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# ANNALS

OF THE

# CAPE OBSERVATORY.

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# THE

# CAPE PHOTOGRAPHIC

# DURCHMUSTERUNG

FOR THE EQUINOX

1875,

BY

DAVID GILL, C.B., LL.D., F.R.S., ETC.,
HER MAJESTY'S ASTRONOMER AT THE CAPE,

AND

J. C. KAPTEYN, Sc.D., ETC.,
PROFESSOR OF ASTRONOMY AT GRONINGEN.

## PART III.

## ZONES —53° TO —89°.

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# PREFACE AND INTRODUCTION

BY

DAVID GILL.

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# PREFACE.

**The** publication of this volume completes the third and last part of the Cape Photographic Durchmusterung, and it remains for me only to acknowledge the aid and the services of those who have contributed to this end.

In connection with the photographic part of the work, I am indebted to the Government Grant Fund of the Royal Society for financial aid, sufficient to cover the cost of an assistant's services during two and a half years.

To Mr. C. Ray Woods (who was engaged in the work as my private assistant from the beginning of 1885 till the 31st of September 1889, and afterwards as a member of the Observatory Staff till completion of the work in 1891), I would here express my sense of his deep interest in the undertaking, and of his devotion and skill in the discharge of his duties.

Mr. R. T. A. Innes (whose official duties are those of Secretary, Librarian and Accountant at this Observatory), has, as a labour of love, devoted himself since April 1896 to the work of revision which is summarized in the Introduction. I most gratefully acknowledge his valuable services.

But it is my colleague and friend, whose name appears on the title page, to whom I am under the deepest obligation. At a time of great stress and discouragement he lifted from my shoulders a load of responsibility by his noble and spontaneous offer to undertake the measurement of the plates, the computation of the results, and the formation of the catalogue. He realized from the first the advantages and possibilities of the work, as well as the need for it in the present state of science, and he devoted over twelve of the best years of his life to the fulfilment of his undertaking. I now realize that my many other duties, and the difficulty of obtaining adequate assistance, would probably have compelled me to defer a great part of the work of the catalogue to the years of my retirement from official life, and might even have prevented its completion.

I feel assured that Kapteyn has not laboured in vain, and that astronomers will duly appreciate what he has done for their science.

Such language on the part of one joint author in regard to the work of the other is perhaps unusual. It can only be justified by the immensely greater share of the whole, and the distinctive character of the work done by Kapteyn—and how much greater has been his share than mine can only be appreciated by those who are acquainted with the technicalities of similar work.

DAVID GILL.

Royal Observatory, Cape of Good Hope.
*13th September* 1899.

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# CAPE
# PHOTOGRAPHIC DURCHMUSTERUNG.
## PART III.

## INTRODUCTION.

In Part I. of this work Kapteyn has given the following lists :—

I. List of Stars contained in the Catalogues of Precision, and missing on the C.P.D. plates.
II. List of Stars, 9·0 magnitude or brighter, contained in Schönfeld's Durchmusterung, and missing on the C.P.D. plates.
III. List of Stars of 9th photographic magnitude or brighter, contained in the C.P.D., and missing in Schönfeld's Durchmusterung.

Of these lists Nos. II. and III. are completed in Part I.

List I. is continued in Kapteyn's Introductions to Parts II. and III.

The following additional lists are given in Kapteyn's Introduction to Part III :—

II. *bis.*, List of Stars, 9·0 magnitude or brighter, contained in the first two parts of Thome's Durchmusterung, and missing on the plates of the C.P.D.
III. *bis.*, List of Stars, 9·2 photographic magnitude or brighter, contained in the C.P.D., and missing in Thome's Durchmusterung.

Similar lists have been forwarded from time to time by Kapteyn, and the questions suggested by them have been examined by Mr. Innes with the aid of the 7-inch equatorial of the Cape Observatory. Meridian and photographic observations have also been made in many cases, the former in connection with questions of proper motion, the latter generally in connection with variable stars which fall below the range of easy visibility with the 7-inch equatorial. It is impossible, within the limits of an introduction of reasonable length, to give an adequate account of this revision. For example, many variable stars, or stars suspected of variability, have been observed on from thirty to one hundred nights each. As the last of Kapteyn's lists was only recently received, it is evident that many of the questions raised cannot yet be completely settled; but, as Part III. of the C.P.D.



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deals with a portion of the sky of which no complete survey at present exists, it seems undesirable to delay its publication until the revision is complete.

We have therefore decided to publish this third, and last, part of the C.P.D. in the form in which it emanates from Kapteyn's hands, adding only, on the most condensed possible plan, the results of the Cape revision up to the present date, leaving complete detailed results of the revision, and the separate observations of variable stars, for subsequent publication.

As indicated in Part I., the following further researches form part of the complete scheme:—

1. A list of errors in the Catalogues of Precision which have been compared with the C.P.D.
2. A list of large and previously unknown proper motions.
3. A list of new variable stars.
4. A further investigation on the systematic difference of colour between the stars of the Milky Way and those of higher galactic latitude.
5. An investigation of the systematic corrections which should be applied to the magnitudes of each of the C.P.D. plates, in accordance with the plan proposed in Part I. p. xxx.

A great deal of work has been done both at Groningen and the Cape in connection with all these researches excepting the last, and these will be published so soon as they are completed—probably about a year hence. The last mentioned investigation cannot be taken in hand until the Cape's share of the international astrographic charts has been completed, and the 13-inch astrographic telescope is at disposal for new work.

As the most compact plan for presenting the preliminary results of the Cape revision, an endeavour is made to classify the answers to questions raised in each of Kapteyn's lists under the following heads:—

1. No star can be seen in the given position.
2. A star of 9th magnitude or brighter exists in the position stated. (See also coloured stars, heads 4 or 5.)
3. A star, fainter than 9th magnitude, exists in the position stated. (See also coloured stars, heads 4 or 5.)
4. The star is coloured—yellow to orange.
5. The star is coloured—orange-red to deep red.
6. The star is variable.
7. There is an explained misprint or mistake in the original catalogue.
8. Miscellaneous.

The number of the star in Kapteyn's list to which the particular answer is applicable is given in order under one of these heads. A coloured star appears under two heads.

The number is included in brackets when there is any remaining doubt.

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## I. LIST OF STARS CONTAINED IN THE CATALOGUES OF PRECISION, AND MISSING ON THE C.P.D. PLATES.

### 1. No star can be seen in the given position.

Nos. 1, 4, 5, C.P.D. position correct; 7, 15, 16, 17, 20, 21, 23, 25, 26, 27, 31, 32, 33, 35, in neither positions; 36, 37, 38, 39, 41, 46, 48, 51, 52, a scattered cluster here; 54, 55, 56, C.P.D. positions correct; 59, 66, 71, at neither dec.; 73, 75, 78, 81, 82, 84, 85, 86, 87, 89, 92, 93, 98, 101, 102, 112, 117, 118, 119, 120, 128, 131, 134, 141, 143, 144, 145, 147, 148, *a* 40ˢ + ?; 152, 154, neither position; 155, 156, 157, 158, 162, 164, 167, 168, see Cord. Photos., p. 471; 175, 179, 182, 183, 186, 187, 191, 192, 197, 198, 199, 211, 212, 217, 220, 221, 223, 226, 228, 231, 233, 234, 235, 236, 237, 238, 239, 240, 242, 245, 246, 247, 248, 249, 250, *f*; 251, 255, 257, 258, 260, 261, 262, 264, 265, 266, 267, 268, 269, 270, 271, 273, 276, 281, 282, 284, 288, 296, 297, 302, 303, 306, 307, [309], 310, 314, 318, 320, 327, 331, 332, 339, 344, 346, 351, 352, 354, 369, 378, 379, 386, 403, 404, 405, 406, 408, 415, 416, 417, 418, 420, 425, 429, 430, 431, 432, 434, 436, 444, 445, 446, 450, 452, 453, 454, 458, 463, 465, [466], 470, 471, 473, 474, [477], 481, 482, 485, 488, 490, 491, 492, 493, 495, 496, 498, 500, 503, 504, 506, 508, 509, 510, 512, 514, 515, 517, 519, 520, 521, 524, 526, 530, 531, 532, 533, 534, 535, 537, 538, 539, 540, 541, 544, 545, 546, [548], 551, 553, 567, 568, 571, 573, 575, 577, 579, 582, 583, 584, 585, 588, 590, 591, 593, 594, 595, 596, 597, 598, 600, 602, 605, 606, 607, 608, 609, 612, 613, 614, 615, 617, 619, 620, 628, 642, 645, 646, 649, 652, 653, 654, 655, 656, 662, 664, 670, 675, 676, 677, 687, 688, 689, 697, 701, 704, 708, 711, 717, 719, 720, 721, 722, 724, 727, 729, 737, 740, 741, 744, 747, 748, 750, 751, 752, 753, 755, 756, 758, pr.; 759, 761, 762, 763, 764, 768, 771, 774, 776, 777, 778, 780, Z.C., 450 is double; 788, 789, 792, 795, 797, 806, 809, 811, 812, 815, 816, 817, 820, 824, 828, 834, 835, 837, 847, 849, 852, 855, 856, 860, 865, 866, 868, 870, 871, 879, 895, 907, 909, 913, 919, 922, 932, 933, 935, 938, 943, 946, 947, [948], 949, 953, 955, 964, 967, [970], [971], 972, [973], 978, 983.

### 2. A star of 9th magnitude or brighter exists in the position stated. (See also coloured stars, heads 4 or 5.)

Nos. 40, 42, 74, 116, 123, 138, two stars; 150, 166, 195, 227, 241, 253, 256, 275, 280, 285, 286, 290, 367, 396, 410, double = *h* 3542; 555, 560, 622, 624, 630, 644, 665, 672, 693, 694, 746, 782, 799, 800, 803, 810, 853, 859, 861, 872, 873, 885, 893, 902, 930, 940.

### 3. A star, fainter than 9th magnitude, exists in the position stated. (See also coloured stars, heads 4 or 5.)

Nos. 2, 3, 6, 8, 9, 10, 11, 12, 13, 14, 18, 19, 22, 24, 28, 29, 30, 34, 44, 45, 47, 49, 50, 57, 58, 60, 61, 62, 64, 65, 67, 72, 79, 80, 83, 88, 90, 91, 94, in Cape 60; 95, 96, 97, 100, 105, 106, 107, 108, 109, 110, 113, 114, 121, 124, 125, 127, 129, 130, 133, 135, 137, 139, 140, 142, 146, 151, 153, 159, 160, 161, 163, 165, 170, 172, 173, 174, 176, 177, 178, 180, 181, 189, 190, 193, 194, 196, 200, 201, 202, 203, 205, 206, 208, 213, 215, 216, 218, 222, 224, 232, 244, 252, perhaps *a* 3 secs. less; 263, 272, 274, 277, [278], 279, 283, 287, 291, 292, 294, 295, 298, 299, 305, 308, 311, 312, [313], 315, 316, 317, 319, 321, 322, 323, 324, [325], 326, [328], 329, 333, 334, 335, [336], [337], 341, 342, 343, 345, 347, [348], 349, [350], 353, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 370, 371, 372, [373], 374, [376], [377], 380, 381, 382, 383, 384, 385, 387, [388], 389, 390, 391, 392, [393], 394, [395], [397], 398, 399, 400, 401, 402, [407], 409, 411, 412, 413, 419, 421, 422, 423, 424, 426, [427], 428, [435], 437, 438, 439, [440], 441, double = Russell 52; 443, 447, 448, 449, 451, 456, 457, 459, 460, 461, 462, 467, 468, 469, 472, 475, 476, [478], 483, 484, 486, [487], 494, 497, 505, 507, 516, 518, 522, 523, 525, [527], 528, 529, 542, but 1′ error in $\delta$?; 543, 547, 549, 550, 552, 554, 556, 557, 559, 562, [563], 565, 569, 572, 574, 578, 580, 589, 599, 601, 603, 604, 610, 616, 618, 621, 623, 625, 626, 629, 632, 634, 635, 636, 638, 639, 641, [643], 647, [648], 651, 658, 659, 660, 661, 663, 666, 668, [669], 671, 680, 681, 682, [683], [684], [686], 690, 692, 696, 698, 702, 703, 705, 706, 707, 709, 710, 712, 714, 715, 716, [718], 723, 725, 726, 728, 733, 734, 739, 742, 743, 745, 754, 757, 760, 765, 766, 767, 769, 770, 772, 773, 775, 779, 781, 783, 784, 785, 786, 791, 794, 796, 798, 801, 805, [807], 808, 814, [818], 819, 821, 822, [823], [825],

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[827], 829, 830, 831, 832, 833, 836, 838, 839, 840, 841, 842, 843, 845, 848, 850, 851, 854, 857, 858, 862, 863, [864], 869, 874, 875, 876, 877, 878, 880, [881], [882], 883, 884, 886, 887, [888], 889, 890, 891, 892, 894, 896, 897, 898, 899, 900, 901, 903, 904, 905, 908, 910, 911, 914, 915, 916, 917, 918, 920, [921], 924, double=$h$ 5255; 926, 927, 928, 929, 931, 934, 936, 937, [939], 941, 945, 950, 951, 952, 954, 956, 957, 958, 959, [960], 961, 962, 963, 965, 966, 968, [969], 974, [975], 976, 977, 979, 980, 981, 982.

## 4. Star is coloured—yellow to orange.

Nos. 40, 42, 45, [72], [88], 99, 104, 114, 116, 139, 140, 142, 173, 224, 291, 295, 316, 324, 367, 370, 523, 549, [550], [552], 555, 622, 665, 672, 694, 734, 745, 746, 769, 800, 822, 833, 876, 884, [902], [905], [940], [956].

## 5. Star is coloured—orange-red to deep red.

Nos. 3, 44, 60, 61, 68, 77, 95, 103, 125, 150, 163, 166, 170, 174, 176, 177, 227, 232, 241, 244, 253, 256, [263], [272], 274, 275, 280, 283, 285, 286, 290, 292, 298, 326, 341, 349, [483], [484], 486, 502, [516], [522], 554, 560, 565, [569], 574, 578, 589, 599, 604, [610], 611, 618, 621, 623, 624, 630, 633, 634, 635, 636, [638], 644, [651], 659, 663, [669], 682, 693, 714, [716], 723, 726, 736, 743, 760, [772], 781, [782], 858, [874], 930, [931], 959.

## 6. Star is variable.

Nos. 68, 69, 77, 99, 103, 104, 122, 126, 132, 136, 149, 184, 185, 204, 209, 210, 214, 219, 259, 338, 502, 631, [673], 912, 944.

## 7. There is an explained misprint or mistake in the original catalogue.

Nos. [53], 34′·6 correct; 55, [59], there is a 9·2 mag. at $7^h\ 57^m\ 3^s\!\cdot\!0$ $-34°.8'\!\cdot\!3$; also a 10 mag. at $7^h\ 57^m\ 5^s\!\cdot\!4$ $-34°.9'\!\cdot\!3$; [70], two stars $\left\{\begin{matrix} 9^h\ 4^m\ 1^s\!\cdot\!4 & -32°.47'\!\cdot\!0 \\ 9^h\ 4^m\ 6^s\!\cdot\!2 & -32°.51'\!\cdot\!3 \end{matrix}\right\}$, $\alpha$ and $\delta$ mixed in C.Z.?; 76 = C.Z. 1987; [111], 207, 220, requires $\alpha + 1^m$; 223, $\delta = 36'$; 226, 289, $\delta\ -37°$; 293 = S 9922; 300, 301, 458, $\delta\ -69°$?; 480 = C.P.D. $-69°$; 590, error in 1880 Catalogue; 488, 592, [608], $\delta\ 3'\!\cdot\!9$; 813 requires $+10^{sec.}$?, if so = $h$ 4988; 846, 942, $\delta\ -66°$.

## 8. Miscellaneous.

Nos. 43, Cape M.O., 1897·2, equinox 1875, $6^h\ 40^m\ 1^s\!\cdot\!41$ $-36°.57'.55''\!\cdot\!4$, p.m. doubtful; 115, 9·5 at $15^h\ 10^m\ 49^s\!\cdot\!2$ $-35°.19'\!\cdot\!7$; 144 is a nebula; 171, about midway between places of *G* and Cor. D.M.; 188, nebula; 225, p.m.; 251, a 9·7, $\alpha = 14^h\ 4^m\ 38^s$; [278], 3 stars in a line; 282, 10 mag. at $17^h\ 5^m\ 24^s$; 633, $\alpha = 11^h\ 52^m\ 38^s$, p.m.?; 787, secs. = 24, p.m.?; 790, p.m.?; 840, $\alpha = 18^h\ 47^m\ 2^s \pm$?; 867 is $19^h\ 42^m\ 48^s \pm$ p.m?.

---

## II. LIST OF STARS IN S.D., 9·0 MAGNITUDE OR BRIGHTER, MISSING ON PLATES (C.P.D., Vol. I. p. (83)).

### Results of revision.

No. 1, 9·6 mag.; No. 2, T Leporis; No. 6, 9·3 mag.

The others are already accounted for by Kapteyn's notes on p. (83).

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## III. LIST OF STARS, PHOTOGRAPHICALLY 9·0 MAGNITUDE OR BRIGHTER, MISSING IN S.D.

Results of revision (incomplete).

No. 5, 9·3 mag.; No. 9, 9·3 mag.

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## II. *bis.*, LIST OF STARS, 9·0 MAGNITUDE OR BRIGHTER, CONTAINED IN THE FIRST TWO PARTS OF THOME'S DURCHMUSTERUNG, AND MISSING ON THE PLATES OF THE C.P.D.

### 1. No star can be seen in the position given.

Nos. 42, 52, 60, 76, 78, 108, 125, 166, 174, 192, 203, 207, 220, 243, 245, 253, 263, 279.

### 2. A star of the 9th magnitude or brighter exists in the position stated. (See also coloured stars, heads 4 or 5.)

Nos. 1, 2, 4, 5, 7, 9, 10, 12, 13, 14, 16, 17, 18, 19, 23, 24, 25, 30, 32, 34, 37, 40, 41, 46, 50, 58, 63, 67, 69, 70, 95, 97, 99, 109, 117, 120, 124, 126, 128, 129, 130, 131, 132, 133, 137, 143, 150, 155, 159, 161, 163, 164, 167, 179, 181, 185, 186, 187, 196, 197, 199, 201, 208, 221, 223, 228, 236, 237, 238, 246, 258, double; 266, 269, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 292, 293, 294, 295, 297, 299, 304, 306.

### 3. A star, fainter than 9th magnitude, exists in the position stated. (See also coloured stars, heads 4 or 5.)

Nos. 3, 6, 8, 11, 15, 21, 22, 26, 27, 28, 29, 33, 35, 36, 38, 39, 43, 44, 45, 47, 49, 50, 53, 56, [57], 59, 61, 62, 64, 65, 66, 68, 72, 73, 74, 75, 77, 80, 81, 82, 86, 87, 88, 89, 90, 91, 92, 93, 94, 98, 101, 102, 103, 104, 105, 106, 107, 110, 111, 112, 113, 115, 116, 118, 119, 122, 123, 127, 134, 135, 136, 139, 140, 141, 142, 144, 146, 147, 148, 149, 151, 152, 153, 154, 156, 157, 158, 160, 162, 165, 168, 169, 170, 171, 173, 175, 178, 180, 182, 183, 184, 188, 189, 190, 191, 193, 194, 195, 198, 200, 202, 204, 205, 206, 209, 210, 211, 212, 213, 214, 215, 217, 218, 222, 224, 225, 229, 230, double; 231, 232, 233, 234, 235, 239, 240, 241, 247, 248, 249, 250, 251, double; 252, 254, 255, 256, 257, 259, 260, 261, 264, 265, 267, 268, 270, 271, 272, 273, double; 274, 275, 276, 277, 278, 280, 291, 296, 298, 300, 301, 302, 303, 305, 307, 308, 309.

Note:—Heads 2 and 3. In general, the scale of magnitudes assumed agrees with that of the Cordoba D.M.

### 4. The star is coloured—yellow to orange.

Nos. [4], [10], 12, 18, 19, 34, 49, 50, 53, 62, 67, 68, 69, 73, [129], 138, 150, 195, 200, 228, [234], 235, 246, 252, 257, 260, 269, 270, [282], 285, 287, [295], 302, 305, 306, 307.

### 5. The star is coloured—orange-red to deep red.

Nos. 1, [5], 6, 13, 15, 21, [22], 31, [32], 33, 35, 36, 46, 50, 58, 61, 66, 70, 72, [74], 75, 77, 81, 82, 86, [88], 92, 99, 112, 116, 120, 124, 128, 136, 137, 147, 151, [154], 155, 159, 161, 163, 164, 165, 167, 173, 178, 181, 182, [183], [184], [188], 197, [199], [201], 205, 210, 221, 223, 232, 233, 236, 237, 238, 241, 248, 267, [278], [281], [294], 297, 300, 308.

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6. The star is variable.

Nos. 20, 31, 54, 121, 138, 172, 176, 216, 262.

7. There is an explained misprint or mistake in the original catalogue.

Nos. 43, 44, 48, 55, 56, 59, 71, δ 19′; 78, [79], [90], 100, 101, 104, 108, 125, 134, 145, 166, 168, 174, 177, 180, 191, 202, 203, 207, 215, 219, 227, 231, 239*a*, [240], 243, 244, 274, 275, 301.

8. Miscellaneous.

No. 192, *a* $6^{sec.}$ out.

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## III. *bis*, LIST OF STARS, 9·2 MAGNITUDE OR BRIGHTER, CONTAINED IN THE C.P.D., AND MISSING IN THOME'S D.M.

Results of revision.

All these stars exist, 9·0 or brighter visually :—

Nos. 4, 5, 7, 17, 18, 19, 21, 22, 24, 27, 67, double.

Less than 9·0 visually :—

Nos. 1, 2, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 20, 23, 25, 26, 28, 29, 30, 31.

Variable :—No. 16.

Cluster Messier 7 in Scorpio, not examined; but Nos. 41, 46, 47, 51, 86, and 96 have been observed on the meridian at Cordoba; and Nos. 46, 47, 50, 51, 52, 53, 54, and 55 are in Gould's Cordoba Photographs.

DAVID GILL.

Royal Observatory, Cape of Good Hope.
13*th September* 1899.

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# PREFACE AND INTRODUCTION

BY

J. C. KAPTEYN.

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# PREFACE.

With this third volume the work proper of the Photographic Durchmusterung may at last be considered complete.

The work has cost nearly double the time—six or seven years—which I originally estimated would be required. The difference is explained as follows:—

1st. The number of stars actually entered in the C.P.D. is more than double that which was at first expected, the original estimate having been based on the supposition of equal star-density with that of the Northern Bonner Durchmusterung.

2nd. The slender resources at my disposal did not allow the employment of more than two or, sometimes, three clerks. Of these only *de Vries* has been with me from beginning to end, and it is largely to his untiring zeal and devotion that the ultimate success of the work is due. The others left me, generally after a very short time, for more remunerative posts. It must be evident that this frequent change of assistants, all of whom were at first absolutely inexperienced in work of the kind, was most detrimental to the rapidity, if not to the quality, of the work.

No one can regret this long delay more than myself. My only consolation is that, however long the delay, the man who originally planned the whole work, but who feared that the measurement and cataloguing must be relegated to his old age, now sees it finished, secure against the uncertainties of all human affairs, at a time of life in which his activity is unabated, so that, if the work proves to be a useful one, he may not only see it bearing fruit, but may himself be enabled to bring some of that fruit to maturity.

The greatest advantage of the photographic method unquestionably is that, by the side of the catalogue, a permanent and authentic record of the state of the sky at a determined epoch is preserved. Every error, every doubt as to the reality, position, or magnitude of a star can be settled at once by an inspection of the plates.

To make the most of this advantage, the original negatives of the C.P.D. will be preserved at Groningen, where the parallactic measuring apparatus will be kept mounted.

All astronomers using the C.P.D. are earnestly requested to communicate any case of doubt or any query that may be solved by our plates, in order that the point may be settled by an inspection of the negatives.



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Nothing now remains but to thank those who have contributed to the success of the work.

It is with a deep feeling of gratitude, that now, at the end of the work, I look back upon much kind and generous help from so many different quarters, without which help it would have been barely possible to bring the work to a successful issue.

Besides the Government, which, on the recommendation of the curators of our University, has gradually augmented its annual subsidy, financial help was generously given by the *Bataafsch Genootschap der proefondervindelyke wijsbegeerte te Rotterdam* and the *Provinciaal Utrechtsch Genootschap van Kunsten en Wetenschappen.*

By this help the first difficulties of instrumental outfit and assistance in the measurements were in great part overcome; and the approval of the work thus implied contributed in no small degree to encourage me in my labours.

The Observatory of Leyden most kindly lent all books necessary for the work which were not in our own University-library, as, unfortunately, is the case for the greater part of them. I feel deeply indebted to Professor H. G. van de Sande Bakhuyzen and to his brother, not only for this act of kindness, but for the unceasing interest with which they have honoured my work from beginning to end.

Last, and not least, I am happy to acknowledge my deepest obligations to my friend and colleague, Professor Huizinga, who, at the beginning of the work, when practical astronomy was absolutely houseless at Groningen, graciously, and at no small inconvenience to himself, offered me the use of two rooms in his laboratory.

In these two rooms the whole of the measurements, and by far the greater part of the computations, have been made, so that, strange as it may sound, the Cape Photographic Durchmusterung, as far as the catalogue is concerned, may be said to have emanated from the Physiological Laboratory of Groningen.

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# INTRODUCTION.

## 1. *Preliminary remarks.*

In order to save further delay in the publication of this third and final volume of the Cape Photographic Durchmusterung, it seems advisable to restrict this introduction within more narrow limits than were originally intended.

The hope expressed in the Introduction to vol. i., that in the present volume we would have been able to give :—

*a.* A list of errors for the catalogues compared with the C.P.D.;
*b.* A list of large, and as yet unknown, proper motions;
*c.* A list of new variables;
*d.* An investigation of the systematic corrections for the magnitudes of every individual plate;
*e.* A further investigation on the colour of the stars in the Milky Way;

has been given up for the present therefore. All these matters (except that under *d*, which has not been begun as yet) are under investigation here or at the Cape, and still require some considerable time for their completion.

It seems especially undesirable to wait for their completion, as this volume covers a part of the sky for which no complete survey exists up to the present date.

## 2. *On the measuring apparatus.*

The measuring apparatus described in vol. i. has been used throughout for the *whole* of our Durchmusterung.

The description, however, as there given, applies fully only to the instrument as it was after some changes made in the summer of 1887. For the measurements made before this time (the Zones $77\frac{1}{2}$ to Pole) the instrument was less efficient in several points.

The most important changes then made were the following :—

*a.* A new graduation of the hour-circle.
*b.* The introduction of a new and wider diaphragm in the ocular, in order to enlarge the field to somewhat over a degree.
*c.* The introduction of a second plate-holder.

The hour-circle used for our instrument is one borrowed from an old and defective universal instrument belonging to the astronomical collection of the University. It was originally divided from 5′ to 5′.

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As this interval corresponds to $20^{sec.}$ in time, it was not difficult to get the readings expressed in time.

For this purpose every third line (corresponding to a whole minute in time) was somewhat prolonged, and every sixth line, that is, every second minute of time, was numbered. By estimating tenths of the intervals we thus got readings accurate to *two* seconds of time, and *adding* the seconds obtained for the R.A. of any star in the *two* measurements of the plate (instead of taking the mean), the mean reading was obtained at once in seconds of time.

The accuracy thus obtainable may be considered amply sufficient for stars near the Pole, but it certainly seems somewhat rough for other parts of the sky. Moreover, it will be understood that the numbers, scratched with a needle in the silver of the circle, looked rather bad, as seen under the microscope.

These reasons determined me to avail myself of the opportunity given, by an unavoidable interruption of the measurements, to send the circle to Messrs. Wanschaff in Berlin, who redivided it from $10^{sec.}$ to $10^{sec.}$, with every whole minute numbered, in a way which seems to leave nothing to be desired.

The diaphragm in the ocular, used for the observation of the polar plates (declin. $77\frac{1}{2}$ to Pole) gave a field of about 40′ on the plates. The plates were measured in zones 30′ in breadth, so that two adjacent zones had a strip in common of about 10′.

This was felt to be a serious inconvenience, especially as it involved the rearrangement of the observations, which in the catalogue were to be given in zones covering a whole degree of declination.

I very soon convinced myself that the qualities of the objective would perfectly allow the measurement of a field of somewhat over a degree in width.

Accordingly, another diaphragm was provided, which was fitted with a new and very excellent photographic ocular-scale covering a range of somewhat over 65′ in declination.

About the advantages of the introduction of a second plate-holder, and the manner of its uses, see Introduction to vol. i. p. (10).

At the same time some minor improvements were made in the instrument itself, in the methods for orientation and illumination of the plates, which need not be detailed here, as the instrument and its accessories have since remained materially unaltered, and have been described at length in the Introduction to vol. i.

When the measurements were resumed in November, we have, of course, regularly measured zones of one degree in breadth. An exception was only made for those cases where the limits of the plate compelled the measurement of "half" zones. For the belts

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of plates having their centre at declinations 85°, 80°, 75°, 70°, 65°, these limits lie at 87°.5, 82°.5, 77°.5, 72°.5, 67°.5, 62°.5.

To avoid the trouble caused by these "half" zones, Dr. Gill had the kindness to arrange the centres of the further belts of plates at the half degrees (55½, 50½) instead of at the whole degrees.

The greater ease in the reductions and in the arrangement of the catalogue—caused partly by the modification of the instrument, partly by modifications introduced in the ledgers and the arrangement of the observations—have been such that I have often since regretted that I did not at once resolve to reobserve the whole of the polar cap. I am quite sure that considerable time would have been *saved* by such a course.

3. *On the reductions of the right ascensions and declinations.*

For all the stars from declination −18° to declination −58°.0, that is, for all stars of vol. i., vol. ii., and part of those of vol. iii., the reductions of the right ascensions and declinations have been made in strict adherence to the rules given on page (19) of the Introduction to vol. i.

For the stars between declination −58°.0 and the Pole these reductions were made to depend on a far smaller number of known stars. On the other hand, the five zones measured on every plate were not generally treated quite independently—at least for the right ascensions—but the corrections applied to the measured values of this co-ordinate were made to vary continuously over the whole plate.

This mode of reduction was abandoned after the completion of the belt of plates −60°, as it appeared that a separate and independent reduction of every zone based, not on a few, but on *all* the stars of Gould's Catalogues, gave somewhat better results, without materially increasing the work of reduction.

I have thought it worth while to revise the whole of the reductions of the stars between −58°.0 and the Pole in accordance with the plan followed for the remaining part of the sky, and to apply supplementary corrections, wherever these seemed clearly called for. These supplementary corrections are, without exception, very small; still there can be no doubt that the accuracy has in this way been materially increased. As will appear in considering the probable errors, the right ascensions seem now quite satisfactory. That the declinations are somewhat less so, at least as compared with the declinations of stars north of −58°.0, is in great part owing to the fact that, the declinations having been rounded off at 0′·1, the sum of two partial corrections led necessarily to somewhat less accurate values than a single correction.

Besides this, there are other reasons why the measurement of the circumpolar region is slightly inferior in point of accuracy, the chief of which is the greater influence of small instrumental errors in the measurement of plates which have a very wide range in right ascension.

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### 4. *On the reduction of the magnitudes.*

Gould's *Zone Catalogue*, on which our reductions of magnitude for the stars south of −24° have been made to depend (see vol. i. Introd., p. (19)), gives hardly any star south of −80°. For the Zones −80° to the Pole, recourse was therefore had to the *Cordoba General Catalogue*, which, having been made by the same observers, nearly at the same time, may be considered homogeneous with the *Zone Catalogue.* The number of stars in the *General Catalogue,* however, being so much smaller, the method of reduction of the magnitudes explained in the Introduction to vol. i. becomes insufficient. For this reason all the plates of the belt −85° and the polar plate itself were carefully compared with the surrounding ones. As the overlap for these plates is, without exception, very considerable, this comparison led to an adjustment of the plates *inter se,* by which the trustworthiness of the reductions was greatly strengthened. For a great number of the plates in the belts of plates −65° and −75°, a similar adjustment, although not strictly necessary, has been made. This fact has been noted in the list of plates by the word "adjusted" in the column for *n*.

For all the rest of the plates, the reductions of the magnitudes have been made in accordance with what has been said at p. (19) and p. (20) of the Introduction to vol. i.

### 5. *The polar plate.*

Nearly at the very beginning of the work the polar plate was measured and reduced in the usual way. Both in the measurement and in the reduction some difficulty was encountered, because in measurement the construction of the instrument does not allow a complete rotation about the hour-axis, and in reduction there is a lack of suitably situated known Standard Stars.

Gilliss's Catalogue of circumpolar stars had not then been published, and in Gould's Catalogue many blanks occur—for example, there are no stars in Zone −87° between $23^h\ 27^m$ and $12^h\ 7^m$.

To obviate this difficulty, a series of stars was observed in the meridian at the Cape, which will be found in the *Cape Annual Catalogue* for 1891, and which have been referred to in the C.P.D.

Before these were used, however, for a re-reduction, the idea occurred to me to make use of Repsold's apparatus, acquired, in the meanwhile, by the Astronomical Laboratory, and to measure *accurately* the rectangular co-ordinates of all the stars on the polar plate. I adopted this course because I had long wished to obtain in some way or other the materials for getting a fair idea as to the accuracy of the positions it would be possible to arrive at with such plates as were used for the C.P.D.

It is very probable that, even in a not very remote future, questions about proper motion of stars not contained in other catalogues of an anterior date, with the exception

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of the C.P.D., may be settled at once by some measurements on our plates. For such questions it is important to know, at least approximately, what is the accuracy obtainable from these plates.

It is true that, with regard to rapidity of reduction, another plate, nearer to the equator, would have had advantages over the polar one; but on the other hand, it seemed to me that if the positions of the stars around the Pole could be obtained with an accuracy of the order of that of Gould's *Zone Catalogue*, they would be specially welcome to the astronomer, as in some sort a supplement to Gould's admirable work. The work once decided upon was executed in part by the two clerks, de Vries and Roose; and in part by Miss Reitsma, who, for a short time, volunteered to take part in the work of the laboratory.

Nearly everything visible up to quite near the edge of the plate has been measured. Indeed, as may be seen in the catalogue, there have been measured a few stars of declination as low as 86°.0′. It seems probable that the position of these latter stars will be somewhat systematically in error, owing to their deformation. For the remaining stars some slight systematic error is also probable, because the reductions have not been made with the utmost refinement. Notwithstanding this, as will be shown below, the probable errors of our declinations are even somewhat smaller than those of Gould's *Zone Catalogue*; whereas, as was to be expected, our right ascensions are of the same order of accuracy as our declinations.

All the magnitudes, as well as the positions of a few faint stars which were overlooked in measuring the rectangular co-ordinates, were taken from the measurement made with the ordinary apparatus. For the latter stars the right ascensions and declinations are set down accurate to $1^s$ and 0′·1 respectively (as for the other circumpolar plates), whereas the positions derived from rectangular co-ordinates are given to $0^s{\cdot}1$ and 0′·001. The two sets of stars are therefore readily distinguishable.

### 6. *The precessions.*

The amount of precession for twenty-five years (secular variation and higher terms neglected) was given in vol. ii. in exactly the same way as in vol. i.—*viz.*, at the bottom of every column. Even for the Zone −52°, the highest in declination of this volume, the difference of the values for consecutive columns is so small that it may either be wholly neglected, or taken into account by a most simple interpolation. Everywhere a precession of about $1^{sec.}$ in R.A., and 0′·1 or 0′·2 declination, is thus readily obtainable.

It is evident, however, that the higher the declination and the greater the range in R.A. in a single column, the more unsatisfactory this mode of getting the precession must become.

I have therefore adopted another plan in the third volume. The precessions at the

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bottom of the columns are omitted, and instead, small tables are given on the margin of each page.

(*a*) For the Zones 53°, 54° . . . . 69° these tables contain, *for the middle declination of the zone* and for every tenth minute of R.A., the precession (for twenty-five years) both in R.A. and declination.

Still nearer the Pole the influence of a deviation of the declination from that of the middle of the zone, which may, of course, amount to 30′ in the extreme, begins to make itself felt. Therefore—

(*b*) For the Zones 70°, 71° . . . . 85° the tables give the precession in R.A. in the form

$$a + bd,$$

where $d$ = number of minutes of the declination.

The numbers $a$ and $b$ were determined in such a way that the values inserted in the tables represent the precession *rigorously* for the declinations 15′ and 45′ of any zone.

At declination 86° even this device begins to fail. Moreover, for 86°.0′ the effect of the secular variation in twenty-five years amounts already in extreme cases to $9^s\cdot3$ (= $9''\cdot7$ arc of *g.c.*) in R.A. and $10''\cdot1$ in declination, and nearer to the pole the effect of this term and of that of the higher terms in the precession increases with extreme rapidity.

A satisfactory continuation of the system of tabulating the precession would, for these reasons, lead to very great complication, especially if an accuracy is sought somewhat in proportion to the greater precision with which the polar plate has been measured.

As the total number of stars south of −86° amounts only to 1050, the simplest and most effective plan is to give the necessary data for the computation of the precession for every individual star, and this plan was therefore definitively adopted. In order to conform as closely as possible to the plan followed in the rest of the catalogue, I have exhibited these data in a manner somewhat different from that usually adopted :—(*a*) the positions are given for the equinoxes 1850 and 1900 ; (*b*) the annual precessions for 1875 and 1900.

The former were computed from the positions for 1875 using *three* terms of the precession for the Zones 86° and 87°, *four* terms for Zone 88° ; whilst the stars of Zone 89° were trigonometrically brought up to the new epochs.

The accuracy of the computation has been such that I confidently hope that the error in the positions due to errors in the precession will, in general, not amount to more than $0^s\cdot2$ and $0'\cdot002$, and in no case to sensibly more than $0^s\cdot3$ or $0'\cdot003$.

The yearly precessions have been computed either with the definitive positions, or with positions differing so little from these that no error on this score need be feared.

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All the computations have been thoroughly checked. The data (*a*) and (*b*) furnish everything that is wanted for bringing the positions of our catalogue up to any required epoch. If only rough positions are wanted, it will generally be sufficient (at least for the Zones 86, 87, 88) to interpolate or extrapolate the precession for the middle between the epoch required and the epoch 1875. The positions thus derived are, of course, correct to the second term of the precession (sec. var.) inclusive. It is, however, easy to push the accuracy to terms of the third or fourth order. Let $t$ be the number of years counted from 1875, $T = \frac{t}{25}$; then we have, *accurate to the third term of precession* (*inclusive*) :—

$$\alpha t = \alpha 75 + \tfrac{1}{4}T[T(2T-3)(\alpha 1900 - \alpha 50) + 100(1+T-T^2) \times \text{pr.}\,75 + 50T \times \text{pr.}\,1900].$$

In the same way, *accurate to the fourth term of the precession* (*inclusive*) :—

$$\alpha t = \alpha 75 + \tfrac{1}{4}T[T(1+T)(7-5T)(\alpha 1900 - \alpha 75) - T(1-T)^2(\alpha 75 - \alpha 50) + 100(1-T)(1-T^2) \times \text{pr.}\,75 - 50T(1-T^2) \times \text{pr.}\,1900].$$

For the declinations change $\alpha$ into $\delta$.

The latter formula gives for the epochs 1880, 1885 . . . .

| | | | | | |
|---|---|---|---|---|---|
| $\alpha 1880$ | $= \alpha 75 + 0.08[$ | $+\ 0.90(\alpha 1900 - \alpha 75)$ | $-0.08(\alpha 75 - \alpha 50)$ | $+\ 48.0$ pr. 75 | $-\ 6.0$ pr. 1900] |
| $\alpha 1885$ | $= \alpha 75 + 0.16[$ | $+\ 1.75$ | $-0.09$ | $+\ 31.5$ | $-\ 10.5$ ] |
| $\alpha 1890$ | $= \alpha 75 + 0.24[$ | $+\ 2.40$ | $-0.06$ | $+\ 16.0$ | $-\ 12.0$ ] |
| $\alpha 1895$ | $= \alpha 75 + 0.32[$ | $+\ 2.70$ | $-0.02$ | $+\ 4.5$ | $-\ 9.0$ ] |
| $\alpha 1900$ | $= \alpha 75 + 0.40[$ | $+\ 2.50$ | $0.00$ | $0.0$ | $0.0$ ] |
| $\alpha 1905$ | $= \alpha 75 + 0.48[$ | $+\ 1.65$ | $-0.03$ | $+\ 5.5$ | $+\ 16.5$ ] |
| $\alpha 1910$ | $= \alpha 75 + 0.56[$ | $0.00$ | $-0.14$ | $+\ 24.0$ | $+\ 42.0$ ] |
| $\alpha 1915$ | $= \alpha 75 + 0.64[$ | $-\ 2.60$ | $-0.36$ | $+\ 58.5$ | $+\ 78.0$ ] |
| $\alpha 1920$ | $= \alpha 75 + 0.72[$ | $-\ 6.30$ | $-0.72$ | $+112.0$ | $+126.0$ ] |
| $\alpha 1925$ | $= \alpha 75 + 0.80[$ | $-11.25$ | $-1.25$ | $+187.5$ | $+187.5$ ] |
| | $= \alpha 50 -$ | $9(\alpha 1900 - \alpha 75) + 150(\text{pr.}\,75 + \text{pr.}\,1900)$. | | | |

For the declinations, change $\alpha$ into $\delta$.

Using Crelle's *Rechentafeln*, the computation thus becomes very easy.

For the stars of Zone $-89°$, the computation of a position for a somewhat remote epoch still remains troublesome and inaccurate. I have therefore thought it worth while to compute (trigonometrically) for these stars the position for every tenth year from 1900–1950. Fabricius' method was found very convenient for these computations. For intermediate epochs the position can be found by interpolation. The accuracy of resp. $0^m.1$ and $0'.01$ still corresponds closely enough to that of the measurements on which the positions rest.

7. *Systematic errors of the magnitudes depending on the position of the stars on the plates.*

As Dr. Gill states in his Introduction to vol. i. p. xix, "the whole of the plates definitively used for the catalogue were taken with the shorter focus, Dallmeyer lens, either in its original or repolished condition."



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The following data will suffice to distinguish the plates obtained with the lens in the two conditions.

Of the plates used for the C.P.D. were obtained :—

I. *With lens in original condition* : all the plates between the declination $-58°.0'$ and the South Pole, *with the exception only of the repeated plates.*

II. *With the repolished lens* : all the plates north of $-58°.0'$.

The repeated plates between $-58°.0'$ and the Pole, all taken with the repolished lens, are the following :—

| ° | h m | ° | h m | ° | h m | ° | h m | ° | h m |
|---|---|---|---|---|---|---|---|---|---|
| −80, | 3 0 (No. 587) | −75, | 0 0 (561) | −70, | 1 30 (531) | −65, | 0 0 (493) | −60, | 1 48 (456) |
| | 19 30 (598) | | 2 0 (563) | | 2 15 (532) | | 0 40 (494) | | 4 48 (461) |
| | 21 0 (599) | | 15 0 (576) | | 3 0 (533) | | 18 0 (520) | | 15 36 (479) |
| | | | 19 0 (580) | | 15 0 (549) | | 22 0 (526) | | 17 24 (482) |
| | | | 20 0 (581) | | 18 0 (553) | | | | 18 36 (484) |
| | | | 21 0 (582) | | 19 30 (555) | | | | |
| | | | | | 22 30 (559) | | | | |

All the Plates I. were taken before or on the night of 14th November 1886.

All the Plates II. were taken after or on the night of 3rd May 1888.

In the Introduction to vol. i. art. 8, the conclusion was reached that a systematic error of the magnitudes depending on the position of the stars on the plate, does not exist to any appreciable amount for the plates discussed in that volume. This conclusion, which was deduced partly from a consideration of the stars of vol. ii., may be safely extended to all the stars of the C.P.D. north of $-58°.0'$—that is, to the whole of vol. ii. and part of vol. iii., and besides to the repeated plates nearer the South Pole enumerated above.

On the plates taken with the lens in its *original* condition, the images of the brighter stars near the edges of the plates are somewhat irregular. For these plates, therefore, the conclusion formerly arrived at cannot evidently be accepted without a separate investigation. I have therefore extended the discussions of vol. i. to these plates.

*a.* Countings made of the stars contained in the different zones of declination give the following results :—

TABLE 1.

Number of Stars.

| $\delta$ Decl. of Centre. | $\delta + 2°.20'$ to $\delta + 2°.0'$ | $\delta + 2°$ to $\delta + 1°$ | $\delta + 1°$ to $\delta$ | $\delta$ to $\delta - 1°$ | $\delta - 1°$ to $\delta - 2°$ | $\delta - 2°.0'$ to $\delta - 2°.20'$ |
|---|---|---|---|---|---|---|
| −60° | ... | 6832 | 6796 | 6543 | 5668 | 1823 |
| −65 | 1535 | 4454 | 3920 | 3708 | 3388 | 1166 |
| −70 | 1004 | 2614 | 2500 | 2140 | 1914 | 664 |
| −75 | 507 | 1470 | 1264 | 884 | 819 | 375 |
| −80 | 415 | 1185 | 975 | 847 | 825 | 262 |
| −85 | 247 | 761 | 661 | 560 | 368 | ... |
| Sum reduced to same area, | 12,840 | 14,860 | 14,700 | 14,100 | 13,200 | 14,020 |

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Only the first zone seems slightly deficient in stars.

*b.* Again, for a more detailed comparison of the several parts, the plates were divided into *nine* divisions, as follows :—

| | Limits in Decl. | Limits in R.A. |
|---|---|---|
| A I | $\delta + 2°.20'$ to $\delta + 1°$ | $\alpha - \frac{1}{2}$ T to $\alpha - \frac{1}{4}$ T |
| A II | „ | $\alpha - \frac{1}{4}$ T „ $\alpha + \frac{1}{4}$ T |
| A III | „ | $\alpha + \frac{1}{4}$ T „ $\alpha + \frac{1}{2}$ T |
| B I | $\delta + 1°$ to $\delta - 1°$ | $\alpha - \frac{1}{2}$ T „ $\alpha - \frac{1}{4}$ T |
| B II | „ | $\alpha - \frac{1}{4}$ T „ $\alpha + \frac{1}{4}$ T |
| B III | „ | $\alpha + \frac{1}{4}$ T „ $\alpha + \frac{1}{2}$ T |
| C I | $\delta - 1°$ to $\delta - 2°.20'$ | $\alpha - \frac{1}{2}$ T „ $\alpha - \frac{1}{4}$ T |
| C II | „ | $\alpha - \frac{1}{4}$ T „ $\alpha + \frac{1}{4}$ T |
| C III | „ | $\alpha + \frac{1}{4}$ T „ $\alpha + \frac{1}{2}$ T |

where $\alpha$ and $\delta$ are the co-ordinates of the centre; T the extent of the plate in the direction of R.A. to within $1^{\text{min.}}$ of the nominal limit.

The *two* following groups of *rich* plates were considered :—

1st Group: Nos. 473, 475, 476, 477, 478, 513, 514, with, in all, 10,574 stars.
2nd Group: Nos. 515, 516, 517, 541, 542, 543, 573, 574, 575, with a total number of 5891 stars.

Those of the first group are fairly symmetrically situated with regard to the Milky Way; in the second group this condition is not fulfilled (mean galactic latitude = −11°), but this seems not very important, as the greatest differences found are in the direction parallel, and not in that at right angles, to the Galaxy.

The results found in the two cases are as follows :—

TABLE 2.

Number of Stars per Square Degree.

| | Group I. (Mean Gal. Lat. = 0°). | | | Group II. (Mean Gal. Lat. = −11°). | | |
|---|---|---|---|---|---|---|
| | A. | B. | C. | A. | B. | C. |
| I. | 99·1 | 99·4 | 92·5 | 34·0 | 43·0 | 46·4 |
| II. | 89·7 | 82·4 | 76·6 | 32·0 | 39·0 | 43·2 |
| III. | 72·5 | 65·8 | 66·9 | 31·3 | 36·0 | 42·0 |

or expressed in percentages above and below the mean.

TABLE 3.

| | Group I. | | | Group II. | | | Mean. | | |
|---|---|---|---|---|---|---|---|---|---|
| | A. | B. | C. | A. | B. | C. | A. | B. | C. |
| I. | +19·7 | +20·0 | +11·8 | −11·8 | +11·5 | +20·4 | + 4·0 | +15·7 | +16·1 |
| II. | + 8·4 | − 0·4 | − 7·5 | −17·0 | + 1·2 | +12·1 | − 4·3 | + 0·4 | + 2·3 |
| III. | −12·4 | −20·5 | −19·2 | −18·8 | − 6·6 | + 9·0 | −15·6 | −13·5 | − 5·1 |

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The evidence of a systematic difference is here somewhat stronger. Still the systematic errors of the *magnitudes* implied by these numbers are only small, as appears if we convert them into magnitudes by means of the formula :

Number of stars of mag. m or brighter = const. × $3{\cdot}8685^m$ (*Uran. Arg.*, p. 354).

We thus obtain from the three last columns of the preceding table :—

TABLE 4.

Systematic Error expressed in Magnitudes.

| | A. | B. | C. |
|---|---|---|---|
| | m | m | m |
| I. | + 0·03 | + 0·11 | + 0·11 |
| II. | − 0·03 | 0·00 | + 0·02 |
| III. | − $0{\cdot}12^5$ | − 0·11 | − 0·04 |

*c*. For the belt of plates −65° the stars photographically between mag. 8·0 and 9·0 have been compared with the magnitudes in Gould's *Zone Catalogue*. This comparison furnished the following table, which may be considered to obtain for stars visually about $8{\cdot}7^m$. All the numbers have been diminished by $0{\cdot}09^m$ in order to reduce the mean to zero. The total number of stars used amounts to 1093.

TABLE 5.

Visual − Phot. Mag. $-0{\cdot}09^m$.

| | A. | B. | C. |
|---|---|---|---|
| | m | | m |
| I. | − 0·13 | ... | − 0·01 |
| II. | ... | 0·00 | ... |
| III. | + 0·05 | ... | + 0·08 |

*d*. For still brighter stars the following data proved available. The number of stars being very limited, no more detailed comparison than that of the Strips I. II. III. could be made. The results obtained are given in the following table, which needs hardly any explanation. By the numbers of the first line, for instance, is expressed the fact that in Division I. of Plate 467 *four* bright stars were found, of which the mean photographic magnitude is 7·05, the mean visual magnitude 7·12 ; *eight* stars in the Division II. where these numbers are respectively 7·49 and 7·77 ; *five* in Division III. giving 7·06 and 7·64 for the same quantities. The three last columns have been formed by subtracting the numbers contained in the preceding ones.

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TABLE 6.

| Plate. | Number of Stars. | | | I. | | II. | | III. | | Visual—Photographic. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I. | II. | III. | Phot. | Vis. | Phot. | Vis. | Phot. | Vis. | I. | II. | III. |
| | | | | m | m | m | m | m | m | m | m | m |
| 467 | 4 | 8 | 5 | 7·05 | 7·12 | 7·49 | 7·77 | 7·06 | 7·64 | + 0·07 | + 0·28 | + 0·58 |
| 468 | 3 | 20 | 4 | 7·28 | 7·42 | 7·42 | 7·63 | 7·45 | 7·10 | + 0·14 | + 0·21 | − 0·35 |
| 498 | 5 | 9 | 6 | 7·50 | 7·80 | 7·17 | 7·36 | 6·98 | 7·08 | + 0·30 | + 0·19 | + 0·10 |
| 510 | 3 | 13 | 9 | 6·87 | 7·17 | 7·26 | 7·50 | 7·48 | 7·54 | + 0·30 | + 0·24 | + 0·06 |
| 511 | 5 | 20 | 12 | 7·38 | 7·50 | 7·35 | 7·65 | 7·17 | 7·43 | + 0·12 | + 0·30 | + 0·26 |
| 513 | 6 | 19 | 3 | 7·10 | 7·25 | 7·31 | 7·51 | 7·43 | 7·43 | + 0·15 | + 0·20 | 0·00 |
| 514 | 3 | 7 | 5 | 7·47 | 7·77 | 7·14 | 7·21 | 7·34 | 7·10 | + 0·30 | + 0·07 | − 0·24 |
| 516 | 7 | 8 | 5 | 7·30 | 7·29 | 7·30 | 7·69 | 7·40 | 7·80 | − 0·01 | + 0·39 | + 0·40 |
| 517 | 3 | 7 | 3 | 7·10 | 6·67 | 7·57 | 7·64 | 6·37 | 6·80 | − 0·43 | + 0·07 | + 0·43 |
| 519 | 3 | 5 | 5 | 7·53 | 7·03 | 7·38 | 7·84 | 7·38 | 7·60 | − 0·50 | + 0·46 | + 0·22 |
| 521 | 4 | 6 | 7 | 7·47 | 7·45 | 7·22 | 7·20 | 7·43 | 7·79 | − 0·02 | − 0·02 | + 0·36 |
| 522 | 5 | 10 | 7 | 7·28 | 7·14 | 7·49 | 7·62 | 7·71 | 7·33 | − 0·14 | + 0·13 | − 0·38 |
| 523 | 3 | 9 | 5 | 7·50 | 7·33 | 7·21 | 7·52 | 7·18 | 7·52 | − 0·17 | + 0·31 | + 0·34 |
| 528 | 4 | 6 | 4 | 7·22 | 6·88 | 7·62 | 7·78 | 7·50 | 7·50 | − 0·34 | + 0·16 | 0·00 |
| 538 | 4 | 5 | 3 | 7·55 | 7·05 | 7·62 | 7·34 | 7·13 | 6·93 | − 0·50 | − 0·28 | − 0·10 |
| 541 | 3 | 8 | 7 | 7·43 | 7·17 | 7·59 | 7·50 | 7·47 | 7·57 | − 0·26 | − 0·09 | + 0·23 |
| 542 | 4 | 12 | 7 | 7·65 | 7·25 | 7·13 | 7·18 | 7·39 | 7·62 | − 0·40 | + 0·05 | + 0·14 |
| 545 | 3 | 12 | 5 | 7·63 | 7·50 | 7·41 | 7·43 | 7·32 | 7·46 | − 0·13 | + 0·02 | + 0·26 |
| 546 | 3 | 15 | 5 | 7·87 | 7·50 | 7·59 | 7·57 | 7·30 | 7·56 | − 0·37 | − 0·02 | + 0·23 |
| 552 | 3 | 3 | 6 | 7·27 | 7·10 | 6·90 | 7·00 | 7·52 | 7·75 | − 0·17 | + 0·10 | + 0·27 |
| 560 | 3 | 5 | 4 | 6·47 | 6·67 | 7·48 | 7·64 | 7·52 | 7·25 | + 0·20 | + 0·16 | − 0·11 |
| Mean, every plate equal weight, | | | | | | | | | | − 0·09 | + 0·14 | + 0·11 |
| „ „ weight proportional to number of stars, | | | | | | | | | | − 0·07 | + 0·15 | + 0·12 |
| „ subtracting total mean, | | | | | | | | | | − 0·14 | + 0·08 | + 0·05 |

from which it would seem that, whereas the Divisions II. and III. are sensibly homogeneous, the photographic magnitudes in Division I. are about $0{\cdot}2^{m}$ too faint.

Summarizing now the results embodied in the Tables 1, 4, 5, 6, we find that in the direction of the increasing declinations (Strips A., B., C.), the star-density and, corresponding therewith, the difference between the photographic and visual magnitudes, hardly varies to any appreciable amount; that in the direction of the increasing right ascensions (Strips I., II., III.), there appears a small variation of this sort which, however, seems to be in opposite directions for the stars brighter than $9{\cdot}0^{m}$, and those fainter than that magnitude.

Though such a result would not seem to be inexplicable, there still seems reason to doubt its reality—1st, because of the small amount of about $0{\cdot}18^{m}$ in both cases; 2nd, on account of the at least partly, relatively imperfect data from which the results had to be derived. I therefore think that we cannot be far wrong in affirming that *for the plates taken with the lens in its original condition, as well as for those taken with the repolished lens, the systematic errors of the magnitudes depending on the position of the stars on the plates must be all but insignificant.*

8. *Comparison of the photographic and the visual magnitudes.*

In continuation of what has been done for vol. i., in the Introduction to that volume, arts. 9 and 10, I have derived the values of $\Delta p$, $\Delta v$ for vols. ii. and iii., restricting, however, the comparisons to Gould's *Zone Catalogue*.

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Even for the very bright stars I have (contrary to what was done in vol. i.) used the estimates of the Z.C. in preference to those of the U.A., in order that future studies about the Purkinje phenomenon (Comp. art. 19 of Introd. to vol. i.) may be facilitated and become more conclusive.*

The results are as follows:—

### Table 7.

Argument: Photographic Magnitude.

Z.C.—C.P.D. $\Delta p$ (Sequel to Table 10, Introd., Vol. I.).

| Photo-mags. | 40½ | 45½ | 50½ | 55½ | 60 | 65 | 70 | 75 | Weighted mean. |
|---|---|---|---|---|---|---|---|---|---|
| m m | m | m | m | m | m | m | m | m | m |
| 9·0 – 9·4 | −0·04 100 | −0·01 60 | −0·03 60 | +0·03 80 | −0·07 70 | +0·05 60 | −0·01 60 | −0·12 43 | −0·02 533 |
| 8·5 – 8·9 | +0·06 100 | +0·08 60 | +0·05 60 | +0·04 80 | −0·01 70 | +0·05 60 | +0·02 60 | +0·01 43 | +0·04 533 |
| 8·0 – 8·4 | +0·01 100 | +0·14 60 | +0·03 60 | −0·03 80 | −0·07 70 | −0·08 60 | −0·08 60 | −0·01 43 | −0·01 533 |
| 7·5 – 7·9 | −0·20 100 | −0·09 60 | −0·18 60 | +0·02 80 | −0·13 70 | −0·02 60 | −0·04 60 | −0·02 43 | −0·09 533 |
| 7·0 – 7·4 | −0·25 100 | −0·30 60 | −0·29 60 | −0·21 80 | −0·09 70 | −0·07 60 | −0·09 60 | +0·02 37 | −0·18 527 |
| 6·0 – 6·9 | −0·37 92 | −0·23 52 | −0·35 43 | −0·34 61 | −0·21 60 | −0·09 53 | −0·13 60 | −0·04 34 | −0·24 455 |
| 5·0 – 5·9 | +0·02 21 | −0·75 21 | −0·23 16 | −0·14 14 | +0·02 29 | −0·05 28 | +0·29 16 | +0·10 4 | −0·11 149 |
| 4·0 – 4·9 | −0·80 10 | −0·30 3 | −0·09 8 | −0·37 7 | −0·22 13 | −0·20 11 | −1·30 4 | −0·60 2 | −0·41 58 |

### Table 8.

Argument: Visual Magnitude.

Z.C.—C.P.D. $\Delta v$ (Sequel to Table 16, Introd., Vol. I.).

| Vis-mag. Z.C. | 40½ | 45½ | 50½ | 55½ | 60 | 65 | 70 | 75 | Weighted mean. |
|---|---|---|---|---|---|---|---|---|---|
| m m | m | m | m | m | m | m | m | m | m |
| 9·0 – 9·4 | −0·05 75 | −0·07 75 | +0·03 75 | +0·07 75 | +0·04 60 | +0·13 49 | −0·01 59 | +0·05 40 | +0·02 508 |
| 8·5 – 8·9 | −0·14 75 | −0·14 75 | −0·02 75 | −0·05 75 | −0·12 60 | −0·09 49 | −0·13 59 | −0·07 40 | −0·09 508 |
| 8·0 – 8·4 | −0·13 75 | −0·12 75 | −0·18 75 | −0·23 75 | −0·23 60 | −0·19 49 | −0·20 59 | −0·17 39 | −0·18 507 |
| 7·5 – 7·9 | −0·27 52 | −0·23 47 | −0·32 45 | −0·21 46 | −0·53 55 | −0·40 53 | −0·47 59 | −0·48 40 | −0·37 397 |
| 7·0 – 7·4 | −0·49 52 | −0·43 47 | −0·59 45 | −0·51 46 | −0·47 55 | −0·49 53 | −0·52 59 | −0·34 36 | −0·48 393 |
| 6·0 – 6·9 | −0·61 52 | −0·61 47 | −0·56 45 | −0·52 47 | −0·35 55 | −0·44 53 | −0·30 59 | −0·45 34 | −0·48 392 |
| 5·0 – 5·9 | −0·79 28 | −0·79 19 | −0·62 25 | −0·69 16 | −0·62 27 | −0·56 28 | −0·65 10 | −1·00 3 | −0·68 156 |
| 4·0 – 4·9 | −1·30 11 | −0·62 9 | −1·01 8 | −0·65 4 | −1·00 14 | −1·08 9 | −0·82 6 | −1·30 2 | −0·98 63 |

* I have been reproached for over-anxiety to attribute the regular progression in the values of $\Delta p - \Delta v$ and $r$ (Introduction, vol. i. arts. 11, 19) to the exclusive action of Purkinje's phenomenon. Notwithstanding Scheiner's experiment (*Astr. Nachr.*, No. 3505), I am still convinced that the actual state of our knowledge does not yet permit any more positive statement to be made upon the subject than this—*viz.*, that part, at least, of the progression in the values of $\Delta p - \Delta v$ must be due to the phenomenon in question. In the Introduction to vol. i. we did *not* find a decrease in the values of $r$ and $\Delta p - \Delta v$ for stars from mag. 6·0 to 7·0 taken from the U.A. But the magnitudes of these stars were observed either with the naked eye or with an opera-glass only, and therefore, in any discussion of magnitudes as affected by Purkinje's phenomenon, such stars are to be regarded as faint objects. From the fact that for these stars no decrease in the values of $r$ and $\Delta p - \Delta v$ occurs, we must be careful in arriving at definitive conclusions before more exhaustive investigations have been made.

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From these tables we derive at once the following, which are analogous to Tables 19 and 22 of the Introduction to vol. i.

TABLE 9.

$\Delta p - \Delta v$ (Sequel to Table 19, Introd., Vol. I.).

| | 40½ | 45½ | 50½ | 55½ | 60 | 65 | 70 | 75 | Weighted mean. |
|---|---|---|---|---|---|---|---|---|---|
| m m | m | m | m | m | m | m | m | m | m |
| 9·0 – 9·4 | +0·01 | +0·06 | –0·06 | –0·04 | –0·11 | –0·08 | 0·00 | –0·17 | –0·04 |
| 8·5 – 8·9 | +0·20 | +0·22 | +0·07 | +0·09 | +0·11 | +0·14 | +0·15 | +0·08 | +0·13 |
| 8·0 – 8·4 | +0·14 | +0·26 | +0·21 | +0·20 | +0·16 | +0·11 | +0·12 | +0·16 | +0·17 |
| 7·5 – 7·9 | +0·07 | +0·14 | +0·14 | +0·23 | +0·40 | +0·38 | +0·43 | +0·46 | +0·28 |
| 7·0 – 7·4 | +0·24 | +0·13 | +0·30 | +0·30 | +0·38 | +0·42 | +0·43 | +0·36 | +0·30 |
| 6·0 – 6·9 | +0·24 | +0·38 | +0·21 | +0·18 | +0·14 | +0·35 | +0·17 | +0·41 | +0·24 |
| 5·0 – 5·9 | +0·81 | +0·04 | +0·39 | +0·55 | +0·64 | +0·51 | +0·94 | +1·10 | +0·57 |
| 4·0 – 4·9 | +0·50 | +0·32 | +0·92 | +0·28 | +0·78 | +0·88 | –0·48 | +0·70 | +0·57 |

and

TABLE 10.

Z.C—C.P.D. $\mu$ (Sequel to Table 22, Introd., Vol. I.).

| | 40½ | 45½ | 50½ | 55½ | 60 | 65 | 70 | 75 | Weighted Mean. |
|---|---|---|---|---|---|---|---|---|---|
| m m | m | m | m | m | m | m | m | m | m |
| 9·0 – 9·4 | –0·05 | –0·04 | 0·00 | +0·05 | –0·01 | +0·09 | –0·01 | –0·04 | 0·00 |
| 8·5 – 8·9 | –0·04 | –0·03 | +0·01 | 0·00 | –0·06 | –0·03 | –0·05 | –0·03 | –0·03 |
| 8·0 – 8·4 | –0·06 | +0·01 | –0·08 | –0·13 | –0·15 | –0·14 | –0·14 | –0·09 | –0·10 |
| 7·5 – 7·9 | –0·22 | –0·14 | –0·23 | –0·10 | –0·32 | –0·22 | –0·26 | –0·25 | –0 22 |
| 7·0 – 7·4 | –0·36 | –0·33 | –0·43 | –0·33 | –0·28 | –0·28 | –0·30 | –0·17 | –0·32 |
| 6·0 – 6·9 | –0·47 | –0·43 | –0·45 | –0·41 | –0·26 | –0·26 | –0·21 | –0·24 | –0·35 |
| 5·0 – 5·9 | –0·41 | –0·74 | –0·44 | –0·43 | –0·32 | –0·30 | –0·21 | –0·46 | –0·40 |
| 4·0 – 4·9 | –0·92 | –0·53 | –0·57 | –0·48 | –0·57 | –0·61 | –0·80 | –0·88 | –0·65 |

The agreement of Table 9 with the former Table 19 of vol. i. is very remarkable. The greater negative value found in vol i. for the stars 9·0–9·4 Z.C. is readily explained by reasoning similar with that of vol. i. p. (39) in connection with these two facts:—1st, that the Zones $-26\frac{1}{2}$, $-31\frac{1}{2}$, $-35\frac{1}{2}$ contain regions nearer to the Pole of the Milky Way; 2nd, that the plates for these zones are somewhat poorer than those of equal galactic latitude for vols. ii. and iii.

For the last table also the agreement with Table 22 (decl. $-24°.0'$ to $38°.0'$) of vol. i. is generally very satisfactory, and there seems to be no ground for not combining both tables to final values. Giving double weight to the table now derived, we get the following table for the reduction of *the whole of the C.P.D. south of declination* $-24°.0'$ to magnitudes complying with Definition III. of photographic magnitude as given in the Introduction to vol. i. p. (47), and which must replace the second part of the table given on p. (97) of that Introduction.

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TABLE 11. $\mu$.

| Phot.-mag. | $\mu$ |
|---|---|
| m | m |
| 9·55 | 0·0 |
| 8·45 | −0·1 |
| 7·95 | −0·2 |
| 7·45 | −0·3 |
| 6·45 | −0·4 |
| 5·05 | −0·5 |
| 4·35 | |

from which the correction $\mu$, to be *added* to the magnitudes of the catalogue, may be taken without interpolation.

For the belt of plates −19° to −24°.0′, the magnitudes of which were based on comparisons with Schönfeld's D.M., the first part of the table given in vol. i. p. (97) will be retained.

9. *The probable errors of the right ascensions, declinations, and magnitudes.*

For derivation of the probable errors in right ascension and declination of our positions as contained in vol. ii. and vol. iii., the C.P.D. places were compared with those of Gould's *General Catalogue.* The P.E. of the *differences* were found to be as follows :—

P.E. of G.—C.P.D.

| Belt of Plates. | P.E. in $\alpha$. | P.E. in $\delta$. | Number of Stars. |
|---|---|---|---|
| | s | ′ | |
| 40½ | 0·289 | 0·0474 | 102 |
| 45½ | 0·284 | 0·0429 | 108 |
| 50½ | 0·346 | 0·0460 | 123 |
| 55½ | 0·276 | 0·0492 | 109 |
| 60 | 0·367 | 0·0498 | 81 |
| 65 | 0·314 | 0·0673 | 47 |
| 70 | 0·374 | 0·0646 | 41 |
| 75 | 0·450 | 0·0520 | 48 |
| 80 | 0·820 | 0·0502 | 40 |
| 85 | 1·023 | 0·0473 | 32 |

In the last column have been given the numbers of stars from which the several results were derived.

If, now, we assume that the P.E. of Gould's positions due to the combined effect of proper motion and accidental error of observation are :—

| Declinations. | P.E. in $\alpha$. | P.E. in $\delta$. |
|---|---|---|
| −38° to −58° | ±0s·09 | } ±0′·0133 |
| −58 „ −86 | ±0s·0467 sec $\delta$ (=0″·7) | |

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get for the P.E. of the positions in the C.P.D. respectively :—

| Declinations. | $r\alpha$. | $r\delta$. |
|---|---|---|
| −38° to −58° | $\pm 0^{s}{\cdot}288$ | $\pm 0'{\cdot}0444$ |
| −58° „ −86° | $\pm (0^{s}{\cdot}157 + 0^{s}{\cdot}0764 \sec. \delta)$ | $\pm 0'{\cdot}0559$ |

For the polar plate *all* the stars common to the C.P.D. and G were used, with the exception only of G 24354, for which the deviation in the declination is somewhat large, but which is very faint, and depends only on a single observation in Cordoba.

For the combined effect of proper motion and error of observation in Cordoba were here adopted the somewhat smaller probable errors :—in R.A. $\pm 0''{\cdot}4$ (arc of gr. circle), and in declination $\pm 0''{\cdot}5$, by the aid of which we get for the probable error of the C.P.D. positions,

in R.A. $\pm 0''{\cdot}53$ (arc of gr. circle), in declination $\pm 0''{\cdot}76$.

These values, compared with the P.E. of Gould's *Zone Catalogue* for the declinations −45° to −80°—*viz.*, in R.A. $\pm 0''{\cdot}66$ (arc of gr. circle), in declination $\pm 0''{\cdot}80$—show that for the polar cap our positions are in no wise inferior to those of Gould's zones, and may therefore be regarded in some sort as a supplement of that work.

The probable errors found for vol. i. (Introd., pp. (51) and (53)) were

$\pm\ 0^{s}{\cdot}269$ and $\pm\ 0'{\cdot}0435$.

They do not materially differ from those found for the stars between declinations −38° and −58°. We may thus condense all our results into the following summary :—

| Declinations. | P.E. in R.A. | P.E. in Declination. |
|---|---|---|
| −18° to −58° | $\pm\ 0^{s}{\cdot}28$ | $\pm 0'{\cdot}044$ |
| −58° „ −86° | $\pm (0^{s}{\cdot}157 + 0^{s}{\cdot}0764 \sec. \delta)$ | $\pm 0'{\cdot}056$ |
| Polar plate. | $\pm\ 0^{s}{\cdot}0353 \sec. \delta$ | $\pm 0'{\cdot}0127$ |

In seconds of arc of the great circle we have therefore the following table :—

TABLE 12.

| Declination. | P.E. in R.A. | P.E. in Declination. |
|---|---|---|
| ° | " | " |
| −20 | ±3·9 | |
| −30 | 3·6 | |
| −40 | 3·2 | ±2·65 (−20 to −55) |
| −50 | 2·7 | |
| −55 | 2·4 | |
| −60 | 2·3 | |
| −65 | 2·1 | |
| −70 | 1·95 | |
| −75 | 1·75 | 3·35 (−60 to −85) |
| −80 | 1·55 | |
| −85 | 1·35 | |
| Polar plate. | 0·53 | 0·76 |



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The cause of the decrease in accuracy of the declinations south of $-58°.0'$ has been explained in art. 3.

As to the probable errors of the magnitudes, the results derived in the Introduction to vol. i. p. (55) will, doubtless, hold for all plates obtained with the repolished lens.

To obtain also data for the plates taken with the lens in its original condition, a great number of comparisons have been made between the estimates for the same stars, made by the two observers at the ocular of the measuring apparatus. The resulting probable errors are strictly comparable with the values $\tau$ given in vol. i. p. (55). They are as follows:—

TABLE 13.

P.E. of Mean of Two Observations. $\tau$.

| Limits of Diameter. | Mean Diameter. | Mean Magnitude. | P.E. of Diameter. | P.E. in Magnitude. | Number of Stars. |
|---|---|---|---|---|---|
| ′ ′ | ′ | | ′ | m | |
| <0·2 | 0·07 | (9·0) | ±0·0125 | ±0·048 | 455 |
| 0·2 to 0·5 | 0·34 | (8·6) | 0·0215 | 0·069 | 426 |
| 0·5 „ 1·0 | 0·7 | (7·5) | 0·038 | 0·093 | 272 |
| 1·0 „ 2·0 | 1·4 | (6·6) | (0·096) | (0·144) | 16 |

If the four results are combined with weights proportional to the number of stars of each class of magnitude, we obtain

$$\tau = \pm 0{\cdot}055^{m},$$

which is sensibly *smaller* than that found for the same quantity in vol. i. It increases, however, much more rapidly with the brightness than is the case with the plates obtained by the repolished lens. If we consider that the images of the stars produced by the lens in its original state are, on the whole, considerably larger, and that, at the same time, the images of brighter stars are more irregular in outline towards the edges of the plates, this result is exactly what might have been anticipated.

It may be well to make a general remark here concerning the *very* bright and the *very* faint stars contained in the catalogue.

As far as I know, no formula has yet been given for converting diameters into magnitudes, which will allow of an extrapolation considerably beyond the limits of magnitude of those stars on which the determination of the constants of the formula depend. The formula used for the C.P.D. (see Introd. to vol. i. p. (20))—though I know as yet no better one—is not exempt from this rule. The consequence is that, speaking roughly, for the stars brighter than 6·5 or fainter than 9·5, the magnitudes as given in the catalogue are far less reliable than those for stars within these limits.

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The uncertainty rapidly increases as we recede from these values, and such magnitudes as, for instance, $5{\cdot}0^m$ or brighter, and $10{\cdot}5^m$ or fainter, will be certainly illusory in most cases.*

The fact that, in deriving our magnitudes, we have adhered throughout to one and the same very simple formula, will make it easy, however, to derive corrections as soon as a better formula is known, or to fall back on the quantities really measured—*i.e.*, on the diameters of the stars on the plates.

10. *On the limit of magnitude to which the C.P.D. may be considered complete.*

It may be safely laid down as a rule, that, if from the magnitudes, as given in the catalogue for the faintest stars on any one plate, we subtract $0{\cdot}3^m$, we will obtain the limit of photographic magnitude to which the stars of the catalogue are certainly practically complete.

In those cases where the images on the measuring plate (as seen in the measuring telescope) are equal to those on the check plate, and *a fortiori* in those cases where the latter were denser,† and this relation has been the almost general rule, this number may even safely be diminished to $0{\cdot}2^m$ or even somewhat less, especially for the poorer plates where every effort was made to get the stars as completely as possible.

It is an advantage of photography that a generally reliable limit of magnitude can thus be at once assigned for every separate region covered by any plate. If this criterion is applied to the *whole* of the plates of the C.P.D., it will be found that we may safely assume the *whole catalogue* to be complete to stars of the photographic magnitude 9·2. There is but one exception—*viz.*, the plate No. 246 ($-35\frac{1}{2}$, $20^h\ 37^m\ 54^s$).

For this plate the faintest stars measured are photographically of the magnitude 9·23, and the limit of certain completeness would thus be 9·03. However, considering that the images on the check plate are here sensibly denser than on the measuring plate, and further, that not a single star of Gould's *Zone Catalogue* is missing on the plates, there seems reason to believe that here, also, the limit of magnitude to which the stars have been *completely* observed will not prove materially below 9·2.

Another question, of course, is—To what limit of magnitude would the plates be found complete, were the magnitudes of the C.P.D. reduced to a homogeneous set of photographic magnitudes for the whole sky? All things considered, I confidently believe that the C.P.D. will be found practically complete, in or near the Milky Way, to stars which, in the scales of Gould, Schönfeld, and Thome, are of the magnitude 9·5, and for the rest of the sky to stars actinically equivalent to these. The reason why this cannot be put into a simpler form lies, of course, in the systematic differences between photographic and visual magnitudes, depending on the galactic latitude (see Introd., vol. i. art. 7). Whether these discrepancies are caused by errors of the visual estimates, or by the difference between the colours of stars in different galactic latitudes, is here, of course, irrelevant.

* The disagreement of the formula and the observations must not be wholly ascribed to the form of the formula. It is certainly also due, to a great extent, to the want of rationality in Gould's scale, especially near the lower limit of his magnitudes. Where the range of magnitude on the plate is small, the determination of the constants B and C must have been largely influenced thereby.

† An estimate of the relative density of the images of the faint stars on measuring and check plate is given in the list of plates.

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## 11. *Total number of stars and number of stars per square degree.*

The following is a summary of the total number of stars contained in every degree of declination. The few additional stars given in the lists of errata of this volume and of vol. ii., as well as an error in the counting of Zone 60°, have been duly taken into account.

TABLE 14.

Total Number of Stars.

| Zone. | Number of Stars. | Zone. | Number of Stars. | Zone. | Number of Stars. | Zone. | Number of Stars. | Zone. | Number of Stars. | Zone. | Number of Stars. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| −18° | 491 | −30° | 6,857 | −42° | 9,663 | −54° | 10,431 | −66° | 3,825 | −78° | 1,485 |
| 19 | 8,448 | 31 | 6,897 | 43 | 9,815 | 55 | 10,161 | 67 | 3,999 | 79 | 1,250 |
| 20 | 8,559 | 32 | 6,721 | 44 | 10,406 | 56 | 10,225 | 68 | 3,599 | 80 | 1,083 |
| 21 | 8,323 | 33 | 6,442 | 45 | 10,518 | 57 | 10,427 | 69 | 3,349 | 81 | 1,050 |
| 22 | 8,432 | 34 | 9,339 | 46 | 10,625 | 58 | 8,131 | 70 | 3,038 | 82 | 908 |
| 23 | 8,376 | 35 | 9,481 | 47 | 10,081 | 59 | 7,957 | 71 | 2,787 | 83 | 761 |
| 24 | 7,513 | 36 | 9,839 | 48 | 11,012 | 60 | 7,721 | 72 | 2,802 | 84 | 661 |
| 25 | 7,617 | 37 | 9,437 | 49 | 11,858 | 61 | 6,795 | 73 | 2,349 | 85 | 560 |
| 26 | 7,545 | 38 | 8,604 | 50 | 11,905 | 62 | 6,468 | 74 | 2,136 | 86 | 426 |
| 27 | 7,607 | 39 | 9,318 | 51 | 12,075 | 63 | 4,949 | 75 | 1,830 | 87 | 349 |
| 28 | 7,750 | 40 | 9,912 | 52 | 12,255 | 64 | 4,404 | 76 | 1,639 | 88 | 213 |
| 29 | 6,927 | 41 | 10,007 | 53 | 10,591 | 65 | 4,199 | 77 | 1,600 | 89 | 62 |

Total number of stars in C.P.D., 454,875.

This number is considerably *greater* than the number of stars (431,760) contained in the similar works of Argelander and Schönfeld for the rest of the sky (−19°.0′ to North Pole), and but little less than the *total* number of stars (457,857) given by these authorities for the whole of the sky from −23°.0′ to the North Pole.

Subtracting the stars of Zone −18°, we get for the total number between −19° and the South Pole, 454,384 stars on a total area of 13,911·15 square degrees; so that we have in the mean

32·66 stars per square degree, as against
15·19 in Northern B.D.
18·21 in Schönfeld's S.D.
56·00 in Thome's D.M. (Decl. −22°.0′ to −42°.0′).

The following table is a continuation of Table 36 of the Introduction to vol. i. (pp. (88) and (89)). In the column headed $\beta$ has been given the galactic latitude for the centre of each region.

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# Table 15.

## Number of Stars per Square Degree.

| α. | −38°.0′ to −43°.0′. | | −43°.0′ to −48°.0′. | | −48°.0′ to −53°.0′. | | −53°.0′ to −58°.0′. | | −58°.0′ to −63°.0′. | | −63°.0′ to −68°.0′. | | −68°.0′ to −73°.0′. | | −73°.0′ to −78°.0′. | | −78°.0′ to −83°.0′. | | −83°.0′ to −87°.0′. | | −87°.0′ to −90°.0′. | | α. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | No. | β. | |
| h h | | ° | | ° | | ° | | ° | | ° | | ° | | ° | | ° | | ° | | ° | | ° | h h |
| 0— 1 | 8·5 | −77 | 11·8 | −72 | 15·4 | −67 | 27·6 | −62 | 9·8 | −57 | 15·2 | −52 | 9·2 | −47 | 17·7 | −42 | 7·8 | −37 | 11·7 | −32 | 20·4 | −29 | 0— 1 |
| 1— 2 | 7·4 | −73 | 9·1 | −69 | 12·6 | −65 | 18·5 | −61 | 14·5 | −56 | 8·1 | −51 | 13·1 | −46 | 17·4 | −41 | 8·7 | −37 | 7·5 | −32 | 18·7 | −29 | 1— 2 |
| 2— 3 | 8·0 | −64 | 8·4 | −62 | 10·3 | −59 | 12·5 | −56 | 9·0 | −52 | 8·9 | −48 | 15·6 | −44 | 17·7 | −40 | 11·4 | −36 | 8·8 | −32 | 17·8 | −29 | 2— 3 |
| 3— 4 | 11·3 | −53 | 9·4 | −52 | 13·0 | −51 | 14·3 | −49 | 8·3 | −46 | 13·0 | −44 | 12·0 | −41 | 10·2 | −38 | 13·4 | −34 | 10·9 | −31 | 32·3 | −28 | 3— 4 |
| 4— 5 | 16·7 | −41 | 13·2 | −42 | 15·6 | −41 | 15·8 | −41 | 13·8 | −40 | 17·0 | −38 | 13·9 | −36 | 9·5 | −34 | 13·3 | −32 | 9·6 | −30 | 21·2 | −28 | 4— 5 |
| 5— 6 | 22·2 | −30 | 17·9 | −31 | 20·7 | −32 | 24·4 | −32 | 21·7 | −32 | 20·9 | −32 | 29·3 | −32 | 14·7 | −31 | 15·4 | −30 | 16·3 | −29 | 23·8 | −28 | 5— 6 |
| 6— 7 | 33·4 | −19 | 42·0 | −21 | 25·6 | −22 | 25·2 | −24 | 27·1 | −25 | 23·8 | −26 | 23·2 | −27 | 15·1 | −27 | 14·1 | −27 | 14·3 | −27 | 18·7 | −27 | 6— 7 |
| 7— 8 | 69·3 | − 9 | 82·7 | −11 | 36·0 | −14 | 34·1 | −16 | 29·7 | −18 | 27·5 | −19 | 24·3 | −22 | 15·1 | −23 | 14·8 | −25 | 34·2 | −26 | 23·8 | −27 | 7— 8 |
| 8— 9 | 101·0 | + 1 | 119·4 | − 2 | 62·9 | − 6 | 58·8 | − 9 | 34·6 | −12 | 30·1 | −14 | 30·4 | −17 | 22·4 | −20 | 35·8 | −23 | 36·1 | −25 | 22·9 | −27 | 8— 9 |
| 9—10 | 87·6 | + 9 | 91·2 | + 5 | 105·8 | + 1 | 113·2 | − 2 | 52·4 | − 6 | 29·0 | −10 | 25·3 | −14 | 25·2 | −17 | 37·0 | −21 | 35·4 | −24 | 29·7 | −26 | 9—10 |
| 10—11 | 64·6 | +16 | 79·5 | +11 | 94·2 | + 7 | 154·2 | + 3 | 118·6 | − 2 | 70·9 | − 6 | 62·7 | −11 | 22·5 | −15 | 41·0 | −19 | 39·4 | −23 | 31·4 | −26 | 10—11 |
| 11—12 | 48·2 | +20 | 53·4 | +15 | 95·7 | +11 | 90·2 | + 6 | 131·7 | + 1 | 35·7 | − 4 | 29·5 | − 9 | 27·7 | −13 | 35·2 | −18 | 40·9 | −23 | 27·2 | −26 | 11—12 |
| 12—13 | 42·0 | +22 | 42·0 | +17 | 94·8 | +12 | 65·8 | + 7 | 80·9 | + 2 | 58·8 | − 2 | 28·7 | − 8 | 30·1 | −13 | 25·5 | −18 | 41·7 | −22 | 32·3 | −26 | 12—13 |
| 13—14 | 33·5 | +21 | 43·8 | +16 | 91·0 | +11 | 60·0 | + 6 | 106·9 | + 2 | 74·6 | − 3 | 37·0 | − 8 | 24·8 | −13 | 12·6 | −18 | 23·5 | −22 | 15·3 | −26 | 13—14 |
| 14—15 | 31·8 | +18 | 50·1 | +13 | 102·3 | + 9 | 52·4 | + 4 | 60·3 | − 1 | 53·1 | − 5 | 45·7 | −10 | 49·9 | −14 | 27·5 | −19 | 21·4 | −23 | 16·1 | −26 | 14—15 |
| 15—16 | 31·9 | +12 | 57·6 | + 8 | 134·8 | + 4 | 90·7 | 0 | 107·4 | − 4 | 40·9 | − 8 | 46·5 | −12 | 45·7 | −16 | 28·8 | −20 | 11·9 | −24 | 20·4 | −26 | 15—16 |
| 16—17 | 35·3 | + 4 | 47·8 | + 1 | 103·8 | − 3 | 102·5 | − 6 | 39·4 | − 9 | 33·3 | −13 | 38·3 | −16 | 19·0 | −19 | 10·0 | −22 | 12·6 | −25 | 22·9 | −27 | 16—17 |
| 17—18 | 62·1 | − 5 | 65·1 | − 8 | 65·8 | −10 | 70·4 | −13 | 41·2 | −15 | 34·4 | −18 | 30·4 | −20 | 14·9 | −22 | 11·4 | −24 | 18·6 | −26 | 15·3 | −27 | 17—18 |
| 18—19 | 27·6 | −15 | 46·8 | −17 | 41·0 | −19 | 57·2 | −21 | 32·7 | −22 | 24·6 | −24 | 22·9 | −25 | 21·3 | −26 | 20·0 | −26 | 15·7 | −27 | 19·5 | −27 | 18—19 |
| 19—20 | 31·0 | −26 | 24·5 | −27 | 29·7 | −28 | 38·2 | −29 | 15·8 | −29 | 11·4 | −30 | 32·4 | −30 | 26·4 | −29 | 21·0 | −29 | 10·1 | −28 | 14·4 | −28 | 19—20 |
| 20—21 | 21·4 | −37 | 21·0 | −38 | 20·9 | −38 | 21·3 | −37 | 10·3 | −37 | 9·6 | −36 | 12·0 | −35 | 22·6 | −33 | 24·7 | −31 | 9·8 | −30 | 16·1 | −28 | 20—21 |
| 21—22 | 16·0 | −49 | 18·8 | −47 | 17·4 | −47 | 28·0 | −46 | 13·4 | −44 | 17·0 | −42 | 13·2 | −39 | 15·0 | −36 | 18·5 | −33 | 10·7 | −31 | 22·1 | −28 | 21—22 |
| 22—23 | 11·0 | −60 | 11·7 | −58 | 14·6 | −56 | 20·2 | −53 | 13·1 | −50 | 16·4 | −47 | 17·8 | −43 | 7·2 | −39 | 10·3 | −35 | 11·3 | −32 | 23·8 | −29 | 22—23 |
| 23— 0 | 11·5 | −70 | 11·8 | −67 | 15·7 | −63 | 25·3 | −59 | 11·4 | −55 | 13·4 | −50 | 9·0 | −46 | 17·0 | −41 | 8·6 | −36 | 8·2 | −32 | 23·8 | −29 | 23— 0 |
| Mean | 34·7 | ... | 40·8 | ... | 51·6 | ... | 50·9 | ... | 41·8 | ... | 28·6 | ... | 25·9 | ... | 21·2 | ... | 19·4 | ... | 19·2 | ... | 22·1 | ... | Mean |

## 12. *Chronology of the measurements.*

The following summary will show at a glance the time that has been expended on the measurement of the various parts of the C.P.D. A fair idea of what can be done with good plates, if the work can be prosecuted without serious interruption, is given by the period 1890 October 7 to 1892 June 11. In these twenty months the whole work of measuring from declination $-34°.0'$ to declination $-58°.0'$, with a total of nearly 250,000 stars, was executed. This number of stars represents considerably more than half of the whole of the stars contained in the C.P.D.

The first photograph for this region was taken on 27th November 1889.* The time elapsed from the beginning of the photographing till the end of the measuring amounts, therefore, to but slightly more than two years and a half.

The table contains also the names of the persons by whom the first observation at the ocular of the measuring apparatus has been made† (the second one and all the revisions have been invariably made by myself), and of those by whom the hour-circle was read.

| Dates. | Plates Measured. | 1st Measurement made by | Hour-Circle read by | Remarks. |
|---|---|---|---|---|
| 1886 Oct. 28 | Polar plate. | $K_1$ | $N_1$ | Hour-circle in its original condition; diameter of field of telescope only 40′ (see art. 2). Polar plate was afterwards remeasured in rectangular co-ordinates (art. 5). |
| to | Belt 85° complete. | $K_1$ | $N_1$, a few by $N_2$ | |
| 1887 June 9 | „ 80° „ | $K_1$ | $N_1$, a few by $N_2$ | |
| | | | | Between 1887 June and November the hour-circle was re-graduated, and a new diaphragm giving a field of 65′ was inserted in the telescope (see art. 2). |
| 1887 Nov. 12 | Belt 75° complete. | S | R | |
| to | „ 70° „ | S | R | |
| 1888 July 14 | „ 65° „ | S | R | |
| | „ 60° „ | S | R | With the exception of plate 60°, $4^h\ 48^m$, of which only a pair of repeated plates was measured 15th January 1894; first measurement, observer at the ocular V, hour-circle read by $K_1$; 2nd measurement, observer K and V at the hour-circle. |
| 1888 Aug. 15 | Belt 55½ (rejected) complete. | S | R | |
| to | „ 51½ „ $13^h\ 24^m - 6^h\ 12^m$ | S | R | |
| 1889 May 18 | „ 31½ 9 24 −23 48 | S | R | |
| | „ 21½ 11 50 −23 50 | S | R | |
| 1889 June 4–19 | Belt 26½ 14 26 −17 26 | S | R | |
| | „ „ 21 11 −23 48 | S | R | |
| 1889 Aug. 5 | Belt 51½ (rejected) 6 12 −13 0 | S | R | Plate 51½, $13^h\ 12^m$, not measured. |
| to | „ 48 „ complete. | S | R | Only *once* measured. |
| 1890 June 7 | „ 40 „ 17 10 −23 50 | S | R | |
| | „ 31½ 23 48 − 9 24 | S, V | R | $6^h\ 36^m$–$9^h\ 36^m$, 1st measuring by S, rest by V. |
| | „ 26½ 23 49 −14 26 | V | R, $K_2$ | $K_2$, $23^h\ 49^m$–$4^h\ 19^m$ and $7^h\ 19^m$–$11^h\ 4^m$, rest by R. |
| | „ „ 17 26 −21 11 | V | R | |
| | „ 21½ 23 50 −11 50 | V | R | From $11^h\ 10^m$–$11^h\ 50^m$ only once measured on original plates. These were so bad that they were rejected before a second measurement was made. |

* The last plate was taken 31st January 1891. The taking of the photographs of this region, therefore, took only fourteen months.

† This name has also been given for every plate definitively retained for the C.P.D. in the list of the plates.

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Chronology of the Measurements—*continued.*

| Date. | Plates Measured. | 1st Measurement made by | Hour-Circle read by | Remarks. |
|---|---|---|---|---|
| 1890 Oct. 7 | Belt $35\frac{1}{2}$ complete. | V | $K_2$ $N_2$ | $K_2$, $23^h\ 47^m$–$7^h\ 22^m$. Rest by $N_2$. |
| to | „ $40\frac{1}{2}$ „ | V | $N_2$ $PK_3$ | $K_3$, $23^h\ 20^m$–$0^h\ 40^m$, and 2nd observation of $10^h\ 0^m$–$12^h\ 13^m$; P, $0^h\ 40^m$–$6^h\ 0^m$. Rest by $N_2$. |
| 1892 June 11 | „ $45\frac{1}{2}$ „ | V | $K_2$ $N_2$ | $K_2$, $23^h\ 46^m$–$6^h\ 14^m$. Rest by $N_2$. |
| | „ $50\frac{1}{2}$ „ | V | $N_2$ $PK_3$ | P, $22^h\ 45^m$–$7^h\ 45^m$; $K_2$, $7^h\ 45^m$–$8^h\ 45^m$; $K_3$, $21^h\ 15^m$–$22^h\ 45^m$, and 2nd observation of $10^h\ 15^m$–$11^h\ 45^m$. Rest by $N_2$. |
| | „ $55\frac{1}{2}$ „ | V | $N_2$ R | $N_2$, $22^h\ 8^m$–$9^h\ 20^m$. Rest by R. |
| 1892 Aug. 18 | 8 repeated plates, belt $21\frac{1}{2}$ | V | $N_2$ | Plates Nos. 28, 35, 36, 37, 38, 39, 46, 61. |
| to | 2 „ „ „ $26\frac{1}{2}$ | V | $N_2$ | „ „ 97, 100. |
| Dec. 8 | 1 „ „ „ $31\frac{1}{2}$ | V | $N_2$ | „ „ 175. |
| | 3rd measurement of 32 plates | V | R | „ „ 28, 35–39, 46, 61, 97, 100, 175, 254, 277–292, 307, 382, 383, 403. |
| 1896 Feb. 19 | 4 repeated plates, belt 60° | V | M | „ „ 456, 479, 482, 484. |
| to Mar. 16 | 4 „ „ „ 65 | V | M | „ „ 493, 494, 520, 526. |
| 1897 Sept. 6–28 | 7 „ „ „ 70 | V | M | „ „ 531, 532, 533, 549, 553, 555, 559. |
| 1898 Jan. 10 | 6 „ „ „ 75 | V | J | „ „ 561, 563, 567, 580, 581, 582. |
| to Feb. 1 | 3 „ „ „ 80 | V | J | „ „ 587, 598, 599. |

J = Jansen. M = Mulder. R = Roetert.
$K_1$ = Kapteyn. $N_1$ = Nienhuis, sen. S = Speckman.
$K_2$ = Kloppenburg. $N_2$ = Nienhuis, jun. V = de Vries.
$K_3$ = Kars. P = Postma.

## 13. *References to other catalogues and list of abbreviations.*

In general the rules given in art. 20 of the Introduction to vol. i. have been adhered to throughout the whole of the work. Advantage only was often taken in the third volume of those cases in which space allowed of a reference to *more* than five authorities. In these cases the five authorities which have precedence are duly given, together with some additional ones, mostly of a relatively remote epoch.

We may, perhaps, be allowed expressly to draw attention to the fact that in order to get the utmost benefit from these references, our catalogue must be used in connection with that of Stone. Except for the stars nearest the equator, which have been frequently observed at many of the northern observatories, the two catalogues together will in most cases give reference to nearly every authority of real importance for the derivation of proper motion up to about 1880. For positions observed in or before 1850, the type used for the reference to Stone shows at once whether or not we may hope to find further authorities in the *Cape Catalogue* for 1880.

To the catalogues referred to in vols. i. and ii. there has been added for the third volume :—

Gilliss's Catalogue of circumpolar stars, which recently appeared in the *Washington Observations* for 1890, Appendix I.

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There can be no doubt but that this catalogue will render good service for the derivation of the proper motions of the fainter stars in high southern declinations, and I have therefore treated it with particular care. The references are *complete*, with the exception only of a few bright stars for which the references to other catalogues are particularly numerous.

As was to be expected for a catalogue which contains numerous very faint stars, the number of stars missing on the plates is rather considerable. It is on this account that the list of "stars contained in the Catalogues of Precision but missing on the plates" has become much bulkier for vol. iii. than for the two preceding volumes. An extensive list of errors has been sent to the Cape for further elucidation, together with similar lists for other catalogues.

A few references (as specified below) have also been given to the yearly *Cape Catalogue* for 1891.

For the sake of convenience, we repeat here the abbreviations used for the references, as well as those used for other purposes.

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## LIST OF ABBREVIATIONS.

A. *In the Catalogue.* REFERENCES [For detail *vide* Introduction to vol. i. pp. (62)–(68)].

Cape 91. CATALOGUE OF MEAN RIGHT ASCENSIONS AND DECLINATIONS OF STARS FROM OBSERVATIONS AT THE ROYAL OBSERVATORY, CAPE OF GOOD HOPE, IN 1891. *Only the stars denoted as Kapteyn's Stars, between* −86° *and the South Pole, have been referred to.**

G, *G*, **G**. GOULD'S ARGENTINE GENERAL CATALOGUE (1886).
*G* refers to the cluster catalogues at the end of the work. **G** implies the presence of the star both in G and p.

K. KAM'S CATALOGUE OF STARS FROM THE ASTR. NACHR., vols. lxvii.–cxii.

S, **S**. STONE'S CAPE CATALOGUE FOR 1880 (1881).
The letter **S** is used in those cases where Stone gives references to catalogues of an epoch before 1850 not given in our catalogue.

c. CAPE CATALOGUE FOR 1850 (1884).

g. GILLISS'S CATALOGUE OF 1963 STARS (1870).

*g*. GILLISS'S CATALOGUE OF 16,748 SOUTHERN CIRCUMPOLAR STARS (from observations 1849–1852) (1895).

k. KAM'S CATALOGUE OF STARS FROM THE ASTR. NACHR., vols. i.–lxvi. (1885).

p. BRISBANE'S PARAMATTA CATALOGUE (1835).

* The reason why, contrary to the rule, these positions have been referred to is this, that these stars have been chosen so as to furnish fixed points between −86° and the Pole just in those parts where such points are nearly or wholly wanting in all the modern catalogues.

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r. RÜMKER'S PRELIMINARY CATALOGUE OF SOUTHERN STARS (1832).

t. TAYLOR'S MADRAS GENERAL CATALOGUE (1844).

λ. LACAILLE'S CATALOGUE OF 398 PRINCIPAL STARS, by F. Baily (1833).

mag. Reference by magnitude to Gould's *Cordoba Zone Catalogue* (1884). *Italics* indicate the fact that the catalogue contains two stars which have produced but a single image on the plates. The magnitude in the references corresponds to the combined light of the two stars.

B. *Other Abbreviations in the Catalogue:—*

* Where in the catalogue the magnitude of a star is marked with an asterisk, the star belongs to the preceding or following plate of the same declination.

†‡ Where in the catalogue the magnitude of a star is marked with a dagger or double dagger, the star belongs to a contiguous plate, North or South (see also remark at the end of art. 14).

: Suspected double.

× Image of star somewhat nebulous.

ρ Existence of star somewhat doubtful.

C. *Abbreviations used in the Lists:—*

Th. CORDOBA DURCHMUSTERUNG, by Thome [*Result. del Observatorio Nacional Argentino*, vol. xvii.] (1894).

Z.C. CORDOBA ZONE CATALOGUE (1884).

C.P.D. CAPE PHOTOGRAPHIC DURCHMUSTERUNG.

h,Z. Hour-angle and zenith-distance of the centre of the plate at the middle of the exposure.

T. Duration of exposure.

β. Galactic latitude of the centre of the plate.

B,C. The constants adopted in the reduction of the diameters to magnitudes by the formula:—

$$m = \frac{B.}{\text{diam.} + C.}$$

n. Number of Z.C. stars used for the computation of B and C.

m. Measuring plate.

c. Check plate.

### 14. *List of plates and arrangement of the catalogue.*

For the explanation of the following list of plates we refer to art. 25 of the Introduction to vol. i.

The meaning of the word "adjusted" in the column for n has been explained in art. 4.

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# LIST OF THE PLATES.

| No. | Centre of Plate. | | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. | | | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | δ 1875. | α 1875. | | | | | | | B. | C. | n. | | | |
| | ° | h m | | | h m | m | ° | | | | | | | |
| 408 | −55·5 | 0 0 | 2419 | 1889 Dec. 4 | 1 37·5 | 35 | 27 | −61 | 101·3 | 9·5 | 47 | o=o | V | *Definition good* } Numerous star- |
| | | | 2427 | „ „ 12 | 1 48·5 | 37 | 29 | | | | | | | *Definition good* } like specks. |
| | | | 2435 | „ „ 24 | 2 48·5 | 37 | | | | | | | | *Definition good.* |
| 409 | „ | 0 32 | 2423 | „ „ 5 | 1 45·0 | 40 | 28 | −62 | 124·1 | 12·5 | 38 | −o=o | V | *Definition good; haze at end.* |
| | | | 2420 | „ „ 4 | 1 44·7 | 37½ | 28 | | | | | | | *Definition good; haze at end.* |
| | | | 2428 | „ „ 12 | 1 56·5 | 37 | | | | | | | | *Definition poor.* |
| 410 | „ | 1 4 | 2421 | „ „ 4 | 1 52·5 | 37 | 29 | −62 | 115·0 | 11·3 | 50 | −o=o | V | *Hazy at beginning.* |
| | | | 2417 | „ „ 2 | 1 24·5 | 35 | 26 | | | | | or −o=+o | | |
| | | | 2413 | „ Nov. 27 | 1 7·5 | 35 | | | | | | | | |
| | | | 2429 | „ Dec. 12 | 2 4·5 | 37 | | | | | | | | *Definition poor.* |
| 411 | „ | 1 36 | 2430 | „ „ 12 | 2 13·5 | 37 | 32 | −60 | 151·1 | 15·3 | 56 | −o=+o | V | *Definition poor.* |
| | | | 2418 | „ „ 2 | 1 33·5 | 35 | 27 | | | | | or −o=−1 | | |
| | | | 2414 | „ Nov. 27 | 1 17·5 | 35 | | | | | | | | |
| | | | 2422 | „ Dec. 4 | 1 59·5 | 35 | | | | | | | | |
| 412 | „ | 2 8 | 2431 | „ „ 12 | 2 22·5 | 37 | 33 | −58 | 155·3 | 15·9 | 57 | o=o | V | *Definition poor.* |
| | | | 2440 | „ „ 27 | 1 30·5 | 37 | 27 | | | | | or −o=o | | *Definition poor.* |
| 413 | „ | 2 40 | 2441 | „ „ 27 | 0 38·5 | 37 | 23 | −55 | 146·2 | 14·5 | 55 | o=o | V | *Definition fair.* |
| | | | 2529 | 1890 Feb. 19 | 4 22·0 | 40 | 49 | | | | | | | *Definition fair.* |
| 414 | „ | 3 12 | 2536 | „ „ 21 | 3 12·0 | 38 | 39 | −51 | 112·2 | 10·6 | 48 | o=o | V | *Definition fair.* |
| | | | 2531 | „ „ 20 | 2 57·0 | 38 | 37 | | | | | | | *Definition fair.* |
| 415 | „ | 3 44 | 2443 | 1889 Dec. 27 | 0 55·5 | 37 | 24 | −47 | 131·1 | 13·2 | 66 | o=o | V | *Definition fair.* |
| | | | 2530 | 1890 Feb. 19 | 4 2·0 | 38 | 46 | | | | | | | *Definition good.* |
| 416 | „ | 4 16 | 2532 | „ „ 20 | 2 38·5 | 37 | 35 | −43 | 157·1 | 16·2 | 53 | −o=o | V | *Definition fair.* |
| | | | 2541 | „ „ 25 | 1 52·5 | 37 | 29 | | | | | | | |
| 417 | „ | 4 48 | 2538 | „ „ 21 | 2 57·5 | 37 | 37 | −38 | 186·0 | 19·5 | 67 | o=o | V | |
| | | | 2542 | „ „ 25 | 2 0·5 | 37 | 30 | | | | | | | *Definition very bad.* |
| 418 | „ | 5 20 | 2533 | „ „ 20 | 2 19·5 | 37 | 32 | −34 | 176·7 | 18·0 | 63 | o=o | V | *Definition fair.* |
| | | | 2546 | „ „ 28 | 2 28·5 | 37 | 33 | | | | | | | *Definition fair.* |
| 419 | „ | 5 52 | 2539 | „ „ 21 | 2 33·5 | 37 | 34 | −29 | 141·3 | 14·0 | 79 | o=o | V | |
| | | | 2547 | „ „ 28 | 2 38·0 | 40 | 35 | | | | | | | *Hazy at beginning.* |
| 420 | „ | 6 24 | 2540 | „ „ 21 | 2 39·5 | 37 | 35 | −25 | 172·4 | 17·7 | 78 | o=−o | V | |
| | | | 2543 | „ „ 25 | 1 6·5 | 37 | 25 | | | | | or +o=−o | | *Definition very bad.* |
| | | | 2534 | „ „ 20 | | | | | | | | | | *Exposure unknown; spoilt.* |
| 421 | „ | 6 56 | 2535 | „ „ 20 | 2 8·5 | 37 | 31 | −20 | 159·7 | 15·8 | 95 | o=o | V | |
| | | | 2544 | „ „ 25 | 1 14·5 | 37 | 25 | | | | | | | *Definition very bad.* |
| 422 | „ | 7 28 | 2548 | „ „ 28 | 1 45·0 | 40 | 28 | −16 | 179·4 | 18·8 | 100 | o=o | V | *Definition fair.* |
| | | | 2545 | „ „ 25 | 1 22·5 | 37 | 26 | | | | | or o=−o | | *Definition very bad.* |
| 423 | „ | 8 0 | 2606 | „ Mar. 21 | 1 4·5 | 37 | 24 | −12 | 152·5 | 15·4 | 89 | o=o | V | *Definition good.* |
| | | | 2549 | „ Feb. 28 | 1 53·5 | 37 | 29 | | | | | | | *Definition fair.* |
| 424 | „ | 8 32 | 2607 | „ Mar. 21 | 1 11·5 | 37 | 25 | − 8 | 189·0 | 19·0 | 114 | −o=o | V | *Definition good* } images |
| | | | 2624 | „ Apr. 1 | 1 18·0 | 40 | 25 | | | | | | | *Definition fair* } good. |
| 425 | „ | 9 4 | 2608 | „ Mar. 21 | 1 22·5 | 37 | 26 | − 5 | 198·2 | 21·0 | 122 | −o=+1 | V | *Definition fair.* |
| | | | 2632 | „ Apr. 15 | 2 22·5 | 37 | 33 | | | | | | | *Definition bad.* |
| | | | | | | | | | | | | | | On c the number of specks is such that the observing in the usual way becomes difficult. Therefore c removed in second measurement. Estimates for magnitude for the Zones −56° and −57° perhaps slightly different from those for the rest of the plate. |
| 426 | „ | 9 36 | 2625 | „ „ 1 | 1 10·0 | 45 | 25 | − 2 | 153·8 | 15·0 | 143 | −o=+o | V | *Hazy; exposure interrupted:* $0^h\,35^m$–$0^h\,45^m$ *and* $1^h\,5^m$–$1^h\,35^m$. |
| | | | 2633 | „ „ 15 | 2 30·5 | 37 | 34 | | | | | | | *Definition bad.* Numerous specks. |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 427 | −55·5 | 10 8 | 2717 | 1890 June 13 | 3 40·5 | 37 | 43 | + 1 | 201·0 | 19·5 | 167 | 0=0 | V | *Definition fair.* |
| | | | 2634 | ″ Apr. 15 | 2 38·5 | 37 | 35 | | | | | | | *Definition bad.* |
| 428 | ″ | 10 40 | 2610 | ″ Mar. 24 | −2 5·5 | 37 | 31 | + 3 | 164·0 | 16·5 | 129 | 0=0 | V | *Definition fair.* |
| | | | 2605 | ″ ″ 21 | −2 21·5 | 37 | 32 | | | | | | | *Definition good. Run clock stopped.* |
| | | | 2609 | ″ ″ 21 | 0 26·5 | 37 | | | | | | | | *Light struck.* |
| 429 | ″ | 11 12 | 2611 | ″ ″ 24 | −1 57·5 | 37 | 30 | + 5 | 207·0 | 21·0 | 122 | 0=0 | V | *Definition fair.* |
| | | | 2615 | ″ ″ 28 | −2 31·5 | 37 | 34 | | | | | | | *Definition poor.* |
| | | | | | | | | | | | | | | Between R.A. 11$^h$ 4$^m$ 20$^s$ and 5$^m$ 40$^s$, and Decl. 57°.15′ and 25′, film of m damaged. This region was carefully swept on c and on rejected plates. |
| 430 | ″ | 11 44 | 2620 | ″ ″ 29 | −2 55·5 | 37 | 37 | + 6 | 204·7 | 21·0 | 123 | 0=0 | V | *Definition bad.* |
| | | | 2616 | ″ ″ 28 | −2 21·5 | 37 | 32 | | | | | | | *Definition very bad.* |
| | | | | | | | | | | | | | | Numerous impurities on plates. |
| 431 | ″ | 12 16 | 2612 | ″ ″ 24 | −2 21·5 | 37 | 32 | + 7 | 169·1 | 17·4 | 121 | 0=0 | V | *Definition fair.* |
| | | | 2621 | ″ ″ 29 | −2 32·5 | 37 | 34 | | | | | | | *Definition bad.* |
| 432 | ″ | 12 48 | 2613 | ″ ″ 24 | −2 13·5 | 37 | 32 | + 7 | 190·6 | 20·0 | 110 | 0=0 | V | *Definition fair.* |
| | | | 2617 | ″ ″ 28 | −2 39·5 | 37 | 35 | | | | | | | *Definition very bad.* |
| 433 | ″ | 13 20 | 2618 | ″ ″ 28 | −2 31·5 | 37 | 34 | + 7 | 179·8 | 18·5 | 111 | 0=0 | V | *Definition very bad.* |
| | | | 2622 | ″ ″ 29 | −2 45·5 | 37 | 36 | | | | | | | *Definition poor.* |
| 434 | ″ | 13 52 | 2619 | ″ ″ 28 | −2 23·5 | 37 | 33 | + 6 | 163·3 | 16·6 | 115 | 0=0 | V | *Definition fair.* |
| | | | 2614 | ″ ″ 24 | −2 37·5 | 37 | 35 | | | | | | | *Definition fair.* |
| 435 | ″ | 14 24 | 2623 | ″ ″ 29 | −3 17·5 | 37 | 40 | + 4 | 160·4 | 16·2 | 121 | 0=−0 | V | *Definition fair.* |
| | | | 2812 | ″ Aug. 18 | 3 20·5 | 37 | 40 | | | | | | | *Definition fair.* |
| 436 | ″ | 14 56 | 2822 | ″ ″ 20 | 4 7·5 | 37 | 47 | + 2 | 198·6 | 20·0 | 106 | −0=0 | V | *Definition fair.* |
| | | | 2813 | ″ ″ 18 | 3 28·5 | 37 | 42 | | | | | | | *Definition fair.* |
| 437 | ″ | 15 28 | 2823 | ″ ″ 20 | 4 16·5 | 37 | 48 | 0 | 179·8 | 18·0 | 106 | 0=−0 | V | *Definition fair.* |
| | | | 2814 | ″ ″ 18 | 3 36·5 | 37 | 43 | | | | | | | *Definition fair.* |
| 438 | ″ | 16 0 | 2740 | ″ June 26 | −2 1·5 | 37 | 30 | − 3 | 179·5 | 17·6 | 137 | 0=0 | V | *Definition poor.* |
| | | | 2743 | ″ ″ 27 | −1 52·5 | 45 | 29 | | | | | | | *Definition fair; hazy.* |
| 439 | ″ | 16 32 | 2815 | ″ Aug. 18 | 3 17·5 | 45 | 40 | − 6 | 222·3 | 23·0 | 106 | 0=0 | V | *Cloudy last 15 min.* |
| | | | 2824 | ″ ″ 20 | 4 52·5 | 37 | 53 | | | | | Of the brighter stars images somewhat denser on m. | | *Definition fair.* Images on m irregular. |
| 440 | ″ | 17 4 | 2917 | ″ Nov. 4 | 5 36·5 | 45 | 59 | −10 | 175·2 | 17·6 | 120 | −0=+0 | V | *Definition good.* |
| | | | 2741 | ″ June 26 | −2 22·5 | 37 | 33 | | | | | | | *Definition poor.* |
| 441 | ″ | 17 36 | 2918 | ″ Nov. 4 | 5 58·0 | 50 | 62 | −14 | 168·5 | 17·0 | 93 | −0=+0 or | V | *Definition fair; interrupted.* |
| | | | 2742 | ″ June 26 | −2 9·5 | 45 | 31 | | | | | −0=−1 | | *Fog passing.* |
| 442 | ″ | 18 8 | 2746 | ″ July 9 | −2 17·5 | 37 | 32 | −18 | 225·1 | 23·2 | 84 | 0=0 | V | *Definition good.* |
| | | | 2744 | ″ ″ 4 | −2 48·0 | 48 | 36 | | | | | | | *Part of the time cloudy.* |
| 443 | ″ | 18 40 | 2745 | ″ ″ 4 | −2 34·5 | 37 | 34 | −22 | 172·0 | 17·6 | 70 | 0=0 | V | *Definition poor.* |
| | | | 2747 | ″ ″ 9 | −3 7·5 | 37 | 39 | | | | | Of the brighter stars images somewhat denser on c. | | *Definition good.* |
| 444 | ″ | 19 12 | 2967 | ″ Nov. 26 | 5 37·5 | 45 | 59 | −26 | 116·3 | 11·6 | 73 | −0=+0 | V | *Definition good.* |
| | | | 2748 | ″ July 9 | −2 50·5 | 37 | 36 | | | | | | | *Definition good.* |
| | | | 2895 | ″ Oct. 23 | 3 59·5 | 35 | | | | | | | | *Part of the time cloudy.* |
| | | | 2963 | ″ Nov. 25 | 5 21·5 | 45 | | | | | | | | *Definition good.* |
| 445 | ″ | 19 44 | 2894 | ″ Oct. 22 | 3 55·0 | 40 | 45 | −31 | 152·9 | 15·0 | 72 | −0=0 | V | *Definition very bad.* |
| | | | 2749 | ″ July 9 | −2 50·5 | 37 | 36 | | | | | | | *Definition good.* |
| | | | 2919 | ″ Nov. 4 | 4 36·5 | 45 | | | | | | | | *Definition good.* |
| 446 | ″ | 20 16 | 2968 | ″ ″ 26 | 5 23·5 | 45 | 58 | −35 | 165·3 | 17·3 | 45 | −0=0 or | V | *Definition good.* |
| | | | 2750 | ″ July 9 | −2 42·5 | 37 | 35 | | | | | −0=+0 | | *Definition good.* |
| | | | 2964 | ″ Nov. 25 | 5 7·5 | 45 | | | | | | | | *Definition fair.* |

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| No. | Centre of Plate. | | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. | | | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | δ 1875. | α 1875. | | | | | | | B. | C. | n. | | | |
| | ° | h m | | | h m | m | ° | | | | | | | |
| 447 | −55·5 | 20 48 | 2969 | 1890 Nov. 26 | 5 41·5 | 45 | 60 | −40 | 101·7 | 10·4 | 45 | o=o | V | *Definition good.* |
| | | | 2920 | " " 4 | 4 19·5 | 45 | 49 | | | | | | | *Definition good.* |
| | | | | | | | | | | | | | | c cracked. None but a few stars of the faintest description can have been lost by this cause. In cases of doubt the third plate has been consulted. |
| | | | 2996 | " Dec. 22 | 5 43·5 | 43 | | | | | | | | *Definition fair.* |
| 448 | " | 21 20 | 2921 | " Nov. 4 | 4 40·5 | 45 | 52 | −44 | 112·6 | 11·3 | 58 | −o=o | V | *Definition fair.* |
| | | | 2896 | " Oct. 24 | 4 22·0 | 48 | 49 | | | | | | | *Part of the time cloudy.* |
| 449 | " | 21 52 | 2897 | " " 24 | 5 18·0 | 60 | 57 | −49 | 173·6 | 18·0 | 64 | o=o | V | *Part of the time cloudy.* |
| | | | 2902 | " " 25 | 3 25·5 | 45 | 41 | | | | | | | *Definition good.* |
| | | | | | | | | | | | | | | Images of the brighter stars with greatest R.A. very bad and irregular. |
| 450 | " | 22 24 | 2970 | " Nov. 26 | 4 55·5 | 45 | 54 | −53 | 95·4 | 9·4 | 48 | o=o | V | *Definition good.* |
| | | | 3012 | 1891 Jan. 3 | 5 16·5 | 45 | 57 | | | | | | | *Definition very bad.* |
| | | | 2997 | 1890 Dec. 22 | 5 0·5 | 45 | | | | | | | | *Definition fair.* |
| | | | 3009 | " " 31 | 5 23·5 | 45 | | | | | | | | *Definition bad.* |
| 451 | " | 22 56 | 2922 | " Nov. 4 | 4 3·5 | 45 | 46 | −56 | 116·9 | 11·5 | 60 | See remarks. | V | *Definition fair.* |
| | | | 2903 | " Oct. 25 | 3 16·5 | 45 | 40 | | | | | | | *Definition fair.* |
| | | | | | | | | | | | | | | Towards the edge of smallest R.A., images on c extensive but faint. For the greater R.A.'s images fairly equal. |
| 452 | " | 23 28 | 2923 | " Nov. 4 | 4 24·5 | 45 | 51 | −59 | 128·4 | 12·9 | 53 | o=o | V | *Definition fair.* |
| | | | 2904 | " Oct. 25 | 3 36·5 | 45 | 43 | | | | | | | *Definition poor.* |
| 453 | −60·0 | 0 0 | 496 | 1886 Sept. 24 | 1 12·0 | 60 | 29 | −57 | 216·0 | 22·5 | 79 | o=o | S | |
| | | | 473 | " Aug. 21 | 0 33·0 | 60 | 27 | | | | | | | |
| 454 | " | 0 36 | 217 | 1885 Nov. 12 | 0 24·0 | 60 | 26 | −57 | 161·3 | 17·0 | 73 | −o=o | S | |
| | | | 488 | 1886 Sept. 20 | 0 23·0 | 60 | 26 | | | | | | | |
| 455 | " | 1 12 | 489 | " " 20 | 0 55·0 | 60 | 28 | −57 | 131·6 | 13·0 | 72 | o=o | S | |
| | | | 483 | " " 10 | 0 30·0 | 60 | 27 | | | | | | | |
| | | | 474 | " " 2 | 0 26·0 | 60 | | | | | | | | *Defective at one end.* |
| 456 | " | 1 48 | 2400 | 1889 June 6 | −4 37·5 | 45 | 51 | −55 | 137·4 | 13·2 | 71 | −o=o | V | Numerous starlike specks. |
| | | | 2387 | " " 5 | −4 43·5 | 45 | 52 | | | | | | | |
| | | | 218 | 1885 Nov. 12 | 0 25·0 | 60 | | | | | | | | |
| | | | 246 | " Dec. 12 | 0 28·0 | 60 | | | | | | | | |
| | | | 2405 | 1889 June 7 | −7 22·0 | 22 | | | | | | | | |
| 457 | " | 2 24 | 493 | 1886 Sept. 21 | 0 35·0 | 60 | 27 | −53 | 157·4 | 16·7 | 78 | o=−o | S | Error. |
| | | | 479 | " " 9 | 0 35·0 | 60 | 27 | | | | | | | |
| 458 | " | 3 0 | 263 | 1885 Dec. 24 | 0 24·0 | 60 | 26 | −50 | 177·7 | 18·5 | 82 | o=o | S | |
| | | | 490 | 1886 Sept. 20 | 0 27·0 | 60 | 27 | | | | | | | |
| | | | 269 | 1885 Dec. 29 | 0 27·5 | 45 | | | | | | | | |
| 459 | " | 3 36 | 480 | 1886 Sept. 9 | 0 30·0 | 60 | 27 | −46 | 121·7 | 12·5 | 71 | −o=+o or −o=−1 | S | |
| | | | 501 | " " 30 | | | | | | | | | | |
| | | | 276 | " Jan. 6 | 0 20·0 | 40 | | | | | | | | |
| 460 | " | 4 12 | 491 | " Sept. 20 | 0 23·0 | 60 | 26 | −42 | 175·5 | 18·0 | 71 | −o=o | S | |
| | | | 498 | " " 29 | | | | | | | | | | |
| 461 | " | 4 48 | 2260 | 1889 Apr. 24 | 5 34·5 | 45 | 58 | −37 | 160·3 | 16·7 | 68 | o=o | V | |
| | | | 2248 | " " 22 | 4 14·5 | 45 | 48 | | | | | | | Numerous starlike specks. |
| | | | 274 | 1886 Jan. 5 | 0 28·0 | 60 | | | | | | | | |
| | | | 499 | " Sept. 29 | 0 22·0 | 60 | | | | | | | | |
| | | | 2120 | 1889 Feb. 18 | 4 9·0 | 30 | | | | | | | | |
| | | | 2235 | " Apr. 20 | 5 4·5 | 45 | | | | | | | | |
| 462 | " | 5 24 | 320 | 1886 Feb. 6 | 0 26·0 | 60 | 26 | −33 | 289·4 | 30·0 | 78 | o=o | S | |
| | | | 322 | " " 9 | 0 33·0 | 60 | 27 | | | | | | | |
| 463 | " | 6 0 | 330 | " " 12 | 0 26·0 | 60 | 26 | −29 | 288·3 | 29·0 | 97 | o=o | S | |
| | | | 335 | " " 17 | 0 29·0 | 60 | 27 | | | | | | | |
| | | | 333 | " " 16 | 0 32·0 | 60 | | | | | | | | |
| | | | | | | | | | | | | | | *Hazy.* |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | h m | | | h m | m | ° | | | | | | | |
| 464 | −60° | 6 36 | 338 | 1886 Feb. 20 | 0 34·0 | 60 | 27 | −24 | 245·6 | 24·6 | 110 | 0=0 | S | |
| | | | 340 | ,, ,, 26 | 0 25·0 | 60 | 26 | | | | | | | |
| 465 | ,, | 7 12 | 328 | ,, ,, 11 | 0 26·0 | 60 | 26 | −20 | 346·3 | 37·0 | 96 | −0=0 | S | |
| | | | 331 | ,, ,, 12 | 0 28·0 | 60 | 27 | | | | | | | |
| 466 | ,, | 7 48 | 363 | ,, Mar. 22 | 0 26·0 | 60 | 26 | −16 | 298·0 | 31·0 | 100 | −0=0 | S | |
| | | | 341 | ,, Feb. 26 | 0 35·0 | 60 | 27 | | | | | | | |
| 467 | ,, | 8 24 | 376 | ,, Mar. 30 | 0 34·0 | 60 | 27 | −12 | 254·2 | 26·8 | 106 | 0=0 | S | |
| | | | 362 | ,, ,, 22 | 1 6·0 | 60 | 28 | | | | | | | *With two interruptions.* |
| | | | 360 | ,, ,, 13 | 0 36·5 | 38 | | | | | | | | *Interrupted.* |
| 468 | ,, | 9 0 | 371 | ,, ,, 26 | 0 36·0 | 60 | 27 | − 8 | 269·9 | 27·3 | 136 | −0=0 or −0=+0 | S | |
| | | | 374 | ,, ,, 29 | 0 37·0 | 60 | 27 | | | | | | | |
| 469 | ,, | 9 36 | 384 | ,, Apr. 5 | 0 38·0 | 60 | 27 | − 5 | 275·5 | 28·4 | 164 | −0=0 | S | |
| | | | 419 | ,, May 12 | 1 0·0 | 60 | 28 | | | | | | | |
| 470 | ,, | 10 12 | 368 | ,, Mar. 23 | 0 38·0 | 60 | 27 | − 3 | 254·0 | 25·5 | 173 | −0=0 | S | |
| | | | 375 | ,, ,, 29 | 0 34·0 | 60 | 27 | | | | | | | |
| 471 | ,, | 10 48 | 372 | ,, ,, 26 | 0 26·0 | 60 | 26 | 0 | 306·9 | 31·4 | 279 | −0=0 | S | *Hazy towards end.* |
| | | | 407 | ,, May 1 | 0 36·0 | 60 | 27 | | | | | | | |
| 472 | ,, | 11 24 | 417 | ,, ,, 6 | 0 30·0 | 60 | 27 | + 1 | 264·3 | 26·6 | 149 | 0=0 | S | |
| | | | 420 | ,, ,, 12 | 0 40·0 | 60 | 27 | | | | | | | |
| | | | 409 | ...... | 0 33·0 | 60 | | | | | | | | |
| | | | 428 | ...... | | | | | | | | | | |
| 473 | ,, | 12 0 | 441 | 1886 July 5 | 2 25·0 | 60 | 35 | + 2 | 232·0 | 23·1 | 125 | −0=+0 | S | |
| | | | 422 | ,, May 13 | 0 35·0 | 60 | 27 | | | | | | | |
| 474 | ,, | 12 36 | 429 | ,, ,, 29 | 0 35·0 | 60 | 27 | + 3 | 252·0 | 25·0 | 131 | −0=0 | S | |
| | | | 410 | ,, ,, 3 | 0 35·0 | 60 | 27 | | | | | | | |
| | | | 427 | ,, ,, 22 | 0 37·5 | 35 | | | | | | | | |
| 475 | ,, | 13 12 | 423 | ,, ,, 13 | 0 40·0 | 60 | 27 | + 2 | 300·5 | 30·0 | 136 | 0=0 | S | |
| | | | 405 | ,, Apr. 30 | 0 38·0 | 60 | 27 | | | | | | | |
| 476 | ,, | 13 48 | 434 | ,, June 17 | 0 32·0 | 60 | 27 | + 2 | 249·3 | 25·0 | 126 | −0=0 or −0=+0 | S | |
| | | | 430 | ,, May 29 | 0 34·0 | 60 | 27 | | | | | | | |
| 477 | ,, | 14 24 | 438 | 1885 July 9 | 0 37·0 | 60 | 27 | 0 | 182·6 | 18·0 | 123 | −0=0 or −0=+0 | S | |
| | | | 89 | 1886 June 23 | 0 48·0 | 60 | 27 | | | | | | | |
| 478 | ,, | 15 0 | 435 | ,, ,, 17 | 0 30·0 | 60 | 27 | − 2 | 254·6 | 26·0 | 120 | 0=0 | S | |
| | | | 92 | 1885 July 10 | 0 53·0 | 60 | 28 | | | | | | | |
| 479 | ,, | 15 36 | 2367 | 1889 June 2 | −1 43·5 | 45 | 31 | − 4 | 229·4 | 23·0 | 146 | 0=0 | V | |
| | | | 2377 | ,, ,, 5 | −2 28·5 | 45 | 36 | | | | | | | *Bad plate.* |
| | | | 99 | 1885 July 23 | 0 33·0 | 60 | | | | | | | | 10 *min. wrong reading.* |
| | | | 102 | ,, ,, 24 | 0 36·0 | 60 | | | | | | | | |
| | | | 445 | 1886 ,, 6 | 0 30·0 | 60 | | | | | | | | |
| | | | 448 | ,, ,, 7 | 0 30·0 | 60 | | | | | | | | |
| 480 | ,, | 16 12 | 451 | ,, ,, 8 | 0 28·0 | 60 | 27 | − 7 | 253·0 | 25·5 | 131 | −0=0 | S | |
| | | | 449 | ,, ,, 7 | 1 8·0 | 60 | 28 | | | | | | | |
| | | | 439 | ...... | 0 15·5 | 9 | | | | | | | | |
| 481 | ,, | 16 48 | 103 | 1885 July 24 | 0 45·0 | 60 | 27 | −11 | 181·3 | 18·7 | 129 | 0=0 | S | |
| | | | 105 | ,, ,, 27 | 1 10·0 | 60 | 28 | | | | | | | |
| | | | 100 | ,, ,, 23 | 0 30·0 | 60 | | | | | | | | |
| 482 | ,, | 17 24 | 2368 | 1889 June 2 | −2 43·5 | 45 | 37 | −15 | 206·8 | 21·0 | 123 | 0=0 | V | |
| | | | 2390 | ,, ,, 6 | −3 55·0 | 52 | 46 | | | | | | | *Part hazy.* |
| | | | 113 | 1885 Aug. 3 | 0 42·0 | 60 | | | | | | | | |
| | | | 452 | 1886 July 8 | 0 26·0 | 60 | | | | | | | | |
| 483 | ,, | 18 0 | 140 | 1885 Sept. 12 | 0 32·0 | 60 | 27 | −19 | 153·5 | 15·9 | 113 | 0=0 | S | |
| | | | 453 | 1886 July 5 | 1 4·0 | 60 | 28 | | | | | | | |
| 484 | ,, | 18 36 | 2369 | 1889 June 2 | −3 8·5 | 45 | 40 | −23 | 165·5 | 17·0 | 115 | −0=0 or −0=+0 | V | |
| | | | 2379 | ,, ,, 5 | −3 53·5 | 45 | 46 | | | | | | | |
| | | | 144 | 1885 Sept. 4 | 0 38·0 | 60 | | | | | | | | |
| | | | 160 | ,, ,, 17 | 0 59·0 | 60 | | | | | | | | |
| | | | 118 | ,, Aug. 15 | 0 45·0 | 60 | | | | | | | | 10 *min. wrong reading* (18h 46m). |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 485 | −60 | 19 12 | 153 | 1885 Sept. 14 | 0 27·0 | 60 | 26 | −27 | 209·6 | 22·2 | 97 | o=o | S | |
| | | | 156 | „ „ 15 | 0 36·0 | 60 | 27 | | | | | | | |
| 486 | „ | 19 48 | 467 | 1886 Aug. 19 | 0 50·0 | 60 | 27 | −32 | 156·2 | 16·0 | 90 | −o=o | S | |
| | | | 455 | „ July 12 | 0 25·0 | 60 | 26 | | | | | | | |
| | | | 458 | „ „ 14 | 0 42·0 | 60 | | | | | | | | *Poor.* |
| 487 | „ | 20 24 | 484 | „ Sept. 12 | 0 37·0 | 60 | 27 | −36 | 184·0 | 19·3 | 73 | −o=o | S | |
| | | | 157 | 1885 „ 15 | 0 30·0 | 60 | 27 | | | | | | | On c images double. |
| | | | 154 | „ Aug. 14 | 0 28·0 | 60 | | | | | | | | *Bad plate.* |
| | | | 170 | „ Sept. 28 | 0 25·0 | 60 | | | | | | | | *Defective.* |
| | | | 475 | 1886 „ 4 | 0 20·0 | 30 | | | | | | | | |
| 488 | „ | 21 0 | 193 | 1885 Oct. 16 | 0 42·0 | 60 | 27 | −41 | 210·1 | 21·9 | 82 | o=−o | S | |
| | | | 183 | „ „ 9 | 0 29·0 | 60 | 27 | | | | | | | |
| 489 | „ | 21 36 | 468 | 1886 Aug. 19 | 0 32·0 | 60 | 27 | −45 | 169·3 | 17·0 | 88 | o=−o | S | |
| | | | | | | | | | | | | or | | |
| | | | 471 | „ „ 21 | 0 42·0 | 60 | 27 | | | | | +o=−o | | |
| | | | 171 | 1885 Sept. 28 | 0 29·0 | 60 | | | | | | | | |
| | | | 465 | 1886 Aug. 18 | | 20 | | | | | | | | |
| 490 | „ | 22 12 | 476 | „ Sept. 9 | 0 30·0 | 60 | 27 | −49 | 146·1 | 15·0 | 89 | o=o | S | |
| | | | 494 | „ „ 24 | 0 53·0 | 60 | 28 | | | | | | | |
| | | | 194 | 1885 Oct. 16 | 0 35·0 | 60 | | | | | | | | 10 *min. wrong.* |
| 491 | „ | 22 48 | 469 | 1886 Aug. 19 | 0 30·0 | 60 | 27 | −52 | 185·6 | 20·0 | 100 | o=o | S | |
| | | | 472 | „ „ 21 | 0 38·0 | 60 | 27 | | | | | | | |
| | | | 191 | 1885 Oct. 14 | 0 24·0 | 60 | | | | | | | | |
| 492 | „ | 23 24 | 187 | „ „ 12 | 0 25·0 | 60 | 26 | −55 | 170·3 | 18·0 | 100 | o=−o | S | Numerous starlike specks. |
| | | | 195 | „ „ 16 | 0 30·0 | 60 | 27 | | | | | | | |
| 493 | −65 | 0 0 | 2385 | 1889 June 5 | −4 30·5 | 45 | 50 | −52 | 151·0 | 14·6 | 85 | o=−o | V | Numerous starlike specks. |
| | | | | | | | | | | | | or | | |
| | | | 2397 | „ „ 6 | −5 25·5 | 45 | 56 | | | | | +o=−o | | |
| | | | 482 | 1886 Sept. 10 | 0 33·0 | 60 | | | | | | | | |
| | | | 511 | „ Nov. 13 | 0 55·0 | 60 | | | | | | | | |
| | | | 512 | „ „ 14 | 0 30·0 | 60 | | | | | | | | *Taken with 69-inch "Dallmeyer" lens?* |
| | | | 2127 | 1889 Feb. 19 | 6 12·5 | 35 | | | | | | | | *Poor.* |
| 494 | „ | 0 40 | 2386 | „ June 5 | −4 23·5 | 45 | 50 | −52 | 149·2 | 14·0 | 74 | +o=−o | V | Numerous starlike specks. |
| | | | 2398 | „ „ 6 | −5 9·5 | 45 | 54 | | | | | | | |
| | | | 231 | 1885 Nov. 29 | 0 33·0 | 60 | | | | | | | | |
| | | | 492 | 1886 Sept. 21 | 0 34·0 | 60 | | | | | | | | |
| | | | 2106 | 1889 Feb. 13 | 5 48·5 | 37 | | | | | | | | |
| 495 | „ | 1 20 | 221 | 1885 Nov. 23 | 0 38·0 | 60 | 32 | −52 | 203·7 | 21·0 | 67 adjusted | −o=o | S | |
| | | | 236 | „ Dec. 5 | 0 25·0 | 60 | 31 | | | | | | | |
| 496 | „ | 2 0 | 243 | „ „ 11 | 0 32·0 | 60 | 31 | −50 | 304·7 | 32·9 | 67 adjusted | −o=o | S | |
| | | | 252 | „ „ 15 | 0 28·0 | 60 | 31 | | | | | | | |
| 497 | „ | 2 40 | 222 | „ Nov. 23 | 0 32·0 | 60 | 31 | −48 | 201·4 | 21·5 | 75 adjusted | o=o | S | |
| | | | 225 | „ „ 24 | 0 30·0 | 60 | 31 | | | | | | | |
| 498 | „ | 3 20 | 497 | 1886 Sept. 29 | | 60 | | −45 | 184·7 | 19·5 | 78 adjusted | See remarks. | S | Images on c large and faint; limit of magnitude contained on the two plates fairly equal. |
| | | | 259 | 1885 Dec. 17 | 0 30·0 | 60 | 31 | | | | | | | |
| | | | 273 | 1886 Jan. 5 | 0 42·0 | 60 | | | | | | | | |
| 499 | „ | 4 0 | 294 | „ „ 19 | 0 41·0 | 60 | 32 | −41 | 150·8 | 15·1 | 87 adjusted | −o=o | S | Numerous starlike specks. |
| | | | 291 | „ „ 18 | 0 54·0 | 60 | 32 | | | | | | | |
| 500 | „ | 4 40 | 314 | „ Feb. 2 | 0 48·0 | 60 | 32 | −37 | 205·9 | 21·1 | 97 adjusted | −o=o | S | Images well defined. |
| | | | 317 | „ „ 5 | 1 2·0 | 60 | 33 | | | | | or −o=+o | | |
| 501 | „ | 5 20 | 295 | „ Jan. 19 | 0 31·0 | 60 | 31 | −33 | 166·2 | 16·9 | 69 adjusted | o=o | S | |
| | | | 300 | „ „ 23 | 0 48·0 | 60 | 32 | | | | | | | |
| 502 | „ | 6 0 | 318 | „ Feb. 5 | 0 52·0 | 60 | 32 | −29 | 209·8 | 21·2 | 81 adjusted | o=o | S | |
| | | | 325 | „ „ 10 | 0 27·0 | 60 | 31 | | | | | | | |
| | | | 327 | „ „ 11 | 0 25·0 | 60 | | | | | | | | |
| 503 | „ | 6 40 | 323 | „ „ 7 | 0 28·0 | 60 | 31 | −25 | 249·6 | 25·3 | 87 adjusted | o=o | S | |
| | | | 321 | „ „ 6 | 0 24·0 | 60 | 31 | | | | | | | |
| 504 | „ | 7 20 | 343 | „ Mar. 2 | 0 27·0 | 60 | 31 | −21 | 291·8 | 30·3 | 102 adjusted | o=o | S | |
| | | | 336 | „ Feb. 17 | 0 30·0 | 60 | 31 | | | | | | | |
| | | | 334 | „ „ 16 | 0 11·5 | 23 | | | | | | | | |

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| No. | Centre of Plate. | | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. | | | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | δ 1875. | α 1875. | | | | | | | B. | C. | n. | | | |
| | ° | h m | | | h m | m | ° | | | | | | | |
| 505 | −65 | 8 0 | 356 | 1886 Mar. 10 | 0 40·0 | 60 | 32 | −17 | 278·2 | 28·8 | 111 | 0=0 | S | |
| | | | 369 | ,, ,, 24 | 0 30·0 | 60 | 31 | | | | adjusted | | | |
| 506 | ,, | 8 40 | 354 | ,, ,, 6 | 0 35·0 | 60 | 32 | −13 | 243·6 | 24·6 | 111 | 0=0 | S | |
| | | | 344 | ,, ,, 2 | 0 25·0 | 60 | 31 | | | | adjusted | | | |
| 507 | ,, | 9 20 | 388 | ,, Apr. 8 | 0 34·0 | 60 | 32 | −10 | 305·6 | 32·4 | 91 | −0=−1 | S | |
| | | | | | | | | | | | adjusted | or | | |
| | | | 367 | ,, Mar. 23 | 0 23·0 | 60 | 31 | | | | | −0=1 | | |
| 508 | ,, | 10 0 | 351 | ,, ,, 5 | 0 32·0 | 60 | 31 | − 8 | 286·9 | 29·2 | 124 | 0=0 | S | |
| | | | 365 | ,, ,, 17 | 0 30·0 | 60 | 31 | | | | adjusted | | | |
| 509 | ,, | 10 40 | 34 | 1885 May 7 | 0 25·0 | 60 | 31 | − 5 | 286·0 | 29·2 | 129 | −0=0 | S | |
| | | | | | | | | | | | adjusted | or | | |
| | | | 31 | ,, ,, 6 | 0 31·0 | 60 | 31 | | | | | −0=+0 | | |
| 510 | ,, | 11 20 | 379 | 1886 Apr. 1 | 0 30·0 | 60 | 31 | − 4 | 294·5 | 30·7 | 109 | −0=−1 | S | |
| | | | 400 | ,, ,, 28 | 0 27·0 | 60 | 31 | | | | adjusted | | | |
| | | | 382 | ,, ,, 2 | 0 1·0 | 10 | | | | | | | | |
| 511 | ,, | 12 0 | 408 | ,, May 1 | 0 28·0 | 60 | 31 | − 3 | 243·0 | 24·8 | 112 | −0=−1 | S | On m images double. |
| | | | 404 | ,, Apr. 30 | 0 40·0 | 60 | 32 | | | | adjusted | | | |
| 512 | ,, | 12 40 | 444 | ,, July 6 | 1 38·0 | 60 | 34 | − 2 | 245·7 | 24·9 | 168 | −0=+0 | S | |
| | | | 399 | ,, Apr. 27 | 0 46·0 | 60 | 32 | | | | adjusted | | | |
| 513 | ,, | 13 20 | 402 | ,, ,, 28 | 0 44·0 | 60 | 32 | − 3 | 325·7 | 33·2 | 138 | 0=0 | S | |
| | | | 64 | 1885 June 22 | 0 50·0 | 60 | 32 | | | | adjusted | | | |
| 514 | ,, | 14 0 | 447 | 1886 July 7 | 0 35·0 | 60 | 32 | − 4 | 240·7 | 24·5 | 133 | −0=0 | S | |
| | | | 411 | ,, May 3 | 0 23·0 | 60 | 31 | | | | adjusted | | | |
| 515 | ,, | 14 40 | 48 | 1885 ,, 22 | 0 40·0 | 60 | 32 | − 5 | 180·2 | 18·4 | 123 | 0=0 | S | |
| | | | | | | | | | | | adjusted | or | | |
| | | | 71 | ,, June 25 | 0 25·0 | 60 | 31 | | | | | −0=0 | | |
| 516 | ,, | 15 20 | 83 | ,, July 2 | 0 42·0 | 60 | 32 | − 7 | 160·7 | 16·4 | 119 | −0=0 | S | |
| | | | 80 | ,, ,, 1 | 0 30·0 | 60 | 31 | | | | adjusted | | | |
| 517 | ,, | 16 0 | 90 | ,, ,, 9 | 0 25·0 | 60 | 31 | −10 | 235·5 | 24·6 | 120 | −0=0 | S | |
| | | | | | | | | | | | adjusted | or | | |
| | | | 72 | ,, June 25 | 0 30·0 | 60 | 31 | | | | | −0=+0 | | |
| 518 | ,, | 16 40 | 120 | ,, Aug. 17 | 0 40·0 | 60 | 32 | −13 | 164·0 | 17·1 | 87 | −0=0 | S | 2 min. in error. |
| | | | 443 | 1886 July 5 | 0 42·0 | 60 | 32 | | | | adjusted | | | |
| 519 | ,, | 17 20 | 131 | 1885 Aug. 28 | 0 34·0 | 60 | 32 | −17 | 169·1 | 17·5 | 115 | 0=0 | S | |
| | | | 134 | ,, ,, 31 | 0 44·0 | 60 | 32 | | | | adjusted | | | |
| 520 | ,, | 18 0 | 2373 | 1889 June 4 | −2 37·5 | 45 | 39 | −20 | 179·4 | 17·7 | 109 | −0=0 | V | |
| | | | 2378 | ,, ,, 5 | −4 4·5 | 45 | 48 | | | | | | | |
| | | | 121 | 1885 Aug. 17 | 0 36·0 | 60 | | | | | | | | |
| | | | 128 | ,, ,, 27 | 0 30·0 | 60 | | | | | | | | |
| 521 | ,, | 18 40 | 149 | ,, Sept. 10 | 0 30·0 | 60 | 31 | −24 | 152·4 | 16·2 | 98 | 0=0 | S | |
| | | | 132 | ,, Aug. 28 | 0 25·0 | 60 | 31 | | | | adjusted | | | |
| 522 | ,, | 19 20 | 122 | ,, ,, 17 | 0 38·0 | 60 | 32 | −29 | 141·8 | 15·1 | 92 | −0=+0 | S | |
| | | | 164 | ,, Sept. 21 | 0 35·0 | 60 | 32 | | | | adjusted | | | |
| 523 | ,, | 20 0 | 143 | ,, ,, 4 | 0 40·0 | 60 | 32 | −33 | 137·0 | 14·2 | 78 | −0=0 | S | |
| | | | 161 | ,, ,, 17 | 0 45·0 | 60 | 32 | | | | adjusted | | | |
| 524 | ,, | 20 40 | 123 | ,, Aug. 17 | 0 38·0 | 60 | 32 | −37 | 145·7 | 15·4 | 79 | −0=+0 | S | |
| | | | 485 | 1886 Sept. 19 | 0 50·0 | 60 | 32 | | | | adjusted | | | |
| | | | 136 | 1885 Aug. 31 | 0 26·0 | 60 | | | | | | | | *Defective plate.* |
| | | | 484a | 1886 Sept. 17 | 0 7·5 | 15 | | | | | | | | |
| 525 | ,, | 21 20 | 162 | 1885 ,, 17 | 0 35·0 | 60 | 32 | −41 | 140·7 | 13·9 | 89 | 0=0 | S | |
| | | | 459 | 1886 July 14 | 0 30·0 | 60 | 31 | | | | adjusted | | | |
| | | | 145 | 1885 Sept. 4 | 0 33·0 | 50 | | | | | | | | |
| 526 | ,, | 22 0 | 3054 | 1891 July 30 | −2 2·0 | 40 | 36 | −45 | 182·7 | 18·1 | 91 | 0=0 | V | *Definition poor.* |
| | | | 3057 | ,, ,, 31 | −1 51·0 | 40 | 35 | | | | | | | *Definition fair; faintly double.* |
| | | | 175 | 1885 Sept. 29 | 0 35·0 | 60 | | | | | | | | *Clock going jerky.* |
| | | | 177 | ,, ,, 30 | 0 38·0 | 60 | | | | | | | | Images of the brighter stars very ill defined. Besides these brighter stars have all a companion (on both plates) which are very troublesome for the observation. |
| | | | 182 | ,, Oct. 5 | 0 30·0 | 60 | | | | | | | | |
| | | | 3060 | 1891 Aug. | | | | | | | | | | |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 527 | −65° | 22 40 | 486 | 1886 Sept. 19 | 0 35·0 | 60 | 32° | −48 | 157·8 | 16·1 | 91 adjusted | 0=0 | S | |
| | | | 481 | „ „ | 0 50·0 | 60 | 32 | | | | | | | |
| | | | 500 | „ „ 30 | 1 50·0 | 60 | | | | | | | | |
| 528 | „ | 23 20 | 495 | „ „ 24 | 0 49·0 | 60 | 32 | −50 | 138·3 | 14·0 | 65 adjusted | −0=0 | S | |
| | | | 487 | „ „ 20 | 0 22·0 | 60 | 31 | | | | | | | |
| | | | 466 | „ Aug. 18 | | | | | | | | | | *Wrong reading.* |
| 529 | −70 | 0 0 | 223 | 1885 Nov. 24 | 0 51·0 | 60 | 37 | −47 | 181·7 | 19·5 | 70 | −0=+0 | S | |
| | | | 470 | 1886 Aug. 19 | 0 26·0 | 60 | 36 | | | | | | | |
| 530 | „ | 0 45 | 226 | 1885 Nov. 26 | 0 43·0 | 60 | 37 | −47 | 188·7 | 20·0 | 65 | 0=0 | S | |
| | | | 228 | „ „ 27 | 0 32·0 | 60 | 36 | | | | | | | |
| 531 | | 1 30 | 2404 | 1889 June 7 | −7 42·5 | 45 | 66 | −47 | 137·3 | 13·7 | 87 | In the mean −0=+0 See remarks. | V | Difference of the images on m and c somewhat greater than mean in the greater R.A.'s and the Southern declinations; somewhat smaller on the rest of the plates. In second measurement estimates of brightness intermediate between the two plates. |
| | | | 2399 | „ „ 6 | −5 7·5 | 45 | 54 | | | | | | | |
| | | | 224 | 1885 Nov. 24 | 0 32·0 | 60 | | | | | | | | |
| | | | 241 | „ Dec. 8 | 0 28·0 | 60 | | | | | | | | |
| | „ | | 2107 | 1889 Feb. 13 | 5 37·0 | 34 | | | | | | | | |
| 532 | „ | 2 15 | 2407 | „ June 7 | −6 25·0 | 40 | 60 | −45 | 110·0 | 10·4 | 89 | −0=+0 | V | |
| | | | 2388 | „ „ 5 | −4 24·0 | 42 | 50 | | | | | | | |
| | | | 237 | 1885 Dec. 8 | 0 40 0 | 60 | | | | | | | | |
| | | | 239 | „ „ 7 | 0 48·0 | 60 | | | | | | | | |
| | | | 2108 | 1889 Feb. 13 | 5 31·5 | 43 | | | | | | | | |
| 533 | „ | 3 0 | 2408 | „ June 7 | −6 32·0 | 40 | 61 | −43 | 133·8 | 13·4 | 80 | −0=0 In Zone −67° difference somewhat larger. | V | |
| | | | 2389 | „ „ 5 | −4 23·5 | 43 | 50 | | | | | | | |
| | | | 253 | 1885 Dec. 15 | 0 36·0 | 60 | | | | | | | | |
| | | | 261 | „ „ 23 | 0 36·0 | 60 | | | | | | | | |
| | | | 2109 | 1889 Feb. 13 | 5 24·5 | 33 | | | | | | | | |
| 534 | „ | 3 45 | 240 | 1885 Dec. 7 | 0 24·0 | 60 | 36 | −40 | 179·8 | 18·5 | 67 | −0=+0 For the brighter stars, difference still larger. | S | |
| | | | 277 | 1886 Jan. 7 | 0 27·0 | 60 | 36 | | | | | | | |
| 535 | „ | 4 30 | 312 | „ „ 30 | 1 0·0 | 60 | 37 | −37 | 299·0 | 31·0 | 64 | See remarks. | S | |
| | | | 308 | „ „ 28 | 0 48·0 | 60 | 37 | | | | | | | *Bad plate.* |
| | | | 305 | „ „ 27 | 0 55·0 | 60 | | | | | | | | *Bad plate.* In first measurement m = Pl. 312, c = Pl. 308; in second measurement m = Pl. 312, c = Pl. 305. The images on the three plates are fairly equal. Plates Nos. 305 and 308 spotted. These spots do not seem to have had any influence on the images of the stars. |
| 536 | „ | 5 15 | 289 | „ „ 14 | 0 30·0 | 60 | 36 | −33 | 417·4 | 43·5 | 77 | −0=0 | S | |
| | | | 292 | „ „ 18 | 0 44·0 | 60 | 37 | | | | | | | |
| 537 | „ | 6 0 | 315 | „ Feb. 2 | 0 36·0 | 60 | 36 | −29 | 236·0 | 23·6 | 71 | 0=0 | S | |
| | | | 313 | „ Jan. 30 | 0 36·0 | 60 | 36 | | | | | | | |
| 538 | „ | 6 45 | 293 | „ „ 18 | 0 25·0 | 60 | 36 | −25 | 219·2 | 22·0 | 79 | 0=0 | S | |
| | | | 296 | „ „ 19 | 0 23·0 | 60 | 36 | | | | | | | |
| | | | 301 | „ „ 23 | 0 32·0 | 60 | | | | | | | | |
| | | | 304 | „ „ 25 | 0 42·0 | 60 | | | | | | | | *In error.* |
| 539 | „ | 7 30 | 324 | „ Feb. 9 | 0 44·0 | 60 | 37 | −22 | 235·8 | 23·0 | 91 | 0=0 | S | *In error.* |
| | | | 339 | „ „ 20 | 0 45·0 | 60 | 37 | | | | | | | |
| 540 | „ | 8 15 | 337 | „ „ 17 | 0 40·0 | 60 | 36 | −18 | 297·0 | 29·9 | 80 | −0=0 | S | |
| | | | 332 | „ „ 12 | 0 33·0 | 60 | 36 | | | | | | | |
| | | | 329 | „ „ 11 | 0 34·0 | 60 | | | | | | | | |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 541 | −70 | 9 0 | 364 | 1886 Mar. 22 | 0 24·0 | 60 | 36 | −15 | 259·4 | 26·0 | 105 | 0=0 | S | |
| | | | 350 | „ „ 5 | 0 23·0 | 60 | 36 | | | | | | | |
| | | | 357 | „ „ 10 | 0 31·5 | 15 | | | | | | | | |
| | | | 358 | „ „ 11 | 0 14·5 | 45 | | | | | | | | *Movement.* |
| 542 | „ | 9 45 | 381 | „ Apr. 2 | 0 45·0 | 60 | 37 | −12 | 283·2 | 29·9 | 86 | −0=+0 or | S | |
| | | | 361 | „ Mar. 15 | 0 30·0 | 60 | 36 | | | | | −0=−1 | | |
| 543 | „ | 10 30 | 25 | 1885 May 2 | 0 26·0 | 60 | 36 | −10 | 281·5 | 28·8 | 128 | 0=0 | S | |
| | | | 20 | „ Apr. 24 | 0 45·0 | 60 | 37 | | | | | | | |
| 544 | „ | 11 15 | 46 | „ May 22 | 0 55·0 | 60 | 37 | −9 | 256·8 | 27·1 | 114 | −0=+0 | S | |
| | | | 52 | „ June 1 | 1 10·0 | 60 | 37 | | | | | | | |
| 545 | „ | 12 0 | 393 | 1886 Apr. 14 | 0 50·0 | 60 | 37 | −8 | 283·3 | 30·0 | 102 | 0=−0 | S | |
| | | | 387 | „ „ 7 | 0 24·0 | 60 | 36 | | | | | | | |
| | | | 58 | 1885 June 3 | 1 10·0 | 60 | | | | | | | | *Bad plate.* |
| 546 | „ | 12 45 | 396 | 1886 Apr. 22 | 0 25·0 | 60 | 36 | −7 | 296·3 | 30·4 | 107 | −0=+1 | S | |
| | | | 50 | 1885 May 23 | 0 25·0 | 60 | 36 | | | | | | | |
| 547 | „ | 13 30 | 47 | „ „ 22 | 0 26·0 | 60 | 36 | −8 | 225·2 | 23·0 | 127 | −0=1 | S | |
| | | | 29 | „ „ 5 | 0 26·0 | 60 | 36 | | | | | | | |
| | | | 33 | „ „ 6 | 0 30·0 | 60 | | | | | | | | *Defective.* |
| 548 | „ | 14 15 | 78 | „ July 1 | 0 33·0 | 60 | 36 | −9 | 274·3 | 29·0 | 110 | −0=+0 | S | |
| | | | 45 | „ May 19 | 0 27·0 | 60 | 36 | | | | | | | |
| 549 | „ | 15 0 | 2371 | 1889 June 4 | −1 17·5 | 45 | 38 | −10 | 227·6 | 23·5 | 146 | 0=0 | V | |
| | | | 2366 | „ „ 2 | −1 55·5 | 45 | 39 | | | | | | | |
| | | | 68 | 1885 „ 24 | 0 37·0 | 60 | | | | | | | | |
| | | | 77 | „ „ 30 | 0 41·0 | 60 | | | | | | | | |
| 550 | „ | 15 45 | 111 | „ July 30 | 0 43·0 | 60 | 37 | −13 | 221·7 | 23·5 | 106 | −0=0 or | S | *Slight movement.* |
| | | | 442 | 1886 „ 5 | 0 25·0 | 60 | 36 | | | | | −0=+0 | | |
| | | | 107 | 1885 „ 29 | 0 42·0 | 60 | | | | | | | | |
| 551 | „ | 16 30 | 446 | 1886 „ 6 | 0 44·0 | 60 | 37 | −15 | 199·0 | 20·0 | 100 | 0=0 | S | |
| | | | 69 | 1885 June 24 | 0 37·0 | 60 | 36 | | | | | | | |
| 552 | „ | 17 15 | 117 | „ Aug. 15 | 0 29·0 | 60 | 36 | −19 | 135·5 | 14·2 | 75 | −0=1 | S | |
| | | | 73 | „ June 25 | 0 50·0 | 60 | 37 | | | | | | | |
| | | | 108 | „ July 29 | 0 23·0 | 60 | | | | | | | | *Bad plate.* |
| 553 | „ | 18 0 | 2391 | 1889 June 6 | −3 34·5 | 55 | 46 | −22 | 198·6 | 20·6 | 104 | −0=0 | V | *Hazy at times.* |
| | | | 2372 | „ „ 4 | −3 27·5 | 45 | 46 | | | | | | | |
| | | | 104 | 1885 July 24 | 0 42·0 | 60 | | | | | | | | |
| | | | 109 | „ „ 29 | 0 50·0 | 60 | | | | | | | | *Bad plate.* |
| | | | 137 | „ Sept. 1 | 0 25·0 | 60 | | | | | | | | *Bad plate.* |
| | | | 450 | 1886 July 7 | 0 30·0 | 60 | | | | | | | | |
| 554 | „ | 18 45 | 114 | 1885 Aug. 3 | 0 31·0 | 60 | 36 | −26 | 141·9 | 15·0 | 89 | 0=0 or | S | |
| | | | 126 | „ „ 26 | 0 27·0 | 60 | 36 | | | | | −0=0 | | |
| 555 | „ | 19 30 | 2392 | 1889 June 6 | −4 11·5 | 45 | 49 | −30 | 173·1 | 17·0 | 108 | 0=0 | V | |
| | | | 2381 | „ „ 5 | −3 10·5 | 45 | 44 | | | | | | | |
| | | | 150 | 1885 Sept. 10 | 0 45·0 | 60 | | | | | | | | |
| | | | 454 | 1886 July 8 | 0 45·0 | 60 | | | | | | | | |
| 556 | „ | 20 15 | 142 | 1885 Sept. 2 | 0 50·0 | 60 | 37 | −34 | 173·4 | 18·0 | 73 | 0=0 | S | |
| | | | 139 | „ „ 11 | 0 38·0 | 60 | 36 | | | | | | | |
| 557 | „ | 21 0 | 174 | „ „ 29 | 0 27·0 | 60 | 36 | −37 | 117·3 | 12·0 | 78 | 0=0 | S | |
| | | | 168 | „ „ 22 | 0 23·0 | 60 | 36 | | | | | | | |
| 558 | „ | 21 45 | 155 | „ „ 14 | 0 23·0 | 60 | 36 | −41 | 202·0 | 20·5 | 88 | 0=0 | S | |
| | | | 197 | „ Oct. 22 | 0 30·0 | 60 | 36 | | | | | | | |
| | | | 166 | „ Sept. 21 | 0 34·0 | 60 | | | | | | | | |
| 559 | „ | 22 30 | 2396 | 1889 June 6 | −4 46·0 | 48 | 52 | −43 | 138·7 | 13·6 | 90 | −0=0 or | V | *5 min. hazy* } Numerous star-like specks. |
| | | | 2384 | „ „ 5 | −3 48·5 | 45 | 47 | | | | | 0=0 | | |
| | | | 211 | 1885 Nov. 7 | 1 1·0 | 60 | | | | | | | | *Defective plate.* |
| | | | 213 | „ „ 9 | 1 0·0 | 60 | | | | | | | | *Defective plate.* |
| | | | 457 | 1886 July 12 | 0 25·0 | 60 | | | | | | | | |
| | | | 460 | „ „ 14 | 0 30·0 | 60 | | | | | | | | |



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| No. | Centre of Plate. | | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. | | | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | δ 1875. | α 1875. | | | | | | | B. | C. | n. | | | |
| | ° | h m | | | h m | m | ° | | | | | | | |
| 560 | −70 | 23 15 | 205 | 1885 Oct. 27 | 0 31·0 | 60 | 36 | −46 | 135·6 | 14·0 | 63 | 0=0 | S | |
| | | | 216 | „ Nov. 12 | 0 36·0 | 60 | 36 | | | | | | | |
| 561 | −75 | 0 0 | 2094 | 1889 Feb. 12 | 5 49·5 | 39 | 57 | −42 | 113·7 | 10·5 | 95 | −0=−0 or | V | *Interrupted* } Especially fainter stars ill defined. Veiled plates. |
| | | | 2105 | „ „ 13 | 5 45·5 | 37 | 56 | | | | | −0=0 | | |
| | | | 206 | 1885 Oct. 27 | 0 51·0 | 60 | | | | | | | | *Defective plate.* |
| | | | 212 | „ Nov. 7 | 0 40·0 | 60 | | | | | | | | *Clouded towards end.* |
| | | | 214 | „ „ 9 | 0 40·0 | 60 | | | | | | | | |
| | | | 219 | „ „ 14 | 0 22·0 | 60 | | | | | | | | |
| 562 | „ | 1 0 | 209 | „ „ 5 | 0 34·0 | 60 | 41 | −42 | 151·3 | 15·6 | 91 | −0=0 | S | Very numerous. |
| | | | 478 | 1886 Sept. 9 | 0 51·0 | 60 | 42 | | | | adjusted | | | Starlike specks. |
| 563 | „ | 2 0 | 2401 | 1889 June 6 | −4 0·5 | 45 | 50 | −41 | 147·5 | 13·8 | 76 | −0=0 | V | Images on m much elongated. |
| | | | 2095 | „ Feb. 13 | 4 31·5 | 37 | 52 | | | | | | | |
| | | | 232 | 1885 Nov. 29 | 0 26·0 | 60 | | | | | | | | |
| | | | 234 | „ Dec. 1 | 0 32·0 | 60 | | | | | | | | |
| | | | 2406 | 1889 June 7 | −7 0·0 | 40 | | | | | | | | |
| 564 | „ | 3 0 | 244 | 1885 Dec. 11 | 0 41·0 | 60 | 41 | −39 | 251·1 | 26·2 | 82 | 0=0 | S | |
| | | | 247 | „ „ 12 | 0 25·0 | 60 | 41 | | | | adjusted | | | |
| | | | 242 | „ „ | 0 1·5 | 15 | | | | | | | | |
| 565 | „ | 4 0 | 254 | „ „ 15 | 0 44·0 | 60 | 41 | −36 | 272·6 | 28·0 | 72 | 0=0 | S | |
| | | | 297 | 1886 Jan. 22 | 0 47·0 | 60 | 41 | | | | adjusted | | | |
| | | | 288 | „ „ 14 | 0 24·0 | 60 | | | | | | | | *Defective plate.* |
| 566 | „ | 5 0 | 278 | „ „ 7 | 0 23·0 | 60 | 41 | −33 | 282·4 | 29·5 | 76 | 0=0 | S | On c images great but faint; |
| | | | 265 | 1885 Dec. 24 | 0 38·0 | 60 | 41 | | | | adjusted | | | limit of magnitude on the two plates fairly equal. |
| 567 | „ | 6 0 | 306 | 1886 Jan. 27 | 0 37·0 | 60 | 41 | −29 | 250·1 | 25·7 | 93 | −0=0 | S | |
| | | | 310 | „ „ 29 | 0 30·0 | 60 | 41 | | | | adjusted | | | |
| 568 | „ | 7 0 | 309 | „ „ 28 | 0 22·0 | 60 | 41 | −25 | 260·0 | 26·9 | 71 | 0=0 | S | |
| | | | 307 | „ „ 27 | 0 44·0 | 60 | 41 | | | | adjusted | | | |
| 569 | „ | 8 0 | 366 | „ Mar. 23 | 0 31·0 | 60 | 41 | −21 | 216·2 | 22·0 | 58 | 0=0 | S | |
| | | | 346 | „ „ 3 | 0 35·0 | 60 | 41 | | | | adjusted | | | *Slight defects.* |
| 570 | „ | 9 0 | 347 | „ „ 3 | 0 40·0 | 60 | 41 | −18 | 273·0 | 28·4 | 67 | 0=0 | S | |
| | | | 342 | „ Feb. 26 | 0 35·0 | 60 | 41 | | | | adjusted | | | |
| 571 | „ | 10 0 | 23 | 1885 May 1 | 0 50·0 | 60 | 41 | −16 | 272·7 | 28·0 | 51 | 0=0 | S | |
| | | | 27 | „ „ 5 | 0 39·0 | 60 | 41 | | | | adjusted | | | |
| 572 | „ | 11 0 | 39 | „ „ 12 | 0 31·0 | 60 | 41 | −14 | 246·9 | 25·4 | 53 | −0=+0 | S | Numerous starlike specks. |
| | | | 36 | „ „ 11 | 0 23·0 | 60 | 41 | | | | adjusted | | | |
| 573 | „ | 12 0 | 26 | „ „ 2 | 0 32·0 | 60 | 41 | −13 | 225·6 | 23·4 | 59 | −0=0 | S | *Last 15 min. definition bad.* |
| | | | 40 | „ „ 12 | 0 40·0 | 60 | 41 | | | | adjusted | | | |
| | | | 32 | „ „ 6 | 0 27·0 | 60 | | | | | | | | |
| 574 | „ | 13 0 | 82 | „ July 2 | 1 6·0 | 60 | 42 | −12 | 179·0 | 18·7 | 41 | −0=−1 | S | |
| | | | 37 | „ May 11 | 0 28·0 | 60 | 41 | | | | adjusted | | | |
| 575 | „ | 14 0 | 74 | „ June 27 | 0 39·0 | 60 | 41 | −13 | 223·4 | 23·4 | 54 | 0=0 | S | |
| | | | 62 | „ „ 19 | 0 30·0 | 60 | 41 | | | | adjusted | | | |
| | | | 59 | „ „ 3 | 0 30·0 | 60 | | | | | | | | *Bad plate.* |
| | | | 76 | „ „ 30 | 0 26·0 | 60 | | | | | | | | *In error.* |
| 576 | „ | 15 0 | 2365 | 1889 June 2 | −2 42·5 | 45 | 45 | −15 | 188·9 | 19·2 | 126 | 0=0 | V | |
| | | | 2266 | „ Apr. 24 | −2 0·5 | 45 | 44 | | | | | | | |
| | | | 54 | 1885 June 1 | 0 30·0 | 60 | | | | | | | | |
| | | | 60 | „ „ 3 | 0 40·0 | 60 | | | | | | | | |
| | | | 75 | „ „ 27 | 0 45·0 | 60 | | | | | | | | |
| | | | 86 | „ July 6 | 0 21·0 | 60 | | | | | | | | |
| 577 | „ | 16 0 | 87 | „ „ 6 | 0 45·0 | 60 | 41 | −17 | 219·8 | 23·6 | 94 | 0=0 | S | |
| | | | 63 | „ June 19 | 0 10·5 | 23 | 41 | | | | adjusted | | | |
| | | | 65 | „ „ 22 | 0 26·0 | 60 | | | | | | | | |
| 578 | „ | 17 0 | 84 | „ July 2 | 0 40·0 | 60 | 41 | −20 | 264·2 | 28·4 | 52 | 0=0 | S | |
| | | | 66 | „ June 22 | 0 50·0 | 60 | 41 | | | | adjusted | | | |
| 579 | „ | 18 0 | 96 | „ July 13 | 0 35·0 | 60 | 41 | −24 | 243·4 | 25·8 | 58 | 0=0 | S | |
| | | | 94 | „ „ 10 | 0 20·0 | 60 | 41 | | | | adjusted | | | |
| | | | 91 | „ „ 9 | 0 22·0 | 60 | | | | | | | | |
| 580 | „ | 19 0 | 2380 | 1889 June 5 | −3 29·5 | 45 | 48 | −28 | 194·6 | 19·4 | 100 | 0=0 | V | On c images double. |
| | | | 2374 | „ „ 4 | −2 49·5 | 45 | 46 | | | | | | | |
| | | | 129 | 1885 Aug. 27 | 0 38·0 | 60 | | | | | | | | |
| | | | 138 | „ Sept. 1 | 0 33·0 | 60 | | | | | | | | |

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m and c Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 581 | −75 | 20 0 | 2373 | 1889 June 4 | −3 2·5 | 45 | 46 | −32 | 187·8 | 19·6 | 87 | o=o | V | |
| | | | 2382 | „ „ 5 | −2 53·5 | 45 | 46 | | | | | | | |
| | | | 127 | 1885 Aug. 26 | 0 23·0 | 60 | | | | | | | | |
| | | | 130 | „ „ 27 | 0 45·0 | 60 | | | | | | | | |
| 582 | „ | 21 0 | 3066 | 1891 Oct. 29 | 2 9·0 | 40 | 44 | −35 | 131·1 | 13·0 | 89 | −o=+o | V | |
| | | | 3064 | „ „ 27 | 1 40·0 | 40 | 43 | | | | | | | |
| | | | 176 | 1885 Sept. 30 | 0 32·0 | 60 | | | | | | | | |
| | | | 185 | „ Oct. 12 | 0 25·0 | 60 | | | | | | | | |
| | | | 3053 | 1891 July 30 | −2 15·0 | 40 | | | | | | | | *Definition poor* } broken. |
| | | | 3056 | „ „ 31 | −2 6·0 | 40 | | | | | | | | *Definition fair* } broken. |
| | | | 3059 | „ Aug. 1 | −2 28·0 | 40 | | | | | | | | *Definition good* } broken. |
| 583 | „ | 22 0 | 186 | 1885 Oct. 12 | 0 35·0 | 60 | 41 | −38 | 171·9 | 18·0 | 45<br>adjusted | −o=o | S | |
| | | | 158 | „ Sept. 15 | 0 27·0 | 60 | 41 | | | | | | | |
| | | | 203 | „ Oct. 24 | 0 36·0 | 60 | | | | | | | | |
| 584 | „ | 23 0 | 201 | „ „ 23 | 0 32·0 | 60 | 41 | −41 | 175·7 | 18·5 | 53<br>adjusted | −o=o | S | |
| | | | 159 | „ Sept. 15 | 0 46·0 | 60 | 41 | | | | | | | |
| | | | 198 | „ Oct. 22 | 0 28·0 | 60 | | | | | | | | |
| 585 | −80 | 0 0 | 202 | „ „ 3 | 0 40·0 | 60 | 46 | −37 | 117·0 | 12·0 | 47 | o=o | V | |
| | | | 220 | „ Nov. 23 | 0 48·0 | 60 | 46 | | | | | | | |
| 586 | „ | 1 30 | 215 | „ „ 9 | 0 25·0 | 60 | 46 | −37 | 212·8 | 21·8 | 41 | −o=+1<br>or | K | |
| | | | 238 | „ Dec. 7 | 0 24·0 | 60 | 46 | | | | | −o=−2 | | |
| 587 | „ | 3 0 | 2409 | 1889 June 7 | −5 40·0 | 40 | 56 | −35 | 136·0 | 14·1 | 65 | −o=+1<br>or | V | |
| | | | 2097 | „ Feb. 12 | 4 52·5 | 35 | 54 | | | | | −o=−2 | | |
| | | | 230 | ...... | | | | | | | | | | |
| | | | 235 | ...... | | | | | | | | | | |
| | | | 2402 | 1889 June 6 | −4 12·5 | 45 | | | | | | | | |
| 588 | „ | 4 30 | 299* | 1886 Jan. 23 | 0 30·0 | 60 | 52 | −32 | 198·3 | 20·1 | 49 | See remarks. | K | Images on the plates 299 and 302 fairly equal. |
| | | | 302* | „ „ 25 | 0 31·0 | 60 | 46 | | | | | | | |
| | | | 260 | 1885 Dec. 17 | 0 27·0 | 60 | | | | | | | | *Plate shifted; double images.* |
| | | | 262 | „ „ 23 | 0 16·0 | 50 | | | | | | | | |
| 589 | „ | 6 0 | 298 | 1886 Jan. 22 | 0 24·0 | 60 | 46 | −29 | 210·1 | 20·6 | 52 | +o=−o | K | |
| | | | 303 | „ „ 25 | 0 24·0 | 60 | 46 | | | | | | | |
| 590 | „ | 7 30 | 311 | „ „ 29 | 0 26·0 | 60 | 46 | −25 | 155·2 | 15·6 | 67 | o=o | K | Numerous starlike specks. |
| | | | 316 | „ Feb. 2 | 0 22·0 | 60 | 46 | | | | | | | |
| | | | 319 | „ „ 5 | 0 32·0 | 60 | | | | | | | | *Defective.* |
| 591 | „ | 9 0 | 19 | 1885 Apr. 24 | 0 50·0 | 60 | 46 | −21 | 247·5 | 24·3 | 90 | o=o | K | |
| | | | 16 | „ „ 18 | 0 41·0 | 60 | 46 | | | | | | | |
| 592 | „ | 10 30 | 17* | „ „ 18 | 0 35·0 | 60 | 46 | −19 | 298·0 | 30·5 | 79 | See remarks. | K | Images on the two plates Nos. 15 and 17 fairly equal. |
| | | | 15* | „ „ 14 | 0 33·0 | 60 | 46 | | | | | | | |
| | | | 22 | „ „ 27 | 0 33·0 | 50 | | | | | | | | *Haze.* |
| 593 | „ | 12 0 | 21 | „ „ 24 | 0 35·0 | 60 | 46 | −18 | 252·6 | 24·9 | 53 | o=o | K | |
| | | | 18 | „ „ 18 | 0 23·0 | 60 | 46 | | | | | | | |
| 594 | „ | 13 30 | 53 | „ June 1 | 0 40·0 | 60 | 46 | −18 | 237·0 | 24·3 | 63 | −o=1 | K | Images on m very elongated. |
| | | | 41 | „ May 12 | 0 30·0 | 60 | 46 | | | | | | | |
| 595 | „ | 15 0 | 35 | „ „ 7 | 0 35·0 | 60 | 46 | −19 | 266·8 | 27·6 | 72 | o=o | K | |
| | | | 30 | „ „ 5 | 0 19·0 | 60 | 46 | | | | | | | |
| 596 | „ | 16 30 | 112 | „ Aug. 3 | 0 25·0 | 60 | 46 | −22 | 164·0 | 17·3 | 45<br>adjusted | .o=o | K | |
| | | | 125 | „ „ 26 | 1 0·0 | 60 | 46 | | | | | | | |
| | | | 106 | „ July 27 | 0 30·0 | 60 | | | | | | | | |
| | | | 116 | „ Aug. 10 | 0 36·0 | 50 | | | | | | | | *Interrupted.* |
| 597 | „ | 18 0 | 88 | „ July 6 | 0 45·0 | 60 | 46 | −25 | 194·7 | 20·4 | 42 | −o=−1 | K | |
| | | | 85 | „ „ 2 | 0 50·0 | 60 | 46 | | | | | | | |
| 598 | „ | 19 30 | 2370 | 1889 June 2 | −3 14·5 | 45 | 50 | −29 | 186·3 | 19·2 | 56 | o=o<br>or | V | |
| | | | 2393 | „ „ 6 | −3 23·5 | 45 | 50 | | | | | −o=o | | *Defective.* |
| | | | 110 | 1885 July 29 | 0 27·0 | 60 | | | | | | | | *Sky hazy during last 20 min.* |
| | | | 133 | „ Aug. 28 | 0 46·0 | 60 | | | | | | | | |
| | | | 167 | „ Sept. 22 | 0 42·0 | 60 | | | | | | | | |
| | | | 173 | „ „ 29 | 0 50·0 | 60 | | | | | | | | |

* It is probable but not certain that, of the two plates used for the measurement, the former has been taken as measuring plate.

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| No. | Centre of Plate. δ 1875. | Centre of Plate. α 1875. | No. | Date of Exposure. | t. | T. | Z. | β. | Reduction—Magnitude. B. | Reduction—Magnitude. C. | Reduction—Magnitude. n. | m. and c. Comp. | Observer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | h m | | | h m | m | ° | | | | | | | |
| 599 | −80 | 21 0 | 2395 | 1889 June 6 | −3 55·5 | 45 | 51 | −33 | 169·8 | 16·8 | 62 | 0=0 | V | Numerous starlike specks. |
| | | | 2383 | „ „ 5 | −3 6·5 | 45 | 49 | | | | | | | |
| | | | 151 | 1885 Sept. 10 | 0 28·0 | 60 | | | | | | | | |
| | | | 456 | 1886 July 12 | 0 30·0 | 60 | | | | | | | | |
| | | | 763 | 1887 Sept. 9 | 0 21·5 | 13 | | | | | | | | *Clouded up.* |
| | | | 766 | „ „ 12 | 0 34·0 | 60 | | | | | | | | |
| | | | 769 | „ „ 13 | 1 10·0 | 60 | | | | | | | | |
| | | | 2376 | 1889 June 4 | −3 27·0 | 22 | | | | | | | | |
| 600 | | 22 30 | 196 | 1885 Oct. 21 | 0 30·0 | 60 | 46 | −36 | 175·2 | 18·4 | 63 | 0=0 | K | |
| | | | 163 | „ Sept. 17 | 0 33·0 | 60 | 46 | | | | | | | |
| | | | 172 | „ „ 28 | 0 42·0 | 60 | | | | | | | | *Defective.* |
| | | | 184 | „ Oct. | 0 40·0 | 60 | | | | | | | | *Wrongreading: centre at 20h 0m.* |
| 601 | −85 | 0 0 | 199 | „ „ 22 | 0 45·0 | 60 | 51 | −32 | 120·9 | 12·7 | 31 | +0=−0 | K | |
| | | | 192 | „ „ 15 | 0 23·0 | 60 | 51 | | | | adjusted | | | |
| 602 | „ | 2 0 | 210 | „ Nov. 5 | 0 43·0 | 60 | 51 | −32 | 163·2 | 17·0 | 19 | −0=+0 | K | |
| | | | 229 | „ „ 27 | 0 28·0 | 60 | 51 | | | | adjusted | | | |
| | | | 227 | „ „ 26 | 0 12·5 | 17 | 51 | | | | | | | |
| 603 | „ | 4 0 | 245* | „ Dec. 11 | 0 47·0 | 60 | 51 | −31 | 210·8 | 21·7 | 15 | +0=−0 | K | |
| | | | 264* | „ „ 24 | 0 30·0 | 60 | 51 | | | | adjusted | | | Images on c very bad. |
| | | | 248 | „ „ | 0 33·0 | 60 | 51 | | | | | | | *Sky hazy.* |
| 604 | „ | 6 0 | 290 | 1886 Jan. 14 | 0 54·0 | 60 | 51 | −28 | 184·8 | 18·5 | 5 | 0=0 | K | Numerous starlike specks. |
| | | | 282 | „ „ 11 | 0 29·0 | 60 | 51 | | | | adjusted | | | |
| | | | 275 | „ „ | 0 26·0 | 60 | 51 | | | | | | | *Defective.* |
| 605 | „ | 8 0 | 14 | 1885 Apr. 14 | 1 21·0 | 60 | 51 | −26 | 227·6 | 21·5 | 11 | 0=0 | K | |
| | | | 8 | „ „ 11 | 0 46·0 | 60 | 51 | | | | adjusted | | | |
| 606 | „ | 10 0 | 9 | „ „ 11 | 0 32·0 | 60 | 51 | −23 | 243·1 | 23·4 | 12 | −0=0 | K | |
| | | | 12 | „ „ 13 | 0 41·0 | 60 | 51 | | | | adjusted | | | |
| 607 | „ | 12 0 | 10 | „ „ 11 | 0 32·0 | 60 | 51 | −22 | 252·3 | 24·6 | 16 | 0=0 | K | |
| | | | 13 | „ „ 13 | 0 35·0 | 60 | 51 | | | | adjusted | | | |
| 608 | „ | 14 0 | 42 | „ May 12 | 1 10·0 | 60 | 51 | −23 | 162·6 | 16·2 | 17 | 0=0 | K | |
| | | | 38 | „ „ 11 | 0 49·0 | 60 | 51 | | | | adjusted | | | |
| 609 | „ | 16 0 | 49 | „ „ 22 | 0 44·0 | 60 | 51 | −24 | 156·9 | 16·2 | 11 | 0=0 | K | On m images double. |
| | | | 93 | „ July 10 | 1 0·0 | 60 | 51 | | | | adjusted | | | |
| 610 | „ | 18 0 | 70 | „ June 24 | 0 25·0 | 60 | 51 | −26 | 178·6 | 18·0 | 14 | 0=0 | K | |
| | | | 81 | „ July 1 | 0 30·0 | 60 | 51 | | | | adjusted | | | |
| 611 | „ | 20 0 | 119 | „ Aug. 15 | 0 27·0 | 60 | 51 | −29 | 141·8 | 14·9 | 9 | 0=0 | K | |
| | | | 115 | „ „ 3 | 0 27·0 | 60 | 51 | | | | adjusted | | | |
| 612 | „ | 22 0 | 204 | „ Oct. 27 | 0 34·0 | 60 | 51 | −31 | 166·1 | 17·5 | 27 | 0=0 | K | |
| | | | 152 | „ Sept. 10 | 0 38·0 | 60 | 51 | | | | adjusted | | | |
| | | | 169 | „ „ 22 | 0 32·0 | 60 | | | | | | | | *Defective.* |
| | | | 200 | „ Oct. 23 | 0 24·0 | 60 | | | | | | | | *Defective.* |
| | | | 207 | „ Nov. 5 | 1 15·0 | 60 | | | | | | | | *Defective.* |
| 613 | −90 | ...... | 6 | „ Apr. 10 | 1 48·0 | 60 | 56 | −27 | 195·7 | 18·6 | 29 | 0=0 | | *Depends on the clock-work;* |
| | | | 11 | „ „ 13 | 1 26·0 | 60 | 56 | | | | adjusted | | | *no guiding star used.* |

Besides these plates, there is a series of plates for the declinations $-53\frac{1}{2}$ to $-57\frac{1}{2}$ completely measured in duplicate, a list of which has been given in Gill's Introduction to vol. i. pp. xxxii to xxxviii.

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For the arrangement of the catalogue, too, I may refer to art. 25 of my Introduction to vol. i. The principal changes that have been made in vol. iii. are those caused by the more detailed data given for the precession. For these art. 6 of the present Introduction may be consulted.

* It is probable but not certain that, of the two plates used for the measurement, the former has been taken as measuring plate.

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The zone $-62°$ contains stars taken partly from the plates of belt $-60°$, partly from those of belt $-65°$. In order that there may be no doubt as to the plates from which the magnitudes were derived, those obtained from the more southern belt were marked with a dagger (†) in the cases in which the number of the plates is *uneven*, with a double dagger (‡) in those in which it is *even*. At the top of the page the numbers of the plates belonging to both the belts have been given. Owing to these precautions, I believe that any mistake must be impossible. The same arrangement has been made on behalf of the Zones $-67°$, $-72°$, $-77°$, $-82°$, and $-86°$.

In the Zones $-86°$ to $-88°$, in the columns of the declinations for 1850 and 1900, some values are *negative*. It need hardly be said that this supposes (contrary to the rule followed for the rest of the catalogue) the *southern* declinations considered as *positive* quantities. In accordance therewith, the sign of the declination at the top of the column has been dropped.

### 15. *Stars missing on plates or in Thome's Cordoba Durchmusterung.*

Of the following lists the second contains a certain number of stars contained in Catalogues of Precision [mostly in those of Rümker, Taylor, and Gilliss (1963 stars)] missing on the plates, but accidentally overlooked in compiling the lists of these stars.

At the end of it will be found a condensed reference to those stars of Brisbane which are not found in the C.P.D. in the position assigned.

No explanation seems needed for the other lists, as they are arranged perfectly in the same way as the corresponding lists of vols. i. and ii.

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## I. LIST OF STARS CONTAINED IN THE CATALOGUES OF PRECISION, AND MISSING ON THE PLATES—(Continuation of List in Vol. II.).

| No. | α 1875. | δ 1875. | Catalogue No. | Mag. | Other Catalogues. | Remarks. |
|---|---|---|---|---|---|---|
| | h m s | ° ′ | | | | |
| 309 | 0 4 22 | 78 35·8 | *g* 36 | 9·5 | | Doubtful traces on *m*. On *c*. certainly missing. |
| 310 | 7 12 | 85 22·6 | r 4 | 7·0 | | Also not found by Stone. See footnote in *Cape Catalogue* for 1880. |
| 311 | 7 39 | 66 29·4 | *g* 59 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 312 | 8 2 | 69 19·5 | *g* 64 | 9·8 | | Certainly missing on *m*. and *c*. |
| 313 | 11 26 | 84 54·8 | *g* 98 | 10·0 | | Faint traces on *m*. On *c*. certainly missing. |
| 314 | 12 15 | 69 34·4 | *g* 111 | 9·5 | | Certainly missing on *m*. and *c*. |
| 315 | 14 26 | 70 8·9 | *g* 130 | 10·0 | | Certainly missing on *m*. and *c*. |
| 316 | 14 31 | 69 49·6 | *g* 131 | 10·0 | | Doubtful traces on *c*. On *m*. certainly missing. |
| 317 | 14 42 | 68 5·7 | *g* 133 | 10·0 | | Faint traces on *c*. On *m*. certainly missing. |
| 318 | 15 37 | 68 4·7 | *g* 153 | 10·0 | | In this position certainly missing on *m*. and *c*. Correction of $-2^m$ in α and star identical with *g* 124? Divergences: $2^m\ 0^s{\cdot}3$ and $1''{\cdot}2$. |
| 319 | 15 50 | 81 36·3 | *g* 155 | 10·0 | | Certainly missing on *m*. and *c*. |

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| No. | α 1875. | δ 1875. | Catalogue No. | Mag. | Other Catalogues. | Remarks. |
|---|---|---|---|---|---|---|
| | h m s | ° ′ | | | | |
| 320 | 0 16 26 | 80 31·9 | g 162 | 10·0 | | Certainly missing on *m.* and *c.* There is a star (9·2) at $\delta = 35'·6$ in C.P.D. |
| 321 | 21 16 | 70 6·6 | g 211 | 10·0 | | Certainly missing on *two* pairs of plates. |
| 322 | 24 19 | 85 18·0 | g 245 | 10·0 | | Certainly missing on plates 85°, $0^h$. |
| 323 | 26 22 | 68 57·3 | g 260 | 10·0 | | Missing in *eight* sweeps on *two* pairs of plates. Perhaps extremely doubtful traces on *m.* and *c.* |
| 324 | 29 16 | 84 1·3 | g 286 | 10·0 | | Faint traces on *m.* On *c.* certainly missing |
| 325 | 33 45 | 68 16·3 | g 325 | 10·0 | | Certainly missing on *m.* and *c.* |
| 326 | 33 49 | 82 36·7 | g 333 | 10·0 | | Perhaps faint traces on *m.* (85°, $0^h$). On *c.* and plates 80°, $0^h$ $0^m$ certainly missing. |
| 327 | 34 1 | 72 57·4 | g 328 | 9·0 | | Certainly missing on *three* pairs of plates (plates 70°, $0^h$ $45^m$; 75°, $0^h$ and $1^h$). Error in δ and star identical with *g* 327? |
| 328 | 34 6 | 86 4·2 | g 342 | 10·0 | | Certainly missing on plates 85°, $0^h$. |
| 329 | 35 19 | 77 40·4 | g 347 | 9·5 | | Perhaps extremely faint traces of a star on *m.* (80°, $0^h$ $0^m$). On *c.* certainly missing. |
| 330 | 35 47 | 66 9·4 | r 22 | 6·0 | | Error in R.A. and identical with G 653? Stone thinks the identity probable. See footnote in *Cape Catalogue* for 1880. |
| 331 | 36 11 | 76 17·2 | g 357 | 8·5 | | Both stars certainly missing on *m.* and *c.* |
| 332 | 36 20 | 76 17·1 | g 358 | 9·0 | | There is a star in C.P.D. as follows: (10·2) $36^m$ $17^s·0$ −76° 26′·9. |
| 333 | 39 6 | 70 36·5 | g 383 | 10·0 | | Certainly missing on *m.* and *c.* |
| 334 | 44 25 | 68 53·5 | g 423 | 10·0 | | Certainly missing on *m.* and *c.* |
| 335 | 50 18 | 83 42·0 | g 494 | 10·0 | | Certainly missing on plates 85°, $0^h$. |
| 336 | 50 33 | 69 39·5 | g 487 | 10·0 | | Certainly missing on *m.* and *c.* |
| 337 | 52 0 | 85 29·6 | g 516 | 10·0 | | Certainly missing on plates 85°, $0^h$. |
| 338 | 53 21 | 75 40·6 | g 519 | 9·5 | | Certainly missing on *m.* and *c.* |
| 339 | 53 21 | 71 29·1 | g 517 | 10·0 | | Certainly missing on *m.* and *c.* |
| 340 | 53 51 | 48 37·0 | r 37 | 7·0 | | See Supplementary List. |
| 341 | 54 55 | 84 48·8 | g 534 | 9·8 | | Certainly missing on plates 85°, $0^h$. |
| 342 | 57 5 | 69 18·4 | g 549 | 10·0 | | Certainly missing on *m.* and *c.* |
| 343 | 57 11 | 69 49·4 | g 550 | 10·0 | | Certainly missing on plates 70°, $0^h$ $45^m$. |
| 344 | 58 30 | 71 32·6 | g 557 | 10·0 | | In this position certainly missing on *m.* and *c.* There is a bright star (8·6) in C.P.D. $5^m$ preceding. |
| 345 | 1 2 58 | 68 46·1 | g 591 | 10·0 | | Certainly missing on *m.* and *c.* |
| 346 | 3 23 | 70 57·6 | g 594 | 10·0 | | Missing in *six* sweeps on *two* pairs of plates. Certainly missing on *m.* and *c.* |
| 347 | 9 54 | 86 29·1 | g 675 | 10·0 | | Certainly missing on plates 85°, $2^h$. Also missing in *three* sweeps on plates 85°, $0^h$. |
| 348 | 13 18 | 85 4·5 | g 696 | 10·0 | | Certainly missing on plates 85°, $2^h$. Also missing in *three* sweeps on plates 85°, $0^h$. |
| 349 | 13 52 | 66 50·6 | g 689 | 9·2 | | |
| 350 | 14 12 | 85 32·5 | g 709 | 10·0 | | Certainly missing on plates 85°, $2^h$. Missing also in *three* sweeps on plates 85° $0^h$. |
| 351 | 14 56 | 75 34·2 | g 700 | 9·5 | | Certainly missing on *m.* and *c.* |
| 352 | 16 14 | 69 46·4 | g 710 | 9·5 | | Missing in *four* sweeps on *two* pairs of plates. |
| 353 | 19 19 | 66 6·1 | g 747 | 10·0 | | |
| 354 | 19 47 | 68 56·6 | g 754 | 11·0 | | There is a faint star in C.P.D. at $\delta = 52'·2$. A correction of 4′ 15″ (*vide* Gilliss's Introd., lvii) seems not improbable therefore. |
| 355 | 23 45 | 85 10·8 | g 797 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 356 | 25 32 | 64 29·1 | Z.C. 669 | 10·0 | | Extremely doubtful traces of a star on the plates. |
| 357 | 25 57 | 82 41·3 | g 806 | 11·0 | | Certainly missing on two pairs of plates [85°, $2^h$ and 80°, $1^h$ $30^m$]. |
| 358 | 32 8 | 82 30·1 | g 865 | 10·2 | | Certainly missing on *two* pairs of plates [85°, $2^h$ and 80°, $1^h$ $30^m$]. |
| 359 | 32 28 | 85 2·7 | g 880 | 10·2 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 360 | 34 23 | 66 55·6 | g 878 | 9·5 | | |
| 361 | 34 25 | 66 38·4 | g 879 | 9·5 | | |
| 362 | 35 11 | 85 3·7 | g 903 | 10·2 | | Certainly missing on plates 85°, $2^h$. |
| 363 | 36 58 | 85 15·2 | g 921 | 10·0 | | Certainly missing on plates 85°, $2^h$. |

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| 364 | 1 38 19 | 66 48·7 | *g* 914 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 365 | 40 51 | 84 55·2 | *g* 955 | 10·2 | | Certainly missing on plates 85°, $2^{h}$. |
| 366 | 41 21 | 85 24·0 | g 52 | 5·0 | | Star probably 1 wire interval in R.A. in error (about $17^{s}$ sec. 85°.31′ = $3^{m}$ $37^{s}$) and identical with g 54. |
| 367 | 48 12 | 82 23·6 | *g* 1015 | 10·5 | | Certainly missing on plates 85°, $2^{h}$ and *m.* of 80°, $1^{h}$ $30^{m}$. On *c.* (80°, $1^{h}$ $30^{m}$) doubtful traces. |
| 368 | 51 35 | 52 14·0 | r 79 | 7·0 | | See Supplementary List. |
| 369 | 51 38 | 76 8·7 | *g* 1045 | 9·0 | | Certainly missing on *m.*, *c.*, and third plate. |
| 370 | 53 5 | 67 22·7 | *g* 1057 | 10·0 | | Missing in *six* sweeps on *three* pairs of plates. |
| 371 | 56 3 | 70 56·3 | *g* 1087 | 11·0 | | Missing in *six* sweeps on *three* pairs of plates. |
| 372 | 58 5 | 66 46·4 | *g* 1109 | 10·0 | | |
| 373 | 58 16 | 78 56·6 | *g* 1118 | 11·0 | | A faint image on *c.* On *m.* certainly missing. |
| 374 | 59 15 | 86 59·2 | *g* 1174 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 375 | 59 34 | 78 53·9 | *g* 1135 | 11·0 | | Certainly missing on plates 80°, $1^{h}$ $30^{m}$. |
| 376 | 0 4 | 69 11·9 | *g* 1134 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 377 | 0 25 | 78 47·5 | *g* 1144 | 11·0 | | Certainly missing on *two* pairs of plates (80°, $1^{h}$ $30^{m}$ and 80°, $3^{h}$ $0^{m}$). |
| 378 | 1 20 | 74 58·8 | *g* 1149 | 10·0 | | In this position certainly missing. Error of 4′ 15″ (wrong declination wire) and star identical with *g* 1148? Divergences: $0^{s}$·31 and 4′.9″·6. |
| 379 | 1 47 | 71 16·6 | *g* 1150 | 10·0 | | There is a star (10·2) in C.P.D. at δ = 8′·2. An error of 8′·5 in δ seems probable. (Comp. Gilliss's Introd., lvii.) |
| 380 | 2 13 | 83 46·4 | *g* 1176 | 11·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 381 | 3 20 | 83 34·1 | *g* 1185 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 382 | 3 25 | 86 57·4 | *g* 1206 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 383 | 3 37 | 84 48·6 | *g* 1193 | 10·0 | | Perhaps extremely faint traces on plates 85°, $2^{h}$. |
| 384 | 9 29 | 66 22·9 | *g* 1221 | 10·0 | | |
| 385 | 9 38 | 66 25·9 | *g* 1223 | 9·5 | | |
| 386 | 10 47 | 84 53·9 | *g* 1265 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 387 | 10 48 | 86 59·2 | *g* 1289 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 388 | 10 49 | 84 19·7 | *g* 1264 | 10·0 | | |
| 389 | 11 0 | 79 3·5 | *g* 1251 | 10·5 | | On *c.* ($3^{h}$ $0^{m}$) doubtful traces; on *m.* and on plates 80°, $1^{h}$ $30^{m}$ certainly missing. Also missing on *two* rejected plates 80°, $3^{h}$ $0^{m}$. |
| 390 | 12 42 | 64 20·6 | G 2349 | 9½ | Z.C. 342 (9½) | Extremely doubtful traces on the plates. |
| 391 | 13 43 | 85 40·8 | *g* 1298 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 392 | 13 54 | 63 59·6 | G 2371 | 9½ | Z.C. 363 (9½) | Certainly missing on *m.* and *c.* |
| 393 | 14 6 | 84 14·0 | *g* 1294 | 9·8 | | Certainly missing on plates 85°, $2^{h}$. |
| 394 | 14 41 | 81 17·7 | *g* 1291 | 10·0 | | Doubtful traces on *c.* Certainly missing on *m.* Also missing on the two rejected plates 80°, $3^{h}$ $0^{m}$. |
| 395 | 14 54 | 77 54·9 | *g* 1285 | 10·0 | | Certainly missing on plates 80°, $1^{h}$ $30^{m}$. On *c.* of $3^{h}$ $0^{m}$ doubtful traces, on *m.* certainly missing. Also missing on two rejected plates of 80°, $3^{h}$ $0^{m}$. |
| 396 | 17 23 | 66 57·0 | *g* 1300 | 9·2 | | |
| 397 | 18 46 | 84 2·5 | *g* 1336 | 9·5 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 398 | 22 59 | 83 58·2 | *g* 1390 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 399 | 25 43 | 86 11·7 | *g* 1437 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 400 | 27 11 | 84 14·3 | *g* 1435 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |
| 401 | 30 15 | 86 25·6 | *g* 1482 | 10·0 | | Extremely doubtful traces on *c.* (85°, $2^{h}$). On *m* certainly missing. |
| 402 | 30 55 | 66 29·4 | *g* 1442 | 10·0 | | |
| 403 } | 31 50 | 82 28·1 | *g* 1472 | 9·0 | | There is a star (9·2) at $2^{h}$ $35^{m}$ $48^{s}$ − 82°.28′·0. Probably Gilliss's stars in error resp. by $4^{m}$ and $1^{m}$ in R.A. The identity of the two stars is already assumed in Gilliss's Catalogue (footnote). In the position of *g*'s Catalogue, certainly missing on plates 85°, $2^{h}$. |
| 404 } | 34 48 | 82 28·2 | *g* 1498 | 9·0 | | |
| 405 | 32 24 | 70 39·2 | *g* 1459 | 10·0 | | Correction $+4^{m}$ in R.A. and star identical with *g* 1497? Divergences: $4^{m}$ $0^{s}$·3 and 5″. |
| 406 | 32 51 | 63 7·6 | Z.C. 892 | 9·0 | | Certainly missing on *m.* and *c.* |
| 407 | 33 25 | 84 14·0 | *g* 1494 | 10·0 | | Certainly missing on plates 85°, $2^{h}$. |

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| 408 | 2 34 21 | 78 55·0 | *g* 1486 | 9·0 | | Certainly missing on *m* and *c*. Also missing on two rejected plates. Correction $-1^m$ in R.A. and star identical with *g* 1478? |
| 409 | 50 7 | 67 52·1 | G 3143 | 11·0 | | Certainly missing on *m*. and *c*. |
| 410 | 51 11 | 64 51·1 | G 3167 | 9½ | | G has a duplex here. The distance of the components being $1^s.4$ and $10''.0$, the duplicity ought to have been visible on the plates. It certainly is not visible however. |
| 411 | 54 21 | 66 41·5 | *g* 1649 | 10·0 | | |
| 412 | 58 12 | 74 3·8 | *g* 1696 | 10·0 | | Extremely doubtful traces on the plates. |
| 413 | 3 0 41 | 84 27·4 | *g* 1749 | 10·0 | | Certainly missing on plates 85°, $4^h$. |
| 414 | 1 34 | 88 22·8 | *g* 1879 | 9·5 | | In this position missing in *four* sweeps on polar plate. Star identical with *g* 1880? In footnote of catalogue the identity is deemed probable. |
| 415 | 3 17 | 79 37·1 | *g* 1754 | 10·0 | | In this position certainly missing on *m*. and *c*. Missing also on rejected plates 80°, $3^h\ 0^m$. There is a star (9·3) following $20^s$ in C.P.D. |
| 416 | 8 18 | 65 27·8 | Z.C. 262 | 9·0 | | Certainly missing on *m*., *c*., and third plate. |
| 417 | 9 28 | 87 22·2 | *g* 1895 | 10·0 | | Missing in *four* sweeps on polar plate. |
| 418 | 9 40 | 81 0·2 | *g* 1828 | 9·5 | | Certainly missing on *m*. and *c*. Also missing on two rejected plates 80°, $3^h\ 0^m$. Correction in R.A. and star identical with *g* 1839? |
| 419 | 11 12 | 81 35·0 | *g* 1847 | 10·0 | | Perhaps doubtful traces on *c*. Certainly missing on *m*. Also missing on two rejected plates 80°, $3^h\ 0^m$. |
| 420 | 11 22 | 76 27·2 | Z.C. 350 | 9·0 | | Certainly missing on *m*. and *c*. |
| 421 | 13 46 | 66 37·9 | *g* 1861 | 10·0 | | |
| 422 | 18 14 | 69 44·0 | *g* 1900 | 12·0 | | |
| 423 | 18 26 | 66 44·1 | *g* 1901 | 10·0 | | |
| 424 | 18 30 | 69 43·5 | *g* 1907 | 10·0 | | |
| 425 | 18 38 | 79 29·8 | *g* 1926 | 10·0 | | Certainly missing on *m*. and *c*. Missing also on two rejected plates 80°, $3^h\ 0^m$. |
| 426 | 21 22 | 75 31·0 | *g* 1942 | 10·0 | | Extremely doubtful traces on the plates. |
| 427 | 21 51 | 71 26·8 | *g* 1943 | 10·0 | | Missing in *six* sweeps on *three* pairs of plates. |
| 428 | 32 12 | 66 45·3 | *g* 2034 | 10·0 | | |
| 429 | 32 24 | 70 56·4 | *g* 2040 | 10·0 | | Correction of $+5^m$ in R.A. and star identical with *g* 2086? Divergences: $5^m\ 0^s.4$ and $1''.7$. |
| 430 | 35 18 | 75 43·6 | *g* 2074 | 9·0 | | In this position certainly missing on *m*. and *c*. Error of $-10^m$ in R.A. and star identical with *g* 1979? Divergences: $9^m\ 59^s.74$ and $1''.4$. |
| 431 | 37 10 | 77 43·2 | *g* 2094 | 10·0 | | Certainly missing on *two* pairs of plates (80°, $3^h\ 0^m$ and 80°, $4^h\ 30^m$). Also missing on rejected plates 80°, $3^h\ 0^m$. |
| 432 | 39 50 | 75 21·6 | *g* 2117 | 10·0 | | In this position certainly missing on *m*. and *c*. Error in R.A. and star identical with *g* 2107 ?? |
| 433 | 40 48 | 71 25·4 | *g* 2121 | 11·0 | | |
| 434 | 45 22 | 70 6·9 | *g* 2162 | 9·5 | | |
| 435 | 45 39 | 76 15·5 | *g* 2172 | 10·0 | | Certainly missing on *m*. and *c*. |
| 436 | 49 2 | 86 0·2 | *g* 2255 | 9·0 | | In this position certainly missing on plates 85°, $4^h$. There is a star (8·7) $5^m$ preceding in C.P.D. |
| 437 | 58 38 | 68 44·2 | *g* 2286 | 10·0 | | |
| 438 | 4 6 0 | 75 53·1 | *g* 2337 | 10·0 | | Extremely doubtful traces on *m*. and *c*. |
| 439 | 8 8 | 70 6·9 | *g* 2351 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 440 | 10 35 | 73 3·0 | *g* 2376 | 10·0 | | Extremely doubtful traces on *m*. and *c*. |
| 441 | 15 10 | 66 30·9 | *g* 2419 | 10·7 | | Near *g* 2416 still the images of the two stars ought to be clearly separated on the plates. |
| 442 | 15 34 | 53 12·5 | t 1522 | 7·8 | | Identical with t 1518? Divergences: $24^s.6$ and $3''.4$; or with t 1521? Divergences: $0^s.09$ and $2'.38''.0$. |
| 443 | 17 3 | 68 11·6 | *g* 2439 | 10·0 | | |
| 444 | 18 29 | 87 28·4 | *g* 2567 | 9·0 | | Certainly missing on plates 85°, $4^h$. Also missing in *four* sweeps on polar plate. |
| 445 | 20 57 | 76 16·1 | *g* 2495 | 10·0 | | Extremely doubtful traces on *m*. and *c*. |
| 446 | 23 35 | 67 12·9 | *g* 2518 | 10·0 | | There is a star in C.P.D. $5^m$ following (9·0) $28^m\ 34^s.5$ $-67°.13'.1$. |
| 447 | 31 39 | 76 57·3 | *g* 2602 | 10·0 | | Missing in *six* sweeps on *two* pairs of plates. Certainly missing on *m*. and *c*. |

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| 448 | 4 42 19 | 71 23·8 | *g* 2704 | 10·0 | | |
| 449 | 44 46 | 68 19·0 | *g* 2727 | 9·8 | | |
| 450 | 45 39 | 66 7·9 | *g* 2733 | 9·0 | | Certainly missing on *m.* and *c.* |
| 451 | 47 23 | 67 45·8 | *g* 2748 | 10·0 | | |
| 452 | 54 45 | 67 7·6 | *g* 2824 | 10·0 | | There is a star in C.P.D. $30^s$ following (9·4) $4^h$ $55^m$ $15^s{\cdot}0$ $-67^\circ{.}7'{\cdot}7$. |
| 453 | 5 0 52<br>1 2 | 85 6·0 | *g* 2944 | 9·5 | | On *m.* (of plates 85°, $4^h$) extremely doubtful traces at $5^h$ $1^m$ $0^s$. On *c.* and plates 85°, $6^h$ certainly missing. |
| 454 | 6 59 | 79 33·1 | *g* 2972 | 10·0 | | Certainly missing on *m.* and *c.* There is a star in C.P.D. as follows: (9·7) $5^h$ $7^m$ $3^s$ $-79^\circ{.}23'{\cdot}0$. Error of 10′ in δ in *g*? |
| 455 | 12 24 | 74 58·8 | Z.C. 443 | 8½ | | In this position certainly missing on plates. Error of 1′ in declination and star identical with Z.C. 444? |
| 456 | 13 29 | 69 52·4 | *g* 3027 | 10·0 | | |
| 457 | 17 32 | 73 51·8 | *g* 3079 | 10·0 | | Certainly missing on *m.* and *c.* |
| 458 | 19 18 | 71 38·9 | G 6247 | 9·0 | | Certainly missing on *m.* and *c.* |
| 459 | 19 50 | 75 15·4 | *g* 3113 | 11·0 | | Certainly missing on *m.* and *c.* |
| 460 | 25 28 | 64 51·1 | *g* 3168 | 10·0 | | |
| 461 | 27 8 | 64 40·2 | *g* 3190 | 11·0 | | |
| 462 | 32 34 | 65 45·9 | *g* 3272 | 10·0 | | |
| 463 | 36 33 | 71 4·5 | *g* 3328 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 464 | 40 58 | 62 59·2 | Z.C. 1526 | 9½ | | Missing in *eight* sweeps on *two* pairs of plates. Marked with ? in Z.C. There is a star (9·6) $40^s$ preceding in C.P.D. |
| 465 | 42 5 | 63 1·6 | *g* 3399 | 8·0 | | Certainly missing on *m.*, *c.*, and third plate. |
| 466 | 43 36 | 75 25·7 | *g* 3432 | 9·5 | | Error of $-4^m$ in R.A. and star identical with *g* 3381? Divergences: $4^m$ $0^s{\cdot}08$ and $1''{\cdot}6$. |
| 467 | 46 31 | 75 56·9 | *g* 3483 | 10·0 | | |
| 468 | 47 29 | 62 43·9 | *g* 3476 | 10·0 | | |
| 469 | 47 41 | 74 34·8 | *g* 3502 | 9·5 | | |
| 470 | 48 57 | 85 23·0 | *g* 3604 | 9·5 | | Certainly missing on plates 85°, $6^h$. |
| 471 | 51 29 | 74 21·6 | *g* 3565 | 10·0 | | |
| 472 | 54 5 | 74 3·6 | *g* 3601 | 10·0 | | |
| 473 | { 56 33 | 69 24·7 | *g* 3628 | 10·0 | } | In C.P.D. there is only the star (9·1) $56^m$ $34^s{\cdot}5$ $-69^\circ{.}\,26'{\cdot}6$. |
| 474 | { 56 34 | 69 30·7 | *g* 3629 | 9·5 | } | |
| 475 | 6 6 51 | 73 47·0 | *g* 3789 | 10·0 | | |
| 476 | 7 13 | 72 43·7 | *g* 3794 | 10·0 | | |
| 477 | 9 11 | 65 39·5 | *g* 3804 | 10·0 | | |
| 478 | 11 39 | 64 22·6 | *g* 3837 | 10·0 | | |
| 479 | 13 46 | 66 42·5 | g 252<br>1 obs. | 9·0 | | Probably correction $+2^m$ in R.A. and star identical with *g* 3896. |
| 480 | 17 32 | 69 6·2 | S 2941 | 7·8 | | Certainly missing on *c.* and *m.* Identical with S 2963? Divergences: $1^m$ $40^s{\cdot}7$ and $1''{\cdot}6$. |
| 481 | 17 42 | 73 9·8 | *g* 3927 | 9·0 | | Error of $+1^m$ in R.A. and star identical with *g* 3949? Divergences: $59^s{\cdot}5$ and $3''{\cdot}7$. |
| 482 | 18 23 | 65 31·6 | *g* 3932 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 483 | 21 2 | 85 48·7 | *g* 4076 | 10·5 | | Certainly missing on plates 85°, $6^h$. |
| 484 | 23 24 | 83 12·8 | *g* 4066 | 10·0 | | Certainly missing on plates 85°, $6^h$. |
| 485 | 23 59 | 80 40·5 | *g* 4055 | 9·5 | | Certainly missing on *m.* and *c.* May there be an error of $1^m$ $40^s$ in R.A., and star be identical with *g* 4085? |
| 486 | 24 14 | 78 22·5 | *g* 4046 | 11·0 | | Faint image on *c.* Certainly missing on *m.* |
| 487 | 38 39 | 65 30·6 | *g* 4236 | 10·0 | | |
| 488 | 40 30 | 69 33·4 | G 8374 | 9·5 | | Certainly missing on *four* plates. |
| 489 | 41 56 | 65 53·8 | *g* 4283 | 9·0 | | In this position certainly missing on *m.* and *c.* A correction of a wire interval in declination makes the star identical with *g* 4281. |
| 490 | 42 4 | 65 41·4 | *g* 4287 | 9·5 | | |
| 491 | 42 19 | 64 59·2 | *g* 4290 | 10·0 | | There is a star in C.P.D. $40^s$ following (9·3) $42^m$ $59^s{\cdot}5$ $-64^\circ{.}59'{\cdot}2$. |
| 492 | 42 43 | 59 8·1 | G 8445 | 9½ | | In this position certainly missing on *m.* and *c.* There is an extremely faint star (10·0) observed $=7'{\cdot}0$. In G but *one* observation. |
| 493 | 43 0 | 75 26·3 | *g* 4316 | 9·0 | | In position of *g* certainly missing. Error of $+5^m$ in R.A. and star identical with *g* 4374? Divergences: $4^m$ $59^s{\cdot}9$ and $2''{\cdot}1$. |



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| 494 | 6 48 53 | 76 33·1 | *g* 4386 | 9·5 | | Certainly missing on *m.* and *c.* |
| 495 | 50 30 | 63 39·8 | *g* 4392 | 10·0 | | |
| 496 | 52 44 | 69 51·8 | *g* 4437 | 10·0 | | |
| 497 | 52 55 | 63 51·4 | *g* 4432 | 9·5 | | |
| 498 | 54 26 | 71 24·0 | *g* 4460 | 9·5 | | |
| 499 | 7 0 6 | 57 18·9 | *g* 412 | 8·5 | | Probably errors of $1^m$ and $10''$, and star identical with G 8965. Divergences: $0^m\ 59^s{\cdot}34$ and $10''{\cdot}2$. |
| 500 | 0 49 | 61 47·0 | Z.C. 61 | 9·0 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 501 | 1 39 | 75 48·– | *g* 4556 | 10·0 | | |
| 502 | 7 53 | 72 48·9 | *g* 4619 | 8·0 | | Certainly missing on *m.* and *c.* The star is *red* according to Gilliss. |
| 503 | 14 14 | 75 28·0 | *g* 4700 | 10·0 | | Certainly missing on *m.* and *c.* |
| 504 | 15 13 | 65 9·9 | *g* 4702 | 9·5 | | Error of $+1^m$ in R.A. and star identical with *g* 4716. Divergences: $0^m\ 59^s{\cdot}7$ and $3''$. |
| 505 | 21 47 | 64 6·3 | *g* 4789 | 10·0 | | |
| 506 | 24 15 | 72 53·– | *g* 4836 | 9·0 | | Certainly missing on *m.* and *c.* |
| 507 | 30 23 | 65 57·9 | *g* 4914 | 10·0 | | Missing in *four* sweeps on *m.* and *c.* |
| 508 | 37 32 | 63 17·1 | *g* 4998 | 9·0 | | Probably wire in error and star identical with the following one in C.P.D., (8·8) $36^m\ 54^s{\cdot}5$ $-63°.17'{\cdot}0$. |
| 509 | 39 38 | 71 18·1 | *g* 5029 | 10·0 | | |
| 510 | 42 0 | 66 11·0 | *g* 5057 | 9·0 | | Certainly missing on *two* pairs of plates. |
| 511 | 46 46 | 54 26·3 | t 3292 | 7·0 | | Identical with G 10304 (8½)? Divergences: $11^s{\cdot}7$ and $2''$. |
| 512 | 55 22 | 86 33·2 | *g* 5318 | 11·0 | | Certainly missing on plates 85°, $8^h$. There is a star (10·5) in C.P.D. at $54^m\ 27^s$ $-86°.32'{\cdot}4$. |
| 513 | 57 30 | 60 9·7 | t 3400 | 1·0 | | Error of 5′ in δ and star identical with t 3401? In this case, however, there must be another error in the magnitude. |
| 514 | 8 3 50 | 65 59·1 | *g* 5336 | 9·0 | | Possibly star identical with *g* 5327 (9·2). Divergences: $1^m\ 0^s{\cdot}1$ and $8''{\cdot}4$. |
| 515 | 9 15 | 80 30·4 | *g* 5406 | 10·0 | | Certainly missing on *two* pairs of plates (80°, $7^h\ 30^m$ and 80°, $9^h\ 0^m$). |
| 516 | 9 53 | 56 17·7 | Z.C. 802 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. |
| 517 | 11 52 | 75 33·8 | *g* 5423 | 10·0 | | Certainly missing on *m.* and *c.* |
| 518 | 15 16 | 66 39·1 | G 11156 | 11·0 | | Certainly missing on *m.* and *c.* |
| 519 | 17 2 | 63 35·2 | Z.C. 1411 | 10·0 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 520 | 18 50 | 66 1·6 | *g* 5493 | 9·5 | | The assumption of an error of one wire interval in declination makes the star identical with *g* 5494. |
| 521 | 19 3 | 81 3·9 | *g* 5526 | 9·5 | | Certainly missing on *two* pairs of plates (80°, $7^h\ 30^m$ and 80°, $9^h\ 0^m$). |
| 522 | 22 56 | 59 33·6 | Z.C. 1918 | 9½ | | At best very faint traces on *m.*, *c.*, and third plate. |
| 523 | 24 32 | 60 3·3 | Z.C. 2053 | 9½ | | Certainly missing on *m.*, *c.*, and third plate. Innes finds the star yellow (March 1898). |
| 524 | 24 33 | 75 56·9 | Z.C. 2054 | 8½ | | Certainly missing on *m.* and *c.*, and also missing in Gilliss's Catalogue. |
| 525 | 25 38 | 60 32·3 | Z.C. 2146 | 10·0 | | Certainly missing on *m.*, *c.*, and third plate. Marked with ? in Z.C. |
| 526 | 31 59 | 62 46·5 | *g* 5639 | 9·5 | | Certainly missing on *m.* and *c.* |
| 527 | 33 7 | 62 31·7 | *g* 5644 | 9·0 | | Certainly missing on *m.* and *c.* On third plate perhaps extremely faint traces of a star. |
| 528 | 33 24 | 59 45·1 | Z.C. 2784 | 9½ | | |
| 529 | 33 53 | 60 3·6 | Z.C. 2819 | 9½ | | Certainly missing on *m.* and *c.* On third plate very doubtful traces. |
| 530 | 36 29 | 62 44·7 | *g* 5680 | 9·5 | | There is a star (9·7) in C.P.D. $23^s$ following. |
| 531 | 37 35 | 84 32·5 | *g* 5733 | 10·0 | | Missing in *four* sweeps on plates 85°, $8^h$. |
| 532 | 38 50 | 72 19·1 | *g* 5703 | 9·0 | | Certainly missing on *two* pairs of plates. |
| 533 | 39 4 | 55 18·6 | Z.C. 3216 | 9·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. δ to be corrected by −1′? This star, however, is $7^m{\cdot}0$, and is contained in the same Cordoba Zone with Z.C. 3216. |
| 534 | 41 11 | 63 6·7 | *g* 5732 | 9·0 | | Certainly missing on *m.* and *c.* |
| 535 | 41 13 | 63 24·7 | *g* 5736 | 10·0 | | |

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| 536 | 8 53 29 | 75 27·– | *g* 5875 | 10·0 | | |
| 537 | 56 37 | 55 6·3 | Z.C. 4591 | 9½ | | In Z.C. *two* observations Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. Identical with star of C.P.D., (9·1) $56^m$ $37^s·3$ −55°. 10′·2 ? |
| 538 | 9 2 25 | 61 57·0 | Z.C. 198 | 10·0 | | Certainly missing on *m.* and *c.* |
| 539 | 6 17 | 82 23·7 | *g* 6028 | 9·5 | | Certainly missing on *three* pairs of plates (80°, $9^h$; 85°, $8^h$; 85°, $10^h$). |
| 540 | 6 31 | 76 39·8 | k 1700 | 9·5 | | |
| 541 | 9 49 | 66 8·0 | *g* 6050 | 9·0 | | Certainly missing on *m.* and *c.* |
| 542 | 11 59 | 63 55·0 | *g* 6079 | 9·0 | | In this position certainly missing on *m.* and *c.* In Gilliss's Catalogue the star has been identified with Z.C. 953. The divergences, however, are $1^s·2$ and 16′.59″·4 (not 16′ as given in Gilliss's Catalogue). |
| 543 | 15 27 | 59 47·0 | Z.C. 1239 | 9½ | | Certainly missing on *m.* On *c.* doubtful traces. |
| 544 | 18 26 | 62 24·0 | *g* 6156 | 9·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *m.* and *c.* |
| 545 | 18 56 | 64 15·9 | G 12807 | 9½ | | Certainly missing in this position on *m.* and *c.* C.P.D. has a bright star at 6′·0; in G *three* observations. |
| 546 | 21 18 | 79 29·2 | *g* 6213 | 10·0 | | Certainly missing on *m.* and *c.* |
| 547 | 24 17 | 59 21·9 | Z.C. 1955 | 9½ | | Very doubtful traces on *m.* and *c.* |
| 548 | 24 46 | 72 24·9 | *g* 6244 | 9·5 | | Missing in *six* sweeps on *three* pairs of plates. Double error of $3^m$ in R.A. and $1^{rev.}$ of the micrometer (27″·9) in δ would make the star identical with *g* 6285. |
| 549 | 24 55 | 62 44·6 | *g* 6239 | 10·0 | | |
| 550 | 25 52 | 60 10·5 | Z.C. 2092 | 9½ | | Perhaps very doubtful traces on *m.* and *c.* |
| 551 | 26 45 | 81 1·3 | g 1106 | 9·5 | | Certainly missing on *m.* and *c.* Also missing in *g.* |
| 552 | 27 45 | 66 42·1 | G 13037 | 9½ | | The star is certainly missing on *m.*, but visible on *c.* (which contains far fainter stars than *m.*). |
| 553 | 30 30 | 67 28·7 | *g* 6324 | 9·0 | | Certainly missing on plates 70°, $9^h$ $20^m$. There is a star in C.P.D. as follows: (9·2) $30^m$ $29^s·0$ −67°. 41′·1. Error of three wire intervals in δ in Gilliss? |
| 554 | 31 16 | 63 28·6 | G 13120 | 9¼ | | The star is certainly missing on *m.*, but visible on *c.* (which contains far fainter stars than *m.*). |
| 555 | 31 43 | 62 47·1 | *g* 6343 | 10·0 | | |
| 556 | 32 30 | 60 11·4 | Z.C. 2605 | 9½ | | Certainly missing on *m.* Doubtful traces on *c.* |
| 557 | 34 43 | 58 54·6 | Z.C. 2748 | 9½ | | Very doubtful traces on *m.* and *c.* |
| 558 | 35 23 | 66 52·5 | Z.C. 2801 | 8½ | | The star is certainly missing on *m.*, but faintly visible on *c.* (which contains far more stars than *m.*). |
| 559 | 36 42 | 66 20·3 | *g* 6404 | 9·5 | | |
| 560 | 36 52 | 66 19·9 | *g* 6405 | 10·0 | | |
| 561 | 39 29 | 66 47·4 | r 169 | 7·0 | | There is a star, 7·2 in declination, 20′·5. Also not found by Stone (see footnote in *Cape Catalogue*, 1880). |
| 562 | 41 36 | 60 10·6 | Z.C. 3238 | 10·0 | | Certainly missing on *m.* Very doubtful traces on *c.* |
| 563 | 43 45 | 76 51·9 | *g* 6500 | 11·0 | | |
| 564 | 45 0 | 62 26·4 | *g* 6509 | 8·0 | | Both this star and *g* 6521 have been identified in Gilliss's Catalogue with Brisbane 2697. The assumption of an error of a wire interval brings, indeed, the position of *g* 6509 to agree with that of *g* 6521. The difference in magnitude, however, is considerable. |
| 565 | 45 39 | 58 59·6 | Z.C. 3538 | 9½ | | Certainly missing on *m.* Very doubtful traces on *c.* |
| 566 | 45 57 | 68 9·6 | Z.C. 3557 | 9½ | | Is contained as a faint star on *c.*; certainly missing on *m.* (which is far poorer in stars). |
| 567 | 46 47 | 62 59·4 | Z.C. 3620 | 9½ | | Certainly missing on *c.* and *m.* |
| 568 | 48 33 | 53 35·5 | Z.C. 3759 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. |
| 569 | 48 59 | 58 43·2 | Z.C. 3788 | 9½ | | Very doubtful traces on *m.* and *c.* |
| 570 | 49 4 | 56 51·4 | Z.C. 3792 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. There is a Z.C. star $2^s$ preceding and 18″ North. |
| 571 | 50 40 | 82 19·1 | *g* 6600 | 9·0 | | Certainly missing on *three* pairs of plates (80°, $9^h$ $0^m$; 80°, $10^h$ $30^m$; 85°, $10^h$). |
| 572 | 54 2 | 63 16·7 | *g* 6616 | 10·0 | | |
| 573 | 55 55 | 65 23·4 | Z.C. 4294 | 9½ | | Certainly missing on *m.* and *c.* |

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| 574 | 9 57 33 | 68 0·0 | *g* 6659 | 10·0 | | Missing in *four* sweeps on *m.* and *c.* |
| 575 | 58 26 | 67 9·4 | Z.C. 4476 | 10·0 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 576 | 59 18 | 59 29·0 | *G* 30 | 9½ | | In *G one* observation. |
| 577 | 10 3 43 | 68 44·2 | *g* 6725 | 10·0 | | Gilliss's identification of the star with Z.C. $10^h$, 193 is mistaken. Z.C. $10^h$ 193 = *g* 6729. |
| 578 | 3 49 | 68 26·6 | Z.C. 271 | 9·5 | | Both C.P.D. and Gilliss have a star here at $3^m$ $44^s$ −68°.27′·1. In the position of Z.C. certainly no star on *m.* and *c.* |
| 579 | 9 48 | 67 27·1 | *g* 6816 | 9·0 | | Probably error of one wire interval in R.A. and identical with *g* 6813. Divergences: $43^s$·8 and 6″·7. |
| 580 | 13 9 | 76 42·2 | *g* 6875 | 10·0 | | |
| 581 | 16 20 | 57 51·3 | g 1247 | 7·0 | | Error in R.A. and identical with G 14154? |
| 582 | 16 28 | 71 8·0 | *g* 6925 | 9·5 | | Error of 6′ in declination and star identical with *g* 6926? Divergences: $0^s$·16 and 5′.57″·3. |
| 583 | 24 18 | 53 52·5 | Z.C. 1764 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *three* plates. Probably R.A. to be corrected by $-6^s$. |
| 584 | 28 40 | 67 58·3 | *g* 7100 | 9·5 | | |
| 585 | 30 36 | 53 36·7 | Z.C. 2210 | 8½ | | Missing in *six* sweeps on *three* pairs of plates. Certainly missing on *three* plates marked with ? in Z.C. |
| 586 | 30 54 | 57 36·1 | *G* Cluster Lac. 4375, No. 9 | 9¾ | | Missing in *eight* sweeps on *three* pairs of plates. There is a star (9·5) 1′ to the North in C.P.D. |
| 587 | 31 1 | 69 42·4 | Z.C. 2249 | 8¼ | { | In C.P.D. only the former, which is also in *g*. The latter certainly missing on *m.* and *c.* and in *g.* |
| 588 | 31 7 | 69 42·4 | Z.C. 2261 | 8½ | { | |
| 589 | 32 57 | 76 18·5 | *g* 7172 | 10·0 | | Perhaps some faint traces on *c.* |
| 590 | 33 22 | 67 35·6 | *g* 7175 | 10·0 | | There is a star in C.P.D. as follows: (9·6) $33^m$ $23^s$·5 −67°.44′·2. It seems probable that this star is identical with Gilliss's star, which would then need a correction of 8′·5 (two wire intervals) in declination. |
| 591 | 36 31 | 58 57·5 | *G* 20 η Carinæ Cluster | 9¾ | | Certainly missing on *m.* and *c.* (in *G one* observation). |
| 592 | 37 21 | 59 13·0 | S 5906 | 7⅓ | | Certainly missing on *m.* and *c.* In δ *one* observation identical with G 14641?? |
| 593 | 38 37 | 58 51·1 | *G* 63 η Carinæ Cluster | 10·0 | | Certainly missing on *m.* and *c.* In *G one* observation. |
| 594 | 39 5 | 58 27·6 | Z.C. 2843 | 9·0 | | Certainly missing on *m.* and *c.* |
| 595 | 43 29 | 63 10·3 | *g* 7343 | 9·0 | | In this position certainly missing on *m.* and *c.* Might the star be identical with *g* 7354? Divergences: $34^s$·1 and 0″·5. |
| 596 | 45 3 | 59 47·1 | *G* 204 η Carinæ Cluster | 10½ | | Certainly missing on *m.* and *c.* *One* observation in *G.* |
| 597 | 46 3 | 59 12·1 | *G* 215 η Carinæ Cluster | 9¼ | | Certainly missing on *m.* and *c.* *One* observation in *G.* |
| 598 | 46 30 | 59 23·4 | g 1354 | 8 | | |
| 599 | 51 13 | 57 46·7 | *G* 35 *x* Carinæ Cluster | 9¼ | | Missing in *six* sweeps on *three* pairs of plates. Perhaps faint traces on check plate; certainly missing on *two* other plates. In *G three* observations. |
| 600 | 53 16 | 63 51·6 | *g* 7475 | 9·0 | | In this position certainly missing on *m.* and *c.* Probably 8′·5 (two wire intervals) in error and star identical with the star of C.P.D. (8·9) $53^m$ $16^s$·5 −63°.43′·1. |
| 601 | 54 24 | 57 47·6 | *G* 52 *x* Carinæ Cluster | 10¼ | | Missing in *six* sweeps on *three* pairs of plates. Perhaps faintest traces of a star on *m.* and *c.* On third plate certainly missing. In *G two* observations. |
| 602 | 54 57 | 81 0·6 | *g* 7495 | 9·5 | | Certainly missing on *m.* and *c.* The assumption of an error of 8′.30″ (two wire intervals) in δ makes the star identical with the star (9·2) $10^h$ $54^m$ $58^s$ −80°.52′·1 in C.P.D. |

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| 603 | 10 55 58 | 58 51·6 | *G* 65 *x* Carinæ Cluster | 9½ | | Extremely doubtful traces on plates. |
| 604 | 57 31 | 70 53·5 | Z.C. 4162 | 10·0 | | On *c.* perhaps doubtful traces; on *m.* certainly missing. |
| 605 | 57 40 | 58 55·8 | *G* 82 *x* Carinæ Cluster | 10¼ | | Certainly missing on *m.* and *c.* |
| 606 | 57 56 | 57 42·2 | *G* 87 *x* Carinæ Cluster | 10¼ | | Missing in *six* sweeps on *three* pairs of plates. Certainly missing on *two* plates. In *G one* observation. |
| 607 | 59 42 | 54 30·3 | Z.C. 4337 | 10·0 | | Certainly missing on *two* plates. Missing on *two* other plates. Marked with ? in Z.C. |
| 608 | 59 48 | 67 13·9 | *g* 7561 | 9·0 | | Certainly missing on *m.* and *c.* The identity with Z.C. 10ʰ, 4353 seems improbable, as the divergences are 1ˢ·6 and 10′.7″. |
| 609 | 11 0 53 | 71 49·9 | *g* 7579 | 10·0 | | |
| 610 | 1 44 | 62 55·6 | Z.C. 121 | 10·0 | | Certainly missing on *m.*, *c.*, and third plate. Missing on *two* other plates. |
| 611 | 1 51 | 54 26·7 | Z.C. 129 | 9·0 | | Missing in *four* sweeps on *two* pairs of plates. Innes finds the star "very red." |
| 612 | 7 30 | 71 58·6 | *g* 7659 2 obs. | 9·5 | | There is a star 55ˢ following in C.P.D. |
| 613 | 7 53 | 60 38·0 | t 5115 | 8·0 | | Identical with G 15348 (9½)? Divergences: 1ᵐ 1ˢ·1 and 0″·6. Besides, the star of G seems somewhat faint for t. |
| 614 | 11 59 | 61 19·3 | Z.C. 865 | 9½ | | Certainly missing on *four* plates. Marked with ? in Z.C. |
| 615 | 15 51 | 67 16·4 | *g* 7765 | 10·0 | | |
| 616 | 21 2 | 67 20·6 | *g* 7832 | 10·0 | | |
| 617 | 21 32 | 79 38·6 | *g* 7845 | 9·0 | | Certainly missing on *two* pairs of plates (80°, 10ʰ 30ᵐ and 80°, 12ʰ 0ᵐ). Error of 10ᵐ in R.A. and star identical with *g* 7981? Divergences: 10ᵐ 0ˢ·72 and 0″·4. |
| 618 | 22 13 | 71 41·0 | *g* 7852 | 9·5 | | |
| 619 | 28 31 | 65 8·3 | *g* 7927 | 9·0 | | Certainly missing on *m.* and *c.* |
| 620 | 29 48 | 63 47·5 | *g* 7943 | 9·0 | | Certainly missing on *m.* and *c.* |
| 621 | 31 36 | 65 13·8 | Z.C. 2215 | 9½ | | Certainly missing on *m.* and third plate. On *c.* faintly visible. |
| 622 | 31 47 | 64 0·7 | *g* 7977 | 9·5 | | |
| 623 | 32 55 | 76 49·6 | *g* 7993 | 10·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 624 | 33 54 | 71 52·0 | G 15946 | 8½ | Z.C., *g* | In G 3·2 observations, *red.* Star also contained in Z.C. and *g.* Extremely doubtful traces on *c.*, and perhaps on plates 70°, 12ʰ 0ᵐ. |
| 625 | 37 52 | 71 28·3 | *g* 8073 | 10·0 | | |
| 626 | 41 1 | 71 49·9 | *g* 8122 | 9·5 | | |
| 627 | 43 45 | 84 51·3 | *g* 8165 | 10·0 | | Certainly missing on plates 85°, 12ʰ 0ᵐ. |
| 628 | 43 54 | 63 34·2 | *g* 8162 | 10·0 | | |
| 629 | 44 45 | 69 29·4 | *g* 8169 | 10·0 | | There is a star (9·2) in C.P.D. following 25ˢ. |
| 630 | 45 56 | 68 4·7 | *g* 8185 | 9·5 | | |
| 631 | 48 48 | 58 33·5 | Z.C. 3351 | 9·0 | | 9·8 on *m.* Missing certainly on *c.* = W Centauri. |
| 632 | 52 0 | 70 41·0 | *g* 8260 | 10·0 | | |
| 633 | 52 42 | 54 39·1 | Z.C. 3610 | 9·0 | | In this position missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. Might be due to extraordinary p.m.<br>Z.C. 1875·3 11ʰ 52ᵐ 41ˢ·8 −54° 39′·13.<br>C.P.D. 1890·2 52ᵐ 38ˢ·0 39′·6. |
| 634 | 52 55 | 68 44·8 | Z.C. 3621 | 9½ | | Perhaps extremely doubtful traces on *m.*, *c.*, and third plate. |
| 635 | 53 0 | 68 46·6 | Z.C. 3628 | 9½ | | Perhaps extremely doubtful traces on *m.*, *c.*, and third plate. |
| 636 | 54 8 | 59 59·9 | G 16399 | 10·0 | Z.C. 3707 (9½) | Certainly missing on *m.* Very doubtful traces on *c.* |
| 637 | 57 28 | 77 31·5 | r 268 | 7·0 | | Error in R.A. and star identical with r 264? |

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| 638 | 11 58 43 | 66 25·4 | Z.C. 4008 | 9½ | *g* 8374 | The star is contained on *c.*, but certainly missing on *m.* (which is far poorer in stars than *c.*). |
| 639 | 12 1 20 | 71 50·2 | *g* 8418 | 10·0 | | |
| 640 | 2 21 | 67 6·3 | Z.C. 150 | 9½ | | There is an error of reduction in Cordoba Zones. Corrected R.A., 30ˢ·98. There is no more a star in this position however. Position still further in error and identical with Z.C. 142? |
| 641 | 4 11 | 71 36·9 | *g* 8452 | 10·0 | | |
| 642 | 11 36 | 74 32·5 | *g* 8537 | 9·0 | | Certainly missing on *three* plates. |
| 643 | 12 18 | 70 43·2 | *g* 8541 | 10·0 | | |
| 644 | 16 1 | 74 48·6 | G 16865 | 9½ | Z.C. 1003<br>*g* 8577 | According to G, star *red*. Certainly missing on *three* plates. |
| 645 | 19 15 | 61 3·2 | Z.C. 1198 | 9½ | | Certainly missing on *m.*, *c.*, and third plate. |
| 646 | 28 14 | 66 44·2 | *g* 8702 | 10·0 | | |
| 647 | 29 30 | 74 18·4 | *g* 8717 | 10·0 | | |
| 648 | 35 7 | 83 58·6 | *g* 8790 | 12·0 | | Certainly missing on plates 85°, 12ʰ. |
| 649 | 36 26 | 74 57·1 | *g* 8808 | 9·5 | | In this position certainly missing on *m.* and *c.* There is a star (9·3) in C.P.D. 15ˢ following. |
| 650 | 37 22 | 62 23·4 | Z.C. 2228 | 9½ | | Certainly missing on *m.*, *c.*, and third plate. Marked with ? in Z.C. |
| 651 | 40 33 | 62 45·7 | Z.C. 2426 | 10·0 | | Very doubtful traces on the plates. |
| 652 | 43 47 | 86 46·8 | *g* 8876 | 9·5 | | Certainly missing on plates 85°, 12ʰ. |
| 653 | 43 53 | 73 42·4 | *g* 8894 | 8·0 | | Certainly missing on *m.* and *c.* In *g* the star is identified with Z.C. 2622, from which, however, it deviates respectively in R.A. and declination: 10ˢ and 16′·3. |
| 654 | 45 56 | 59 55·7 | t 5914 | 8·0 | | Certainly missing on *m.*, *c.*, and third plate. The star is also contained in Brisbane (*one* observation), No. 4221. Variable? |
| 655 | 47 42 | 70 8·3 | *g* 8933 | 10·0 | | The assumption of an error of three wire intervals (in declination) would make the star identical with *g* 8932. |
| 656 | 48 6 | 70 50·6 | *g* 8938 | 10·0 | | There is a bright star 3′ South in C.P.D. as follows:— (9·3) 48ᵐ 8ˢ·0 −70°.53′·7. |
| 657 | 48 43 | 62 10·6 | Z.C. 2893 | 9½ | | Certainly missing on *m.*, *c.*, and third plate. Marked with ? in Z.C. |
| 658 | 50 27 | 70 22·3 | *g* 8971 | 10·0 | | |
| 659 | 52 14 | 71 47·3 | *g* 8992 | 10·0 | | Certainly missing on *m.* and *c.* |
| 660 | 52 30 | 76 52·7 | *g* 8995 | 9·3 | | Certainly missing on *m.* and *c.* |
| 661 | 53 7 | 76 30·8 | *g* 9003 | 10·0 | | Certainly missing on *m.* and *c.* |
| 662 | 54 44 | 63 49·2 | Z.C. 3242 | 10·0 | | |
| 663 | 57 31 | 72 7·7 | *g* 9055 | 10·0 | | Certainly missing on *m.* and *c.* Also missing in *g.* |
| 664 | 58 15 | 76 33·0 | Z.C. 3436 | 10·0 | | There is a star (9·3) in C.P.D. preceding 17ˢ. |
| 665 | 13 2 6 | 72 32·0 | *g* 9107 | 9·5 | | Extremely doubtful traces on plates 75°, 13ʰ. |
| 666 | 2 36 | 70 47·5 | *g* 9115 | 10·0 | | |
| 667 | 3 48 | 77 34·7 | *g* 9128 | 9·5 | | |
| 668 | 6 5 | 69 37·6 | *g* 9162 | 10·0 | | |
| 669 | 9 32 | 83 34·1 | *g* 9192 | 9·0 | | Certainly missing on plates 85°, 14ʰ. |
| 670 | 10 22 | 75 55·0 | *g* 9220 | 10·0 | | Certainly missing on *m.* and *c.* |
| 671 | 10 49 | 79 36·7 | *g* 9223 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 672 | 11 1 | 72 5·9 | *g* 9229 | 9·5 | | Missing in *four* sweeps on *two* pairs of plates. |
| 673 | 13 27 | 80 25·8 | *g* 9254 | 10·0 | | The latter star is contained in C.P.D. Of the former only extremely doubtful traces on *c.* On *m.* certainly missing. |
| 674 | 13 35 | 80 26·2 | *g* 9258 | 11·0 | | |
| 675 | 13 46 | 60 43·4 | Z.C. 838 | 10·0 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 676 | 14 39 | 78 17·2 | G 18176 | 8½ | | Certainly missing on *m.* and *c.* Also missing in Z.C. and *g.* |
| 677 | 16 43 | 62 46·1 | Z.C. 1009 | 9½ | | Certainly missing on *m.* and *c.* |
| 678 | 21 58 | 58 52·9 | t 6208 | 7·0 | | Identical with G 18300 (8)? Divergences: 1ᵐ 41ˢ·1 and 2″·0. |
| 679 | 22 41 | 83 48·9 | g 1584 | 10·0 | | Error of 1ᵐ in R.A. and star identical with *g* 9373? |
| 680 | 24 18 | 80 16·7 | *g* 9393 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |

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| 681 | 13 25 58 | 70 47·3 | S 7425 | 10·0 | | Extremely doubtful traces on *m.* and *c.* On third plate certainly missing. |
| 682 | 29 44 | 66 21·1 | *g* 9468 | 9·5 | | |
| 683 | 33 32 | 79 44·1 | *g* 9507 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 684 | 33 41 | 78 2·6 | *g* 9513 | 10·0 | | Doubtful traces on *c.* Certainly missing on *m.* |
| 685 | 36 47 | 61 59·2 | r 351 | 7·0 | | Also not found by Stone (see footnote, *Cape Catalogue* for 1880). |
| 686 | 36 59 | 67 27·4 | *g* 9553 | 10·0 | | There is a star (9·4) in C.P.D. $40^s$ following. |
| 687 | 40 41 | 83 52·1 | *g* 9577 | 10·0 | | Certainly missing on plates 85°, $14^h$. |
| 688 | 43 36 | 83 31·– | G 18800 | 9·0 | | Certainly missing on plates 85°, $14^h$. |
| 689 | 43 44 | 77 11·0 | *g* 9628 | 9·5 | | Certainly missing on *two* pairs of plates (75°, $14^h$ and 80°, $13^h$ $30^m$). |
| 690 | 45 31 | 80 48·5 | *g* 9645 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 691 | 48 30 | 61 43·9 | g 1603<br>1 obs. | 6·5 | | Error of about 8'·5 in declination and star identical with C.P.D. −61, 4194? (The error of 8'·5 very common in Gilliss's *Circumpolar Catalogue* = two wire intervals.) |
| 692 | 53 33 | 69 49·2 | *g* 9758 | 10·0 | | |
| 693 | 54 18 | 81 40·2 | *g* 9757 | 9·5 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 694 | 56 36 | 72 12·1 | *g* 9791 | 9·5 | | |
| 695 | 57 20 | 54 4·2 | t 6544 | 6·7 | | Probably $5^s$ in error and identical with t 6545. |
| 696 | 14 0 16 | 71 40·1 | *g* 9839 | 10·0 | | |
| 697 | 0 23 | 77 26·9 | *g* 9831 | 7·0 | | Certainly missing on *two* pairs of plates (75°, $14^h$ and 80°, $13^h$ $30^m$). |
| 698 | 0 28 | 81 3·9 | *g* 9821 | 10·0 | | |
| 699 | 1 56 | 77 54·3 | *g* 9855 | 10·0 | | |
| 700 | 1 59 | 78 51·8 | *g* 9854 | 10·0 | | |
| 701 | 3 46 | 63 34·1 | Z.C. 247 | 10·0 | | Certainly missing on *m.* and *c.* In Gould's zones slight error of reduction 63°.34'.5"·4 read 63°.33'.55"·4. |
| 702 | 4 23 | 79 57·7 | *g* 9889 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 703 | 6 52 | 53 24·9 | Z.C. 440 | 9·0 | | Certainly missing on *two* plates. Missing on *two* other plates. |
| 704 | 7 10 | 73 37·8 | Z.C. 451 | 9½ | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 705 | 8 28 | 67 57·7 | Z.C. 548 | 9½ | | Certainly missing on *m.* and *c.* |
| 706 | 9 55 | 79 48·9 | *g* 9960 | 10·0 | | Extremely doubtful traces on *c.* On *m.* certainly missing. |
| 707 | 10 48 | 71 49·4 | Z.C. 690 | 9·0 | | In this position certainly missing on *m.* and *c.* Error of 1' in declination and star identical with Z.C. 689 (observed in same zone). Divergences: $0^s$·11 and 0'.58"·7. |
| 708 | 11 32 | 70 24·5 | *g* 9991 | 9·5 | | Certainly missing on *m.* and *c.* |
| 709 | 11 53 | 71 52·5 | Z.C. 758 | 9·0 | | Certainly missing on *m.* and *c.* |
| 710 | 13 18 | 59 46·7 | Z.C. 849 | 10·0 | | Certainly missing on *m.* Very doubtful traces on *c.* |
| 711 | 13 20 | 70 23·5 | *g* 10011 | 9·0 | | Certainly missing on *m.* and *c.* |
| 712 | 25 15 | 69 44·3 | *g* 10183 | 10·0 | | |
| 713 | 28 – | 66 5·0 | *g* 10215 | 10·0 | | |
| 714 | 29 7 | 71 4·7 | *g* 10227<br>2 obs. | 9·8 | | There is a star (9·4) $4^m$ preceding in C.P.D. |
| 715 | 29 46 | 59 17·5 | G 19797 | 9¼ | | Certainly missing on *m.* and *c.* |
| 716 | 36 17 | 64 22·1 | Z.C. 2300 | 9½ | | Extremely doubtful traces on the plates. |
| 717 | 45 34 | 70 56·3 | Z.C. 2903 | 9·0 | | Certainly missing in this position on *m.* and *c.* Missing on *two* other plates. Double error of $1^s$ and 10' and star identical with *g* 10482? Divergences: $0^s$·94 and 10'.0"·6. |
| 718 | 46 14 | 71 25·5 | Z.C. 2940 | 9·0 | | In C.P.D. and *g* there is a star $8^s$ following. |
| 719 | 50 40 | 67 56·4 | *g* 10557 | 9·5 | | |
| 720 | 50 54 | 66 49·3 | *g* 10561 | 9·0 | | Certainly missing on *m.* and *c.* |
| 721 | 51 55 | 85 47·3 | *g* 10524 | 10·0 | | Certainly missing on plates 85°, $14^h$. There is a star (9·6) in C.P.D. at $\delta = 45'·2$. |
| 722 | 53 25 | 74 29·0 | *g* 10597 | 9·5 | | |
| 723 | 15 2 2 | 66 35·8 | *g* 10730 | 10·0 | | |

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| 724 | 15 3 10 | 79 56·8 | *g* 10726 | 10·0 | | Certainly missing on *m.* and *c.* There is a star (9·3) $1^m\ 30^s$ preceding in C.P.D. |
| 725 | 3 26 | 67 26·8 | *g* 10747 | 10·0 | | |
| 726 | 3 42 | 59 51·9 | Z.C. 246 | 8½ | | Certainly missing on *m.* and *c.* |
| 727 | 9 16 | 66 45·2 | *g* 10835 | 9·5 | | |
| 728 | 11 17 | 66 45·0 | *g* 10858 | 9·5 | | |
| 729 | 17 28 | 67 55·2 | *g* 10949 | 9·5 | | There is a star (9·2) $4^m$ preceding in C.P.D. |
| 730 | 26 38 | 56 41·0 | r 434 | 7·0 | | Error in declination and identical with G 21082 ? |
| 731 | 29 44 | 60 47·2 | Z.C. 2049 | 9·5 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. |
| 732 | 32 35 | 53 55·3 | r 442 | 6·0 | | Error in R.A. and star identical with *c.* 2816. The declinations agree excellently. |
| 733 | 33 13 | 63 36·9 | Z.C. 2294 | 9½ | | Certainly missing on *m.* and *c.* |
| 734 | 34 27 | 63 6·8 | Z.C. 2401 | 9·0 | | Certainly missing on *m.* and *c.* |
| 735 | 45 4 | 60 6·5 | r 455 | 7·0 | | Error of $30^s$ in R.A.? and star identical with r 456? Divergences: $30^s{\cdot}7$ and $7''{\cdot}9$. Stone seems to assume the identity. |
| 736 | 46 3 | 74 7·0 | G 21518 | 9½ | *g* 11344 | Certainly missing on *m.* and *c.* According to G, star orange-yellow. |
| 737 | 46 8 | 72 44·3 | *g* 11345 | 9·5 | | Certainly missing on *three* plates. There is a star (9·2) preceding $3^m\ 5^s$ in C.P.D. |
| 738 | 47 57 | 67 3·5 | Z.C. 3364 | 9·0 | | |
| 739 | 51 26 | 67 7·9 | *g* 11427 | 10·0 | | |
| 740 | 54 20 | 72 32·7 | *g* 11459 | 8·5 | | Certainly missing on *six* plates. |
| 741 | 54 40 | 78 18·8 | *g* 11453 | 9·0 | | Certainly missing on *two* pairs of plates (80°, $15^h\ 0^m$; and 80°, $16^h\ 30^m$). |
| 742 | 55 51 | 68 2·5 | *g* 11483 | 10·0 | | |
| 743 | 56 0 | 70 49·3 | *g* 11481 | 10·0 | | |
| 744 | 56 16 | 73 35·7 | *g* 11482 | 9·0 | | Certainly missing on *m.* and *c.* |
| 745 | 56 29 | 67 15·3 | *g* 11497 | 9·5 | | There is a star (9·2) 30′ to the South in C.P.D. |
| 746 | 16 2 36 | 71 2·3 | Z.C. 201 | 9½ | | Certainly missing on *m.*, *c.*, and third plate. |
| 747 | 3 33 | 77 56·8 | *g* 11574 | 9·5 | | Certainly missing on plates 80°, $16^h\ 30^m$. |
| 748 | 5 26 | 68 16·4 | *g* 11616 | 10·0 | | There is a star (9·2) $18^s$ preceding in C.P.D. |
| 749 | 8 40 | 64 20·2 | r 466 | 7·0 | | Error in R.A. and star identical with C.P.D. −64°, 3442 ? |
| 750 | 12 1 | 67 58·3 | *g* 11713 | 9·0 | | Certainly missing on *m.* and *c.* |
| 751 | 12 48 | 63 44·6 | Z.C. 911 | 10·0 | | Certainly missing on *m.* and *c.* |
| 752 | 14 26 | 75 31·5 | *g* 11735 | 9·5 | | Certainly missing on *m.* and *c.* |
| 853 | 17 49 | 66 29·2 | Z.C. 1256 | 9½ | | Certainly missing on *m.* and *c.* (65°, $16^h\ 0^m$); also certainly missing on *m.* and *c.* (65°, $16^h\ 40^m$). Probably identical with C.P.D. −68°, 2736 (10·0), $16^h\ 17^m\ 48^s{\cdot}5$ −68°.28′·9. |
| 754 | 22 30 | 53 23·9 | Z.C. 1537 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. Extremely faint traces on *m.* and *c.* |
| 755 | 22 57 | 67 12·4 | *g* 11848 | 9·0 | | Certainly missing on *two* pairs of plates. |
| 756 | 24 8 | 67 9·7 | Z.C. 1647 | 8½ | | In this position certainly missing on *m.* and *c.* Not contained in Gilliss's Catalogue. Double error and identical with Z.C. 1654 ? |
| 757 | 26 30 | 79 10·8 | *g* 11879 | 9·5 | | Certainly missing on *m.* and *c.* |
| 758 | 27 13 | 54 37·1 | Z.C. 1873 | 9·0 | | There are here *two* stars in Z.C. as follows:—<br>(9) $16^h\ 27^m\ 13^s{\cdot}4$ −54°·37′. 90″<br>(8½) $27^m\ 16^s{\cdot}7$ 37′. 9″·4.<br>On the plates the former is certainly missing (cannot be covered by the latter). |
| 759 | 30 24 | 77 2·2 | *g* 11942 | 10·0 | | Certainly missing on *two* pairs of plates (75°, $17^h$ and 80°, $16^h\ 30^m$). Also missing on plates 75°, $16^h$. There is a star (9·2) 3′ to the North in C.P.D. |
| 760 | 32 9 | 78 10·2 | *g* 11955 | 10·0 | | Certainly missing on *m.* and *c.* |
| 761 | 33 40 | 74 32·6 | Z.C. 2337 | 9·0 | | In this position certainly missing on *m.* and *c.* Error of 1′ in δ and star identical with Z.C. 2336? Divergences: $0^s{\cdot}2$ and $54''{\cdot}3$. |
| 762 | 34 14 | 53 42·4 | Z.C. 2382 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. Marked with ? in Z.C. |
| 763 | 35 53 | 83 46·8 | *g* 11966 | 9·5 | | In this position missing on plates 85°, $16^h$. There is a star (8·9) $1^m\ 5^s$ preceding in C.P.D. |

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| 764 | 16 44 50 | 72 22·5 | *g* 12140 | 10·0 | | There is a star (9·0) 10′ to the South in C.P.D. |
| 765 | 45 47 | 54 31·0 | Z.C. 3237 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. |
| 766 | 45 49 | 67 1·0 | *g* 12158 | 9·0 | | Doubtful traces both on *m.* and *c.* |
| 767 | 49 33 | 62 20·3 | Z.C. 3523 | 10·0 | | Very doubtful traces on the plates. |
| 768 | 56 35 | 77 54·9 | *g* 12285 | 9·0 | | Certainly missing on plates 80°, $15^h$ $30^m$. Correction of $+4^m$ in R.A. makes the star identical with *g* 12345. Divergences: $3^m$ $59^s{\cdot}70$ and $2''{\cdot}1$. |
| 769 | 58 37 | 77 38·2 | *g* 12316 | 10·0 | | Certainly missing on plates 80°, $16^h$ $30^m$. |
| 770 | 59 1 | 79 35·0 | *g* 12314 | 10·0 | | Extremely doubtful traces of a star on both plates. |
| 771 | 59 22 | 65 56·3 | *g* 12347 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. There is a star (9·9) $50^s$ preceding in C.P.D. |
| 772 | 17 0 16 | 59 55·4 | G 23172 | 8½ | | In Cordoba mag. estimated 9·5, 9·5, 7·5, 8·5. On *m.* mag. = 9·7, on *c.* mag. = 9·4. On third plate there is a defect in the film, which is probably the reason that the star is invisible here. Variable? |
| 773 | 0 28 | 66 33·8 | *g* 12359 | 9·5 | | Missing in *four* sweeps on *two* pairs of plates. |
| 774 | 0 43 | 53 46·9 | Z.C. 54 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *two* plates. Marked with ? in Z.C. |
| 775 | 1 43 | 66 28·7 | *g* 12376 | 9·5 | | Missing in *four* sweeps on *two* pairs of plates. |
| 776 | 2 19 | 71 48·5 | *g* 12378 | 8·5 | | Certainly missing on *m.* and *c.* |
| 777 | 2 29 | 69 8·4 | *g* 12383 | 10·0 | | There is a star (9·0) $50^s$ following in C.P.D. |
| 778 | 3 41 | 84 1·3 | *g* 12351 | 10·0 | | Certainly missing on *two* pairs of plates (85°, $16^h$ and 85°, $18^h$). |
| 779 | 4 56 | 75 54·0 | *g* 12403 | 9·5 | | Certainly missing on *m.* and *c.* |
| 780 | 7 1 | 53 53·5 | Z.C. 453 | 9½ | | Missing in *six* sweeps on *three* pairs of plates. Certainly missing on *m.* and *c.* There is another Z.C. star preceding $2^s$, but the two cannot be identical. |
| 781 | 12 6 | 67 26·8 | *g* 12487 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 782 | 12 13 | 67 8·5 | *g* 12488 | 9·5 | | |
| 783 | 12 54 | 63 45·0 | G 23470 | 9½ | | Certainly missing on *m.* and *c.* |
| 784 | 13 33 | 71 36·7 | *g* 12501 | 9·5 | | Certainly missing on *m.* and *c.* |
| 785 | 15 27 | 70 51·3 | *g* 12530 | 10·0 | | |
| 786 | 15 45 | 76 45·6 | *g* 12527 | 10·0 | | Extremely doubtful traces on *m.* and *c.* |
| 787 | 17 31 | 78 29·8 | G 23587 | 11·0 | | Certainly missing on *two* pairs of plates (80°, $16^h$ $30^m$ and 80°, $18^h$ $0^m$). Also missing in *g*. |
| 788 | 17 47 | 61 7·2 | Z.C. 1204 | 9½ | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *m.* and *c.* |
| 789 | 18 3 | 78 40·1 | *g* 12552 | 10·0 | | In this position certainly missing on *two* pairs of plates (80°, $16^h$ $30^m$ and 80°, $18^h$ $0^m$). There is a star both in C.P.D. and *g* at $\delta = 40'{\cdot}6$. |
| 790 | 18 22 | 66 45·7 | *g* 12574 | 9·5 | | |
| 791 | 18 41 | 66 17·3 | *g* 12578 | 9·5 | | |
| 792 | 19 29 | 68 27·2 | *g* 12583 | 9·0 | | Certainly missing on *m.* and *c.* In C.P.D. there is a faint star at $\delta = 35'{\cdot}6$ (error of two wire intervals in declination?). |
| 793 | 19 31 | 67 42·3 | Z.C. 1320 | 9·5 | | On *c.*, which is a very rich plate, faint traces; on *m.* and third plate certainly missing. |
| 794 | 20 42 | 66 39·3 | *g* 12602 | 9·5 | | |
| 795 | 21 5 | 72 18·4 | *g* 12600 | 8·5 | | Certainly missing on *two* pairs of plates. |
| 796 | 21 39 | 66 45·2 | *g* 12618 | 9·5 | | |
| 797 | 22 1 | 53 27·6 | Z.C. 1494 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *m.* and *c.* |
| 798 | 24 59 | 71 53·4 | *g* 12650 | 10·0 | | Certainly missing on *m.* and *c.* |
| 799 | 25 1 | 66 12·5 | *g* 12656 | 9·0 | | Certainly missing on *m.* and *c.* |
| 800 | 26 18 | 79 13·0 | *g* 12651 | 9·5 | | Certainly missing on *two* pairs of plates (80°, $16^h$ $30^m$ and 80°, $18^h$ $0^m$). |
| 801 | 26 19 | 66 34·4 | *g* 12672 | 10·0 | | |
| 802 | 30 9 | 53 40·5 | g 1698 | 10·0 | | Error of 4′ in declination and identical with C.P.D. −53°, 8707? |
| 803 | 31 26 | 67 37·2 | *g* 12736 | 10·0 | | |
| 804 | 33 9 | 75 54·2 | *g* 12746 | 9·7 | | |
| 805 | 34 3 | 76 48·8 | *g* 12753 | 9·5 | | Certainly missing on *m.* and *c.* |
| 806 | 36 40 | 74 2·8 | *g* 12787 | 10·0 | | Certainly missing on *m.* and *c.* |



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| 807 | 17 38 17 | 80 48·5 | *g* 12789 | 9·5 | | Extremely doubtful traces of a star at R.A. $38^m$ $24^s$. |
| 808 | 38 34 | 76 47·2 | *g* 12808 | 10·0 | | Perhaps extremely faint traces on *m.* and *c.* |
| 809 | 39 57 | 69 31·0 | *g* 12831 | 9·2 | | |
| 810 | 41 50 | 74 31·5 | *g* 12851 | 10·0 | | Perhaps extremely faint traces on *m.* and *c.* |
| 811 | 43 14 | 66 42·8 | *g* 12874 | 9·5 | | There is a bright star (9·1) at δ = 30′·0 in C.P.D. Error of three wire intervals in Gilliss? |
| 812 | 44 30 | 69 48·3 | *g* 12885 | 9·5 | | |
| 813 | 49 21 | 78 59·0 | *g* 12919 | 9·5 | | In this position certainly missing on plates. Can the star be identical with one following $12^s$, which is contained both in C.P.D. and in *g*? |
| 814 | 50 14 | 74 36·7 | G 24383 | 10·0 | *g* 12948 | Certainly missing on *m.*, *c.*, and third plate. |
| 815 | 50 59 | 74 0·3 | *g* 12956 | 8·0 | | Certainly missing on *m.* and *c.* in this position. Double error of $1^m$ in R.A. and $1^{rev.}$ of micrometer (27″·9) in δ, and star identical with *g* 12946 = Lac. 7456? |
| 816 | 51 38 | 71 2·0 | *g* 12968 | 9·0 | | Certainly missing on *m.* and *c.* Error of 6′ in declination and star identical with *g* 12967? Divergences: $0^s$·09 and 6′.2″·1. |
| 817 | 57 44 | 79 54·9 | *g* 13031 | 9·0 | | Certainly missing on *m.* and *c.* Correction $-2^m$ and star identical with *g* 13004? Divergences: $1^m$ $58^s$·9 and 0″·6. |
| 818 | 57 49 | 81 20·5 | *g* 13019 | 9·0 | | Certainly missing on *m.* and *c.* |
| 819 | 18 1 28 | 76 45·0 | *g* 13075 | 10·0 | | Certainly missing on *m.* and *c.* |
| 820 | 4 4 | 72 35·5 | *g* 13114 | 9·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 821 | 4 30 | 76 58·9 | *g* 13110 | 9·8 | | Certainly missing on *m.* and *c.* |
| 822 | 6 17 | 73 39·1 | *g* 13145 | 9·5 | | Extremely doubtful traces. |
| 823 | 6 35 | 75 53·7 | *g* 13144 | 10·0 | | Certainly missing on *m.* and *c.* |
| 824 | 11 6 | 78 39·8 | *g* 13179 | 10·0 | | Certainly missing on *m.* and *c.* |
| 825 | 11 44 | 81 5·4 | *g* 13178 | 10·0 | | Certainly missing on *m.* and *c.* |
| 826 | 12 31 | 57 35·7 | Z.C. 823 | 9·0 | | Certainly missing on *m.* and *c.* Marked with ? in Z.C. There is a faint star (9·8) in C.P.D. at δ = 45′·6· |
| 827 | 17 54 | 74 38·6 | *g* 13252 | 10·0 | | Certainly missing on *m.* and *c.* |
| 828 | 21 30 | 70 14·0 | *g* 13298 | 9·5 | | |
| 829 | 21 40 | 75 51·5 | *g* 13289 | 9·5 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 830 | 24 3 | 73 43·8 | *g* 13319 | 9·5 | | Certainly missing on *m.* and *c.* |
| 831 | 26 18 | 80 50·7 | *g* 13330 | 9·8 | | Certainly missing on *m.* and *c.* |
| 832 | 28 24 | 65 49·1 | *g* 13383 | 9·0 | | Exceedingly doubtful traces on both *m.* and *c.* |
| 833 | 32 32 | 70 11·2 | Z.C. 1998 | 9·0 | *g* 13423 | Perhaps extremely doubtful traces on both *m.* and *c.* |
| 834 | 33 19 | 59 47·6 | Z.C. 1940 | 9½ | | Certainly missing on *m.* and *c.* |
| 835 | 34 17 | 70 12·3 | *g* 13445 | 9·5 | | In this position certainly missing on *m.* and *c.* Probably correction $+1^m$ in R.A. and star identical with *g* 13452. Divergences: $59^s$·3 and 2″·0. |
| 836 | 36 36 | 66 59·4 | Z.C. 2106 | 9½ | *g* 13470 (10) | Certainly missing on *m.* and *c.* |
| 837 | 40 49 | 65 49·4 | *g* 13514 | 10·0 | | |
| 838 | 42 13 | 66 58·9 | *g* 13523 | 10·0 | | |
| 839 | 43 26 | 71 12·9 | Z.C. 2437 | 9·0 | | Perhaps extremely doubtful traces on both *m.* and *c.* |
| 840 | 46 57 | 71 38·1 | *g* 13562 | 10·0 | | Certainly missing on *m.* and *c.* There is a star (9·6) 5′ South in C.P.D. |
| 841 | 49 6 | 66 11·7 | *g* 13595 | 9·2 | | |
| 842 | 50 14 | 70 21·0 | *g* 13607 | 9·5 | | Certainly missing on *m.* and *c.* |
| 843 | 51 1 | 66 25·5 | *g* 13618 | 10·0 | | |
| 844 | 51 56 | 57 4·0 | g 1770 | 7·5? | | |
| 845 | 55 38 | 67 49·4 | *g* 13662 | 10·0 | | Certainly missing on *m.* and *c.* |
| 846 | 56 13 | 62 19·9 | G 26079 | 8·0 | | Certainly missing on *m.* and *c.* In G *one* observation. Probably identical with G 26067 (which is $23^s$ preceding). |
| 847 | 56 15 | 67 29·4 | *g* 13667 | 10·0 | | Certainly missing on *m.* and *c.* |
| 848 | 57 23 | 66 7·6 | *g* 13682 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 849 | 58 20 | 75 8·3 | *g* 13683 | 9·5 | | Error of one wire interval in δ and star identical with *g* 13684? (Compare Gilliss's Introduction, lvii). |
| 850 | 59 4 | 67 24·1 | *g* 13696 | 10·0 | | Certainly missing on *m.* and *c.* |
| 851 | 19 0 17 | 71 21·4 | *g* 13707 | 10·0 | | Certainly missing on *m.* and *c.* |
| 852 | 1 57 | 57 49·9 | Z.C. 84 | 9½ | | Missing in *six* sweeps on *three* pairs of plates. Certainly missing on *four* plates. Marked with ? in Z.C. |

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| 853 | 19 2 3 | 70 15·4 | g 13725 | 9·5 | | Certainly missing on *m.* and *c.* |
| 854 | 2 49 | 70 13·0 | g 13735 | 10·0 | | Certainly missing on *m.* and *c.* |
| 855 | 3 17 | 87 2·1 | g 13650 | 9·5 | | Certainly missing on plates 85°, 20h. |
| 856 | 3 45 | 68 13·4 | g 13745 | 10·0 | | Certainly missing on *m.* and *c.* |
| 857 | 3 47 | 70 18·9 | g 13744 | 11·0 | | Certainly missing on *m.* and *c.* |
| 858 | 4 52 | 83 54·5 | g 13718 | 9·5 | | Extremely doubtful traces on plates 85°, 20h. |
| 859 | 12 27 | 65 48·0 | g 13850 | 9·5 | | |
| 860 | 13 2 | 72 33·3 | g 13851 | 9·5 | | Missing in *eight* sweeps on *four* pairs of plates. |
| 861 | 13 22 | 67 26·1 | g 13863 | 9·8 | | |
| 862 | 17 7 | 67 32·8 | g 13912 | 11·0 | | |
| 863 | 25 41 | 66 46·7 | g 14000 | 10·0 | | |
| 864 | 31 14 | 64 22·0 | Z.C. 1343 | 9½ | | Certainly missing on *m.* and *c.* |
| 865 | 33 10 | 65 45·3 | g 14092 | 9·5 | | In this position certainly missing on *m.* and *c.* There is a star (9·5) 41s following. Probably error of one wire interval in Gilliss. |
| 866 | 38 9 | 74 1·1 | g 14141 | 10·0 | | There is a star in C.P.D. as follows: (9·3) 38m 10s·5 −75°.13′·9. Error of three wire intervals in declination? |
| 867 | 42 51 | 67 19·9 | g 14201 | 10·0 | | |
| 868 | 43 35 | 81 34·2 | g 14187 | 10·0 | | Certainly missing on *m.* and *c.* Also missing on rejected plates. |
| 869 | 43 43 | 65 52·6 | g 14212 | 10·0 | | |
| 870 | 45 59 | 76 1·8 | g 14224 | 9·5 | | |
| 871 | 46 24 | 76 14·0 | g 14230 | 10·0 | | |
| 872 | 51 49 | 65 58·7 | g 14297 | 9·5 | | Missing in *four* sweeps on *m.* and *c.* |
| 873 | 52 21 | 63 12·8 | Z.C. 2155 | 9½ | | Certainly missing on *m.* Doubtful traces on *c.* |
| 874 | 53 19 | 86 41·6 | g 14241 | 9·9 | | Extremely doubtful traces on plates 85°, 20h. |
| 875 | 53 22 | 65 50·6 | g 14321 | 9·5 | | |
| 876 | 55 33 | 67 41·8 | g 14350 | 9·5 | | Certainly missing on *m.* and *c.* |
| 877 | 56 7 | 66 10·1 | g 14357 | 9·5 | | |
| 878 | 56 26 | 66 44·8 | g 14362 | 9·5 | | |
| 879 | 58 14 | 86 41·4 | g 14288 | 10·0 | | |
| 880 | 20 0 38 | 83 37·2 | g 14371 | 9·5 | | Extremely doubtful traces on plates 85°, 20h. |
| 881 | 1 10 | 65 48·6 | g 14406 | 9·5 | | |
| 882 | 1 25 | 66 14·7 | g 14409 | 9·8 | | |
| 883 | 1 43 | 67 45·5 | g 14411 | 9·2 | | Certainly missing on *m.* and *c.* |
| 884 | 2 10 | 69 23·6 | g 14415 | 10·0 | | Certainly missing on *m.* and *c.* |
| 885 | 3 21 | 62 38·1 | Z.C. 122 | 9½ | | Extremely doubtful traces on the plates. |
| 886 | 4 15 | 68 6·4 | g 14434 | 10·0 | | Certainly missing on *m.* and *c.* |
| 887 | 7 15 | 66 13·5 | g 14468 | 10·0 | | |
| 888 | 8 34 | 68 22·6 | g 14479 | 9·5 | | Certainly missing on *m.* and *c.* |
| 889 | 10 4 | 67 43·8 | g 14498 | 10·0 | | Certainly missing on *m.* and *c.* |
| 890 | 10 47 | 66 17·0 | g 14512 | 10·0 | | |
| 891 | 14 32 | 67 26·0 | g 14551 | 9·5 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on 70°, 20h 15m. |
| 892 | 14 38 | 66 15·1 | g 14552 | 10·0 | | Probably error of 5s in R.A. and star identical with g 14554. Divergences: 5s·0 and 0″·0. |
| 893 | 14 59 | 66 14·9 | g 14559 | 9·5 | | |
| 894 | 15 27 | 67 24·9 | g 14562 | 9·5 | | Certainly missing on plates 70°, 20h 15m. |
| 895 | 17 1 | 81 56·7 | g 14555 | 9·5 | | Certainly missing on plates 80°, 21h 0m. Also missing on rejected plates (80°, 21h 0m). |
| 896 | 17 48 | 66 28·8 | g 14585 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 897 | 19 0 | 65 55·2 | g 14604 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 898 | 21 13 | 68 25·9 | g 14622 | 10·0 | | Certainly missing on *m.* and *c.* |
| 899 | 23 3 | 68 4·8 | g 14641 | 9·5 | | Certainly missing on *m.* and *c.* |
| 900 | 23 30 | 67 37·9 | g 14650 | 10·0 | | Certainly missing on *m.* and *c.* |
| 901 | 23 41 | 69 1·8 | g 14651 | 10·0 | | Certainly missing on *m.* and *c.* |
| 902 | 24 56 | 71 0·5 | Z.C. 829 | 9·0 | g 14665 | Certainly missing on *m.* and *c.* |
| 903 | 25 26 | 83 45·6 | g 14633 | 10·0 | | Extremely doubtful traces on plates 85°, 20h. |
| 904 | 28 44 | 68 7·1 | g 14705 | 9·5 | | Certainly missing on *m.* and *c.* |
| 905 | 31 4 | 67 20·8 | g 14726 | 9·5 | | Certainly missing on plates 70°, 20h 15m. |
| 906 | 34 25 | 69 45·2 | g 14761 | 10·0 | | Certainly missing on *two* pairs of plates. |
| 907 | 34 57 | 70 29·8 | g 14766 | 7·5 | | Certainly missing on *two* pairs of plates. |
| 908 | 36 20 | 65 46·1 | g 14780 | 10·0 | | |

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| No. | α 1875. | δ 1875. | Catalogue No. | Mag. | Other Catalogues. | Remarks. |
|---|---|---|---|---|---|---|
| | h m s | ° ′ | | | | |
| 909 | 20 38 38 | 59 41·4 | Z.C. 1259 | 8·0 | | Certainly missing in this position on *m.*, *c.*, and *three* other plates. Identical with G 28460, which is $13^s·6$ following? |
| 910 | 43 51 | 60 5·8 | Z.C. 1437 | 10·0 | | Certainly missing on *m.* and *c.* |
| 911 | 45 32 | 65 57·5 | *g* 14861 | 9·5 | | |
| 912 | 47 7 | 54 47·9 | Z.C. 1539 | 9½ | | Is contained on the rejected plates, but certainly not on m = S Indi (Chandler III.). |
| 913 | 47 28 | 85 28·1 | *g* 14840 | 10·0 | | Certainly missing on *two* pairs of plates (85°, $20^h$ and 85°, $22^h$). In Gilliss's Catalogue there is the footnote, "Minute of R.A. doubtful." |
| 914 | 50 24 | 65 44·4 | *g* 14915 | 9·5 | | |
| 915 | 52 19 | 66 31·4 | *g* 14929 | 9·3 | | |
| 916 | 52 29 | 67 21·0 | *g* 14931 | 10·0 | | Certainly missing on plates 70°, $21^h$ $0^m$. |
| 917 | 53 5 | 65 41·4 | *g* 14940 | 9·0 | | Certainly missing on *four* plates. |
| 918 | 21 0 48 | 68 14·3 | *g* 15008 | 9·5 | | Certainly missing on *m.* and *c.* |
| 919 | 3 32 | 79 41·5 | *g* 15028 | 10·0 | | Certainly missing on *m.* and *c.* Correction of $+3^m$ in R.A. makes star identical with *g* 15053. Divergences: $3^m$ $0^s·06$ and $3''·7$. |
| 920 | 3 36 | 67 4·7 | Z.C. 111 | 10·0 | | Certainly missing on *m.*, *c.*, and third plate. |
| 921 | 4 52 | 69 47·5 | *g* 15047 | 10·0 | | Certainly missing on *m.* and *c.* |
| 922 | 9 1 | 74 40·6 | g 1850 | 9·5 | | Missing on *two* pairs of plates. Certainly missing on *c.* and *m.* and in *g.* |
| 923 | 10 38 | 67 26·2 | *g* 15107 | 9·0 | } | In C.P.D. only the former of these. The star has been looked up on *five* plates, but on no one any trace of duplicity could be detected. |
| 924 | 10 42 | 67 26·4 | *g* 15108 | 10·0 | } | |
| 925 | 11 32 | 88 24·3 | *g* 14985 | 10·0 | | In this position missing in *four* sweeps on polar plates. In Gilliss's Catalogue there is the following footnote: "This is probably the same as *g* 15210, differing two wire intervals in R.A." |
| 926 | 13 34 | 69 36·8 | *g* 15137 | 10·0 | | Certainly missing on *m.* and *c.* Identical with *g* 15142? Divergences: $13^s·5$ and $1''·1$. |
| 927 | 14 39 | 67 2·3 | *g* 15153 | 9·5 | | |
| 928 | 17 29 | 69 30·8 | *g* 15187 | 10·0 | | Certainly missing on *m.* and *c.* |
| 929 | 25 58 | 83 20·6 | G 29507 | 10·0 | | Certainly missing on *five* plates 85°, $22^h$. Gould identifies with p. 7029 (position reduced to 1875, $21^h$ $27^m$ $1^s$ −85° 17′·8). |
| 930 | 36 24 | 65 52·8 | Z.C. 1131 | 9·5 | *g* 15358 (9·0) | Certainly missing on *m.*, *c.*, and third plate. |
| 931 | 44 38 | 69 35·2 | *g* 15450 | 10·5 | | |
| 932 | 45 47 | 54 59·5 | Z.C. 1426 | 9½ | | Missing in *eight* sweeps on *two* pairs of plates. Certainly missing on *c.* On *m.* there is a star-like speck just in this position. If a star, then mag. = 9·0 and star variable. |
| 933 | 47 53 | 67 24·3 | *g* 15474 | 10·0 | | |
| 934 | 48 11 | 69 48·1 | *g* 15480 | 10·0 | | |
| 935 | 22 3 10 | 80 50·9 | *g* 15623 | 9·9 | | In this position certainly missing on *m.* and *c.* In C.P.D. there is a star $1^m$ following. |
| 936 | 10 5 | 74 52·8 | *g* 15693 | 10·0 | | Certainly missing on *m.* and *c.* |
| 937 | 10 14 | 75 56·7 | *g* 15695 | 10·0 | | Extremely doubtful traces on plates. |
| 938 | 18 23 | 69 49·7 | *g* 15767 | 9·5 | | Correction $+30^s$ and star identical with *g* 15777? Divergences $30^s·4$ and $4''·4$. |
| 939 | 18 40 | 74 45·6 | *g* 15768 | 10·0 | | |
| 940 | 21 50 | 83 22·2 | *g* 15791 | 10·0 | | Certainly missing on *five* plates 85°, $22^h$. |
| 941 | 22 18 | 61 8·8 | G 30659 | 10·0 | Cape 1860 No. 1082 (11) | Doubtful traces on plates. |
| 942 | 22 38 | 69 34·9 | *g* 15823 | 9·5 | | |
| 943 | 26 52 | 84 6·9 | *g* 15853 | 10·0 | | In this position certainly missing on plates 85°, $22^h$. |
| 944 | 27 4 | 67 56·0 | G 30765 | var. | Z.C. 806 | Double error and star identical with *g* 15843?? = R Indi. |
| 945 | 28 52 | 67 41·7 | *g* 15886 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. |
| 946 | 38 26 | 77 42·5 | Z.C. 1166 | 10·0 | | Certainly missing on *three* pairs of plates (75°, $22^h$; 75°, $23^h$; and 80°, $22^h$ $30^m$. Marked with ? in Z.C. |
| 947 | 39 14 | 77 {20·0 foot-note {20·5 | *g* 15976 | 9·5 | | Certainly missing (in both positions) on *two* pairs of plates (75°, $23^h$ and 80°, $22^h$ $30^m$). |
| 948 | 41 19 | 76 0·1 | Z.C. 1264 | 10·0 | | Marked with ? in Z.C. Certainly missing on *m.* and *c.* |

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| No. | α 1875. | δ 1875. | Catalogue No. | Mag. | Other Catalogues. | Remarks. |
|---|---|---|---|---|---|---|
| | h m s | ° ′ | | | | |
| 949 | 22 46 52 | 84 46·6 | *g* 16034 | 10·0 | | In this position certainly missing on plates 85°, $22^{h}$. Also missing in *four* sweeps on plates 85°, $0^{h}$. In C.P.D. there is a star $20^{s}$ preceding, which is also in *g* (with correction in δ ?). |
| 950 | 55 5 | 73 5·3 | *g* 16124 | 10·0 | | Extremely doubtful traces on the plates. |
| 951 | 55 27 | 73 5·7 | *g* 16130 | 11·0 | | Extremely doubtful traces on the plates. |
| 952 | 23 0 20 | 82 37·7 | *g* 16171 | 10·0 | | Extremely doubtful traces on *m.* (85°, $0^{h}$). On *c.* (85°, $0^{h}$) and *five* plates of 85°, $22^{h}$, certainly missing. Also certainly missing on plates 80°, $0^{h}$ and 80°, $22^{h}$ $30^{m}$. |
| 953 | 1 42 | 54 30·8 | Z.C. 42 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *c.* and *m.* Marked with ? in Z.C. |
| 954 | 6 16 | 81 21·0 | *g* 16231 | 10·0 | | Extremely doubtful traces on both plates. |
| 955 | 9 1 | 68 27·6 | r 588 | 7·0 | | The precision in R.A. is correct for a declination of 60°. 27′. It seems not improbable, therefore, that the star is identical with C.P.D. −60°, 7645. |
| 956 | 9 51 | 69 26·8 | G 31553 | 9½ | *g* 16283 (10·0) | Certainly missing on *m.* and *c.* |
| 957 | 10 4 | 70 2·0 | *g* 16288 | 10·0 | | Certainly missing on *m.* and *c.* |
| 958 | 11 20 | 85 18·3 | *g* 16289 | 10·0 | | Certainly missing on plates 85°, $0^{h}$. According to footnote in Gilliss's Catalogue, "Record confused." |
| 959 | 15 9 | 75 31·8 | *g* 16323 | 11·0 | | Extremely doubtful traces on the plates. |
| 960 | 19 5 | 69 39·5 | *g* 16355 | 10·0 | | Certainly missing on *m.* and *c.* |
| 961 | 22 38 | 70 28·1 | *g* 16383 | 11·0 | | Certainly missing on *m.* and *c.* |
| 962 | 25 49 | 80 12·3 | *g* 16409 | 10·0 | | Certainly missing on plates 80°, $0^{h}$ $0^{m}$. |
| 963 | 25 50 | 67 49·1 | *g* 16411 | 9·5 | | Certainly missing on *m.* and *c.* |
| 964 | 28 42 | 57 5·8 | Z.C. 773 | 10·0 | | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on *c.* and *m.* |
| 965 | 29 7 | 67 45·1 | Z.C. 787 | 9·5 | *g* 16434 | Perhaps extremely doubtful traces on both *m.* and *c.* |
| 966 | 29 11 | 70 19·0 | Z.C. 790 | 9·5 | *g* 16435 | Certainly missing on *m.* and *c.* |
| 967 | 29 31 | 78 50·0 | *g* 16438 | 10·0 | | Certainly missing on plates 80°, $0^{h}$ $0^{m}$. |
| 968 | 31 11 | 67 42·4 | *g* 16457 | 10·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 969 | 32 40 | 86 6·4 | *g* 16460 | 10·0 | | Certainly missing on plates 85°, $0^{h}$. |
| 970 | 34 18 | 84 5·6 | *g* 16487 | 9·0 | | Certainly missing on plates 85°, $0^{h}$. |
| 971 | 34 29 | 86 29·5 | *g* 16483 | 10·0 | | Certainly missing on plates 85°, $0^{h}$. |
| 972 | 34 33 | 78 51·5 | *g* 16491 | 10·0 | | Certainly missing on plates 80°, $0^{h}$ $0^{m}$. Probably correction $-1^{m}$ in R.A. and star identical with *g* 16481. Divergences: $0^{m}$ $59^{s}$·6 and 0″·8. |
| 973 | 35 12 | 71 48·3 | *g* 16495 | 10·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 974 | 35 50 | 71 21·2 | *g* 16499 | 10·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 975 | 35 56 | 85 15·7 | *g* 16497 | 10·5 | | Certainly missing on plates 85°, $0^{h}$. |
| 976 | 38 9 | 69 6·4 | *g* 16527 | 10·0 | | Certainly missing on *m.* and *c.* Missing on another pair of plates. |
| 977 | 40 49 | 79 47·7 | *g* 16548 | 10·0 | | Extremely doubtful traces on plates. |
| 978 | 43 21 | 73 23·9 | Z.C. 1171 | 9·5 | | Marked with ? in Z.C. Certainly missing on *m.* and *c.* |
| 979 | 46 51 | 68 44·7 | *g* 16609 | 10·0 | | |
| 980 | 47 14 | 82 52·7 | *g* 16612 | 11·0 | | Extremely doubtful traces on *m.* On *c.* certainly missing. |
| 981 | 55 1 | 68 38·3 | *g* 16690 | 10·0 | | Certainly missing on *m.* and *c.* |
| 982 | 55 46 | 68 13·2 | *g* 16700 | 10·0 | | |
| 983 | 57 32 | 66 33·1 | *g* 16709 | 9·5 | | Correction of $20^{s}$ and star identical with *g* 16711? Divergences: $20^{s}$·5 and 2″·9. |

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# SUPPLEMENTARY LIST OF STARS CONTAINED IN CATALOGUES OF PRECISION, AND MISSING ON THE PLATES.

| No. | α 1875. | δ 1875. | Catalogue No. | Mag. | Remarks. |
|---|---|---|---|---|---|
| | h m s | ° ′ | | | |
| 1 | 0 19 23 | −48 54·0 | r 14 | 7·0 | |
| 2 | 0 53 50 | 48 37·2 | r 37 | ... | In Stone's Catalogue there is the footnote, "Cannot be found." |
| 3 | 1 51 34 | 52 14·3 | r 79 | 7·0 | In Stone's Catalogue there is the footnote, "No star visible, of the seventh magnitude, near the assigned position." Error in R.A. and star identical with $\chi$ Eridani? Declination, however, differs by about 10″ (having regard to p.m.). |
| 4 | 4 35 5 | 24 52·7 | W 2054 | ... | *One* observation. |
| 5 | 6 28 26 | 19 16·2 | l 12645 | 8½ | The place of the Hist. Cel. containing this position and that of some stars in the neighbourhood has been corrected by Argelander, B.B. vii. p. 205. According to this correction, the star l 12645 is to be omitted from the catalogue. |
| 6 | 6 31 32 | 34 52·1 | g 307 | 7·5 | Two errors and identical with G 8083? |
| 7 | 6 40 3 | 36 53·8 | Z.C. 1923 | 10·0 | Cord. Obs. xvii. p. 540, the declination is corrected to 56′·7. In this declination, however, there is still no star in C.P.D. In Thome's DM. the star is evidently identified with (9·6) $6^h\ 40^m\ 2^s{\cdot}0$ −36° 57′·7, which, however, is more probably identical with C.P.D. −36°, 1045 (9·6) $6^h\ 40^m\ 0^s{\cdot}8$ −36° 58′·1. |
| 8 | 7 29 51 | 44 12·9 | g 527 | 7·0 | (*One* observation). In g the star has been identified with Lac. 2874?, which, in its turn, is identified by Stone and Gould with S 3741, G 9797, and p. 1663. These identifications, however, would imply a double error both in Lac. and in g, as appears from the following observations (reduced to 1875·0):<br>h m s ° ′<br>Lac. 2874 7 30 27 −44.11·2<br>Brisb. 1663 30 53·3 1·3<br>Taylor 3137 30 56·4 1·2<br>Gilliss 527 29 51·2 12·9<br>Stone 3741 30 56·2 1·3<br>G.C. 9797 30 56·2 1·3<br>C.P.D. 30 56·4 1·4 |
| 9 | 7 32 5 | 49 29·6 | g 536 | 8·0 | The identification with Lac. 2905 is erroneous (position for 1875: $7^h\ 33^m\ 9^s$ −49° 29′·0). Moreover, Lac. 2905 itself does not exist in the sky (see Stone's Catalogue). |
| 10 | 7 35 40 | 43 3·9 | g 552 | 7·5 | Error in declination and identical with G 9945? |
| 11 | 8 52 7 | 42 46·5 | t 3912 | 9·0 | Identical with S 4758? For 1880:<br>t 3912 (9) $8^h\ 52^m\ 18^s{\cdot}01$ −42° 47′ 36″·9<br>S 4758 (7) $52^m\ 46^s{\cdot}93$ −42° 47′ 39″·1 |
| 12 | 8 53 16 | 50 39·2 | g 979 | 8·5 | Probably one wire interval in error in R.A. and star identical with G 12216 (one wire interval, about $17^s$ in equator; $17^s$, sec. 50°.40′ = $26^s{\cdot}8$). For 1875:<br>g 979 $8^h\ 53^m\ 15^s{\cdot}6$ −50°.39′.11″<br>G 12216 $53^m\ 42^s{\cdot}1$ 39′. 9″ |
| 13 | 9 29 56 | 45 41·7 | r 160 | 7·0 | In Stone's Catalogue there is the footnote, "No star of the seventh magnitude visible nearer R.A. $9^h\ 30^m$ and N.P.D. 135° 42′ than S 5180." |
| 14 | 9 50 26 | 44 21·3 | r 179 | 7·0 | In Stone's Catalogue there is the footnote, "There is no seventh magnitude star near the place of r 179." |
| 15 | 10 10 53 | 49 24·2 | t 4580 | 7·8 | Error in declination and star identical with G 14012? Divergences: $0^s{\cdot}14$ and 9′ 3″·7. |
| 16 | 15 22 0 | 38 13·4 | t 7216 | 6·7 | Error in declination and star identical with G 20974? Divergences: $0^s{\cdot}5$ and 4′ 19″. |
| 17 | 20 3 45 | 29 32·7 | l 38553 | | There is a star at declination 3′·7 in C.P.D. |
| 18 | 20 13 25 | 41 39·0 | t 9352 | 7·8 | 30′ in error in declination and star identical with G 27862? (=Lac. 8410). |
| 19 | 20 18 51 | 25 36·2 | k 4018 | | |

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*Not* included in the list (nor in the supplement) are the stars of the Washington Zones and those of Brisbane (p.) missing on the plates. As has been said already in vol. i. p. (67), I have not attempted to correct the errors of the Washington Zones. The work would have been enormous, and the success exceedingly doubtful. Considering the excessively great number of errors, it is evident, however, that without such a work as a preliminary step, the insertion of the missing stars of the Washington Zones into the foregoing list could not be thought of. The list would have become, at the same time, very bulky and very uninteresting.

Much the same thing holds for Brisbane's Catalogue.

There can be no doubt but that practically in every case where a star of the Paramatta Catalogue is missing in the C.P.D., the fact is due to an error in the former. It may be well, however, to give a separate list of the numbers of those stars which are not to be found in the C.P.D. in the position assigned. In many cases I have given, between brackets, references to known stars, which seem, more or less probably, to be the stars really observed. Those cases in which Brisbane's error could be established with tolerable certainty, were inserted in a list of errors of Brisbane. In these cases, references to *p.* will be found in their proper place in the C.P.D.

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## LIST OF THE NOS. OF THOSE STARS OF BRISBANE (*p.*) WHICH ARE NOT TO BE FOUND IN THE C.P.D. IN THE POSITION ASSIGNED.

28, 39, 50, 78, 83, 85, 90, 129, 151, 165, 203, 222, 231, 302, 419, 471, 483, 487, 604, 611, 692, 785, 790, 800 (correction $-10^s$?); 809 (correction $-3^m$?); 821, 829, 834, 886, 890, 909, 917 (correction $+30^s$?); 974, 1062, 1070, 1109 (correction about $+5^s$?); 1115, 1123, 1126, 1135 (correction $-1^m$?); 1141, (correction $-1^m$ and =p. 1134?); 1146 (correction $+30^s$?); 1160, 1171, 1211, 1236, 1239, 1277, 1299 (correction $+2^m$?); 1315 (correction $-1^m$ and =p. 1307?); 1398 (correction $+1^\circ$ in C.P.D.?); 1482, 1531, 1543, 1573 (correction $+30^s$?); 1574 (error in R.A. and =p. 1578?); 1577, 1608, 1610, 1646, 1685, 1696, 1783 (error in R.A. and =p. 1757?); 1790, 1804, 1837, 1845 (error in R.A. and =p. 1849?); 1871 (=p. 1869?); 1895, 2040, 2045 (=p. 2044?); 2050, 2059, 2079, 2111, 2118, 2142, 2191, 2245, 2277 (S assumes error in R.A. of about $27^s$ or $28^s$); 2302 (=p. 2308?); 2316 (error of 5′ in $\delta$ and =p 2317?); 2331, 2365 (error in R.A. and =p. 2368?); 2379, 2383, 2448, 2462, 2467, 2471, 2483, 2502, 2510, (error $+50^s$?); 2517, 2538 (=p. 2530?); 2556 (=p. 2558?); 2559 (=p. 2558?); 2576, 2578, 2618, 2713, 2743 (=p. 2736?); 2774, (=p. 2776?); 2775, 2779, 2830 (two errors and =G 13770?); 2868 (=p. 2864?); 2870, 2915 (=p. 2916?); 2922 (=p. 2917?); 2955 (correction $+30^s$ and =p. 2962?); 2957 (=p. 2947?); 2977 (=p. 2985?); 2979 (=p. 2981?); 3020, 3024, 3039, (=G 14332?); 3041 (=p. 3040?); 3042 (=G14332?); 3056 (=p. 3052?); 3066 (=p. 3076?); 3067 (=p. 3075?); 3090, 3115, 3150, 3153 (=p. 3145?); 3165, (=p. 3170?); 3177 (=p. 3175?); 3252 (=p. 3248?); 3264, 3275, 3322 (=p. 3314?); 3326 (=p. 3317 or =p. 3325?); 3342 (error of 10′ in $\delta$?); 3344 (error in R.A. and =p. 3338? There is a star near the position of *p.*, however,—*viz.*, Z.C. No. 4072; Z.C. −p. = 20″ in declination. This star, however, seems somewhat too faint for p., as it is 9·6 in C.P.D., 9·0 in Z.C.); 3357, 3364, 3425, 3434, (error of 20″ in declination and =p. 3432?); 3438 (=p. 3437?); 3442, 3451, 3458 (=p. 3444?); 3460, 3552 (=p. 3553?); 3577 (=p. 3578?); 3587 (=p. 3584?); 3615 (=p. 3618?); 3622, (=p. 3619?); 3630 (=p. 3631?); 3672, 3695 (=p. 3693?); 3704, 3708 (=p. 3710?); 3757, 3762, 3774 (=p. 3776?); 3784, 3863 (=p. 3857?); 3906, 3937 (=p. 3933?); 4011, 4015 (=p. 4018?); 4025 (=p. 4024?); 4026, 4037, 4065, 4076, 4088, 4111, 4124, 4131, 4208, 4221, 4229 (these three stars all in error by about the same amount of error in C.P.D. and respectively =p. 4209 4223, 4228?); 4243, 4272 (=p. 4275?); 4347, 4348 (=p. 4349?); 4355 (=p. 4356?); 4357, 4379, 4392, 4430, 4451, 4486 (error of $1^\circ$ in $\delta$ and =G 18348?); 4563, 4601 (=p. 4599?); 4641 (=p. 4633?); 4652 (=p. 4656?); 4654 (=p. 4658?); 4732, 4744 (=p. 4743?); 4794, 4807 (=p. 4804?); 4817 (=p. 4818?);

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4837, 4841, 4862, 4875, 4906 (=p. 4916?); 4910, 4921 (correction $-1^m$ in R.A. and =C.P.D. −38°, 3853?); 4983 (=p. 4986?); 4996, 5020 (=p. 5028?); 5034, 5117 (correction $-2^m$ in R.A. and =G 20163?); 5124, 5126 (=p. 5128?); 5132, 5142 (correction $-1^m$ and =G 20289?); 5154 (=p. 5155?); 5195 (error in R.A. and =G 20624?); 5210, 5211 (both seem to need a correction of about $20^s$ in R.A.; one of them =p. 5206); 5247 (=p. 5250?); 5253 (=p. 5251?); 5314, 5317 (=p. 5315?); 5467, 5493, 5506 (=p. 5505?); 5517 (correction of about $5^s$ or $6^s$ in R.A. and =G 21526?); 5525, 5599, 5616, 5631, 5639, 5642, 5649 (all three =G 22009?); 5657 (=p. 5658?); 5721, 5726 (=p. 5728?); 5820, 5877, 5929 (=p. 5927?); 5934 (=p. 5931?); 5940, 5954, 6020 (=p. 6022?); 6021, 6029, 6032, 6040, 6061, 6065, 6066, 6068, 6115, 6131, 6147, 6186, 6187 (there is a faint star 9·8 very near this position in C.P.D. Can this be *p.*'s star? variable?); 6191 (=p. 6192?); 6250, 6328, 6354 (probably 5′ in error in S.P.D. and =G 24855); 6383 (error of about $50^s$ in R.A. and =G 25026; declination agrees very closely); 6390, 6423, 6441 (=p. 6446?); 6447, 6475 (=p. 6477?); 6476 (=p. 6477?); 6545 (=p. 6550?); 6554, 6589, 6608 (=p. 6612?); 6610, 6631, 6684 (=p. 6681?); 6693, 6697, 6698, 6705, 6715, 6769 (=p. 6766?); 6783 and 6784 seem both in error by about $3^m$ $55^s$ and respectively (=p. 6795 and p. 6797); 6786 (=p. 6797?); 6791 (=p. 6794?); 6798 (=p. 6771?); 6920, 6938 (there is an error in the precision of R.A.); 6941, 6993 (=p. 6994?); 7026, 7032, 7092, 7109, 7242 (error of $-6^m$ and =G 31277?); 7329 (there is a star 7·9 at a distance of $6^s$ and 0′·7); 7347.

The stars of Brisbane referred to in G and S are not included in this list, although a few of these may perhaps have been wrongly identified.

## II. *bis*.—LIST OF STARS, 9·0 OR BRIGHTER, IN THE FIRST TWO PARTS OF THOME'S CORDOBA DM., AND MISSING ON THE PLATES.

| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 1 | 8·9 | 0 5 39·0 | 25 15·7 | One rejected observation −0 (10·0). |
| 2 | 9·0 | 11 16·4 | 25 58·2 | One rejected observation −0 (9·9). |
| 3 | 8·9 | 13 55·9 | 31 43·2 | One rejected observation −0 (10·2). Looked up on plates. Faintly visible on four plates. On fifth plate missing. |
| 4 | 9·0 | 18 34·8 | 28 23·3 | The star was looked up and found −0 (9·9) $18^m$ $34^s·8$ −28°.24′·0. |
| 5 | 9·0 | 19 40·2 | 31 53·7 | One rejected observation −0 (10·2). Looked up on plates. Faintly visible on four plates. On fifth plate missing. |
| 6 | 8·7 | 20 34·3 | 26 24·0 | Looked up on plates. Faint traces on plate 2027 (measuring plate). On check plate (2036) certainly missing, which can be explained by the difference of the images on the two plates. On plate 1641 very doubtful traces. |
| 7 | 9·0 | 22 26·0 | 28 56·2 | Certainly missing. |
| 8 | 9·0 | 29 44·0 | 31 18·7 | One rejected observation −0 (10·2). Looked for. Extremely faint star on three plates. On two other plates certainly missing. |
| 9 | 8·9 | 30 29·7 | 31 42·2 | Certainly missing on three plates. On plates 1633 and 1716 faintly visible. |
| 10 | 8·8 | 30 45·0 | 31 55·7 | Certainly missing on four plates. On plate 1633 faintly visible. |
| 11 | 9·0 | 31 8·0 | 31 28·7 | Certainly missing on four plates. On plate 1633 faintly visible. |
| 12 | 9·0 | 32 44·3 | 31 48·2 | One rejected observation −0 (10·6). Looked up on plates. On measuring and check plate very faint traces. On plate 1633 plainly, and on plate 1716 very faintly, visible. |
| 13 | 9·0 | 35 38·9 | 26 20·8 | The star was looked up and found −0 (10·2) $35^m$ $39^s·7$ −26°.20′·6. Images on measuring and check plate show the normal difference. |
| 14 | 8·9 | 41 43·6 | 26 17·3 | One rejected observation −0 (10·2). |
| 15 | 9·0 | 43 58·3 | 26 22·3 | Looked up on plates. An extremely faint image (on both measuring and check plate) observed as follows: −0 (10·2) $43^m$ $59^s·0$ −26°.22′·4. In Thome's list of susp. var., mags.: *9·5, 8·7, 8·5, 9·4*. |
| 16 | 9·0 | 48 57·6 | 31 41·3 | One rejected observation −0 (10·6). |
| 17 | 9·0 | 50 37·1 | 27 55·1 | Perhaps extremely faint and uncertain traces on both measuring and check plate. |

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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ' | |
| 18 | 8·9 | 0 51 15·4 | 26 52·9 | One rejected observation −0 (10·2). |
| 19 | 9·0 | 51 18·6 | 26 36·9 | One rejected observation −0 (10·2). |
| 20 | 8·8 | 1 5 38·6 | 30 46·8 | Certainly missing on both measuring and check plate. = U Sculptoris (Chandler III). |
| 21 | 8·9 | 11 36·6 | 25 24·4 | One rejected observation −0 (10·5). |
| 22 | 8·9 | 23 11·3 | 23 40·3 | Looked up on plates. Found as an extremely faint star on both plates: −0 (9·8) 23m 12s −23°.40'·0. Orm. Stone 9·1, Wash Zones 9. |
| 23 | 9·0 | 28 40·8 | 31 8·4 | One rejected observation −1 (10·1). Looked up on plates. Perhaps faint traces on both plates. |
| 24 | 8·7 | 29 52·4 | 31 34·3 | One observation −0 (10·1). Looked up on plates. Extremely faint image on both plates. |
| 25 | 9·0 | 31 46·7 | 31 15·0 | Certainly missing on both plates. |
| 26 | 9·0 | 36 11·0 | 34 39·8 | One rejected observation −0 (9·9). In Thome's list of susp. var., mags. observed at Cordoba: 8·5, 9·7, 9·7. |
| 27 | 9·0 | 39 56·2 | 31 12·1 | On measuring plate certainly missing. On check plate uncertain traces. |
| 28 | 9·0 | 42 17·2 | 41 40·6 | One rejected observation −0 (10·0). |
| 29 | 9·0 | 43 17·7 | 31 13·1 | One rejected observation −0 (10·1). On measuring plate certainly missing; on check plate uncertain traces. |
| 30 | 9·0 | 2 19 50·2 | 31 22·5 | One rejected observation −0 (10·4). |
| 31 | 8·6 | 23 39·8 | 26 39·2 | Certainly missing on four plates. = R. Fornacis (Chandler III.). |
| 32 | 9·0 | 29 11·1 | 23 35·0 | Certainly missing on four plates. |
| 33 | 9·0 | 38 53·4 | 32 14·2 | Certainly missing. |
| 34 | 9·0 | 39 2·6 | 27 15·9 | One rejected observation −0 (9·6). |
| 35 | 9·0 | 44 46·5 | 23 59·8 | Certainly missing on measuring plate. Uncertain traces on check plate. |
| 36 | 9·0 | 47 15·3 | 30 0·3 | One observation −0 (10·6). Looked up on plates. Extremely faint image on both plates. |
| 37 | 9·0 | 52 7·9 | 23 47·0 | Two observations −0 (9·8). Rejected on account of a doubt about its stellar nature. |
| 38 | 9·0 | 3 0 58·7 | 23 48·1 | Certainly missing on three plates. Orm. Stone 9·1, Wash. Zones 9. |
| 39 | 9·0 | 2 39·3 | 31 3·9 | Certainly missing on three plates. |
| 40 | 9·0 | 4 10·9 | 30 53·1 | One rejected observation −0 (10·4). Looked up on plates. On measuring plate good image; on check plate extremely faint. This difference attributable to normal difference of the two plates. On third plate certainly missing. |
| 41 | 8·8 | 4 55·6 | 30 54·2 | Certainly missing on both measuring and check plate. On third plate perhaps traces of a star. |
| 42 | 8·7 | 11 8·7 | 25 25·5 | Certainly missing on m and c. Most probably error in Thome, and star identical with our star 9·2 3h 11m 20s·2 −25°.25'·6, which is certainly right. |
| 43 | 9·0 | 13 6·0 | 35 12·4 | Certainly missing on measuring and check plate. |
| 44 | 8·9 | 16 34·4 | 30 29·0 | Certainly missing on three plates. |
| 45 | 9·0 | 16 46·7 | 24 57·8 | One rejected observation −0 (9·6). |
| 46 | 8·9 | 19 29·7 | 29 25·7 | One rejected observation −0 (10·0). Looked up on plates. Found on three plates as an extremely faint star. |
| 47 | 9·0 | 47 16·1 | 24 33·5 | Certainly missing on three plates. |
| 48 | 9·0 | 47 45·7 | 31 37·4 | On both the plates 3h 36m there is, perhaps, an extremely faint star; on plates 4h 0m certainly missing. It seems not improbable, however, that Thome's α is to be corrected by +1m, so that it is really identical with C.P.D. −31°, 453. |
| 49 | 9·0 | 47 58·5 | 33 42·0 | Looked up on plates and found as follows: +0 (9·8) 3h 47m 59s·7 −33°. 41'·9. The star had been accidentally overlooked in both measurements. *Vide* Corrigenda, C.P.D., ii. p. xxxi. |
| 50 | 8·9 | 48 29·7 | 27 37·8 | Two observations −0 (9·6). The star has been rejected on account of a doubt about its stellar nature. |
| 51 | 8·8 | 54 23·5 | 30 40·5 | One rejected observation −0 (10·2). Looked up on plates. Extremely faint star on both plates. |
| 52 | 8·7 | 4 10 18·0 | 24 7·1 | One rejected observation −0 (10·2). |
| 53 | 9·0 | 42 56·3 | 41 1·7 | One rejected observation −0 (10·1). |
| 54 | 8·9 | 59 30·8 | 22 4·4 | On measuring plate certainly missing. On check plate perhaps an extremely faint star. In Schönfeld's DM. mag. 8·7. See also Introduction to vol. i. p. 83, No. 2. |
| 55 | 9·0 | 5 26 28·8 | 31 17·5 | According to Errata, *Cord. Obs.*, xvii. p. xxi., Decl. to be read 7'·5.<br>„ „ „ xv. p. 334, "Star does not exist." |

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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 56 | 9·0 | 5 32 19·7 | 24 28·8 | Certainly missing on four plates. |
| 57 | 8·8 | 6 3 22·1 | 24 0·5 | Certainly missing on four plates. There is a star in C.P.D. 8·7 $3^m$ $17^s$·0 −23°.59′·7, but this is also in Thome. |
| 58 | 8·6 | 18 40·0 | 26 59·8 | Certainly missing on plate. Contained in G: *Orange-yellow*. (See Introduction C.P.D., i. p. (72), No. 40.) |
| 59 | 7·9 | 18 55·2 | 34 14·5 | One rejected observation −0 (10·1). |
| 60 | 8·5 | 26 14·4 | 38 40·5 | Thome has two stars as follows :—<br>8·5 $26^m$ $14^s$·4 40′·5.<br>8·9 $26^m$ $24^s$·4 41′·0.<br>On measuring and check plate certainly only the star,<br>8·5 $26^m$ $20^s$·5 40′·0. |
| 61 | 9·0 | 34 47·3 | 31 18·8 | Both on measuring plate and check plate certainly missing. It is contained, however, on the preceding pair of plates ($6^h$ $24^m$), somewhat beyond the limit to which these plates have been measured for the C.P.D., mag. 9·5. The plates $6^h$ $48^m$ seem to be rather poor. At all events, those of $6^h$ $24^m$ contain a great deal more of stars on the overlapping portion. Besides measuring and check plate, there are available the plates 2165, 1304, and 1326; but the first of these is very dark, the two others too much in error to be of much use. |
| 62 | 8·9 | 35 34·9 | 31 19·8 | On plates $6^h$ $48^m$ perhaps faint traces of a star. On plates $6^h$ $24^m$ pretty bright, 9·4. See No. 61 for remarks about plates. |
| 63 | 8·9 | 36 16·3 | 31 51·0 | One rejected observation −0 (9·8). Looked up on plates. Certainly missing. See No. 61 for remarks about plates. |
| 64 | 9·0 | 36 25·5 | 31 28·7 | Certainly missing. See No. 61 for remarks about plates. |
| 65 | 9·0 | 37 51·5 | 30 20·0 | Certainly missing. See No. 61 for remarks about plates. |
| 66 | 8·7 | 38 17·2 | 30 35·8 | Very faint traces on both measuring and check plate, as also on plate 2165. See No. 61 for remarks about plates. |
| 67 | 8·7 | 38 56·3 | 31 59·6 | Certainly missing. See No. 61 for remarks about plates. |
| 68 | 8·8 | 40 44·2 | 30 24·1 | One rejected observation −0 (9·8). On both measuring and check plate faint traces. See No. 61 for remarks about plates. |
| 69 | 9·0 | 41 28·2 | 30 12·5 | One rejected observation −0 (9·8). On both measuring and check plate faint traces. On plate 2165 missing. See No. 61 for remarks about plates. |
| 70 | 9·0 | 46 21·0 | 30 37·1 | One rejected observation −0 (9·8). On check plate faint star; on measuring plate and on plate 2165 certainly missing. See No. 61 for remarks about plates. |
| 71 | 9·0 | 52 32·6 | 30 28·9 | Certainly missing on three plates. See No. 61 for remarks about plates. |
| 72 | 9·0 | 53 54·2 | 35 51·8 | One rejected observation −0 (9·9). |
| 73 | 8·7 | 59 42·3 | 31 27·9 | One rejected observation −0 (9·6). Looked up on plates. Extremely faint star on both plates. On plate 1311, which is considerably poorer, certainly missing. |
| 74 | 9·0 | 7 4 23·6 | 30 0·5 | One rejected observation −0 (9·6). Looked up on plates. On check plate, which is the best of the plates, faint star; on measuring plate and plate 1311 certainly missing. |
| 75 | 9·0 | 10 9·0 | 31 49·3 | Two observations −0 (9·6). Was rejected on account of a doubt about its stellar nature. Looked up on plates. Extremely faint star on both measuring and check plate. On plate 1311 certainly missing. |
| 76 | 8·5 | 13 6·5 | 38 29·0 | Thome has two stars as follows :—<br>8·5 $13^m$ $6^s$·5 29′·0.<br>8·5 $13^m$ $13^s$·2 29′·5 Z.C.<br>On measuring and check plate certainly only the star,<br>8·2 $13^m$ $12^s$·0 29′·1. |
| 77 | 8·9 | 23 56·0 | 29 7·2 | One rejected observation −0 (10·0). |
| 78 | 9·0 | 34 14·1 | 35 2·0 | Thome doubtlessly in error, and δ = 12′·1. At this declination there is a star $8^m$·4 in C.P.D. |
| 79 | 3·7 | 50 24·5 | 22 11·7 | Also missing in S.D. Mag. to be read 9·7? |
| 80 | 9·0 | 8 33 46·7 | 31 0·2 | On three plates $8^h$ $24^m$ certainly missing. On measuring and check plate $8^h$ $48^m$ perhaps extremely faint traces. On plate 1329 certainly missing. |
| 81 | 8·9 | 58 43·5 | 29 26·4 | On two plates at $8^h$ $48^m$ and two plates at $9^h$ $12^m$ there is an extremely faint star. On two other plates certainly missing. |
| 82 | 8·8 | 9 3 48·6 | 28 29·7 | One rejected observation −0 (10·2). |
| 83 | 9·2 | 3 44·4 | 23 2·7 | In C.P.D. and S.D. only the *two* stars { 9·2 $3^m$ $44^s$·0 −23°.2′·1. / 8·4 $3^m$ $51^s$·9 23°.0′·8. } |
| 84 | 8·8 | 3 52·2 | 23 1·1 | |
| 85 | 8·5 | 3 52·0 | 22 59·6 | The two latter positions of Th. belonging to same star? |

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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 86 | 8·8 | 9 3 56·2 | 30 27·5 | Doubtful traces on both measuring and check plate. On two other poor plates certainly missing. |
| 87 | 9·0 | 10 48·7 | 29 5·2 | One rejected observation −o (10·0). Looked up on plates. On both measuring and check plate extremely faint star. On plates 1313 and 1347 (which are much poorer) certainly missing. |
| 88 | 8·9 | 12 27·6 | 31 28·2 | Doubtful traces on both measuring and check plate. On two other plates (1313 and 1347, see preceding number) certainly missing. |
| 89 | 8·7 | 12 36·8 | 27 50·6 | One rejected observation −o (10·0) at $9^h\ 12^m\ 40^s$ $-27°.51'.5$. |
| 90 | 9·0 | 15 9·7 | 31 12·1 | Certainly missing on four plates. |
| 91 | 9·0 | 16 0·8 | 26 16·3 | Certainly missing on three plates. |
| 92 | 8·9 | 17 17·2 | 27 7·3 | One rejected observation −o (10·0). |
| 93 | 9·0 | 18 5·5 | 26 53·1 | Certainly missing on three plates. |
| 94 | 8·9 | 18 31·9 | 26 12·0 | Two observations −o (9·8). Was rejected on account of a doubt about its stellar nature. |
| 95 | 8·5 | 20 23·7 | 30 30·8 | One rejected observation −o (9·8). Looked up on plates. A star −o (9·8) on both measuring and check plate. On plates 1313, 1347, 1330, 1356 certainly missing. |
| 96 | 8·9 | 21 32·9 | 24 11·9 | Missing in two sweeps. |
| 97 | 8·7 | 21 43·2 | 27 4·1 | One rejected observation −o (10·0). |
| 98 | 9·0 | 22 58·7 | 26 45·6 | Certainly missing on three plates. |
| 99 | 9·0 | 24 27·8 | 28 50·3 | One rejected observation −o (10·0). |
| 100 | 8·7 | 25 9·2 | 27 51·1 | Certainly missing on three plates. Star "does not exist." See *Astr. Journ.*, 16, p. 30. Declination is −26°. |
| 101 | 8·9 | 29 5·0 | 24 11·6 | Certainly missing on three plates. |
| 102 | 9·0 | 33 12·4 | 30 36·7 | Extremely faint star on both measuring and check plate. |
| 103 | 9·0 | 33 27·5 | 28 4·5 | Certainly missing on measuring plate (No. 1375). On check plate (No. 3252) very conspicuous; diameter reduced to system of measuring plate +1 (=$9^m.2$); stellar nature undubitable (as seen under the microscope). On plate 1392 and on four plates at $9^h\ 45^m$ certainly missing (fifth plate of this region, No. 2331, is in error). There can be little doubt about the star's *variability*. |
| 104 | 8·8 | 39 19·9 | 24 0·1 | One rejected observation −o (10·3). |
| 105 | 9·0 | 42 28·3 | 31 36·2 | Two observations o (10·4). Was rejected on account of a doubt about its stellar nature. Looked up on the plates. On both plates faintly visible; *nebulous*. Not in Dreyer's G.C. |
| 106 | 9·0 | 47 59·9 | 31 9·5 | One rejected observation −o (10·4). Looked up on the plates. An extremely faint star on both measuring and check plate. On third plate certainly missing. |
| 107 | 9·0 | 50 4·7 | 29 10·6 | One rejected observation −o (10·4). Looked up on the plates. An extremely faint star on three plates. |
| 108 | 8·9 | 54 42·6 | 31 35·4 | Certainly missing on three plates. Probably error in Thome; corrected, δ= $-31°.55'.4$. |
| 109 | 8·9 | 10 5 2·1 | 33 32·2 | One rejected observation −o (10·4). Looked up. On three plates faintly visible. |
| 110 | 9·0 | 9 46·8 | 31 6·3 | On three plates at $10^h\ 0^m$, and on m and c of the region $10^h\ 24^m$, star very faintly visible. On sixth plate star certainly missing. |
| 111 | 8·8 | 11 42·9 | 29 14·9 | One rejected observation −o (10·1). Looked up on plates. Both on measuring plate and on check plate an extremely faint star. Missing on third plate. |
| 112 | 8·8 | 16 32·0 | 31 42·6 | One rejected observation −o (10·1). Same remarks as for preceding number. |
| 113 | 9·0 | 20 10·4 | 32 0·7 | Doubtful traces of a star on both measuring and check plate at δ=1′·9. On third plate certainly missing. |
| 114 | 9·0 | 20 58·3 | 24 39·5 | Missing in two sweeps. |
| 115 | 8·9 | 21 45·3 | 29 54·1 | One rejected observation −o (10·1). Looked up on plates. Doubtful traces on both measuring and check plate. Missing on third plate. |
| 116 | 9·0 | 27 4·0 | 29 19·7 | One rejected observation −o (10·1). Looked up on plates. Faint star on both measuring and check plate. Certainly missing on third plate. |
| 117 | 8·8 | 30 40·7 | 27 26·2 | One rejected observation −c (9·6). |
| 118 | 8·8 | 31 44·6 | 29 51·6 | On both measuring and check plate extremely faint star. On third plate certainly missing. |
| 119 | 9·0 | 33 3·0 | 24 30·7 | One rejected observation −o (9·6). |

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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 120 | 9·0 | 10 33 49·0 | 31 36·5 | Of the plates at $10^h$ $24^m$, the check plate only shows the star very faintly. Measuring and check plate at $10^h$ $48^m$ both contain the star very faintly. On a third plate of this region the star is certainly missing. |
| 121 | 8·7 | 45 22·2 | 27 58·2 | Certainly missing on three plates. |
| 122 | 8·7 | 52 17·5 | 27 48·6 | One rejected observation —0 (10·2). |
| 123 | 9·0 | 54 20·0 | 28 7·1 | One rejected observation —0 (10·2). |
| 124 | 8·9 | 55 28·0 | 28 12·2 | Doubtful traces on two plates. On third certainly missing. |
| 125 | 9·0 | 56 36·4 | 35 47·8 | Certainly missing on measuring and check plate. |
| 126 | 8·9 | 58 32·3 | 24 12·3 | One rejected observation —0 (10·2). |
| 127 | 9·0 | 59 21·8 | 30 8·4 | Extremely faint star on both plates. |
| 128 | 8·9 | 11 0 25·7 | 31 57·8 | One rejected observation —0 (10·2). Looked up. Extremely faint star on both plates. |
| 129 | 9·0 | 4 29·3 | 32 9·3 | One rejected observation —0 (10·2). Looked up. Extremely faint star on both plates. |
| 130 | 9·0 | 6 50·7 | 30 1·4 | One rejected observation —0 (10·2). Looked up. Doubtful traces on check plate. On measuring plate certainly missing. |
| 131 | 9·0 | 6 51·2 | 30 46·8 | One rejected observation —0 (10·2). Looked up. Extremely faint star on both plates. |
| 132 | 9·0 | 10 6·0 | 29 30·6 | Certainly missing on both plates. |
| 133 | 9·0 | 12 6·0 | 32 10·2 | One rejected observation —0 (10·2). Looked up. Extremely faint star on both plates. |
| 134 | 6·9 | 16 15·3 | 25 40·5 | Also missing in Uran. Arg., G, Z.C., a. Mag. to be read 9·9? Certainly missing on three plates. |
| 135 | 8·9 | 27 35·2 | 33 55·7 | Certainly missing on three plates. One rejected observation (9·7) on plates 35½°, $11^h$ $22^m$ $6^s$. |
| 136 | 9·0 | 35 55·7 | 32 43·5 | Certainly missing on three plates. |
| 137 | 8·7 | 40 23·4 | 33 39·7 | One rejected observation —0 (10·3). Looked up. On check plate, which is much richer than measuring plate, star plainly visible. On measuring plate extremely faint. On third plate missing. |
| 138 | 8·5 | 41 21·7 | 32 34·5 | Certainly missing on three plates. |
| 139 | 9·0 | 43 18·0 | 24 53·5 | Certainly missing on four plates. |
| 140 | 8·9 | 45 37·0 | 32 14·4 | One rejected observation —0 (10·4). Looked up. On measuring and check plate at $11^h$ $36^m$ extremely faint star; the same on check plate at $12^h$ $0^m$. On two other plates certainly missing. |
| 141 | 8·9 | 47 0·8 | 29 45·4 | On check plate faint star. On the two other plates certainly missing. |
| 142 | 9·0 | 47 4·7 | 31 58·3 | One rejected observation —0 (9·6). On three plates faintly visible. |
| 143 | 8·9 | 48 40·3 | 33 1·5 | One rejected observation —0 (9·6). Looked up. Doubtful traces on measuring and check plate. On third plate certainly missing. |
| 144 | 9·0 | 48 40·4 | 33 33·9 | On check plate doubtful traces. On the two other plates certainly missing. |
| 145 | 9·0 | 48 48·4 | 31 37·9 | |
| 146 | 8·9 | 48 51·2 | 33 42·2 | One rejected observation —0 (9·6). Looked up. Perhaps a faint star on both measuring and check plate. On third plate certainly missing. |
| 147 | 9·0 | 49 58·0 | 33 33·7 | Doubtful traces on measuring and check plate. Certainly missing on third plate. |
| 148 | 8·7 | 50 2·6 | 33 34·7 | Certainly missing on three plates. |
| 149 | 9·0 | 53 29·2 | 33 21·3 | One rejected observation —0 (9·6). Looked up. Doubtful traces on both measuring and check plate. Certainly missing on third plate. |
| 150 | 8·9 | 53 54·1 | 33 53·2 | One rejected observation on plates 35½° (9·4). Looked up on the plates of region 31½°, $12^h$ $0^m$. Extremely faint star on check plate. Certainly missing on the two other plates. |
| 151 | 8·9 | 12 2 42·2 | 32 55·4 | Extremely faint star on measuring and on check plate. Certainly missing on third plate. |
| 152 | 9·0 | 8 8·9 | 31 59·7 | Of three plates, only the check plate contains a very faint star. |
| 153 | 9·0 | 17 51·9 | 31 48·0 | Doubtful traces on measuring and check plate. Certainly missing on third plate. |
| 154 | 8·5 | 20 47·5 | 31 52·7 | On check plate extremely faint star. Certainly missing on two other plates. |
| 155 | 8·8 | 22 40.2 | 37 34·1 | Certainly missing on measuring and check plate. |
| 156 | 9·0 | 33 38·4 | 29 56·5 | One rejected observation —0 (9·6). Looked for on plates. Extremely faint star on three plates $12^h$ $48^m$. |
| 157 | 8·7 | 34 12 1 | 33 53·1 | One rejected observation (9·4) on plates 35½°, $12^h$ $37^m$ $54^s$. Looked for on plates 31½°, $12^h$ $48^m$. Very faint star on measuring and check plate. Certainly missing on third plate. |

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| 158 | 9·0 | 12 37 9·0 | 32 5·8 | Certainly missing on three plates. |
| 159 | 8·7 | 37 40·7 | 33 34·0 | Very faint star on measuring and check plate. Certainly missing on third plate. |
| 160 | 8·9 | 40 46·3 | 29 21·9 | Extremely faint star on measuring and check plate. Certainly missing on third plate. |
| 161 | 9·0 | 47 56·8 | 33 24·3 | One rejected observation −0 (9·9). Looked for on plates. Both on measuring and check plate very faint star. On third plate missing. |
| 162 | 9·0 | 49 43·9 | 36 17·3 | Certainly missing on measuring and check plate. |
| 163 | 8·9 | 50 11·3 | 32 49·7 | One rejected observation −0 (9·9). Looked for on plates. Both on measuring and check plate very faint star. On third plate certainly missing. |
| 164 | 9·0 | 56 11·7 | 31 38·3 | One rejected observation −0 (9·9). Looked for on plates. Both on measuring and check plate very faint star. On third plate certainly missing. |
| 165 | 9·0 | 13 2 37·5 | 29 16·5 | Doubtful traces on check plate. On two other plates certainly missing. |
| 166 | 9·0 | 3 45·2 | 35 47·4 | In Thome the two stars,<br>9·0 $3^{m}$ $45^{s}$·2 47′·4,<br>9·3 $55^{s}$·5 47′·5.<br>On measuring and check plate certainly only a star as follows:—<br>9·0 $3^{m}$ $55^{s}$·6 47′·4. |
| 167 | 9·0 | 3 47·2 | 33 10·8 | One rejected observation −0 (9·7). Looked for on plates. Both on measuring and check plate very faint star. On third plate certainly missing. |
| 168 | 9·0 | 4 42·7 | 24 6·8 | Doubtful traces on measuring and check plate. On third plate certainly missing. |
| 169 | 9·0 | 12 34·1 | 29 19·8 | One rejected observation −0 (9·7). Looked for on plates. Both on measuring and on check plate an extremely faint star. On third plate certainly missing. |
| 170 | 9·0 | 12 44·0 | 29 9·2 | Two observations −0 (9·7). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Both on measuring and check plate star very faintly visible. On third plate certainly missing. |
| 171 | 9·0 | 18 40·5 | 31 6·3 | Two observations −0 (9·7). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Doubtful traces on both measuring and check plate. On third plate certainly missing. |
| 172 | 8·4 | 22 53·0 | 22 38·4 | = *R Hydræ* (see C.P.D., i. Introd., p. (75), No. 99). |
| 173 | 9·0 | 26 12·9 | 30 12·1 | One rejected observation −0 (10·4). Looked for on plates. Extremely faint star both on measuring and check plate. On third plate certainly missing. |
| 174 | 9·0 | 26 39·1 | 31 1·5 | Certainly missing on three plates. |
| 175 | 9·0 | 38 10·6 | 31 12·4 | One rejected observation −0 (10·4). Looked for on plates. Extremely doubtful traces on measuring and check plate. On third plate certainly missing. |
| 176 | 9·0 | 41 2·5 | 36 14·2 | G., Z.C., and Thome all contain the *two* stars,<br>9·0 $13^{h}$ $41^{m}$ $2^{s}$ −36°.15′·0,<br>9·0 $41^{m}$ $2^{s}$ 14′·2.<br>On the four plates, measuring and check plate, 35½°, $13^{h}$ $28^{m}$ $25^{s}$,<br>and measuring and check plate, $13^{h}$ $53^{m}$ $41^{s}$,<br>certainly *only* the former is contained. |
| 177 | 9·0 | 42 56·0 | 24 52·0 | One rejected observation −0 (9·9). |
| 178 | 9·0 | 48 46·1 | 32 34·9 | Extremely faint star on measuring and check plate. Certainly missing on third plate. |
| 179 | 9·0 | 51 21·7 | 32 21·7 | One rejected observation −0 (9·5). Looked for on plates. Faint star both on measuring and check plate. On third plate certainly missing. |
| 180 | 9·0 | 52 3·3 | 30 59·2 | Certainly missing on three plates. |
| 181 | 9·0 | 54 50·4 | 32 33·4 | Certainly missing on three plates. |
| 182 | 8·7 | 14 1 33·2 | 29 7·2 | Certainly missing on three plates. |
| 183 | 9·0 | 3 16·9 | 29 0·7 | Two observations −0 (9·5). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Doubtful traces on measuring and check plates. On third plate certainly missing. |
| 184 | 9·0 | 6 32·8 | 33 10·2 | Certainly missing on three plates. |
| 185 | 9·0 | 13 41·0 | 33 8·6 | Extremely faint star on measuring and check plate. Certainly missing on third plate. |

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| 186 | 8·7 | 14 21 36·2 | 33 44·1 | Extremely faint star on measuring and check plate. Certainly missing on third plate. |
| 187 | 9·0 | 25 3·9 | 29 8·2 | Two observations −0 (9·7). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Very faintly visible on three plates. |
| 188 | 9·0 | 29 22·3 | 32 57·1 | Certainly missing on three plates. |
| 189 | 9·0 | 32 14·3 | 29 17·1 | Both on measuring and check plate very faint star. Certainly missing on third plate. |
| 190 | 9·0 | 35 25·2 | 32 49·2 | Of the three plates of the region $14^h$ $24^m$, only the check plate contains a very faint star here. On both the plates at $14^h$ $48^m$ extremely faint traces. |
| 191 | 9·0 | 41 23·2 | 28 20·8 | Certainly missing on three plates. |
| 192 | 9·0 | 42 46·2 | 37 43·0 | Thome has the two following stars:—<br>( 9·0) $14^h$ $42^m$ $46^s{\cdot}2$ $-37°43'{\cdot}0$,<br>(10·0) $42^m$ $53^s{\cdot}0$ $43'{\cdot}9$.<br>On three plates there is certainly only the star,<br>( 9·8) $42^m$ $53^s{\cdot}3$ $43'{\cdot}3$. |
| 193 | 9·0 | 45 28·7 | 25 38·7 | One rejected observation −0 (9·9). |
| 194 | 9·0 | 52 24·8 | 32 23·7 | One rejected observation −0 (9·9). Looked for on plates. Extremely faint star on measuring and check plate. |
| 195 | 9·0 | 54 57·0 | 38 22·2 | One rejected observation −0 (10·1). |
| 196 | 9·0 | 57 18·6 | 38 51·7 | One rejected observation −0 (10·1). |
| 197 | 8·5 | 58 33·7 | 34 26·0 | One rejected observation −0 (9·8). |
| 198 | 9·0 | 59 48·8 | 28 48·0 | Very doubtful traces both on measuring and check plate. |
| 199 | 8·9 | 15 0 37·1 | 34 45·6 | Extremely doubtful traces on measuring and check plate. |
| 200 | 9·0 | 1 21·2 | 34 43·6 | In Z.C. 9·0. Extremely doubtful traces on plates. |
| 201 | 8·9 | 13 38·7 | 28 41·5 | Certainly missing on measuring and check plate. |
| 202 | 9·0 | 17 19·4 | 36 23·0 | Certainly missing on measuring and check plate. |
| 203 | 9·0 | 20 35·3 | 41 38·2 | Certainly missing on *four* plates. |
| 204 | 9·0 | 21 28·1 | 38 33·7 | One rejected observation −0 (9·6). |
| 205 | 9·0 | 24 36·6 | 31 21·3 | Extremely faint star both on measuring and check plate. |
| 206 | 8·9 | 25 6·6 | 35 12·4 | One rejected observation −0 (9·7). |
| 207 | 9·0 | 25 13·2 | 39 19·7 | Certainly missing on *four* plates. |
| 208 | 9·0 | 28 0·8 | 31 34·1 | One rejected observation −0 (9·7). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Very faint star on both measuring and check plate. |
| 209 | 9·0 | 28 5·2 | 35 12·4 | One rejected observation −0 (9·7). |
| 210 | 9·0 | 30 42·8 | 28 37·4 | One rejected observation −0 (10·0). |
| 211 | 9·0 | 32 25·8 | 37 52·7 | One rejected observation −0 (9·7). |
| 212 | 9·0 | 34 55·7 | 34 22·3 | One rejected observation −0 (9·7). |
| 213 | 9·0 | 36 46·2 | 38 1·3 | There are two rejected observations: one, −0 (9·7), on the plates $35\frac{1}{2}°$, $15^h$ $34^m$ $34^s$; one on the plates $40\frac{1}{2}°$, $15^h$ $33^m$ $20^s$, −0 (9·6). Inserted in List of Errata, p. 87. |
| 214 | 9·0 | 42 43·5 | 38 27·8 | One rejected observation −0 (9·6). |
| 215 | 9·0 | 44 45·6 | 40 27·8 | Certainly missing on *four* plates. |
| 216 | 8·9 | 45 21·0 | 35 55·7 | = R. Lupi. See also Introd. to vol. i. p. (77). |
| 217 | 9·0 | 47 46·8 | 29 54·4 | One rejected observation −0 (10·0). Was rejected on account of a doubt about its stellar nature. Looked for on plates. Faint star on both measuring and check plate. |
| 218 | 9·0 | 58 33·1 | 35 29·6 | Certainly missing on measuring and check plate. |
| 219 | 6·7 | 16 8 15·6 | 31 50·1 | According to Corrigenda, C.O., xvii. p. xxi., read mag. 10 instead of 6·7 (observed at Cordoba, according to private communication, 1888 May 5, =6·7; Revision 10). |
| 220 | 9·0 | 14 21·4 | 31 22·8 | Certainly missing on both measuring and check plate. |
| 221 | 9·0 | 15 57·4 | 28 50·2 | Extremely faint star on four plates [−0 (9·6) $15^m$ $57^s{\cdot}7$ $-28°.50'{\cdot}4$]. |
| 222 | 9·0 | 19 21·2 | 33 1·2 | Very doubtful traces on measuring and check plate. |
| 223 | 8·9 | 22 25·3 | 32 51·8 | Doubtful traces on both measuring and check plate. |
| 224 | 9·0 | 34 16·6 | 29 8·4 | One rejected observation −0 (9·9). Looked for on plates. Faint star on both measuring and check plate of region $16^h$ $48^m$. |
| 225 | 9·0 | 36 12·6 | 38 43·6 | Thome has two stars as follows:—<br>9·0 $36^m$ $12^s{\cdot}6$ $-38°43'{\cdot}6$,<br>9·5 $36^m$ $13^s{\cdot}1$ $45'{\cdot}6$.<br>On plates certainly only the star,<br>9·3 $36^m$ $14^s{\cdot}7$ $-38°.45'{\cdot}2$. |

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| 226 | 9·0 | 16 40 4·1 | 25 57·3 | Two observations +0 (9·6). Left out accidentally. See Corrigenda, C.P.D., ii. p. xxxi. |
| 227 | 8·9 | 41 53·9 | 30 58·9 | Certainly missing on measuring and check plate. Probably error in Thome. Correction in α $-10^s$. |
| 228 | 8·9 | 43 57·6 | 26 9·5 | One rejected observation −0 (10·0). |
| 229 | 9·0 | 53 15·3 | 28 44·5 | One rejected observation −0 (10·0). |
| 230 | 9·0 | 53 21·0 | 39 32·4 | One rejected observation −0 (10·4). |
| 231 | 8·4 | 53 34·1 | 24 41·4 | Certainly missing on both measuring and check plate. |
| 232 | 8·7 | 55 21·6 | 39 29·6 | One rejected observation −0 (10·4). |
| 233 | 9·0 | 17 7 11·1 | 39 28·4 | In Z.C. 8·5. On plates extremely doubtful traces. |
| 234 | 8·9 | 7 52·8 | 29 2·6 | Two observations −0 (10·3) in separately measured strip 28° 50′ to 29° 3′. Rejected on account of its missing in principal zone. |
| 235 | 8·8 | 9 56·1 | 40 57·3 | On plates extremely doubtful traces. |
| 236 | 9·0 | 17 52·4 | 40 5·2 | In Z.C. 8·8 (two observations). Missing in *four* sweeps. Certainly missing on measuring and check plate. |
| 237 | 9·0 | 30 31·0 | 23 2·3 | In S.D. 9·3. In Orm. Stone 9·4. Missing in *four* sweeps. |
| 238 | 8·0 | 31 39·1 | 41 33·7 | In Z.C. 8·0. In G 7·8 yellow. Missing in *four* sweeps on two pairs of plates. Certainly missing on measuring and check plate. |
| 239 | 9·0 | 54 27·0 | 24 14·9 | Very doubtful traces on both measuring and check plate. Probably Th. 10′ in error and star identical with the following one of C.P.D., 10·0 $54^m\ 23^s{\cdot}0$ $-24°\ 25'{\cdot}8$, which is missing in Thome. |
| 240 | 7·3 | 54 36·0 | 25 19·0 | Star does not exist. See *Astr. Journ.*, No. 360, p. 197. |
| 240*b* | 8·9 | 18 9 3·2 | 22 2·3 | One rejected observation −0 (10·3). In Schönfeld's DM. 9·9. |
| 241 | 9·0 | 15 16·6 | 30 40·0 | One rejected observation −0 (10·3). |
| 242 | 8·6 | 19 5 22·7 | 22 59·6 | In Th. the two stars, 8·6 $19^h\ 5^m\ 22^s{\cdot}7$ $-22°\ 59'{\cdot}6$, 8·6 $5^m\ 23^s{\cdot}0$ $61'{\cdot}0$. } In S.D. and C.P.D. only (8·0) $19^h\ 5^m\ 23^s{\cdot}0$ $-22°.60'{\cdot}5$.<br>The two stars of Th. probably the same. |
| 243 | 9·0 | 15 3·8 | 39 45·6 | Certainly missing on plates in this position. Thome is 20′ in error, $\delta = 25'{\cdot}1$. |
| 244 | 9·0 | 21 43·4 | 24 0·4 | Missing in six sweeps. |
| 245 | 8·9 | 31 35·4 | 25 8·4 | One rejected observation −0 (10·4) at $31^m\ 37^s{\cdot}7$ $-25°\ 10'{\cdot}8$. Looked for on plate. In the position of our observation there is a very faint star. In Thome's position nothing. |
| 246 | 9·0 | 36 38·7 | 28 38·3 | One rejected observation −0 (10·4). In Thome's list of susp. var. Looked for on plates. Very faint star −0 (10·4) $36^m\ 40^s{\cdot}0$ $-28°.37'{\cdot}9$. The images on measuring and check plate show the normal difference in density. Thome's mags.: *8·5*, *9*, *8·7*, *9·5*. |
| 247 | 9·0 | 47 23·1 | 31 46·4 | Certainly missing. |
| 248 | 9·0 | 47 27·5 | 32 6·3 | Certainly missing. |
| 249 | 9·0 | 53 25·1 | 32 21·8 | One rejected observation −0 (10·4). Looked for on plates. Extremely faint and somewhat doubtful star on both measuring and check plate. |
| 250 | 9·0 | 54 39·6 | 31 29·3 | Extremely faint star on both measuring and check plate. |
| 251 | 8·8 | 55 50·2 | 31 58·9 | One rejected observation −0 (10·4). Looked for on plates. Doubtful traces on both measuring and check plate. |
| 252 | 8·7 | 56 56·3 | 31 48·9 | One rejected observation −0 (10·4). Looked for on plates. Extremely faint star on both measuring and check plate. |
| 253 | 8·3 | 20 0 4·6 | 31 5·7 | (Pointed out by Innes). According to private communication from Thome, *Cordoba Observations* have given:—<br>{ 1888 July 30 = 8·3.<br>1887 July 22 not visible.<br>Revision do.<br>1897 Aug. 21 not seen.<br>Var? Planet? |
| 254 | 9·0 | 9 0·4 | 29 25·3 | Extremely faint star on four plates. |
| 255 | 9·0 | 9 9·9 | 27 7·8 | Certainly missing on both measuring and check plate. |
| 256 | 9·0 | 11 9·0 | 31 3·4 | Certainly missing on both measuring and check plate. |
| 257 | 9·0 | 14 1·5 | 29 36·3 | One rejected observation −0 (10·0). Looked for on plates. Star (−0) contained on both measuring and check plate. |
| 258 | 9·0 | 21 49·1 | 30 27·2 | One rejected observation −0 (10·0). Looked for on plates. On check plate doubtful traces. On measuring plate there is a bubble in the glass just in the position of the star. |
| 259 | 9·0 | 23 30·4 | 33 24·9 | Extremely faint star on both measuring and check plate. |
| 260 | 9·0 | 24 19·5 | 32 43·6 | Doubtful traces on both measuring and check plate. |

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| 261 | 9·0 | 20 26 28·3 | 30 5·5 | On check plate very evident. Mag. = 9·6. On measuring plate certainly missing; therefore mag. < 10·0. Probably *variable*. |
| 262 | 8·7 | 54 54·0 | 27 34·8 | Certainly missing on both measuring and check plate. Star in Thome's list of susp. var. mags.: invisible, 9, 9·3, invisible (not in Chandler III.). Very probably *variable*. |
| 263 | 8·0 | 59 52·9 | 31 37·4 | Certainly missing on four plates. In Thome no "colour"; not in list of susp. var.; not in errata. |
| 264 | 9·0 | 21 8 58·3 | 38 52·3 | One rejected observation −0 (10·4). Also one observation (10·4) on rejected [plates. |
| 265 | 9·0 | 17 38·3 | 35 0·0 | Certainly missing on four plates. |
| 266 | 9·0 | 24 19·2 | 29 39·5 | One rejected observation −0 (10·0). |
| 267 | 9·0 | 26 42·1 | 30 26·5 | Doubtful traces on check plate. On measuring and third plate certainly missing. |
| 268 | 8·9 | 28 22·3 | 30 44·1 | Extremely faint star on three plates. |
| 269 | 8·9 | 43 58·0 | 31 19·8 | Star −0 (10·0) on three plates. |
| 270 | 9·0 | 49 45·9 | 30 38·6 | Doubtful traces on measuring and check plate. On third plate certainly missing. |
| 271 | 9·0 | 52 35·5 | 31 41·9 | Very doubtful traces on three plates. |
| 272 | 9·0 | 54 52·7 | 32 29·7 | One rejected observation −0 (10·0). Looked for on plates. Extremely faint star on both measuring and check plate. On third plate doubtful traces. |
| 273 | 8·9 | 57 21·5 | 33 26·6 | Extremely faint star on both measuring and check plate. On third plate very doubtful traces. |
| 274 | 9·0 | 57 37·0 | 38 33·7 | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on measuring and check plate. |
| 275 | 9·0 | 22 11 54·8 | 38 23·0 | Missing in *four* sweeps on *two* pairs of plates. Certainly missing on measuring and check plate. |
| 276 | 9·0 | 13 58·7 | 32 3·6 | Extremely faint star on both measuring and check plate. On three other plates certainly missing. |
| 277 | 9·0 | 23 6·4 | 26 2·4 | One rejected observation −0 (10·3). |
| 278 | 9·0 | 24 14·3 | 25 51·7 | Extremely faint star on both measuring and check plate. |
| 279 | 9·0 | 25 8·0 | 22 52·6 | Not in C.P.D. nor in S.D. |
| 280 | 9·0 | 26 35·2 | 31 20·0 | One rejected observation −0 (10·3). Looked for on plates. Faint star on both measuring and check plate. On three other plates certainly missing. |
| 281 | 9·0 | 28 38·3 | 32 17·0 | One rejected observation −0 (10·3). Looked for on plates. Very faint star on both measuring and check plate. On three other plates certainly missing. |
| 282 | 8·9 | 33 28·6 | 32 56·8 | Two observations −0 (10·3). Was rejected on account of a doubt about its stellar nature. Looked for on plates. On both measuring and check plate very faint star. On three other plates certainly missing. |
| 283 | 9·0 | 34 18·0 | 32 27·0 | * On check plate of region 22ʰ 24ᵐ doubtful traces. On four other plates of this region certainly missing. On measuring and check plate of region 22ʰ 48ᵐ certainly missing too. |
| 284 | 9·0 | 35 33·8 | 31 15·7 | * On four plates (of regions 22ʰ 24ᵐ and 22ʰ 48ᵐ) very faint star. On three other plates certainly missing. |
| 285 | 8·6 | 36 13·6 | 32 36·1 | * One rejected observation 0 (10·4). Looked for on plates. On three plates very faint star. |
| 286 | 9·0 | 40 15·4 | 31 54·4 | * On three plates extremely faint star. |
| 287 | 8·7 | 41 29·0 | 31 2·5 | * One rejected observation 0 (10·4). Looked for on plates. On three plates very faint star. |
| 288 | 9·0 | 41 59·7 | 32 43·5 | * One rejected observation +0 (10·2) Was rejected on account of doubt about its stellar nature. Looked for on plates. Extremely faint star on three plates. |
| 289 | 8·9 | 42 21·6 | 32 35·0 | * On measuring plate and on plate 1607 doubtful traces. On check plate certainly missing. |
| 290 | 9·0 | 42 50·3 | 32 22·5 | * Very faint star on three plates. |
| 291 | 9·0 | 43 8·4 | 31 23·6 | * One rejected observation 0 (10·4). Looked for on plates. Star (10·4) on three plates. |
| 292 | 9·0 | 44 18·7 | 32 12·0 | * Very faint star on three plates. |
| 293 | 9·0 | 44 53·6 | 31 46·7 | * One rejected observation 0 (10·4). Very faint star on three plates. |
| 294 | 9·0 | 47 52·4 | 32 16·5 | * Very faint star on three plates. |

* The check plate of the region −31½°, 22ʰ 48ᵐ is considerably fainter than measuring plate (*vide* Introd., p. (117)).

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| 295 | 8·9 | 22 53 45·8 | 32 33·0 | * Extremely faint star on three plates. |
| 296 | 9·0 | 54 5·1 | 32 47·0 | * Extremely faint star on three plates. |
| 297 | 8·7 | 54 49·9 | 29 59·2 | * One rejected observation −0 (10·7). Looked for on plates. On both measuring and check plate very faint star. |
| 298 | 9·0 | 54 53·7 | 32 37·0 | * Certainly missing on three plates. |
| 299 | 9·0 | 56 30·0 | 32 32·0 | * One rejected observation 0 (10·4). Looked for on plates. Very faint star on three plates. |
| 300 | 9·0 | 56 37·6 | 31 56·6 | * On measuring plate and plate 1607 extremely faint star. On check plate certainly missing. |
| 301 | 6·7 | 58 30·8 | 37 13·9 | Certainly missing on measuring and check plate. |
| 302 | 9·0 | 59 12·3 | 31 22·2 | One rejected observation −0 (11·4). Looked for on plates. On measuring and check plate extremely faint star. On plate No. 1614 certainly missing. |
| 303 | 9·0 | 23 3 15·2 | 25 47·4 | Certainly missing on three plates. |
| 304 | 8·7 | 3 27·6 | 33 29·7 | One rejected observation −0 (11·4). Extremely faint star on four plates. On plate No. 1873 certainly missing. |
| 305 | 9·0 | 3 28·5 | 26 9·4 | One rejected observation −0 (9·6). |
| 306 | 9·0 | 10 37·3 | 25 5·6 | One rejected observation −0 (9·6). |
| 307 | 8·9 | 17 53·8 | 26 3·9 | Very doubtful traces on three plates. |
| 308 | 9·0 | 47 18·9 | 28 15·1 | On measuring plate certainly missing. On two other plates very doubtful traces. |
| 309 | 9·0 | 54 16·3 | 31 56·2 | Very doubtful traces on measuring and check plate. On three other plates certainly missing. |

## III. *bis.*—LIST OF STARS, 9·2 MAG. OR BRIGHTER, CONTAINED IN C.P.D., AND MISSING IN THE FIRST TWO PARTS OF THOME'S CORDOBA DM.

| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 1 | 8·9 | 4 13 12·6 | 33 53·9 | Probably 10ˢ error in Thome and our star identical with Thome's (9·3) 13ᵐ 1ˢ·6 −33°.54′.5. |
| 2 | 9·2 | 42 52·6 | 29 0·2 | Perhaps 1° error in Thome and our star identical with Thome's (9·4) 42ᵐ 51ˢ·8 −28°.0′.0. |
| 3 | 9·0 | 45 39·2 | 28 37·2 | Probably 10′ error in Thome and our star identical with Thome's (9·3) 45ᵐ 40ˢ·4 −28°.46′.7. Looked up on plates. Three plates give 9·0 in perfect agreement. |
| 4 | 8·9 | 6 16 6·3 | 34 32·9 | Looked up on plates. Images normal. |
| 5 | 8·7 | 49 33·2 | 24 0·6 | The star is contained on six plates, which, reduced to a uniform scale, give the following magnitudes:—<br>Plate 2141 9·4 : 1889 February 27.<br>2146 9·4 : " " 28.<br>2157 8·6 " March 5.<br>2171 9·4 : " " 11.<br>2206 8·6 " " 26.<br>2228 9·9 : " April 3.<br>On the plates 2141, 2146, 2171, 2228, however, the star is very near the border of the plates; consequently the magnitudes are extremely uncertain. Still, however, variability seems very probable. |
| 6 | 8·9 | 7 4 46·4 | 32 43·6 | Looked up on plates. The star is contained on three plates. |
| 7 | 8·8 | 9 14·2 | 31 14·2 | Looked up on plates. The star is contained on three plates. |

* The check plate of the region −31½°, 22ʰ 48ᵐ is considerably fainter than measuring plate (*vide* Introd., p. (117)).



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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 8 | 9·0 | 14 5·4 | 24 39·8 | Looked up on plates. The star has mag. 9·0 on both plates. |
| 9 | 9·2 | 7 19 40·6 | 28 59·0 | On plates 31½°, $7^h$ $12^m$ mag. = 9·4 (reduced to system of plates 26½°, $7^h$ $30^m$). |
| 10 | 9·0 | 29 52·8 | 33 19·8 | Probably error of $10^s$ in Thome and our star identical with Thome's (9·5) $29^m$ $44^s·7$ −33°.19′·8. Looked up on plates. On *c.* and *m.* mag. 9·0. The star is also contained on *two* other, poorer, plates. |
| 11 | 9·2 | 41 34·1 | 26 31·9 | Thome has only the star (9·6) $41^m$ $36^s·5$ −26°.29′·5, which seems to be the n.f. one. |
| 12 | 9·5 | 41 35·6 | 29·5 | |
| 13 | 9·2 | 46 41·8 | 4[illegible] 50·8 | Looked up on plates. Images normal. |
| 14 | 9·2 | 52 31·0 | 33 40·6 | Error in Thome and our star identical with Thome's (10) $52^m$ $39^s·0$ −33°.40′·7? Looked up on plates. The star is really fainter than given in C.P.D. The error is owing to an accidental speck coinciding with the star on *m.* According to *c.* mag. = 9·6. See List of Errata. |
| 15 | 9·2 | 53 40·5 | 41 24·7 | Looked up on plates. Images normal. |
| 16 | 9·2 | 8 39 31·0 | 38 15·3 | In Thome only the star (10) $39^m$ $36^s·0$ −38°.16′·1. |
| 17 | 9·7 | 39 37·6 | 15·9 | |
| 18 | 8·7 | 9 39 16·3 | 23 26·7 | Also missing in Orm. Stone's DM. Star contained on three plates giving all mag. 8·75. Variable? |
| 19 | 9·0 | 10 35 42·2 | 41 44·8 | Looked up on plates. Images normal. |
| 20 | 8·9 | 11 40 5·4 | 35 14·8 | Also in Z.C. (9·5). |
| 21 | 9·1 | 12 36 32·0 | 33 0·0 | Is contained in Z.C. (mag. 9·0). |
| 22 | 9·0 | 13 53 35·5 | 36 40·4 | Looked up on plates. Images normal on three plates. |
| 23 | 8·8 | 55 50·2 | 40 15·3 | Looked up on plates. Images normal. |
| 24 | 9·1 | 14 12 14·2 | 36 48·6 | Looked up on *four* plates. Images normal. |
| 25 | 9·1 | 28 53·1 | 24 41·3 | Looked up on *two* plates. On both mag. = 9·0. |
| 26 | 8·7 | 15 18 7·1 | 37 42·8 | Looked up on plates. Images normal. |
| 27 | 9·1 | 46 30·8 | 24 52·1 | Thome has only the star (9·5) $46^m$ $30^s·8$ −24°.51′·7. |
| 28 | 9·2 | 46 35·8 | 24 52·1 | |
| 29 | 9·7 | 17 32 28·6 | 32 9·9 | In Cluster. Thome has only the star (9·8) $32^m$ $29^s·3$ −32°.8′·9. |
| 30 | 8·7 | 32 31·6 | 32 7·0G | |
| 31 | 9·2 | 29 17·6 | 37 41·2 | |
| 32 | 9·2 | 34 49·4 | 35 12·8 | |
| 33 | 9·2 | 34 50·4 | 35 7·4 | |
| 34 | 9·2 | 38 29·4 | 35 34·2 | |
| 35 | 9·2 | 39 23·5 | 35 9·2 | |
| 36 | 9·2 | 40 15·2 | 36 3·0 | |
| 37 | 9·2 | 41 10·8 | 36 28·6 | |
| 38 | 9·2 | 42 32·5 | 35 26·6 | |
| 39 | 8·8 | 43 25·5 | 35 29·3 | |
| 40 | 8·8 | 43 30·8 | 34 48·0 | |
| 41 | 9·2 | 44 19·3 | 36 15·2 | |
| 42 | 9·2 | 44 24·9 | 37 46·7 | |
| 43 | 9·2 | 44 47·8 | 34 57·2 | |
| 44 | 9·2 | 45 11·2 | 34 54·4 | |
| 45 | 9·2 | 45 17·2 | 34 47·2 | |
| 46 | 8·6 | 45 24·7 | 34 43·8 | Cluster 7 *Messier* (in Scorpius). All these stars are missing in Thome; a few on account of their being so near to other pretty bright stars. |
| 47 | 9·1 | 45 24·7 | 34 47·0 | |
| 48 | 9·2 | 45 40·2 | 35 25·5 | |
| 49 | 9·2 | 45 43·7 | 34 40·3 | |
| 50 | 9·2 | 45 43·7 | 34 42·2 | |
| 51 | 9·2 | 45 49·7 | 34 45·4 | |
| 52 | 8·8 | 45 53·2 | 34 49·0 | |
| 53 | 9·2 | 46 17·7 | 34 32·0 | |
| 54 | 9·1 | 46 22·2 | 34 36·8 | |
| 55 | 9·2 | 47 3·7 | 34 8·2 | |
| 56 | 9·2 | 47 7·7 | 34 6·2 | |
| 57 | 9·2 | 47 23·8 | 36 0·1 | |
| 58 | 9·2 | 47 40·7 | 35 35·2 | |
| 59 | 9·2 | 48 10·5 | 36 3·0 | |
| 60 | 9·2 | 48 35·7 | 35 14·7 | |
| 61 | 9·2 | 49 0·9 | 37 42·0 | |
| 62 | 9·2 | 51 39·5 | 36 53·9 | |
| 63 | 9·2 | 51 39·7 | 35 16·4 | |

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| No. | Mag. | α 1875. | δ 1875. | Remarks. |
|---|---|---|---|---|
| | | h m s | ° ′ | |
| 64 | 9·2 | 17 51 45·7 | 37 3·5 | Cluster 7 *Messier* (in Scorpius). All these stars are missing in Thome; a few on account of their being so near to other pretty bright stars. |
| 65 | 9·2 | 51 55·2 | 37 12·6 | |
| 66 | 8·6 | 51 58·7 | 37 41·3 | |
| 67 | 9·2 | 52 0·7 | 37 14·2 | |
| 68 | 8·8 | 57 57·6 | 27 49·6 | Thome has only the star (9·8) $57^m$ $58^s·2$ $-27°.51'·5$, which seems to be the star of Z.C. |
| 69 | 9·9 | 57 57·6 | 27 50·4 | |
| 70 | 9·5 | 57 58·1 | 27 52·0 Z.C.(10·0) | |
| 71 | 9·2 | 18 29 19·1 | 34 28·5 | Thome has a star, 9·9 at $29^m$ $13^s·5$ $-34°.29'·9$. Position of C.P.D. certainly correct. Images normal on three plates. |
| 72 | 9·2 | 19 8 6·3 | 28 6·1 | Looked up on plates. Both on *m.* and *c.* mag. 9·2. |
| 73 | 9·1 | 54 20·0 | −33 21·1 | Probably $10^s$ error in Thome and our star identical with Thome's (9·4) $54^m$ $9^s·4$ $-33°.21'·2$. Looked up on plates. Both on *m.* and *c.* the mag. is 9·1. |
| 74 | 9·1 | 20 8 43·0 | 23 51·9 | The mags. of C.P.D. on plates 21½°, $20^h$ $20^m$, and for the stars of which the declination exceeds 23°.50′ of southern declination, are slightly uncertain, one of the plates being here evidently somewhat poor. For this reason the Zone −23°.50′ to −24°.0′, was measured also on the plates −26½°, $20^h$ $15^m$. On this plate, however, our star was found to be even rather somewhat brighter (mag. 9·0). The star is also missing in Orm. Stone's DM. |

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# ERRATA.

The following list of errata, together with those of vol. i. p. (123) and vol. ii. p. xxxi, contain all the errors of the catalogue known up to the present date (July 1899). The same precautions as were described in vol. i. p. (123) were taken for vols. ii. and iii. against errors of reductions, copying, and printing.

That the list of errata is such a long one is again due in part to the frequent dropping out of the more unusual types, but by far the greater part to the corrigenda lately published for the catalogues to which references are given in the C.P.D., especially to the numerous corrigenda published by Thome, in the *Astronomische Nachrichten* and elsewhere, for the *Cordoba Catalogues*. In order to facilitate reference to these corrected positions, the source where the correction is to be found has been indicated.

The letters C.O. and A.N. stand respectively for *Cordoba Observations* and *Astronomische Nachrichten*.

## VOL. I. [See also lists, vol. i. p. (123) and vol. ii. p. xxxi.]

### *Introduction.*

PAGE

(49) Heading of Table 22: The words Phot. Mag. must stand exclusively over the first column. Further, for U.S. read U.A.

(71) Add: No. $34^b$ $4^h$ $18^m$ $33^s$ $-26°.13'·9$ Z.C. 601 9½ Marked with ? in Z.C.

(72) No. 46 to be omitted from list of missing stars. The positions of Z.C. in error both in R.A. and decl., and star = Z.C. $6^h$, 2355. See C.O., XII. p. 347.

(73) No. 59 to be omitted from list. The suggested identity may be considered certain. See C.O., XII. p. 347.

(73) No. 70 to be omitted from list. The suggested correction of 4′ in decl. certain. See C.O., XII. p. 347.

(73) No. 55. According to Thome, star does not exist. See A.N., No. 3539.

(74) No. 76 to be omitted from list. R.A. of Z.C. in error and star identical with Z.C. $10^h$, 1987. See C.O., XVII. p. 540.

(75) No. 87 to be omitted from list. The suggested identity with Z.C. $11^h$, 4088 certain. See C.O., X. p. 263.

(76) No. 111 may be omitted from list. Z.C. in error in R.A. and star = Z.C. $14^h$, 2811. See C.O., XVII. p. 540.

(77) No. 124. According to Thome, star variable. See C.O., XVII. p. 541.

(79) No. 152. Thome (C.O., XVII. p. 541) assumes an error in R.A. in Z.C., in order to make the position agree with that of a star of his DM. According to C.P.D., however, this identification implies another correction of 1′ in decl.

(80) No. 183 may be omitted from list. Decl. of Z.C. to be corrected to $58'.7''·6$ (C.O., XVII. p. 541). In this position there is a star (9·0) in C.P.D.

(81) No. 189 to be omitted from list. The position is that of Vesta (decl. being corrected to 37′). See C.O., XVII. p. 541.

(82) No. 207 to be omitted from list. Error in R.A. in Z.C. and star = Z.C. $21^h$, 1628. See C.O., XVII. p. 541.

(94) Line 14 from the bottom, remark (error of 1′ in decl.) to be omitted.

### *Catalogue.*

| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 2 | 31 | Ref. | Cl | Cbl |
| 43 | 432 | ,, | Cb—l | CKb—l |
| 44 | ... | Mag. | ... | Between the Nos. 793 and 794 put ▬ |
| 59 | 4281 | ,, | 9·8 | 9·0 |
| 109 | 7655 | Ref. | MCa | MCam |
| 114 | 507 | ,, | 7·5 Ga | 9·5 Ga (A.N., No. 3539) |
| 151 | 672 | ,, | 9·5 Ga | 7·5 Ga (C.O., X. p. 263) |
| 164 | 3936 | ,, | 9·5 Ga | 7·5 Ga (C.O., XIII. p. 607) |
| 192 | 1903 | ,, | 9·0 G≡ | 8·8 G≡ (C.O., XVII. p. 540) |
| 193 | 2074 | Mag. | 7·8 | 9·8 |
| 193 | 2168 | Ref. | G | ... |
| 194 | 2472 | Ref. | 8·5 | ... |
| 212 | 6613 | ,, | ... | 10·0 (C.O., XVII. p. 541) |
| 226 | 2404 | ,, | ... | 8·5 (C.O., XI. p. 327) |
| 231 | ... | Top | 25° | —25° |
| 250 | 521 | Ref. | l | ... |
| 266 | 4351 | ,, | 9·0— | 9·2— (C.O., XVII. p. 540) |
| 281 | 341 | ,, | ... | p |
| 298 | 4313 | ,, | 9·5 GSat | 7·5 GSat (C.O., X. p. 263) |
| 307 | 6437 | ,, | 7·0 G— | 9·0 G— (C.O., XI. p. 328) |
| 307 | ... | Mag. | ... | Between the Nos. 6486 and 6487 put ▬. |
| 310 | 7123 | Ref. | 7·0 GSμβ | 4·0 GSμβ (C.O., X. p. 232) |

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| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 324 | 2858 | Ref. | ... | 10·0 (C.O., X. p. 263) |
| 328 | 3809 | ,, | 9·5 G | G (A.N., No. 2659) |
| 343 | 7557 | ,, | 8·5 Gaml | 7·5 Gaml (C.O., XVII. p. 541) |
| 367 | 5273 | ,, | 8·5 Ga | 8·5 Gam |
| 368 | 5615 | ,, | ... | 9·5 (C.O., XVII. p. 541) |
| 388 | 3476 | ,, | 8·8 Ga | 8·8 G |
| 388 | 3478 | ,, | 8·0 G | 8·0 Ga |
| 415 | 2820 | ,, | *8·1* G— | 8·8 G—(C.O., XII. p. 347) |
| 443 | 2535 | ,, | ... | 9·5 (C.O., XII. p. 347) |
| 453 | 5041 | ,, | ... | 9·0 |
| 469 | 1877 | Mag. | 9·2 | 9·6 |
| 477 | 3867 | Ref. | ... | 9·0 |
| 485 | 5830 | ,, | ... | 9·0 |
| 518 | 7297 | ,, | 7·5 *G* | 7·5 *G*Wpπ |
| ,, | 7299 | ,, | 8·0 *G*Wpπ | 8·0 *G* |
| 561 | 7847 | ,, | *6·G* | 7·5 (C.O., XVII. p. 541) |
| 595 | 6591 | ,, | 8·0 | 8·2 (C.O., XVII. p. 540) |
| 597 | 7050 | ,, | 8·2 G— | 8·2 G—p (p 1° in error) |
| 618 | 1965 | ,, | 8·5 | ... |
| ,, | 1967 | ,, | ... | 8·5 |
| 635 | 6001 | ,, | ... | 9·5 (C.O., X. p. 263) |
| 641 | 7359 | ,, | ... | 8·5 (A.N., No. 3539) |

## VOL. II.

### *Introduction.*

| PAGE | NO. | |
|---|---|---|
| viii. | 220 | To be omitted from list. Suggested correction of +1′ in R.A. right. See A.N., No. 3539. Star already referred to in its proper place in C.P.D. |
| viii. | 223 | To be omitted from list. Suggested correction of +20′ in decl. right. See C.O., XV. p. 333. |
| viii. | 224 | Original observations for Z.C.; decl. = 29′. See A.N., No. 3539. In this position also not found by Thome, and not contained in C.P.D. |
| ix. | 226 | To be omitted from list. Suggested correction of +6′ in decl. right. See A.N., No. 3539. |
| ix. | 228 | To be omitted from list. Decl. 5° in error and star = C.P.D. −42°, 1066. See C.O., XV. p. 333. |
| ix. | 233 | To be omitted from list. Decl. 1° in error and star = C.P.D. −40°, 1783. See C.O., XVII. p. 540. |
| ix. | 236 | To be omitted from list. Error in Z.C. The two stars are the same. See C.O., XV. p. 332. |
| x. | 240 | To be omitted from list. Error of 2′ in Z.C. and star = C.P.D. −51°, 3019. See A.N., No. 3539. |
| x. | 243 | To be omitted from list. Error of 1° in Z.C. and star = C.P.D. −50°, 3936. See A.N., No. 3539. |
| x. | 245 | To be omitted from list. Error in Z.C. The two stars are the same. See C.O., XVII. p. 540. |
| x. | 248 | To be omitted from list. Suggested error of 4′ in decl. right. See A.N., No. 3539. |
| xi. | 252 | Original decl. of Z.C. 48° instead of 49°. See A.N., No. 3539. In this position also not found by Thome, and not contained in C.P.D. |
| xi. | 254 | Original decl. of Z.C. 49′ instead of 56′. See A.N., No. 3539. In this position also not found by Thome, and certainly missing on plates. |
| xi. | 264 | Original R.A. of Z.C. $20^s{\cdot}10$. In this position star not found by Thome, and missing in C.P.D. |
| xii. | 267 | To be omitted from list. Error in R.A. in Z.C. and star = Z.C. $16^h$, 380. See C.O., XV. p. 332. |
| xii. | 272 | To be omitted from list. Correction of 10′ in decl. in Z.C. and star = C.P.D. −45°, 8041. See A.N., No. 3539. |
| xii. | 279 | To be omitted from list. Error in R.A. in Z.C. and star = C.P.D. −44°, 8124. See A.N., No. 3539. |
| xii. | 281 | Original decl. of Z.C. 12′ instead of 18′. In this position also not found by Thome, and not contained in C.P.D. |
| xiii. | 288 | To be omitted from list. 1° in error in decl. and star = C.P.D. −43°, 8103. See A.N., No. 3539. |
| xiii. | 289 | To be omitted from list. 1° in error in decl. and star = C.P.D. −37°, 7359. See A.N., No. 3539. |
| xiii. | 296 | To be omitted from list. Error in R.A. in Z.C. and star = Z.C. $18^h$, 2095. See C.O., XV. p. 332. |
| xiii. | 297 | To be omitted from list. Error in G and star = G 25626. See C.O., XV. p. 333. |
| xiv. | 300 | To be omitted from list. Error of 10° in G and star = C.P.D. −58°, 7730. See A.N., No. 3539. |
| xiv. | 301 | To be omitted from list. Error of 4° in G and star = C.P.D. −48°, 10406. See A.N., No. 3539. |
| xiv. | 302 | To be omitted from list. Error in R.A. of Z.C. and star = Z.C. $20^h$, 1465. See C.O., XV. p. 332. |
| xiv. | 304 | To be omitted from list. Error of 20′ in decl. of Z.C. and star = Z.C. $21^h$, 214. See A.N., No. 3539. |
| xiv. | 306 | To be omitted from list. Error in R.A. of Z.C. and star = C.P.D. −46°, 10399. See A.N., No. 3539. |
| xiv. | 307 | To be omitted from list. Error of 20′ in decl. of Z.C. and star = C.P.D. −51°, 11916. See A.N., No. 3539. |

### *Catalogue.*

| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 3 | 301 | Ref. | 7·2 GS | 7·2 GSt |
| 16 | 3375 | ,, | *G* | G |
| 16 | 3474 | ,, | *7·6* G— | 8·2 G—(C.O., XII. p. 347) |
| 19 | 4144 | ,, | 8·0 | 8·0— |
| 24 | 5303 | ,, | 9·0 | 9·0— |
| 26 | 5755 | ,, | 9·5 | ... |
| 31 | 6869 | ,, | 8·5 | 8·5— |
| 31 | 6877 | ,, | ... | — |
| 35 | 7830 | Ref. | 7·5 G | 9·5 G (C.O., XIII. p. 607) |
| 36 | 8222 | ,, | 8·5 G | 9·0 G (A.N., No. 3539) |
| 37 | 8396 | ,, | 8·0 GS— | 8·0 GS— |
| 49 | 2351 | ,, | 8·0 G— | 8·0 G |
| 53 | 3474 | ,, | 8·2 G | 8·2 G— |
| 54 | 3601 | ,, | 8·5 | 8·5— |
| 55 | 3727 | ,, | ... | — |
| 55 | 3805 | ,, | ... | — |

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| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 55 | 3885 | Ref. | ... | — |
| 56 | 4073 | ,, | 9·5= | 9·5≡ |
| 57 | 4387 | Mag. | 10·7 | 10·4 |
| 60 | 4966 | Ref. | ... | — |
| 61 | 5368 | ,, | 9·5 | 9·5— |
| 64 | 5898 | ,, | 8·0 G | 8·0 G— |
| 64 | 5955 | ,, | 7·0 GSg | 7·0 GS—g |
| 69 | 7296 | ,, | GS | GS= |
| 77 | 9001 | ,, | 8·5 | 8·5— |
| 78 | 9252 | ,, | 8·0 GW | 8·0 GW— |
| 86 | 1783 | ,, | ... | 9·5 (C.O., XVII. p. 540) |
| 107 | 6636 | ,, | 6·5 GSπ | 6·5 GStπ |
| 113 | 8256 | ,, | 8·2 GS | 8·2 GS— |
| 135 | 3407 | R.A. | 0·0 | 6 0·0 |
| 162 | 9727 | Ref. | 8·0 | ... (C.O., XVII. p. 541) |
| 165 | 386 | ,, | 9·0 | 7·0 (A.N., No. 3539) |
| 167 | 1066 | ,, | ... | G (C.O., XV. p. 333) |
| 168 | 1183 | ,, | 7·5 GS | 7·5 GSt |
| 207 | 657 | ,, | 7·5 GS | 7·5 GSp (See end of Cat. p) |
| 210 | 1489 | ,, | 9·5 | 7·5 (A.N., No. 3539) |
| 220 | 3836 | ,, | GS | GSt |
| 223 | 4504 | ,, | 9·0 GSg | 7·5 GSg (C.O., XV. p. 332) |
| 224 | 4806 | ,, | ... | According to C.O., XV. p. 336, probably G to be omitted here, and to be placed against C.P.D.—43°, 4810. |
| 235 | 7374 | ,, | 7·0 GS | 7·0 GSt |
| 238 | 8103 | ,, | ... | G (A.N., No. 3539) |
| 238 | 8133 | ,, | ... | Decl. badly printed. Read 48·4. |
| 243 | ... | Top | 9240–9300 | 9241–9300 |
| 244 | 9677 | Ref. | 8·2 GS | 7·2 GS (C.O., XV. p. 332) |
| 249 | 612 | ,, | ... | 8·0 (P.M. Star) |
| 250 | 910 | ,, | 9·2 | 9·5 |
| 270 | 5827 | ,, | 7·8 Gt | 7·8 GSt |
| 279 | 7930 | ,, | 7·5 G | 9·5 G (A.N., No. 3539) |
| 280 | 8124 | ,, | ... | 9·0 (A.N., No. 3539) |
| 295 | 1258 | ,, | 9·5 | 7·5 (C.O., XV. p. 332) |
| 307 | 4086 | ,, | 5·8 Stπ | 5·8 GStπ |
| 322 | ... | 25 prec. | 44·7 | 1 44·7 |
| 323 | 7827 | Ref. | 9·5 | 9·4 (C.O., XV. p. 332) |

| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 324 | 8041 | Ref. | ... | 9·5 (A.N., No. 3539) |
| 325 | 8346 | ,, | 8·0 | 8·0 G. In some copies right. |
| 337 | 450 | ,, | 9·5 | 9·5 G |
| 339 | 1059 | ,, | 9·0 G | 9·0 |
| 339 | 1073 | ,, | 8·3 | 8·3 G |
| 342 | 1597 | ,, | 9·0 | 7·0 (A.N., No. 3539) |
| 347 | 2852 | ,, | 8·0 G | 8·0 Gg |
| 349 | 3474 | ,, | 6·3 GS | 6·3 GSt. In some copies right. |
| 360 | 5958 | ,, | 8·5 G | 8·0 G (C.O., XVII. p. 540) |
| 361 | 6338 | ,, | 8·5 | ... (C.O., XV. p. 332) |
| 375 | 9710 | ,, | 9·5 GS | 7·5 GS (C.O., XV. p. 332) |
| 378 | 10399 | ,, | ... | 9·5 (A.N., No. 3539) |
| 380 | ... | ... | ... | In heading read 81–120 instead of 80–120. |
| 406 | 6250 | Ref. | 9·0 | 9·2 (A.N., No. 3539) |
| 434 | 2564 | ,, | 8·9 S | 8·9 |
| 434 | 2580 | ,, | 8·2 Gt | 8·2 GSt |
| 439 | 3773 | ,, | ... | : |
| 466 | 10406 | ,, | ... | G (A.N., No. 3539) |
| 473 | 828 | ,, | *8·6* | 9·2 (C.O., XV. p. 332) |
| 480 | 2356 | ,, | *8·7* | 9·5 (A.N., No. 3256) |
| 482 | 2958 | ,, | 9·5 GSt | 7·5 GSt (C.O., XV. p. 332) |
| 483 | 3140 | ,, | *8·0* | 8·7 (A.N., No. 3256) |
| 517 | 11334 | ,, | 8·8 | 7·8 (A.N., No. 3539) |
| 522 | 523 | ,, | ... | G (C.O., XV. p. 333) |
| 536 | 3936 | ,, | ... | 9·0 (A.N., No. 3539) |
| 548 | 6654 | Mag. | 9·6 | 6·7 |
| 568 | 11545 | Decl. | 34·5 | 44·5 |
| 577 | 1809 | Ref. | 9·0 | 8·8 (A.N., No. 3256) |
| 582 | 3019 | ,, | ... | 9·5 (A.N., No. 3539) |
| 591 | 5139 | ,, | 7·0 | 9·0 (C.O., XV. p. 332) |
| 616 | ... | ... | ... | In heading put 10961–11020 instead of 11961–11020. |
| 618 | 11625 | Ref. | 9·0 | 9·0 G |
| 619 | 11916 | ,, | ... | 8·5 (A.N., No. 3539) |
| 624 | 708 | ,, | ... | 9·0 (A.N., No. 3539) |
| 632 | 2645 | ,, | 8·0 | 8·0 p |
| 634 | 3270 | Decl. | ·09 | 0·9 |

Add the star 6265b (9·6) $15^h\ 36^m\ 47^s.6$ —38°.1′·0, which was accidentally omitted.

## VOL. III.

| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 39 | 8923 | *a* | $55^m\ 38^s.5$ | $55^m\ 39^s.5$ |
| 46 | 10467 | Ref. | 7·0 GSr | 7·0 GScr |
| 50 | 734 | ,, | ... | 9·0 |
| 53 | 1443 | ,, | 8·5 t | 8·5 tp |
| 71 | 5725 | ,, | 7·0 GSt | 7·0 GStp |
| 72 | 6033 | ,, | ... | 9·5 |
| 72 | ... | Mag. | ... | = between Nos. 6160 and 6161 to be struck out. |
| 82 | 8521 | Ref. | ... | ? |
| 86 | 9330 | ,, | 8·5 | 8·5 G |
| 87 | 9765 | ,, | 7·5 GS | 7·5 GSp |
| 96 | 1185 | ,, | 7·0 GS | 7·0 GSc |
| 115 | ... | 25 prec. | ... | The number 14 of $14^h\ 10^m$ to be placed a line higher up. |
| 133 | 10112 | Ref. | 7·8 GSt | 7·8 GStp |

| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 136 | 615 | Ref. | ... | 9·0 |
| 136 | 620 | Mag. | 9·2 | 9·6 |
| 140 | 1429 | ,, | 9·2 | 8·6 |
| 144 | 2382 | Ref. | *7·7* | 8·5 (C.O., XVII. p. 540) |
| 166 | 7719 | ,, | ... | p |
| 169 | 8348 | ,, | 7·8 GSc | 7·8 GScr |
| 174 | 9743 | ,, | 6·5 GSt | 6·5 GStr |
| 179 | 659 | ,, | *6·6* Gct | *6·6* GSct |
| 186 | 2264 | ,, | ... | : |
| 199 | 5423 | ,, | ... | : |
| 224 | 692 | ,, | 77·0 GSct | 7·0 GSct |
| 227 | 1607 | ,, | 79·5 | 9·5 |
| 248 | 6443 | ,, | 8·0 G | 8·0 G |
| 253 | 7730 | ,, | ... | G (A.N., No. 3539) |
| 258 | 705 | ,, | ... | ? |

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| Page. | Star. | Col. | For. | Put. |
|---|---|---|---|---|
| 258 | 770 | Ref. | 8·2 GS | 8·2 GSt |
| 259 | 921 | ,, | 7·5 GS | 7·5 GSt |
| 259 | 944 | ,, | 6·0 GS | 6·0 GSt |
| 262 | 1774 | ,, | ... | : |
| 263 | 1922 | ,, | 8·5 GSt | 8·5 GStr |
| 274 | ... | Top | 95° | 59° |
| 289 | ... | ... | ... | Countings in error. In every column there are, in reality, 46 stars instead of 45 as implied by the numbers at the top of the columns. In order that the rest of the numbering may be retained unaltered, the stars in the first line may be denoted by $1^a$, $46^a$, $91^a$, $136^a$. |
| 303 | ... | Top | 2421–3480 | 3421–3480 |
| 311 | 5408 | Ref. | ... | ? |
| 317 | ... | Top | $16^h$–$17^h$ | $17^h$ |
| 317 | 6833 | Ref. | 8·0 Gg | 8·0 Ggp |
| 320 | 7583 | ,, | 7·8 | 7·8 G |
| 332 | 2560 | Mag. | 9·8 | 8·2 |
| 353 | 619 | Ref. | 7· Gg | 7·5 Gg |
| 354 | 903 | ,, | 7·5 Gg | 7·8 Gg (A.N., No. 2688) |
| 360 | 2358 | ,, | : | ... |
| 360 | 2363 | Mag. | 9·7‡ | 9·7† |
| 364 | 3329 | Ref. | 8· | 8·0 |
| 373 | 5422 | ,, | 7·0 G | 7·0 GS |
| 379 | 391 | ,, | 8·5 G | 8·3 G |
| 385 | 1969 | ,, | ... | g |
| 386 | 2047 | ,, | ... | G |
| 386 | 2164 | ,, | ... | G |
| 386 | 2168 | ,, | ... | 9·0 |
| 387 | 2270 | ,, | 7·2 GS | 7·2 GS |
| 400 | 514 | ,, | — | g |
| 401 | 563 | ,, | g | g : |
| 401 | 616 | ,, | 9· g | 9·5 g |
| 402 | 987 | R.A. | 0· 10·8 | 0 0·8. The sign – must be lowered half a line. |
| 420 | 672 | Ref. | ... | g |
| 422 | 1305 | ,, | 8·5 GSg | 8·5 GSg |
| 423 | 1368 | ,, | ... | Gg |
| 434 | 3978 | ,, | ... | g |
| 434 | 4113 | R.A. | $57^m$ $31^s$·5 | $5^m$ $31^s$·5. |
| 437 | 509 | Ref. | 9·0 Gg | 9·0 gg |
| 448 | ... | 25 prec. | ... | In the table for 25 prec. the argument must be read $16^h$ $50^m$, $17^h$ $0^m$, etc. |
| 457, 458 | ... | ... | ... | In the headings, instead of 1520, 1521, 1580, 1581, read 1500, 1501, 1560, 1561. |
| 460 | 2131 | Ref. | 9·0 | 9·0 g |
| 462 | 2715 | Mag. | 19·0 | 10·0 |
| 466 | 3620 | Star | does not | exist. |
| 469 | ... | 25 prec. δ last line | 1· | 1·1 |
| 481 | 3126 | Ref. | 8·5 G | 8·5 g |
| 484 | 121 | ,, | 7·5 GSg | 7·5 GSg |
| 485 | 336 | ,, | 9·0 GSg | 9·0 GSg |
| 485 | 340 | ,, | 8·5 GSg | 8·5 GSg |
| 485 | 534 | ,, | 8·0 GSgg | 8·0 GSgg |
| 486 | 607 | ,, | 6·0 GSg | 6·0 GSg |
| 490 | 1741 | ,, | 8·0 Gg | 8·0 Ggp |
| 491 | 1829 | ,, | 8·7 Gg | 8·7 Gg |
| 496 | 3126 | ,, | G | Gg |
| 515 | 37 | R.A. | | Strike out $1^h$ and put it before preceding star. |
| 515 | 58 | Ref. | 8·5 GSg | 8·5 GSgp |
| 521 | 1016 | Decl. | zt·7 | 24·7 |
| 522 | 1193 | Ref. | Gg | Ggp |
| 542 | 2076 | Star | does not | exist. |
| 556 | 1696 | R.A. | $55^m$ $42^s$·0 | $54^m$ $42^s$·0. |
| 567 | | 25 prec. δ last line. | −5· | −5·9 |
| 577 | 843 | Ref. | ... | g |
| 587 | 781 | R.A. | ... | Badly printed. Read $13^h$ $35^m$ $31^s$·5. |
| 587 | 799 | Ref. | 6·0 GSg | 6·0 GSgr |
| 592 | ... | Top(−77°)$0^h$–$1^h$ | | $1^h$ |
| 599 | 1168 | Ref. | 8·0 GSg | 8·0 GSg |
| 629 | 661 | ,, | ... | g |
| 635 | 770 | ,, | GSg | GSg |
| 640 | 573 | ,, | GSg | GSg |
| 640 | 593 | ,, | GSg | GSg |
| 953 | 194 | Mag. | 10·2 | 10·2† |

Add the star −78° $848^b$ (9·7) $14^h$ $2^m$ $2^s$·5 −78 .51′·7 g.

## SUPPLEMENTARY CORRECTIONS.

### VOL. I.

Introduction (72) add : No. $48^b$ $7^h$ $6^m$ $1^s$ 36° 52′·3 Z.C. 408 $10^m$ $10^m$ (Col. Th.).
Catalogue, page 573. No. 1157, Column Ref. *dele* 10·0.

### VOL. III.

| Page | No. in *First* Column. | No. in *Fourth* Column. | Column. | |
|---|---|---|---|---|
| 43 | 428 | 2605 | T | read 34 instead of 37 |
| 44 | 459 | 501 | t | insert −2 30·0 |
| | | | T | ,, 60 |
| ,, | 460 | 498 | t | ,, −0 51·0 |
| | | | T | ,, 60 |
| 46 | 489 | 465 | t | ,, 1 10·0 |
| ,, | 498 | 497 | t | ,, −1 15·0 |

| Page | No. in *First* Column. | No. in *Fourth* Column. | Column |
|---|---|---|---|
| 47 | 526 | 3060 | Date add 7 |
| | | | t insert −2 38·0 |
| | | | T ,, 40 |
| 48 | 527 | 481 | Date add 10 |
| 50 | 564 | 242 | ,, ,, 8 |
| 52 | 600 | 184 | ,, ,, 9 |
| ,, | 603 | 248 | ,, ,, 12 |
| ,, | 604 | 275 | ,, ,, 5 |

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# THE CAPE PHOTOGRAPHIC DURCHMUSTERUNG

FOR THE EQUINOX

1875,

BY

DAVID GILL, C.B., LL.D., F.R.S., ETC.,
HER MAJESTY'S ASTRONOMER AT THE CAPE,

AND

J. C. KAPTEYN, Sc.D., ETC.,
PROFESSOR OF ASTRONOMY AT GRONINGEN.

---

## PART III.

## ZONES —53° TO —89°.

S.O.—Wt. 21462/376.—N.—600—2/98.

A

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# CAPE PHOTOGRAPHIC DURCHMUSTERUNG.

EQUINOX 1875.

## ZONE — 53°.

25 prec.

| h m | α + s | δ + ′ |
|---|---|---|
| 0 0 | 77 | 8·4 |
| 10 | 75 | 8·3 |
| 20 | 73 | 8·3 |
| 30 | 71 | 8·3 |

### 1—30.

| mag. | 0h. m s | −53° ′ | |
|---|---|---|---|
| 11·0 | 0 0·8 | 37·0 | |
| 9·0 | 5·8 | 37·8 | 8·5 G |
| 9·4 | 13·7 | 2·5 | |
| 10·6 | 28·3 | 41·2 | |
| 9·6 | 47·3 | 31·1 | |
| 11·0 | 48·3 | 51·6 | |
| 10·0 | 1 1·8 | 13·2 | |
| 10·2 | 2 23·8 | 28·6 | |
| 8·0 | 25·7 | 1·4 | |
| 11·0 | 41·3 | 11·4 | |
| 9·4 | 42·3 | 43·8 | |
| 10·6 | 59·8 | 15·7 | |
| 11·0 | 3 13·3 | 58·5 | |
| 10·0 | 29·8 | 40·6 | |
| 11·0 | 48·8 | 49·9 | |
| 11·0 | 56·8 | 3·0 | |
| 9·8 | 4 2·3 | 55·9 | |
| 10·2 | 6·3 | 9·6 | |
| 10·2 | 6·8 | 3·1 | |
| 11·0 | 21·8 | 2·0 | |
| 10·4 | 27·8 | 21·9 | |
| 9·6 | 5 7·3 | 48·8 | |
| 10·0 | 34·3 | 3·0 | |
| 11·0 | 6 6·3 | 51·6 | |
| 11·0 | 9·3 | 18·4 | |
| 9·4 | 16·2 | 1·7 | 8·5 |
| 11·0 | 19·8 | 11·7 | |
| 9·6 | 29·8 | 48·2 | |
| 11·0 | 58·3 | 40·4 | |
| 8·6 | 7 34·8 | 16·0 | 8·5 |

### 31—60.

| mag. | 0h. m s | −53° ′ | |
|---|---|---|---|
| 8·6 | 7 39·8 | 14·2 | 8·5 |
| 10·4 | 8 7·3 | 50·6 | |
| 10·0 | 20·8 | 27·1 | |
| 10·4 | 29·8 | 29·1 | |
| 10·4 | 49·8 | 48·1 | |
| 11·0 | 9 8·7 | 57·5 | |
| 10·4 | 24·8 | 38·3 | |
| 10·6 | 28·1 | 10·1 | |
| 10·4 | 29·6 | 49·1 | |
| 9·4 | 48·6 | 54·3 | |
| 11·0 | 55·6 | 44·7 | |
| 6·9 | 10 39·1 | 21·1 | 7·5 GS |
| 9·4 | 44·6 | 24·3 | |
| 10·4 | 55·1 | 8·6 | |
| 11·0 | 11 23·1 | 43·5 | |
| 9·8 | 26·6 | 29·9 | |
| 11·0 | 35·6 | 37·8 | |
| 8·8 | 59·6 | 39·3 | 8·5 |
| 11·0 | 12 3·1 | 37·3 | |
| 9·6 | 9·1 | 28·3 | |
| 9·4 | 17·6 | 13·7 | |
| 11·0 | 18·1 | 55·5 | |
| 10·4 | 23·1 | 9·0 | |
| 10·0 | 30·1 | 11·9 | |
| 11·0 | 42·1 | 20·3 | |
| 10·6 | 43·6 | 0·5 | |
| 10·4 | 52·1 | 54·1 | |
| 11·0 | 13 3·1 | 4·3 | |
| 9·8 | 30·1 | 35·3 | |
| 9·6 | 44·1 | 9·0 | |

### 61—90.

| mag. | 0h. m s | −53° ′ | |
|---|---|---|---|
| 10·4 | 13 56·6 | 41·9 | |
| 10·4 | 14 9·6 | 49·1 | |
| 10·2 | 19·6 | 22·7 | |
| 11·0 | 22·1 | 21·3 | |
| 11·0 | 48·6 | 14·9 | |
| 11·0 | 49·6 | 36·2 | |
| 10·2 | 53·1 | 28·9 | |
| 9·8 | 54·6 | 42·0 | |
| 10·4 | 57·6 | 22·5 | |
| 10·2 | 15 1·6 | 42·9 | |
| 11·0 | 10·6 | 6·3 | |
| 9·8 | 27·6 | 12·9 | |
| 10·4 | 27·7 | 12·7 | |
| 10·0 | 47·1 | 53·5 | |
| 9·6 | 16 18·2 | 9·2 | |
| 8·2 | 44·2 | 55·1 | 8·0 |
| 9·0 | 50·2 | 12·3 | |
| 9·7 | 19 10·2 | 9·0 | |
| 9·6 | 20·2 | 28·7 | |
| 9·7 | 34·1 | 26·2 | |
| 10·2 | 50·7 | 35·5 | |
| 9·4 | 59·7 | 54·6 | |
| 8·6 | 20 8·2 | 24·5 | |
| 10·2 | 37·2 | 41·0 | |
| 10·2 | 21 30·7 | 33·4 | |
| 9·8 | 30·7 | 17·7 | |
| 9·0 | 36·2 | 17·8 | |
| 7·5 | 22 1·7 | 38·7 | 7·5 GS |
| 9·2 | 18·2 | 24·5 | |
| 9·4 | 21·7 | 35·2 | |

### 91—120.

| mag. | 0h. m s | −53° ′ | |
|---|---|---|---|
| 10·0 | 22 30·2 | 34·1 | |
| 10·2 | 46·2 | 37·9 | |
| 10·2 | 49·2 | 18·6 | |
| 8·6 | 51·2 | 45·0 | 9·0 |
| 9·8 | 23 10·9 | 0·5 | |
| 9·2 | 14·7 | 36·0 | |
| 10·0 | 21·2 | 41·5 | |
| 9·6 | 30·2 | 8·9 | |
| 9·9 | 31·2 | 41·0 | |
| 10·0 | 24 8·2 | 36·6 | |
| 10·2 | 9·2 | 23·5 | |
| 9·6 | 29·2 | 41·7 | |
| 10·2 | 45·2 | 21·7 | |
| 10·0 | 25 31·7 | 4·4 | |
| 6·7 | 40·2 | 48·5 | 7·9 GS |
| 9·6 | 41·5 | 35·1 | |
| 9·9 | 42·5 | 18·2 | |
| 10·2 | 26 12·5 | 27·3 | |
| 9·4 | 35·0 | 42·4 | |
| 10·2 | 43·0 | 47·4 | |
| 9·2 | 27 4·0 | 39·2 | |
| 8·4 | 31·0 | 53·1 | 9·0 |
| 9·8 | 31·0 | 24·8 | |
| 10·0 | 32·5 | 34·2 | |
| 10·2 | 28 3·0 | 20·9 | |
| 10·2 | 20·0 | 37·8 | |
| 6·4 | 30·5 | 3·8 | 5·9 GSct |
| 9·8 | 42·5 | 6·0 | |
| 9·4 | 44·5 | 10·9 | |
| 9·0 | 58·0 | 56·8 | |



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**121—180.**

| mag. | 0h. m | s | —53° ′ | |
|---|---|---|---|---|
| 10·2 | 29 | 6·5 | 49·8 | |
| 9·6 | | 10·0 | 21·5 | |
| 10·2 | | 29·5 | 22·2 | |
| 9·6 | | 42·5 | 11·7 | |
| 9·9 | 30 | 16·5 | 46·8 | |
| 9·4 | | 29·0 | 9·8 | |
| 9·9 | | 33·5 | 15·3 | |
| 9·6 | | 52·5 | 0·3 | |
| 8·6 | 31 | 30·0 | 42·1 | |
| 10·2 | | 50·0 | 16·4 | |
| 9·8 | 32 | 28·5 | 7·9 | |
| 10·2 | | 31·5 | 27·3 | |
| 9·8 | | 33·5 | 3·7 | |
| 10·0 | | 36·5 | 12·9 | |
| 8·6 | | 42·0 | 5·6 | 8·8 G |
| 8·1 | 33 | 6·0 | 1·5 | 8·0 G |
| 7·6 | | 6·5 | 13·2 | 7·9 G |
| 9·0 | | 22·5 | 17·5 | 8·6 G |
| 9·7 | | 41·8 | 57·8 | |
| 10·2 | 34 | 18·5 | 31·3 | |
| 9·0 | | 20·0 | 30·9 | |
| 10·2 | | 30·5 | 55·9 | |
| 10·2 | | 50·5 | 56·0 | |
| 8·4 | | 52·6 | 1·6 | 8·5 |
| 7·2 | 35 | 3·5 | 53·7 | 6·8 GSg |
| 10·0 | | 6·0 | 44·1 | |
| 9·8 | | 19·6 | 43·0 | |
| 10·2 | | 26·1 | 0·2 | |
| 10·2 | | 54·6 | 20·1 | |
| 10·2 | | 57·4 | 4·5 | |
| 10·2 | | 59·1 | 33·9 | |
| 9·8 | 36 | 14·6 | 13·1 | |
| 8·0 | | 14·6 | 53·4 | 8·2 G |
| 9·2 | | 30·6 | 13·9 | |
| 9·9 | | 30·6 | 2·1 | |
| 9·2 | | 30·6 | 14·8 | |
| 9·4 | | 56·6 | 49·0 | |
| 10·2 | 37 | 17·6 | 41·8 | |
| 9·7 | | 40·1 | 59·8 | |
| 9·0 | | 45·1 | 54·6 | |
| 10·2 | | 45·6 | 31·0 | |
| 9·9 | | 59·1 | 11·0 | |
| 9·7 | 38 | 7·6 | 12·0 | |
| 10·0 | | 11·1 | 9·1 | |
| 10·2 | | 20·6 | 39·5 | |
| 9·4 | | 28·1 | 14·5 | |
| 9·4 | | 39·6 | 2·4 | |
| 8·4 | | 44·6 | 31·3 | GS |
| 9·9 | | 47·9 | 1·3 | |
| 10·2 | | 50·1 | 11·8 | |
| 10·2 | 39 | 10·1 | 34·3 | |
| 8·4 | | 23·1 | 55·3 | |
| 9·8 | | 35·1 | 44·9 | |
| 10·2 | 40 | 38·1 | 26·7 | |
| 9·6 | 41 | 5·6 | 25·3 | |
| 9·6 | | 16·5 | 3·0 | |
| 9·4 | | 27·6 | 44·4 | |
| 9·9 | | 35·1 | 51·1 | |
| 9·8 | | 40·1 | 14·2 | |
| 9·9 | 42 | 32·1 | 59·1 | |

**181—240.**

| mag. | 0h. m | s | —53° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 44·6 | 26·9 | |
| 9·7 | | 50·1 | 14·0 | |
| 10·0 | 43 | 17·6 | 41·7 | |
| 9·4 | | 33·1 | 7·5 | |
| 9·2 | 44 | 54·1 | 35·4 | |
| 10·2 | 45 | 7·1 | 37·9 | |
| 9·0 | | 12·4 | 2·0 | |
| 10·2 | | 29·9 | 38·2 | |
| 10·2 | | 49·4 | 20·2 | |
| 9·8 | 46 | 14·9 | 18·7 | |
| 9·4 | | 26·9 | 14·2 | |
| 10·2 | | 27·4 | 6·0 | |
| 10·0 | | 35·9 | 40·0 | |
| 10·2 | | 37·4 | 9·9 | |
| 9·4 | | 57·9 | 30·3 | |
| 10·2 | 47 | 3·2 | 51·3 | |
| 9·4 | | 28·5 | 6·0 | |
| 10·2 | | 47·0 | 18·1 | |
| 10·2 | | 59·4 | 5·4 | |
| 9·4 | 48 | 5·9 | 18·8 | |
| 9·6 | | 10·2 | 59·4 | |
| 9·6 | | 19·5 | 5·6 | |
| 10·4 | | 27·7 | 49·2 | |
| 10·0 | | 30·0 | 22·9 | |
| 10·0 | | 35·2 | 49·1 | |
| 10·4 | | 58·0 | 57·2 | |
| 10·4 | 49 | 3·5 | 42·6 | |
| 10·4 | | 8·6 | 35·9 | |
| 10·4 | | 19·6 | 45·8 | |
| 9·3 | | 23·0 | 55·2 | |
| 10·4 | | 53·0 | 6·9 | |
| 7·5 | 50 | 20·5 | 52·2 | 6·2 GSctr |
| 9·8 | | 27·5 | 27·9 | |
| 9·4 | | 35·0 | 49·5 | |
| 8·2 | | 41·5 | 15·4 | |
| 10·2 | 51 | 25·5 | 0·2 | |
| 10·2 | | 32·5 | 3·6 | |
| 10·2 | | 46·0 | 26·2 | |
| 9·6 | 52 | 19·5 | 13·6 | |
| 9·6 | | 38·0 | 34·4 | |
| 10·4 | 53 | 0·0 | 53·2 | |
| 10·0 | | 17·5 | 24·8 | |
| 10·2 | | 18·5 | 21·7 | |
| 9·8 | 54 | 3·0 | 0·3 | |
| 10·4 | | 9·5 | 24·4 | |
| 9·6 | | 50·5 | 55·4 | |
| 9·1 | | 54·5 | 30·0 | |
| 7·0 | 55 | 11·0 | 15·3 | 6·8 GS |
| 10·4 | | 53·0 | 29·0 | |
| 7·6 | 56 | 16·5 | 59·5 | 8·2 GS |
| 10·0 | | 20·5 | 22·6 | |
| 8·5 | | 21·5 | 49·8 | 8·2 |
| 9·0 | | 30·5 | 34·6 | |
| 10·4 | | 49·5 | 11·4 | |
| 9·2 | | 56·0 | 42·8 | |
| 10·4 | | 56·0 | 7·0 | |
| 9·6 | 57 | 9·5 | 4·8 | |
| 10·4 | | 30·0 | 12·9 | |
| 10·4 | 58 | 6·0 | 3·1 | |
| 10·0 | | 16·5 | 55·7 | |

**241—300.**

| mag. | 0h.—1h. m | s | —53° ′ | |
|---|---|---|---|---|
| 9·5 | 58 | 16·5 | 33·3 | |
| 10·4 | 59 | 3·0 | 49·0 | |
| 10·4 | | 6·0 | 18·7 | |
| 10·4 | | 12·5 | 6·1 | |
| 9·5 | | 19·5 | 39·5 | |
| 10·0 | | 49·5 | 48·3 | |
| 8·6 | | 58·5 | 30·3 | |
| 9·5 | 0 | 26·0 | 53·2 | |
| 10·4 | | 32·5 | 6·0 | |
| 9·2 | | 46·5 | 29·8 | |
| 9·8 | | 54·5 | 59·0 | |
| 10·0 | 1 | 6·5 | 32·1 | |
| 9·8 | | 59·0 | 32·3 | |
| 9·6 | 2 | 1·5 | 40·2 | |
| 9·6 | | 20·5 | 59·6 | |
| 10·0 | | 36·5 | 6·0 | |
| 8·6 | | 41·5 | 22·8 | |
| 8·6 | | 52·5 | 21·0 | |
| 10·4 | | 57·5 | 40·8 | |
| 10·0 | 3 | 17·5 | 13·2 | |
| 10·4 | | 39·5 | 33·6 | |
| 9·6 | 4 | 0·5 | 58·6 | |
| 9·8 | | 5·0 | 6·9 | |
| 9·8 | | 11·0 | 29·5 | |
| 9·5 | | 22·0 | 1·8 | |
| 10·0 | | 23·0 | 26·4 | |
| 10·2 | | 34·5 | 42·4 | |
| 9·2 | | 45·3 | 59·5 | |
| 8·8 | | 49·0 | 24·5 | |
| 9·1 | 5 | 0·5 | 25·0 | |
| 10·4 | | 2·5 | 5·3 | |
| 8·6 | | 10·5 | 28·9 | 9·0 G |
| 10·4 | | 52·0 | 45·1 | |
| 10·4 | 6 | 0·5 | 13·3 | |
| 10·4 | | 27·0 | 6·6 | |
| 10·0 | | 31·5 | 36·6 | |
| 9·8 | 7 | 45·5 | 14·2 | |
| 10·4 | | 48·5 | 57·8 | |
| 9·8 | | 51·0 | 44·0 | |
| 10·4 | | 58·5 | 14·2 | |
| 10·4 | 8 | 3·0 | 15·0 | |
| 10·4 | | 4·4 | 58·9 | |
| 9·5 | | 10·5 | 11·5 | |
| 9·0 | | 40·5 | 47·9 | |
| 7·9 | 9 | 6·0 | 47·1 | 7·8 GS |
| 9·2 | | 12·0 | 32·3 | |
| 10·4 | | 32·6 | 57·8 | |
| 9·3 | 10 | 5·5 | 36·8 | |
| 10·2 | | 43·0 | 40·5 | |
| 9·6 | | 54·5 | 54·2 | |
| 10·4 | 11 | 51·5 | 4·0 | |
| 9·5 | 12 | 4·0 | 4·5 | |
| 10·4 | | 14·5 | 13·7 | |
| 8·5 | | 23·5 | 47·9 | 9·0 |
| 9·2 | | 30·5 | 13·0 | |
| 10·4 | | 38·5 | 11·1 | |
| 9·8 | | 39·5 | 13·3 | |
| 10·2 | 13 | 16·0 | 3·7 | |
| 10·2 | | 32·0 | 55·1 | |
| 9·0 | | 52·0 | 16·7 | |

**301—360.**

| mag. | 1h. m | s | —53° ′ | |
|---|---|---|---|---|
| 9·3 | 14 | 27·5 | 40·1 | |
| 10·2 | | 40·5 | 14·4 | |
| 10·4 | | 44·4 | 42·2 | |
| 9·6 | | 56·5 | 45·2 | |
| 8·6 | 15 | 5·0 | 18·3 | |
| 8·8 | | 10·5 | 12·1 | |
| 10·2 | | 18·5 | 24·4 | |
| 8·2 | | 40·5 | 7·8 | 8·5 |
| 9·4 | | 40·5 | 47·1 | |
| 9·3 | 16 | 23·7 | 56·5 | |
| 10·4 | | 43·5 | 27·8 | |
| 9·6 | | 48·1 | 57·7 | |
| 9·2 | 17 | 20·5 | 17·7 | |
| 10·4 | | 24·5 | 0·1 | |
| 9·4 | | 25·0 | 9·8 | |
| 10·0 | | 50·5 | 20·5 | |
| 10·4 | 18 | 4·5 | 32·3 | |
| 10·4 | | 20·0 | 1·1 | |
| 9·5 | | 47·5 | 17·7 | |
| 9·0 | 19 | 0·5 | 9·9 | |
| 9·2 | | 1·5 | 42·0 | |
| 10·4 | | 24·5 | 58·1 | |
| 9·4 | | 37·0 | 27·9 | |
| 9·3 | 20 | 6·5 | 52·7 | |
| 10·4 | | 30·3 | 59·6 | |
| 10·4 | | 36·5 | 50·6 | |
| 9·2 | | 44·9 | 46·7 | |
| 9·1 | 23 | 2·9 | 17·1 | |
| 9·8 | | 4·9 | 46·9 | |
| 10·0 | | 34·9 | 32·7 | |
| 8·8 | 24 | 28·4 | 7·8 | 9·0 G |
| 8·0 | | 29·4 | 0·7 | 7·1 GSg |
| 10·0 | | 30·9 | 34·7 | |
| 8·8 | | 33·4 | 8·6 | 9·0 G |
| 9·2 | | 40·4 | 26·9 | |
| 7·7 | 25 | 17·4 | 8·3 | 5·8 GSg |
| 8·9 | 26 | 45·9 | 33·8 | |
| 10·0 | 27 | 38·4 | 8·8 | |
| 10·0 | | 39·9 | 52·7 | |
| 8·4 | | 51·0 | 15·5 | 9·0 |
| 10·0 | 28 | 33·0 | 59·6 | |
| 8·2 | 30 | 47·0 | 50·3 | 7·8 GS |
| 9·4 | | 50·5 | 15·0 | |
| 9·2 | 31 | 24·0 | 51·7 | |
| 9·6 | 33 | 3·5 | 35·5 | |
| 10·0 | | 8·0 | 23·0 | |
| 10·0 | | 58·0 | 21·3 | |
| 10·0 | 34 | 6·0 | 42·7 | |
| 10·0 | | 59·0 | 39·5 | |
| 8·4 | 36 | 42·5 | 33·7 | 8·2 GS |
| 9·2 | 40 | 0·3 | 57·9 | |
| 10·0 | | 10·0 | 41·9 | |
| 10·0 | | 50·0 | 20·0 | |
| 10·0 | 41 | 10·0 | 17·4 | |
| 10·0 | 42 | 38·0 | 37·9 | |
| 10·0 | | 59·0 | 48·7 | |
| 9·0 | 43 | 54·5 | 4·7 | 9·5 |
| 10·0 | 44 | 10·0 | 56·7 | |
| 9·2 | | 20·0 | 55·9 | G |
| 9·0 | | 24·0 | 37·9 | 9·0 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 20 | 73 | 8·3 |
| | 30 | 71 | 8·3 |
| | 40 | 69 | 8·2 |
| | 50 | 67 | 8·2 |
| 1 | 0 | 65 | 8·1 |
| | 10 | 63 | 8·0 |
| | 20 | 61 | 7·9 |
| | 30 | 60 | 7·7 |
| | 40 | 58 | 7·6 |
| | 50 | 56 | 7·4 |

25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 1 | 40 | 58 | 7·6 |
| | 50 | 56 | 7·4 |
| 2 | 0 | 54 | 7·2 |
| | 10 | 53 | 7·0 |
| | 20 | 51 | 6·8 |
| | 30 | 49 | 6·6 |
| | 40 | 48 | 6·4 |
| | 50 | 46 | 6·2 |
| 3 | 0 | 45 | 5·9 |
| | 10 | 44 | 5·6 |
| | 20 | 42 | 5·4 |
| | 30 | 41 | 5·1 |
| | 40 | 40 | 4·8 |

## 361—420.

| mag. | $1^{h}$–$2^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·1 | 44 | 40·0 | 31·9 | 9·5 |
| 10·0 | 45 | 10·0 | 33·5 | |
| 9·4 | | 29·0 | 23·7 | |
| 9·6 | | 29·2 | 0·2 | |
| 10·0 | 46 | 18·0 | 13·3 | |
| 9·6 | 47 | 0·0 | 33·6 | |
| 10·0 | | 18·5 | 4·2 | |
| 10·0 | | 30·0 | 14·4 | |
| 8·0 | 48 | 20·0 | 18·5 | GS |
| 8·3 | | 51·9 | 51·9 | 8·2 Gt |
| 9·6 | | 53·9 | 55·9 | |
| 9·1 | 50 | 21·9 | 26·2 | |
| 10·0 | | 59·9 | 36·9 | |
| 9·4 | 51 | 8·4 | 27·2 | |
| 9·6 | | 56·0 | 19·6 | |
| 9·2 | 52 | 26·3 | 15·0 | |
| 10·0 | | 54·0 | 52·9 | |
| 9·8 | 53 | 24·7 | 14·0 | |
| 9·8 | 55 | 10·2 | 46·8 | |
| 9·0 | | 41·7 | 39·4 | |
| 9·8 | 56 | 14·7 | 39·8 | |
| 9·0 | | 39·7 | 13·0 | |
| 9·0 | 57 | 15·8 | 20·6 | |
| 9·6 | | 18·7 | 26·2 | |
| 10·0 | | 19·7 | 11·0 | |
| 9·8 | | 27·2 | 38·1 | |
| 8·1 | 58 | 0·7 | 8·2 | 8·1 G |
| 8·8 | | 7·7 | 33·9 | 9·5 |
| 7·1 | | 27·2 | 38·3 | 7·4 GScg |
| 10·0 | 59 | 5·7 | 40·7 | |
| 9·0 | 0 | 48·7 | 28·8 | |
| 10·0 | 2 | 9·7 | 32·8 | |
| 10·0 | | 9·8 | 37·8 | |
| 8·2 | | 49·7 | 47·6 | 8·2 G |
| 9·4 | 4 | 7·7 | 50·2 | |
| 9·9 | | 49·2 | 13·5 | |
| 9·0 | | 54·7 | 23·6 | |
| 9·2 | | 54·7 | 46·5 | |
| 9·0 | 5 | 4·2 | 19·9 | |
| 8·1 | | 11·7 | 52·1 | 7·5 G |
| 9·5 | | 49·2 | 53·4 | |
| 9·5 | 6 | 7·2 | 8·3 | |
| 9·8 | | 24·7 | 59·0 | |
| 9·6 | | 33·7 | 39·3 | |
| 9·9 | 7 | 14·7 | 34·3 | |
| 9·5 | | 29·7 | 31·5 | |
| 9·5 | | 39·7 | 32·2 | |
| 9·9 | | 47·7 | 11·4 | |
| 8·4 | 8 | 14·2 | 4·3 | G |
| 9·2 | | 22·5 | 56·6 | |
| 9·4 | | 30·7 | 58·4 | |
| 9·8 | | 52·7 | 15·3 | |
| 9·8 | 9 | 44·7 | 38·9 | |
| 9·6 | | 54·2 | 19·8 | |
| 9·4 | 10 | 40·4 | 3·0 | |
| 9·5 | 11 | 29·7 | 36·3 | |
| 7·2 | | 41·7 | 28·1 | GSg |
| 8·4 | | 47·2 | 58·4 | G |
| 10·0 | | 49·7 | 36·7 | |
| 9·5 | 12 | 34·7 | 43·9 | |

## 421—480.

| mag. | $2^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·9 | 14 | 41·2 | 41·9 | |
| 8·7 | | 58·7 | 46·3 | 9·0 |
| 7·7 | 16 | 38·7 | 32·1 | 7·5 GS |
| 9·0 | | 43·2 | 15·9 | |
| 9·6 | 17 | 53·2 | 21·1 | |
| 10·0 | 18 | 10·7 | 10·9 | |
| 10·0 | | 13·2 | 40·1 | |
| 9·2 | | 37·7 | 31·6 | |
| 9·9 | | 42·7 | 38·3 | |
| 9·4 | | 56·7 | 10·0 | |
| 8·0 | 19 | 49·2 | 22·7 | 8·0 GS |
| 9·9 | 20 | 49·2 | 20·4 | |
| 8·6 | | 49·2 | 30·9 | 9·0 G |
| 8·0 | 21 | 39·7 | 31·6 | 8·5 GS |
| 9·1 | 22 | 2·7 | 50·8 | 9·5 |
| 10·0 | | 19·7 | 29·0 | |
| 8·6 | | 19·9 | 52·8 | 8·5 G |
| 10·0 | | 24·7 | 19·0 | |
| 9·9 | | 47·2 | 20·4 | |
| 9·1 | 23 | 7·9 | 49·4 | |
| 10·3 | 24 | 27·1 | 36·0 | |
| 8·9 | | 40·0 | 2·4 | |
| 10·3 | 27 | 15·2 | 6·9 | |
| 10·3 | 28 | 38·3 | 59·9 | |
| 10·3 | 29 | 20·2 | 2·9 | |
| 10·0 | 30 | 30·2 | 39·5 | |
| 10·3 | | 41·2 | 3·3 | |
| 9·2 | | 50·2 | 40·8 | |
| 10·0 | 31 | 20·2 | 27·5 | |
| 10·0 | | 30·2 | 22·1 | |
| 9·0 | | 32·2 | 25·2 | 9·0 |
| 8·7 | | 56·7 | 35·4 | 8·5 |
| 10·2 | 32 | 22·2 | 3·8 | |
| 9·2 | | 58·7 | 40·4 | |
| 9·8 | 33 | 3·2 | 6·0 | 9·5 |
| 10·3 | | 11·7 | 37·4 | |
| 6·3 | | 18·2 | 5·3 | 5·5 GSct |
| 8·9 | | 23·2 | 25·0 | 9·5 |
| 9·2 | | 43·8 | 2·5 | |
| 9·0 | 34 | 0·2 | 31·7 | |
| 10·0 | | 31·7 | 46·6 | |
| 7·5 | | 40·7 | 29·6 | 7·5 GS |
| 9·6 | 35 | 1·3 | 36·4 | ? |
| 8·6 | | 2·2 | 41·2 | 8·5 |
| 7·0 | | 3·7 | 28·5 | 7·0 GS |
| 9·4 | | 32·7 | 48·2 | |
| 8·4 | 36 | 25·8 | 20·7 | 9·0 |
| 8·4 | 37 | 27·8 | 51·2 | 8·0 G |
| 10·3 | | 45·3 | 31·8 | |
| 8·8 | 38 | 45·3 | 30·1 | 9·0 |
| 10·2 | 39 | 2·3 | 54·6 | |
| 8·5 | | 36·3 | 23·1 | 8·0 G |
| 9·0 | | 49·3 | 28·5 | |
| 10·3 | 40 | 5·8 | 43·0 | |
| 6·8 | | 9·8 | 6·0 | 6·5 GSct |
| 9·4 | | 19·8 | 6·9 | |
| 8·2 | | 29·8 | 18·9 | 8·5 |
| 8·7 | 41 | 14·8 | 14·4 | 9·0 |
| 9·8 | | 35·3 | 53·2 | |
| 9·0 | 43 | 59·8 | 37·0 | |

## 481—540.

| mag. | $2^{h}$–$3^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·2 | 45 | 29·8 | 5·8 | |
| 8·9 | | 45·8 | 16·6 | 8·5 G |
| 9·2 | 46 | 51·8 | 30·6 | 9·5 G |
| 9·2 | 47 | 1·8 | 42·9 | |
| 9·8 | | 10·8 | 31·1 | G |
| 9·8 | | 13·8 | 25·8 | |
| 8·0 | | 14·8 | 33·1 | G |
| 9·4 | | 17·0 | 1·1 | |
| 8·4 | | 48·8 | 4·4 | 9·0 |
| 9·8 | 48 | 29·3 | 44·8 | |
| 8·2 | | 36·8 | 23·6 | 8·5 G |
| 8·8 | | 41·3 | 35·7 | 9·5 G |
| 9·6 | | 47·3 | 4·7 | |
| 10·3 | 49 | 15·3 | 54·6 | |
| 9·4 | | 29·3 | 5·2 | |
| 9·6 | | 43·2 | 2·8 | |
| 10·3 | | 56·8 | 57·8 | |
| 10·2 | 51 | 12·3 | 58·8 | |
| 9·8 | | 54·3 | 36·4 | |
| 9·8 | 52 | 49·3 | 39·8 | |
| 9·4 | 53 | 23·8 | 53·9 | 9·5 |
| 9·6 | | 44·8 | 38·1 | |
| 10·3 | 54 | 27·8 | 7·6 | |
| 10·2 | | 43·9 | 37·6 | |
| 10·2 | 57 | 0·6 | 17·4 | |
| 10·0 | | 10·5 | 13·3 | |
| 10·8 | | 36·5 | 39·5 | |
| 10·4 | 58 | 10·0 | 10·0 | |
| 10·0 | | 14·5 | 48·9 | |
| 10·0 | | 37·0 | 39·0 | |
| 10·2 | | 42·0 | 24·3 | |
| 10·8 | | 50·5 | 38·8 | |
| 10·8 | 59 | 33·0 | 48·0 | |
| 8·4 | 1 | 1·0 | 19·0 | 8·5 GS |
| 8·6 | | 2·8 | 2·8 | 9·0 |
| 10·8 | | 8·0 | 51·8 | |
| 10·0 | | 20·5 | 14·3 | |
| 9·8 | | 40·0 | 19·7 | 9·5 |
| 9·6 | | 49·5 | 20·4 | 9·5 |
| 9·6 | 2 | 32·0 | 48·2 | |
| 11·0 | | 35·0 | 33·8 | |
| 8·4 | | 39·0 | 4·0 | 9·5 |
| 10·6 | | 40·3 | 0·6 | |
| 10·0 | | 44·5 | 48·0 | |
| 10·6 | 3 | 30·5 | 36·3 | |
| 10·0 | | 42·5 | 22·0 | |
| 11·0 | | 47·0 | 13·6 | |
| 11·0 | 4 | 11·0 | 18·4 | |
| 9·6 | 5 | 15·0 | 22·6 | |
| 10·8 | | 36·0 | 49·2 | |
| 9·8 | 6 | 32·5 | 55·7 | |
| 10·8 | | 36·5 | 31·6 | |
| 11·0 | | 44·5 | 34·4 | |
| 9·6 | | 46·0 | 13·6 | |
| 10·0 | 7 | 25·5 | 13·0 | |
| 10·3 | | 41·5 | 21·8 | |
| 10·2 | | 51·7 | 19·2 | 9·5 |
| 8·7 | | 55·7 | 21·3 | 9·0 |
| 11·0 | 9 | 15·2 | 12·3 | |
| 8·4 | 10 | 1·7 | 8·1 | 9·0 G |

## 541—600.

| mag. | $3^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·2 | 10 | 10·2 | 47·5 | |
| 11·0 | | 33·2 | 12·9 | |
| 11·0 | 11 | 17·4 | 28·6 | |
| 10·6 | | 17·7 | 27·0 | |
| 10·6 | | 24·7 | 25·6 | |
| 11·0 | 12 | 8·7 | 50·1 | |
| 8·9 | 13 | 10·2 | 23·0 | |
| 9·2 | 14 | 27·7 | 18·7 | 9·5 S |
| 9·2 | 15 | 16·2 | 12·1 | |
| 10·8 | | 47·2 | 57·4 | |
| 10·3 | 17 | 23·2 | 32·7 | |
| 8·9 | | 28·7 | 30·3 | 9·0 |
| 9·6 | | 40·2 | 23·6 | |
| 9·8 | | 40·2 | 52·8 | |
| 8·4 | | 48·7 | 18·4 | |
| 10·0 | | 49·2 | 44·0 | G |
| 9·6 | 18 | 2·7 | 43·9 | 10·0 G |
| 9·4 | | 13·2 | 19·2 | |
| 9·4 | | 50·2 | 21·9 | |
| 9·4 | 19 | 25·2 | 52·7 | |
| 10·6 | | 36·2 | 52·2 | |
| 10·2 | | 38·7 | 6·9 | |
| 10·6 | 20 | 5·2 | 0·1 | |
| 9·6 | | 20·7 | 52·5 | |
| 11·0 | 21 | 0·2 | 22·5 | |
| 9·6 | 23 | 1·7 | 36·3 | |
| 9·6 | | 33·2 | 59·9 | 8·0 G |
| 9·4 | 24 | 38·2 | 32·7 | 9·5 |
| 11·0 | 25 | 20·2 | 21·1 | |
| 9·6 | | 43·7 | 55·9 | |
| 10·3 | 26 | 3·4 | 43·9 | |
| 11·0 | | 7·3 | 1·9 | |
| 9·4 | 27 | 21·4 | 13·5 | |
| 9·6 | | 31·1 | 46·1 | |
| 10·2 | 28 | 18·6 | 30·7 | |
| 10·0 | | 29·3 | 35·6 | |
| 10·0 | 29 | 0·8 | 42·7 | |
| 9·4 | | 23·3 | 37·7 | |
| 9·6 | | 50·5 | 49·8 | 9·0 |
| 10·0 | 30 | 27·5 | 36·8 | |
| 9·4 | | 38·5 | 45·9 | |
| 9·0 | 31 | 16·5 | 56·2 | 8·5 |
| 9·9 | | 21·7 | 2·0 | |
| 10·2 | 32 | 7·5 | 57·4 | |
| 7·8 | | 19·5 | 37·2 | 8·0 G |
| 9·2 | | 37·2 | 58·8 | |
| 7·8 | 33 | 2·5 | 11·4 | 7·5 GS |
| 8·1 | | 40·5 | 29·2 | 8·0 GS |
| 9·6 | | 56·0 | 54·5 | |
| 9·0 | 35 | 6·0 | 29·2 | 9·5 G |
| 9·2 | | 10·5 | 2·6 | |
| 8·8 | 36 | 4·5 | 54·1 | 9·0 |
| 10·2 | | 5·5 | 46·3 | |
| 7·4 | | 22·0 | 18·9 | 7·0 GSt |
| 10·0 | | 48·5 | 7·9 | G |
| 8·2 | | 51·0 | 7·9 | 8·5 G |
| 8·0 | 37 | 10·5 | 5·9 | 8·0 GS |
| 10·0 | | 37·5 | 54·0 | |
| 9·6 | | 38·5 | 28·9 | |
| 10·2 | | 48·5 | 43·3 | |



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## 601—660.

| mag. | 3h.–4h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.4 | 37 | 55.0 | 38.4 | |
| 9.4 | 38 | 40.5 | 2.2 | |
| 9.4 | 39 | 15.0 | 40.3 | 9.0 |
| 9.4 | 40 | 40.5 | 54.6 | |
| 8.8 | 41 | 23.0 | 37.4 | 9.0 |
| 9.1 | | 32.0 | 20.5 | |
| 9.8 | 42 | 30.2 | 58.3 | |
| 10.2 | 43 | 19.0 | 32.1 | |
| 9.6 | | 58.0 | 22.1 | |
| 9.6 | 44 | 50.5 | 59.5 | |
| 8.1 | 45 | 31.0 | 33.9 | 8.0 GS |
| 9.4 | | 33.0 | 7.5 | |
| 9.2 | | 39.0 | 18.0 | |
| 7.6 | 46 | 9.0 | 37.3 | 7.5 GS |
| 9.7 | | 51.5 | 48.8 | |
| 9.1 | | 54.0 | 17.9 | 9.5 |
| 9.2 | 47 | 4.3 | 1.5 | |
| 10.2 | | 17.5 | 20.1 | |
| 9.8 | | 51.0 | 31.3 | |
| 9.4 | 48 | 1.5 | 59.7 | |
| 8.8 | | 37.0 | 17.5 | 9.0 |
| 9.8 | | 38.5 | 32.1 | |
| 10.2 | 49 | 16.0 | 21.1 | |
| 9.9 | | 35.0 | 26.9 | |
| 9.2 | | 37.0 | 16.8 | 9.0 |
| 9.4 | | 48.5 | 37.4 | |
| 9.4 | 50 | 40.5 | 28.9 | |
| 6.5 | 51 | 17.5 | 3.4 | 6.5 GSt |
| 8.5 | | 49.5 | 32.2 | 8.0 |
| 9.0 | 53 | 9.0 | 18.0 | 8.5 G |
| 10.2 | | 12.5 | 26.4 | |
| 10.2 | | 13.5 | 28.3 | |
| 9.0 | | 52.0 | 36.1 | 8.0 |
| 8.2 | | 58.5 | 6.5 | 7.5 G |
| 9.7 | 54 | 30.5 | 53.1 | |
| 10.0 | 55 | 2.0 | 46.6 | |
| 10.2 | | 25.5 | 14.6 | |
| 9.8 | | 54.5 | 23.1 | |
| 10.2 | 56 | 13.1 | 10.7 | |
| 10.2 | 57 | 1.6 | 3.9 | |
| 9.2 | | 17.1 | 53.1 | |
| 10.0 | | 33.6 | 51.1 | |
| 9.2 | | 58.6 | 29.9 | |
| 10.0 | | 59.6 | 8.5 | |
| 9.6 | 58 | 8.1 | 31.7 | |
| 9.0 | | 47.2 | 53.5 | 9.5 |
| 8.8 | 59 | 4.7 | 58.0 | 8.0 |
| 9.9 | | 49.9 | 47.4 | |
| 7.1 | 0 | 29.9 | 16.4 | G S |
| 9.9 | 2 | 44.9 | 58.7 | |
| 9.6 | 3 | 9.9 | 50.1 | |
| 8.4 | | 30.4 | 18.9 | 8.0 G |
| 9.4 | 4 | 18.9 | 20.9 | |
| 9.9 | | 50.4 | 22.5 | |
| 8.9 | 5 | 19.4 | 10.0 | |
| 9.2 | 6 | 32.4 | 15.7 | |
| 8.8 | | 45.4 | 9.5 | |
| 9.9 | 7 | 16.4 | 8.5 | |
| 9.9 | | 21.4 | 14.2 | |
| 9.4 | | 24.9 | 8.7 | |

## 661—720.

| mag. | 4h. m | s | –53° ′ | |
|---|---|---|---|---|
| 8.9 | 7 | 28.9 | 54.7 | |
| 9.8 | | 42.9 | 55.1 | |
| 9.6 | 8 | 0.4 | 44.1 | |
| 7.6 | | 55.4 | 44.0 | 7.0 GS |
| 9.4 | 9 | 53.9 | 29.9 | |
| 9.9 | 10 | 17.9 | 9.2 | |
| 9.7 | | 41.4 | 45.3 | |
| 9.2 | | 45.4 | 19.8 | |
| 9.6 | | 54.4 | 38.1 | |
| 9.2 | 12 | 0.4 | 19.2 | 8.5 G |
| 8.3 | | 23.9 | 54.9 | |
| 8.2 | | 44.4 | 37.9 | GS |
| 9.9 | | 49.7 | 59.3 | |
| 9.2 | 14 | 3.4 | 18.5 | 9.5 |
| 9.2 | | 4.4 | 20.5 | |
| 8.6 | | 16.4 | 49.7 | 8.5 |
| 9.4 | | 20.9 | 54.0 | |
| 7.5 | 15 | 10.4 | 12.5 | GSt |
| 6.7 | | 34.9 | 9.9 | GSct |
| 9.6 | | 40.4 | 28.3 | |
| 9.2 | | 40.4 | 45.7 | 9.0 |
| 9.7 | | 40.4 | 45.9 | |
| 8.6 | | 50.4 | 50.9 | 8.0 G |
| 9.6 | | 54.4 | 33.9 | |
| 8.2 | | 58.4 | 14.7 | 8.5 Gt |
| 8.9 | 16 | 52.9 | 15.3 | 8.0 G |
| 9.7 | 17 | 31.9 | 41.7 | |
| 9.2 | | 57.9 | 14.5 | 9.5 G |
| 9.0 | 20 | 1.4 | 49.5 | |
| 9.9 | | 18.5 | 36.3 | |
| 9.2 | | 38.5 | 18.9 | |
| 9.9 | | 40.5 | 27.4 | |
| 9.7 | 21 | 31.5 | 56.0 | |
| 9.9 | | 39.0 | 39.0 | |
| 9.8 | | 57.5 | 23.8 | |
| 9.8 | 22 | 11.5 | 31.8 | |
| 9.4 | | 11.5 | 21.1 | |
| 7.2 | | 29.5 | 23.7 | 7.0 GS |
| 9.9 | | 51.0 | 47.1 | |
| 9.9 | 23 | 1.0 | 55.0 | |
| 9.9 | | 6.0 | 1.9 | |
| 9.6 | | 19.3 | 1.0 | |
| 9.7 | | 20.0 | 36.9 | |
| 9.9 | | 30.0 | 57.9 | |
| 9.4 | | 40.0 | 38.8 | |
| 8.0 | | 44.5 | 59.2 | 8.5 |
| 9.6 | 24 | 24.5 | 35.0 | |
| 7.8 | | 27.5 | 41.0 | 8.0 GS |
| 9.7 | 26 | 29.5 | 30.2 | |
| 9.9 | | 34.5 | 4.9 | |
| 7.8 | | 50.5 | 15.2 | 8.0 GS |
| 9.2 | 27 | 2.0 | 43.6 | |
| 9.2 | | 14.5 | 18.7 | |
| 8.6 | | 21.0 | 43.5 | 8.5 |
| 9.7 | | 51.5 | 17.2 | |
| 9.2 | 29 | 8.3 | 57.9 | |
| 9.9 | 30 | 28.5 | 13.9 | |
| 9.7 | | 30.0 | 51.0 | |
| 9.6 | | 36.5 | 26.9 | |
| 9.2 | | 53.0 | 19.3 | |

## 721—780.

| mag. | 4h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.9 | 30 | 59.7 | 58.6 | |
| 9.9 | 31 | 35.0 | 13.2 | |
| 9.4 | | 46.5 | 39.0 | |
| 9.8 | | 53.6 | 0.3 | |
| 9.4 | 32 | 12.0 | 40.2 | |
| 9.8 | | 37.0 | 42.7 | |
| 8.8 | | 37.0 | 3.7 | 9.5 |
| 9.6 | | 37.0 | 6.9 | |
| 8.4 | | 42.9 | 47.8 | |
| 9.7 | | 43.3 | 29.1 | |
| 9.2 | | 59.8 | 54.0 | |
| 9.1 | 33 | 5.8 | 30.1 | 9.0 |
| 9.4 | | 56.3 | 53.7 | |
| 9.3 | 34 | 26.3 | 48.2 | |
| 9.6 | 35 | 1.5 | 59.1 | |
| 9.3 | 36 | 35.4 | 12.4 | 9.5 |
| 9.0 | | 58.4 | 23.9 | |
| 9.0 | 37 | 15.4 | 11.8 | 9.2 |
| 9.2 | | 36.9 | 17.1 | 9.5 |
| 9.4 | | 48.9 | 1.7 | |
| 9.2 | 38 | 4.4 | 51.6 | |
| 9.7 | 39 | 16.1 | 50.3 | |
| 9.1 | | 44.9 | 37.3 | |
| 9.4 | 40 | 9.9 | 54.1 | |
| 9.7 | | 17.9 | 54.1 | |
| 9.7 | | 25.9 | 29.9 | |
| 9.6 | | 28.9 | 16.3 | |
| 9.4 | | 53.9 | 55.4 | |
| 9.1 | 41 | 40.4 | 29.3 | 9.0 |
| 8.8 | 42 | 44.8 | 39.4 | |
| 9.6 | 43 | 20.8 | 24.2 | |
| 9.7 | | 25.3 | 9.0 | |
| 9.2 | 44 | 12.3 | 50.6 | |
| 9.6 | | 21.8 | 15.2 | |
| 9.1 | | 37.8 | 19.9 | 9.0 |
| 9.4 | | 54.8 | 11.0 | |
| 9.2 | 45 | 41.7 | 28.9 | |
| 9.6 | 46 | 50.7 | 13.0 | |
| 8.4 | 47 | 8.7 | 29.7 | 8.5 |
| 6.5 | 48 | 8.7 | 40.5 | 6.6 GSct |
| 9.7 | | 10.3 | 6.3 | |
| 9.2 | | 17.7 | 5.7 | |
| 8.8 | | 31.2 | 37.0 | 9.0 |
| 9.6 | | 57.7 | 29.1 | |
| 9.3 | 50 | 10.7 | 39.0 | |
| 9.6 | | 27.2 | 23.0 | |
| 9.6 | | 32.2 | 5.0 | |
| 9.0 | | 42.2 | 51.8 | |
| 9.3 | 51 | 30.7 | 44.0 | |
| 8.3 | | 58.7 | 7.0 | 9.0 GS |
| 9.7 | 53 | 37.7 | 6.6 | |
| 8.3 | | 41.2 | 13.3 | |
| 9.3 | | 42.7 | 2.3 | |
| 7.8 | 54 | 1.0 | 2.7 | 8.0 G |
| 9.1 | | 4.2 | 27.3 | |
| 8.7 | | 38.7 | 12.3 | 9.5 |
| 8.7 | | 57.7 | 35.2 | 8.5 |
| 9.7 | 55 | 8.7 | 3.3 | |
| 9.7 | | 32.7 | 33.0 | |
| 9.2 | 56 | 45.7 | 53.0 | |

## 781—840.

| mag. | 4h.–5h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.2 | 56 | 56.6 | 43.0 | |
| 9.2 | 58 | 12.1 | 59.0 | 9.5 |
| 8.7 | | 19.1 | 11.4 | 8.5 |
| 9.7 | | 19.1 | 49.9 | |
| 9.7 | | 38.0 | 23.5 | |
| 9.6 | 59 | 4.1 | 15.7 | |
| 9.4 | | 49.6 | 3.8 | |
| 9.6 | 1 | 18.6 | 31.8 | |
| 9.1 | | 28.1 | 16.1 | |
| 9.7 | | 36.1 | 50.7 | |
| 9.2 | 2 | 9.6 | 18.7 | |
| 9.2 | | 39.4 | 26.6 | 9.2 |
| 9.4 | | 41.4 | 44.3 | |
| 9.3 | | 43.4 | 2.2 | |
| 9.6 | 3 | 11.9 | 32.2 | |
| 9.3† | | 19.4 | 45.0 | |
| 10.4 | | 20.4 | 1.7 | |
| 9.6 | 4 | 0.6 | 37.8 | |
| 9.4 | | 27.1 | 14.8 | |
| 7.8 | | 56.6 | 43.3 | 8.0 GS |
| 9.7 | 5 | 12.6 | 2.0 | |
| 10.0 | | 15.3 | 58.8 | |
| 9.7 | | 20.4 | 11.6 | |
| 10.0 | | 20.6 | 25.8 | |
| 9.3 | | 26.6 | 9.4 | |
| 10.0 | | 44.1 | 30.4 | |
| 9.8 | | 48.6 | 37.2 | |
| 9.2 | | 58.1 | 23.7 | 9.0 G |
| 9.4 | 6 | 27.1 | 52.1 | |
| 10.0 | 7 | 7.6 | 43.4 | |
| 8.4 | | 24.1 | 40.6 | GS |
| 10.0 | | 42.0 | 1.0 | |
| 10.0 | 8 | 49.5 | 57.4 | |
| 10.0 | 9 | 19.5 | 11.3 | |
| 9.8 | | 52.5 | 26.8 | |
| 9.4 | | 59.0 | 53.6 | |
| 8.1 | 10 | 57.5 | 7.2 | 8.0 GS |
| 10.0 | 11 | 38.5 | 18.8 | |
| 10.0 | 12 | 8.5 | 15.8 | |
| 8.4 | | 28.5 | 14.0 | 8.5 GS |
| 9.2 | | 48.5 | 46.7 | |
| 9.4 | 13 | 1.5 | 4.9 | |
| 10.0 | | 40.0 | 34.2 | |
| 10.0 | | 42.5 | 52.8 | |
| 8.8 | | 49.5 | 27.7 | 9.0 |
| 8.9 | | 52.5 | 6.0 | 9.0 |
| 10.0 | | 56.8 | 5.1 | |
| 9.6 | 14 | 33.0 | 16.6 | |
| 9.3 | | 43.0 | 52.2 | |
| 8.9 | 15 | 26.0 | 32.5 | |
| 9.8 | | 27.0 | 25.2 | |
| 9.4 | | 29.0 | 50.8 | |
| 9.2 | | 34.5 | 31.7 | |
| 9.8 | | 44.5 | 34.5 | |
| 9.7 | 16 | 3.5 | 4.2 | |
| 10.0 | | 17.0 | 26.4 | |
| 9.7 | | 22.5 | 9.1 | |
| 9.0 | | 43.5 | 2.9 | |
| 9.6 | | 54.5 | 17.3 | |
| 9.4 | 17 | 12.5 | 34.6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 3 | 30 | 41 | 5.1 |
| | 40 | 40 | 4.8 |
| | 50 | 39 | 4.5 |
| 4 | 0 | 38 | 4.2 |
| | 10 | 37 | 3.9 |
| | 20 | 36 | 3.5 |
| | 30 | 35 | 3.2 |
| | 40 | 34 | 2.9 |
| | 50 | 34 | 2.5 |
| 5 | 0 | 33 | 2.2 |
| | 10 | 33 | 1.8 |
| | 20 | 32 | 1.5 |



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| h | m | 25 prec. α + s | δ + ′ |
|---|---|---|---|
| 5 | 10 | 33 | 1·8 |
| | 20 | 32 | 1·5 |
| | 30 | 32 | 1·1 |
| | 40 | 32 | 0·7 |
| | 50 | 32 | 0·4 |
| 6 | 0 | 32 | 0·0 |
| | | | − |
| | 10 | 32 | 0·4 |
| | 20 | 32 | 0·7 |
| | 30 | 32 | 1·1 |

**841—900.**

| mag. | 5h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 17 | 21·0 | 23·3 | |
| 9·4 | 18 | 5·0 | 59·7 | |
| 9·6 | | 19·5 | 53·4 | |
| 9·4 | | 45·5 | 27·7 | |
| 10·0 | | 49·0 | 5·0 | |
| 8·1 | | 53·5 | 26·0 | 8·0 GS |
| 9·4 | | 54·0 | 55·9 | |
| 8·9 | | 55·5 | 5·3 | 9·5 |
| 10·0 | 19 | 4·5 | 7·1 | |
| 9·4 | | 19·0 | 29·2 | |
| 10·0 | | 19·0 | 51·7 | |
| 9·0 | | 40·5 | 51·7 | |
| 9·4 | | 59·0 | 4·4 | |
| 9·6 | 20 | 13·5 | 51·4 | |
| 9·2 | | 19·3 | 52·9 | |
| 9·4 | | 42·8 | 33·5 | 9·0 |
| 10·0 | | 55·6 | 58·1 | |
| 10·0 | 21 | 2·3 | 42·7 | |
| 7·4 | | 28·8 | 32·4 | 8·0 GSg |
| 10·0 | | 31·8 | 3·1 | |
| 10·0 | | 37·3 | 4·6 | |
| 9·4 | 22 | 22·3 | 11·6 | |
| 8·0 | 23 | 0·3 | 35·5 | 8·0 GSg |
| 8·0 | | 10·3 | 41·5 | 8·0 GSg |
| 9·2 | | 19·8 | 4·0 | 9·5 |
| 10·0 | | 23·8 | 11·7 | |
| 9·4 | | 42·7 | 1·3 | |
| 10·0 | | 51·3 | 55·5 | |
| 9·6 | | 59·8 | 16·8 | |
| 9·4 | 24 | 9·3 | 50·9 | |
| 9·6 | | 23·3 | 55·7 | |
| 9·4 | | 24·3 | 10·4 | |
| 9·7 | | 43·8 | 9·0 | |
| 10·0 | 25 | 17·8 | 24·5 | |
| 10·0 | | 31·3 | 12·6 | |
| 7·7 | | 44·3 | 59·1 | 8·5 GSg |
| 9·6 | 26 | 28·8 | 43·2 | |
| 9·6 | | 34·8 | 2·0 | |
| 8·2 | 27 | 2·8 | 21·6 | 8·0 GSg |
| 10·0 | | 7·3 | 45·3 | |
| 10·0 | | 17·8 | 51·2 | |
| 10·0 | | 19·8 | 34·9 | |
| 9·2 | 28 | 0·3 | 19·7 | 9·0 |
| 10·0 | | 34·8 | 35·0 | |
| 9·6 | 29 | 0·3 | 29·3 | |
| 8·8 | | 23·8 | 37·0 | 9·0 |
| 10·0 | | 29·8 | 52·8 | |
| 8·7 | | 34·8 | 53·7 | 9·0 |
| 10·0 | 30 | 0·3 | 41·1 | |
| 9·6 | | 18·3 | 20·4 | |
| 10·0 | | 19·8 | 18·8 | |
| 9·4 | | 37·3 | 2·9 | |
| 9·6 | | 54·8 | 39·5 | |
| 9·4 | 32 | 33·8 | 54·2 | |
| 9·6 | | 36·3 | 14·1 | |
| 9·6 | 33 | 9·8 | 30·3 | |
| 8·9 | | 21·3 | 5·2 | 8·5 |
| 10·0 | 34 | 11·8 | 9·4 | |
| 10·0 | | 19·7 | 14·5 | |
| 10·0 | | 26·8 | 52·0 | |

**901—960.**

| mag. | 5h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·7 | 34 | 40·8 | 46·3 | 8·5 G |
| 9·4 | 35 | 0·5 | 27·2 | |
| 7·4 | | 1·0 | 36·5 | 7·5 GS |
| 9·0 | | 2·1 | 34·3 | 9·5 |
| 9·8 | | 11·3 | 10·8 | |
| 9·8 | | 43·8 | 2·2 | |
| 9·6 | 36 | 3·5 | 3·2 | |
| 9·8 | | 8·8 | 32·7 | |
| 9·8 | | 47·0 | 10·0 | |
| 10·4 | | 55·8 | 25·3 | |
| 10·2 | 37 | 10·3 | 51·7 | |
| 10·4 | | 10·8 | 55·0 | |
| 9·4 | | 13·8 | 21·5 | 10·0 |
| 9·3 | | 54·3 | 17·3 | 9·5 |
| 8·2 | 38 | 0·8 | 8·4 | 8·0 G |
| 7·4 | | 1·3 | 16·8 | 7·0 GS |
| 10·4 | | 3·3 | 44·2 | |
| 9·9 | | 29·8 | 47·7 | |
| 10·4 | | 56·8 | 53·5 | |
| 10·2 | 39 | 28·8 | 48·6 | |
| 9·6 | 40 | 1·3 | 7·6 | |
| 9·8 | | 8·3 | 3·9 | |
| 10·4 | | 29·3 | 27·8 | |
| 9·0 | 41 | 1·3 | 44·3 | 9·0 |
| 9·2 | | 20·8 | 25·7 | 8·5 G |
| 10·0 | 42 | 21·8 | 34·5 | |
| 9·6 | | 25·8 | 13·5 | |
| 9·8 | | 30·8 | 35·8 | |
| 10·4 | | 35·3 | 54·7 | |
| 10·2 | | 41·3 | 31·9 | |
| 10·4 | 43 | 33·8 | 32·1 | |
| 10·0 | | 42·8 | 16·7 | 9·5 |
| 7·0 | | 46·8 | 15·7 | 7·0 GS |
| 9·4 | 44 | 28·8 | 15·8 | |
| 9·8 | | 50·8 | 20·5 | |
| 9·3 | | 55·8 | 45·6 | |
| 9·4 | | 58·8 | 15·0 | |
| 10·2 | 45 | 10·8 | 6·5 | |
| 9·9 | | 13·8 | 56·1 | |
| 8·1 | | 14·8 | 40·4 | 9·0 |
| 8·3 | | 56·3 | 42·7 | 7·5 G |
| 9·4 | 46 | 13·3 | 18·9 | |
| 8·4 | | 16·8 | 30·0 | 8·5 |
| 8·8 | | 19·8 | 28·3 | 9·0 |
| 10·4 | | 39·8 | 48·2 | |
| 10·4 | 47 | 16·7 | 7·9 | |
| 10·4 | | 28·2 | 25·1 | |
| 10·2 | | 29·2 | 32·2 | |
| 10·4 | | 32·7 | 2·9 | |
| 7·8 | | 58·7 | 26·9 | 8·0 G |
| 9·4 | | 59·7 | 21·5 | 9·0 |
| 10·4 | 48 | 12·2 | 26·7 | |
| 8·8 | | 45·2 | 36·9 | 9·0 S |
| 8·1 | | 51·2 | 41·0 | 8·0 GSg |
| 9·0 | 49 | 12·7 | 3·2 | 9·5 |
| 10·2 | | 27·7 | 19·4 | |
| 9·6 | 50 | 4·2 | 19·0 | |
| 10·0 | | 21·2 | 3·9 | |
| 9·8 | | 21·7 | 8·6 | |
| 8·8 | 51 | 32·7 | 14·0 | |

**961—1020.**

| mag. | 5h.–6h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·7 | 51 | 34·2 | 43·6 | 9·0 |
| 10·4 | | 48·7 | 31·8 | |
| 9·6 | | 54·7 | 8·9 | |
| 7·8 | 52 | 8·7 | 35·8 | 8·0 G |
| 8·7 | | 20·7 | 32·8 | 8·5 |
| 10·4 | | 27·7 | 8·0 | |
| 10·0 | | 28·2 | 14·1 | |
| 10·4 | | 31·2 | 44·8 | |
| 10·4 | | 40·2 | 19·8 | |
| 9·1 | | 41·7 | 46·5 | |
| 8·6 | | 51·2 | 33·2 | 9·0 G |
| 10·2 | 53 | 1·7 | 34·2 | |
| 9·6 | | 2·2 | 55·6 | |
| 9·8 | | 51·7 | 52·0 | |
| 8·2 | | 55·7 | 35·0 | 8·5 G |
| 9·6 | 54 | 28·7 | 12·9 | |
| 7·8 | | 30·7 | 25·8 | 7·5 GS |
| 7·4 | | 36·2 | 26·2 | 6·5 GS |
| 10·0 | | 41·2 | 25·2 | |
| 10·2 | | 49·7 | 8·6 | |
| 10·2 | 55 | 1·2 | 44·6 | |
| 9·1 | | 1·2 | 25·0 | 9·0 G |
| 10·2 | | 24·2 | 13·0 | |
| 8·8 | | 27·2 | 32·5 | |
| 10·2 | 56 | 11·7 | 26·1 | |
| 8·2 | | 18·7 | 48·5 | 8·0 G |
| 9·6 | | 57·2 | 18·3 | |
| 10·0 | 57 | 0·2 | 32·9 | |
| 9·2 | | 20·2 | 40·9 | |
| 9·0 | | 32·2 | 55·1 | 9·0 : |
| 9·6 | 58 | 16·2 | 47·1 | |
| 8·4 | | 40·7 | 34·7 | 8·5 |
| 9·9 | | 59·2 | 34·3 | |
| 10·2 | 59 | 15·2 | 27·4 | |
| 9·4 | | 15·7 | 8·6 | 9·0 |
| 9·3 | | 50·2 | 12·9 | |
| 9·6 | | 53·2 | 49·2 | |
| 10·4 | | 55·2 | 1·2 | |
| 7·8 | 0 | 10·2 | 34·7 | 7·0 GSgt |
| 10·4 | | 19·2 | 49·5 | |
| 9·8 | | 20·2 | 22·8 | |
| 8·0 | | 49·2 | 53·1 | 7·5 GSg |
| 9·9 | 1 | 5·2 | 26·7 | |
| 9·0 | | 20·2 | 45·6 | |
| 10·2 | | 58·2 | 53·8 | |
| 8·4 | 2 | 22·2 | 12·1 | |
| 10·2 | | 23·7 | 5·2 | |
| 9·4 | | 25·2 | 42·0 | |
| 10·4 | | 52·2 | 25·9 | |
| 8·6 | | 54·7 | 48·5 | |
| 10·0 | | 56·7 | 39·0 | |
| 9·0 | 3 | 0·2 | 7·2 | 8·5 |
| 9·9 | | 20·2 | 42·0 | |
| 10·0 | | 21·2 | 4·4 | |
| 9·6 | | 29·2 | 25·8 | |
| 10·0 | | 39·2 | 37·8 | |
| 9·1 | | 40·2 | 4·3 | 8·5 |
| 8·8 | 4 | 17·2 | 33·4 | |
| 9·1 | | 42·2 | 48·9 | |
| 9·1 | 5 | 27·2 | 12·7 | 9·5 |

**1021—1080.**

| mag. | 6h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 5 | 30·2 | 55·5 | |
| 8·2 | | 34·2 | 15·9 | 8·0 Gt |
| 8·8 | | 35·7 | 35·7 | |
| 10·4 | | 55·2 | 40·8 | |
| 10·0 | 6 | 2·7 | 47·0 | |
| 9·0 | | 13·7 | 50·4 | |
| 8·8 | | 25·2 | 55·5 | 9·5 |
| 9·2 | | 31·2 | 3·1 | G |
| 10·4 | | 50·7 | 29·7 | |
| 8·6 | | 54·4 | 51·9 | 8·5 G |
| 10·2 | 7 | 0·2 | 27·4 | |
| 10·4 | | 7·4 | 9·6 | |
| 9·9 | 8 | 10·2 | 38·5 | |
| 10·4 | | 18·7 | 48·2 | |
| 9·4 | | 19·7 | 12·0 | |
| 8·4 | | 36·9 | 22·9 | 8·5 |
| 10·0 | 9 | 7·7 | 7·1 | |
| 10·0 | | 40·2 | 11·1 | |
| 9·4 | | 55·2 | 29·5 | |
| 9·8 | | 58·7 | 13·8 | |
| 10·0 | 10 | 21·2 | 2·0 | |
| 9·4 | | 50·6 | 14·6 | 8·5 |
| 9·2 | 11 | 12·6 | 34·8 | |
| 8·6 | | 34·1 | 20·2 | 8·5 |
| 8·6 | | 49·1 | 2·5 | |
| 10·0 | 12 | 16·8 | 0·5 | |
| 9·3 | | 38·1 | 42·4 | |
| 9·2 | | 38·3 | 57·8 | |
| 9·8 | 13 | 7·1 | 4·0 | |
| 9·8 | | 26·6 | 31·8 | |
| 9·2 | | 35·6 | 14·8 | |
| 10·0 | | 47·6 | 31·2 | |
| 9·8 | 14 | 52·1 | 45·2 | |
| 10·0 | 15 | 1·6 | 40·4 | |
| 7·7 | | 4·6 | 55·9 | 7·2 GSg |
| 7·0 | | 27·6 | 30·6 | 7·0 GSg |
| 7·8 | | 54·1 | 34·8 | 7·5 GSg |
| 9·6 | 16 | 10·1 | 33·4 | |
| 9·4 | | 18·1 | 14·4 | |
| 8·2 | | 29·1 | 55·2 | 8·8 G |
| 10·0 | 17 | 37·1 | 10·0 | |
| 9·6 | 18 | 8·1 | 40·3 | |
| 9·4 | | 20·6 | 51·3 | |
| 9·3 | | 41·1 | 4·8 | |
| 9·6 | | 50·1 | 33·0 | |
| 9·6 | 19 | 15·1 | 36·1 | |
| 10·0 | | 16·6 | 26·8 | |
| 8·0 | | 25·1 | 54·6 | 7·8 |
| 9·4 | | 36·1 | 15·8 | |
| 7·2 | | 39·1 | 16·3 | 6·8 GS |
| 8·4 | 20 | 50·8 | 21·5 | 8·2 |
| 9·4 | | 58·8 | 0·9 | |
| 9·4 | 21 | 13·3 | 36·5 | |
| 9·4 | | 20·8 | 14·2 | |
| 8·8 | | 38·8 | 30·5 | |
| 9·4 | | 49·3 | 42·5 | |
| 8·8 | 22 | 7·8 | 13·4 | |
| 9·4 | | 24·8 | 13·6 | |
| 9·6 | 23 | 0·3 | 24·0 | |
| 8·8 | | 2·9 | 2·0 | |



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### 1081—1140.

| mag. | 6h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.4 | 23 | 14.8 | 18.1 | |
| 9.4 | | 29.8 | 10.1 | |
| 9.4 | | 33.8 | 25.4 | 9.5 |
| 10.0 | | 41.3 | 30.1 | |
| 9.4 | 24 | 9.8 | 18.8 | |
| 8.4 | | 14.8 | 30.3 | 8.0 |
| 9.2 | | 36.3 | 22.0 | |
| 8.0 | | 40.3 | 29.3 | 8.0 |
| 9.6 | | 59.8 | 7.2 | |
| 9.1 | 25 | 13.8 | 45.1 | |
| 9.8 | 26 | 4.3 | 2.6 | |
| 9.3 | | 4.8 | 13.8 | |
| 9.6 | | 46.3 | 11.0 | |
| 9.4 | 27 | 7.3 | 36.7 | |
| 10.0 | | 11.0 | 19.1 | |
| 9.2 | | 12.3 | 38.7 | 9.5 |
| 9.4 | | 47.3 | 32.1 | |
| 10.0 | 28 | 4.8 | 29.3 | |
| 9.6 | | 57.3 | 7.4 | |
| 8.4 | 29 | 7.2 | 10.4 | 8.5 |
| 9.8 | | 21.2 | 14.2 | |
| 9.3 | | 39.2 | 38.5 | |
| 10.0 | | 55.2 | 40.2 | |
| 9.6 | 30 | 43.7 | 21.1 | |
| 9.6 | | 55.2 | 8.8 | |
| 10.0 | 31 | 20.4 | 1.2 | |
| 10.0 | | 29.2 | 21.4 | |
| 10.0 | | 39.7 | 55.7 | |
| 10.0 | 32 | 4.2 | 30.0 | |
| 8.2 | | 9.2 | 10.8 | 7.5 G |
| 9.8 | | 9.2 | 21.0 | |
| 10.0 | | 31.2 | 27.8 | |
| 9.1 | | 31.2 | 17.2 | 9.5 |
| 9.4 | | 32.2 | 56.9 | |
| 9.0 | | 49.2 | 36.5 | 9.0 |
| 9.6 | 33 | 9.2 | 47.8 | |
| 10.0 | | 29.2 | 27.2 | |
| 9.0 | 34 | 30.2 | 21.8 | |
| 9.6 | | 38.2 | 12.0 | |
| 9.3 | | 42.7 | 1.8 | |
| 10.0 | | 54.2 | 59.9 | |
| 8.7 | 35 | 2.7 | 9.3 | 9.5 |
| 9.4 | | 7.7 | 46.3 | |
| 10.0 | | 32.7 | 5.6 | |
| 9.2 | | 42.7 | 38.6 | |
| 8.0 | | 46.7 | 32.5 | 8.0 G |
| 10.0 | 36 | 4.2 | 47.1 | |
| 9.0 | | 8.2 | 47.1 | |
| 9.4 | | 19.2 | 6.1 | |
| 9.8 | | 38.7 | 51.1 | |
| 9.2 | | 44.7 | 3.4 | |
| 8.8 | | 49.2 | 35.7 | 9.0 |
| 7.4 | 37 | 0.2 | 20.1 | 7.5 GSt |
| 8.8 | | 42.1 | 57.2 | |
| 10.0 | 38 | 2.6 | 48.2 | |
| 9.8 | | 8.6 | 1.0 | |
| 9.8 | | 32.1 | 51.6 | |
| 9.6 | 39 | 10.9 | 34.5 | |
| 9.8 | | 15.1 | 18.2 | |
| 9.8 | | 32.1 | 29.0 | |

### 1141—1200.

| mag. | 6h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.4 | 40 | 23.9 | 45.4 | |
| 9.6 | | 27.4 | 59.7 | |
| 9.6 | | 40.7 | 16.5 | |
| 10.3 | 41 | 4.4 | 9.7 | |
| 9.1 | | 24.4 | 40.0 | |
| 10.1 | | 33.2 | 48.4 | |
| 10.2 | | 43.2 | 53.3 | |
| 10.3 | 42 | 20.2 | 23.6 | |
| 9.8 | | 38.7 | 50.8 | |
| 10.3 | 43 | 8.7 | 7.0 | |
| 9.1 | | 18.8 | 6.0 | |
| 9.8 | | 23.8 | 45.0 | |
| 10.0 | | 37.8 | 15.5 | |
| 10.1 | | 38.3 | 12.4 | |
| 10.1 | | 49.3 | 43.6 | |
| 9.2 | | 58.8 | 13.5 | |
| 10.1 | 44 | 14.8 | 1.4 | |
| 8.6 | | 33.3 | 16.6 | 9.5 |
| 9.6 | | 38.8 | 25.0 | |
| 8.3 | 45 | 10.7 | 2.3 | 9.0 |
| 9.8 | | 39.3 | 17.7 | |
| 8.0 | | 45.8 | 45.1 | 8.2 |
| 7.5 | | 59.8 | 52.4 | 7.8 G |
| 10.3 | 46 | 5.9 | 31.3 | |
| 8.8 | | 7.3 | 36.3 | 9.2 |
| 9.8 | | 33.8 | 42.5 | |
| 9.6 | 47 | 1.8 | 41.8 | 9.5 |
| 6.3 | | 8.8 | 28.5 | 5.0 GSct |
| 9.4 | | 50.8 | 34.1 | |
| 10.2 | | 51.8 | 40.0 | |
| 9.8 | 48 | 5.8 | 36.2 | |
| 9.6 | 49 | 5.3 | 25.2 | |
| 10.0 | | 30.8 | 31.1 | |
| 10.2 | | 52.3 | 42.0 | |
| 10.1 | | 53.8 | 39.5 | |
| 10.0 | 50 | 5.3 | 3.6 | |
| 7.6 | | 7.3 | 56.2 | 7.0 GSct |
| 10.1 | | 21.0 | 0.9 | |
| 10.0 | | 25.8 | 20.0 | |
| 10.1 | | 27.3 | 5.5 | |
| 9.5 | | 33.3 | 17.2 | |
| 10.3 | | 38.8 | 3.0 | |
| 10.3 | | 55.9 | 12.3 | |
| 9.6 | 51 | 9.7 | 59.7 | |
| 9.8 | | 10.7 | 40.1 | |
| 10.2 | | 13.7 | 17.3 | |
| 9.8 | | 36.7 | 34.9 | |
| 9.6 | | 50.2 | 15.8 | |
| 9.8 | 52 | 1.2 | 11.7 | |
| 9.6 | | 16.7 | 38.3 | |
| 9.6 | | 22.7 | 5.2 | |
| 9.1 | | 41.7 | 42.1 | |
| 8.5 | | 57.7 | 29.9 | 9.0 |
| 8.6 | 53 | 2.2 | 27.7 | 8.5 G |
| 9.6 | | 11.2 | 34.2 | |
| 9.5 | | 22.2 | 22.3 | 9.0 |
| 10.1 | | 30.7 | 41.3 | |
| 10.3 | | 32.6 | 8.2 | |
| 9.4 | | 35.3 | 1.3 | |
| 9.6 | | 47.7 | 49.1 | |

### 1201—1260.

| mag. | 6h.–7h. m | s | –53° ′ | |
|---|---|---|---|---|
| 9.4 | 53 | 48.7 | 22.7 | 10.0 |
| 10.3 | 54 | 0.7 | 14.9 | |
| 9.8 | | 34.2 | 46.5 | |
| 10.1 | | 44.2 | 49.3 | |
| 8.3 | | 51.2 | 26.5 | 8.5 |
| 8.8 | 55 | 26.7 | 43.9 | |
| 9.8 | | 53.9 | 58.7 | |
| 9.2 | | 54.7 | 57.5 | 9.5 |
| 9.4 | 56 | 8.7 | 24.0 | |
| 8.6 | | 19.7 | 18.2 | 8.5 |
| 9.1 | | 30.7 | 25.2 | 8.5 |
| 8.6 | | 46.2 | 11.3 | 8.5 |
| 10.3 | | 51.2 | 35.1 | |
| 9.0 | 57 | 24.7 | 43.7 | |
| 9.4 | 58 | 2.7 | 54.7 | |
| 9.5 | | 19.7 | 3.2 | |
| 10.3 | | 26.2 | 12.8 | |
| 10.3 | | 32.0 | 8.1 | |
| 9.8 | | 34.5 | 52.1 | |
| 9.5 | | 35.0 | 37.6 | |
| 10.1 | | 35.5 | 44.0 | |
| 10.3 | 59 | 0.0 | 21.7 | |
| 10.2 | | 1.0 | 10.1 | |
| 9.6 | | 10.5 | 41.5 | |
| 10.2 | | 20.5 | 17.2 | |
| 8.2 | | 25.5 | 52.8 | 8.0 GSt |
| 8.6 | | 29.5 | 32.3 | 9.5 |
| 10.1 | | 36.0 | 49.0 | |
| 9.0 | | 41.5 | 21.5 | 9.5 |
| 10.1 | 0 | 2.5 | 37.0 | |
| 10.1 | | 19.5 | 43.2 | |
| 9.6 | | 36.5 | 23.5 | |
| 10.3 | | 39.5 | 41.4 | |
| 10.0 | 1 | 13.5 | 6.9 | |
| 9.0 | | 40.0 | 32.9 | |
| 9.8 | | 50.0 | 34.2 | |
| 10.2 | 2 | 8.5 | 50.2 | |
| 10.0 | | 30.0 | 19.1 | |
| 10.3 | | 45.5 | 1.6 | |
| 7.6 | | 46.5 | 55.8 | 8.2 Gt |
| 10.1 | | 51.5 | 45.0 | |
| 10.3 | | 55.0 | 2.7 | |
| 9.0 | | 59.5 | 11.0 | |
| 10.3 | 3 | 19.5 | 53.7 | |
| 9.4 | | 36.2 | 57.7 | |
| 8.8 | | 47.0 | 42.3 | 9.0 |
| 9.4 | 4 | 10.5 | 20.9 | |
| 9.8 | | 14.0 | 49.4 | |
| 10.0 | 5 | 0.0 | 20.6 | 9.5 |
| 10.3 | | 19.7 | 58.8 | |
| 10.3 | | 30.5 | 27.3 | |
| 9.6 | | 31.5 | 25.5 | |
| 9.6 | | 43.5 | 44.4 | |
| 10.3 | 6 | 0.0 | 35.1 | |
| 10.2 | | 1.0 | 9.5 | |
| 8.6 | | 2.5 | 42.5 | 9.0 |
| 9.4 | | 7.5 | 39.2 | 9.5 |
| 8.3 | | 32.5 | 20.5 | 9.0 |
| 10.2 | 7 | 5.5 | 15.7 | |
| 8.2 | | 12.0 | 19.3 | 8.5 G |

### 1261—1320.

| mag. | 7h. m | s | –53° ′ | |
|---|---|---|---|---|
| 10.0 | 7 | 24.0 | 35.9 | |
| 9.8 | | 29.5 | 13.6 | |
| 9.5 | | 41.5 | 55.0 | |
| 9.5 | | 46.0 | 56.9 | |
| 9.4 | | 59.5 | 44.6 | |
| 9.4 | | 59.5 | 4.3 | |
| 10.2 | 8 | 6.5 | 48.1 | |
| 10.0 | | 14.0 | 54.1 | |
| 9.8 | | 17.0 | 11.7 | |
| 10.0 | | 29.5 | 24.7 | |
| 10.1 | | 38.0 | 21.3 | |
| 9.8 | | 56.5 | 19.3 | |
| 9.3 | | 59.0 | 48.9 | |
| 9.6 | 9 | 9.0 | 24.1 | |
| 9.6 | | 13.0 | 1.4 | 9.5 |
| 9.1 | | 14.0 | 0.3 | 9.0 |
| 10.0 | | 30.0 | 8.1 | |
| 10.0 | | 34.5 | 16.7 | |
| 10.1 | 10 | 0.5 | 39.0 | |
| 8.2 | | 4.5 | 40.7 | 7.8 GSg |
| 10.3 | | 16.0 | 27.7 | |
| 9.6 | | 41.0 | 30.7 | |
| 10.2 | | 50.0 | 46.5 | |
| 7.3 | | 50.5 | 27.1 | 7.0 GScgt |
| 10.2 | | 59.5 | 28.9 | |
| 10.3 | | 59.5 | 30.8 | |
| 9.1 | 11 | 9.0 | 16.9 | |
| 9.8 | | 16.1 | 20.1 | |
| 9.0 | | 20.3 | 49.0 | |
| 9.5 | | 44.5 | 26.9 | |
| 9.8 | | 49.5 | 49.3 | |
| 8.4 | | 58.1 | 13.7 | 9.0 |
| 9.4 | | 58.5 | 34.1 | |
| 9.6 | 12 | 11.0 | 35.5 | |
| 9.0 | | 14.9 | 12.8 | |
| 10.3 | | 16.7 | 26.8 | |
| 9.8 | | 24.5 | 4.2 | |
| 10.0 | | 28.5 | 37.7 | |
| 9.0 | | 49.7 | 14.4 | 9.5 |
| 9.0 | | 55.2 | 18.3 | |
| 8.0 | | 57.2 | 22.7 | 8.0 |
| 7.8 | 13 | 23.2 | 49.2 | 7.5 GSt |
| 8.5 | | 31.7 | 5.9 | 8.0 |
| 8.7 | | 50.7 | 12.8 | 9.0 |
| 9.6 | | 53.2 | 34.5 | |
| 9.3 | 14 | 0.7 | 45.3 | 8.5 G |
| 9.7 | | 10.7 | 34.6 | |
| 9.6 | | 21.7 | 46.0 | |
| 9.7 | | 39.7 | 54.4 | |
| 9.7 | 15 | 21.7 | 25.3 | |
| 9.2 | | 26.7 | 5.5 | |
| 9.0 | | 32.1 | 1.5 | |
| 9.6 | 16 | 2.7 | 35.5 | |
| 9.6 | | 45.7 | 52.7 | |
| 8.4 | 17 | 20.4 | 58.7 | 8.0 G |
| 9.7 | | 31.7 | 51.1 | |
| 9.2 | | 45.7 | 14.1 | |
| 9.6 | | 52.4 | 59.3 | |
| 8.6 | 18 | 0.7 | 32.1 | 8.5 |
| 9.2 | | 14.7 | 11.3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 6 | 20 | 32 | 0.7 |
| | 30 | 32 | 1.1 |
| | 40 | 32 | 1.5 |
| | 50 | 33 | 1.8 |
| 7 | 0 | 33 | 2.2 |
| | 10 | 34 | 2.5 |
| | 20 | 34 | 2.9 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 7 | 20 | 34 | 2·9 |
| | 30 | 35 | 3·2 |
| | 40 | 36 | 3·5 |
| | 50 | 37 | 3·9 |
| 8 | 0 | 38 | 4·2 |
| | 10 | 39 | 4·5 |

## 1321—1380.

| mag. | 7h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·2 | 18 | 16·7 | 38·7 | 8·0 |
| 9·6 | | 17·4 | 49·0 | |
| 8·4 | | 20·4 | 23·4 | |
| 9·4 | | 31·4 | 8·0 | |
| 9·7 | 19 | 0·9 | 54·0 | |
| 8·4 | | 6·4 | 39·9 | 9·0 |
| 9·6 | | 45·9 | 15·0 | |
| 9·2 | | 52·4 | 48·2 | |
| 9·6 | | 59·4 | 8·8 | |
| 9·7 | 20 | 28·9 | 28·7 | |
| 7·7 | | 29·4 | 15·8 | 7·0 GSgt |
| 9·2 | | 40·9 | 40·0 | |
| 9·7 | | 49·4 | 14·2 | |
| 7·0 | | 50·4 | 25·6 | 7·2 GSgt |
| 9·7 | 21 | 52·4 | 35·2 | |
| 9·3 | 22 | 0·4 | 43·6 | |
| 9·7 | 23 | 19·4 | 5·9 | |
| 9·2 | | 51·9 | 20·5 | |
| 9·7 | | 56·4 | 54·3 | |
| 9·6 | 24 | 0·4 | 4·0 | |
| 9·3 | | 23·9 | 13·1 | |
| 9·0 | 25 | 5·9 | 14·0 | |
| 9·3 | | 8·4 | 45·0 | |
| 8·8 | | 15·3 | 2·5 | |
| 9·4 | | 21·4 | 45·0 | |
| 9·3 | 26 | 14·9 | 2·6 | |
| 9·4 | | 22·4 | 28·8 | |
| 9·6 | | 32·4 | 53·0 | |
| 9·7 | | 55·4 | 42·2 | |
| 9·7 | 27 | 17·4 | 2·0 | |
| 9·7 | | 20·4 | 8·6 | |
| 9·2 | 28 | 10·4 | 17·3 | |
| 8·6 | | 35·4 | 36·0 | |
| 9·6 | | 40·4 | 43·4 | |
| 9·7 | 29 | 8·4 | 6·9 | |
| 9·6 | | 11·4 | 45·0 | |
| 7·4 | | 50·0 | 17·1 | 7·2 GSct |
| 9·4 | 30 | 0·0 | 28·7 | |
| 9·6 | | 32·0 | 24·9 | |
| 9·4 | | 48·0 | 41·5 | |
| 9·2 | | 51·9 | 57·9 | |
| 9·2 | 31 | 1·5 | 53·1 | |
| 9·6 | | 16·0 | 35·1 | |
| 9·7 | | 34·0 | 25·0 | |
| 7·5 | | 34·5 | 47·5 | 7·5 GSg |
| 9·7 | | 39·0 | 9·3 | |
| 8·7 | | 48·0 | 38·6 | 8·0 |
| 8·4 | | 50·0 | 40·1 | 8·5 |
| 9·0 | 32 | 2·5 | 20·1 | |
| 9·0 | | 27·0 | 26·8 | |
| 8·6 | | 30·0 | 33·8 | |
| 8·2 | | 40·0 | 50·9 | 7·5 S |
| 9·3 | | 55·0 | 43·9 | |
| 9·0 | 33 | 15·0 | 34·7 | 8·8 |
| 8·4 | | 19·5 | 32·4 | 8·0 Gt |
| 9·4 | | 26·0 | 7·1 | |
| 9·4 | | 29·5 | 51·9 | |
| 7·0 | | 32·0 | 54·5 | 7·0 GSg |
| 9·0 | | 40·5 | 26·1 | |
| 9·6 | | 40·5 | 17·3 | |

## 1381—1440.

| mag. | 7h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·4 | 33 | 41·0 | 10·0 | |
| 9·0 | | 44·0 | 26·2 | |
| 8·2 | 34 | 5·0 | 47·9 | 8·0 Gg |
| 9·4 | | 24·5 | 46·9 | |
| 9·2 | | 25·5 | 46·7 | |
| 9·6 | | 38·0 | 44·8 | |
| 9·2 | 35 | 0·5 | 14·5 | |
| 9·4 | | 2·0 | 18·2 | |
| 9·2 | | 6·0 | 48·3 | |
| 8·4 | | 20·0 | 43·3 | 8·8 |
| 8·4 | | 30·0 | 49·9 | 7·8 GS |
| 9·2 | | 32·5 | 34·9 | |
| 9·7 | | 40·5 | 21·2 | |
| 8·3 | 36 | 2·0 | 52·9 | 8·5 |
| 9·7 | | 2·2 | 37·8 | |
| 9·3 | | 12·2 | 22·4 | |
| 9·2 | | 12·7 | 0·9 | 9·5 |
| 8·9 | | 43·2 | 14·6 | |
| 8·8 | | 51·2 | 21·0 | |
| 8·0 | 37 | 9·7 | 41·4 | |
| 9·2 | | 19·7 | 15·0 | |
| 9·3 | | 25·2 | 50·0 | |
| 9·7 | | 27·7 | 25·2 | |
| 9·7 | | 39·4 | 22·1 | |
| 9·3 | | 39·7 | 11·8 | |
| 8·5 | | 47·2 | 14·3 | 9·0 |
| 9·4 | | 50·2 | 35·9 | |
| 9·6 | 38 | 25·7 | 30·3 | |
| 9·7 | | 53·7 | 11·8 | |
| 9·7 | | 57·7 | 11·4 | |
| 9·3 | 39 | 29·2 | 59·0 | |
| 9·7 | | 34·4 | 49·9 | |
| 9·3 | | 39·7 | 28·8 | |
| 9·6 | 40 | 1·2 | 10·2 | |
| 9·7 | | 1·2 | 15·8 | |
| 9·3 | | 26·7 | 55·2 | |
| 9·2 | | 27·7 | 46·6 | GSg |
| 7·5 | | 33·7 | 56·6 | 7·2 GSg |
| 9·6 | | 36·5 | 0·4 | |
| 9·0 | | 38·2 | 25·6 | |
| 9·4 | | 51·7 | 17·2 | |
| 9·3 | | 55·7 | 59·0 | |
| 9·6 | 41 | 4·7 | 41·2 | |
| 9·0 | | 10·7 | 45·1 | |
| 9·4 | | 34·0 | 52·9 | |
| 9·2 | | 44·5 | 38·5 | |
| 9·7 | 42 | 18·0 | 14·4 | |
| 9·4 | 43 | 38·2 | 56·2 | |
| 9·0 | | 44·5 | 32·5 | |
| 8·8 | 44 | 9·2 | 7·5 | 9·5 |
| 9·2 | | 17·8 | 18·9 | |
| 7·1 | | 19·8 | 1·4 | 7·5 GSt |
| 8·2 | | 50·8 | 56·7 | 8·0 |
| 10·0 | 45 | 31·8 | 37·1 | |
| 10·0 | | 45·8 | 13·7 | |
| 10·0 | 46 | 9·5 | 59·8 | |
| 10·2 | | 18·3 | 0·8 | |
| 9·8 | | 23·3 | 14·9 | |
| 10·0 | | 26·8 | 44·5 | |
| 9·2 | | 27·8 | 42·6 | |

## 1441—1500.

| mag. | 7h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 46 | 52·8 | 35·0 | |
| 10·0 | | 55·3 | 52·2 | |
| 9·6 | 47 | 2·3 | 50·6 | |
| 10·0 | | 5·8 | 12·9 | |
| 10·0 | | 14·8 | 24·3 | |
| 10·2 | | 49·8 | 33·7 | |
| 10·2 | 48 | 1·3 | 42·6 | |
| 9·2 | | 17·3 | 58·9 | |
| 8·6 | | 20·8 | 28·2 | 8·2 |
| 9·8 | | 22·8 | 12·8 | |
| 9·8 | | 30·8 | 50·3 | |
| 10·0 | | 30·8 | 25·7 | |
| 10·2 | | 31·2 | 2·1 | |
| 8·9 | | 37·5 | 2·3 | 9·5 |
| 10·2 | | 41·8 | 28·6 | |
| 9·5 | | 49·8 | 31·5 | |
| 8·6 | | 50·8 | 0·2 | 9·5 |
| 10·0 | 49 | 16·0 | 12·7 | |
| 10·0 | | 21·5 | 30·9 | |
| 8·6 | | 30·0 | 39·8 | 9·5 |
| 8·6 | | 30·0 | 52·0 | |
| 9·8 | | 41·0 | 13·1 | |
| 10·0 | | 55·0 | 15·5 | |
| 9·6 | | 56·0 | 4·7 | |
| 9·5 | 50 | 23·0 | 20·1 | |
| 9·4 | | 24·5 | 45·5 | |
| 9·6 | | 33·5 | 23·0 | |
| 9·8 | | 50·5 | 6·7 | |
| 10·2 | | 51·0 | 17·5 | |
| 10·2 | | 58·5 | 47·2 | |
| 10·2 | 51 | 4·5 | 41·9 | |
| 9·6 | | 5·5 | 13·9 | |
| 9·6 | | 12·0 | 38·9 | 9·5 |
| 9·6 | | 14·0 | 35·5 | |
| 10·0 | | 14·5 | 10·1 | |
| 9·0 | | 16·0 | 42·7 | 9·5 |
| 9·4 | | 42·0 | 57·7 | |
| 10·2 | | 48·5 | 8·2 | |
| 9·4 | 52 | 17·0 | 16·9 | Gg |
| 8·4 | | 19·0 | 17·5 | GSg |
| 9·2 | | 26·5 | 26·7 | |
| 8·6 | | 57·0 | 44·9 | 9·0 |
| 9·8 | | 58·0 | 38·3 | |
| 10·0 | 53 | 4·0 | 12·5 | |
| 9·4 | | 36·0 | 3·9 | 9·0 |
| 9·2 | | 37·0 | 46·0 | |
| 9·5 | 54 | 18·0 | 41·7 | |
| 10·0 | | 23·0 | 41·2 | |
| 9·2 | | 26·0 | 37·0 | |
| 9·4 | | 26·5 | 8·2 | |
| 10·2 | | 48·5 | 59·2 | |
| 10·0 | 55 | 4·5 | 24·1 | |
| 10·0 | | 16·0 | 8·0 | |
| 9·8 | | 27·5 | 41·0 | |
| 9·4 | | 32·5 | 42·9 | |
| 9·8 | | 34·0 | 16·0 | |
| 10·2 | | 45·0 | 2·3 | |
| 9·5 | | 49·0 | 32·1 | |
| 9·6 | 56 | 1·0 | 8·0 | |
| 10·2 | | 2·5 | 25·4 | |

## 1501—1560.

| mag. | 7h.–8h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 56 | 5·0 | 27·2 | |
| 9·6 | | 40·0 | 57·6 | |
| 9·4 | | 42·3 | 2·1 | |
| 9·6 | 57 | 43·5 | 52·7 | |
| 5·7 | | 45·5 | 48·3 | 6·5 GSct |
| 9·8 | | 49·5 | 28·5 | |
| 9·2 | 58 | 16·0 | 7·4 | 9·0 |
| 9·8 | | 26·5 | 10·3 | |
| 9·2 | | 33·5 | 41·1 | |
| 10·0 | | 40·5 | 40·3 | |
| 10·2 | | 46·0 | 47·9 | |
| 9·8 | 59 | 5·5 | 40·9 | |
| 10·2 | | 21·0 | 51·5 | |
| 10·0 | | 22·8 | 58·6 | |
| 10·0 | | 31·0 | 33·6 | |
| 8·4 | | 51·0 | 5·7 | 9·0 |
| 9·5 | | 51·0 | 29·1 | |
| 8·6 | 0 | 3·5 | 39·5 | 8·5 |
| 10·2 | | 8·5 | 18·1 | |
| 10·2 | | 19·5 | 17·2 | |
| 10·2 | | 32·0 | 22·0 | |
| 8·6 | | 34·5 | 50·2 | |
| 9·4 | | 46·0 | 12·9 | |
| 9·8 | | 54·5 | 54·2 | |
| 9·4 | 1 | 10·0 | 39·8 | |
| 10·0 | | 21·0 | 8·3 | |
| 10·2 | | 27·0 | 52·7 | |
| 10·2 | 2 | 13·5 | 39·0 | |
| 8·4 | | 17·0 | 55·2 | 9·0 |
| 9·4 | | 25·5 | 7·6 | |
| 9·6 | | 56·0 | 21·3 | |
| 10·2 | | 58·1 | 0·6 | |
| 8·5 | 3 | 12·0 | 41·0 | 8·5 |
| 9·8 | | 12·5 | 15·8 | |
| 10·2 | | 17·2 | 40·5 | |
| 9·6 | | 27·5 | 3·0 | |
| 9·8 | 4 | 0·0 | 42·3 | |
| 8·5 | | 2·0 | 19·2 | 9·0 |
| 8·4 | | 26·5 | 7·6 | 8·5 |
| 10·0 | | 30·5 | 17·8 | |
| 7·8 | | 31·0 | 42·0 | |
| 9·6 | | 35·5 | 39·4 | |
| 9·6 | 5 | 1·0 | 27·0 | |
| 9·6 | | 4·5 | 10·0 | |
| 10·0 | | 18·5 | 5·4 | |
| 10·2 | | 31·5 | 31·0 | |
| 8·6 | 6 | 21·0 | 10·5 | 8·5 |
| 9·6 | | 31·5 | 6·2 | |
| 10·0 | | 38·5 | 49·2 | |
| 9·6 | | 42·5 | 18·2 | |
| 9·2 | | 50·0 | 5·4 | |
| 10·2 | 8 | 1·0 | 48·6 | |
| 10·0 | | 6·0 | 21·4 | |
| 10·0 | | 10·5 | 18·3 | |
| 10·0 | | 11·5 | 47·6 | |
| 9·8 | | 23·0 | 50·0 | |
| 8·9 | | 33·5 | 30·9 | 9·5 |
| 9·4 | | 46·0 | 24·8 | 9·0 G |
| 10·0 | | 56·5 | 39·8 | |
| 9·2 | 9 | 14·0 | 50·7 | |



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## 1561—1620.

| mag. | 8h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.2 | 9 | 16.0 | 0.0 | |
| 9.5 | | 20.5 | 7.0 | |
| 10.2 | | 22.0 | 5.0 | |
| 7.1 | | 22.5 | 46.3 | 7.5 GSct |
| 10.2 | | 43.3 | 38.5 | |
| 10.2 | | 43.8 | 2.1 | |
| 9.4 | | 49.8 | 40.4 | |
| 9.2 | | 49.8 | 23.4 | |
| 9.6 | | 51.3 | 40.3 | |
| 10.2 | 10 | 0.8 | 16.2 | |
| 10.2 | | 12.3 | 36.9 | |
| 9.4 | | 35.3 | 28.1 | 10.0 |
| 10.2 | | 50.8 | 46.9 | |
| 10.2 | | 59.8 | 0.0 | |
| 9.5 | 11 | 1.3 | 21.1 | |
| 9.6 | | 5.8 | 34.9 | |
| 10.0 | | 6.3 | 41.6 | |
| 10.0 | | 10.3 | 16.5 | |
| 9.8 | | 10.8 | 25.5 | |
| 10.2 | | 11.3 | 39.8 | |
| 9.4 | | 16.8 | 7.6 | |
| 10.0 | | 22.3 | 44.7 | |
| 9.4 | | 40.8 | 21.0 | |
| 9.4 | | 50.0 | 59.0 | |
| 9.6 | | 57.8 | 23.4 | |
| 10.0 | | 58.3 | 28.8 | |
| 9.8 | 12 | 5.8 | 31.9 | |
| 9.6 | | 7.8 | 27.8 | |
| 10.2 | | 8.8 | 15.0 | |
| 10.2 | | 10.8 | 53.8 | |
| 10.2 | | 11.8 | 19.0 | |
| 7.8 | | 15.8 | 9.2 | 8.2 |
| 10.0 | | 31.8 | 23.5 | |
| 9.5 | | 57.3 | 40.5 | |
| 8.4 | 13 | 2.3 | 6.2 | 8.5 |
| 10.0 | | 20.8 | 9.6 | |
| 9.8 | | 21.8 | 8.3 | |
| 9.4 | | 22.3 | 43.3 | |
| 9.4 | | 23.3 | 39.3 | |
| 9.4 | | 23.3 | 35.9 | |
| 7.5 | | 32.8 | 5.3 | 8.0 |
| 7.8 | | 36.3 | 14.3 | 7.5 |
| 9.6 | | 38.8 | 8.6 | |
| 7.5 | | 40.8 | 18.9 | 8.0 GSg |
| 9.8 | | 51.8 | 7.7 | |
| 10.0 | | 55.8 | 55.3 | |
| 10.2 | 14 | 14.3 | 39.4 | |
| 9.2 | | 18.3 | 58.5 | |
| 10.2 | | 26.8 | 26.0 | |
| 9.8 | 15 | 0.8 | 51.0 | |
| 9.2 | | 17.5 | 58.4 | |
| 10.1 | | 21.1 | 21.6 | |
| 10.1 | | 27.1 | 40.9 | |
| 10.0 | | 32.4 | 4.4 | |
| 9.6 | | 44.2 | 1.5 | |
| 10.1 | 16 | 1.1 | 24.8 | |
| 9.6 | | 10.6 | 46.6 | |
| 9.4 | | 29.1 | 12.4 | 9.0 |
| 9.4 | | 29.9 | 45.0 | |
| 9.7 | | 29.9 | 9.8 | |

## 1621—1680.

| mag. | 8h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8.7 | 16 | 30.6 | 30.3 | 8.2 |
| 9.8 | | 33.7 | 31.2 | |
| 9.8 | | 36.1 | 34.0 | |
| 9.8 | | 37.2 | 9.5 | |
| 8.7 | | 40.6 | 17.6 | 8.0 GSt |
| 9.8 | | 42.1 | 35.6 | |
| 8.8 | | 46.6 | 31.6 | 9.0 |
| 9.6 | | 51.6 | 6.5 | |
| 10.0 | | 52.6 | 7.2 | |
| 10.0 | | 56.1 | 22.7 | |
| 10.1 | | 56.6 | 34.1 | |
| 10.1 | 17 | 11.1 | 50.8 | |
| 9.7 | | 13.6 | 20.4 | |
| 10.1 | | 23.6 | 34.9 | |
| 10.1 | | 40.6 | 28.8 | |
| 10.1 | | 49.6 | 8.4 | |
| 8.8 | | 51.1 | 20.8 | 8.8 |
| 9.8 | | 52.6 | 2.6 | |
| 10.1 | | 53.1 | 2.0 | |
| 10.1 | | 54.1 | 27.3 | |
| 10.1 | 18 | 6.1 | 15.2 | |
| 9.6 | | 9.6 | 22.4 | |
| 10.1 | | 10.6 | 55.8 | |
| 10.1 | | 12.1 | 0.3 | |
| 10.1 | | 41.6 | 51.5 | |
| 9.6 | | 59.5 | 57.0 | |
| 8.8 | 19 | 5.6 | 27.4 | 9.5 |
| 9.1 | | 20.6 | 23.0 | 9.5 |
| 8.9 | | 32.1 | 4.8 | 9.5 |
| 10.0 | | 32.6 | 52.9 | |
| 10.0 | | 44.1 | 22.4 | |
| 10.0 | | 50.1 | 42.9 | |
| 10.0 | 20 | 20.1 | 2.4 | |
| 10.1 | | 20.6 | 59.9 | |
| 10.0 | | 38.1 | 42.8 | |
| 9.4 | | 40.1 | 25.7 | |
| 9.6 | | 48.6 | 31.8 | |
| 8.7 | | 50.1 | 47.9 | 9.5 |
| 8.5 | | 55.6 | 7.0 | 9.0 |
| 9.8 | 21 | 0.6 | 37.0 | |
| 9.6 | | 7.6 | 3.9 | |
| 9.6 | | 8.6 | 20.3 | |
| 9.8 | | 9.1 | 10.6 | |
| 7.6 | | 11.6 | 19.7 | 8.0 GSg |
| 10.1 | | 21.1 | 29.9 | |
| 9.8 | | 21.1 | 15.7 | |
| 10.0 | | 29.6 | 2.9 | |
| 9.8 | | 32.1 | 28.4 | |
| 9.7 | | 32.1 | 53.3 | |
| 9.6 | | 38.1 | 45.0 | |
| 9.8 | | 50.0 | 59.6 | |
| 9.6 | 22 | 3.6 | 26.5 | |
| 9.7 | | 28.1 | 52.9 | |
| 10.0 | | 43.1 | 19.9 | |
| 10.1 | | 55.1 | 36.3 | |
| 10.0 | | 56.6 | 14.1 | |
| 9.1 | 23 | 0.6 | 10.7 | |
| 9.2 | | 0.6 | 30.9 | |
| 10.0 | | 3.1 | 3.9 | |
| 9.2 | | 5.6 | 34.7 | |

## 1681—1740.

| mag. | 8h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.2 | 23 | 19.6 | 36.7 | |
| 10.1 | | 25.1 | 39.3 | |
| 9.2 | | 32.6 | 49.3 | |
| 9.6 | | 51.6 | 59.1 | |
| 9.2 | | 57.9 | 2.9 | |
| 8.1 | 24 | 0.1 | 38.3 | 8.5 |
| 9.6 | | 4.6 | 9.5 | |
| 9.8 | | 15.6 | 21.7 | |
| 9.7 | | 17.1 | 29.9 | |
| 9.4 | | 23.7 | 0.6 | |
| 9.6 | | 35.1 | 32.9 | |
| 10.0 | | 41.1 | 5.7 | |
| 10.1 | | 43.1 | 15.3 | |
| 10.0 | | 45.1 | 10.3 | |
| 9.6 | | 48.6 | 10.1 | |
| 10.1 | | 48.6 | 49.9 | |
| 9.8 | | 51.1 | 19.7 | |
| 9.8 | | 54.6 | 47.1 | |
| 9.4 | 25 | 0.6 | 47.3 | |
| 10.0 | | 0.6 | 9.1 | |
| 10.0 | | 2.1 | 7.5 | |
| 9.6 | | 3.1 | 7.8 | |
| 10.1 | | 12.1 | 9.1 | |
| 10.0 | | 14.1 | 51.9 | |
| 9.6 | | 31.6 | 50.7 | |
| 9.4 | 26 | 0.6 | 19.7 | |
| 7.0 | | 10.6 | 47.6 | 7.0 GScgt |
| 9.2 | | 22.6 | 51.7 | 9.5 |
| 10.1 | | 40.6 | 10.9 | |
| 10.1 | | 41.6 | 27.1 | |
| 9.6 | | 51.1 | 55.7 | |
| 10.1 | | 54.1 | 35.3 | |
| 10.0 | | 54.1 | 29.0 | |
| 9.6 | | 55.1 | 59.5 | |
| 10.0 | 27 | 19.1 | 25.3 | |
| 10.1 | | 19.1 | 1.3 | |
| 9.7 | | 20.6 | 55.5 | |
| 9.8 | | 22.4 | 58.3 | |
| 10.0 | | 27.1 | 4.7 | |
| 9.6 | | 32.1 | 18.1 | |
| 8.4 | | 46.1 | 40.2 | 8.0 Gg |
| 9.4 | | 50.6 | 24.9 | |
| 9.0 | | 52.1 | 9.7 | |
| 9.6 | | 55.6 | 41.6 | |
| 10.0 | | 59.1 | 11.9 | |
| 9.8 | 28 | 0.6 | 23.9 | |
| 9.7 | | 1.6 | 24.1 | |
| 9.6 | | 2.1 | 33.4 | |
| 7.6 | | 9.9 | 58.3 | 7.0 GSg |
| 9.8 | | 21.6 | 21.7 | |
| 9.8 | | 23.1 | 40.3 | |
| 9.6 | | 27.6 | 16.7 | |
| 10.1 | | 42.6 | 3.7 | |
| 9.6 | | 51.6 | 22.7 | |
| 8.7 | 29 | 7.6 | 41.9 | 8.8 |
| 10.0 | | 10.1 | 36.1 | |
| 9.4 | | 14.2 | 28.9 | |
| 10.1 | | 20.1 | 48.9 | |
| 9.8 | | 25.6 | 7.0 | |
| 9.8 | | 35.1 | 43.2 | |

## 1741—1800.

| mag. | 8h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.6 | 29 | 40.6 | 32.9 | |
| 10.1 | | 50.6 | 9.3 | |
| 10.0 | 30 | 4.6 | 1.7 | |
| 9.4 | | 9.1 | 45.9 | |
| 9.6 | | 11.1 | 40.1 | |
| 9.7 | | 21.6 | 8.1 | |
| 10.0 | | 29.6 | 43.3 | |
| 9.8 | | 31.6 | 45.3 | |
| 9.6 | | 39.1 | 23.9 | |
| 9.4 | | 44.1 | 35.5 | |
| 10.1 | | 55.6 | 24.5 | |
| 9.6 | 31 | 11.1 | 44.3 | |
| 9.4 | | 13.1 | 49.2 | |
| 9.4 | | 15.6 | 23.3 | |
| 8.9 | | 15.6 | 3.3 | |
| 9.4 | | 29.4 | 0.1 | |
| 9.4 | | 40.6 | 37.5 | |
| 9.6 | | 42.6 | 26.3 | |
| 10.0 | | 45.1 | 17.1 | |
| 7.2 | | 46.6 | 46.5 | 7.0 GSg |
| 10.1 | | 49.6 | 3.9 | |
| 9.7 | | 51.1 | 9.3 | |
| 9.4 | | 57.0 | 3.2 | 9.0 |
| 10.1 | 32 | 3.6 | 32.5 | |
| 10.0 | | 14.1 | 29.0 | |
| 10.1 | | 20.1 | 45.6 | |
| 9.4 | | 20.1 | 53.1 | |
| 10.0 | | 21.6 | 41.3 | |
| 9.6 | | 22.1 | 6.3 | |
| 8.9 | | 31.6 | 10.9 | 9.0 |
| 10.1 | | 35.6 | 6.7 | |
| 9.4 | | 38.6 | 25.9 | |
| 8.8 | | 40.4 | 2.7 | 9.0 |
| 10.1 | | 52.6 | 6.3 | |
| 9.4 | | 59.6 | 35.0 | |
| 9.6 | 33 | 11.1 | 53.9 | |
| 9.3 | | 12.9 | 23.1 | |
| 10.0 | | 24.4 | 41.8 | |
| 10.1 | | 39.4 | 26.7 | |
| 8.4 | 34 | 1.4 | 9.5 | 8.5 |
| 9.6 | | 2.4 | 38.5 | |
| 9.6 | | 4.9 | 9.5 | |
| 9.8 | | 8.4 | 25.7 | |
| 8.6 | | 12.4 | 44.8 | 9.0 |
| 10.1 | | 22.4 | 19.5 | |
| 10.0 | | 31.6 | 58.9 | |
| 9.4 | | 39.4 | 25.5 | |
| 9.3 | | 54.9 | 47.3 | |
| 7.8 | | 54.9 | 17.0 | 7.5 G |
| 9.8 | | 57.4 | 22.1 | |
| 10.1 | 35 | 2.7 | 56.1 | |
| 10.1 | | 11.4 | 39.9 | |
| 8.8 | | 17.9 | 4.9 | 7.5 G |
| 10.1 | | 28.7 | 25.1 | |
| 9.4 | | 49.9 | 21.7 | |
| 5.7 | | 52.7 | 0.0 | 6.0 GSct |
| 9.6 | | 52.9 | 36.3 | |
| 10.1 | 36 | 4.4 | 19.5 | |
| 9.7 | | 5.7 | 1.6 | |
| 9.8 | | 6.9 | 17.0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 0 | 38 | 4.2 |
| | 10 | 39 | 4.5 |
| | 20 | 40 | 4.8 |
| | 30 | 41 | 5.1 |
| | 40 | 42 | 5.4 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 8 | 30 | 41 | 5·1 |
| | 40 | 42 | 5·4 |
| | 50 | 44 | 5·6 |
| 9 | 0 | 45 | 5·9 |

## 1801—1860.

| | 8h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·1 | 36 | 28·4 | 10·3 | |
| 10·1 | | 30·4 | 55·4 | |
| 9·4 | | 33·4 | 41·2 | |
| 7·4 | | 33·9 | 24·5 | 8·0 GSt |
| 9·6 | | 35·9 | 11·6 | |
| 10·0 | | 37·7 | 24·6 | |
| 9·3 | | 42·4 | 13·5 | |
| 9·0 | | 45·4 | 0·0 | 8·0 |
| 9·0 | | 49·4 | 41·5 | 9·5 |
| 9·8 | | 55·4 | 16·7 | |
| 10·1 | 37 | 2·4 | 21·1 | |
| 10·0 | | 8·4 | 12·7 | |
| 8·4 | | 10·4 | 39·9 | 9·0 |
| 10·0 | | 15·4 | 42·1 | |
| 9·8 | | 18·9 | 11·1 | |
| 9·7 | | 21·4 | 18·1 | |
| 9·0 | | 31·0 | 19·6 | |
| 10·1 | | 39·5 | 2·2 | |
| 9·0 | | 51·0 | 11·4 | |
| 9·6 | 38 | 0·0 | 9·6 | |
| 9·6 | | 6·5 | 6·5 | |
| 9·8 | | 9·2 | 57·1 | |
| 10·0 | | 10·5 | 0·9 | |
| 10·1 | | 22·5 | 13·7 | |
| 8·4 | | 43·5 | 42·2 | 8·5 |
| 8·8 | | 49·0 | 27·2 | |
| 9·3 | | 51·5 | 34·4 | |
| 9·8 | | 52·5 | 5·0 | |
| 10·1 | | 55·5 | 14·2 | |
| 9·8 | 39 | 13·5 | 31·4 | |
| 9·4 | | 15·0 | 52·9 | |
| 10·1 | | 20·5 | 57·4 | |
| 10·0 | | 21·1 | 51·9 | |
| 8·0 | | 21·5 | 18·0 | 8·2 Gt |
| 10·1 | | 22·0 | 42·0 | |
| 9·7 | | 25·5 | 42·4 | |
| 10·0 | | 30·0 | 27·0 | |
| 10·1 | | 31·5 | 39·8 | |
| 9·4 | | 32·0 | 45·9 | |
| 9·6 | | 38·5 | 11·8 | |
| 9·8 | | 42·5 | 8·8 | |
| 7·6 | 40 | 2·5 | 4·4 | 8·0 GSt |
| 9·7 | | 6·0 | 19·0 | |
| 10·0 | | 14·5 | 7·1 | |
| 9·8 | | 25·0 | 24·8 | |
| 10·1 | | 25·5 | 6·6 | |
| 9·6 | | 33·5 | 28·3 | |
| 9·8 | | 42·0 | 47·8 | |
| 9·6 | 41 | 1·0 | 22·0 | |
| 10·1 | | 9·0 | 42·0 | |
| 10·1 | | 10·0 | 8·8 | |
| 9·6 | | 12·0 | 29·8 | |
| 9·8 | | 13·0 | 27·6 | |
| 9·7 | | 15·0 | 35·6 | |
| 10·1 | | 20·5 | 19·7 | |
| 10·0 | | 26·0 | 50·2 | |
| 8·4 | | 29·8 | 5·3 | |
| 10·1 | | 32·3 | 3·3 | |
| 10·0 | | 35·0 | 57·0 | |
| 9·8 | | 40·8 | 43·8 | |

## 1861—1920.

| | 8h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·6 | 41 | 41·8 | 51·3 | |
| 8·9 | | 42·8 | 24·0 | |
| 9·4 | | 45·8 | 19·2 | |
| 10·1 | | 47·0 | 46·0 | |
| 9·6 | | 53·8 | 59·1 | |
| 9·6 | | 53·8 | 13·3 | |
| 9·4 | | 54·8 | 37·7 | |
| 8·5 | | 56·3 | 10·5 | 9·0 |
| 10·0 | | 59·8 | 44·6 | |
| 10·1 | 42 | 0·6 | 57·5 | |
| 9·3 | | 9·8 | 59·4 | |
| 10·0 | | 9·8 | 49·9 | |
| 9·2 | | 10·8 | 3·9 | 8·5 |
| 10·1 | | 13·8 | 7·3 | |
| 9·4 | | 17·8 | 0·1 | |
| 10·1 | | 18·0 | 48·5 | |
| 10·1 | | 21·3 | 51·6 | |
| 8·8 | | 36·8 | 15·7 | |
| 9·8 | | 41·8 | 15·7 | |
| 9·6 | | 41·8 | 17·8 | |
| 9·7 | | 49·8 | 10·1 | |
| 9·6 | | 51·8 | 40·2 | |
| 9·8 | | 55·8 | 18·4 | |
| 9·8 | 43 | 0·8 | 38·8 | |
| 10·1 | | 3·2 | 41·1 | |
| 9·7 | | 4·2 | 29·8 | |
| 10·0 | | 8·2 | 0·1 | |
| 8·0 | | 17·8 | 44·3 | 8·5 |
| 9·6 | | 24·2 | 51·1 | |
| 9·8 | | 27·2 | 12·4 | |
| 9·4 | | 47·8 | 34·4 | |
| 9·3 | | 49·8 | 42·6 | |
| 9·8 | | 53·8 | 15·3 | |
| 9·2 | | 59·0 | 0·5 | |
| 9·4 | 44 | 4·3 | 56·0 | |
| 10·1 | | 4·8 | 29·6 | |
| 10·1 | | 5·3 | 1·0 | |
| 8·9 | | 9·8 | 17·6 | |
| 8·9 | | 10·8 | 6·4 | 9·5 |
| 10·1 | | 16·8 | 5·0 | |
| 8·5 | | 24·8 | 27·0 | 8·8 |
| 9·7 | | 25·6 | 17·5 | |
| 9·7 | | 27·6 | 30·9 | |
| 8·1 | | 29·6 | 7·9 | 8·5 |
| 10·1 | | 33·6 | 58·7 | |
| 10·0 | | 39·4 | 2·6 | |
| 8·3 | | 39·6 | 7·3 | 8·5 |
| 9·6 | | 39·6 | 32·7 | |
| 8·7 | | 40·6 | 19·5 | 9·5 |
| 9·7 | | 55·1 | 57·9 | |
| 10·1 | 45 | 2·6 | 17·3 | |
| 9·4 | | 13·1 | 44·1 | |
| 10·0 | | 18·6 | 37·3 | |
| 8·6 | | 21·6 | 48·5 | |
| 10·1 | | 25·6 | 1·7 | |
| 10·1 | | 28·1 | 51·3 | |
| 10·1 | | 38·1 | 44·3 | |
| 10·1 | | 40·6 | 59·7 | |
| 10·1 | | 48·6 | 57·9 | |
| 9·1 | | 53·8 | 1·3 | |

## 1921—1980.

| | 8h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·2 | 46 | 5·1 | 42·3 | GS |
| 9·6 | | 8·6 | 29·1 | |
| 8·3 | | 10·6 | 33·3 | 9·5 |
| 10·1 | | 11·1 | 58·7 | |
| 9·2 | | 11·3 | 0·9 | |
| 10·0 | | 12·6 | 50·1 | |
| 9·7 | | 13·1 | 45·3 | |
| 9·8 | | 17·0 | 2·3 | |
| 8·9 | | 21·6 | 48·5 | |
| 10·1 | | 38·6 | 53·3 | |
| 9·4 | | 39·1 | 46·5 | |
| 10·1 | | 39·6 | 2·7 | |
| 9·4 | | 43·6 | 58·1 | |
| 10·1 | | 44·6 | 16·7 | |
| 9·4 | | 53·6 | 39·9 | |
| 10·1 | | 54·7 | 57·4 | |
| 9·6 | | 59·6 | 22·4 | |
| 10·0 | 47 | 0·6 | 33·7 | |
| 9·8 | | 8·6 | 40·9 | |
| 9·6 | | 10·1 | 55·7 | |
| 9·2 | | 12·0 | 42·7 | G |
| 10·1 | | 12·6 | 55·7 | |
| 8·0 | | 13·0 | 38·7 | GS |
| 9·6 | | 16·5 | 40·9 | |
| 10·1 | | 20·5 | 29·8 | |
| 10·0 | | 23·5 | 46·8 | |
| 10·0 | | 24·5 | 19·9 | |
| 9·6 | | 29·9 | 35·3 | |
| 9·7 | | 33·9 | 41·3 | |
| 9·8 | | 35·0 | 20·1 | |
| 9·6 | | 42·0 | 52·8 | |
| 8·8 | | 58·5 | 19·5 | |
| 9·7 | 48 | 7·8 | 2·0 | |
| 10·1 | | 10·0 | 52·3 | |
| 10·0 | | 16·7 | 2·4 | |
| 9·8 | | 20·5 | 27·7 | |
| 9·0 | | 21·5 | 7·1 | |
| 9·6 | | 25·6 | 22·7 | |
| 9·6 | | 29·3 | 20·9 | |
| 9·0 | | 32·3 | 11·1 | |
| 9·4 | | 55·3 | 41·5 | |
| 9·4 | | 57·6 | 58·5 | |
| 9·1 | 49 | 15·8 | 41·1 | |
| 9·6 | | 24·3 | 43·6 | |
| 9·6 | | 45·8 | 40·1 | |
| 9·1 | | 54·3 | 54·5 | |
| 9·0 | 50 | 3·3 | 2·5 | |
| 9·2 | | 6·8 | 40·7 | 9·5 |
| 9·3 | | 9·8 | 24·1 | |
| 9·4 | | 10·9 | 57·5 | |
| 9·2 | | 11·6 | 0·8 | |
| 9·6 | | 26·3 | 12·7 | |
| 9·6 | | 27·8 | 8·1 | |
| 10·0† | | 32·0 | 2·6 | |
| 8·5 | | 35·3 | 50·3 | 9·5 |
| 9·3 | | 35·8 | 54·1 | |
| 9·6 | | 39·3 | 50·9 | |
| 9·2 | | 45·3 | 23·3 | |
| 9·1 | | 46·3 | 51·4 | |
| 10·0† | | 49·0 | 0·9 | |

## 1981—2040.

| | 8h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·6 | 50 | 49·8 | 36·9 | |
| 9·1 | 51 | 0·3 | 33·9 | |
| 9·2 | | 7·8 | 18·5 | |
| 9·6 | | 11·3 | 27·7 | |
| 9·6 | | 12·8 | 32·6 | |
| 9·6 | | 15·8 | 45·9 | |
| 9·6 | | 19·8 | 43·0 | |
| 9·4 | | 24·8 | 5·6 | |
| 9·6 | | 25·9 | 1·1 | |
| 9·6 | | 29·8 | 16·1 | |
| 9·0 | | 44·3 | 30·1 | |
| 9·6 | | 49·8 | 53·7 | |
| 9·2 | | 49·8 | 25·5 | |
| 9·1 | | 55·8 | 20·3 | |
| 9·4 | 52 | 2·8 | 25·5 | |
| 9·6 | | 10·8 | 56·3 | |
| 9·6 | | 25·2 | 34·1 | |
| 8·2 | | 44·3 | 19·1 | 8·0 GSc |
| 9·6 | | 46·8 | 5·1 | |
| 8·8 | | 49·3 | 50·5 | |
| 8·9 | 53 | 3·8 | 19·9 | 9·2 |
| 9·6 | | 8·6 | 0·7 | |
| 8·4 | | 9·3 | 48·2 | |
| 8·6 | | 10·3 | 44·1 | |
| 9·1 | | 16·3 | 48·9 | 8·5 |
| 9·3 | | 20·3 | 48·0 | |
| 8·8 | | 32·3 | 6·9 | |
| 8·8 | | 52·8 | 22·9 | 9·2 |
| 9·4 | | 55·3 | 32·5 | |
| 9·6 | | 55·3 | 1·7 | |
| 9·6 | 54 | 1·3 | 22·1 | |
| 9·6 | | 2·3 | 40·7 | |
| 9·3 | | 21·8 | 15·1 | |
| 9·2 | | 32·8 | 36·2 | |
| 9·6 | | 36·3 | 47·1 | |
| 9·6 | | 44·3 | 46·9 | |
| 9·4 | | 49·0 | 0·9 | |
| 9·6 | | 50·3 | 28·2 | |
| 9·2 | | 50·3 | 12·2 | |
| 9·1 | | 51·8 | 50·0 | |
| 9·6 | | 58·3 | 22·9 | |
| 9·2 | 55 | 0·3 | 19·2 | |
| 9·6 | | 25·6 | 1·8 | |
| 9·2 | | 39·2 | 1·4 | |
| 9·6 | | 47·8 | 51·3 | |
| 9·2 | | 54·4 | 56·5 | 9·0 |
| 9·6 | 56 | 0·3 | 13·1 | |
| 9·6 | | 1·3 | 21·3 | |
| 9·2 | | 1·8 | 6·9 | |
| 8·8 | | 1·8 | 35·1 | 10·0 |
| 9·6 | | 2·8 | 26·1 | |
| 8·0 | | 4·3 | 44·9 | 7·8 GSg |
| 9·6 | | 7·8 | 52·9 | |
| 9·6 | | 8·9 | 57·7 | 9·5 |
| 9·0 | | 9·8 | 5·0 | |
| 9·6 | | 12·3 | 48·4 | |
| 9·6 | | 12·3 | 16·8 | |
| 9·6 | | 22·8 | 37·0 | |
| 9·3 | | 25·2 | 59·8 | |
| 9·0 | | 30·3 | 37·0 | |



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## 2041—2100.

| mag. | 8h.–9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 56 | 33·8 | 15·1 | |
| 9·1 | | 36·5 | 39·8 | 9·5 |
| 9·2 | | 40·3 | 15·8 | |
| 9·2 | | 44·8 | 28·9 | |
| 9·6 | | 44·8 | 8·8 | |
| 9·2 | | 45·8 | 37·2 | 9·5 |
| 9·4 | | 55·8 | 6·3 | 9·2 |
| 9·0 | | 57·9 | 58·0 | 9·5 |
| 9·4 | 57 | 0·3 | 51·0 | |
| 7·6 | | 1·3 | 52·4 | 7·6 GSg |
| 9·2 | | 5·8 | 13·4 | 8·8 |
| 9·4 | | 19·3 | 52·4 | |
| 9·4 | | 22·3 | 25·0 | |
| 9·6 | | 30·3 | 9·1 | |
| 8·6 | | 34·8 | 3·4 | 9·0 |
| 9·2 | | 36·8 | 10·4 | |
| 9·6 | | 37·3 | 31·0 | |
| 9·3 | | 40·3 | 51·8 | |
| 9·4 | | 43·3 | 37·0 | |
| 9·4 | | 47·3 | 12·2 | |
| 9·6 | | 51·3 | 35·4 | |
| 8·6 | 58 | 0·3 | 36·8 | 9·0 G |
| 9·3 | | 1·3 | 12·4 | |
| 9·1 | | 5·3 | 3·8 | |
| 9·4 | | 11·8 | 4·4 | |
| 9·6 | | 12·3 | 8·8 | |
| 9·4 | | 21·3 | 9·4 | |
| 9·3 | | 27·3 | 56·2 | |
| 9·6 | | 44·3 | 21·6 | |
| 9·4 | | 53·5 | 42·3 | |
| 9·6 | 59 | 16·8 | 35·4 | |
| 7·1 | | 20·3 | 3·4 | 7·0 GSg |
| 9·6 | | 24·5 | 37·9 | |
| 9·1 | | 40·3 | 55·1 | 8·8 |
| 9·2 | | 56·3 | 39·7 | |
| 9·6 | | 59·3 | 18·2 | |
| 9·3 | 0 | 2·5 | 2·0 | 9·2 |
| 9·0 | | 2·8 | 34·7 | 8·5 G |
| 9·1 | | 5·3 | 33·6 | 9·0 |
| 9·6 | | 8·3 | 32·3 | |
| 9·4 | | 9·8 | 25·6 | |
| 8·8 | | 10·3 | 14·2 | 9·0 |
| 10·0† | | 14·7 | 1·2 | |
| 9·6 | | 17·3 | 42·0 | |
| 9·6 | | 19·0 | 0·9 | |
| 8·8 | | 21·8 | 12·1 | 9·5 |
| 9·6 | | 22·8 | 41·9 | |
| 9·2 | | 24·8 | 12·8 | |
| 9·4 | | 25·3 | 9·1 | |
| 9·4 | | 31·0 | 1·2 | |
| 9·4 | | 41·3 | 44·7 | |
| 9·0 | | 49·3 | 6·5 | |
| 9·6 | | 56·3 | 9·7 | |
| 9·6 | | 57·8 | 58·1 | |
| 9·4 | 1 | 0·8 | 3·8 | |
| 9·4 | | 1·3 | 9·1 | |
| 9·4 | | 8·3 | 3·7 | |
| 9·6 | | 9·3 | 39·6 | |
| 9·4 | | 9·8 | 7·7 | |
| 9·6 | | 15·3 | 11·9 | |

## 2101—2160.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 1 | 21·3 | 38·5 | |
| 9·0 | | 23·8 | 44·6 | 9·5 |
| 9·6 | | 24·8 | 9·7 | |
| 9·6 | | 25·0 | 0·0 | |
| 9·4 | | 29·8 | 22·9 | |
| 9·6 | | 33·2 | 2·0 | |
| 9·6 | | 41·3 | 3·1 | |
| 9·4 | | 42·3 | 26·7 | |
| 9·6 | | 43·8 | 22·8 | |
| 9·6 | | 44·8 | 19·3 | |
| 9·6 | | 51·3 | 35·0 | |
| 9·6 | | 53·8 | 21·6 | |
| 9·1 | 2 | 0·1 | 30·6 | |
| 9·2 | | 4·6 | 28·9 | |
| 9·1 | | 11·1 | 37·6 | |
| 9·6 | | 11·6 | 7·1 | |
| 9·4 | | 20·6 | 7·4 | |
| 9·0 | | 28·6 | 3·1 | 9·5 |
| 9·6 | | 31·6 | 17·8 | |
| 9·6 | | 38·1 | 53·4 | |
| 9·3 | | 38·1 | 0·2 | |
| 8·2 | | 46·1 | 35·2 | 8·8 |
| 9·4 | | 51·6 | 12·1 | |
| 9·6 | | 53·6 | 18·8 | |
| 9·4 | | 54·6 | 50·1 | |
| 9·6 | 3 | 0·6 | 14·0 | |
| 9·6 | | 7·1 | 29·0 | |
| 9·0 | | 10·1 | 49·0 | 9·5 |
| 9·2 | | 17·1 | 41·2 | |
| 9·4 | | 17·6 | 14·6 | |
| 9·0 | | 18·1 | 29·5 | |
| 9·6 | | 18·1 | 45·5 | |
| 9·3 | | 19·6 | 12·6 | |
| 9·6 | | 20·1 | 46·8 | |
| 9·2 | | 20·6 | 40·1 | |
| 9·1 | | 21·6 | 37·1 | |
| 9·2 | | 24·1 | 26·1 | |
| 9·6 | | 25·6 | 2·0 | |
| 9·2 | | 25·6 | 30·3 | |
| 9·4 | | 32·1 | 6·4 | |
| 9·3 | | 33·6 | 5·4 | |
| 9·6 | | 35·6 | 20·0 | |
| 9·3 | | 38·6 | 33·8 | |
| 9·1 | | 45·6 | 30·1 | 9·2 |
| 9·4 | | 58·1 | 7·0 | |
| 9·4 | | 58·6 | 33·4 | |
| 9·4 | 4 | 1·6 | 13·4 | |
| 9·3 | | 1·6 | 51·2 | |
| 9·4 | | 7·6 | 38·0 | |
| 8·4 | | 18·1 | 47·2 | 8·5 t |
| 9·6 | | 20·1 | 16·3 | |
| 9·2 | | 22·1 | 36·1 | |
| 9·1 | | 24·6 | 44·0 | 9·5 |
| 9·6 | | 37·1 | 52·7 | |
| 9·6 | | 37·6 | 21·8 | |
| 9·3 | | 38·6 | 46·1 | |
| 8·8 | | 39·6 | 30·7 | 9·2 |
| 8·7 | | 49·6 | 36·9 | 9·2 |
| 9·3 | | 51·6 | 15·5 | |
| 9·6 | | 53·6 | 59·9 | |

## 2161—2220.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·0 | 4 | 54·6 | 53·1 | 9·5 |
| 7·6 | | 54·6 | 51·9 | 7·7 GS |
| 9·4 | | 57·6 | 34·0 | |
| 7·7 | 5 | 2·6 | 5·3 | 7·2 GSg |
| 9·6 | | 14·1 | 55·1 | |
| 9·4 | | 20·1 | 7·1 | |
| 9·2 | | 21·1 | 6·5 | |
| 9·6 | | 21·6 | 31·1 | |
| 9·0 | | 26·6 | 17·6 | 9·0 |
| 9·6 | | 32·6 | 37·5 | |
| 9·6 | | 40·6 | 4·9 | |
| 8·8 | | 57·6 | 54·2 | 8·5 |
| 9·4 | 6 | 12·1 | 9·6 | |
| 9·1 | | 13·6 | 21·4 | |
| 9·2 | | 19·6 | 24·1 | |
| 9·6 | | 20·8 | 0·5 | |
| 9·3 | | 21·1 | 50·6 | |
| 9·4 | | 26·1 | 22·5 | |
| 9·6 | | 29·6 | 2·5 | |
| 9·3 | | 30·1 | 43·2 | |
| 9·4 | | 35·1 | 51·2 | |
| 8·8 | | 40·1 | 22·3 | 8·3 |
| 9·6 | | 41·6 | 8·4 | |
| 9·0 | | 42·6 | 22·6 | |
| 9·6 | | 43·6 | 22·1 | |
| 9·2 | | 47·1 | 44·3 | 8·8 |
| 9·1 | | 48·6 | 16·1 | 9·0 |
| 9·6 | | 50·1 | 23·6 | |
| 9·1 | 7 | 4·1 | 24·8 | |
| 9·6 | | 7·6 | 15·8 | |
| 9·4 | | 11·6 | 42·7 | |
| 9·6 | | 15·6 | 28·4 | |
| 9·3 | | 18·1 | 53·7 | |
| 9·6 | | 24·6 | 52·0 | |
| 8·6 | | 26·3 | 58·1 | 9·0 |
| 9·4 | | 28·6 | 10·4 | |
| 9·4 | | 30·6 | 12·9 | |
| 9·6 | | 33·6 | 49·6 | |
| 9·2 | | 34·1 | 20·5 | |
| 9·3 | | 38·1 | 51·6 | |
| 9·6 | | 40·6 | 24·1 | |
| 9·0 | | 43·1 | 57·3 | |
| 8·4 | | 44·1 | 35·8 | 8·8 |
| 9·4 | | 48·6 | 53·7 | |
| 7·2 | | 49·6 | 31·4 | 7·0 GSg |
| 9·2 | 8 | 9·9 | 1·9 | |
| 9·0 | | 11·1 | 27·6 | |
| 9·4 | | 11·6 | 36·5 | |
| 7·6 | | 12·6 | 26·9 | 8·0 GSg |
| 9·6 | | 13·1 | 50·4 | |
| 9·6 | | 16·1 | 57·7 | |
| 9·6 | | 19·1 | 53·1 | |
| 9·2 | | 20·6 | 1·0 | |
| 9·3 | | 22·1 | 54·0 | |
| 9·0 | | 30·1 | 46·0 | 9·5 |
| 9·4 | | 32·6 | 26·4 | |
| 8·6 | | 37·1 | 11·2 | 9·0 |
| 9·0 | | 43·5 | 8·9 | 8·5 |
| 9·4 | | 44·6 | 41·9 | |
| 9·2 | | 46·1 | 7·9 | |

## 2221—2280.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 8 | 57·1 | 42·6 | |
| 9·6 | 9 | 0·1 | 41·2 | |
| 9·4 | | 11·6 | 42·2 | |
| 9·6 | | 15·7 | 4·7 | |
| 9·6 | | 19·1 | 3·8 | |
| 9·4 | | 24·1 | 46·2 | |
| 7·9 | | 28·1 | 28·0 | 7·8 GSg |
| 9·4 | | 35·1 | 28·5 | |
| 9·0 | | 37·6 | 33·4 | |
| 9·4 | | 39·1 | 25·7 | |
| 9·2 | | 55·6 | 1·2 | |
| 9·4 | | 58·6 | 42·6 | |
| 9·0 | | 59·1 | 45·0 | 9·5 |
| 9·3 | 10 | 7·1 | 32·3 | |
| 9·4 | | 14·6 | 37·2 | |
| 10·0† | | 14·7 | 0·4 | |
| 9·4 | | 16·1 | 40·0 | |
| 9·2 | | 16·6 | 4·2 | 9·2 |
| 9·1 | | 36·1 | 14·9 | |
| 9·1 | | 47·6 | 59·1 | |
| 8·6 | | 51·1 | 7·6 | 8·7 |
| 9·6 | | 54·1 | 45·6 | |
| 9·6 | | 55·6 | 46·1 | |
| 10·0† | | 57·3 | 1·0 | |
| 9·6 | | 57·6 | 16·6 | |
| 8·8 | | 59·1 | 45·7 | 9·5 |
| 8·8 | 11 | 0·1 | 1·9 | 9·0 |
| 9·4 | | 0·7 | 27·9 | |
| 9·3 | | 1·1 | 12·5 | |
| 9·4 | | 5·6 | 46·0 | |
| 9·4 | | 10·1 | 59·8 | |
| 9·1 | | 12·1 | 47·7 | |
| 9·2 | | 17·6 | 23·0 | |
| 9·6 | | 22·1 | 18·5 | |
| 9·3 | | 26·1 | 54·1 | |
| 9·1 | | 30·6 | 40·1 | |
| 9·1 | | 30·6 | 5·3 | |
| 9·3 | | 44·1 | 34·9 | |
| 9·3 | | 46·6 | 23·2 | |
| 10·0† | | 52·2 | 1·1 | |
| 9·2 | 12 | 1·1 | 30·4 | 10·0 |
| 10·0† | | 4·4 | 1·0 | |
| 10·0† | | 10·2 | 0·8 | |
| 9·4 | | 11·6 | 56·1 | |
| 9·6 | | 16·1 | 41·3 | |
| 9·6 | | 20·1 | 0·2 | |
| 9·6 | | 21·1 | 37·2 | |
| 9·2 | | 30·1 | 53·5 | |
| 9·3 | | 31·1 | 22·2 | 9·5 |
| 8·8 | | 44·1 | 21·3 | 8·2 |
| 9·4 | | 45·6 | 19·8 | |
| 8·2 | | 46·1 | 25·6 | 8·3 |
| 9·6 | | 55·6 | 17·9 | |
| 9·6 | | 55·6 | 48·1 | |
| 9·6 | 13 | 1·1 | 4·0 | |
| 9·4 | | 9·6 | 12·8 | |
| 9·3 | | 10·1 | 59·7 | |
| 9·3 | | 37·6 | 31·6 | |
| 8·8 | | 41·1 | 59·7 | 9·0 |
| 9·4 | | 47·1 | 29·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 50 | 44 | 5·6 |
| 9 | 0 | 45 | 5·9 |
| | 10 | 46 | 6·2 |
| | 20 | 48 | 6·4 |

| 25 prec. | α | δ |
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| | + | − |
| h m | s | ′ |
| 9 10 | 46 | 6·2 |
| 20 | 48 | 6·4 |
| 30 | 49 | 6·6 |

## 2281—2340.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·0 | 13 | 50·8 | 58·3 | 7·0 GSg |
| 9·4 | | 53·9 | 54·6 | |
| 9·6 | | 58·9 | 56·4 | |
| 9·6 | 14 | 9·4 | 44·6 | |
| 9·6 | | 15·9 | 31·0 | |
| 9·0 | | 19·7 | 1·2 | |
| 9·1 | | 27·9 | 0·8 | |
| 9·6 | | 29·0 | 57·0 | |
| 9·6 | | 30·4 | 14·9 | |
| 9·3 | | 42·8 | 1·2 | |
| 9·6 | | 44·4 | 39·6 | |
| 9·4 | | 44·4 | 10·1 | |
| 8·1 | | 49·9 | 5·1 | 8·5 |
| 9·6 | | 51·9 | 22·3 | |
| 9·4 | | 51·9 | 40·8 | |
| 9·6 | 15 | 3·9 | 18·4 | |
| 9·6 | | 5·4 | 4·2 | |
| 9·2 | | 6·4 | 14·1 | 9·2 |
| 9·2 | | 17·4 | 50·8 | |
| 8·9 | | 19·4 | 30·0 | |
| 9·6 | | 20·9 | 4·5 | |
| 9·4 | | 31·9 | 31·0 | |
| 9·3 | | 33·9 | 18·1 | |
| 8·6 | | 36·4 | 51·4 | 8·0 G |
| 9·4 | | 36·9 | 0·8 | |
| 8·2 | | 42·4 | 12·1 | 8·6 |
| 9·3 | | 43·4 | 20·0 | |
| 9·3 | | 49·4 | 55·4 | |
| 9·4 | | 51·9 | 17·8 | |
| 9·4 | | 57·9 | 18·0 | |
| 9·6 | 16 | 2·5 | 1·4 | |
| 9·6 | | 3·5 | 39·6 | |
| 9·2 | | 3·5 | 3·0 | |
| 9·4 | | 6·0 | 8·0 | |
| 9·4 | | 8·0 | 26·4 | |
| 9·6 | | 13·5 | 51·3 | |
| 9·2 | | 13·5 | 17·4 | |
| 9·2 | | 17·7 | 57·4 | 9·5 |
| 9·6 | | 20·5 | 57·1 | |
| 9·1 | | 28·9 | 59·3 | |
| 9·6 | | 45·0 | 7·8 | |
| 9·4 | | 59·0 | 1·7 | |
| 8·8 | | 59·5 | 34·4 | 10·0 |
| 9·0 | 17 | 0·8 | 1·9 | 9·2 |
| 9·0 | | 4·0 | 6·1 | |
| 9·4 | | 4·5 | 30·9 | |
| 9·6 | | 7·5 | 51·1 | |
| 9·1 | | 15·0 | 54·0 | 9·5 |
| 9·6 | | 29·5 | 11·5 | |
| 9·4 | | 31·0 | 31·9 | |
| 9·6 | | 35·0 | 24·7 | |
| 9·6 | | 41·7 | 36·0 | |
| 8·9 | | 45·5 | 2·5 | 10·0 |
| 9·0 | | 49·5 | 30·4 | 9·0 |
| 8·8 | | 55·0 | 16·5 | 9·2 |
| 9·6 | | 59·0 | 54·4 | |
| 9·6 | 18 | 3·0 | 37·9 | |
| 9·6 | | 6·5 | 23·0 | |
| 9·6 | | 7·7 | 48·6 | |
| 9·4 | | 11·0 | 44·9 | |

## 2341—2400.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·1 | 18 | 13·5 | 21·8 | |
| 9·6 | | 16·0 | 22·4 | |
| 9·4 | | 18·7 | 21·9 | |
| 9·6 | | 21·5 | 20·7 | |
| 8·4 | | 23·5 | 56·1 | 8·3 |
| 9·2 | | 26·0 | 27·5 | |
| 8·0 | | 29·0 | 12·2 | 8·3 S |
| 9·6 | | 32·5 | 53·1 | |
| 9·2 | | 32·5 | 25·5 | |
| 9·4 | | 36·0 | 25·7 | |
| 9·4 | | 41·3 | 25·1 | |
| 9·3 | | 56·5 | 50·0 | |
| 9·2 | | 57·5 | 49·7 | 9·5 |
| 8·9 | 19 | 3·0 | 51·3 | 9·0 |
| 8·7 | | 5·0 | 4·9 | 8·8 |
| 7·8 | | 7·0 | 17·1 | 7·5 GSg |
| 9·4 | | 13·0 | 42·8 | |
| 9·2 | | 15·0 | 11·9 | |
| 9·4 | | 17·5 | 0·6 | |
| 9·4 | | 23·5 | 43·0 | |
| 9·6 | | 28·7 | 14·8 | |
| 9·4 | | 40·5 | 52·0 | |
| 9·6 | | 48·0 | 4·1 | |
| 9·6 | | 48·1 | 15·8 | |
| 9·1 | | 48·2 | 43·2 | |
| 9·6 | | 49·8 | 49·1 | |
| 9·6 | | 52·8 | 26·6 | |
| 9·6 | | 57·8 | 26·3 | |
| 9·3 | | 59·5 | 36·8 | 9·5 |
| 9·6 | 20 | 2·0 | 3·1 | |
| 9·0 | | 2·5 | 47·5 | |
| 9·6 | | 7·8 | 43·8 | |
| 9·6 | | 9·5 | 15·8 | |
| 9·6 | | 18·3 | 32·9 | |
| 10·4 | | 20·8 | 37·2 | |
| 10·4 | | 25·8 | 0·1 | |
| 10·4 | | 31·8 | 55·9 | |
| 10·4 | | 33·9 | 26·8 | |
| 9·5 | | 42·3 | 26·4 | |
| 10·0 | | 42·3 | 48·5 | |
| 10·0 | | 52·8 | 37·4 | |
| 10·2 | | 55·3 | 43·8 | |
| 10·4 | 21 | 0·8 | 24·1 | |
| 10·2 | | 3·8 | 9·7 | |
| 10·4 | | 7·6 | 1·4 | |
| 10·4 | | 10·7 | 0·9 | |
| 10·4 | | 17·3 | 31·4 | |
| 8·0 | | 21·8 | 55·5 | 7·0 GSet |
| 10·4 | | 30·3 | 30·2 | |
| 10·2 | | 30·8 | 23·9 | |
| 8·6 | | 36·8 | 38·3 | |
| 10·0 | | 37·8 | 22·7 | |
| 10·4 | | 38·8 | 18·3 | |
| 9·4 | | 38·8 | 14·3 | |
| 10·2 | | 44·4 | 2·7 | |
| 8·6 | | 46·8 | 6·0 | 8·0 |
| 9·0 | | 51·8 | 21·4 | 10·0 |
| 10·4 | | 53·3 | 30·1 | |
| 10·4 | | 54·8 | 26·7 | |
| 10·0 | | 56·8 | 7·4 | |

## 2401—2460.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 7·8 | 21 | 56·8 | 17·9 | 7·5 GSt |
| 10·4 | | 58·8 | 48·4 | |
| 10·4 | 22 | 1·3 | 34·1 | |
| 8·9 | | 3·8 | 4·0 | 9·2 |
| 10·2 | | 6·3 | 24·8 | |
| 8·4 | | 12·3 | 49·8 | 8·3 |
| 10·2 | | 16·8 | 59·0 | |
| 9·5 | | 17·3 | 37·6 | |
| 10·0 | | 19·3 | 8·7 | |
| 10·2 | | 21·3 | 43·7 | |
| 10·2 | | 22·3 | 40·0 | |
| 9·4 | | 22·5 | 2·4 | |
| 10·4 | | 22·8 | 4·9 | |
| 10·4 | | 29·3 | 37·9 | |
| 10·0 | | 31·3 | 48·6 | |
| 10·0 | | 34·3 | 37·3 | |
| 10·4 | | 35·3 | 6·2 | |
| 10·2 | | 36·8 | 46·6 | |
| 10·4 | | 44·3 | 39·0 | |
| 9·4 | | 44·8 | 19·9 | 8·5 |
| 10·4 | | 51·8 | 4·9 | |
| 10·0 | | 52·8 | 44·8 | |
| 7·6 | | 53·8 | 48·7 | 7·3 GSt |
| 10·4 | | 58·8 | 38·0 | |
| 10·4 | 23 | 0·8 | 47·9 | |
| 10·4 | | 0·8 | 48·9 | |
| 10·2 | | 6·8 | 54·7 | |
| 9·8 | | 13·8 | 25·2 | |
| 9·0 | | 15·3 | 46·0 | 8·3 G |
| 10·4 | | 16·8 | 43·0 | |
| 10·4 | | 17·8 | 21·9 | |
| 10·4 | | 17·8 | 6·0 | |
| 7·9 | | 19·8 | 25·5 | 8·5 |
| 10·4 | | 24·7 | 1·5 | |
| 9·8 | | 24·8 | 29·9 | |
| 9·8 | | 25·3 | 18·1 | |
| 10·4 | | 27·7 | 22·3 | |
| 9·8 | | 28·8 | 49·9 | |
| 9·5 | | 29·3 | 55·1 | 8·8 |
| 10·2 | | 29·6 | 59·3 | |
| 10·4 | | 30·8 | 25·0 | |
| 9·8 | | 30·8 | 29·4 | |
| 10·2 | | 32·3 | 33·9 | |
| 10·0 | | 37·8 | 42·1 | |
| 10·0 | | 40·8 | 44·1 | |
| 9·4 | | 42·3 | 41·8 | |
| 10·4 | | 42·8 | 26·7 | |
| 10·2 | | 43·3 | 16·2 | |
| 9·6 | | 54·3 | 29·9 | |
| 9·4 | | 54·8 | 18·0 | |
| 9·6 | | 59·8 | 41·6 | 9·5 |
| 10·0 | 24 | 0·8 | 45·2 | 9·5 |
| 10·4 | | 2·1 | 59·1 | |
| 10·2 | | 2·3 | 9·7 | |
| 9·8 | | 3·3 | 3·7 | 9·5 |
| 10·0 | | 9·8 | 45·3 | 9·5 |
| 8·1 | | 10·8 | 22·4 | 8·2 |
| 9·2 | | 14·8 | 39·4 | |
| 9·6 | | 16·8 | 32·0 | |
| 9·6 | | 24·8 | 52·1 | |

## 2461—2520.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 24 | 30·8 | 52·3 | |
| 9·8 | | 35·3 | 45·9 | |
| 10·0 | | 37·3 | 54·6 | |
| 10·4 | | 37·8 | 21·1 | |
| 10·0 | | 43·8 | 20·8 | |
| 10·4 | | 45·8 | 23·5 | |
| 9·8 | | 46·3 | 44·9 | |
| 9·8 | | 46·8 | 14·0 | |
| 10·4 | | 48·3 | 5·7 | |
| 10·4 | | 54·3 | 30·5 | |
| 8·6 | | 56·1 | 57·0 | 9·2 |
| 9·8 | | 59·8 | 47·1 | |
| 8·8 | 25 | 0·8 | 8·2 | 9·5 |
| 9·0 | | 0·8 | 53·2 | 9·5 |
| 10·4 | | 1·8 | 2·9 | |
| 10·4 | | 3·8 | 42·5 | |
| 10·4 | | 6·8 | 18·6 | |
| 10·4 | | 12·3 | 1·5 | |
| 10·4 | | 13·0 | 0·5 | |
| 10·0 | | 13·3 | 12·1 | |
| 9·6 | | 15·8 | 32·6 | |
| 10·0 | | 21·3 | 13·5 | |
| 9·4 | | 25·8 | 46·0 | |
| 9·8 | | 26·2 | 2·9 | 9·0 |
| 10·4 | | 27·8 | 25·4 | |
| 10·0 | | 28·8 | 40·8 | |
| 10·4 | | 43·3 | 15·4 | |
| 9·8 | | 45·8 | 8·9 | |
| 9·0 | | 47·3 | 53·0 | 8·3 |
| 10·4 | | 48·8 | 30·9 | |
| 9·2 | 26 | 1·3 | 11·8 | |
| 10·4 | | 1·3 | 55·3 | |
| 9·8 | | 2·3 | 17·4 | |
| 10·2 | | 3·3 | 14·6 | |
| 10·4 | | 6·8 | 54·3 | |
| 10·4 | | 8·7 | 50·9 | |
| 10·0 | | 15·2 | 23·6 | |
| 10·4 | | 15·7 | 42·0 | |
| 9·4 | | 27·2 | 16·6 | |
| 10·4 | | 30·2 | 48·5 | |
| 10·4 | | 33·2 | 12·6 | |
| 10·0 | | 39·7 | 9·5 | |
| 10·4 | | 42·2 | 4·2 | |
| 10·2 | | 49·7 | 27·3 | |
| 9·8 | | 52·2 | 28·1 | |
| 10·4 | | 55·2 | 28·3 | |
| 10·0 | | 56·2 | 43·0 | |
| 10·2 | | 57·7 | 9·9 | |
| 10·2 | 27 | 2·2 | 7·8 | 10·0 |
| 10·2 | | 6·7 | 23·0 | |
| 10·4 | | 7·2 | 39·2 | |
| 10·4 | | 16·7 | 59·5 | |
| 7·8 | | 16·7 | 14·8 | 8·3 |
| 10·0 | | 16·9 | 1·6 | |
| 10·0 | | 18·7 | 43·6 | |
| 10·2 | | 22·7 | 19·9 | |
| 10·0 | | 22·7 | 33·3 | |
| 10·2 | | 26·2 | 5·9 | |
| 10·2 | | 28·2 | 30·2 | |
| 10·0 | | 29·2 | 22·0 | |



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### 2521—2580.

| mag. | 9h. m s | −53° ′ | |
|---|---|---|---|
| 10·4 | 27 30·7 | 42·1 | |
| 10·4 | 32·2 | 15·1 | |
| 10·4 | 36·7 | 34·9 | |
| 10·0 | 40·7 | 15·5 | 9·2 |
| 9·6 | 43·2 | 46·1 | |
| 10·4 | 46·7 | 37·1 | |
| 9·8 | 49·7 | 10·6 | |
| 9·5 | 51·2 | 13·5 | |
| 10·0 | 56·7 | 7·1 | |
| 10·4 | 58·2 | 14·9 | |
| 10·0 | 28 2·7 | 10·8 | |
| 10·2 | 6·5 | 58·2 | |
| 9·8 | 13·7 | 5·6 | 9·5 |
| 10·4 | 16·2 | 11·0 | |
| 9·8 | 19·7 | 32·0 | 9·5 |
| 10·4 | 21·2 | 55·9 | |
| 8·9 | 22·7 | 42·1 | 8·5 |
| 10·2 | 24·2 | 19·6 | |
| 10·4 | 26·2 | 49·2 | |
| 10·4 | 29·1 | 0·4 | |
| 9·5 | 30·7 | 17·9 | |
| 10·4 | 35·0 | 59·0 | |
| 10·4 | 39·7 | 41·8 | |
| 8·9 | 39·7 | 29·4 | 8·5 |
| 10·0 | 41·7 | 49·5 | |
| 9·6 | 44·7 | 24·5 | |
| 10·2 | 46·2 | 41·5 | |
| 9·2 | 46·7 | 54·1 | |
| 10·0 | 49·7 | 44·5 | |
| 10·0 | 59·7 | 55·4 | |
| 10·4 | 29 4·7 | 47·2 | |
| 10·2 | 9·2 | 32·3 | |
| 9·8 | 9·7 | 5·0 | |
| 10·4 | 11·7 | 17·2 | |
| 10·4 | 12·6 | 40·3 | |
| 10·0 | 15·7 | 52·0 | |
| 10·0 | 16·2 | 21·3 | |
| 10·0 | 18·7 | 11·5 | |
| 9·6 | 21·2 | 25·6 | |
| 10·0 | 25·2 | 4·4 | |
| 10·0 | 27·5 | 57·6 | |
| 10·4 | 32·7 | 55·6 | |
| 10·4 | 32·7 | 49·0 | |
| 10·2 | 36·2 | 35·2 | |
| 10·2 | 39·2 | 16·0 | 9·0 |
| 8·9 | 40·7 | 29·0 | 8·0 |
| 10·4 | 42·2 | 44·9 | |
| 9·2 | 42·7 | 0·5 | 9·5 |
| 9·8 | 44·7 | 9·5 | |
| 10·4 | 46·2 | 39·5 | |
| 8·0 | 46·7 | 4·8 | 8·5 |
| 10·2 | 47·7 | 42·6 | |
| 10·4 | 49·2 | 49·9 | |
| 9·8 | 53·7 | 19·9 | |
| 10·4 | 55·2 | 33·1 | |
| 10·0 | 58·2 | 30·2 | |
| 10·0 | 58·2 | 49·1 | |
| 10·4 | 58·7 | 2·0 | |
| 9·4 | 30 0·2 | 35·9 | 9·0 |
| 9·8 | 4·2 | 46·0 | |

### 2581—2640.

| mag. | 9h. m s | −53° ′ | |
|---|---|---|---|
| 9·8 | 30 6·7 | 16·4 | |
| 9·6 | 12·7 | 5·2 | |
| 10·0 | 13·1 | 0·2 | |
| 10·4 | 21·2 | 25·0 | |
| 9·8 | 21·7 | 34·2 | |
| 10·4 | 22·6 | 50·6 | |
| 10·2 | 25·2 | 46·6 | |
| 10·4 | 25·7 | 58·9 | |
| 9·5 | 27·2 | 8·9 | |
| 10·0 | 28·2 | 49·9 | |
| 10·4 | 29·6 | 38·1 | |
| 8·7 | 29·7 | 30·9 | 9·2 |
| 10·0 | 30·2 | 30·4 | |
| 10·4 | 38·7 | 12·1 | |
| 10·4 | 39·7 | 52·7 | |
| 10·0 | 42·2 | 11·0 | |
| 10·2 | 42·7 | 16·1 | |
| 10·4 | 44·2 | 48·3 | |
| 10·0 | 46·2 | 50·8 | |
| 10·2 | 50·2 | 31·0 | |
| 10·4 | 53·7 | 2·9 | |
| 10·4 | 31 0·2 | 28·8 | |
| 9·6 | 1·2 | 31·2 | |
| 10·2 | 2·2 | 57·3 | |
| 10·4 | 5·2 | 46·6 | |
| 10·4 | 7·1 | 53·0 | |
| 10·0 | 9·2 | 45·6 | |
| 10·4 | 10·7 | 47·4 | |
| 9·8 | 10·7 | 31·9 | |
| 9·6 | 10·7 | 26·4 | |
| 8·8 | 11·7 | 42·8 | 9·5 |
| 9·4 | 17·7 | 41·0 | *8·8* |
| 10·4 | 27·7 | 39·0 | |
| 10·4 | 28·4 | 1·8 | |
| 10·4 | 30·2 | 56·2 | |
| 7·8 | 40·7 | 36·7 | 8·5 G |
| 9·4 | 47·2 | 38·9 | |
| 10·2 | 48·7 | 38·3 | |
| 9·8 | 49·4 | 1·0 | |
| 9·8 | 53·7 | 37·2 | |
| 10·0 | 57·4 | 2·3 | |
| 9·8 | 32 1·7 | 2·1 | |
| 9·8 | 3·2 | 5·8 | |
| 9·0 | 6·7 | 21·3 | |
| 10·4 | 10·7 | 6·5 | |
| 10·4 | 10·7 | 22·3 | |
| 9·8 | 16·2 | 13·2 | |
| 10·4 | 18·7 | 33·4 | |
| 10·4 | 20·7 | 33·1 | |
| 10·0 | 32·2 | 31·5 | |
| 10·4 | 32·7 | 24·9 | |
| 10·0 | 37·2 | 9·5 | |
| 10·4 | 46·4 | 0·7 | |
| 10·4 | 50·2 | 26·5 | |
| 10·4 | 52·2 | 29·7 | |
| 10·2 | 52·2 | 44·5 | |
| 10·4 | 52·7 | 27·4 | |
| 10·4 | 54·2 | 42·9 | |
| 10·4 | 55·7 | 45·5 | |
| 9·6 | 55·9 | 2·9 | |

### 2641—2700.

| mag. | 9h. m s | −53° ′ | |
|---|---|---|---|
| 10·2 | 32 57·2 | 22·9 | |
| 10·4 | 58·2 | 1·0 | |
| 10·2 | 33 0·2 | 24·9 | |
| 10·4 | 0·7 | 43·3 | |
| 9·6 | 1·2 | 16·9 | 9·0 |
| 6·2 | 2·2 | 6·5 | 6·0 GSct |
| 10·0 | 7·7 | 11·3 | |
| 10·4 | 12·2 | 18·8 | |
| 10·0 | 20·7 | 3·2 | 9·0 |
| 8·6 | 22·2 | 11·5 | 9·3 |
| 10·4 | 28·2 | 25·5 | |
| 9·5 | 29·7 | 8·8 | |
| 10·4 | 32·7 | 14·8 | |
| 10·4 | 34·7 | 20·2 | |
| 10·0 | 36·7 | 19·0 | |
| 8·6 | 39·2 | 7·1 | 9·0 |
| 10·4 | 42·9 | 55·1 | |
| 10·4 | 44·2 | 49·9 | |
| 10·2 | 44·7 | 19·4 | |
| 9·8 | 47·7 | 35·8 | |
| 10·4 | 47·9 | 12·6 | |
| 10·0 | 52·0 | 43·5 | |
| 10·4 | 53·0 | 41·0 | |
| 7·0 | 53·5 | 39·3 | 7·2 Gg |
| 9·8 | 53·5 | 19·1 | |
| 10·2 | 34 1·0 | 5·2 | |
| 9·5 | 1·5 | 1·8 | |
| 9·8 | 2·0 | 7·2 | |
| 10·0 | 4·5 | 18·6 | |
| 10·4 | 4·5 | 5·4 | |
| 9·6 | 6·0 | 29·5 | |
| 10·4 | 9·0 | 5·9 | |
| 10·0 | 12·0 | 17·5 | |
| 10·4 | 16·5 | 4·2 | |
| 9·8 | 24·1 | 2·2 | |
| 10·4 | 26·0 | 55·0 | |
| 10·4 | 30·5 | 34·8 | |
| 10·0 | 37·5 | 52·2 | |
| 8·8 | 40·5 | 45·7 | 9·0 |
| 9·0 | 44·5 | 33·0 | |
| 9·0 | 50·5 | 29·8 | 9·5 |
| 10·2 | 54·5 | 38·4 | |
| 10·4 | 56·0 | 15·8 | |
| 10·4 | 56·0 | 21·5 | |
| 10·2 | 57·0 | 20·2 | |
| 10·4 | 35 1·0 | 10·7 | |
| 9·0 | 1·5 | 29·2 | 9·0 |
| 10·4 | 2·0 | 6·9 | |
| 10·2 | 3·0 | 27·6 | |
| 10·0 | 6·5 | 0·2 | |
| 10·4 | 8·5 | 19·6 | |
| 10·4 | 16·0 | 18·6 | |
| 8·6 | 17·5 | 42·0 | 7·8 G |
| 10·4 | 18·1 | 1·2 | |
| 10·4 | 21·0 | 14·6 | |
| 8·9 | 23·5 | 45·2 | 9·2 |
| 9·0 | 26·0 | 54·9 | 8·1 |
| 9·0 | 27·5 | 38·8 | |
| 10·0 | 31·0 | 11·4 | |
| 10·4 | 36·0 | 13·4 | |

### 2701—2760.

| mag. | 9h. m s | −53° ′ | |
|---|---|---|---|
| 9·2 | 35 36·5 | 31·4 | |
| 9·0 | 43·0 | 36·4 | 9·0 |
| 10·4 | 43·0 | 31·6 | |
| 9·5 | 44·0 | 44·9 | |
| 10·4 | 49·0 | 51·0 | |
| 9·8 | 49·5 | 27·6 | |
| 9·4 | 50·5 | 26·3 | |
| 10·2 | 36 0·0 | 2·0 | |
| 9·6 | 3·0 | 47·0 | |
| 10·2 | 3·5 | 26·0 | |
| 10·4 | 6·0 | 45·2 | |
| 10·0 | 8·0 | 33·0 | |
| 9·8 | 9·5 | 39·8 | |
| 8·3 | 17·5 | 49·1 | 8·5 |
| 10·2 | 17·5 | 55·0 | |
| 10·0 | 18·5 | 40·6 | |
| 10·0 | 24·0 | 25·0 | |
| 10·2 | 24·5 | 7·0 | |
| 9·8 | 27·0 | 18·2 | |
| 10·0 | 28·5 | 29·6 | |
| 9·6 | 31·6 | 1·8 | |
| 10·4 | 33·5 | 10·4 | |
| 10·2 | 33·5 | 20·8 | |
| 10·2 | 37·5 | 16·8 | |
| 9·6 | 40·5 | 30·5 | 9·3 |
| 10·2 | 46·0 | 4·4 | |
| 9·8 | 51·6 | 1·4 | |
| 9·8 | 37 2·0 | 9·8 | |
| 10·0 | 3·0 | 19·2 | |
| 9·6 | 7·3 | 58·4 | |
| 9·2 | 7·5 | 40·5 | 10·0 |
| 10·2 | 11·0 | 18·5 | |
| 9·8 | 12·0 | 43·4 | |
| 10·0 | 12·5 | 51·1 | |
| 10·4 | 12·5 | 7·1 | |
| 10·4 | 13·0 | 37·4 | |
| 10·4 | 13·8 | 57·2 | |
| 9·2 | 18·5 | 51·3 | 10·0 |
| 10·0 | 22·0 | 43·0 | |
| 10·4 | 25·0 | 37·2 | |
| 9·6 | 34·0 | 35·9 | |
| 10·4 | 34·0 | 21·1 | |
| 9·5 | 34·3 | 2·8 | |
| 10·0 | 36·5 | 45·0 | |
| 8·2 | 41·0 | 38·8 | 8·2 GSt |
| 10·0 | 51·0 | 49·5 | |
| 10·0 | 52·0 | 20·6 | |
| 10·2 | 53·0 | 49·6 | |
| 10·4 | 53·5 | 49·3 | |
| 10·4 | 54·5 | 12·2 | |
| 10·4 | 58·4 | 23·0 | |
| 10·4 | 38 2·5 | 9·2 | |
| 10·4 | 7·0 | 19·7 | |
| 10·0 | 12·0 | 18·2 | |
| 10·4 | 16·5 | 52·2 | |
| 10·2 | 18·0 | 12·4 | |
| 10·4 | 26·0 | 45·7 | |
| 10·4 | 27·0 | 12·9 | |
| 10·0 | 30·5 | 39·1 | |
| 10·4 | 32·0 | 13·8 | |

25 prec.

| h m | α + s | δ − |
|---|---|---|
| 9 20 | 48 | 6·4 |
| 30 | 49 | 6·6 |
| 40 | 51 | 6·8 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 9 | 30 | 49 | 6·6 |
| | 40 | 51 | 6·8 |
| | 50 | 53 | 7·0 |

**2761—2820.**

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 38 | 33·2 | 14·5 | |
| 10·2 | | 35·5 | 5·4 | |
| 10·2 | | 36·0 | 37·0 | |
| 8·4 | | 36·0 | 32·5 | 8·5 |
| 10·2 | | 36·0 | 24·9 | |
| 10·4 | | 38·0 | 19·8 | |
| 9·8 | | 38·0 | 21·0 | 9·0 |
| 10·0 | | 43·5 | 53·5 | |
| 9·8 | | 46·5 | 17·9 | |
| 10·4 | | 47·0 | 13·2 | |
| 9·4 | | 48·0 | 39·9 | |
| 10·4 | | 51·5 | 44·2 | |
| 9·4 | | 56·0 | 54·6 | |
| 9·8 | | 58·5 | 15·6 | 9·5 |
| 7·8 | | 59·0 | 30·2 | 8·0 GSt |
| 10·4 | 39 | 0·5 | 50·0 | |
| 9·6 | | 1·0 | 33·5 | |
| 9·2 | | 7·0 | 14·1 | |
| 10·0 | | 8·0 | 20·6 | |
| 10·2 | | 11·0 | 12·2 | |
| 10·4 | | 12·5 | 57·1 | |
| 10·4 | | 13·0 | 4·8 | |
| 10·4 | | 13·0 | 27·4 | |
| 9·4 | | 18·5 | 54·1 | 8·5 |
| 10·4 | | 25·0 | 21·5 | |
| 10·4 | | 25·5 | 51·0 | |
| 10·4 | | 25·9 | 1·8 | |
| 6·0 | | 28·0 | 19·1 | 6·0 GSct |
| 10·0 | | 32·0 | 50·0 | |
| 10·4 | | 32·0 | 32·2 | |
| 10·4 | | 32·2 | 21·3 | |
| 9·6 | | 33·5 | 14·0 | |
| 10·4 | | 36·5 | 45·5 | |
| 10·0 | | 37·0 | 59·6 | |
| 10·4 | | 37·5 | 22·9 | |
| 10·4 | | 37·8 | 57·5 | |
| 10·2 | | 40·3 | 57·1 | |
| 9·8 | | 44·0 | 22·0 | |
| 10·4 | | 44·5 | 4·0 | |
| 9·8 | | 44·5 | 49·4 | |
| 9·4 | | 46·0 | 7·2 | 10·0 |
| 10·4 | | 47·5 | 34·0 | |
| 10·4 | | 48·0 | 35·6 | |
| 9·0 | | 50·0 | 39·0 | |
| 9·6 | | 51·0 | 31·1 | |
| 8·0 | | 51·0 | 10·3 | 8·0 G |
| 10·4 | | 54·0 | 21·2 | |
| 10·0 | | 54·0 | 22·8 | |
| 10·0 | | 54·0 | 42·0 | |
| 10·4 | | 55·5 | 38·8 | |
| 10·4 | 40 | 1·0 | 31·4 | |
| 10·4 | | 5·2 | 50·2 | |
| 10·4 | | 7·0 | 56·6 | |
| 9·5 | | 8·5 | 55·7 | |
| 10·4 | | 10·0 | 26·6 | |
| 10·4 | | 12·0 | 44·0 | |
| 10·0 | | 13·5 | 37·4 | |
| 10·2 | | 15·0 | 13·0 | |
| 10·0 | | 22·3 | 54·0 | |
| 10·2 | | 27·8 | 38·9 | |

**2821—2880.**

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 40 | 28·3 | 31·1 | |
| 10·4 | | 33·2 | 0·8 | |
| 10·4 | | 33·8 | 40·9 | |
| 9·2 | | 35·3 | 52·4 | 9·0 |
| 9·5 | | 35·3 | 24·1 | |
| 10·0 | | 40·3 | 42·1 | |
| 10·4 | | 42·3 | 52·0 | |
| 10·4 | | 48·3 | 21·9 | |
| 10·0 | | 49·8 | 35·1 | |
| 10·4 | | 56·0 | 2·4 | |
| 10·0 | | 57·8 | 26·8 | |
| 10·4 | | 58·8 | 52·6 | |
| 10·0 | 41 | 1·8 | 25·0 | |
| 10·0 | | 1·8 | 36·9 | |
| 10·4 | | 2·3 | 36·0 | |
| 7·4 | | 2·8 | 40·2 | 7·5 GSt |
| 10·2 | | 6·3 | 29·3 | |
| 10·0 | | 8·3 | 14·7 | |
| 9·8 | | 9·3 | 40·7 | 9·5 |
| 8·3 | | 11·8 | 43·4 | 9·0 |
| 9·0 | | 11·8 | 47·7 | 8·8 |
| 10·4 | | 13·8 | 4·5 | |
| 9·0 | | 18·3 | 22·7 | 9·5 |
| 10·0 | | 21·8 | 26·0 | |
| 10·2 | | 22·3 | 27·6 | |
| 10·4 | | 23·8 | 33·6 | |
| 10·4 | | 28·3 | 50·2 | |
| 10·4 | | 29·3 | 18·6 | |
| 10·4 | | 31·8 | 28·1 | |
| 9·5 | | 32·8 | 49·2 | |
| 10·4 | | 33·8 | 46·1 | |
| 10·2 | | 33·9 | 59·2 | |
| 10·2 | | 36·0 | 2·0 | |
| 9·8 | | 42·3 | 54·5 | |
| 10·4 | | 42·8 | 49·1 | |
| 10·2 | | 45·8 | 12·4 | |
| 10·4 | | 48·3 | 27·0 | |
| 10·4 | | 51·8 | 31·0 | |
| 10·2 | | 52·8 | 17·2 | |
| 10·4 | | 55·3 | 26·5 | |
| 10·4 | | 55·3 | 49·7 | |
| 10·4 | 42 | 0·3 | 30·1 | |
| 10·0 | | 1·3 | 34·6 | |
| 9·8 | | 6·8 | 42·9 | |
| 8·6 | | 7·3 | 34·4 | 8·8 G |
| 10·2 | | 11·3 | 34·0 | |
| 10·4 | | 12·3 | 52·0 | |
| 10·4 | | 14·8 | 15·2 | |
| 10·4 | | 20·3 | 34·5 | |
| 9·4 | | 22·3 | 15·3 | 9·5 |
| 10·4 | | 22·3 | 51·6 | |
| 10·2 | | 30·3 | 14·9 | |
| 9·8 | | 31·0 | 0·3 | |
| 10·0 | | 34·8 | 10·6 | |
| 10·2 | | 44·3 | 43·5 | |
| 10·2 | | 48·8 | 22·7 | |
| 10·4 | | 49·8 | 50·1 | |
| 8·7 | | 50·8 | 37·5 | 9·0 |
| 10·4 | | 50·8 | 48·1 | |
| 10·4 | | 50·8 | 47·3 | |

**2881—2940.**

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·2 | 42 | 53·3 | 43·2 | |
| 10·4 | 43 | 6·3 | 1·0 | |
| 10·4 | | 8·3 | 40·6 | |
| 9·0 | | 14·5 | 1·3 | 10·0 |
| 9·2 | | 16·3 | 43·2 | 10·0 |
| 10·4 | | 18·8 | 32·6 | |
| 10·2 | | 19·8 | 45·2 | |
| 10·2 | | 21·3 | 1·3 | |
| 10·4 | | 21·8 | 26·8 | |
| 10·4 | | 22·3 | 9·7 | |
| 10·2 | | 26·8 | 27·3 | |
| 10·2 | | 29·8 | 35·9 | |
| 10·2 | | 36·5 | 2·4 | |
| 10·2 | | 38·8 | 7·1 | |
| 10·4 | | 40·3 | 14·4 | |
| 10·2 | | 41·8 | 6·9 | |
| 9·8 | | 44·8 | 30·2 | |
| 10·4 | | 45·8 | 24·1 | |
| 9·6 | | 51·8 | 39·0 | |
| 9·8 | | 53·8 | 55·6 | |
| 10·4 | | 55·8 | 44·9 | |
| 8·2 | | 56·8 | 49·0 | 7·8 G |
| 10·4 | 44 | 5·8 | 47·0 | |
| 10·0 | | 9·8 | 50·8 | |
| 10·4 | | 11·2 | 58·9 | |
| 10·0 | | 12·8 | 38·8 | |
| 10·4 | | 18·3 | 3·6 | |
| 10·4 | | 19·8 | 41·5 | |
| 10·4 | | 23·3 | 51·7 | |
| 10·0 | | 28·0 | 59·4 | |
| 10·0 | | 30·3 | 24·5 | |
| 8·4 | | 31·6 | 0·4 | 8·8 |
| 9·8 | | 37·3 | 28·9 | 9·5 |
| 10·4 | | 38·3 | 52·5 | |
| 10·4 | | 42·8 | 30·6 | |
| 9·6 | | 44·3 | 5·0 | 10·0 |
| 10·4 | | 44·3 | 55·0 | |
| 10·4 | | 46·3 | 34·2 | |
| 9·0 | 45 | 1·8 | 36·8 | 9·0 |
| 9·2 | | 3·3 | 19·8 | 9·5 |
| 9·5 | | 6·8 | 31·5 | |
| 9·8 | | 8·3 | 13·1 | |
| 10·4 | | 11·3 | 45·8 | |
| 9·2 | | 16·8 | 33·8 | 9·5 |
| 8·4 | | 22·3 | 28·8 | 8·7 |
| 10·2 | | 30·8 | 52·8 | |
| 10·2 | | 37·3 | 39·6 | |
| 10·2 | | 43·3 | 29·1 | |
| 9·8 | | 50·3 | 56·1 | |
| 10·4 | | 51·3 | 21·2 | |
| 10·4 | | 54·3 | 45·8 | |
| 10·0 | | 54·5 | 57·1 | |
| 10·0 | | 57·3 | 43·1 | |
| 10·0 | 46 | 0·3 | 10·9 | |
| 10·4 | | 0·8 | 51·8 | |
| 10·4 | | 2·8 | 15·2 | |
| 10·2 | | 8·8 | 53·1 | |
| 9·8 | | 9·3 | 36·5 | |
| 10·4 | | 16·3 | 56·0 | |
| 10·4 | | 20·8 | 24·8 | |

**2941—3000.**

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 46 | 22·3 | 17·4 | |
| 10·4 | | 30·3 | 15·9 | |
| 9·8 | | 30·8 | 13·9 | |
| 10·4 | | 32·3 | 51·7 | |
| 10·4 | | 39·3 | 25·0 | |
| 9·6 | | 40·0 | 57·7 | |
| 9·8 | | 49·3 | 19·2 | |
| 10·4 | | 53·2 | 32·8 | |
| 10·0 | | 55·8 | 44·9 | |
| 9·2 | | 58·3 | 12·9 | 10·0 |
| 10·4 | 47 | 0·8 | 35·8 | |
| 9·0 | | 7·3 | 16·2 | 10·0 |
| 10·2 | | 9·3 | 29·2 | |
| 10·2 | | 10·0 | 0·1 | |
| 9·4 | | 14·3 | 6·7 | |
| 10·4 | | 21·8 | 29·8 | |
| 9·2 | | 27·3 | 45·7 | |
| 10·4 | | 28·8 | 1·7 | |
| 10·4 | | 31·8 | 47·4 | |
| 10·4 | | 35·8 | 48·4 | |
| 10·0 | | 35·8 | 32·0 | |
| 9·5 | | 40·8 | 6·2 | |
| 9·6 | | 44·8 | 26·5 | |
| 8·4 | | 46·8 | 41·9 | 9·0 |
| 10·4 | | 46·8 | 9·4 | |
| 10·4 | | 48·3 | 46·0 | |
| 10·4 | | 49·3 | 10·0 | |
| 8·1 | | 49·3 | 18·4 | 9·0 |
| 10·0 | | 56·5 | 34·0 | |
| 10·4 | | 57·0 | 26·8 | |
| 9·6 | | 59·5 | 39·2 | |
| 10·0 | 48 | 0·0 | 24·2 | 9·5 |
| 10·4 | | 3·0 | 55·0 | |
| 9·8 | | 7·5 | 50·6 | |
| 10·4 | | 11·0 | 37·4 | |
| 9·0 | | 18·0 | 43·9 | 9·0 |
| 9·4 | | 18·0 | 22·0 | 9·5 |
| 10·4 | | 20·0 | 51·7 | |
| 10·4 | | 22·0 | 9·2 | |
| 10·4 | | 24·5 | 37·4 | |
| 9·5 | | 30·5 | 19·6 | |
| 10·4 | | 31·5 | 8·3 | |
| 10·4 | | 32·5 | 11·9 | |
| 8·6 | | 38·0 | 37·2 | 9·2 |
| 10·4 | | 40·0 | 34·6 | |
| 9·6 | | 42·8 | 2·9 | |
| 10·4 | | 45·0 | 44·6 | |
| 10·4 | | 46·0 | 55·0 | |
| 10·4 | | 49·0 | 36·1 | |
| 9·6 | | 50·0 | 33·9 | |
| 10·2 | | 52·0 | 38·0 | |
| 10·0 | | 58·5 | 44·0 | |
| 9·8 | 49 | 1·5 | 45·0 | |
| 8·4 | | 5·5 | 42·1 | 8·5 |
| 10·4 | | 6·5 | 13·5 | |
| 9·0 | | 12·0 | 16·5 | 9·5 |
| 9·2 | | 13·5 | 38·1 | 9·5 |
| 9·5 | | 20·3 | 44·1 | 9·5 |
| 10·4 | | 20·5 | 40·3 | |
| 10·2 | | 22·3 | 51·9 | |



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## 3001—3060.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 49 | 25·3 | 47·7 | 9·5 |
| 10·4 | | 30·3 | 6·1 | |
| 10·2 | | 31·8 | 6·8 | |
| 10·4 | | 38·8 | 36·8 | |
| 10·4 | | 41·8 | 52·9 | |
| 9·2 | | 45·8 | 3·1 | 9·5 |
| 10·4 | | 48·8 | 15·1 | |
| 9·6 | | 56·8 | 37·8 | 8·8 |
| 9·4 | 50 | 5·8 | 24·7 | |
| 9·4 | | 6·3 | 22·2 | 9·5 |
| 10·0 | | 9·8 | 47·1 | 9·5 |
| 10·2 | | 9·8 | 36·9 | 9·0 |
| 10·4 | | 10·8 | 46·8 | |
| 10·4 | | 11·8 | 39·1 | |
| 10·4 | | 12·8 | 21·0 | |
| 10·4 | | 17·8 | 23·4 | |
| 10·4 | | 19·8 | 15·9 | |
| 10·2 | | 19·8 | 35·6 | |
| 9·4 | | 21·8 | 6·1 | |
| 10·4 | | 25·8 | 14·5 | |
| 10·0 | | 36·3 | 41·4 | |
| 10·4 | | 37·8 | 5·8 | |
| 10·0 | | 38·1 | 0·0 | |
| 9·0 | | 39·8 | 47·9 | 9·0 |
| 10·2 | | 40·8 | 12·3 | |
| 10·4 | | 41·8 | 48·8 | |
| 9·5 | | 42·3 | 47·5 | |
| 10·4 | | 44·6 | 14·3 | |
| 10·4 | | 48·2 | 0·0 | |
| 10·4 | | 49·3 | 44·8 | |
| 10·0 | | 51·8 | 17·0 | |
| 9·0 | | 57·3 | 27·3 | |
| 10·4 | | 59·3 | 26·1 | |
| 10·2 | 51 | 0·8 | 0·8 | |
| 9·4 | | 8·8 | 43·8 | |
| 10·0 | | 16·3 | 34·1 | |
| 10·0 | | 16·8 | 6·9 | |
| 9·6 | | 16·8 | 18·9 | 9·5 |
| 9·5 | | 19·8 | 16·0 | |
| 10·4 | | 19·8 | 38·3 | |
| 9·8 | | 19·8 | 49·0 | |
| 10·4 | | 20·3 | 34·9 | |
| 10·4 | | 26·0 | 57·7 | |
| 10·4 | | 29·8 | 16·7 | |
| 8·7 | | 33·3 | 28·3 | 9·0 |
| 10·4 | | 35·8 | 46·8 | |
| 10·4 | | 38·8 | 31·1 | |
| 10·4 | | 41·1 | 14·5 | |
| 10·2 | | 41·8 | 32·0 | |
| 9·5 | | 43·6 | 50·4 | |
| 10·4 | | 47·5 | 15·9 | |
| 7·1 | | 47·9 | 1·7 | 7·2 GSg |
| 10·4 | | 48·3 | 54·0 | |
| 9·6 | | 48·4 | 22·8 | |
| 10·4 | | 49·8 | 13·1 | |
| 10·4 | | 51·6 | 5·6 | |
| 10·4 | | 54·8 | 41·9 | |
| 10·4 | | 55·8 | 4·2 | |
| 10·2 | 52 | 1·6 | 29·3 | |
| 10·4 | | 4·8 | 47·7 | |

## 3061—3120.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 52 | 4·9 | 31·9 | |
| 10·4 | | 5·8 | 59·9 | |
| 9·8 | | 6·4 | 29·2 | |
| 10·0 | | 6·8 | 54·6 | |
| 10·4 | | 9·4 | 16·9 | |
| 9·8 | | 11·3 | 57·4 | |
| 10·2 | | 12·1 | 18·3 | |
| 7·8 | | 13·3 | 49·6 | 8·4 G |
| 10·4 | | 15·8 | 48·1 | |
| 10·4 | | 19·8 | 39·4 | |
| 10·4 | | 20·3 | 48·5 | |
| 10·4 | | 20·3 | 56·5 | |
| 10·2 | | 20·3 | 28·9 | |
| 10·4 | | 22·5 | 13·7 | |
| 4·4 | | 30·2 | 58·4 | 4·0 GS trλ |
| 9·9 | | 31·5 | 23·3 | |
| 10·5 | | 36·0 | 46·0 | |
| 10·5 | | 39·1 | 54·9 | |
| 10·5 | | 39·4 | 56·7 | |
| 10·5 | | 39·4 | 13·4 | |
| 10·5 | | 41·9 | 36·2 | |
| 10·5 | | 42·9 | 57·3 | |
| 9·6 | | 45·4 | 26·1 | |
| 10·4 | | 46·4 | 12·8 | |
| 10·0 | | 46·9 | 37·7 | |
| 10·5 | | 47·5 | 20·2 | |
| 10·5 | | 48·4 | 34·0 | |
| 10·4 | | 48·4 | 10·3 | |
| 10·5 | | 49·9 | 5·5 | |
| 10·4 | | 51·9 | 22·0 | |
| 9·4 | | 53·4 | 15·9 | |
| 10·2 | | 54·4 | 31·8 | |
| 10·5 | 53 | 2·6 | 57·4 | |
| 8·6 | | 4·4 | 47·3 | 9·5 |
| 10·4 | | 5·9 | 16·1 | |
| 10·4 | | 13·9 | 16·8 | |
| 10·5 | | 18·9 | 34·5 | |
| 10·5 | | 20·4 | 36·1 | |
| 9·0 | | 22·4 | 48·8 | 9·2 |
| 10·4 | | 22·4 | 40·5 | |
| 10·5 | | 23·4 | 34·3 | |
| 9·7 | | 25·9 | 48·9 | |
| 10·5 | | 26·9 | 6·2 | |
| 9·0 | | 27·4 | 11·3 | 9·5 |
| 10·2 | | 30·9 | 37·9 | |
| 10·2 | | 32·4 | 44·3 | |
| 9·9 | | 34·9 | 30·9 | |
| 10·5 | | 34·9 | 5·9 | |
| 9·9 | | 38·4 | 36·9 | |
| 10·2 | | 38·4 | 35·9 | |
| 10·2 | | 39·4 | 36·0 | |
| 10·5 | | 40·9 | 17·5 | |
| 10·4 | | 43·2 | 57·5 | |
| 10·5 | | 44·6 | 2·8 | |
| 10·0 | | 58·3 | 42·9 | |
| 10·2 | 54 | 0·3 | 8·2 | |
| 10·4 | | 1·3 | 57·7 | |
| 10·4 | | 2·3 | 8·0 | |
| 10·4 | | 4·8 | 11·9 | |
| 10·0 | | 5·8 | 30·5 | |

## 3121—3180.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 54 | 11·8 | 30·6 | |
| 10·4 | | 12·1 | 17·8 | |
| 10·5 | | 14·3 | 43·9 | |
| 10·0 | | 14·8 | 1·7 | |
| 10·4 | | 15·3 | 48·9 | |
| 9·2 | | 16·3 | 16·5 | |
| 10·5 | | 19·1 | 10·3 | |
| 10·5 | | 22·3 | 5·0 | |
| 10·0 | | 25·8 | 39·3 | |
| 10·0 | | 27·6 | 59·3 | |
| 10·0 | | 34·8 | 22·6 | |
| 10·4 | | 41·3 | 42·1 | |
| 9·9 | | 45·3 | 5·4 | |
| 9·8† | | 46·1 | 2·4 | |
| 9·8 | | 48·3 | 23·0 | |
| 10·4 | | 51·8 | 15·5 | |
| 10·5 | | 51·9 | 1·0 | |
| 9·8 | | 52·3 | 44·4 | |
| 9·9 | | 54·3 | 50·7 | |
| 10·5 | | 55·8 | 8·3 | |
| 10·0 | 55 | 0·8 | 19·4 | |
| 10·2 | | 2·8 | 31·5 | |
| 10·4 | | 4·1 | 32·9 | |
| 9·4 | | 4·3 | 50·9 | |
| 10·4 | | 4·3 | 17·8 | |
| 10·2 | | 5·3 | 10·1 | |
| 10·0 | | 7·3 | 42·7 | |
| 10·4 | | 9·7 | 11·7 | |
| 9·9 | | 9·7 | 21·1 | |
| 10·2 | | 13·2 | 39·1 | |
| 9·8 | | 17·2 | 43·8 | |
| 10·5 | | 18·2 | 14·7 | |
| 10·5 | | 21·5 | 58·1 | |
| 10·0 | | 23·2 | 44·1 | |
| 9·4 | | 23·7 | 21·7 | |
| 10·5 | | 30·7 | 31·1 | |
| 10·5 | | 32·2 | 29·8 | |
| 10·5 | | 33·2 | 54·4 | |
| 10·4 | | 36·2 | 28·3 | |
| 10·2 | | 37·2 | 28·9 | |
| 9·4 | | 38·2 | 24·3 | |
| 10·0 | | 42·2 | 38·9 | |
| 9·8 | | 45·7 | 49·7 | |
| 9·0 | | 45·7 | 14·1 | 9·2 |
| 10·0 | | 50·2 | 26·2 | |
| 10·5 | | 55·8 | 58·7 | |
| 10·4 | 56 | 1·2 | 25·0 | |
| 10·4 | | 13·2 | 13·0 | |
| 9·8 | | 14·7 | 43·7 | |
| 10·4 | | 28·7 | 57·3 | |
| 10·0 | | 30·2 | 41·9 | |
| 10·0 | | 30·2 | 37·1 | |
| 10·2 | | 30·7 | 38·7 | |
| 10·4 | | 34·2 | 42·6 | |
| 10·2 | | 34·7 | 52·3 | |
| 10·4 | | 37·7 | 34·7 | |
| 10·5 | | 42·2 | 28·9 | |
| 10·0 | | 50·7 | 44·8 | |
| 10·2 | | 51·2 | 28·7 | |
| 10·2 | | 54·7 | 30·7 | |

## 3181—3240.

| mag. | 9h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·2 | 56 | 56·2 | 34·2 | 10·0 |
| 9·8† | 57 | 0·1 | 0·4 | |
| 10·0 | | 6·7 | 39·8 | |
| 10·0 | | 8·2 | 52·7 | |
| 9·4 | | 8·7 | 48·7 | |
| 10·4 | | 9·7 | 9·5 | |
| 9·8 | | 13·2 | 40·1 | |
| 10·0 | | 14·1 | 2·9 | |
| 9·4 | | 15·7 | 32·5 | |
| 9·8† | | 21·1 | 2·8 | |
| 10·5 | | 22·2 | 18·6 | |
| 10·0 | | 22·7 | 47·7 | |
| 8·1 | | 23·2 | 36·2 | 8·5 |
| 10·0 | | 28·2 | 33·5 | |
| 10·5 | | 31·2 | 48·9 | |
| 9·9 | | 35·1 | 2·8 | |
| 10·4 | | 41·2 | 20·9 | |
| 10·0 | | 43·2 | 12·7 | |
| 10·2 | | 43·2 | 14·7 | |
| 10·4 | | 48·3 | 59·5 | |
| 9·4 | | 52·2 | 26·9 | |
| 9·4 | | 54·9 | 0·5 | |
| 10·2 | | 59·2 | 22·1 | |
| 9·7 | 58 | 6·7 | 19·5 | |
| 10·2 | | 14·2 | 49·5 | |
| 10·0 | | 16·7 | 41·0 | |
| 10·5 | | 17·7 | 36·0 | |
| 10·5 | | 18·2 | 15·1 | |
| 9·4 | | 20·2 | 3·7 | 9·5 |
| 10·0 | | 22·2 | 27·7 | |
| 10·5 | | 22·7 | 49·9 | |
| 10·0 | | 24·2 | 40·3 | |
| 10·5 | | 25·3 | 27·5 | |
| 10·5 | | 26·2 | 32·7 | |
| 10·4 | | 26·7 | 22·7 | |
| 10·4 | | 28·2 | 12·6 | |
| 10·0 | | 32·1 | 30·9 | |
| 8·4 | | 33·1 | 57·3 | 9·0 |
| 10·0 | | 34·1 | 44·9 | |
| 10·2 | | 35·6 | 35·5 | |
| 10·4 | | 35·6 | 20·1 | |
| 10·4 | | 39·6 | 28·7 | |
| 10·0 | | 41·4 | 0·9 | |
| 10·4 | | 59·1 | 23·7 | |
| 10·4 | 59 | 0·6 | 33·1 | |
| 10·0 | | 3·6 | 31·7 | |
| 10·2 | | 4·6 | 53·5 | |
| 10·4 | | 6·6 | 37·1 | |
| 9·7 | | 8·1 | 6·1 | |
| 10·2 | | 8·1 | 55·1 | |
| 10·4 | | 9·6 | 17·1 | |
| 10·4 | | 11·6 | 55·5 | |
| 10·4 | | 13·1 | 37·1 | |
| 10·4 | | 15·6 | 8·5 | |
| 10·4 | | 16·1 | 9·1 | |
| 9·2 | | 22·1 | 55·7 | 9·8 |
| 9·8 | | 25·6 | 43·1 | |
| 10·4 | | 28·6 | 55·1 | |
| 10·4 | | 31·6 | 5·0 | |
| 10·4 | | 33·1 | 25·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 40 | 51 | 6·8 |
| | 50 | 53 | 7·0 |
| 10 | 0 | 54 | 7·2 |

25 prec.

| | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 9 | 50 | 53 | 7.0 |
| 10 | 0 | 54 | 7.2 |
| | 10 | 56 | 7.4 |

**3241—3300.**

| mag. | 9h.–10h. m s | −53° ′ | |
|---|---|---|---|
| 10.0 | 59 35.6 | 48.5 | |
| 10.0 | 37.1 | 3.8 | |
| 10.0 | 42.1 | 20.3 | |
| 10.2 | 46.1 | 37.3 | |
| 10.4 | 48.6 | 43.7 | |
| 10.0 | 49.3 | 0.0 | |
| 9.9 | 49.6 | 5.5 | |
| 9.7 | 51.0 | 12.9 | 8.5 |
| 10.4 | 52.0 | 40.9 | |
| 10.0 | 55.5 | 27.0 | |
| 10.4 | 57.0 | 34.9 | |
| 9.7 | 0 4.0 | 22.9 | |
| 10.4 | 4.0 | 8.7 | |
| 10.4 | 5.5 | 32.1 | |
| 9.8 | 6.5 | 13.8 | 9.5 |
| 10.5 | 9.5 | 57.5 | |
| 9.8 | 13.4 | 54.0 | |
| 10.4 | 13.5 | 30.3 | |
| 10.4 | 14.5 | 2.6 | |
| 9.4 | 16.0 | 47.7 | 9.0 |
| 9.9 | 16.5 | 44.9 | |
| 10.4 | 19.5 | 38.8 | |
| 9.4 | 23.0 | 26.2 | |
| 9.8 | 23.5 | 4.6 | |
| 10.4 | 24.0 | 8.4 | |
| 10.2 | 25.0 | 50.7 | |
| 9.9 | 30.5 | 19.0 | |
| 10.4 | 32.0 | 38.7 | |
| 10.0 | 32.0 | 41.1 | |
| 10.0 | 33.0 | 51.0 | |
| 10.2 | 36.0 | 30.9 | |
| 9.2 | 37.5 | 3.7 | 8.7 |
| 10.5 | 47.5 | 37.6 | |
| 9.9 | 49.0 | 6.9 | |
| 10.4 | 50.5 | 53.4 | |
| 9.4 | 54.0 | 16.2 | |
| 9.9 | 55.5 | 53.2 | |
| 10.4 | 55.5 | 53.5 | |
| 10.5 | 55.5 | 54.4 | |
| 10.4 | 56.4 | 33.2 | |
| 10.4 | 57.5 | 17.1 | |
| 10.2 | 1 0.5 | 48.1 | |
| 10.5 | 3.5 | 47.0 | |
| 9.8 | 6.5 | 51.8 | |
| 9.7 | 9.0 | 8.9 | |
| 9.7 | 13.0 | 29.2 | |
| 10.5 | 13.5 | 6.7 | |
| 10.5 | 21.9 | 27.2 | |
| 10.5 | 23.9 | 43.5 | |
| 7.8 | 25.4 | 59.2 | 8.1 GSg |
| 10.5 | 33.9 | 21.7 | |
| 9.6 | 37.9 | 20.1 | |
| 10.0 | 37.9 | 44.8 | |
| 9.9 | 40.4 | 7.0 | |
| 9.8 | 43.9 | 57.0 | |
| 10.0 | 44.4 | 56.2 | |
| 8.1 | 44.9 | 27.4 | 9.0 |
| 10.2 | 44.9 | 28.1 | |
| 9.4 | 48.4 | 7.4 | |
| 10.0 | 49.7 | 1.1 | |

**3301—3360.**

| mag. | 10h. m s | −53° ′ | |
|---|---|---|---|
| 10.0 | 1 53.9 | 27.3 | |
| 10.0 | 55.4 | 45.8 | |
| 9.8 | 59.4 | 39.8 | |
| 8.0 | 2 1.9 | 5.2 | 8.5 |
| 10.4 | 4.4 | 9.9 | |
| 10.5 | 4.4 | 54.2 | |
| 10.5 | 10.9 | 43.0 | |
| 10.0 | 13.4 | 25.8 | |
| 10.4 | 15.4 | 51.2 | |
| 9.4 | 15.9 | 8.1 | 9.0 |
| 8.0 | 19.4 | 18.2 | 8.3 |
| 10.2 | 19.4 | 56.0 | |
| 10.4 | 22.9 | 50.9 | |
| 10.5 | 27.2 | 8.0 | |
| 10.4 | 28.9 | 33.4 | |
| 10.4 | 33.9 | 29.5 | |
| 10.5 | 34.9 | 51.3 | |
| 7.6 | 35.9 | 57.3 | 8.0 GSg |
| 10.5 | 36.9 | 8.1 | |
| 10.5 | 38.2 | 1.5 | |
| 9.6 | 41.0 | 58.2 | |
| 10.0 | 42.9 | 6.0 | |
| 10.4 | 43.4 | 52.9 | |
| 10.0 | 43.9 | 21.4 | |
| 9.6 | 45.3 | 11.8 | |
| 10.4 | 45.4 | 57.8 | |
| 9.8 | 48.8 | 35.4 | |
| 9.7 | 54.8 | 12.4 | |
| 10.2 | 54.8 | 35.6 | |
| 10.5 | 58.5 | 58.0 | |
| 10.0 | 3 2.3 | 52.6 | |
| 10.5 | 2.3 | 33.1 | |
| 10.5 | 2.8 | 53.3 | |
| 10.2 | 3.8 | 25.6 | |
| 10.0 | 4.8 | 20.3 | |
| 10.0 | 6.0 | 40.4 | |
| 10.4 | 10.3 | 38.0 | |
| 9.6 | 10.8 | 17.3 | 9.0 |
| 10.5 | 11.3 | 50.0 | |
| 9.8† | 12.0 | 2.0 | |
| 9.4 | 14.8 | 29.8 | |
| 10.2 | 17.8 | 52.0 | |
| 10.0 | 21.8 | 2.0 | |
| 9.4 | 25.3 | 28.4 | |
| 9.7 | 26.8 | 59.5 | 9.0 |
| 10.2 | 27.0 | 59.0 | |
| 10.4 | 34.8 | 33.8 | |
| 10.4 | 36.8 | 20.8 | |
| 10.4 | 36.8 | 56.7 | |
| 9.4 | 40.3 | 10.2 | 10.0 |
| 10.4 | 42.3 | 23.8 | |
| 10.5 | 47.3 | 11.2 | |
| 10.2 | 51.0 | 57.4 | |
| 10.0 | 51.8 | 50.9 | |
| 9.0 | 53.3 | 45.3 | 9.5 |
| 10.2 | 56.3 | 6.5 | |
| 10.4 | 59.8 | 56.1 | |
| 10.2 | 4 1.7 | 53.9 | |
| 10.2 | 5.2 | 48.5 | |
| 10.2 | 9.7 | 22.6 | |

**3361—3420.**

| mag. | 10h. s | −53° ′ | |
|---|---|---|---|
| 10.4 | 4 10.2 | 24.0 | |
| 10.4 | 12.7 | 28.8 | |
| 10.5 | 15.2 | 32.0 | |
| 10.4 | 16.7 | 2.7 | |
| 10.4 | 20.2 | 29.7 | |
| 10.4 | 21.7 | 30.3 | |
| 10.2 | 29.7 | 16.8 | |
| 9.4 | 31.7 | 5.8 | |
| 10.4 | 31.7 | 33.7 | |
| 9.8 | 33.7 | 33.9 | |
| 10.4 | 35.7 | 36.4 | |
| 10.4 | 39.0 | 17.9 | |
| 10.0 | 39.1 | 2.4 | |
| 10.2 | 41.7 | 23.3 | |
| 10.4 | 42.9 | 1.4 | |
| 10.4 | 50.2 | 18.9 | |
| 10.4 | 53.7 | 31.0 | |
| 9.2 | 55.2 | 42.8 | |
| 10.4 | 55.2 | 32.1 | |
| 10.4 | 58.2 | 28.9 | |
| 10.2 | 59.2 | 11.0 | |
| 10.4 | 5 0.0 | 38.1 | |
| 9.6 | 0.2 | 8.6 | |
| 10.4 | 6.2 | 44.1 | |
| 10.5 | 8.7 | 22.3 | |
| 10.2 | 10.2 | 58.3 | |
| 10.5 | 11.7 | 54.2 | |
| 10.0 | 12.2 | 48.0 | |
| 10.2 | 13.7 | 54.1 | |
| 10.0 | 13.7 | 25.7 | |
| 10.4 | 17.2 | 36.6 | |
| 9.8 | 25.2 | 32.1 | |
| 10.4 | 27.7 | 48.4 | |
| 10.2 | 33.7 | 50.9 | |
| 9.8 | 36.7 | 23.8 | |
| 10.4 | 37.6 | 33.9 | |
| 9.8 | 39.6 | 26.0 | |
| 10.5 | 40.7 | 37.9 | |
| 10.4 | 41.6 | 40.8 | |
| 10.5 | 43.1 | 32.9 | |
| 10.4 | 48.1 | 39.8 | |
| 10.4 | 49.6 | 42.0 | |
| 10.4 | 52.3 | 57.9 | |
| 10.4 | 54.6 | 46.9 | |
| 10.4 | 55.1 | 48.4 | |
| 9.8† | 59.5 | 2.0 | |
| 9.7 | 6 0.1 | 24.1 | |
| 10.5 | 1.1 | 12.0 | |
| 9.0 | 2.6 | 15.4 | 9.2 |
| 9.6 | 5.1 | 36.1 | |
| 10.5 | 7.1 | 36.9 | |
| 9.8 | 10.6 | 48.2 | |
| 10.0 | 12.1 | 36.9 | |
| 10.2 | 14.1 | 12.1 | |
| 10.0 | 16.6 | 36.9 | |
| 10.0 | 18.6 | 52.7 | |
| 10.2 | 18.6 | 17.4 | |
| 9.6 | 26.1 | 31.4 | 9.5 |
| 9.4 | 27.6 | 25.8 | |
| 9.2 | 28.6 | 47.9 | |

**3421—3480.**

| mag. | 10h. m s | −53° ′ | |
|---|---|---|---|
| 10.0 | 6 46.1 | 51.8 | |
| 10.4 | 51.6 | 8.0 | |
| 10.2 | 7 2.1 | 11.3 | |
| 10.5 | 13.6 | 57.8 | |
| 10.5 | 13.7 | 28.8 | |
| 9.8 | 18.1 | 43.3 | |
| 10.4 | 21.6 | 44.5 | |
| 10.5 | 23.1 | 33.4 | |
| 10.5 | 23.7 | 59.6 | |
| 10.4 | 29.1 | 48.0 | |
| 10.0 | 30.6 | 5.0 | |
| 10.0 | 37.5 | 48.0 | |
| 10.2 | 43.5 | 16.5 | |
| 10.0 | 51.5 | 59.9 | |
| 10.4 | 54.0 | 8.4 | |
| 9.8 | 54.5 | 48.6 | 8.8 |
| 8.8 | 54.5 | 33.2 | 9.0 |
| 10.0 | 58.1 | 57.8 | |
| 10.2 | 59.0 | 19.9 | |
| 10.0 | 8 4.0 | 4.2 | |
| 10.0 | 10.0 | 13.7 | |
| 9.6 | 11.5 | 44.9 | |
| 10.5 | 12.5 | 25.2 | |
| 8.2 | 15.0 | 57.4 | 8.0 |
| 10.0 | 16.0 | 8.4 | |
| 9.9 | 19.0 | 2.5 | |
| 9.4 | 21.5 | 44.9 | |
| 10.4 | 26.5 | 28.9 | |
| 10.0 | 27.5 | 35.4 | |
| 9.6 | 28.5 | 48.8 | 9.2 |
| 9.9 | 31.5 | 14.6 | |
| 10.2 | 32.5 | 5.7 | |
| 10.4 | 33.5 | 40.1 | |
| 10.4 | 35.0 | 16.3 | |
| 10.0 | 35.0 | 15.8 | |
| 10.2 | 36.5 | 49.3 | |
| 10.2 | 38.5 | 1.5 | |
| 10.0 | 38.5 | 30.0 | |
| 9.7 | 39.5 | 39.1 | |
| 10.2 | 40.0 | 54.1 | |
| 10.0 | 42.5 | 25.2 | |
| 10.4 | 43.5 | 33.3 | |
| 10.0 | 44.5 | 13.6 | |
| 10.4 | 47.5 | 52.8 | |
| 9.8 | 51.5 | 3.9 | 8.8 |
| 9.7 | 56.0 | 22.8 | |
| 9.8 | 57.4 | 59.1 | |
| 10.2 | 59.9 | 46.4 | |
| 10.5 | 9 0.9 | 58.6 | |
| 10.4 | 2.4 | 44.7 | |
| 10.4 | 5.4 | 46.9 | |
| 10.0 | 5.9 | 29.5 | |
| 10.0 | 9.4 | 37.3 | |
| 10.4 | 9.9 | 59.9 | |
| 9.2 | 13.4 | 52.2 | 10.0 |
| 9.4 | 14.9 | 13.1 | 9.2 |
| 10.4 | 15.9 | 27.0 | |
| 10.2 | 16.9 | 58.4 | |
| 10.4 | 20.9 | 14.6 | |
| 10.0 | 20.9 | 40.7 | |



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## 3481—3540.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·5 | 9 | 23·4 | 34·2 | |
| 9·6 | | 23·4 | 54·1 | |
| 10·0 | | 23·4 | 37·6 | |
| 10·5 | | 25·9 | 38·1 | |
| 10·4 | | 26·4 | 6·4 | |
| 10·2 | | 26·9 | 47·2 | |
| 9·8† | | 29·0 | 0·4 | |
| 10·4 | | 31·9 | 32·1 | |
| 10·2 | | 39·4 | 3·9 | |
| 10·2 | | 41·4 | 27·9 | |
| 10·2 | | 44·9 | 6·7 | |
| 9·2 | | 45·4 | 3·3 | 9·5 |
| 10·2 | | 47·1 | 57·9 | |
| 10·0 | | 48·4 | 23·7 | |
| 10·4 | | 48·9 | 30·4 | |
| 10·2 | | 49·9 | 39·6 | |
| 10·5 | | 53·4 | 32·7 | |
| 9·6 | | 56·9 | 45·1 | |
| 10·4 | | 57·4 | 4·0 | |
| 10·5 | 10 | 2·4 | 4·7 | |
| 10·4 | | 8·9 | 43·3 | |
| 10·4 | | 9·4 | 8·6 | |
| 10·4 | | 11·4 | 34·9 | |
| 10·4 | | 12·9 | 4·9 | |
| 10·0 | | 13·9 | 45·5 | |
| 10·5 | | 15·7 | 6·6 | |
| 10·0 | | 18·4 | 14·1 | |
| 10·0 | | 19·4 | 33·8 | |
| 10·0 | | 21·4 | 5·2 | |
| 10·4 | | 21·9 | 54·8 | |
| 10·4 | | 24·9 | 35·3 | |
| 10·0 | | 25·9 | 49·6 | |
| 10·5 | | 27·7 | 28·1 | |
| 10·5 | | 29·4 | 57·7 | |
| 8·6 | | 34·9 | 51·5 | |
| 10·5 | | 40·4 | 33·1 | |
| 10·4 | | 45·9 | 26·7 | G |
| 10·5 | | 46·9 | 51·3 | |
| 10·0 | | 52·4 | 15·5 | |
| 9·8 | | 53·4 | 46·9 | |
| 9·6 | | 53·9 | 52·6 | |
| 10·5 | | 59·7 | 46·1 | |
| 9·8 | 11 | 3·4 | 11·0 | |
| 10·5 | | 7·9 | 0·4 | |
| 10·4 | | 8·9 | 39·7 | |
| 10·4 | | 8·9 | 54·7 | |
| 10·5 | | 10·8 | 17·1 | |
| 10·4 | | 10·9 | 15·1 | |
| 10·2 | | 11·3 | 18·8 | |
| 9·8 | | 12·3 | 59·9 | |
| 10·4 | | 17·3 | 22·0 | |
| 10·0 | | 19·8 | 13·3 | |
| 9·4 | | 19·8 | 16·8 | 9·0 |
| 10·4 | | 20·3 | 2·8 | |
| 9·6 | | 22·3 | 45·2 | |
| 9·6 | | 22·8 | 18·0 | |
| 9·4 | | 24·3 | 10·3 | |
| 10·2 | | 25·3 | 20·4 | |
| 9·2 | | 26·3 | 58·5 | |
| 10·4 | | 27·3 | 45·5 | |

## 3541—3600.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 27·8 | 25·1 | |
| 10·2 | | 28·3 | 6·5 | |
| 10·5 | | 28·4 | 56·0 | |
| 10·4 | | 32·3 | 27·0 | |
| 10·2 | | 34·3 | 21·5 | |
| 10·0 | | 36·8 | 14·1 | |
| 10·5 | | 37·8 | 39·8 | |
| 10·4 | | 37·8 | 33·5 | |
| 10·2 | | 41·3 | 22·0 | |
| 10·5 | | 42·8 | 11·3 | |
| 10·0 | | 47·3 | 13·6 | |
| 8·8 | | 48·8 | 27·5 | 9·2 |
| 10·5 | | 53·3 | 50·0 | |
| 10·4 | | 53·3 | 22·1 | |
| 10·4 | | 57·3 | 42·5 | |
| 10·5 | | 57·8 | 38·4 | |
| 10·4 | | 58·8 | 31·8 | |
| 10·5 | | 58·8 | 23·3 | |
| 9·9 | 12 | 3·3 | 27·0 | |
| 9·4 | | 9·3 | 59·9 | |
| 9·8 | | 10·3 | 56·4 | |
| 9·4 | | 11·8 | 50·8 | |
| 10·2 | | 12·3 | 58·3 | |
| 10·2 | | 15·7 | 59·4 | |
| 10·5 | | 16·7 | 33·1 | |
| 9·8 | | 24·7 | 38·8 | |
| 10·2 | | 25·2 | 13·8 | |
| 10·5 | | 28·7 | 27·9 | |
| 9·8 | | 30·2 | 43·4 | |
| 9·4 | | 33·2 | 17·0 | 9·5 |
| 10·0 | | 35·2 | 52·2 | |
| 10·0 | | 35·2 | 55·0 | |
| 9·4 | | 38·7 | 36·9 | |
| 10·5 | | 39·2 | 46·2 | |
| 10·5 | | 39·7 | 42·9 | |
| 10·2 | | 40·7 | 37·2 | |
| 10·5 | | 42·7 | 35·5 | |
| 10·0 | | 43·2 | 23·9 | |
| 7·7 | | 47·2 | 46·5 | 8·2 |
| 8·8 | | 49·2 | 10·5 | 9·0 |
| 10·0 | | 51·7 | 42·6 | |
| 9·7 | | 55·2 | 54·2 | |
| 10·2 | | 55·7 | 6·8 | |
| 9·6 | | 57·7 | 19·5 | |
| 10·4 | 13 | 0·2 | 54·3 | |
| 10·2 | | 0·2 | 46·8 | |
| 9·2 | | 1·2 | 14·5 | 9·5 |
| 9·4 | | 1·9 | 2·3 | |
| 10·0 | | 2·7 | 45·2 | |
| 10·5 | | 2·7 | 55·9 | |
| 10·4 | | 7·7 | 53·3 | |
| 9·9 | | 9·2 | 52·8 | |
| 10·2 | | 10·2 | 4·8 | |
| 7·8 | | 11·4 | 59·9 | 8·0 |
| 10·2 | | 11·7 | 42·2 | |
| 10·0 | | 14·7 | 11·3 | |
| 10·0 | | 16·2 | 32·7 | |
| 10·4 | | 18·2 | 14·3 | |
| 9·2 | | 18·6 | 1·0 | 9·5 |
| 10·4 | | 19·7 | 3·1 | |

## 3601—3660.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 13 | 21·2 | 57·3 | |
| 9·7 | | 23·7 | 43·9 | |
| 10·4 | | 26·7 | 56·6 | |
| 10·5 | | 29·7 | 5·4 | |
| 9·9 | | 31·2 | 6·0 | |
| 10·0 | | 33·2 | 52·3 | |
| 9·9 | | 34·1 | 44·8 | |
| 9·0 | | 34·1 | 21·1 | |
| 10·4 | | 36·1 | 26·0 | |
| 10·2 | | 39·6 | 11·0 | |
| 8·5 | | 41·1 | 57·2 | 8·7 |
| 10·4 | | 55·6 | 35·7 | |
| 9·4 | | 57·1 | 36·8 | |
| 10·5 | 14 | 1·1 | 53·6 | |
| 9·9 | | 2·1 | 17·9 | |
| 10·5 | | 2·1 | 54·1 | |
| 9·2 | | 3·1 | 40·1 | 9·0 |
| 10·5 | | 9·1 | 16·4 | |
| 9·4 | | 12·1 | 15·9 | |
| 10·4 | | 16·6 | 57·6 | |
| 9·8 | | 17·1 | 53·3 | |
| 9·2 | | 23·6 | 34·4 | |
| 9·8 | | 27·6 | 33·6 | 9·5 |
| 10·5 | | 32·6 | 25·5 | |
| 10·2 | | 33·1 | 26·1 | |
| 10·4 | | 33·6 | 22·9 | |
| 10·4 | | 34·6 | 41·2 | |
| 9·8 | | 36·1 | 39·4 | |
| 10·2 | | 36·6 | 28·8 | |
| 10·2 | | 39·6 | 21·5 | |
| 9·4 | | 45·6 | 54·1 | |
| 8·6 | | 48·6 | 52·5 | 9·5 |
| 9·8 | | 49·6 | 44·1 | |
| 10·4 | 15 | 0·1 | 39·3 | |
| 10·5 | | 0·1 | 39·7 | |
| 10·4 | | 0·6 | 42·8 | |
| 9·6 | | 2·1 | 52·3 | |
| 10·5 | | 3·1 | 2·8 | |
| 9·0 | | 12·1 | 15·5 | 9·5 |
| 9·6 | | 17·0 | 5·4 | 9·5 |
| 10·0 | | 17·2 | 1·0 | |
| 10·2 | | 17·5 | 31·7 | |
| 10·4 | | 24·0 | 37·9 | |
| 10·5 | | 27·0 | 41·1 | |
| 10·4 | | 30·5 | 12·3 | |
| 10·4 | | 31·5 | 56·2 | |
| 10·4 | | 38·0 | 3·8 | |
| 9·6 | | 48·0 | 23·8 | |
| 7·8 | | 53·2 | 2·2 | 7·8 |
| 10·4 | | 55·5 | 3·0 | |
| 10·4 | | 56·0 | 1·8 | |
| 9·4 | | 56·1 | 14·8 | 10·0 |
| 10·0 | | 56·5 | 9·7 | |
| 10·4 | | 58·0 | 16·6 | |
| 10·0 | 16 | 1·5 | 40·9 | |
| 9·8 | | 2·0 | 26·5 | |
| 10·5 | | 3·0 | 59·9 | |
| 10·0 | | 3·0 | 41·5 | |
| 10·4 | | 5·0 | 29·9 | |
| 10·4 | | 7·0 | 12·1 | |

## 3661—3720.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 16 | 10·7 | 1·6 | |
| 10·2 | | 16·5 | 2·0 | |
| 10·0 | | 17·0 | 8·5 | |
| 9·0 | | 31·5 | 25·9 | 9·0 |
| 9·4 | | 33·0 | 25·9 | |
| 9·8 | | 34·5 | 36·7 | |
| 10·5 | | 39·0 | 32·1 | |
| 9·0 | | 40·0 | 4·4 | 9·0 |
| 10·5 | | 42·5 | 58·0 | |
| 10·2 | | 48·0 | 33·4 | |
| 10·4 | | 49·5 | 30·4 | |
| 10·0 | | 51·0 | 14·9 | |
| 10·4 | | 51·0 | 34·9 | |
| 10·4 | | 53·0 | 25·4 | |
| 10·0 | | 55·5 | 53·9 | |
| 10·2 | | 59·5 | 37·1 | |
| 10·2 | 17 | 1·0 | 42·5 | |
| 10·0 | | 2·0 | 25·7 | |
| 10·4 | | 4·5 | 55·4 | |
| 9·2 | | 11·5 | 50·8 | 9·2 |
| 10·4 | | 15·7 | 58·9 | |
| 10·4 | | 18·0 | 32·9 | |
| 8·1 | | 20·0 | 8·1 | 8·5 |
| 10·2 | | 21·0 | 19·4 | |
| 10·5 | | 21·3 | 26·4 | |
| 10·4 | | 23·5 | 33·1 | |
| 10·2 | | 24·5 | 34·5 | |
| 8·2 | | 26·7 | 57·5 | 8·0 |
| 9·8 | | 27·0 | 47·8 | |
| 10·0 | | 28·5 | 19·9 | |
| 10·0 | | 29·0 | 3·9 | |
| 10·4 | | 29·5 | 46·5 | |
| 10·2 | | 31·0 | 28·3 | |
| 10·4 | | 31·5 | 25·8 | |
| 10·5 | | 32·0 | 5·9 | |
| 8·5 | | 33·0 | 8·1 | 8·2 |
| 10·0 | | 33·5 | 34·5 | |
| 10·0 | | 35·0 | 46·5 | |
| 9·8 | | 43·0 | 43·8 | |
| 10·5 | | 49·5 | 38·8 | |
| 10·4 | | 53·0 | 20·5 | |
| 10·4 | | 58·0 | 56·9 | |
| 9·9 | 18 | 3·0 | 19·2 | |
| 10·2 | | 3·3 | 46·7 | |
| 10·0 | | 4·5 | 54·3 | |
| 10·5 | | 4·5 | 40·3 | |
| 10·0 | | 4·5 | 49·1 | |
| 10·2 | | 4·5 | 43·9 | |
| 8·6 | | 5·7 | 57·5 | 9·5 |
| 9·9 | | 9·5 | 19·4 | |
| 9·4 | | 10·0 | 37·3 | |
| 9·9 | | 10·5 | 23·9 | |
| 10·2 | | 12·0 | 51·6 | |
| 10·2 | | 19·5 | 37·3 | |
| 10·4 | | 22·5 | 10·5 | |
| 10·2 | | 23·0 | 33·9 | |
| 9·0 | | 25·3 | 44·8 | 9·0 |
| 10·2 | | 25·9 | 23·7 | |
| 10·0 | | 26·9 | 19·1 | |
| 10·4 | | 27·4 | 47·1 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 10 | 0 | 54 | 7·2 |
| | 10 | 56 | 7·4 |
| | 20 | 58 | 7·6 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 56 | 7.4 |
| | 20 | 58 | 7.6 |
| | 30 | 60 | 7.7 |

**3721—3780.**

| mag. | 10ʰ m | s | −53° ′ | |
|---|---|---|---|---|
| 10.4 | 18 | 31.0 | 49.8 | |
| 10.4 | | 32.9 | 56.7 | |
| 10.4 | | 33.9 | 43.7 | |
| 10.0 | | 35.4 | 16.5 | |
| 10.4 | | 37.9 | 34.2 | |
| 10.0 | | 38.0 | 56.9 | |
| 10.4 | | 40.4 | 59.1 | |
| 10.2 | | 44.9 | 24.9 | |
| 10.0 | | 45.4 | 42.3 | |
| 9.0 | | 49.9 | 16.9 | 9.5 |
| 10.0 | | 51.4 | 22.9 | |
| 10.5 | | 52.4 | 9.6 | |
| 10.4 | | 56.9 | 35.6 | |
| 9.8 | 19 | 1.9 | 32.5 | |
| 10.4 | | 6.4 | 31.5 | |
| 10.0 | | 7.4 | 12.4 | |
| 9.8 | | 8.9 | 47.1 | |
| 10.0 | | 8.9 | 3.6 | |
| 10.2 | | 11.4 | 18.4 | |
| 10.4 | | 11.9 | 31.7 | |
| 10.4 | | 11.9 | 13.9 | |
| 10.2 | | 14.6 | 56.7 | |
| 10.5 | | 20.4 | 20.1 | |
| 10.5 | | 20.4 | 39.3 | |
| 10.4 | | 22.0 | 58.2 | |
| 10.4 | | 22.9 | 11.9 | |
| 10.4 | | 23.4 | 20.5 | |
| 8.1 | | 25.4 | 5.7 | 8.0 G |
| 10.2 | | 26.9 | 59.9 | |
| 10.2 | | 28.4 | 22.6 | 9.5 |
| 10.5 | | 29.9 | 22.8 | |
| 10.2 | | 31.4 | 37.9 | |
| 10.2 | | 32.9 | 43.6 | |
| 10.0 | | 43.9 | 8.1 | |
| 8.0 | | 44.9 | 22.7 | 8.2 G |
| 9.8 | | 47.8 | 34.3 | |
| 10.2 | | 48.8 | 53.7 | |
| 8.0 | | 50.8 | 41.2 | 7.5 GSt |
| 10.4 | | 51.3 | 50.4 | |
| 10.4 | | 52.2 | 57.0 | |
| 10.0 | | 55.3 | 20.1 | |
| 10.0 | | 56.8 | 47.7 | |
| 10.2 | | 57.8 | 59.1 | |
| 10.2 | 20 | 0.8 | 49.0 | |
| 9.4 | | 1.3 | 23.4 | |
| 9.9 | | 1.8 | 45.6 | |
| 10.2 | | 6.8 | 17.1 | |
| 9.4 | | 8.8 | 29.4 | |
| 10.0 | | 9.8 | 39.9 | |
| 9.7 | | 22.8 | 18.6 | |
| 10.5 | | 23.3 | 44.3 | |
| 10.4 | | 25.8 | 39.4 | |
| 10.4 | | 30.8 | 32.9 | |
| 10.4 | | 34.3 | 55.3 | |
| 10.0 | | 40.3 | 19.1 | |
| 10.4 | | 42.3 | 44.9 | |
| 10.0 | | 42.3 | 44.1 | |
| 10.4 | | 42.3 | 56.5 | |
| 10.5 | | 44.3 | 28.8 | |
| 10.4 | | 46.8 | 42.9 | |

18

**3781—3840.**

| mag. | 10ʰ m | s | −53° ′ | |
|---|---|---|---|---|
| 10.0 | 20 | 46.8 | 26.5 | |
| 10.5 | | 48.8 | 38.9 | |
| 10.4 | | 49.8 | 52.9 | |
| 10.0 | | 52.8 | 14.8 | |
| 10.0 | | 57.8 | 56.2 | |
| 10.5 | 21 | 2.8 | 15.4 | |
| 10.0 | | 3.3 | 30.1 | |
| 10.0 | | 6.3 | 21.9 | |
| 10.4 | | 7.8 | 42.6 | |
| 10.5 | | 8.3 | 9.5 | |
| 10.4 | | 15.7 | 40.0 | |
| 10.4 | | 22.2 | 10.9 | |
| 7.8 | | 22.7 | 15.4 | 7.5 GSt: |
| 9.6 | | 26.7 | 53.2 | 9.0 |
| 10.5 | | 32.2 | 54.3 | |
| 10.0 | | 32.7 | 57.7 | |
| 9.8 | | 33.2 | 9.5 | |
| 10.0 | | 34.2 | 56.0 | |
| 10.4 | | 37.7 | 11.4 | |
| 10.5 | | 37.7 | 21.0 | |
| 10.2 | | 38.2 | 23.0 | |
| 10.0 | | 39.2 | 37.6 | |
| 10.4 | | 40.2 | 59.8 | |
| 10.5 | | 47.7 | 17.1 | |
| 10.4 | | 49.2 | 50.8 | |
| 10.2 | | 57.0 | 1.0 | |
| 10.0 | | 58.7 | 2.5 | |
| 9.0 | | 58.8 | 2.2 | 9.0 |
| 10.4 | | 59.7 | 50.8 | |
| 10.0 | 22 | 1.7 | 25.5 | |
| 10.4 | | 4.2 | 32.9 | |
| 10.0 | | 12.2 | 58.1 | |
| 10.5 | | 16.2 | 4.3 | |
| 10.0 | | 19.7 | 36.9 | |
| 10.4 | | 20.7 | 29.1 | |
| 9.4 | | 21.3 | 56.8 | |
| 10.0 | | 21.7 | 51.8 | |
| 10.5 | | 23.2 | 25.4 | |
| 10.5 | | 24.7 | 3.5 | |
| 10.4 | | 28.7 | 34.5 | |
| 10.0 | | 30.7 | 35.6 | |
| 10.5 | | 30.7 | 50.4 | |
| 10.4 | | 30.7 | 43.0 | |
| 10.0 | | 32.7 | 35.9 | |
| 10.0 | | 33.2 | 28.7 | |
| 10.5 | | 33.7 | 40.8 | |
| 10.5 | | 35.1 | 32.0 | |
| 9.6 | | 35.6 | 19.0 | |
| 10.2 | | 37.1 | 37.8 | |
| 8.3 | | 37.5 | 2.6 | 8.2 G |
| 10.4 | | 38.6 | 37.4 | |
| 10.5 | | 39.6 | 37.0 | |
| 9.4 | | 45.1 | 34.2 | |
| 8.4 | | 45.6 | 16.0 | 8.0 |
| 10.4 | | 46.1 | 1.4 | |
| 10.2 | | 57.6 | 19.2 | |
| 10.2 | | 58.6 | 55.5 | |
| 10.0 | 23 | 0.1 | 49.4 | |
| 10.5 | | 1.6 | 2.4 | |
| 9.4 | | 7.6 | 49.0 | 9.0 |

**3841—3900.**

| mag. | 10ʰ m | s | −53° ′ | |
|---|---|---|---|---|
| 10.4 | 23 | 8.6 | 46.4 | |
| 10.0 | | 9.6 | 19.1 | |
| 9.4 | | 13.8 | 44.6 | 9.5 |
| 10.0 | | 15.6 | 20.3 | |
| 9.9 | | 21.8 | 52.9 | |
| 9.6 | | 30.6 | 41.9 | |
| 9.7 | | 31.1 | 18.0 | 9.0 |
| 10.2 | | 32.2 | 37.9 | |
| 10.4 | | 33.1 | 36.6 | |
| 10.2 | | 42.1 | 0.2 | |
| 9.9 | | 50.6 | 10.4 | |
| 9.8 | | 51.3 | 54.9 | |
| 9.8 | | 51.6 | 24.0 | |
| 10.0 | | 52.6 | 21.4 | |
| 10.2 | 24 | 1.3 | 40.0 | |
| 10.2 | | 2.1 | 36.8 | |
| 9.9 | | 2.6 | 42.5 | |
| 9.7 | | 8.6 | 33.4 | |
| 10.0 | | 10.3 | 1.5 | |
| 9.2 | | 12.0 | 52.2 | |
| 9.7 | | 13.5 | 23.5 | |
| 10.0 | | 14.0 | 30.8 | |
| 9.4 | | 14.2 | 6.8 | 9.5 |
| 10.4 | | 14.7 | 7.5 | |
| 10.4 | | 18.5 | 53.0 | |
| 10.0 | | 20.0 | 44.3 | |
| 10.5 | | 24.6 | 59.1 | |
| 9.9 | | 25.0 | 20.6 | |
| 10.5 | | 27.5 | 16.2 | |
| 10.0 | | 30.0 | 9.1 | |
| 10.2 | | 30.5 | 44.8 | |
| 9.6 | | 33.2 | 49.0 | |
| 9.2 | | 33.4 | 21.7 | |
| 9.0 | | 36.4 | 23.6 | 9.5 G |
| 9.1 | | 37.4 | 37.5 | 8.8 G |
| 10.0† | | 38.9 | 0.8 | |
| 10.0† | | 40.4 | 1.3 | |
| 9.2 | | 46.9 | 41.6 | |
| 9.6 | | 52.4 | 40.9 | |
| 10.1 | | 53.4 | 31.0 | |
| 8.2 | | 55.9 | 25.2 | 8.7 |
| 10.0 | 25 | 7.4 | 50.9 | |
| 9.6 | | 9.4 | 5.6 | |
| 9.8 | | 9.9 | 28.9 | |
| 9.8 | | 11.4 | 3.1 | |
| 9.6 | | 13.9 | 3.1 | |
| 9.6 | | 19.4 | 2.5 | |
| 9.8 | | 19.9 | 4.8 | |
| 8.8 | | 20.9 | 23.8 | 9.3 |
| 10.1 | | 22.4 | 22.9 | |
| 9.8 | | 24.4 | 50.6 | |
| 10.1 | | 25.9 | 33.2 | |
| 9.8 | | 26.4 | 5.9 | |
| 9.6 | | 27.4 | 27.5 | |
| 9.6 | | 35.9 | 41.8 | |
| 10.1 | | 38.9 | 45.6 | |
| 9.6 | | 39.9 | 0.8 | |
| 9.5 | | 42.9 | 27.6 | |
| 8.8 | | 51.4 | 50.5 | 8.0 Gg |
| 9.0 | | 52.4 | 52.4 | 8.5 |

**3901—3960.**

| mag. | 10ʰ m | s | −53° ′ | |
|---|---|---|---|---|
| 9.8 | 25 | 53.9 | 29.6 | |
| 8.0 | | 56.4 | 22.3 | 8.3 Gg |
| 9.5 | | 56.4 | 38.8 | |
| 10.1 | | 56.4 | 34.1 | |
| 9.8 | | 58.9 | 13.5 | 9.2 |
| 10.1 | | 58.9 | 30.5 | |
| 9.6 | 26 | 27.8 | 56.9 | 10.0 |
| 9.6 | | 28.9 | 46.5 | |
| 6.4 | | 30.4 | 4.8 | 5.9 GSt |
| 10.1 | | 31.9 | 51.5 | |
| 10.1 | | 42.9 | 40.0 | |
| 9.8 | | 44.4 | 13.1 | |
| 8.8 | | 50.4 | 26.2 | 9.5 G |
| 10.0 | | 52.4 | 54.6 | |
| 9.6 | 27 | 1.9 | 46.0 | |
| 10.1 | | 2.1 | 32.8 | |
| 10.1 | | 4.4 | 47.0 | |
| 10.1 | | 4.9 | 36.0 | |
| 9.6 | | 8.4 | 14.8 | |
| 10.0 | | 9.9 | 6.8 | 9.8 |
| 10.1 | | 17.9 | 9.9 | |
| 10.1 | | 26.4 | 45.9 | |
| 10.1 | | 31.4 | 22.9 | |
| 9.8 | | 32.9 | 19.2 | |
| 10.0 | | 33.4 | 50.4 | |
| 9.8 | | 34.1 | 58.8 | |
| 10.0 | | 38.9 | 24.2 | |
| 9.6 | | 38.9 | 18.2 | |
| 10.0 | | 44.9 | 53.7 | |
| 10.1 | | 45.9 | 38.9 | |
| 10.0 | | 46.4 | 40.7 | |
| 9.8 | | 52.4 | 52.7 | |
| 10.0 | 28 | 6.4 | 41.3 | |
| 8.6 | | 10.9 | 20.2 | 9.2 |
| 9.4 | | 17.4 | 34.5 | 10.0 |
| 9.5 | | 29.9 | 32.9 | |
| 10.0 | | 31.9 | 41.8 | |
| 10.1 | | 32.4 | 38.6 | |
| 9.6 | | 33.4 | 45.9 | |
| 10.0 | | 33.9 | 37.7 | |
| 9.6 | | 45.4 | 51.0 | 9.5 |
| 10.1 | | 51.1 | 59.5 | |
| 10.1 | 29 | 0.9 | 45.0 | |
| 10.1 | | 1.4 | 50.1 | |
| 9.8 | | 2.4 | 12.4 | |
| 9.2 | | 5.9 | 42.0 | |
| 10.1 | | 11.4 | 22.2 | |
| 9.6 | | 16.4 | 43.7 | 9.5 |
| 9.8 | | 16.9 | 58.8 | |
| 9.4 | | 21.4 | 53.2 | 9.1 |
| 9.6 | | 22.1 | 58.9 | |
| 9.2 | | 33.9 | 26.1 | |
| 10.1 | | 36.4 | 33.0 | |
| 9.6 | | 36.9 | 18.6 | 9.5 |
| 8.8 | | 37.4 | 6.5 | 9.0 |
| 9.6 | | 40.4 | 54.3 | |
| 10.1 | | 40.9 | 2.9 | |
| 9.4 | | 45.4 | 38.5 | |
| 9.5 | | 52.0 | 59.9 | 10.0 |
| 9.6 | | 52.4 | 9.5 | |

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### 3961—4020.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.0 | 29 | 55.9 | 19.0 | |
| 10.0 | | 57.4 | 15.0 | |
| 10.0 | | 59.4 | 10.5 | |
| 10.1 | 30 | 3.9 | 26.5 | |
| 9.6 | | 6.4 | 50.5 | |
| 9.6 | | 10.4 | 18.6 | |
| 9.6 | | 11.4 | 17.6 | |
| 10.1 | | 14.9 | 16.2 | |
| 9.5 | | 15.4 | 35.6 | |
| 10.1 | | 20.9 | 13.3 | |
| 10.0 | | 21.4 | 39.6 | |
| 10.1 | | 25.4 | 56.1 | |
| 9.4 | | 25.9 | 8.0 | 9.8 |
| 9.0 | | 27.9 | 53.3 | 9.5 |
| 10.1 | | 31.9 | 13.6 | |
| 10.1 | | 40.2 | 20.5 | |
| 8.4 | | 48.9 | 38.7 | 9.0 |
| 10.1 | | 50.4 | 44.3 | |
| 10.1 | | 53.9 | 48.7 | |
| 10.1 | | 56.4 | 9.4 | |
| 9.0 | | 57.4 | 18.1 | 9.1 |
| 9.2 | | 58.4 | 13.3 | |
| 10.1 | 31 | 2.4 | 9.9 | |
| 10.1 | | 3.9 | 13.8 | 9.5 |
| 9.4 | | 12.6 | 0.1 | |
| 10.1 | | 16.1 | 58.0 | |
| 10.1 | | 17.9 | 31.8 | |
| 9.5 | | 20.4 | 38.8 | |
| 10.1 | | 20.9 | 50.8 | |
| 10.1 | | 29.9 | 13.8 | |
| 10.1 | | 30.4 | 38.6 | |
| 10.0 | | 30.4 | 19.0 | |
| 9.5 | | 43.4 | 24.4 | |
| 10.1 | | 45.4 | 30.4 | |
| 10.1 | | 50.4 | 0.6 | |
| 9.8 | | 52.9 | 24.0 | |
| 9.6 | | 54.4 | 16.4 | |
| 8.4 | | 55.9 | 35.4 | 8.2 GSg |
| 9.6 | | 57.4 | 33.0 | |
| 9.6 | 32 | 5.9 | 39.7 | |
| 9.6 | | 13.9 | 7.5 | |
| 6.8 | | 14.4 | 12.5 | 7.0 GSt |
| 9.2 | | 16.4 | 14.5 | 9.1 |
| 9.8 | | 20.4 | 59.8 | |
| 10.1 | | 20.9 | 24.6 | |
| 9.6 | | 22.4 | 16.8 | |
| 10.1 | | 34.9 | 29.4 | |
| 10.1 | | 38.4 | 7.4 | |
| 9.8 | | 43.9 | 35.9 | |
| 9.6 | | 48.9 | 16.2 | 9.0 |
| 9.8 | | 56.4 | 49.4 | |
| 10.1 | | 57.9 | 11.1 | |
| 9.8 | | 59.4 | 28.1 | |
| 10.0 | 33 | 3.9 | 6.6 | |
| 10.1 | | 10.5 | 6.3 | |
| 10.1 | | 11.9 | 29.7 | |
| 9.6 | | 12.9 | 11.2 | |
| 10.0 | | 31.9 | 28.0 | |
| 9.4 | | 33.4 | 17.1 | 9.0 |
| 9.8 | | 33.4 | 51.0 | |

### 4021—4080.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8.6 | 33 | 36.9 | 28.9 | 9.0 |
| 10.1 | | 40.4 | 58.8 | |
| 9.4 | | 40.7 | 31.2 | |
| 10.0 | | 41.7 | 27.7 | |
| 9.4 | | 43.7 | 27.2 | |
| 10.1 | | 45.7 | 27.8 | |
| 9.0 | | 46.2 | 31.1 | 9.5 |
| 9.5 | | 47.2 | 32.3 | |
| 9.8 | | 49.2 | 22.4 | |
| 9.8 | | 49.7 | 25.9 | |
| 10.0 | | 50.2 | 27.3 | |
| 10.0 | | 51.2 | 28.5 | |
| 9.6 | | 59.7 | 42.0 | |
| 10.1 | | 59.8 | 1.0 | |
| 9.8 | 34 | 2.2 | 44.8 | |
| 9.6 | | 6.2 | 51.2 | |
| 9.0 | | 15.2 | 6.2 | |
| 9.6 | | 16.2 | 23.7 | |
| 10.1 | | 21.7 | 27.4 | |
| 9.6 | | 33.4 | 59.3 | |
| 10.0 | | 34.7 | 21.0 | |
| 9.8 | | 40.5 | 57.9 | |
| 10.0 | | 41.2 | 19.8 | |
| 10.1 | | 42.3 | 26.6 | |
| 10.0 | | 43.2 | 30.0 | |
| 8.4 | | 49.7 | 6.0 | 8.6 |
| 10.1 | | 52.9 | 58.7 | |
| 10.1 | 35 | 10.7 | 51.6 | |
| 10.1 | | 11.2 | 52.9 | |
| 10.0 | | 16.5 | 59.5 | |
| 9.6 | | 24.2 | 34.0 | |
| 10.1 | | 24.7 | 58.3 | |
| 8.8 | | 29.2 | 2.6 | 8.5 |
| 9.2 | | 30.2 | 29.8 | |
| 10.0 | | 32.2 | 47.7 | |
| 9.6 | | 42.2 | 55.2 | |
| 10.0 | | 53.2 | 53.1 | |
| 10.1 | 36 | 2.2 | 41.3 | |
| 9.5 | | 17.7 | 47.3 | |
| 8.3 | | 21.7 | 27.2 | 8.5 |
| 9.1 | | 23.7 | 1.7 | |
| 10.0 | | 24.3 | 41.7 | |
| 10.0 | | 25.7 | 26.3 | |
| 8.8 | | 29.2 | 37.3 | |
| 9.6 | | 40.2 | 39.7 | |
| 9.6 | | 55.7 | 48.7 | |
| 10.0 | 37 | 1.7 | 31.5 | |
| 9.8 | | 2.2 | 4.1 | 9.0 |
| 9.4 | | 6.3 | 58.7 | |
| 10.1 | | 10.2 | 57.3 | |
| 10.1 | | 12.7 | 12.2 | |
| 10.1 | | 25.2 | 57.1 | |
| 9.8 | | 28.7 | 51.5 | |
| 8.1 | | 30.2 | 52.8 | 8.0 |
| 9.6 | | 33.7 | 1.1 | |
| 10.1 | | 37.7 | 43.1 | |
| 9.8 | | 44.2 | 24.7 | |
| 10.1 | | 46.2 | 47.5 | |
| 9.5 | | 53.7 | 43.6 | |
| 8.6 | 38 | 0.2 | 35.2 | 8.0 |

### 4081—4140.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.4 | 38 | 1.0 | 58.5 | 9.0 |
| 10.1 | | 1.2 | 34.0 | |
| 10.1 | | 6.3 | 20.5 | |
| 10.0 | | 12.2 | 53.7 | |
| 10.1 | | 13.7 | 29.5 | |
| 10.0 | | 15.2 | 29.9 | |
| 10.0 | | 23.7 | 38.0 | |
| 9.4 | | 38.7 | 29.6 | |
| 10.0 | | 39.7 | 26.7 | |
| 8.6 | | 44.2 | 30.9 | 8.5 |
| 9.6 | | 51.9 | 1.1 | |
| 10.0 | 39 | 0.7 | 51.2 | |
| 10.1 | | 0.7 | 2.9 | |
| 8.8 | | 8.7 | 58.7 | 8.5 |
| 8.8 | | 17.7 | 38.1 | |
| 9.8 | | 25.7 | 35.6 | |
| 9.8 | | 31.2 | 12.3 | |
| 10.0 | | 31.2 | 57.6 | |
| 9.2 | | 35.6 | 1.9 | |
| 9.4 | | 36.2 | 36.9 | |
| 9.8 | | 36.2 | 41.5 | |
| 10.1 | | 37.3 | 33.2 | |
| 10.0 | | 42.7 | 42.7 | |
| 9.6 | | 45.2 | 56.2 | |
| 10.1 | | 50.2 | 17.9 | |
| 10.1 | | 52.2 | 54.1 | |
| 10.1 | | 53.7 | 9.3 | |
| 10.0 | | 55.2 | 48.3 | |
| 9.6 | 40 | 0.2 | 56.3 | |
| 10.1 | | 8.2 | 11.7 | |
| 8.8 | | 10.7 | 37.6 | |
| 8.4 | | 20.2 | 10.1 | 8.5 |
| 9.8 | | 20.2 | 31.2 | |
| 9.6 | | 20.2 | 36.9 | |
| 9.8 | | 25.7 | 14.7 | |
| 10.0 | | 27.2 | 34.3 | |
| 9.6 | | 32.2 | 54.2 | |
| 9.8 | | 38.2 | 49.5 | |
| 9.8 | | 45.7 | 48.2 | |
| 9.6 | | 46.2 | 28.8 | |
| 9.2 | | 56.2 | 20.2 | |
| 9.4 | | 57.7 | 29.7 | |
| 9.2 | | 58.2 | 34.5 | |
| 10.1 | 41 | 10.8 | 0.0 | |
| 9.5 | | 13.2 | 35.0 | |
| 9.8 | | 14.7 | 31.2 | |
| 9.4 | | 24.7 | 9.6 | |
| 9.8 | | 33.2 | 22.3 | |
| 10.0 | | 42.2 | 10.7 | |
| 10.0 | | 43.7 | 52.2 | |
| 9.2 | | 55.2 | 3.9 | |
| 10.1 | | 55.7 | 6.1 | |
| 10.1 | | 57.2 | 6.5 | |
| 9.8 | 42 | 1.9 | 0.7 | |
| 10.1 | | 8.7 | 35.9 | |
| 10.1 | | 14.2 | 17.7 | |
| 9.8 | | 20.2 | 56.0 | |
| 10.0 | | 24.7 | 44.3 | |
| 10.1 | | 26.7 | 22.5 | |
| 10.1 | | 35.2 | 46.8 | |

### 4141—4200.

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.0 | 42 | 36.7 | 59.1 | |
| 10.1 | | 37.5 | 20.8 | |
| 10.0 | | 38.2 | 56.1 | |
| 9.8 | | 40.2 | 52.6 | |
| 9.2 | | 43.7 | 19.8 | |
| 10.0 | | 46.7 | 12.3 | |
| 9.4 | 43 | 13.7 | 10.0 | |
| 10.1 | | 15.7 | 30.8 | |
| 10.1 | | 19.2 | 3.6 | |
| 9.4 | | 27.7 | 29.2 | |
| 9.1 | | 42.2 | 3.2 | 9.5 |
| 10.0 | | 45.2 | 46.6 | |
| 10.1 | | 49.2 | 37.5 | |
| 10.1 | | 51.2 | 18.2 | |
| 9.8 | | 51.2 | 5.7 | |
| 10.1 | | 55.7 | 23.5 | |
| 10.1 | | 56.2 | 41.3 | |
| 10.0 | | 58.2 | 14.4 | |
| 9.6 | 44 | 1.2 | 6.8 | |
| 9.8 | | 3.2 | 13.9 | |
| 9.8 | | 3.2 | 45.8 | |
| 10.0 | | 3.7 | 40.3 | |
| 9.8 | | 7.7 | 11.3 | 9.5 |
| 9.1 | | 11.2 | 28.0 | |
| 9.5 | | 13.2 | 56.3 | |
| 10.1 | | 16.2 | 34.2 | |
| 9.0 | | 16.2 | 15.7 | 9.5 |
| 10.1 | | 21.2 | 51.7 | |
| 10.0 | | 28.7 | 13.1 | |
| 10.0 | | 30.5 | 58.3 | |
| 9.6 | | 33.7 | 58.0 | |
| 9.6 | | 38.7 | 6.3 | |
| 10.0 | | 42.7 | 31.9 | |
| 10.0 | | 46.2 | 58.7 | |
| 10.1 | | 49.1 | 3.0 | |
| 9.8 | | 49.7 | 49.0 | |
| 9.5 | | 50.2 | 26.0 | |
| 9.6 | | 53.7 | 58.3 | |
| 9.4 | | 57.7 | 45.2 | |
| 9.6 | | 58.2 | 19.5 | |
| 10.1 | 45 | 14.2 | 2.6 | |
| 10.0 | | 17.2 | 26.9 | |
| 9.8 | | 17.2 | 46.6 | |
| 9.6 | | 23.5 | 0.4 | |
| 10.1 | | 28.7 | 31.0 | |
| 10.1 | | 30.2 | 55.4 | |
| 9.8 | | 37.2 | 27.6 | |
| 10.1 | | 39.2 | 41.5 | |
| 9.4 | | 52.2 | 41.0 | |
| 10.1 | 46 | 2.2 | 55.7 | |
| 10.0 | | 2.2 | 6.6 | |
| 9.8 | | 5.2 | 51.0 | |
| 10.1 | | 18.3 | 54.3 | |
| 10.0 | | 25.3 | 1.8 | |
| 10.1 | | 26.2 | 40.6 | |
| 8.2 | | 36.2 | 58.6 | 8.0 |
| 10.1 | | 40.2 | 18.2 | |
| 10.1 | | 42.7 | 57.9 | |
| 9.8 | | 48.2 | 13.7 | |
| 8.8 | | 52.7 | 36.4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 20 | 58 | 7.6 |
| | 30 | 60 | 7.7 |
| | 40 | 61 | 7.9 |
| | 50 | 63 | 8.0 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 10 | 40 | 61 | 7·9 |
| | 50 | 63 | 8·0 |
| 11 | 0 | 65 | 8·1 |
| | 10 | 67 | 8·2 |
| | 20 | 69 | 8·2 |

**4201—4260.**

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 46 | 58·7 | 17·1 | |
| 9·8 | 47 | 3·2 | 9·5 | |
| 9·8 | | 3·2 | 14·6 | |
| 10·1 | | 6·2 | 16·2 | |
| 9·0 | | 7·7 | 41·4 | |
| 10·0 | | 10·2 | 49·2 | |
| 10·1 | | 32·7 | 17·4 | |
| 10·0 | | 45·7 | 46·5 | |
| 8·8 | | 50·7 | 44·9 | 8·0 |
| 9·8 | | 55·7 | 32·0 | |
| 10·1 | 48 | 3·5 | 57·0 | |
| 9·6 | | 5·7 | 36·1 | |
| 10·0 | | 12·2 | 8·9 | |
| 10·1 | | 21·3 | 28·8 | |
| 8·8 | | 30·2 | 15·2 | 9·0 |
| 10·1 | | 31·2 | 42·3 | |
| 10·1 | | 33·7 | 19·1 | |
| 9·5 | | 41·2 | 54·0 | |
| 10·1 | | 43·2 | 40·1 | |
| 9·5 | | 58·7 | 19·7 | 8·5 |
| 10·1 | 49 | 2·2 | 29·7 | |
| 10·0 | | 3·7 | 32·4 | |
| 10·0 | | 16·7 | 14·7 | |
| 7·7 | | 25·7 | 53·8 | 8·0 GSt |
| 9·8 | | 30·2 | 22·3 | |
| 10·1 | | 40·1 | 57·0 | |
| 9·8 | | 40·7 | 52·4 | |
| 9·6 | | 46·2 | 49·2 | |
| 10·0 | | 52·2 | 53·8 | |
| 10·1 | 50 | 1·2 | 35·1 | |
| 10·1 | | 2·2 | 7·7 | |
| 10·1 | | 7·3 | 16·0 | |
| 7·5 | | 7·7 | 24·8 | 7·8 GSt |
| 9·5 | | 9·7 | 25·9 | 9·2 |
| 10·1 | | 12·2 | 29·3 | |
| 9·6 | | 15·2 | 33·9 | |
| 9·8 | | 22·2 | 18·0 | |
| 9·8 | | 24·7 | 41·5 | |
| 10·1 | | 27·2 | 13·7 | |
| 10·1 | | 34·2 | 25·0 | |
| 10·1 | | 35·2 | 22·2 | |
| 9·8 | | 45·2 | 5·2 | |
| 9·6 | | 53·7 | 41·3 | |
| 9·4 | | 59·2 | 19·0 | |
| 10·0 | 51 | 4·2 | 46·3 | |
| 10·0 | | 7·7 | 9·5 | |
| 10·1 | | 24·2 | 49·7 | |
| 10·1 | | 26·7 | 36·0 | |
| 8·8 | | 29·7 | 12·3 | 9·0 |
| 9·0 | | 41·2 | 56·2 | |
| 10·0 | | 53·7 | 44·1 | |
| 9·0 | | 56·2 | 17·4 | 9·5 |
| 10·0† | 52 | 0·0 | 0·2 | |
| 9·6 | | 2·2 | 30·7 | |
| 9·6 | | 12·2 | 23·5 | |
| 9·6 | | 23·7 | 57·0 | |
| 9·0 | | 23·7 | 49·0 | 9·0 |
| 10·0 | | 34·3 | 6·5 | |
| 10·1 | | 41·2 | 3·3 | |
| 10·2† | | 42·5 | 2·1 | |

**4261—4320.**

| mag. | 10h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·4 | 52 | 42·7 | 5·2 | |
| 8·8 | | 46·7 | 39·8 | 8·0 |
| 9·6 | | 47·2 | 15·4 | |
| 9·8 | 53 | 0·0 | 9·7 | |
| 9·8 | | 16·2 | 22·1 | |
| 9·0 | | 20·2 | 47·9 | |
| 9·4 | | 20·2 | 59·9 | |
| 10·1 | | 20·2 | 58·0 | |
| 8·8 | | 22·2 | 50·3 | |
| 9·2 | | 24·2 | 11·0 | 9·5 |
| 9·0 | | 36·2 | 23·4 | 8·5 |
| 9·6 | | 38·7 | 23·5 | 9·0 |
| 9·2 | | 41·7 | 37·4 | |
| 9·8 | | 51·7 | 26·0 | |
| 10·1 | | 54·9 | 1·5 | |
| 9·8 | 54 | 0·2 | 30·3 | |
| 9·8 | | 1·7 | 51·8 | |
| 10·1 | | 3·3 | 6·1 | |
| 10·1 | | 4·7 | 51·1 | |
| 9·8 | | 11·7 | 28·7 | |
| 9·4 | | 15·7 | 15·1 | 9·5 |
| 7·9 | | 22·9 | 1·2 | GSt |
| 9·8 | | 40·2 | 21·4 | |
| 8·8 | | 57·2 | 53·9 | 8·5 |
| 9·6 | 55 | 16·2 | 29·8 | |
| 10·0 | | 22·2 | 51·3 | |
| 10·0 | | 32·7 | 43·4 | |
| 10·0 | | 36·0 | 28·5 | |
| 9·8 | | 40·2 | 16·9 | |
| 8·8 | 56 | 0·9 | 55·0 | 8·5 |
| 10·0 | | 14·6 | 59·9 | |
| 10·0 | | 16·7 | 44·4 | |
| 10·0 | | 22·0 | 18·1 | |
| 10·0 | | 26·2 | 45·0 | |
| 9·6 | | 30·2 | 10·5 | |
| 9·0 | | 38·0 | 22·8 | 9·0 |
| 10·0 | | 48·2 | 23·7 | |
| 9·6 | 57 | 1·7 | 22·6 | 10·0 |
| 10·0 | | 11·7 | 53·6 | 9·5 |
| 10·0 | | 18·2 | 42·8 | |
| 9·8 | | 20·2 | 24·0 | |
| 9·8 | | 21·2 | 37·2 | |
| 10·0 | | 23·7 | 16·1 | |
| 10·0 | | 27·2 | 7·0 | |
| 9·4 | | 36·2 | 46·3 | |
| 9·8 | | 37·2 | 41·8 | |
| 10·0 | | 39·2 | 52·0 | |
| 9·6 | | 41·7 | 51·9 | |
| 9·5 | 58 | 5·7 | 6·4 | |
| 9·0 | | 5·7 | 44·8 | 9·5 |
| 8·9 | | 15·7 | 15·7 | 9·2 |
| 9·8 | | 20·2 | 37·2 | |
| 9·8 | | 25·7 | 8·9 | |
| 9·4 | | 36·2 | 41·7 | |
| 9·4 | | 36·2 | 30·4 | |
| 10·0 | | 37·5 | 28·3 | |
| 8·1 | | 37·7 | 31·5 | 7·0 GSct |
| 9·6 | | 47·5 | 44·6 | |
| 10·0 | | 57·0 | 35·3 | |
| 10·0 | | 58·0 | 50·1 | |

**4321—4380.**

| mag. | 10h.—11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 59 | 5·5 | 47·5 | |
| 9·4 | | 8·0 | 51·9 | |
| 9·3 | | 12·0 | 18·5 | 8·8 |
| 10·0 | | 12·0 | 4·0 | |
| 10·0 | | 22·0 | 48·5 | |
| 9·4 | | 22·5 | 21·3 | 8·8 |
| 10·0 | | 24·2 | 58·1 | |
| 10·0 | | 33·1 | 42·9 | |
| 9·4 | | 33·5 | 11·7 | |
| 9·6 | | 34·5 | 50·3 | |
| 10·0 | | 37·5 | 21·5 | |
| 10·0 | | 41·5 | 44·7 | |
| 9·8 | | 44·0 | 34·7 | |
| 9·6 | | 47·5 | 47·1 | |
| 10·0 | | 47·5 | 52·9 | |
| 9·6 | 0 | 10·5 | 59·9 | |
| 9·2 | | 12·0 | 34·9 | 9·5 |
| 10·0 | | 12·6 | 0·4 | |
| 10·0 | | 26·0 | 43·2 | |
| 10·0 | | 35·0 | 19·0 | |
| 10·0 | | 39·5 | 31·7 | |
| 10·0 | | 48·5 | 9·5 | |
| 9·8 | | 52·0 | 46·1 | |
| 9·0 | 1 | 3·5 | 3·4 | 9·0 |
| 10·0 | | 4·0 | 54·2 | |
| 9·6 | | 9·0 | 42·4 | |
| 9·6 | | 11·0 | 20·6 | |
| 9·6 | | 13·0 | 34·4 | 9·5 |
| 9·4 | | 23·0 | 49·6 | |
| 9·6 | | 28·5 | 33·9 | |
| 10·0 | | 32·5 | 58·1 | |
| 10·0 | | 35·5 | 42·2 | |
| 10·0 | | 40·0 | 27·0 | |
| 10·0 | | 41·5 | 54·0 | |
| 9·8 | | 44·0 | 20·2 | |
| 9·6 | | 49·0 | 31·9 | |
| 9·4 | | 51·8 | 6·5 | |
| 9·4 | | 54·8 | 11·6 | 9·0 |
| 9·6 | 2 | 4·3 | 7·7 | |
| 8·7 | | 9·8 | 23·1 | 8·5 |
| 9·4 | | 11·8 | 24·1 | 9·5 |
| 9·8 | | 34·7 | 58·1 | |
| 10·0 | | 37·5 | 0·2 | |
| 10·0 | | 39·8 | 25·9 | |
| 9·8 | | 40·5 | 58·7 | |
| 9·6 | | 42·8 | 53·1 | |
| 9·5 | | 51·3 | 3·1 | |
| 9·8 | | 55·3 | 13·8 | |
| 10·0 | | 57·3 | 44·5 | |
| 10·0 | 3 | 4·8 | 0·2 | |
| 9·8 | | 10·3 | 32·9 | |
| 9·6 | | 23·8 | 2·0 | |
| 10·0 | | 28·8 | 18·3 | |
| 9·6 | | 33·3 | 32·2 | |
| 9·8 | | 38·8 | 39·6 | |
| 10·0 | | 40·8 | 22·5 | |
| 9·3 | | 45·8 | 18·2 | |
| 9·8 | | 55·8 | 22·9 | |
| 9·6 | | 56·3 | 25·1 | |
| 9·8 | | 56·8 | 34·1 | |

**4381—4440.**

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 3 | 58·8 | 16·6 | |
| 9·4 | 4 | 10·3 | 35·2 | |
| 9·8 | | 11·8 | 17·9 | |
| 10·0 | | 29·8 | 31·5 | |
| 9·8 | | 30·8 | 3·5 | |
| 10·3† | | 31·2 | 0·8 | |
| 10·0 | | 37·3 | 49·3 | |
| 9·8 | | 46·3 | 36·0 | |
| 9·8 | | 50·3 | 10·7 | |
| 9·8 | 5 | 17·8 | 9·6 | |
| 9·4 | | 20·2 | 1·9 | 9·5 |
| 9·1 | | 22·8 | 32·9 | |
| 9·6 | | 44·3 | 15·1 | |
| 8·7 | | 46·8 | 52·8 | 8·0 GSt |
| 10·0 | | 51·7 | 40·6 | |
| 10·0 | | 57·4 | 1·6 | |
| 10·0 | 6 | 0·2 | 42·4 | |
| 9·4 | | 3·4 | 27·1 | |
| 9·6 | | 3·9 | 43·5 | |
| 9·4 | | 7·4 | 27·9 | |
| 9·3 | | 13·4 | 8·7 | |
| 9·4 | | 23·4 | 15·3 | |
| 9·6 | | 39·4 | 14·7 | |
| 9·8 | | 53·4 | 57·1 | |
| 9·6 | | 53·4 | 46·7 | 9·0 |
| 9·8 | | 55·4 | 56·4 | |
| 9·8 | 7 | 1·4 | 36·3 | |
| 10·0 | | 6·4 | 53·7 | |
| 10·0 | | 32·9 | 41·6 | |
| 10·0 | | 38·4 | 41·5 | |
| 9·4 | | 40·9 | 30·2 | |
| 10·0 | | 42·9 | 11·1 | |
| 9·5 | | 43·4 | 7·0 | |
| 10·0 | | 46·9 | 54·1 | |
| 10·0 | | 51·9 | 39·5 | |
| 10·0 | 8 | 12·2 | 15·0 | |
| 10·0 | | 25·9 | 45·0 | |
| 10·0 | | 29·9 | 17·4 | |
| 10·0 | | 58·4 | 53·0 | |
| 8·8 | 9 | 0·9 | 46·0 | 9·0 |
| 9·4 | | 1·4 | 40·5 | 9·5 |
| 10·0 | | 4·4 | 19·5 | |
| 9·4 | | 5·4 | 22·4 | |
| 9·6 | | 6·4 | 52·3 | |
| 10·0 | | 17·4 | 30·4 | |
| 9·4 | | 33·4 | 57·0 | 9·0 |
| 10·0 | | 37·9 | 17·5 | |
| 9·5 | | 46·4 | 45·1 | 9·0 |
| 9·1 | | 51·4 | 21·0 | 9·5 |
| 9·5 | 10 | 9·4 | 54·1 | |
| 9·6 | | 11·4 | 32·9 | |
| 10·0 | | 25·4 | 57·2 | |
| 9·8 | | 30·4 | 52·2 | |
| 9·1 | | 43·9 | 46·3 | |
| 10·0 | | 50·4 | 26·1 | |
| 9·6 | | 54·7 | 51·3 | |
| 9·4 | 11 | 0·7 | 6·7 | |
| 9·2 | | 2·7 | 33·3 | |
| 9·6 | | 3·7 | 59·6 | |
| 10·0 | | 5·4 | 39·2 | |



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## 4441—4500.

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 6·2 | 42·0 | |
| 9·8 | | 8·7 | 48·7 | |
| 10·2† | | 32·9 | 2·8 | |
| 9·8 | | 34·2 | 44·3 | |
| 9·4 | | 38·7 | 2·4 | |
| 9·8 | | 41·2 | 15·1 | |
| 9·8 | | 47·2 | 30·3 | |
| 9·5 | | 48·7 | 33·8 | |
| 9·2 | | 50·7 | 50·3 | |
| 10·0 | 12 | 7·2 | 52·8 | |
| 9·1 | | 10·7 | 8·0 | |
| 10·0 | | 15·2 | 22·2 | |
| 9·8 | | 20·2 | 23·3 | |
| 9·8 | | 22·2 | 30·7 | |
| 9·8 | | 25·7 | 51·2 | |
| 9·6 | | 29·2 | 5·5 | |
| 9·6 | | 30·7 | 13·1 | |
| 10·0 | | 35·2 | 51·9 | |
| 9·4 | | 40·7 | 11·1 | |
| 8·6 | | 50·7 | 1·8 | 8·5 |
| 9·0 | 13 | 0·7 | 21·5 | 9·2 |
| 9·6 | | 12·7 | 25·1 | |
| 9·6 | | 13·7 | 23·8 | |
| 9·6 | | 15·2 | 11·1 | |
| 9·5 | | 15·7 | 41·0 | |
| 10·0 | | 21·2 | 28·1 | |
| 9·4 | | 24·7 | 10·5 | |
| 10·0 | | 26·2 | 34·0 | |
| 9·5 | | 26·2 | 47·1 | |
| 10·3† | | 29·7 | 1·4 | |
| 10·0 | | 32·2 | 23·6 | |
| 10·0 | | 33·7 | 23·2 | |
| 10·0 | | 41·7 | 22·7 | |
| 10·0 | | 42·7 | 51·1 | |
| 9·8 | | 48·7 | 52·3 | |
| 9·4 | | 51·2 | 28·8 | |
| 9·8 | 14 | 4·2 | 17·4 | |
| 8·4 | | 5·5 | 39·5 | 9·0 G |
| 10·0 | | 10·5 | 53·3 | |
| 10·0 | | 14·0 | 24·5 | |
| 10·0 | | 21·0 | 43·7 | |
| 10·0 | | 23·5 | 7·1 | |
| 10·0 | | 26·0 | 15·3 | |
| 9·8 | | 32·0 | 29·7 | |
| 9·6 | | 34·5 | 45·3 | |
| 9·8 | | 35·0 | 44·3 | |
| 10·0 | | 37·5 | 31·1 | |
| 9·6 | | 41·0 | 10·3 | |
| 10·0 | | 49·0 | 13·4 | |
| 9·8 | | 50·5 | 29·0 | |
| 9·6 | | 54·5 | 18·9 | |
| 10·0 | | 56·5 | 35·7 | |
| 9·6 | 15 | 1·5 | 47·6 | |
| 9·8 | | 2·0 | 7·8 | |
| 9·4 | | 4·0 | 25·1 | |
| 9·4 | | 10·0 | 18·8 | |
| 10·0 | | 14·7 | 0·1 | |
| 4·9 | | 19·0 | 48·4 | 4·0 GStr |
| 10·0 | | 39·0 | 32·8 | |
| 9·6 | | 43·0 | 26·9 | 9·0 |

## 4501—4560.

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·8 | 15 | 58·0 | 41·1 | 9·0 |
| 10·0 | | 59·0 | 17·0 | |
| 9·8 | 16 | 2·0 | 50·3 | |
| 9·6 | | 14·0 | 46·4 | |
| 10·0 | | 15·2 | 23·5 | |
| 9·6 | | 16·5 | 8·6 | |
| 9·0 | | 17·0 | 15·6 | |
| 9·4 | | 23·2 | 28·9 | 8·5 |
| 10·0 | | 26·5 | 43·0 | |
| 10·0 | | 35·0 | 52·1 | |
| 9·4 | | 39·0 | 7·4 | 9·5 |
| 9·6 | | 46·0 | 22·6 | |
| 10·0 | | 47·7 | 0·4 | |
| 9·4 | | 49·5 | 41·7 | |
| 10·0 | | 53·0 | 58·0 | |
| 10·0 | 17 | 22·2 | 33·7 | |
| 9·8 | | 23·2 | 54·7 | |
| 9·8 | | 23·7 | 9·1 | |
| 9·8 | | 29·2 | 45·8 | |
| 9·8 | | 34·7 | 26·6 | |
| 9·5 | | 37·2 | 58·8 | 9·5 |
| 9·0 | | 43·7 | 12·2 | 9·0 |
| 9·8 | | 48·7 | 33·2 | 10·0 |
| 9·8 | | 55·2 | 33·1 | |
| 9·6 | | 57·2 | 48·1 | |
| 9·5 | 18 | 0·7 | 32·9 | |
| 10·0 | | 1·2 | 33·0 | |
| 9·8 | | 3·2 | 40·3 | |
| 9·8 | | 7·2 | 17·2 | |
| 10·0 | | 16·7 | 11·2 | |
| 9·8 | | 22·2 | 12·3 | |
| 9·8 | | 23·7 | 48·8 | |
| 10·0 | | 32·2 | 31·3 | 10·0 |
| 9·8 | | 46·5 | 59·2 | |
| 10·0 | | 50·2 | 35·9 | |
| 10·0 | | 50·7 | 51·1 | |
| 10·0 | | 51·7 | 25·7 | |
| 10·0 | 19 | 6·7 | 42·2 | |
| 9·8 | | 9·7 | 13·1 | |
| 9·8 | | 17·7 | 10·0 | |
| 9·8 | | 18·7 | 0·0 | |
| 9·6 | | 33·2 | 59·5 | |
| 9·8 | | 49·7 | 44·0 | |
| 9·1 | 20 | 0·2 | 35·3 | |
| 10·0 | | 2·2 | 34·4 | |
| 9·8 | | 7·7 | 56·0 | |
| 10·0 | | 14·2 | 22·1 | |
| 9·6 | | 15·2 | 33·9 | |
| 10·0 | | 15·2 | 45·7 | |
| 9·4 | | 23·7 | 48·0 | |
| 10·0 | | 31·2 | 12·9 | |
| 9·4 | | 32·0 | 52·8 | 9·5 |
| 10·0 | | 37·6 | 43·4 | |
| 10·0 | | 43·0 | 57·1 | |
| 10·0 | 21 | 18·5 | 23·8 | |
| 9·8 | | 18·5 | 27·9 | |
| 10·0 | | 23·5 | 9·9 | |
| 9·9† | | 31·3 | 1·4 | |
| 9·5 | | 32·0 | 36·9 | |
| 9·8 | | 33·5 | 36·3 | |

## 4561—4620.

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 21 | 43·8 | 58·0 | |
| 10·0 | | 53·5 | 13·8 | |
| 10·0 | | 58·9 | 2·5 | |
| 9·2 | 22 | 1·0 | 13·3 | 9·0 |
| 9·5 | | 2·0 | 13·5 | |
| 9·5 | | 4·0 | 46·1 | |
| 10·0 | | 5·2 | 2·9 | |
| 9·8 | | 18·0 | 36·0 | |
| 9·8 | | 23·5 | 59·4 | |
| 9·0 | | 39·5 | 39·2 | 8·5 |
| 9·9† | | 46·8 | 2·6 | |
| 9·6 | | 48·5 | 56·1 | |
| 10·0 | | 49·9 | 2·0 | |
| 9·6 | | 50·5 | 46·8 | |
| 9·0 | | 50·8 | 28·8 | 8·8 |
| 10·0 | | 53·6 | 40·8 | |
| 10·0 | | 58·7 | 0·7 | |
| 10·0 | 23 | 5·4 | 1·9 | |
| 10·0 | | 5·5 | 6·4 | |
| 10·0 | | 16·0 | 51·3 | |
| 9·6 | | 22·0 | 33·7 | |
| 9·8 | | 22·5 | 50·7 | |
| 10·0 | | 31·5 | 45·5 | |
| 8·8 | | 32·0 | 22·7 | 9·0 |
| 9·3 | | 56·5 | 8·9 | |
| 9·0 | 24 | 4·5 | 56·8 | 9·0 |
| 8·8 | | 18·3 | 58·6 | 9·0 |
| 10·0 | | 30·0 | 7·0 | |
| 9·8 | | 33·5 | 33·6 | |
| 10·0 | | 38·2 | 58·8 | |
| 9·5 | | 40·5 | 9·6 | |
| 10·0 | 25 | 2·0 | 24·4 | |
| 9·8 | | 7·0 | 49·2 | |
| 10·0 | | 13·0 | 17·5 | |
| 9·6 | | 23·3 | 0·9 | |
| 9·4 | | 26·5 | 57·0 | 9·5 |
| 10·0 | | 40·1 | 21·0 | |
| 10·0 | | 44·1 | 40·3 | |
| 9·8 | | 47·0 | 59·9 | |
| 10·0 | | 50·1 | 7·5 | |
| 10·0 | | 56·1 | 41·0 | |
| 9·8 | | 58·5 | 58·5 | |
| 9·8 | | 59·6 | 4·3 | |
| 9·8 | 26 | 5·6 | 11·9 | |
| 10·0 | | 16·6 | 40·3 | |
| 9·8 | | 25·6 | 37·1 | |
| 10·0 | | 28·1 | 19·3 | |
| 9·8 | | 28·6 | 47·1 | |
| 9·8 | | 36·6 | 28·1 | |
| 9·8 | | 39·1 | 48·3 | |
| 9·1 | | 46·1 | 54·9 | 8·5 |
| 9·8 | 27 | 1·6 | 57·7 | |
| 8·3 | | 11·6 | 38·0 | 8·5 GSt |
| 8·6 | | 15·6 | 9·9 | 9·2 |
| 9·8 | | 18·0 | 57·3 | |
| 9·8 | | 27·2 | 31·9 | |
| 9·8 | | 29·1 | 5·4 | |
| 9·9 | | 34·7 | 34·2 | |
| 9·4 | | 37·9 | 24·0 | |
| 9·5 | | 43·4 | 8·2 | |

## 4621—4680.

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 27 | 56·9 | 52·4 | |
| 8·8 | 28 | 1·7 | 21·8 | 9·0 |
| 9·8 | | 3·1 | 46·1 | |
| 9·6 | | 3·2 | 53·4 | |
| 9·9 | | 12·7 | 30·5 | |
| 9·9 | | 13·4 | 14·9 | |
| 9·0 | | 19·2 | 52·0 | 8·5 |
| 9·2 | | 20·2 | 41·6 | |
| 9·9 | | 21·5 | 24·8 | |
| 9·5 | | 24·4 | 13·6 | |
| 9·6 | | 28·6 | 13·2 | |
| 9·5 | | 29·4 | 43·5 | |
| 9·4 | | 29·4 | 46·1 | |
| 9·9 | | 32·9 | 1·2 | |
| 9·5 | | 37·6 | 11·4 | |
| 8·7 | | 48·2 | 58·1 | 9·0 |
| 5·9 | | 50·4 | 34·4 | 5·0 GSct |
| 9·9 | | 59·7 | 28·9 | |
| 9·9 | 29 | 10·2 | 40·7 | |
| 9·3 | | 11·9 | 57·0 | |
| 9·9 | | 24·2 | 21·1 | |
| 9·9 | | 26·7 | 51·9 | |
| 9·8 | | 31·7 | 54·0 | |
| 8·8 | 30 | 12·2 | 6·5 | 9·0 |
| 9·9 | | 15·2 | 1·0 | |
| 9·9 | | 19·7 | 18·6 | |
| 9·9 | | 22·7 | 22·7 | |
| 8·8 | | 24·2 | 33·7 | 8·5 |
| 9·5 | | 24·7 | 34·5 | |
| 9·9 | | 34·6 | 1·0 | |
| 9·5 | | 44·7 | 51·5 | |
| 9·9 | | 52·1 | 4·2 | |
| 9·8 | | 52·2 | 1·8 | |
| 9·9 | | 56·1 | 34·2 | |
| 8·5 | 31 | 13·1 | 17·4 | 9·0 |
| 9·9 | | 18·1 | 25·5 | |
| 9·3 | | 19·8 | 2·9 | |
| 8·6 | | 25·8 | 2·9 | Gt |
| 9·9 | | 36·6 | 5·8 | |
| 9·8 | | 43·6 | 14·5 | |
| 9·9 | | 49·1 | 26·1 | |
| 9·6 | | 49·6 | 40·8 | |
| 9·9 | | 54·9 | 0·0 | |
| 9·4 | | 58·3 | 58·3 | |
| 9·6 | 32 | 8·4 | 3·0 | |
| 9·8 | | 16·8 | 2·7 | |
| 9·9 | | 17·6 | 30·6 | |
| 8·9 | | 27·1 | 33·8 | |
| 9·5 | | 29·6 | 1·8 | |
| 9·4 | | 54·6 | 25·9 | |
| 9·8 | 33 | 2·6 | 51·6 | |
| 9·6 | | 3·1 | 34·6 | |
| 9·8 | | 6·1 | 36·3 | |
| 9·9 | | 11·6 | 55·3 | |
| 9·9 | | 24·1 | 46·0 | |
| 9·6 | | 36·6 | 14·3 | |
| 9·4 | | 39·6 | 14·8 | 9·5 |
| 9·4 | | 41·1 | 19·1 | |
| 9·6 | | 47·1 | 19·1 | |
| 9·8 | | 49·6 | 41·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 67 | 8·2 |
| | 20 | 69 | 8·2 |
| | 30 | 71 | 8·3 |
| | 40 | 73 | 8·3 |



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25 prec.

| h | m | a (+) s | δ (−) ′ |
|---|---|---|---|
| 11 | 30 | 71 | 8.3 |
| | 40 | 73 | 8.3 |
| | 50 | 75 | 8.3 |
| 12 | 0 | 77 | 8.4 |

**4681—4740.**

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.5 | 33 | 51.1 | 57.7 | |
| 9.9 | 34 | 2.6 | 28.1 | |
| 9.2 | | 2.6 | 25.1 | 9.0 |
| 9.9 | | 24.1 | 11.1 | |
| 9.8 | | 26.6 | 25.7 | |
| 9.9† | | 28.9 | 2.1 | |
| 9.5 | | 29.9 | 26.0 | |
| 9.6 | | 30.1 | 2.7 | |
| 9.6 | | 31.9 | 35.8 | |
| 9.6 | | 37.4 | 31.2 | |
| 7.7 | | 40.9 | 16.4 | 6.8 GSt |
| 9.8 | | 45.4 | 30.5 | |
| 7.6 | | 59.4 | 51.3 | 8.0 GSt |
| 9.6 | 35 | 0.9 | 48.1 | |
| 9.9 | | 6.9 | 14.9 | |
| 8.9 | | 7.0 | 57.4 | |
| 9.5 | | 9.4 | 34.2 | |
| 9.5 | | 10.9 | 6.5 | |
| 9.4 | | 19.0 | 57.1 | |
| 9.9 | | 19.4 | 17.4 | |
| 9.9 | | 20.9 | 55.5 | |
| 9.9 | | 23.4 | 9.7 | |
| 9.3 | | 23.9 | 34.7 | |
| 9.8 | | 50.9 | 4.5 | |
| 9.9 | | 57.4 | 13.9 | |
| 9.4 | 36 | 2.9 | 57.1 | |
| 9.9 | | 5.9 | 43.0 | |
| 9.9 | | 10.9 | 28.9 | |
| 9.8 | | 12.4 | 22.4 | |
| 9.3 | | 13.9 | 54.7 | |
| 9.9 | | 15.9 | 33.5 | |
| 8.8 | | 16.4 | 50.4 | 9.0 |
| 9 8 | | 20.9 | 43.9 | |
| 9.8 | | 26.4 | 14.2 | |
| 9.9 | | 47.4 | 39.1 | |
| 9.8 | | 48.9 | 35.1 | |
| 9.8 | | 49.9 | 26.7 | |
| 9.8 | 37 | 3.4 | 6.4 | |
| 9.6 | | 8.9 | 49.2 | |
| 8.8 | | 19.4 | 36.8 | 8.5 G |
| 9.4 | | 20.9 | 5.9 | |
| 9.6 | | 22.9 | 4.0 | |
| 8.8 | | 31.4 | 8.3 | 9.0 |
| 9.4 | | 34.4 | 37.1 | |
| 9.9 | | 34.9 | 31.0 | |
| 9.8 | | 39.9 | 27.4 | |
| 8.9 | | 40.3 | 44.7 | |
| 9.8 | | 49.3 | 3.2 | |
| 9.3 | | 51.3 | 7.5 | |
| 8.3 | 38 | 3.8 | 3.3 | |
| 9.9 | | 5.8 | 20.8 | |
| 9.3 | | 5.8 | 19.1 | |
| 9.3 | | 9.8 | 24.2 | |
| 9.9 | | 16.3 | 11.3 | |
| 9.6 | | 37.3 | 27.8 | |
| 9.8 | | 38.8 | 46.6 | |
| 9.8 | | 43.3 | 13.4 | |
| 9.5 | | 49.8 | 48.3 | |
| 9.4 | | 50.8 | 39.6 | |
| 9.5 | 39 | 0.8 | 39.6 | |

**4741—4800.**

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.6 | 39 | 2.3 | 47.2 | |
| 9.3 | | 6.3 | 43.9 | |
| 9.4 | | 8.8 | 11.3 | 9.5 |
| 9.5 | | 14.3 | 29.8 | |
| 9.5 | | 19.8 | 13.9 | 9.5 |
| 9.5 | | 22.3 | 9.7 | |
| 9.5 | | 22.3 | 7.5 | 9.2 G |
| 9.5 | | 29.8 | 49.5 | |
| 9.8 | | 40.8 | 37.9 | |
| 9.6 | | 44.3 | 48.9 | |
| 9.9 | | 45.8 | 23.1 | |
| 9.9 | | 57.3 | 32.3 | |
| 9.9 | 40 | 1.3 | 58.5 | |
| 9.9 | | 3.8 | 44.4 | |
| 9.8 | | 5.8 | 44.2 | |
| 8.4 | | 20.8 | 29.0 | 8.5 GS |
| 9.9† | | 26.9 | 0.0 | |
| 9.6 | | 40.3 | 34.7 | |
| 9.6 | | 43.8 | 24.1 | |
| 9.9 | | 59.8 | 55.3 | |
| 9.9 | 41 | 7.8 | 29.6 | |
| 9.8 | | 18.6 | 39.3 | |
| 9.9 | | 20.1 | 3.0 | |
| 9.9 | | 22.6 | 56.6 | |
| 9.9 | | 23.6 | 56.3 | |
| 9.3 | | 26.1 | 43.7 | |
| 9.9† | | 32.4 | 0.6 | |
| 9.0 | | 37.1 | 25.1 | 9.5 |
| 9.2 | | 53.6 | 39.6 | 10.0 |
| 9.9 | | 58.6 | 37.8 | |
| 9.5 | 42 | 10.1 | 57.9 | |
| 8.9 | | 18.1 | 27.6 | 9.5 |
| 9.9 | | 20.6 | 6.0 | |
| 9.9 | | 33.1 | 42.7 | |
| 9.4 | | 35.6 | 35.7 | |
| 9.9 | | 36.5 | 2.0 | |
| 9.9 | | 38.6 | 49.9 | |
| 9.2 | | 44.3 | 0.4 | |
| 9.9 | | 46.6 | 2.7 | |
| 9.9 | 43 | 2.6 | 5.1 | |
| 9.8 | | 2.6 | 17.0 | |
| 9.8 | | 4.6 | 44.1 | |
| 8.9 | | 14.1 | 2.1 | |
| 9.5 | | 28.6 | 35.2 | |
| 9.0 | | 32.1 | 20.3 | 9.0 |
| 8.4 | | 40.6 | 48.9 | 8 5 G |
| 9.9 | 44 | 1.6 | 23.0 | |
| 9.9 | | 13.6 | 53.0 | |
| 9.9 | | 13.6 | 5.6 | |
| 9.2 | | 23.1 | 1.0 | 9.5 |
| 9.5 | | 23.6 | 21.0 | |
| 9.8 | | 43.8 | 59.9 | 9.5 |
| 8.8 | | 56.1 | 48.5 | |
| 9.4 | 45 | 1.6 | 36.1 | |
| 9.9 | | 13.5 | 20.0 | |
| 9.9 | | 17.0 | 8.9 | |
| 9.8 | | 20.5 | 26.3 | |
| 9.6 | | 22.0 | 4.4 | |
| 8.2 | | 49.5 | 42.8 | 8.8 GSt |
| 9.8 | | 52.5 | 28.1 | |

**4801—4860.**

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8.8 | 45 | 55.5 | 4.5 | 9.5 |
| 9.9 | | 57.0 | 1.7 | |
| 9.4 | | 58.5 | 46.8 | |
| 9.8 | 46 | 2.0 | 41.3 | |
| 10.1† | | 5.7 | 1.7 | |
| 9.9 | | 14.5 | 34.3 | |
| 8.9 | | 17.0 | 8.5 | 9.5 |
| 9.6 | | 22.5 | 6.3 | |
| 9.3 | | 26.0 | 25.7 | |
| 9.4 | | 34.0 | 16.1 | |
| 9.5 | | 38.0 | 11.1 | |
| 9.8 | | 50.5 | 32.8 | |
| 9.8 | | 51.0 | 47.6 | |
| 9.6 | | 53.5 | 10.3 | |
| 9.5 | | 54.0 | 9.0 | |
| 9.8 | | 57.5 | 41.9 | |
| 8.4 | 47 | 4.0 | 13.5 | 9.2 |
| 9.4 | | 4.0 | 14.1 | 10.0 |
| 9.9 | | 6.5 | 36.9 | |
| 9.9 | | 26.0 | 22.5 | |
| 9.6 | | 31.5 | 21.2 | |
| 9.9 | | 32.5 | 43.9 | |
| 9.9 | | 50.0 | 42.1 | |
| 9.9 | | 53.0 | 28.4 | |
| 9.9 | | 53.0 | 7.1 | |
| 9.9 | 48 | 8.5 | 20.3 | |
| 8.9 | | 10.5 | 53.3 | 9.0 |
| 9.9 | | 16.5 | 9.5 | |
| 8.8 | | 19.1 | 56.3 | 9.0 G |
| 9.4 | | 19.5 | 38.8 | |
| 9.2 | | 20.1 | 2.1 | 9.0 |
| 8.6 | | 21.5 | 58.9 | 9.0 |
| 9.8 | | 25.0 | 53.3 | |
| 9.9 | | 35.0 | 0.5 | |
| 9.4 | | 36.0 | 56.9 | |
| 9.1 | | 42.0 | 8.4 | |
| 9.2 | | 45.5 | 38.3 | |
| 9.8 | | 50.4 | 3.7 | |
| 9.8 | | 53.9 | 5.4 | |
| 9.8 | | 53.9 | 3.5 | |
| 9.2 | | 55.4 | 8.2 | 9.5 |
| 9.8 | | 57.2 | 26.7 | |
| 9.9 | 49 | 12.9 | 50.1 | |
| 9.5 | | 13.9 | 45.0 | 9.0 |
| 9.3 | | 16.9 | 26.6 | 9.5 |
| 9.8 | | 18.4 | 11.3 | |
| 9.5 | | 22.9 | 26.9 | |
| 9.8 | | 23.4 | 46.4 | |
| 9.3 | | 25.9 | 51.4 | |
| 8.6 | | 26.9 | 29.0 | 9.0 |
| 9.6 | | 30.4 | 41.8 | |
| 9.9 | | 32.4 | 7.1 | |
| 9.8 | | 33.4 | 26.7 | |
| 9.9 | | 42.2 | 58.2 | |
| 9.9 | | 43.6 | 0.3 | |
| 9.8 | | 47.9 | 26.1 | |
| 10.0† | | 55.8 | 1.8 | |
| 9.9 | 50 | 3.5 | 59.5 | |
| 8.5 | | 3.9 | 12.2 | 8.5 G |
| 9.5 | | 11.4 | 13.5 | |

**4861—4920.**

| mag. | 11h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.9 | 50 | 14.4 | 30.4 | |
| 9.8† | | 15.8 | 0.5 | |
| 9.9† | | 19.8 | 1.3 | |
| 8.2 | | 34.9 | 47.9 | 8.5 G |
| 9.4 | | 51.9 | 30.3 | |
| 9.9 | | 56.9 | 32.7 | |
| 8.8 | 51 | 0.9 | 10.3 | 9.0 |
| 9.9 | | 2.9 | 11.0 | |
| 9.9 | | 6.2 | 51.0 | |
| 9.9 | | 6.2 | 15.1 | |
| 9.8 | | 9.4 | 38.4 | |
| 9.9 | | 10.2 | 58.6 | |
| 9.8 | | 15.9 | 23.5 | |
| 10.0† | | 29.3 | 0.5 | |
| 10.1† | | 39.3 | 2.8 | |
| 9.8 | 52 | 5.9 | 26.9 | |
| 9.6 | | 13.4 | 30.7 | |
| 9.9 | | 51.9 | 58.1 | |
| 9.9 | | 53.9 | 52.6 | |
| 9.6 | | 59.9 | 2.2 | |
| 9.6 | 53 | 18.7 | 52.2 | |
| 9.8 | | 18.7 | 56.3 | |
| 9.9 | | 41.2 | 29.7 | |
| 9.8 | | 42.0 | 35.0 | |
| 9.9 | | 43.2 | 13.9 | |
| 9.9 | | 48.7 | 39.5 | |
| 9.9 | | 50.2 | 32.2 | |
| 9.5 | | 58.2 | 11.1 | |
| 8.4 | | 59.2 | 13.6 | 8.0 G |
| 9.6 | | 59.7 | 29.8 | |
| 8.6 | 54 | 6.2 | 8.5 | 8.5 |
| 8.9 | | 18.2 | 21.3 | 8.5 |
| 9.2 | | 30.7 | 23.9 | |
| 9.9 | | 52.2 | 24.2 | |
| 9.9 | 55 | 6.2 | 11.3 | |
| 9.6 | | 10.2 | 39.1 | |
| 8.5 | | 12.2 | 8.3 | |
| 8.9 | | 26.2 | 16.1 | |
| 9.9 | | 27.2 | 47.7 | |
| 9.9 | | 29.0 | 21.5 | |
| 9.2 | | 43.2 | 17.1 | |
| 9.9 | 56 | 0.7 | 36.1 | |
| 9.2 | | 0.9 | 59.3 | |
| 9.1 | | 4.2 | 44.7 | |
| 9.5 | | 16.7 | 6.4 | |
| 10.0† | | 18.5 | 1.9 | |
| 9.9 | | 28.2 | 24.1 | |
| 9.9 | | 32.7 | 14.7 | |
| 9.4 | | 46.4 | 0.9 | |
| 9.3 | | 48.2 | 5.5 | |
| 9.6 | | 57.2 | 9.5 | |
| 9.9 | 57 | 11.7 | 6.5 | |
| 9.0 | | 13.6 | 59.9 | 8.5 |
| 9.8 | | 32.2 | 24.0 | |
| 9.9 | | 32.2 | 57.2 | |
| 9.8† | | 43.0 | 2.9 | |
| 9.6 | | 45.0 | 28.0 | |
| 9.0 | | 47.5 | 28.1 | |
| 9.2 | | 53.0 | 59.0 | 8.0 |
| 9.5 | 58 | 12.0 | 31.0 | |



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**4921—4980.**

| mag. | 11h.–12h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.0 | 58 | 19.0 | 14.9 | |
| 9.9 | | 20.0 | 16.7 | |
| 9.9 | | 37.5 | 53.2 | |
| 9.3 | | 40.5 | 48.4 | |
| 9.8† | | 51.5 | 0.1 | |
| 9.4 | | 53.5 | 32.1 | |
| 9.6 | | 54.5 | 15.4 | |
| 9.9 | 59 | 28.2 | 34.1 | |
| 9.6 | | 33.2 | 20.8 | |
| 8.2 | | 34.2 | 33.7 | GScgt |
| 9.9 | | 44.6 | 27.7 | |
| 9.9 | | 50.2 | 18.9 | |
| 9.6 | | 54.8 | 29.9 | |
| 9.8 | 0 | 7.7 | 8.8 | |
| 9.8 | | 10.7 | 24.0 | |
| 9.9 | | 12.7 | 8.5 | |
| 9.2 | | 13.7 | 29.1 | |
| 9.3 | | 14.6 | 49.0 | |
| 9.6 | | 20.2 | 7.0 | |
| 9.4 | | 23.3 | 5.9 | |
| 9.2 | | 27.5 | 58.7 | |
| 9.3 | | 27.6 | 54.7 | 9.5 |
| 8.8 | | 31.1 | 20.1 | 9.0 |
| 9.9 | | 46.2 | 40.1 | |
| 9.9 | | 48.7 | 42.7 | |
| 9.6 | | 59.7 | 20.5 | |
| 9.6 | 1 | 10.7 | 7.5 | |
| 9.3 | | 14.7 | 40.9 | |
| 9.4 | | 22.7 | 10.3 | |
| 9.4 | | 36.2 | 35.1 | |
| 9.6 | | 36.7 | 41.5 | |
| 9.9 | 2 | 8.7 | 7.0 | |
| 9.9 | | 22.2 | 3.9 | |
| 9.0 | | 29.7 | 40.5 | |
| 9.9 | | 32.7 | 28.9 | |
| 9.9 | | 44.7 | 27.2 | |
| 9.4 | | 46.2 | 55.2 | |
| 9.4 | | 57.2 | 27.9 | |
| 9.8 | 3 | 8.2 | 33.5 | |
| 9.9 | | 9.7 | 9.0 | |
| 9.7 | | 11.2 | 51.4 | |
| 9.1 | | 16.2 | 59.5 | |
| 9.9 | | 16.6 | 1.1 | |
| 9.4 | | 37.2 | 21.8 | |
| 9.9 | | 40.2 | 38.1 | |
| 9.7 | | 43.7 | 28.1 | |
| 9.8 | | 43.7 | 59.7 | |
| 9.8 | 4 | 3.2 | 33.5 | |
| 9.8 | | 7.7 | 37.7 | |
| 9.6 | | 16.7 | 39.3 | |
| 8.8 | | 17.2 | 9.7 | |
| 9.8 | | 20.2 | 32.9 | |
| 9.3 | | 26.2 | 38.9 | |
| 9.7 | | 27.2 | 15.0 | |
| 9.4 | | 29.2 | 0.0 | |
| 9.8 | | 38.7 | 33.6 | |
| 9.6 | | 42.5 | 57.8 | |
| 10.0† | | 43.3 | 2.3 | |
| 9.4 | | 50.5 | 2.4 | |
| 9.9 | 5 | 2.7 | 52.6 | |

**4981—5040.**

| mag. | 12h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.8 | 5 | 4.2 | 35.3 | |
| 7.4 | | 4.7 | 43.3 | 7.5 GS |
| 10.0† | | 10.4 | 0.0 | |
| 9.1 | | 18.7 | 7.4 | |
| 9.2 | | 23.7 | 35.8 | |
| 8.6 | | 39.7 | 32.1 | 9.0 |
| 9.7 | | 43.6 | 2.3 | |
| 9.8 | | 46.2 | 32.0 | |
| 9.9 | | 50.2 | 26.7 | |
| 9.9 | | 58.3 | 2.2 | |
| 9.4 | 6 | 2.2 | 48.0 | |
| 9.2 | | 9.2 | 5.5 | |
| 9.9 | | 26.2 | 9.1 | |
| 9.4 | | 44.7 | 33.5 | |
| 9.7 | | 50.7 | 46.4 | |
| 9.4 | 7 | 2.7 | 50.6 | |
| 9.4 | | 6.7 | 52.8 | |
| 9.6 | | 11.2 | 36.3 | |
| 9.2 | | 13.7 | 59.1 | |
| 9.9 | | 15.2 | 13.8 | |
| 9.8 | | 17.6 | 24.3 | |
| 9.9 | | 20.7 | 26.2 | |
| 9.8 | | 22.7 | 10.0 | |
| 9.6 | | 30.7 | 44.6 | |
| 9.9 | | 33.7 | 33.8 | |
| 9.1 | | 37.6 | 1.6 | |
| 9.8 | | 37.7 | 6.0 | |
| 9.8 | | 40.2 | 44.1 | |
| 7.8 | | 40.7 | 13.5 | 8.0 GSt |
| 9.7 | | 45.2 | 58.3 | |
| 9.8 | | 46.2 | 46.1 | |
| 9.7 | 8 | 6.2 | 27.9 | |
| 8.6 | | 7.2 | 8.8 | 9.0 |
| 9.7 | | 9.7 | 16.7 | |
| 9.2 | | 15.2 | 14.7 | |
| 9.7 | | 24.7 | 48.9 | |
| 9.9 | | 33.6 | 23.0 | |
| 10.1† | | 50.6 | 0.7 | |
| 9.8 | | 50.7 | 10.6 | |
| 10.0† | | 52.1 | 1.2 | |
| 9.7 | | 52.2 | 13.6 | |
| 9.7 | | 59.7 | 56.0 | |
| 9.6 | 9 | 0.7 | 52.7 | |
| 9.4 | | 7.2 | 34.7 | 9.0 |
| 9.9 | | 12.7 | 49.3 | |
| 8.0 | | 19.2 | 21.7 | 7.0 GSt |
| 9.6 | | 21.7 | 26.1 | |
| 9.9 | | 26.2 | 6.0 | |
| 9.4 | | 26.7 | 42.3 | |
| 9.9 | | 30.7 | 8.3 | |
| 9.2 | | 31.7 | 48.8 | |
| 9.9 | | 36.2 | 43.0 | |
| 9.8 | | 44.7 | 26.9 | |
| 9.7 | | 56.7 | 45.7 | |
| 9.9 | 10 | 0.7 | 13.0 | |
| 9.9 | | 3.6 | 26.0 | |
| 9.9 | | 6.2 | 36.9 | |
| 9.7 | | 7.2 | 47.9 | |
| 9.9 | | 19.9 | 1.4 | |
| 9.6 | | 26.2 | 42.0 | |

**5041—5100.**

| mag. | 12h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.2 | 10 | 35.9 | 2.0 | |
| 9.6 | | 38.7 | 27.2 | |
| 9.9 | | 42.7 | 9.0 | |
| 9.4 | | 44.7 | 6.6 | |
| 10.0† | | 52.1 | 2.1 | |
| 9.9 | | 56.2 | 40.4 | |
| 9.3 | | 57.2 | 46.9 | |
| 9.9 | 11 | 3.2 | 35.5 | |
| 9.7 | | 4.2 | 28.8 | |
| 9.2 | | 16.2 | 19.9 | |
| 9.4 | | 21.7 | 50.2 | |
| 9.2 | | 28.2 | 36.4 | |
| 9.0 | | 45.7 | 26.5 | |
| 9.4 | | 48.2 | 39.4 | |
| 9.4 | | 53.2 | 11.0 | |
| 9.6 | | 58.7 | 51.3 | |
| 9.9 | 12 | 2.7 | 49.8 | |
| 9.4 | | 10.7 | 36.6 | |
| 9.6 | | 11.7 | 58.8 | |
| 9.9 | | 12.6 | 2.9 | |
| 8.4 | | 18.2 | 10.8 | |
| 9.7 | | 38.7 | 41.2 | |
| 9.2 | | 39.7 | 4.4 | |
| 9.9† | | 57.2 | 2.3 | |
| 9.9 | 13 | 3.2 | 46.4 | |
| 9.9 | | 11.2 | 47.2 | |
| 9.7 | | 16.4 | 2.7 | |
| 9.6 | | 19.7 | 42.9 | |
| 10.1† | | 23.7 | 0.7 | |
| 9.0 | | 28.7 | 12.9 | |
| 9.4 | | 28.7 | 42.0 | 9.0 |
| 9.0 | | 34.2 | 13.9 | |
| 9.9 | | 35.7 | 56.0 | |
| 9.9 | | 40.7 | 27.9 | |
| 9.6 | | 46.2 | 5.3 | |
| 9.3 | | 49.2 | 31.1 | |
| 9.9 | | 54.2 | 31.0 | |
| 9.9 | | 57.4 | 58.9 | |
| 9.7 | 14 | 11.2 | 25.1 | |
| 9.3 | | 13.7 | 45.2 | |
| 9.7 | | 22.7 | 29.2 | |
| 9.9 | | 28.7 | 3.2 | |
| 9.8 | | 28.7 | 23.6 | |
| 9.9 | | 29.1 | 1.2 | |
| 9.8 | | 29.7 | 49.5 | |
| 8.4 | | 38.7 | 48.5 | 8.0 |
| 9.9 | | 39.7 | 14.0 | |
| 10.1† | | 41.3 | 1.4 | |
| 9.8 | | 57.7 | 43.1 | |
| 9.8 | 15 | 0.7 | 29.0 | |
| 9.6 | | 4.2 | 2.2 | |
| 8.6 | | 7.2 | 42.3 | 8.5 |
| 9.4 | | 19.7 | 8.6 | |
| 9.2 | | 26.1 | 1.1 | |
| 9.9 | | 32.2 | 14.3 | |
| 9.9 | | 33.7 | 25.8 | |
| 9.4 | | 35.2 | 20.7 | |
| 9.6 | | 40.2 | 37.4 | |
| 9.8 | | 59.2 | 41.8 | |
| 9.8 | 16 | 6.2 | 36.4 | |

**5101—5160.**

| mag. | 12h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.9 | 16 | 10.2 | 8.8 | |
| 9.4 | | 17.0 | 28.5 | |
| 9.9 | | 25.5 | 10.0 | |
| 9.4 | | 25.5 | 20.5 | |
| 9.7 | | 28.0 | 51.0 | |
| 9.7 | | 28.6 | 38.4 | |
| 9.6 | | 39.5 | 27.2 | |
| 9.7 | | 42.5 | 36.8 | |
| 9.6 | | 44.5 | 54.7 | |
| 9.1 | | 55.5 | 34.0 | |
| 9.2 | 17 | 2.5 | 51.0 | |
| 9.4 | | 2.5 | 24.7 | |
| 9.6 | | 3.0 | 5.4 | |
| 9.3 | | 17.5 | 25.8 | |
| 9.9 | | 29.0 | 17.2 | |
| 9.9 | | 34.5 | 16.4 | |
| 9.8 | | 36.6 | 54.6 | |
| 9.6 | | 40.5 | 31.6 | |
| 9.9 | | 44.5 | 16.5 | |
| 9.8 | | 45.5 | 17.8 | |
| 9.9 | | 46.0 | 32.4 | |
| 9.3 | 18 | 4.0 | 18.1 | |
| 9.9 | | 10.5 | 52.3 | |
| 9.8 | | 14.0 | 0.9 | |
| 9.7 | | 20.5 | 49.1 | |
| 8.8 | | 39.0 | 11.6 | 9.5 |
| 10.3† | | 54.1 | 2.4 | |
| 9.9 | | 56.0 | 23.0 | |
| 9.4 | | 58.0 | 12.8 | |
| 9.7 | | 59.5 | 1.8 | |
| 8.8 | 19 | 14.0 | 33.8 | |
| 9.7 | | 14.5 | 6.2 | |
| 9.6 | | 15.5 | 39.7 | |
| 9.9 | | 20.6 | 31.9 | |
| 9.9 | | 24.0 | 47.3 | |
| 10.2† | | 32.1 | 1.0 | |
| 9.9 | | 41.0 | 30.1 | |
| 9.9 | | 42.1 | 0.7 | |
| 9.9 | | 44.0 | 48.0 | |
| 9.7 | 20 | 1.2 | 56.7 | |
| 9.4 | | 4.5 | 29.0 | |
| 10.3† | | 8.1 | 1.0 | |
| 9.9 | | 10.5 | 59.3 | |
| 9.2 | | 11.5 | 24.6 | |
| 9.2 | | 27.0 | 39.1 | |
| 8.8 | | 35.5 | 46.7 | 9.0 |
| 9.6 | | 40.5 | 41.6 | |
| 9.9 | | 41.0 | 41.2 | |
| 9.4 | | 44.5 | 38.6 | |
| 9.4 | | 47.5 | 57.5 | |
| 9.6 | | 50.5 | 3.8 | |
| 8.8 | | 56.5 | 9.7 | 9.0 |
| 9.7 | 21 | 10.5 | 51.4 | |
| 9.4 | | 13.6 | 30.6 | |
| 9.0 | | 22.5 | 35.6 | |
| 8.5 | | 33.0 | 34.1 | 9.0 |
| 9.2 | | 43.5 | 8.3 | |
| 9.6 | | 44.0 | 54.6 | |
| 9.9 | | 49.5 | 25.0 | |
| 8.8 | | 54.5 | 26.9 | 9.0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 50 | 75 | 8.3 |
| 12 | 0 | 77 | 8.4 |
| | 10 | 79 | 8.3 |
| | 20 | 81 | 8.3 |
| | 30 | 83 | 8.3 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ' |
| 12 | 20 | 81 | 8.3 |
| | 30 | 83 | 8.3 |
| | 40 | 85 | 8.2 |
| | 50 | 87 | 8.2 |
| 13 | 0 | 88 | 8.1 |

## 5161—5220.

| mag. | 12h. m | s | −53° ' | |
|---|---|---|---|---|
| 9.9 | 21 | 57.0 | 29.9 | |
| 9.4 | | 59.5 | 9.0 | |
| 9.1 | 22 | 3.5 | 0.2 | |
| 9.9 | | 4.5 | 57.4 | |
| 9.7 | | 8.5 | 46.7 | |
| 9.9 | | 26.0 | 56.8 | |
| 8.8 | | 30.5 | 30.3 | 9.0 |
| 9.9 | | 33.5 | 32.2 | |
| 8.5 | | 36.0 | 16.4 | |
| 9.6 | | 36.0 | 5.1 | |
| 9.6 | | 52.0 | 20.7 | |
| 9.2 | | 53.0 | 44.6 | |
| 9.7 | | 55.5 | 19.1 | |
| 9.9 | 23 | 5.5 | 41.9 | |
| 9.9 | | 6.0 | 42.1 | |
| 9.0 | | 10.5 | 54.0 | 9.0 |
| 9.9 | | 16.0 | 29.1 | |
| 9.1 | | 16.5 | 14.8 | |
| 9.4 | | 28.5 | 3.8 | G |
| 9.8 | | 40.0 | 25.1 | |
| 9.9 | | 46.5 | 49.7 | |
| 9.9 | | 58.5 | 8.6 | |
| 8.8 | 24 | 7.5 | 36.8 | |
| 9.4 | | 8.7 | 58.1 | |
| 9.9 | | 14.0 | 4.8 | |
| 9.9 | | 15.5 | 5.2 | |
| 9.4 | | 24.0 | 13.5 | |
| 9.9 | | 46.2 | 59.4 | |
| 9.9 | | 52.5 | 30.3 | |
| 9.6 | | 59.0 | 49.4 | |
| 8.8 | | 59.0 | 16.2 | 9.0 |
| 9.4 | 25 | 4.0 | 28.9 | |
| 9.3 | | 17.0 | 41.3 | |
| 9.8 | | 25.8 | 1.0 | |
| 9.6 | | 35.0 | 25.6 | |
| 9.9 | | 43.8 | 1.4 | |
| 9.9 | | 52.0 | 28.0 | |
| 9.9 | 26 | 1.3 | 57.6 | |
| 9.9 | | 17.5 | 45.1 | |
| 9.4 | | 20.5 | 28.4 | |
| 9.9 | | 31.0 | 0.4 | |
| 8.8 | | 31.5 | 49.5 | |
| 10.2† | | 31.6 | 0.9 | |
| 9.4 | | 40.5 | 29.0 | |
| 8.6 | | 44.0 | 9.6 | 9.0 |
| 9.9 | | 44.5 | 3.0 | |
| 9.8 | 27 | 2.0 | 18.2 | |
| 9.2 | | 5.0 | 8.2 | 9.5 |
| 7.9 | | 12.0 | 5.0 | 8.0 G |
| 9.9 | | 14.3 | 5.4 | |
| 9.6 | | 41.0 | 29.0 | |
| 9.7 | 28 | 0.6 | 0.9 | |
| 9.1 | | 8.0 | 15.6 | |
| 9.9 | | 9.5 | 45.7 | |
| 9.9 | | 12.5 | 5.6 | |
| 9.9 | | 23.0 | 14.8 | |
| 9.9 | | 30.0 | 11.7 | |
| 9.4 | | 34.0 | 34.9 | |
| 9.0 | | 40.5 | 53.9 | 9.5 |
| 9.8 | | 45.0 | 40.1 | |

## 5221—5280.

| mag. | 12h. m | s | −53° ' | |
|---|---|---|---|---|
| 9.1 | 28 | 48.5 | 40.0 | |
| 9.9 | | 49.5 | 41.3 | |
| 9.4 | 29 | 15.5 | 43.9 | |
| 9.8 | | 16.5 | 26.9 | |
| 9.3 | | 22.0 | 54.7 | 9.0 |
| 9.2 | | 30.5 | 57.6 | |
| 9.7 | | 33.2 | 45.2 | |
| 9.2 | | 35.0 | 53.5 | |
| 9.7 | | 35.0 | 28.6 | |
| 9.7 | | 39.5 | 28.7 | |
| 9.2 | | 46.3 | 0.3 | |
| 9.2 | | 52.5 | 25.1 | |
| 10.3† | | 53.1 | 2.3 | |
| 9.6 | | 58.0 | 48.7 | |
| 9.8 | 30 | 2.0 | 31.0 | |
| 9.9 | | 2.2 | 9.5 | |
| 9.6 | | 20.5 | 15.5 | |
| 10.0† | | 22.1 | 1.9 | |
| 9.9 | | 33.3 | 57.9 | |
| 9.9 | | 42.2 | 15.0 | |
| 9.9 | | 46.2 | 28.0 | |
| 9.7 | 31 | 19.0 | 36.4 | |
| 9.9 | | 22.1 | 25.1 | |
| 9.9 | | 23.2 | 37.0 | |
| 9.2 | | 41.6 | 8.1 | |
| 9.6 | | 44.3 | 17.2 | 9.5 |
| 9.7 | 32 | 9.2 | 45.6 | |
| 9.2 | | 11.8 | 48.1 | 9.0 |
| 8.6 | | 13.2 | 51.8 | 9.0 |
| 9.4 | | 25.5 | 15.7 | |
| 9.7 | | 28.7 | 45.3 | |
| 9.1 | | 36.2 | 11.5 | |
| 9.3 | | 50.0 | 51.2 | |
| 9.4 | | 52.7 | 57.6 | |
| 9.2 | | 53.0 | 27.2 | |
| 9.2 | 33 | 15.6 | 59.0 | |
| 9.3 | | 16.5 | 41.8 | |
| 9.2 | | 24.5 | 34.2 | |
| 8.8 | | 26.0 | 11.0 | 8.8 |
| 9.4 | | 28.5 | 6.0 | |
| 9.0 | | 31.5 | 22.4 | |
| 9.2 | | 41.5 | 15.3 | |
| 9.6 | | 42.5 | 26.4 | |
| 9.3 | | 56.0 | 24.0 | |
| 9.6 | | 56.5 | 20.3 | |
| 9.6 | | 57.0 | 59.5 | |
| 9.7 | 34 | 5.5 | 9.5 | |
| 9.6 | | 6.5 | 10.1 | |
| 9.7 | | 7.0 | 34.4 | |
| 9.4 | | 9.3 | 30.0 | |
| 9.1 | | 9.5 | 27.0 | |
| 9.6 | | 12.5 | 10.2 | |
| 9.7 | | 21.0 | 16.4 | |
| 9.7 | | 29.0 | 47.1 | |
| 8.9 | | 30.0 | 49.8 | 9.0 |
| 9.4 | | 30.5 | 37.0 | |
| 9.3 | | 37.5 | 12.6 | |
| 9.1 | | 52.0 | 36.9 | |
| 9.2 | 35 | 0.0 | 21.0 | |
| 9.1 | | 6.0 | 15.5 | |

## 5281—5340.

| mag. | 12h. m | s | −53° ' | |
|---|---|---|---|---|
| 9.6 | 35 | 9.0 | 14.5 | |
| 9.6 | | 19.5 | 28.5 | |
| 9.7 | | 32.5 | 50.0 | |
| 9.3 | | 33.0 | 58.6 | |
| 7.3 | | 36.5 | 51.2 | 7.5 GSct |
| 9.3 | | 40.5 | 37.0 | |
| 9.7 | | 48.6 | 59.5 | |
| 9.7 | | 50.0 | 0.2 | |
| 9.4 | | 54.4 | 34.4 | |
| 9.3 | 36 | 7.4 | 15.2 | |
| 8.8 | | 10.9 | 43.4 | 8.2 G |
| 9.6 | | 11.4 | 23.5 | |
| 9.1 | | 12.9 | 50.6 | |
| 8.8 | | 21.9 | 57.8 | |
| 9.6 | | 25.4 | 37.0 | |
| 9.7 | | 25.9 | 51.1 | |
| 9.6 | | 26.9 | 27.5 | |
| 8.6 | | 37.1 | 29.2 | 9.5 |
| 9.7 | | 39.9 | 41.0 | |
| 9.7 | | 40.9 | 53.6 | |
| 9.7 | | 41.4 | 29.2 | |
| 9.2 | | 54.4 | 45.2 | |
| 8.8 | | 59.4 | 7.1 | |
| 9.4 | | 59.9 | 51.4 | |
| 8.8 | 37 | 0.4 | 20.9 | 8.5 |
| 8.9 | | 3.9 | 25.4 | 9.5 |
| 9.6 | | 16.4 | 19.8 | |
| 9.3 | | 20.4 | 19.6 | |
| 8.6 | | 21.9 | 39.6 | 9.5 |
| 9.7 | | 31.2 | 52.0 | |
| 9.7 | | 31.9 | 26.2 | |
| 9.7 | | 33.3 | 59.8 | |
| 8.6 | | 35.9 | 24.0 | 7.5 GSt |
| 9.6 | | 50.4 | 12.5 | |
| 9.6 | | 52.9 | 55.4 | |
| 9.7 | 38 | 18.4 | 56.8 | |
| 8.2 | | 27.9 | 10.6 | GSg |
| 9.7 | | 30.4 | 18.0 | |
| 8.0 | | 59.4 | 55.8 | 7.0 GSct |
| 9.7 | 39 | 14.9 | 11.6 | |
| 9.1 | | 15.4 | 56.0 | 8.8 |
| 9.6 | | 30.4 | 58.2 | |
| 9.4 | | 37.9 | 27.5 | |
| 9.6 | | 45.4 | 6.8 | |
| 9.7 | | 50.4 | 33.4 | |
| 9.3 | | 58.4 | 18.8 | |
| 9.2 | | 58.9 | 18.6 | |
| 8.6 | 40 | 2.9 | 54.0 | 8.5 |
| 8.6 | | 18.1 | 46.7 | 9.2 |
| 10.0† | | 20.7 | 1.3 | |
| 9.6 | | 21.6 | 7.3 | |
| 10.3† | | 23.7 | 1.3 | |
| 9.3 | | 33.1 | 22.1 | |
| 9.2 | | 33.1 | 29.7 | |
| 9.7 | | 36.4 | 0.8 | |
| 9.2 | | 57.1 | 21.6 | |
| 9.2 | | 58.1 | 9.6 | |
| 9.6 | 41 | 20.6 | 7.2 | |
| 8.7 | | 30.9 | 0.0 | |
| 9.7 | 42 | 17.9 | 58.7 | |

## 5341—5400.

| mag. | 12h. m | s | −53° ' | |
|---|---|---|---|---|
| 9.7 | 42 | 34.6 | 33.9 | |
| 9.0 | | 39.1 | 16.2 | 9.0 |
| 9.7 | | 39.2 | 23.5 | |
| 9.3 | 43 | 12.1 | 4.2 | |
| 9.6 | | 17.1 | 57.0 | |
| 9.4 | | 19.1 | 7.3 | |
| 9.7 | | 31.1 | 14.1 | |
| 9.6 | | 38.1 | 51.5 | |
| 9.4 | | 43.1 | 34.5 | |
| 9.7 | | 52.6 | 47.1 | |
| 9.6 | | 54.6 | 47.7 | |
| 9.0 | 44 | 3.1 | 19.0 | |
| 9.2 | | 5.6 | 25.9 | |
| 9.7 | | 7.6 | 22.1 | |
| 9.1 | | 29.1 | 49.5 | |
| 9.7 | | 48.1 | 22.3 | |
| 9.0 | | 54.1 | 9.5 | |
| 9.2 | 45 | 0.8 | 58.7 | |
| 7.8 | | 13.6 | 9.0 | GSg |
| 9.7 | | 21.1 | 4.1 | |
| 9.7 | | 37.1 | 35.5 | |
| 9.4 | | 40.1 | 17.7 | |
| 9.0 | | 41.6 | 9.5 | |
| 9.7 | | 58.6 | 53.0 | |
| 9.6 | 46 | 2.1 | 13.2 | |
| 9.6 | | 10.1 | 55.3 | |
| 10.3† | | 17.1 | 0.8 | |
| 10.4† | | 21.1 | 2.8 | |
| 9.7 | | 22.6 | 33.9 | |
| 9.4 | | 24.8 | 45.7 | |
| 9.6 | | 25.3 | 42.1 | |
| 9.3 | | 50.3 | 41.5 | |
| 9.2 | | 52.3 | 51.2 | |
| 9.1 | | 55.3 | 10.2 | |
| 9.0 | 47 | 5.3 | 29.0 | |
| 9.6 | | 9.8 | 43.1 | |
| 9.4 | | 14.8 | 9.7 | |
| 9.4 | | 22.8 | 28.9 | |
| 9.7 | | 46.7 | 2.7 | |
| 9.7 | | 49.9 | 59.2 | |
| 9.6 | | 50.8 | 13.1 | |
| 9.7 | | 57.3 | 59.4 | |
| 9.7 | 48 | 9.8 | 5.2 | |
| 8.6 | | 18.3 | 27.7 | 9.5 |
| 9.0 | | 34.3 | 34.1 | |
| 9.7 | | 49.8 | 57.1 | |
| 9.1 | | 49.8 | 10.1 | |
| 9.0 | | 59.8 | 6.1 | |
| 9.2 | 49 | 7.8 | 49.1 | |
| 9.7 | | 9.8 | 33.1 | |
| 9.4 | | 14.3 | 55.3 | |
| 8.8 | | 24.8 | 38.5 | 8.5 G |
| 9.0 | | 26.8 | 27.1 | |
| 9.0 | | 27.3 | 36.5 | 9.0 |
| 9.7 | | 35.8 | 8.9 | |
| 9.6 | | 37.8 | 23.9 | |
| 7.1 | | 41.3 | 54.9 | GS |
| 9.3 | | 49.8 | 55.3 | |
| 9.7 | | 49.8 | 14.7 | |
| 9.7 | 50 | 2.8 | 41.1 | |



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## 5401—5460.

| mag. | 12h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 50 | 2·8 | 8·8 | |
| 8·8 | | 29·8 | 26·1 | |
| 9·1 | | 29·8 | 37·0 | |
| 9·7 | | 51·8 | 50·9 | |
| 7·5 | | 52·3 | 30·5 | 7·6 GSt |
| 9·3 | 51 | 0·3 | 56·4 | |
| 8·6 | | 9·8 | 43·3 | 9·0 |
| 8·4 | | 16·8 | 37·0 | 9·0 |
| 9·6 | | 19·8 | 12·9 | |
| 9·7 | | 31·3 | 29·5 | |
| 9·1 | | 36·3 | 26·6 | 9·0 |
| 9·6 | | 38·8 | 18·1 | |
| 9·7 | | 39·3 | 14·9 | |
| 9·7 | 52 | 5·3 | 45·3 | |
| 9·7 | | 21·8 | 24·3 | |
| 8·5 | | 32·5 | 42·2 | 8·0 GSt |
| 8·7 | | 45·5 | 59·6 | |
| 9·0 | | 47·5 | 27·0 | 9·5 |
| 9·1 | | 51·0 | 21·3 | |
| 9·7 | | 54·5 | 48·5 | |
| 9·7 | | 55·0 | 43·7 | |
| 9·3 | | 56·7 | 59·1 | |
| 9·3 | 53 | 2·0 | 58·6 | |
| 9·7 | | 2·5 | 20·1 | |
| 8·8 | | 12·5 | 47·7 | |
| 9·7 | | 20·2 | 59·5 | |
| 9·0 | | 21·5 | 28·1 | 9·5 |
| 9·7 | | 38·5 | 4·9 | |
| 9·0 | | 51·0 | 35·0 | 9·5 |
| 9·7 | | 54·5 | 27·3 | |
| 8·8 | | 55·0 | 43·9 | 9·0 |
| 9·2 | 54 | 5·7 | 59·8 | |
| 9·7 | | 11·5 | 47·2 | |
| 9·2 | | 17·5 | 39·7 | 9·5 |
| 9·1 | | 19·5 | 55·1 | |
| 9·4 | | 19·5 | 3·1 | |
| 9·6 | | 20·0 | 30·7 | |
| 9·6 | | 27·0 | 39·0 | |
| 9·4 | | 41·0 | 25·3 | |
| 9·7 | | 52·0 | 38·6 | |
| 9·4 | 55 | 8·5 | 17·2 | |
| 9·7 | | 17·9 | 1·8 | |
| 9·2 | | 23·0 | 45·7 | |
| 9·4 | | 27·0 | 30·3 | |
| 9·0 | 56 | 1·0 | 55·1 | 8·5 |
| 9·6 | | 4·5 | 48·4 | |
| 9·3 | | 19·5 | 52·1 | |
| 9·7 | | 25·0 | 56·4 | |
| 9·6 | | 27·0 | 20·0 | |
| 8·7 | | 30·0 | 9·2 | 9·0 |
| 9·2 | 57 | 1·0 | 1·6 | |
| 9·0 | | 4·5 | 0·7 | |
| 9·4 | | 9·0 | 33·0 | |
| 9·7 | | 14·2 | 35·1 | |
| 9·0 | | 45·7 | 36·3 | |
| 9·4 | | 50·2 | 10·0 | |
| 9·2 | 58 | 13·2 | 41·4 | |
| 9·7 | | 15·7 | 26·5 | |
| 9·2 | | 16·2 | 40·2 | |
| 9·7 | | 45·7 | 30·0 | |

## 5461—5520.

| mag. | 12h.–13h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·7 | 58 | 47·2 | 29·3 | |
| 9·4 | | 56·2 | 9·4 | |
| 9·3 | 59 | 0·2 | 51·7 | |
| 8·0 | | 9·7 | 37·2 | GS |
| 9·6 | | 10·7 | 7·5 | |
| 8·0 | | 11·2 | 50·2 | GS |
| 9·3 | | 16·7 | 56·9 | |
| 9·6 | | 32·2 | 41·6 | |
| 9·7 | | 33·2 | 50·0 | |
| 8·7 | | 39·2 | 23·5 | |
| 10·0† | | 43·0 | 0·3 | |
| 8·8 | | 46·2 | 39·7 | |
| 9·0 | | 48·2 | 38·1 | |
| 9·4 | | 49·7 | 23·7 | |
| 9·0 | | 54·2 | 39·5 | |
| 9·7 | | 54·8 | 1·0 | |
| 9·0 | 0 | 15·7 | 29·1 | |
| 8·8 | | 17·2 | 44·9 | |
| 9·4 | | 21·2 | 22·6 | |
| 9·6 | | 24·2 | 51·1 | |
| 8·8 | | 26·2 | 5·2 | 9·5 |
| 9·4 | | 46·2 | 17·8 | |
| 9·1 | | 50·2 | 19·7 | |
| 9·7 | | 59·2 | 50·5 | |
| 9·3 | 1 | 8·1 | 57·8 | |
| 7·8 | | 9·9 | 56·8 | GSg |
| 9·6 | | 25·7 | 31·5 | |
| 10·4† | | 39·2 | 2·0 | |
| 9·4 | | 49·2 | 46·0 | |
| 9·6 | 2 | 6·2 | 54·3 | |
| 9·6 | | 11·2 | 28·8 | |
| 9·6 | | 29·2 | 48·0 | |
| 9·6 | | 41·7 | 19·9 | |
| 9·7 | | 46·2 | 38·1 | |
| 9·7 | | 49·2 | 0·2 | |
| 9·4 | 3 | 14·2 | 52·8 | |
| 9·4 | | 15·2 | 10·3 | |
| 9·2 | | 24·9 | 44·5 | |
| 9·0 | | 30·5 | 28·8 | |
| 8·3 | | 36·8 | 30·0 | |
| 9·9 | | 36·8 | 22·1 | |
| 9·8 | | 48·8 | 46·8 | |
| 9·6 | | 51·3 | 8·2 | |
| 9·6 | 4 | 11·8 | 14·1 | |
| 10·3† | | 26·2 | 1·9 | |
| 9·6 | | 31·6 | 14·5 | |
| 9·4 | | 35·8 | 42·7 | |
| 10·3† | | 45·2 | 0·8 | |
| 9·4 | | 46·0 | 59·0 | |
| 9·9 | 5 | 4·1 | 28·6 | |
| 9·8 | | 12·1 | 57·1 | |
| 8·6 | | 15·0 | 15·8 | 9·0 |
| 9·8 | | 21·8 | 59·3 | |
| 9·6 | | 31·1 | 1·0 | |
| 9·4 | | 49·0 | 21·8 | |
| 9·6 | | 53·5 | 12·3 | |
| 9·9 | | 56·5 | 4·8 | |
| 9·8 | 6 | 31·0 | 47·2 | |
| 9·9 | | 59·0 | 34·3 | |
| 9·9 | 7 | 0·0 | 57·3 | |

## 5521—5580.

| mag. | 13h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·2 | 7 | 5·5 | 52·8 | 9·0 G |
| 9·9 | | 27·0 | 28·1 | |
| 9·3 | | 33·5 | 46·7 | |
| 10·3† | | 36·2 | 2·9 | |
| 9·2 | | 38·5 | 0·5 | |
| 8·8 | | 50·5 | 1·8 | |
| 9·2 | 8 | 20·0 | 24·1 | |
| 9·4 | | 21·0 | 56·8 | |
| 8·7 | | 24·5 | 56·6 | 9·5 |
| 8·9 | | 33·1 | 0·4 | |
| 9·0 | | 34·0 | 27·6 | |
| 9·8 | | 40·0 | 55·2 | |
| 8·7 | | 52·0 | 49·8 | 9·0 |
| 9·4 | | 57·0 | 4·0 | |
| 9·4 | 9 | 18·5 | 14·9 | |
| 9·4 | | 29·0 | 5·2 | |
| 9·6 | | 34·5 | 52·0 | |
| 9·6 | | 34·5 | 26·8 | |
| 10·4† | | 52·2 | 1·6 | |
| 9·8 | | 57·5 | 42·1 | |
| 9·0 | 10 | 4·5 | 55·9 | |
| 9·9 | | 19·5 | 39·9 | |
| 9·2 | | 41·5 | 26·3 | |
| 9·6 | | 41·5 | 50·3 | |
| 9·3 | | 44·0 | 41·8 | |
| 9·4 | | 45·0 | 23·7 | |
| 9·6 | 11 | 4·0 | 50·4 | |
| 9·4 | | 23·0 | 38·1 | |
| 9·4 | | 23·5 | 53·5 | |
| 9·9 | | 24·5 | 32·2 | |
| 9·9 | | 39·5 | 10·7 | |
| 9·6 | | 48·5 | 49·8 | |
| 9·9 | | 54·0 | 59·6 | |
| 9·0 | | 54·5 | 38·6 | |
| 9·9 | 12 | 9·0 | 13·8 | |
| 9·8 | | 30·2 | 28·5 | |
| 9·9 | | 41·2 | 51·9 | |
| 9·9 | | 50·2 | 0·3 | |
| 9·2 | | 59·2 | 36·4 | |
| 9·9 | | 59·3 | 43·2 | |
| 9·6 | 13 | 5·7 | 7·7 | |
| 9·6 | | 5·7 | 41·3 | |
| 9·9 | | 15·7 | 19·9 | |
| 9·6 | | 19·7 | 42·9 | |
| 9·4 | | 57·7 | 42·0 | 9·5 |
| 9·6 | 14 | 11·2 | 55·9 | |
| 9·0 | | 15·2 | 43·3 | 9·5 |
| 9·2 | | 15·2 | 11·9 | |
| 9·9 | | 30·2 | 54·2 | |
| 9·9 | | 40·2 | 11·5 | |
| 9·4 | | 51·2 | 52·4 | |
| 8·9 | | 54·2 | 51·1 | 9·5 |
| 9·6 | 15 | 13·2 | 55·7 | |
| 9·8 | | 18·7 | 39·4 | |
| 9·4 | | 29·2 | 7·9 | |
| 9·6 | | 34·7 | 34·3 | |
| 9·6 | | 36·7 | 27·3 | |
| 9·9 | | 43·7 | 38·5 | |
| 9·9 | | 48·7 | 2·9 | |
| 9·4 | 16 | 13·2 | 23·9 | |

## 5581—5640.

| mag. | 13h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·9 | 16 | 13·5 | 1·9 | |
| 9·6 | | 17·2 | 4·2 | |
| 9·4 | | 18·7 | 54·0 | |
| 9·6 | | 22·9 | 56·7 | |
| 9·4 | | 26·6 | 56·7 | |
| 7·3 | | 27·7 | 8·3 | 7·5 G |
| 9·9 | | 30·2 | 35·5 | |
| 9·4 | | 34·2 | 14·5 | |
| 9·7 | | 35·2 | 57·9 | |
| 9·9 | | 37·7 | 50·3 | |
| 7·9 | | 40·2 | 20·7 | 8·0 GSt |
| 9·4 | | 44·6 | 3·5 | |
| 8·2 | | 54·1 | 15·7 | 7·0 Gt |
| 9·9 | 17 | 3·1 | 9·2 | |
| 8·6 | | 10·6 | 10·0 | 8·5 |
| 9·4 | | 20·3 | 59·8 | |
| 9·4 | | 30·6 | 15·3 | 9·5 |
| 9·6 | | 33·1 | 32·8 | |
| 8·4 | | 39·1 | 11·1 | 8·5 |
| 8·8 | | 40·1 | 35·1 | |
| 9·4 | | 43·6 | 21·1 | |
| 9·4 | | 44·1 | 14·2 | 9·5 |
| 9·6 | 18 | 1·6 | 29·6 | |
| 9·7 | | 6·6 | 58·9 | |
| 9·7 | | 8·6 | 21·4 | |
| 9·8 | | 12·1 | 21·5 | |
| 9·7 | | 34·1 | 11·9 | |
| 8·8 | | 41·1 | 26·5 | |
| 9·4 | | 43·1 | 3·2 | |
| 9·9 | | 51·1 | 47·6 | |
| 9·9 | 19 | 6·6 | 13·8 | |
| 9·2 | | 10·1 | 46·9 | |
| 7·9 | | 13·1 | 8·1 | 8·0 G |
| 9·9 | | 34·1 | 18·0 | |
| 8·2 | | 42·1 | 30·1 | 8·0 GS |
| 9·3 | | 44·1 | 11·1 | 8·5 |
| 9·4 | | 53·1 | 29·9 | |
| 9·2 | | 57·1 | 37·1 | |
| 9·7 | 20 | 0·1 | 53·0 | |
| 8·9 | | 8·6 | 4·4 | |
| 9·7 | | 17·1 | 5·5 | |
| 8·2 | | 22·1 | 30·9 | 8·0 GS |
| 9·2 | | 22·1 | 23·7 | 9·5 |
| 8·5 | | 29·1 | 51·7 | |
| 8·8 | | 41·1 | 25·8 | 8·5 |
| 8·9 | | 41·6 | 39·5 | |
| 9·6 | | 49·6 | 49·9 | |
| 9·1 | | 56·1 | 50·9 | |
| 9·9 | 21 | 1·4 | 52·5 | |
| 9·4 | | 4·4 | 16·7 | |
| 9·8 | | 9·4 | 31·1 | |
| 9·6 | | 19·2 | 1·7 | |
| 9·9 | | 21·4 | 55·0 | |
| 9·7 | | 22·9 | 47·0 | |
| 8·5 | | 40·9 | 24·0 | 9·0 |
| 9·6 | | 43·9 | 3·0 | |
| 9·6 | | 48·9 | 54·2 | |
| 9·7 | | 51·9 | 10·7 | |
| 7·6 | | 56·4 | 21·2 | 7·5 G |
| 9·4 | 22 | 5·9 | 27·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 40 | 85 | 8·2 |
| | 50 | 87 | 8·2 |
| 13 | 0 | 88 | 8·1 |
| | 10 | 90 | 8·0 |
| | 20 | 92 | 7·9 |
| | 30 | 94 | 7·7 |

25 prec.

| | α + | δ − |
|---|---|---|
| h m | s | ′ |
| 13 20 | 92 | 7·9 |
| 30 | 94 | 7·7 |
| 40 | 96 | 7·6 |
| 50 | 98 | 7·4 |
| 14 0 | 99 | 7·2 |

**5641—5700.**

| | 13h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·4 | 22 | 11·9 | 51·7 | |
| 9·2 | | 22·4 | 52·1 | |
| 8·4 | | 44·4 | 17·1 | 7·5 G |
| 9·9 | | 47·4 | 43·4 | |
| 9·9 | | 49·9 | 58·4 | |
| 8·8 | | 50·9 | 49·0 | 10·0 |
| 9·6 | | 58·4 | 16·0 | |
| 9·4 | | 59·9 | 12·0 | |
| 8·8 | 23 | 0·9 | 45·1 | 9·0 |
| 9·4 | | 33·9 | 36·8 | |
| 9·7 | | 37·4 | 52·5 | |
| 9·6 | | 40·9 | 39·7 | |
| 9·6 | | 43·9 | 36·1 | |
| 9·9 | | 49·9 | 27·7 | |
| 8·7 | | 56·4 | 52·0 | 8·5 |
| 9·4 | 24 | 28·9 | 58·5 | |
| 9·8 | | 44·9 | 48·5 | |
| 9·4 | | 52·4 | 11·1 | 9·0 |
| 9·2 | 25 | 0·9 | 45·9 | |
| 9·1 | | 6·4 | 31·3 | |
| 9·8 | | 7·6 | 56·7 | |
| 9·8 | | 9·1 | 10·9 | |
| 9·2 | | 20·6 | 49·2 | |
| 9·0 | | 29·1 | 47·2 | |
| 9·6 | | 46·6 | 15·7 | |
| 9·6 | | 53·1 | 55·0 | |
| 9·8 | 26 | 4·6 | 19·7 | |
| 9·4 | | 31·2 | 0·8 | |
| 8·8 | | 32·7 | 2·7 | 9·0 |
| 10·2† | | 46·3 | 0·3 | |
| 9·6 | | 54·1 | 27·6 | |
| 9·9 | | 55·1 | 2·3 | |
| 8·8 | 27 | 11·6 | 49·9 | 9·5 |
| 8·8 | | 14·1 | 33·9 | |
| 9·9 | | 19·0 | 28·0 | |
| 9·9 | | 23·1 | 22·1 | |
| 9·8 | | 24·1 | 1·9 | |
| 9·6 | | 29·6 | 27·4 | |
| 9·3 | | 37·6 | 55·8 | 9·0 |
| 9·6 | | 39·1 | 47·9 | |
| 9·6 | | 44·1 | 25·7 | |
| 9·8 | | 45·1 | 40·8 | |
| 9·7 | 28 | 21·6 | 46·9 | |
| 9·6 | | 22·8 | 26·0 | |
| 8·7 | | 28·1 | 15·1 | |
| 9·6 | | 35·6 | 16·8 | |
| 9·1 | | 37·6 | 2·5 | |
| 9·9 | | 37·6 | 13·3 | |
| 9·9 | | 39·1 | 15·3 | |
| 9·1 | | 41·6 | 41·1 | |
| 9·3 | | 54·6 | 48·2 | |
| 9·7 | 29 | 0·1 | 52·6 | |
| 9·8 | | 20·6 | 27·0 | |
| 9·8† | | 30·3 | 1·5 | |
| 9·2 | | 36·6 | 7·1 | |
| 9·2 | | 38·2 | 0·8 | 9·0 |
| 9·7 | | 42·6 | 20·6 | |
| 9·9 | | 47·6 | 31·1 | |
| 9·6 | | 56·1 | 17·3 | |
| 9·9 | 30 | 19·1 | 35·8 | |

**5701—5760.**

| | 13h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·9 | 30 | 34·1 | 34·7 | |
| 9·7 | | 34·1 | 10·0 | |
| 9·2 | | 53·6 | 28·7 | |
| 8·7 | | 57·4 | 16·3 | |
| 9·3 | | 58·7 | 57·1 | |
| 9·9 | 31 | 4·4 | 59·3 | |
| 9·4 | | 15·4 | 22·7 | |
| 9·4 | | 18·4 | 7·7 | |
| 9·4 | | 31·4 | 54·9 | |
| 9·4 | | 31·9 | 14·6 | |
| 9·6 | | 42·4 | 49·0 | |
| 7·6 | | 48·9 | 30·6 | 7·5 GSt |
| 9·7 | | 52·9 | 53·5 | |
| 9·4 | | 58·9 | 17·8 | |
| 9·0 | 32 | 17·4 | 33·3 | 8·0 S |
| 9·6 | | 23·9 | 21·6 | |
| 7·6 | | 30·4 | 13·6 | |
| 9·4 | | 43·4 | 31·5 | |
| 9·4 | | 48·4 | 15·3 | |
| 9·4 | | 53·9 | 31·5 | |
| 9·6 | 33 | 0·4 | 28·2 | |
| 9·2 | | 20·8 | 1·2 | |
| 9·9 | | 43·2 | 24·7 | |
| 9·9 | | 44·2 | 28·7 | |
| 6·1 | | 44·7 | 55·5 | 6·0 GSc |
| 9·3 | | 54·2 | 17·5 | |
| 9·6 | | 58·2 | 55·0 | |
| 9·3 | 34 | 1·7 | 21·7 | |
| 9·1 | | 2·1 | 57·0 | 8·8 |
| 9·4 | | 29·2 | 15·0 | |
| 9·6 | 35 | 10·7 | 16·5 | |
| 9·9 | | 23·7 | 57·7 | 9·8 |
| 8·9 | | 26·4 | 21·7 | 9·5 |
| 9·1 | | 27·7 | 58·8 | 9·2 |
| 9·4 | | 28·4 | 53·3 | |
| 9·7 | | 30·7 | 16·2 | |
| 9·2 | | 38·0 | 33·7 | |
| 9·9 | | 39·4 | 36·2 | |
| 9·6 | | 56·2 | 48·9 | |
| 9·6 | 36 | 6·7 | 42·0 | |
| 8·7 | | 28·7 | 5·9 | 8·0 |
| 8·9 | | 30·2 | 8·3 | 8·5 |
| 9·7 | 37 | 8·2 | 47·2 | |
| 9·6 | | 20·7 | 5·9 | |
| 10·0 | | 26·7 | 0·6 | |
| 9·6 | | 43·2 | 39·7 | |
| 10·0 | | 54·2 | 13·0 | |
| 9·6 | 38 | 36·2 | 46·7 | |
| 9·8 | | 40·2 | 33·0 | |
| 10·0 | | 45·7 | 55·1 | |
| 10·0 | | 51·7 | 27·7 | |
| 9·8 | 39 | 1·2 | 59·2 | |
| 9·4 | | 38·7 | 4·7 | |
| 9·1 | | 49·7 | 52·8 | 9·5 |
| 10·0 | 40 | 9·7 | 47·7 | |
| 9·4 | | 26·2 | 36·7 | |
| 9·6 | | 32·2 | 17·6 | |
| 9·6 | | 57·7 | 35·6 | |
| 9·2 | 41 | 2·2 | 55·4 | |
| 8·8 | | 3·7 | 36·2 | |

**5761—5820.**

| | 13h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·6 | 41 | 10·7 | 7·6 | |
| 9·6 | | 11·7 | 51·4 | 9·5 |
| 10·0 | | 16·2 | 30·1 | |
| 8·7 | | 17·7 | 7·1 | 9·2 G |
| 10·0 | | 19·9 | 1·6 | |
| 9·2 | 42 | 19·7 | 32·6 | |
| 10·0 | | 41·2 | 56·3 | |
| 8·8 | | 45·2 | 18·7 | 9·5 |
| 9·4 | 43 | 2·7 | 6·7 | 9·5 |
| 10·0 | | 16·2 | 51·2 | |
| 9·8 | | 28·7 | 33·7 | |
| 9·4 | | 38·2 | 19·1 | |
| 9·2 | | 44·2 | 27·3 | 9·5 |
| 9·2 | | 46·7 | 30·2 | |
| 9·2 | 44 | 1·7 | 49·9 | |
| 9·6 | | 6·7 | 38·5 | 9·5 |
| 9·4 | | 13·2 | 34·9 | |
| 9·4 | | 16·2 | 53·7 | |
| 10·0 | | 36·7 | 27·2 | |
| 10·0 | | 37·7 | 33·1 | |
| 7·6 | | 42·9 | 57·5 | 8·0 GS |
| 9·6 | | 43·2 | 9·0 | |
| 9·2 | | 51·2 | 21·5 | 9·5 |
| 9·1 | | 51·2 | 56·7 | 9·5 |
| 9·4 | | 54·9 | 58·2 | 9·5 |
| 9·6 | 45 | 17·7 | 5·1 | |
| 10·0 | | 21·7 | 0·0 | |
| 9·4 | | 45·7 | 3·2 | |
| 9·7 | | 46·2 | 48·4 | |
| 10·0 | | 50·7 | 43·0 | |
| 7·6 | 46 | 13·2 | 47·7 | GSt |
| 10·2† | | 24·0 | 1·6 | |
| 9·6 | | 28·7 | 20·6 | |
| 9·2 | | 34·2 | 53·7 | |
| 10·0 | | 39·7 | 42·1 | |
| 9·6 | | 41·7 | 13·5 | |
| 9·1 | | 46·9 | 57·9 | |
| 9·8 | 47 | 12·7 | 47·1 | |
| 9·6 | | 29·9 | 59·6 | |
| 9·2 | | 46·2 | 8·8 | |
| 9·6 | | 59·7 | 38·5 | |
| 9·7 | 48 | 1·2 | 45·7 | |
| 9·6 | | 7·7 | 8·0 | |
| 9·8 | | 8·2 | 49·1 | |
| 6·9 | | 8·7 | 30·9 | 6·5 GSt |
| 10·0 | | 29·9 | 47·4 | |
| 10·0 | | 38·9 | 25·8 | |
| 10·0 | | 48·9 | 40·7 | |
| 9·4 | 49 | 29·9 | 36·7 | |
| 9·4 | | 31·4 | 25·9 | |
| 9·4 | | 32·4 | 37·2 | |
| 7·8 | | 45·9 | 5·6 | 7·5 G |
| 10·0 | | 48·4 | 36·2 | |
| 10·0 | 50 | 19·4 | 47·7 | |
| 9·8 | | 27·9 | 27·2 | |
| 10·0 | | 39·4 | 6·9 | |
| 9·7 | | 40·9 | 49·7 | |
| 9·6 | 51 | 0·4 | 54·0 | |
| 9·7 | | 10·4 | 54·3 | |
| 8·8 | | 14·4 | 34·1 | 9·5 |

**5821—5880.**

| | 13h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·4 | 51 | 25·9 | 14·2 | |
| 9·6 | | 35·9 | 50·2 | |
| 9·8 | | 40·4 | 29·8 | |
| 10·0 | | 47·9 | 55·3 | |
| 9·4 | | 51·4 | 33·7 | 9·5 |
| 9·0 | | 56·9 | 32·3 | 9·0 |
| 10·0 | 52 | 0·9 | 13·7 | |
| 8·2 | | 21·4 | 35·9 | 8·5 |
| 9·2 | | 29·9 | 0·4 | |
| 10·0 | | 38·4 | 16·2 | |
| 10·0 | | 39·4 | 4·2 | |
| 9·4 | | 47·4 | 54·7 | |
| 9·8 | | 48·9 | 36·3 | |
| 9·6 | | 51·9 | 30·3 | |
| 9·4 | | 54·9 | 17·8 | 9·5 |
| 9·2 | 53 | 7·9 | 13·9 | 9·5 |
| 9·6 | | 18·4 | 42·7 | |
| 10·0 | | 19·0 | 58·8 | |
| 9·4 | | 23·4 | 34·1 | |
| 10·0 | | 24·1 | 0·2 | |
| 10·0 | | 29·4 | 8·0 | |
| 9·4 | | 43·7 | 42·0 | |
| 9·8 | 54 | 11·2 | 30·3 | |
| 8·7 | | 14·7 | 51·5 | 9·0 |
| 8·8 | | 17·2 | 23·2 | 8·5 |
| 9·6 | | 46·7 | 4·8 | |
| 10·0 | | 47·2 | 25·9 | |
| 9·8 | | 49·2 | 37·7 | |
| 10·0 | | 57·2 | 51·2 | |
| 9·7 | 55 | 1·7 | 17·0 | |
| 9·4 | | 5·7 | 52·4 | |
| 10·0 | | 7·0 | 59·9 | |
| 10·0 | | 33·2 | 14·4 | |
| 8·0 | | 37·7 | 10·2 | 8·5 |
| 10·0 | | 41·1 | 1·1 | |
| 8·6 | | 42·2 | 7·0 | 9·0 |
| 10·0 | | 58·2 | 21·4 | |
| 10·1† | 56 | 0·0 | 1·2 | |
| 10·0 | | 0·2 | 53·5 | |
| 9·7 | | 5·2 | 38·5 | |
| 10·2† | | 9·0 | 2·1 | |
| 9·2 | | 9·2 | 55·8 | |
| 8·8 | | 14·2 | 25·7 | 9·2 |
| 10·0 | | 52·2 | 45·2 | |
| 10·0 | | 52·2 | 6·2 | |
| 8·8 | | 57·2 | 38·1 | 9·0 |
| 10·0 | 57 | 0·7 | 44·2 | |
| 9·6 | | 26·2 | 43·0 | |
| 10·0 | | 27·7 | 42·8 | |
| 10·0 | | 42·2 | 20·6 | |
| 7·6 | | 51·2 | 36·3 | 7·5 GS |
| 10·0 | 58 | 3·2 | 6·3 | |
| 9·2 | | 12·2 | 36·8 | 8·5 GS |
| 8·7 | | 20·2 | 24·3 | 8·8 |
| 9·2 | 59 | 3·2 | 42·9 | 9·0 |
| 9·6 | | 10·2 | 57·6 | |
| 8·8 | | 12·2 | 40·0 | 8·0 |
| 9·1 | | 19·7 | 22·7 | 8·5 |
| 9·0 | | 25·7 | 5·6 | 8·5 GS |
| 8·4 | | 26·2 | 5·3 | 9·0 GS |



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## 5881—5940.

| mag. | 13h.–14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.8 | 59 | 29.2 | 7.7 | |
| 9.4 | | 54.2 | 22.5 | 9.0 |
| 8.9 | 0 | 1.2 | 19.9 | 8.8 |
| 10.0 | | 1.2 | 50.7 | |
| 10.0 | | 3.0 | 35.3 | |
| 9.4 | | 18.5 | 31.6 | 9.0 |
| 10.0† | | 24.1 | 1.6 | |
| 9.6 | | 56.0 | 7.5 | |
| 9.2 | | 59.5 | 10.1 | |
| 10.0 | 1 | 12.0 | 46.8 | |
| 9.6 | | 27.0 | 39.6 | |
| 9.8 | | 57.5 | 54.2 | |
| 9.2 | 2 | 6.0 | 17.2 | 10.0 |
| 10.0 | | 7.0 | 7.4 | |
| 9.1 | | 26.0 | 27.2 | |
| 9.2 | | 34.5 | 23.9 | |
| 9.2 | | 34.5 | 10.3 | 9.5 |
| 10.0 | | 48.5 | 42.0 | |
| 10.0 | | 53.7 | 1.4 | |
| 9.8 | 3 | 0.5 | 45.7 | |
| 9.0 | | 4.0 | 28.8 | |
| 10.0 | | 12.0 | 46.9 | |
| 10.0 | | 12.5 | 20.6 | |
| 9.4 | | 19.0 | 33.8 | |
| 9.8 | | 30.0 | 44.0 | |
| 9.1 | | 53.0 | 43.7 | 9.5 |
| 8.8 | | 59.5 | 4.3 | 8.5 |
| 9.8† | 4 | 17.7 | 2.3 | |
| 9.1 | | 19.5 | 3.0 | 9.0 |
| 9.1 | | 34.5 | 16.1 | 8.2 G |
| 10.0 | | 49.0 | 42.9 | 9.5 |
| 7.1 | | 52.5 | 4.8 | 6.0 GSct |
| 9.6 | 5 | 4.0 | 59.6 | |
| 9.8 | | 7.5 | 26.4 | 9.0 |
| 9.2 | | 42.0 | 20.6 | 7.5 G |
| 10.0 | | 49.5 | 10.2 | |
| 9.6 | | 57.5 | 54.2 | |
| 10.0† | 6 | 3.2 | 0.2 | |
| 9.4 | | 14.5 | 23.9 | 9.0 |
| 9.4 | | 40.5 | 28.2 | |
| 10.0 | | 40.5 | 45.8 | |
| 9.9† | | 42.2 | 0.2 | |
| 9.6 | 7 | 9.0 | 44.7 | |
| 10.0 | | 13.0 | 18.7 | |
| 9.6 | | 13.5 | 38.0 | |
| 9.2 | | 14.6 | 33.4 | 9.5 |
| 10.0 | | 21.0 | 42.8 | |
| 9.2 | | 33.6 | 13.9 | |
| 10.0 | | 45.7 | 57.0 | |
| 8.6 | | 50.7 | 13.9 | |
| 9.7 | 8 | 9.5 | 54.1 | |
| 9.4 | | 24.5 | 43.1 | 10.0 |
| 9.2 | | 30.8 | 20.8 | 9.2 |
| 9.0 | | 35.2 | 15.8 | 9.2 |
| 10.2 | | 47.7 | 39.0 | |
| 8.5 | 9 | 22.7 | 53.6 | 9.0 |
| 9.5 | | 42.2 | 28.1 | |
| 8.0 | | 53.2 | 44.5 | 9.0 |
| 9.5 | | 56.7 | 46.9 | |
| 8.3 | 10 | 0.7 | 32.9 | 8.0 GSt |

## 5941—6000.

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.2 | 10 | 12.2 | 34.8 | |
| 8.5 | | 23.2 | 53.2 | 9.0 |
| 9.8 | | 30.2 | 21.6 | 9.0 |
| 9.2 | 11 | 4.2 | 7.0 | |
| 9.4 | | 9.2 | 5.2 | |
| 10.2 | | 18.7 | 56.1 | |
| 10.2 | | 50.2 | 3.3 | |
| 10.2 | | 59.2 | 20.6 | |
| 9.6 | 12 | 7.2 | 8.7 | |
| 9.8 | | 9.7 | 53.7 | |
| 10.2 | | 21.2 | 17.2 | |
| 9.4 | | 37.7 | 26.9 | 9.0 |
| 10.2 | | 44.7 | 2.4 | |
| 10.2† | 13 | 23.0 | 0.8 | |
| 10.0† | | 33.2 | 0.8 | |
| 9.0 | | 38.7 | 11.1 | 9.5 |
| 10.0 | 14 | 13.2 | 42.1 | |
| 10.2 | | 47.0 | 2.1 | |
| 9.8 | 15 | 11.2 | 27.0 | |
| 9.6 | | 20.7 | 14.5 | |
| 9.8 | | 30.7 | 59.9 | |
| 9.0 | | 33.2 | 28.9 | 9.5 |
| 10.0 | | 46.5 | 57.2 | |
| 10.2 | 16 | 1.2 | 49.9 | |
| 9.6 | | 7.2 | 10.1 | |
| 8.2 | | 19.5 | 59.4 | 8.5 |
| 10.0 | | 23.2 | 13.9 | |
| 9.6 | | 28.2 | 38.2 | |
| 10.2 | | 44.7 | 30.1 | |
| 10.2 | | 49.7 | 2.0 | |
| 10.2 | 17 | 1.6 | 51.3 | |
| 10.0 | | 9.1 | 8.8 | |
| 10.3† | | 17.9 | 0.8 | |
| 10.0 | | 20.1 | 28.5 | |
| 10.2 | | 23.6 | 51.9 | |
| 9.2 | | 36.6 | 48.3 | |
| 9.5 | | 37.6 | 16.6 | |
| 9.4 | | 43.0 | 7.8 | 9.5 |
| 9.6 | | 45.6 | 0.5 | |
| 10.2 | | 47.1 | 29.2 | |
| 9.9† | | 50.9 | 1.0 | |
| 9.8 | | 52.6 | 23.0 | |
| 8.2 | 18 | 16.1 | 22.3 | 8.5 |
| 9.6 | | 16.6 | 52.5 | |
| 10.0 | | 41.6 | 57.2 | |
| 10.0 | | 42.6 | 52.7 | |
| 10.2 | | 42.6 | 49.7 | |
| 10.2 | | 52.1 | 32.1 | |
| 9.6 | 19 | 56.6 | 43.8 | |
| 10.2 | 20 | 17.1 | 35.3 | |
| 9.6 | | 31.1 | 41.1 | |
| 10.2 | | 41.3 | 0.5 | |
| 9.4 | | 54.1 | 21.9 | |
| 9.2 | 21 | 19.4 | 2.0 | 9.0 |
| 10.2 | | 30.6 | 22.9 | |
| 10.2 | | 46.6 | 52.0 | |
| 9.4 | | 52.6 | 57.2 | |
| 9.2 | 22 | 12.6 | 59.0 | 10.0 |
| 8.4 | | 12.6 | 7.7 | 8.8 |
| 9.6 | | 13.1 | 27.2 | |

## 6001—6060.

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.2 | 22 | 35.7 | 1.9 | |
| 10.2 | 23 | 1.1 | 45.2 | |
| 9.5 | | 8.1 | 6.7 | |
| 9.6 | | 10.6 | 24.6 | |
| 10.0 | | 13.6 | 32.9 | |
| 9.8 | | 14.6 | 47.8 | |
| 9.4 | | 28.7 | 57.2 | 9.0 |
| 10.2 | | 29.1 | 6.4 | |
| 10.2 | | 52.6 | 23.7 | |
| 9.4 | | 53.1 | 8.2 | 9.5 |
| 10.0 | 24 | 1.1 | 46.2 | |
| 10.2 | | 5.5 | 31.1 | |
| 9.6 | | 8.7 | 58.9 | 9.5 |
| 9.6 | | 12.0 | 54.5 | |
| 10.0 | | 21.0 | 33.1 | |
| 10.2 | | 55.5 | 34.6 | |
| 10.0 | | 59.0 | 13.6 | |
| 9.8 | 25 | 1.0 | 23.0 | |
| 8.3 | | 8.0 | 56.1 | 9.0 |
| 9.0 | | 43.0 | 43.3 | |
| 10.0 | | 46.5 | 26.8 | |
| 9.5 | 26 | 29.5 | 54.1 | |
| 10.0 | | 40.0 | 29.1 | |
| 10.2 | | 54.5 | 14.6 | |
| 10.0 | | 58.0 | 9.8 | |
| 10.0 | 27 | 7.0 | 25.6 | |
| 10.2 | | 12.0 | 4.6 | |
| 9.5 | | 26.0 | 43.2 | |
| 9.8 | | 30.0 | 46.9 | |
| 9.8 | | 38.5 | 22.0 | |
| 10.0 | | 54.5 | 40.7 | |
| 8.8 | | 56.0 | 41.5 | 9.5 |
| 9.5 | 28 | 2.0 | 26.3 | 9.5 |
| 9.5 | | 11.0 | 55.2 | |
| 9.6 | 29 | 1.5 | 14.5 | |
| 10.0 | | 5.5 | 41.4 | |
| 8.2 | | 13.0 | 58.0 | 8.5 GS |
| 8.2 | | 19.5 | 58.2 | 8.5 GS |
| 9.8 | | 26.5 | 23.8 | |
| 10.0 | | 27.0 | 37.1 | |
| 10.0 | | 33.0 | 14.6 | |
| 10.0 | | 33.5 | 25.7 | |
| 8.3 | 30 | 17.0 | 48.0 | 8.5 |
| 9.4 | | 21.0 | 33.3 | 9.0 |
| 9.6 | | 23.0 | 37.3 | 9.5 |
| 10.0 | | 38.4 | 31.0 | |
| 10.2 | | 41.4 | 36.4 | |
| 10.0 | | 42.9 | 18.0 | |
| 9.5 | | 50.6 | 59.2 | |
| 9.6 | | 53.1 | 58.9 | |
| 10.0 | 31 | 10.9 | 45.2 | |
| 10.2 | | 11.9 | 9.8 | |
| 10.2 | | 36.4 | 40.7 | |
| 10.2 | 32 | 2.4 | 45.0 | |
| 9.6 | | 12.4 | 12.7 | |
| 9.6 | | 15.9 | 17.9 | |
| 9.0 | | 20.9 | 2.0 | 9.0 |
| 9.2 | | 21.9 | 32.0 | |
| 10.2 | | 21.9 | 46.2 | |
| 8.6 | | 36.4 | 0.2 | 9.0 |

## 6061—6120.

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.5 | 32 | 45.1 | 2.2 | 10.0 |
| 9.5 | | 55.9 | 3.8 | |
| 10.0 | | 57.4 | 38.2 | |
| 10.0 | | 59.9 | 7.4 | 9.5 |
| 10.2 | 33 | 19.4 | 8.7 | |
| 9.2 | | 29.4 | 4.2 | 9.5 |
| 10.0 | | 38.4 | 38.6 | |
| 8.8 | | 49.9 | 56.1 | 8.5 |
| 10.2† | | 52.2 | 1.1 | |
| 9.6 | 34 | 0.4 | 44.0 | |
| 10.0 | | 17.6 | 0.2 | |
| 9.2 | | 19.4 | 12.6 | |
| 10.0† | | 29.7 | 0.3 | |
| 9.2 | | 31.9 | 17.4 | |
| 9.8 | | 54.4 | 3.2 | 9.5 |
| 10.2 | | 55.4 | 38.7 | |
| 8.8 | | 57.4 | 42.0 | |
| 9.8 | 35 | 0.9 | 59.0 | |
| 9.8 | | 1.1 | 0.8 | |
| 10.2 | | 22.9 | 8.2 | |
| 10.2 | | 28.6 | 1.0 | |
| 10.0 | | 35.9 | 33.3 | |
| 9.2 | | 40.1 | 59.4 | |
| 9.8 | | 41.9 | 25.4 | |
| 9.6 | | 43.9 | 14.2 | |
| 9.8 | 36 | 7.8 | 45.2 | |
| 10.0 | | 9.3 | 10.6 | |
| 9.4 | | 9.8 | 33.8 | |
| 9.8 | | 10.8 | 35.9 | |
| 9.8 | | 40.8 | 37.4 | |
| 9.6 | | 43.8 | 31.1 | |
| 10.0† | | 49.7 | 0.1 | |
| 10.0 | 37 | 34.3 | 54.5 | |
| 8.0 | | 38.3 | 48.7 | 8.0 G |
| 9.4 | | 43.3 | 8.8 | |
| 10.2 | | 44.8 | 10.6 | |
| 10.2 | | 45.8 | 29.0 | |
| 9.2 | | 51.8 | 13.6 | 9.5 |
| 8.2 | | 53.8 | 19.8 | 8.0 GS |
| 8.7 | | 56.8 | 33.9 | |
| 9.5 | 38 | 10.3 | 48.1 | 9.0 |
| 9.2 | | 10.8 | 35.2 | |
| 7.6 | | 13.3 | 14.7 | 7.5 GSt |
| 9.8 | | 34.5 | 0.7 | |
| 9.4 | 39 | 1.1 | 55.0 | |
| 9.5 | | 5.9 | 15.8 | |
| 10.0 | | 30.4 | 17.2 | |
| 8.9 | | 35.6 | 57.0 | |
| 10.0 | | 40.3 | 3.1 | |
| 9.8 | | 42.5 | 46.8 | |
| 8.2 | | 55.0 | 34.8 | 8.0 |
| 10.2 | | 58.2 | 59.9 | |
| 10.2 | 40 | 2.6 | 56.5 | |
| 10.0 | | 4.3 | 59.5 | |
| 9.5 | | 6.3 | 56.3 | |
| 10.2 | | 7.7 | 9.9 | |
| 10.0 | | 8.0 | 59.1 | |
| 10.3† | | 9.7 | 0.1 | |
| 10.2 | | 12.3 | 56.4 | |
| 8.8 | | 17.3 | 41.6 | 9.0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 50 | 98 | 7.4 |
| 14 | 0 | 99 | 7.2 |
| | 10 | 101 | 7.0 |
| | 20 | 103 | 6.8 |
| | 30 | 104 | 6.6 |
| | 40 | 106 | 6.4 |
| | 50 | 107 | 6.2 |



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25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 14 40 | 106 | 6·4 |
| 50 | 107 | 6·2 |
| 15 0 | 109 | 5·9 |
| 10 | 110 | 5·6 |

**6121—6180.**

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 40 | 26·2 | 44·1 | 8·5 |
| 9·7 | | 40·5 | 59·5 | |
| 10·1 | | 44·4 | 43·0 | |
| 10·1 | | 52·2 | 7·2 | 9·0 |
| 9·6 | 41 | 4·2 | 28·9 | |
| 10·0 | | 21·2 | 45·1 | |
| 9·6 | | 28·7 | 11·0 | |
| 9·4 | | 34·2 | 23·0 | |
| 10·0 | | 38·2 | 23·2 | |
| 8·7 | | 41·7 | 6·9 | 8·0 |
| 10·2† | | 55·2 | 0·1 | |
| 10·0 | 42 | 2·2 | 25·2 | |
| 10·0 | | 8·7 | 48·8 | |
| 9·8† | | 13·7 | 0·8 | |
| 10·1 | | 14·7 | 46·5 | |
| 9·6 | | 17·2 | 37·0 | |
| 8·8 | | 30·7 | 23·7 | 9·0 |
| 10·1 | | 31·7 | 56·1 | |
| 9·4 | 43 | 6·2 | 22·8 | 9·5 |
| 9·4 | | 25·7 | 38·4 | |
| 10·1 | | 32·2 | 16·0 | ? |
| 10·1 | | 40·7 | 37·4 | |
| 9·6 | | 56·7 | 57·4 | |
| 10·3† | 44 | 9·1 | 1·8 | × |
| 10·1 | | 10·0 | 0·5 | |
| 9·4 | | 11·2 | 34·2 | |
| 9·6 | | 14·2 | 30·9 | |
| 9·4 | | 21·2 | 23·4 | 9·0 |
| 9·2 | | 22·7 | 19·5 | 9·0 |
| 9·6 | | 28·2 | 11·2 | |
| 9·8 | | 37·2 | 54·1 | |
| 10·1 | | 53·7 | 44·4 | |
| 9·8 | 45 | 21·2 | 21·0 | |
| 10·0 | | 26·2 | 23·8 | |
| 10·2† | | 29·5 | 1·8 | |
| 9·8 | | 31·2 | 7·0 | 9·5 |
| 10·4† | 46 | 40·5 | 0·9 | |
| 8·4 | | 42·2 | 8·6 | 8·2 |
| 9·4 | | 46·7 | 16·3 | 9·5 |
| 10·1 | 47 | 4·7 | 44·0 | |
| 9·0 | | 32·2 | 13·8 | 9·0 |
| 9·8 | | 40·2 | 44·4 | |
| 9·6 | | 40·7 | 9·6 | |
| 10·1 | | 45·2 | 8·1 | 10·0 |
| 9·2 | | 52·7 | 15·5 | 9·0 |
| 10·0 | 48 | 2·7 | 31·6 | |
| 9·8 | | 4·7 | 46·3 | |
| 9·4 | | 8·7 | 57·2 | |
| 8·6 | | 14·2 | 9·1 | 8·8 |
| 9·6 | | 24·2 | 59·4 | |
| 9·6 | | 25·2 | 1·1 | |
| 9·6 | | 30·7 | 1·4 | |
| 9·8 | | 56·2 | 14·5 | |
| 10·2† | 49 | 24·2 | 1·0 | |
| 10·1 | | 53·2 | 39·2 | |
| 10·1 | 50 | 19·2 | 41·7 | |
| 9·8 | | 20·7 | 18·9 | 9·5 |
| 9·4 | | 27·2 | 56·9 | |
| 10·0 | | 27·7 | 23·1 | |
| 9·2 | | 40·7 | 29·5 | |

**6181—6240.**

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·0 | 50 | 40·7 | 39·1 | G |
| 9·7 | | 59·7 | 15·3 | |
| 9·4 | 51 | 0·2 | 26·0 | |
| 10·6† | | 0·7 | 1·0 | |
| 10·1 | | 12·2 | 49·3 | |
| 8·9 | | 32·7 | 33·9 | |
| 9·7 | | 36·7 | 16·8 | |
| 10·1 | | 39·2 | 41·4 | |
| 9·6 | | 40·7 | 38·2 | |
| 9·6 | | 55·7 | 18·0 | |
| 9·7 | | 58·2 | 41·1 | |
| 10·0 | 52 | 4·7 | 43·5 | |
| 9·7 | | 15·7 | 16·7 | 9·0 |
| 10·1 | | 29·0 | 37·3 | |
| 9·8 | | 32·0 | 55·9 | |
| 9·0 | 53 | 2·5 | 11·4 | 9·5 |
| 9·2 | | 6·5 | 8·4 | 9·5 |
| 9·8 | | 9·0 | 28·2 | 9·5 |
| 10·1 | | 14·0 | 40·9 | |
| 10·0 | | 22·5 | 43·1 | |
| 10·1 | | 26·0 | 45·0 | |
| 10·1 | | 30·5 | 10·6 | |
| 9·8 | | 30·5 | 48·3 | |
| 10·1 | | 37·5 | 28·5 | |
| 10·0 | | 38·5 | 6·1 | |
| 8·4 | | 40·5 | 19·8 | 8·0 |
| 9·8 | | 49·5 | 43·0 | |
| 10·1 | | 51·0 | 48·8 | |
| 10·1 | 54 | 4·8 | 45·6 | |
| 10·0 | | 6·0 | 47·6 | |
| 9·8 | | 6·5 | 44·3 | |
| 9·7 | | 10·0 | 47·0 | |
| 9·8 | | 11·0 | 41·6 | |
| 9·4 | | 11·5 | 53·4 | |
| 10·1 | | 18·8 | 54·2 | |
| 10·0 | | 20·5 | 57·2 | |
| 10·1 | | 22·5 | 44·9 | |
| 10·0 | | 23·0 | 42·2 | |
| 10·1 | | 24·5 | 47·3 | |
| 9·8 | | 32·5 | 48·3 | |
| 9·8 | | 32·5 | 58·6 | |
| 9·6 | | 34·5 | 53·0 | 9·0 |
| 9·2 | | 41·5 | 27·8 | 8·5 G |
| 10·0 | | 44·0 | 44·8 | |
| 10·1 | | 46·5 | 50·2 | |
| 10·0 | | 48·0 | 44·4 | |
| 10·1 | | 54·5 | 23·8 | 10·0 |
| 9·0 | | 55·5 | 6·0 | |
| 9·4 | | 56·0 | 50·9 | 9·0 G |
| 9·6 | 55 | 5·5 | 55·6 | |
| 10·0 | | 7·0 | 56·2 | |
| 10·1 | | 9·4 | 58·9 | |
| 10·0 | | 9·9 | 46·0 | |
| 9·6 | | 10·4 | 54·1 | |
| 10·0 | | 11·4 | 58·0 | |
| 10·1 | | 14·4 | 54·5 | |
| 10·1 | | 16·9 | 46·9 | |
| 10·1 | | 19·6 | 55·1 | |
| 8·7 | | 19·9 | 7·8 | 8·0 G |
| 9·8 | | 19·9 | 4·0 | |

**6241—6300.**

| mag. | 14h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 55 | 21·4 | 48·1 | |
| 9·8 | | 25·5 | 57·3 | |
| 10·0 | | 32·4 | 51·5 | |
| 10·0 | | 35·4 | 48·8 | |
| 9·7 | | 37·9 | 27·4 | |
| 10·1 | | 40·4 | 1·8 | |
| 10·1 | | 42·4 | 49·8 | |
| 9·8 | | 43·9 | 50·8 | |
| 10·0 | | 44·4 | 49·6 | |
| 9·8 | | 50·4 | 23·4 | 9·5 |
| 9·8 | | 52·4 | 48·4 | 9·0 |
| 9·4 | | 54·4 | 57·0 | |
| 10·0 | | 59·4 | 45·0 | |
| 10·1 | 56 | 9·6 | 25·3 | |
| 10·1 | | 15·4 | 52·2 | |
| 10·1 | | 17·6 | 53·7 | 9·5 |
| 9·0 | | 17·9 | 32·8 | |
| 10·0 | | 23·9 | 55·4 | |
| 8·8 | | 27·8 | 2·5 | 8·5 |
| 10·1 | | 29·6 | 53·6 | |
| 10·1 | | 31·9 | 54·1 | |
| 10·0 | | 33·9 | 48·2 | |
| 9·6 | | 36·4 | 36·6 | |
| 10·0 | | 37·6 | 56·2 | |
| 10·0 | | 40·4 | 57·2 | |
| 9·6 | | 42·4 | 55·8 | |
| 10·1 | | 42·9 | 39·0 | |
| 10·6† | | 43·3 | 0·2 | |
| 10·0 | | 45·4 | 53·6 | |
| 10·1 | | 46·9 | 35·8 | 9·5 |
| 10·0 | | 51·9 | 53·6 | |
| 9·8 | | 52·4 | 42·4 | |
| 10·0 | | 54·4 | 38·4 | |
| 10·0 | | 55·4 | 42·7 | |
| 9·8 | 57 | 2·4 | 39·6 | |
| 10·0 | | 4·4 | 55·1 | |
| 10·0 | | 8·2 | 48·2 | |
| 9·6 | | 18·7 | 42·6 | |
| 10·1 | | 38·2 | 43·2 | |
| 9·6 | | 39·2 | 49·4 | 9·5 |
| 10·0 | | 43·2 | 41·4 | |
| 8·9 | | 48·7 | 27·2 | 9·0 |
| 9·4 | 58 | 0·7 | 40·8 | |
| 10·1 | | 11·7 | 51·2 | |
| 9·8 | | 18·4 | 58·9 | |
| 10·1 | | 18·7 | 57·4 | |
| 10·0 | | 23·2 | 23·4 | |
| 8·5 | | 25·7 | 50·8 | 8·5 |
| 8·6 | | 31·2 | 21·3 | 9·0 |
| 9·8 | | 32·2 | 38·2 | |
| 10·1 | | 38·9 | 59·0 | |
| 9·0 | | 46·2 | 44·9 | 9·0 |
| 9·4 | | 53·2 | 50·0 | |
| 8·4 | | 57·2 | 43·8 | 8·2 G |
| 9·4 | 59 | 14·7 | 8·8 | 8·5 |
| 10·2† | | 15·3 | 0·5 | |
| 9·2 | | 16·2 | 51·7 | 9·0 |
| 10·0 | | 22·7 | 50·0 | |
| 10·1 | | 29·7 | 34·0 | |
| 10·1 | | 32·2 | 26·9 | |

**6301—6360.**

| mag. | 14h.–15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·1 | 59 | 36·7 | 19·1 | 8·2 G |
| 10·1 | | 49·4 | 58·7 | |
| 10·1 | | 50·2 | 18·8 | |
| 10·0 | | 52·4 | 45·3 | |
| 10·1 | | 54·2 | 52·1 | |
| 9·4 | | 55·2 | 29·4 | |
| 9·8 | 0 | 5·2 | 44·0 | |
| 9·7 | | 21·2 | 30·2 | |
| 10·0 | | 22·2 | 8·2 | |
| 9·6 | | 36·0 | 1·6 | |
| 9·2 | | 36·2 | 26·7 | 9·5 |
| 9·8 | | 36·2 | 10·8 | |
| 9·7 | | 36·7 | 24·0 | |
| 10·1 | | 44·2 | 33·8 | |
| 9·8 | | 45·7 | 35·6 | |
| 9·6 | | 48·7 | 37·9 | |
| 10·1† | | 51·2 | 2·0 | |
| 10·1 | | 51·9 | 16·8 | |
| 10·0 | | 55·9 | 37·2 | |
| 9·8 | | 58·7 | 59·7 | |
| 9·4 | 1 | 1·9 | 4·4 | 8·5 |
| 10·0 | | 4·0 | 18·7 | |
| 8·5 | | 5·4 | 5·8 | 8·5 |
| 9·4 | | 11·4 | 52·6 | 9·2 |
| 9·4 | | 22·4 | 11·0 | |
| 10·6† | | 25·2 | 2·1 | |
| 9·0 | | 56·4 | 39·8 | 9·0 |
| 10·1 | 2 | 1·0 | 56·0 | |
| 9·8 | | 15·9 | 50·0 | |
| 9·8 | | 19·9 | 40·6 | |
| 9·8 | | 20·2 | 58·0 | |
| 9·8 | | 21·4 | 51·0 | |
| 10·0 | | 32·4 | 42·3 | |
| 9·6 | | 40·9 | 56·6 | |
| 9·0 | | 58·4 | 36·3 | 9·0 |
| 8·8 | 3 | 3·4 | 54·1 | 9·2 |
| 8·1 | | 10·9 | 10·9 | 8·3 |
| 10·6† | | 25·2 | 2·4 | |
| 9·6 | | 25·9 | 37·1 | 9·0 |
| 10·1 | | 26·3 | 1·1 | |
| 10·1 | | 28·5 | 1·7 | |
| 9·4 | | 31·4 | 14·0 | |
| 9·7 | | 33·4 | 6·3 | |
| 9·7 | | 39·9 | 22·4 | |
| 9·4 | | 48·9 | 53·8 | 9·2 |
| 9·6 | | 55·9 | 45·0 | |
| 10·0 | 4 | 5·4 | 27·4 | |
| 9·8 | | 5·9 | 37·9 | |
| 10·3† | | 21·2 | 1·4 | |
| 10·1 | | 29·9 | 6·9 | |
| 9·8 | | 34·9 | 4·9 | |
| 10·6† | | 35·7 | 1·1 | |
| 10·1 | | 44·4 | 5·1 | |
| 9·2 | | 46·9 | 39·8 | 9·0 |
| 9·2 | | 51·9 | 32·2 | 9·5 |
| 10·6† | | 55·2 | 1·3 | |
| 9·6 | | 55·6 | 13·2 | 9·5 |
| 9·8 | | 57·1 | 12·8 | |
| 10·1 | 5 | 5·6 | 59·5 | |
| 9·6 | | 7·1 | 54·0 | |



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## 6361—6420.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·5 | 5 | 24·1 | 56·4 | 8·5 |
| 9·7 | | 24·1 | 43·8 | |
| 10·0 | | 37·1 | 43·1 | |
| 10·1 | | 43·1 | 54·8 | |
| 10·6† | | 44·7 | 0·4 | |
| 9·8 | | 47·6 | 14·0 | 9·0 |
| 10·0 | | 54·1 | 18·5 | |
| 9·8 | | 55·1 | 26·5 | |
| 9·4 | 6 | 10·7 | 2·1 | 9·0 |
| 10·0 | | 18·6 | 54·1 | |
| 10·0 | | 19·6 | 34·1 | |
| 10·2† | | 20·3 | 2·5 | |
| 9·8 | | 20·6 | 44·6 | |
| 10·0 | | 23·6 | 55·8 | |
| 9·8 | | 32·1 | 8·3 | 9·5 |
| 10·0 | | 32·6 | 56·6 | |
| 10·3† | | 35·7 | 1·8 | |
| 9·8 | | 39·6 | 43·2 | |
| 9·8 | | 47·6 | 52·7 | |
| 9·6 | | 49·1 | 12·6 | 9·0 |
| 10·1 | | 51·6 | 31·0 | |
| 9·0 | | 58·1 | 40·1 | 9·0 |
| 10·1 | 7 | 3·6 | 32·6 | |
| 9·6 | | 8·1 | 35·9 | |
| 8·9 | | 8·1 | 40·0 | 9·0 |
| 9·8 | | 10·6 | 47·3 | |
| 10·1 | | 18·1 | 59·2 | |
| 10·1 | | 21·8 | 59·1 | |
| 9·0 | | 25·6 | 26·8 | 9·0 |
| 9·7 | | 27·6 | 38·4 | ? |
| 8·7 | | 29·6 | 38·4 | |
| 8·6 | | 40·6 | 43·8 | 9·2 |
| 10·1 | | 41·6 | 13·4 | |
| 10·1 | | 43·6 | 19·4 | |
| 9·8 | | 52·6 | 45·4 | |
| 10·6† | 8 | 5·0 | 0·9 | |
| 7·8 | | 9·6 | 46·4 | 8·5 G |
| 9·6 | | 10·6 | 15·9 | |
| 10·0 | | 16·1 | 52·9 | |
| 9·2 | | 30·6 | 44·9 | 9·0 |
| 10·1 | | 33·6 | 32·7 | |
| 10·1 | 9 | 1·7 | 53·9 | |
| 9·4 | | 7·7 | 30·1 | |
| 10·1 | | 13·2 | 59·4 | |
| 8·8 | | 17·2 | 43·8 | 9·0 |
| 9·7 | | 18·2 | 13·9 | 9·0 G |
| 10·1 | | 25·2 | 35·5 | |
| 8·2 | | 28·7 | 54·1 | 7·5 GSt |
| 9·4 | | 33·2 | 54·0 | 9·5 |
| 9·7 | | 41·2 | 20·7 | |
| 9·4 | | 43·7 | 36·7 | |
| 8·8 | | 49·2 | 52·3 | 9·0 |
| 10·0 | | 49·2 | 10·3 | |
| 10·1 | | 49·2 | 49·8 | |
| 9·6 | | 54·7 | 38·3 | |
| 10·1 | 10 | 7·2 | 37·1 | |
| 9·8 | | 19·7 | 31·0 | |
| 10·1 | | 20·4 | 59·4 | |
| 8·9 | | 27·2 | 5·5 | 9·0 |
| 9·7 | | 38·2 | 54·9 | |

## 6421—6480.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·1 | 10 | 52·6 | 0·6 | |
| 8·9 | | 54·2 | 18·2 | 9·0 |
| 9·6 | | 57·9 | 2·6 | |
| 9·8 | | 58·7 | 27·9 | |
| 10·1 | 11 | 12·2 | 41·1 | |
| 9·8 | | 19·0 | 22·0 | 9·0 |
| 10·1 | | 28·0 | 47·2 | |
| 10·4† | | 43·5 | 0·8 | 9·0 |
| 10·6† | | 46·5 | 1·0 | |
| 10·1 | | 54·8 | 28·0 | |
| 7·6 | | 55·2 | 50·1 | 8·0 GSt |
| 10·0 | 12 | 0·2 | 2·8 | |
| 10·1 | | 9·2 | 52·1 | |
| 9·6 | | 10·7 | 33·9 | |
| 9·0 | | 27·5 | 5·1 | 8·2 G |
| 9·8 | | 32·3 | 32·5 | |
| 9·6 | | 43·8 | 21·9 | |
| 10·1 | | 44·8 | 44·6 | |
| 9·7 | | 45·3 | 31·6 | |
| 10·2 | | 46·8 | 13·0 | |
| 10·2 | | 53·8 | 59·3 | |
| 10·2 | | 54·8 | 57·2 | |
| 7·6 | 13 | 0·8 | 8·9 | 7·5 GSt |
| 10·1 | | 0·8 | 13·9 | |
| 9·8 | | 2·8 | 20·0 | |
| 10·2 | | 3·9 | 0·5 | |
| 9·9 | | 5·8 | 43·7 | |
| 9·8 | | 12·1 | 58·1 | |
| 9·9 | | 12·3 | 8·9 | |
| 10·2 | | 13·8 | 8·1 | |
| 9·9 | | 24·8 | 24·9 | |
| 9·6 | | 32·2 | 4·9 | |
| 9·1 | | 39·7 | 17·3 | |
| 9·4 | | 40·7 | 58·4 | 9·5 |
| 10·6† | | 44·5 | 1·0 | |
| 9·8 | | 45·2 | 4·1 | |
| 10·1 | | 52·2 | 6·1 | |
| 9·8 | | 59·7 | 19·3 | |
| 10·0 | 14 | 0·7 | 44·7 | |
| 9·6 | | 8·2 | 4·8 | |
| 10·1 | | 8·2 | 53·6 | |
| 10·2 | | 13·7 | 49·8 | |
| 10·1 | | 19·7 | 28·8 | |
| 9·8 | | 22·7 | 13·7 | |
| 9·8 | | 27·7 | 16·9 | |
| 10·1 | | 29·7 | 24·8 | |
| 9·2 | | 30·2 | 39·4 | 10·0 |
| 10·2 | | 32·2 | 48·3 | |
| 10·2 | | 33·5 | 25·9 | |
| 9·8 | | 50·7 | 55·7 | |
| 10·1 | | 50·7 | 21·1 | |
| 9·8 | 15 | 0·7 | 31·6 | |
| 10·1 | | 5·5 | 16·5 | |
| 8·4 | | 26·2 | 40·7 | 9·0 |
| 9·6 | | 32·7 | 21·3 | |
| 10·0 | | 47·7 | 54·5 | |
| 9·4 | | 57·7 | 36·3 | 9·0 |
| 10·2 | | 59·2 | 14·0 | |
| 9·6 | 16 | 0·7 | 52·8 | |
| 10·1 | | 17·7 | 24·4 | |

## 6481—6540.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 16 | 20·2 | 59·5 | |
| 7·9 | | 32·2 | 52·5 | 7·5 G |
| 7·8 | | 37·2 | 19·5 | 8·2 G |
| 10·0† | | 39·3 | 2·1 | |
| 10·2 | | 43·7 | 30·2 | |
| 9·6 | | 48·0 | 1·9 | |
| 9·7 | | 51·7 | 11·3 | |
| 7·9 | | 52·2 | 6·8 | 8·5 |
| 9·6 | | 56·1 | 40·0 | |
| 9·6 | | 56·6 | 37·9 | |
| 10·2 | 17 | 2·6 | 59·0 | |
| 9·7 | | 10·1 | 53·2 | 9·5 |
| 10·2 | | 14·6 | 54·3 | |
| 10·0 | | 22·6 | 23·0 | |
| 10·0 | | 30·1 | 47·4 | |
| 10·0 | | 44·6 | 14·1 | 10·0 : |
| 10·1 | | 50·6 | 26·2 | |
| 8·4 | | 52·1 | 39·8 | 8·5 |
| 8·4 | | 53·6 | 52·4 | 8·5 |
| 10·2 | 18 | 6·1 | 4·3 | |
| 9·6 | | 7·6 | 15·3 | |
| 10·0† | | 12·0 | 1·1 | |
| 10·2 | | 22·1 | 39·3 | |
| 7·4 | | 33·6 | 15·6 | 7·7 GS |
| 9·7 | | 34·1 | 51·2 | |
| 10·1 | | 34·6 | 34·5 | |
| 10·1 | | 36·1 | 45·7 | |
| 10·0† | | 37·0 | 1·5 | |
| 10·0 | | 55·6 | 15·5 | |
| 10·2 | | 57·1 | 54·3 | |
| 10·1 | 19 | 1·6 | 41·0 | |
| 9·8 | | 2·1 | 37·3 | |
| 10·2 | | 15·6 | 7·5 | |
| 10·0 | | 17·6 | 33·0 | |
| 10·0 | | 20·1 | 34·3 | |
| 9·4 | | 22·1 | 37·4 | 9·0 |
| 7·9 | | 28·6 | 29·1 | 8·0 G |
| 9·4 | | 32·1 | 25·3 | |
| 8·6 | | 32·1 | 0·5 | 8·5 |
| 9·9 | | 50·6 | 46·9 | |
| 9·7 | | 54·6 | 15·4 | |
| 9·3 | | 55·1 | 36·5 | |
| 9·7 | | 59·6 | 23·1 | |
| 9·1 | 20 | 12·1 | 9·4 | 9·0 |
| 10·2 | | 16·1 | 13·0 | |
| 8·8 | | 16·1 | 53·1 | 9·2 |
| 9·4 | | 21·0 | 40·0 | |
| 10·0† | | 28·0 | 0·5 | |
| 10·2 | | 29·0 | 0·7 | |
| 10·0 | 21 | 0·8 | 0·8 | |
| 10·0 | | 2·0 | 8·5 | |
| 10·0 | | 8·5 | 52·6 | |
| 9·4 | | 22·5 | 8·2 | |
| 10·2 | | 30·0 | 4·0 | |
| 9·7 | | 43·5 | 56·4 | |
| 9·6 | | 47·5 | 1·4 | |
| 9·9 | | 49·0 | 2·4 | |
| 9·7 | | 53·5 | 33·8 | |
| 10·2 | 22 | 5·0 | 51·2 | |
| 9·7 | | 6·5 | 36·8 | |

## 6541—6600.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 22 | 9·0 | 25·0 | |
| 10·1 | | 22·7 | 42·9 | |
| 9·0 | | 27·5 | 51·2 | 9·8 |
| 8·2 | | 28·0 | 55·9 | 9·0 |
| 9·7 | | 51·5 | 37·9 | |
| 10·2 | | 55·0 | 6·8 | |
| 9·6 | | 57·5 | 51·6 | |
| 10·2 | 23 | 3·5 | 50·1 | |
| 10·2 | | 5·0 | 25·9 | |
| 9·7 | | 7·0 | 46·9 | |
| 10·1 | | 19·5 | 17·2 | |
| 9·9† | | 39·8 | 0·9 | |
| 9·8 | | 44·0 | 18·3 | 10·0 |
| 10·1 | | 47·5 | 29·7 | |
| 10·2 | | 48·5 | 6·6 | |
| 10·2 | 24 | 11·5 | 43·9 | |
| 9·7 | | 16·0 | 51·2 | |
| 10·2 | | 27·0 | 15·2 | |
| 9·4 | | 27·5 | 27·3 | |
| 10·2 | | 33·0 | 5·4 | |
| 9·9 | | 41·9 | 39·2 | 9·0 |
| 9·6 | | 48·4 | 37·7 | |
| 10·2 | 25 | 21·9 | 11·3 | |
| 10·2 | | 22·0 | 16·9 | |
| 10·0 | | 25·9 | 7·9 | |
| 9·7 | | 27·9 | 23·1 | 9·0 |
| 8·9 | | 43·4 | 29·9 | 9·0 |
| 8·3 | | 44·4 | 10·7 | 8·8 |
| 9·8 | | 54·9 | 47·4 | |
| 9·6 | 26 | 2·4 | 11·9 | 9·0 |
| 10·0 | | 16·9 | 55·7 | |
| 10·2 | | 20·9 | 33·8 | |
| 9·1 | | 24·9 | 11·1 | 9·0 |
| 8·8 | | 28·4 | 11·5 | 8·8 |
| 9·4 | | 40·9 | 50·5 | |
| 10·2 | | 49·4 | 13·4 | |
| 9·3 | | 50·4 | 11·3 | |
| 8·7 | 27 | 1·9 | 4·0 | 8·8 |
| 10·2 | | 5·9 | 52·6 | |
| 10·0 | | 5·9 | 15·0 | |
| 10·2 | | 7·4 | 31·3 | |
| 9·6 | | 12·9 | 10·2 | |
| 10·1 | | 16·4 | 41·1 | |
| 9·9 | | 20·2 | 1·5 | |
| 9·6 | | 23·4 | 27·2 | |
| 7·9 | | 28·4 | 17·9 | 8·0 GS |
| 9·6 | | 28·6 | 59·1 | |
| 9·7† | | 43·5 | 2·0 | |
| 10·2 | | 47·3 | 1·0 | |
| 9·6 | | 50·4 | 26·8 | |
| 10·0 | | 54·9 | 19·1 | |
| 8·2 | | 56·9 | 56·9 | 8·5 G |
| 7·9 | | 57·4 | 4·4 | 8·0 G |
| 10·0 | | 57·9 | 53·4 | |
| 10·2 | | 59·2 | 0·2 | |
| 10·0 | 28 | 0·9 | 15·9 | |
| 10·2 | | 10·9 | 24·2 | |
| 10·2 | | 18·4 | 26·0 | |
| 9·6 | | 23·4 | 37·1 | |
| 10·1 | | 26·9 | 51·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 109 | 5·9 |
| | 10 | 110 | 5·6 |
| | 20 | 111 | 5·4 |
| | 30 | 113 | 5·1 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 20 | 111 | 5·4 |
| | 30 | 113 | 5·1 |
| | 40 | 114 | 4·8 |
| | 50 | 115 | 4·5 |

## 6601—6660.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 28 | 33·3 | 16·5 | |
| 10·0 | | 33·3 | 37·0 | |
| 9·1 | | 50·8 | 42·3 | 9·5 |
| 9·8 | | 56·8 | 41·0 | |
| 9·4 | 29 | 2·3 | 14·5 | |
| 10·2 | | 4·3 | 3·4 | |
| 10·2 | | 9·5 | 1·2 | |
| 10·1 | | 12·3 | 37·1 | |
| 10·2 | | 15·3 | 53·3 | |
| 9·7 | | 25·8 | 25·4 | |
| 9·6 | | 26·3 | 17·3 | |
| 10·0 | | 32·3 | 17·2 | |
| 10·2 | | 32·3 | 10·4 | |
| 9·9 | | 37·3 | 10·5 | |
| 9·3 | | 39·8 | 18·4 | 9·5 |
| 10·0 | | 55·8 | 46·2 | |
| 10·2 | | 57·9 | 24·2 | |
| 9·9 | 30 | 8·3 | 22·3 | |
| 9·4 | | 21·8 | 59·2 | 9·5 |
| 9·2 | | 31·8 | 35·5 | 9·5 |
| 10·2 | | 36·3 | 13·6 | |
| 10·2 | | 40·3 | 20·5 | |
| 9·2 | | 43·3 | 12·4 | 9·5 |
| 9·8 | | 43·3 | 9·1 | |
| 9·7 | | 50·3 | 35·6 | |
| 10·1 | | 55·8 | 22·9 | |
| 9·1 | 31 | 18·3 | 20·2 | 9·0 |
| 9·9 | | 22·8 | 6·8 | |
| 9·4 | | 25·8 | 23·0 | 9·3 |
| 9·8 | | 27·3 | 25·4 | |
| 9·7 | | 29·8 | 46·4 | |
| 8·9 | | 36·8 | 34·7 | |
| 9·8† | | 38·3 | 1·2 | |
| 9·6 | | 39·3 | 43·7 | |
| 10·2 | 32 | 1·8 | 3·7 | |
| 9·3 | | 3·3 | 33·3 | |
| 9·3 | | 11·8 | 40·9 | |
| 9·1 | | 16·3 | 17·1 | 9·2 |
| 10·2 | | 17·8 | 10·8 | |
| 10·1 | | 19·8 | 5·6 | |
| 10·0 | | 28·7 | 35·1 | |
| 9·6 | | 37·2 | 28·3 | |
| 9·6 | | 43·2 | 21·1 | |
| 9·7 | | 43·7 | 36·9 | 9·5 |
| 10·0 | | 48·2 | 45·7 | |
| 10·2 | | 48·7 | 56·4 | |
| 9·3 | | 50·2 | 47·1 | 9·5 |
| 9·9 | | 53·7 | 25·7 | |
| 10·0 | | 58·7 | 44·7 | |
| 9·6 | | 59·7 | 17·3 | |
| 10·2 | 33 | 4·7 | 4·9 | |
| 9·9 | | 5·7 | 15·9 | |
| 9·3 | | 19·7 | 31·1 | 9·5 |
| 9·7 | | 30·2 | 36·1 | 9·0 |
| 9·9 | | 41·2 | 11·5 | |
| 9·7 | | 44·7 | 8·9 | 10·0 |
| 10·2 | | 48·2 | 21·7 | |
| 9·9 | | 52·7 | 32·3 | |
| 9·8 | | 56·2 | 16·9 | |
| 9·4 | 34 | 1·7 | 39·1 | 9·5 |

## 6661—6720.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 34 | 4·7 | 19·7 | |
| 9·7 | | 18·2 | 3·7 | |
| 9·9 | | 20·7 | 12·7 | |
| 10·2 | | 41·7 | 54·7 | |
| 9·7 | | 42·7 | 21·7 | 9·5 |
| 9·6 | | 43·2 | 52·9 | |
| 8·0 | | 43·7 | 55·3 | 8·0 c |
| 9·9 | | 44·2 | 27·1 | |
| 10·0 | | 49·2 | 27·1 | |
| 9·6 | | 49·7 | 37·9 | 9·5 |
| 9·8 | | 50·2 | 8·9 | |
| 8·5 | | 59·2 | 52·1 | 9·0 |
| 10·1 | 35 | 19·2 | 52·5 | |
| 8·4 | | 22·7 | 58·9 | 9·0 |
| 9·6 | | 27·2 | 22·8 | |
| 10·0 | | 31·7 | 31·6 | |
| 10·0 | | 53·7 | 35·3 | |
| 10·2 | | 54·0 | 36·3 | |
| 10·0† | 36 | 1·5 | 0·2 | |
| 9·7 | | 2·5 | 24·3 | 9·0 |
| 8·4 | | 8·8 | 2·5 | 8·0 G |
| 10·2 | | 12·8 | 0·7 | |
| 9·7 | | 23·5 | 31·9 | |
| 9·4 | | 29·5 | 11·1 | |
| 8·8 | | 34·0 | 36·9 | 8·0 |
| 10·2 | | 50·5 | 10·7 | |
| 9·7 | 37 | 5·5 | 10·1 | |
| 9·6 | | 6·5 | 5·1 | |
| 9·6 | | 8·5 | 4·9 | |
| 9·6 | | 11·0 | 36·3 | |
| 9·3 | | 28·0 | 57·1 | 9·8 |
| 9·7 | | 33·0 | 9·2 | |
| 10·1 | | 40·0 | 27·4 | |
| 9·9 | | 47·5 | 17·6 | 10·0 |
| 9·6 | 38 | 2·0 | 17·9 | 9·5 |
| 9·4 | | 6·5 | 7·5 | |
| 10·2 | | 11·5 | 39·9 | |
| 10·2 | 39 | 2·0 | 16·0 | |
| 9·7 | | 2·5 | 43·9 | |
| 10·0 | | 3·5 | 16·1 | |
| 9·8 | | 5·0 | 51·3 | 9·5 |
| 10·1 | | 9·5 | 16·9 | |
| 9·3 | | 21·5 | 29·6 | |
| 10·0 | | 28·0 | 37·9 | |
| 9·8 | | 37·5 | 23·7 | |
| 10·1 | | 52·0 | 54·3 | |
| 10·1 | | 58·5 | 17·1 | |
| 9·6 | 40 | 9·5 | 2·3 | |
| 10·2 | | 13·0 | 7·7 | |
| 10·0 | | 14·8 | 8·8 | |
| 10·2 | 41 | 0·3 | 32·9 | |
| 10·2 | | 4·3 | 0·8 | |
| 10·2 | | 17·8 | 21·9 | |
| 10·1 | | 22·8 | 32·7 | |
| 9·4 | | 35·3 | 11·4 | 9·0 |
| 9·7 | | 45·8 | 54·4 | |
| 9·8 | | 52·7 | 59·9 | |
| 9·9 | 42 | 0·3 | 47·9 | |
| 10·0† | | 13·1 | 0·2 | |
| 9·7 | | 14·8 | 19·0 | 10·0 |

## 6721—6780.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 18·8 | 47·1 | |
| 9·6 | 43 | 1·8 | 46·0 | |
| 8·4 | | 5·3 | 51·8 | 7·3 GSt |
| 8·4 | | 7·3 | 3·5 | 8·0 G |
| 10·2 | | 13·3 | 15·4 | |
| 8·6 | | 21·3 | 25·8 | 8·0 G |
| 10·1 | | 21·8 | 28·1 | |
| 8·2 | | 23·3 | 32·2 | 8·0 |
| 10·4 | | 25·5 | 8·8 | |
| 10·0 | | 42·5 | 19·2 | |
| 10·4 | | 49·5 | 55·6 | |
| 8·2 | | 49·7 | 49·5 | 8·8 |
| 9·8 | | 50·9 | 50·5 | |
| 9·8 | | 50·9 | 45·8 | |
| 10·0 | | 52·0 | 23·5 | |
| 8·8 | | 52·4 | 46·8 | 9·0 |
| 10·0 | | 52·5 | 11·3 | |
| 10·4 | | 52·5 | 39·8 | |
| 10·4 | | 55·5 | 40·4 | |
| 10·4 | | 57·0 | 26·0 | |
| 9·0 | | 58·0 | 10·8 | |
| 10·4 | | 58·0 | 53·0 | |
| 9·5 | 44 | 4·0 | 49·0 | |
| 9·3 | | 4·6 | 2·1 | 9·5 |
| 10·4 | | 5·5 | 53·0 | |
| 10·2 | | 22·0 | 59·1 | |
| 9·6 | | 22·0 | 30·4 | |
| 10·4 | | 27·5 | 41·0 | |
| 9·8 | | 32·0 | 51·8 | |
| 10·0 | | 39·5 | 15·8 | |
| 10·4 | | 40·0 | 14·6 | |
| 10·2 | | 41·0 | 47·2 | |
| 7·4 | | 41·5 | 12·5 | 7·2 GScr |
| 10·4 | | 42·0 | 45·0 | |
| 10·4 | | 43·5 | 21·7 | |
| 10·4 | | 44·5 | 32·8 | |
| 10·4 | | 46·5 | 21·3 | |
| 10·0 | | 49·0 | 4·8 | |
| 10·1 | | 52·0 | 7·5 | |
| 9·6 | | 52·5 | 22·0 | |
| 10·2 | | 54·0 | 49·8 | |
| 9·8 | 45 | 1·0 | 39·0 | 9·0 |
| 10·4 | | 2·5 | 24·8 | |
| 10·4 | | 14·0 | 35·3 | |
| 10·4 | | 18·0 | 1·8 | |
| 7·7 | | 22·5 | 6·6 | 7·5 GSt |
| 10·2 | | 24·5 | 5·1 | |
| 9·0 | | 25·5 | 37·7 | 8·5 |
| 10·0 | | 27·5 | 6·8 | |
| 10·2 | | 30·5 | 33·2 | |
| 10·0 | | 31·5 | 27·2 | |
| 9·6 | | 33·5 | 42·1 | |
| 10·2 | | 34·0 | 44·4 | |
| 9·8 | | 40·0 | 4·4 | |
| 10·0 | | 40·5 | 11·7 | |
| 10·4 | | 43·0 | 11·9 | |
| 10·0 | | 45·0 | 19·2 | |
| 9·8 | | 46·5 | 15·7 | |
| 10·4 | | 48·5 | 42·1 | |
| 10·4 | | 53·5 | 48·7 | |

## 6781—6840.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 45 | 53·5 | 2·5 | |
| 9·5 | | 57·0 | 35·5 | |
| 9·6 | | 57·5 | 45·1 | |
| 10·4 | 46 | 0·5 | 56·7 | |
| 10·0 | | 0·5 | 30·7 | |
| 9·8 | | 4·0 | 28·0 | |
| 10·2 | | 9·0 | 27·0 | |
| 10·0 | | 11·5 | 24·8 | |
| 10·4 | | 13·5 | 1·0 | |
| 9·8 | | 17·0 | 22·3 | |
| 7·9 | | 22·5 | 14·9 | 8·2 G |
| 10·4 | | 25·5 | 36·1 | |
| 10·4 | | 26·5 | 29·3 | |
| 9·8 | | 31·0 | 7·7 | |
| 9·8 | | 32·0 | 39·0 | |
| 10·2 | | 33·5 | 8·3 | |
| 10·4 | | 33·5 | 48·1 | |
| 9·8 | | 35·5 | 19·3 | |
| 10·4 | | 35·5 | 40·6 | |
| 10·4 | | 35·5 | 39·9 | |
| 10·4 | | 39·5 | 45·9 | |
| 10·4 | | 40·0 | 21·8 | |
| 10·4 | | 44·5 | 30·0 | |
| 10·0 | | 44·5 | 48·2 | |
| 9·8 | | 45·5 | 38·1 | |
| 10·4 | | 49·0 | 9·8 | |
| 10·4 | | 50·0 | 54·0 | |
| 10·4 | | 52·0 | 12·4 | |
| 10·0 | | 52·5 | 40·3 | |
| 10·4 | | 52·5 | 9·9 | |
| 10·0 | | 53·0 | 22·7 | |
| 10·4 | | 58·5 | 33·1 | |
| 9·8 | | 58·5 | 4·4 | |
| 9·3 | | 58·5 | 21·1 | |
| 10·4 | | 58·5 | 48·5 | |
| 9·6 | 47 | 0·2 | 59·8 | |
| 9·6 | | 1·0 | 35·4 | |
| 10·0 | | 2·0 | 42·7 | |
| 10·1 | | 2·0 | 32·2 | |
| 10·0 | | 3·5 | 45·1 | |
| 10·4 | | 5·0 | 1·8 | |
| 9·8 | | 6·5 | 12·8 | |
| 10·0 | | 7·5 | 18·2 | |
| 7·9 | | 7·5 | 25·2 | 7·5 G |
| 9·8 | | 12·0 | 43·1 | |
| 10·4 | | 13·5 | 44·8 | |
| 9·5 | | 17·0 | 13·1 | |
| 10·4 | | 18·3 | 15·8 | |
| 10·1 | | 19·5 | 31·8 | |
| 9·6 | | 20·5 | 20·5 | 8·8 |
| 9·8 | | 20·5 | 19·0 | |
| 10·4 | | 22·0 | 45·2 | |
| 10·0 | | 22·0 | 39·8 | |
| 9·8 | | 24·0 | 27·6 | 9·0 G |
| 10·0 | | 24·5 | 53·0 | |
| 8·6 | | 26·7 | 59·2 | 8·8 G |
| 10·0 | | 29·5 | 45·5 | |
| 9·5 | | 29·5 | 6·8 | |
| 9·6 | | 30·5 | 16·9 | |
| 10·1 | | 32·0 | 20·0 | |



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### 6841—6900.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 47 | 34·5 | 32·9 | |
| 9·0 | | 36·0 | 23·7 | 8·5 |
| 10·4 | | 43·5 | 42·2 | |
| 9·6 | | 43·5 | 53·2 | |
| 8·0 | | 43·5 | 58·0 | 8·2 G |
| 10·4 | | 46·5 | 6·5 | |
| 9·5 | | 47·0 | 56·6 | |
| 10·4 | | 48·0 | 55·8 | |
| 9·6 | | 48·5 | 57·1 | |
| 9·8 | | 50·5 | 35·6 | |
| 9·5 | | 52·5 | 49·8 | |
| 9·8 | | 56·0 | 31·2 | |
| 9·8 | | 58·5 | 13·3 | |
| 10·4 | | 58·5 | 9·3 | |
| 10·1 | 48 | 2·5 | 24·8 | |
| 10·0 | | 4·5 | 50·6 | |
| 10·0 | | 5·0 | 40·1 | |
| 10·2 | | 8·0 | 53·9 | |
| 10·4 | | 8·5 | 16·7 | |
| 7·7 | | 14·5 | 23·5 | 8·0 G |
| 10·4 | | 20·5 | 28·5 | |
| 10·4 | | 23·0 | 54·3 | |
| 9·6 | | 24·5 | 15·5 | |
| 10·1 | | 26·0 | 40·1 | |
| 10·2 | | 29·0 | 20·6 | |
| 9·8 | | 29·0 | 36·9 | |
| 10·0 | | 32·5 | 29·6 | |
| 8·6 | | 33·0 | 58·7 | 8·5 |
| 9·0 | | 34·0 | 11·9 | |
| 10·4 | | 36·0 | 42·7 | |
| 10·4 | | 39·0 | 50·2 | |
| 10·4 | | 40·0 | 32·8 | |
| 10·0 | | 40·5 | 7·6 | |
| 10·4 | | 41·5 | 23·9 | |
| 10·4 | | 43·0 | 41·6 | |
| 10·4 | | 44·0 | 46·9 | |
| 10·4 | | 46·5 | 32·0 | |
| 10·4 | | 46·5 | 3·7 | |
| 10·4 | | 48·0 | 43·3 | |
| 10·2 | | 50·0 | 33·6 | |
| 10·1 | 49 | 1·0 | 12·3 | |
| 8·6 | | 2·0 | 41·6 | 8·0 |
| 9·8 | | 10·5 | 19·9 | |
| 9·6 | | 12·5 | 47·8 | 8·5 |
| 10·2 | | 13·0 | 35·7 | |
| 10·4 | | 15·0 | 50·2 | |
| 10·4 | | 16·5 | 54·5 | |
| 8·6 | | 17·5 | 42·0 | 9·0 |
| 9·2 | | 21·5 | 28·2 | |
| 10·2 | | 26·5 | 46·5 | |
| 9·8 | | 29·0 | 9·7 | |
| 9·4 | | 32·0 | 8·5 | |
| 10·4 | | 35·0 | 14·6 | |
| 10·4 | | 36·0 | 26·8 | |
| 10·2 | | 36·5 | 12·2 | |
| 9·0 | | 36·5 | 17·3 | 8·5 |
| 9·6 | | 37·0 | 5·9 | |
| 10·1 | | 40·0 | 26·7 | |
| 9·8 | | 41·0 | 8·7 | |
| 10·4 | | 49·0 | 35·5 | |

### 6901—6960.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 49 | 50·5 | 36·3 | |
| 9·6 | | 56·5 | 21·7 | |
| 10·4 | 50 | 0·5 | 44·3 | |
| 10·4 | | 1·0 | 23·0 | |
| 10·4 | | 2·5 | 36·8 | |
| 10·4 | | 2·5 | 34·7 | |
| 10·2 | | 2·5 | 4·1 | |
| 10·4 | | 10·5 | 59·2 | |
| 9·8 | | 11·0 | 40·7 | |
| 9·6 | | 11·0 | 40·9 | |
| 6·5 | | 14·5 | 39·5 | 6·5 GSct |
| 10·2 | | 16·5 | 23·0 | |
| 8·9 | | 18·5 | 41·1 | 9·0 |
| 9·2 | | 19·0 | 56·1 | 9·0 |
| 10·0 | | 23·0 | 39·7 | |
| 8·2 | | 24·0 | 29·3 | 8·5 G |
| 9·8 | | 28·0 | 33·5 | |
| 9·8 | | 28·5 | 56·8 | |
| 9·8 | | 29·0 | 54·9 | |
| 10·4 | | 29·5 | 13·1 | |
| 10·0 | | 30·5 | 54·7 | |
| 10·4 | | 46·0 | 19·5 | |
| 9·6 | | 47·5 | 33·1 | 9·5 |
| 10·0 | | 51·0 | 0·1 | |
| 10·4 | | 57·0 | 15·8 | |
| 10·4 | 51 | 3·6 | 33·4 | |
| 9·6 | | 7·0 | 15·7 | |
| 10·2 | | 8·0 | 39·5 | |
| 10·4 | | 13·0 | 36·1 | |
| 9·6 | | 15·0 | 50·3 | |
| 10·4 | | 15·0 | 14·7 | |
| 9·6 | | 22·0 | 56·7 | |
| 10·4 | | 27·5 | 29·9 | |
| 10·4 | | 29·0 | 20·7 | |
| 10·4 | | 32·0 | 31·1 | |
| 9·8 | | 32·0 | 25·3 | |
| 10·4 | | 32·5 | 19·9 | |
| 10·1 | | 32·5 | 13·5 | |
| 9·3 | | 36·5 | 22·9 | |
| 10·4 | | 41·5 | 42·3 | |
| 9·6 | | 42·7 | 0·9 | |
| 9·6 | | 44·5 | 38·1 | |
| 9·8 | | 45·0 | 50·3 | |
| 10·4 | | 47·5 | 41·3 | |
| 10·0 | | 49·0 | 39·9 | |
| 10·1 | | 52·5 | 42·9 | |
| 9·2 | | 54·5 | 47·2 | 8·0 G |
| 10·4 | | 59·5 | 15·9 | |
| 10·4 | 52 | 2·0 | 9·7 | |
| 9·2 | | 2·5 | 47·3 | 9·5 |
| 10·2 | | 2·5 | 15·6 | |
| 9·8 | | 7·5 | 44·3 | |
| 8·6 | | 11·0 | 14·5 | 9·0 |
| 10·0 | | 11·0 | 41·6 | |
| 9·4 | | 12·0 | 32·5 | |
| 10·1 | | 13·5 | 8·8 | |
| 10·0 | | 13·5 | 48·6 | |
| 10·4 | | 16·5 | 18·7 | |
| 9·8 | | 16·5 | 6·2 | |
| 10·1 | | 17·5 | 32·0 | |

### 6961—7020.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 52 | 20·0 | 29·4 | |
| 9·6 | | 22·0 | 11·3 | |
| 9·8 | | 23·5 | 18·5 | |
| 10·1 | | 25·4 | 31·9 | |
| 10·1 | | 26·9 | 18·9 | |
| 10·4 | | 27·4 | 56·3 | |
| 9·0 | | 29·9 | 21·5 | 9·5 |
| 10·4 | | 30·4 | 51·5 | |
| 10·2 | | 31·4 | 28·4 | |
| 8·9 | | 31·7 | 0·6 | 8·8 G |
| 10·1 | | 34·4 | 35·3 | |
| 10·2 | | 34·9 | 51·1 | |
| 10·2 | | 51·4 | 54·6 | |
| 10·4 | | 53·9 | 11·7 | |
| 10·2 | 53 | 0·4 | 51·8 | |
| 10·4 | | 3·4 | 20·5 | |
| 10·4 | | 5·4 | 27·9 | |
| 8·3 | | 8·4 | 4·5 | 8·5 |
| 10·4 | | 8·9 | 36·9 | |
| 10·0 | | 10·4 | 48·7 | |
| 10·0 | | 15·4 | 35·1 | |
| 10·4 | | 17·4 | 9·7 | |
| 10·0 | | 18·9 | 28·4 | |
| 10·0 | | 22·4 | 27·0 | |
| 10·4 | | 27·9 | 56·1 | |
| 10·4 | | 28·9 | 6·3 | |
| 9·8 | | 31·9 | 22·6 | |
| 10·0 | | 32·4 | 11·1 | |
| 10·1 | | 33·4 | 4·3 | |
| 10·4 | | 47·2 | 0·0 | |
| 9·6 | | 47·4 | 28·7 | |
| 9·6 | | 49·4 | 19·9 | |
| 10·0 | | 49·4 | 18·5 | |
| 10·1 | | 49·4 | 42·3 | |
| 9·8 | | 56·9 | 15·9 | |
| 10·1 | | 58·4 | 54·5 | |
| 10·2 | 54 | 0·4 | 40·9 | |
| 10·4 | | 0·4 | 46·6 | |
| 10·4 | | 1·9 | 14·5 | |
| 10·1 | | 1·9 | 59·3 | |
| 10·4 | | 5·4 | 46·8 | |
| 10·2 | | 10·4 | 21·7 | |
| 10·0 | | 11·9 | 58·3 | |
| 10·4 | | 12·4 | 33·7 | |
| 9·0 | | 22·4 | 54·3 | 9·0 |
| 10·4 | | 22·4 | 0·7 | |
| 10·4 | | 22·4 | 0·2 | |
| 9·6 | | 22·4 | 33·5 | |
| 10·0 | | 23·9 | 17·9 | |
| 9·5 | | 28·4 | 37·8 | |
| 9·6 | | 29·4 | 30·0 | |
| 10·4 | | 34·9 | 4·7 | |
| 9·0 | | 39·9 | 22·9 | 9·5 |
| 10·4 | | 40·4 | 54·5 | |
| 6·7 | | 41·9 | 21·5 | 6·8 GSt |
| 9·8 | | 43·4 | 19·0 | |
| 9·8 | | 46·9 | 15·9 | |
| 10·2 | | 47·4 | 52·6 | |
| 10·1 | | 48·4 | 22·1 | |
| 10·4 | | 51·4 | 43·2 | |

### 7021—7080.

| mag. | 15h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 54 | 54·4 | 45·3 | |
| 10·0 | | 55·4 | 39·9 | |
| 10·4 | | 58·4 | 33·4 | |
| 9·6 | 55 | 1·9 | 39·5 | |
| 10·2 | | 2·4 | 20·9 | |
| 10·0 | | 10·4 | 0·9 | |
| 10·0 | | 12·9 | 29·9 | |
| 10·4 | | 15·4 | 37·1 | |
| 10·2 | | 16·9 | 32·1 | |
| 10·4 | | 17·4 | 58·7 | |
| 10·4 | | 18·4 | 25·8 | |
| 10·4 | | 18·9 | 19·1 | |
| 10·2 | | 20·4 | 11·9 | |
| 10·2 | | 21·9 | 35·5 | |
| 10·4 | | 24·4 | 25·9 | |
| 10·4 | | 25·2 | 0·5 | |
| 10·4 | | 26·4 | 43·7 | |
| 9·8 | | 27·4 | 14·7 | |
| 9·8 | | 28·4 | 34·2 | |
| 10·4 | | 29·9 | 11·7 | |
| 9·6 | | 30·7 | 0·0 | |
| 10·4 | | 33·4 | 4·1 | |
| 8·6 | | 35·9 | 46·1 | 8·0 |
| 8·9 | | 36·9 | 49·9 | 8·0 |
| 10·0 | | 39·9 | 6·3 | |
| 9·8 | | 43·9 | 42·2 | |
| 10·1 | | 43·9 | 1·9 | |
| 9·3 | | 45·9 | 17·1 | |
| 10·2 | | 47·4 | 59·3 | |
| 10·4 | | 48·9 | 44·9 | |
| 8·5 | | 52·2 | 1·9 | 9·0 |
| 10·4 | | 53·4 | 42·3 | |
| 10·0 | | 56·4 | 3·9 | |
| 10·0 | 56 | 10·4 | 52·7 | |
| 10·4 | | 10·4 | 27·0 | |
| 9·8 | | 10·4 | 47·7 | |
| 10·4 | | 11·9 | 22·5 | |
| 10·4 | | 13·4 | 17·0 | |
| 9·6 | | 15·4 | 15·5 | 9·0 |
| 10·4 | | 21·9 | 27·9 | |
| 10·4 | | 22·4 | 25·5 | |
| 10·4 | | 24·9 | 55·3 | |
| 9·8 | | 29·4 | 32·7 | |
| 9·4 | | 30·4 | 34·9 | |
| 10·4 | | 38·4 | 15·7 | |
| 9·4 | | 39·4 | 21·1 | |
| 10·4 | | 40·9 | 39·9 | |
| 10·4 | | 47·9 | 24·6 | |
| 10·4 | | 49·4 | 37·4 | |
| 9·6 | | 50·4 | 44·7 | |
| 10·4 | | 50·4 | 28·7 | |
| 10·0 | | 53·4 | 24·5 | |
| 10·0 | 57 | 0·4 | 53·0 | |
| 10·4 | | 2·4 | 21·1 | |
| 10·4 | | 9·9 | 35·7 | |
| 10·2 | | 10·9 | 58·9 | 10·0 |
| 9·6 | | 13·3 | 58·9 | 9·0 |
| 10·4 | | 16·9 | 49·9 | |
| 9·6 | | 18·4 | 27·5 | |
| 9·6 | | 19·9 | 21·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 40 | 114 | 4·8 |
| | 50 | 115 | 4·5 |
| 16 | 0 | 116 | 4·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 50 | 115 | 4·5 |
| 16 | 0 | 116 | 4·2 |
| | 10 | 117 | 3·9 |

## 7081—7140.

| mag. | 15h. m s | −53° ′ | |
|---|---|---|---|
| 8·5 | 57 19·9 | 29·1 | |
| 9·6 | 20·4 | 50·5 | 9·5 |
| 10·0 | 22·4 | 15·5 | |
| 9·8 | 24·9 | 34·1 | |
| 10·4 | 25·9 | 24·7 | |
| 10·2 | 30·4 | 23·5 | |
| 10·0 | 30·9 | 58·9 | |
| 10·4 | 31·4 | 52·8 | |
| 10·4 | 32·9 | 14·1 | |
| 9·2 | 33·4 | 51·3 | 9·0 |
| 10·4 | 35·9 | 40·0 | |
| 10·0 | 36·4 | 15·3 | |
| 9·8 | 36·9 | 11·1 | |
| 9·6 | 36·9 | 7·8 | |
| 10·2 | 39·9 | 11·3 | |
| 10·0 | 39·9 | 18·5 | |
| 9·6 | 39·9 | 19·5 | |
| 10·4 | 41·9 | 58·0 | |
| 10·4 | 42·2 | 23·9 | |
| 10·4 | 42·4 | 4·8 | |
| 10·1 | 43·9 | 37·1 | |
| 10·4 | 47·4 | 48·4 | |
| 9·8 | 47·4 | 41·0 | |
| 10·2 | 51·2 | 36·0 | |
| 10·4 | 51·2 | 4·9 | |
| 8·7 | 51·9 | 15·7 | 9·0 |
| 9·8 | 52·4 | 19·0 | |
| 10·2 | 54·4 | 39·9 | |
| 10·4 | 56·2 | 40·8 | |
| 10·0 | 57·4 | 17·1 | |
| 10·4 | 57·7 | 57·0 | |
| 10·4 | 57·9 | 40·0 | |
| 9·8 | 58·4 | 38·8 | |
| 9·8 | 58 0·4 | 40·5 | |
| 10·4 | 3·2 | 23·1 | |
| 10·0 | 6·9 | 56·8 | 9·5 |
| 10·4 | 9·4 | 34·2 | |
| 8·4 | 11·9 | 21·2 | 8·3 |
| 10·4 | 12·6 | 38·7 | |
| 9·6 | 12·9 | 19·2 | |
| 8·8 | 13·4 | 55·8 | 8·5 |
| 10·4 | 13·4 | 24·7 | |
| 10·2 | 14·4 | 23·4 | |
| 9·6 | 15·9 | 10·2 | |
| 10·2 | 16·4 | 37·8 | |
| 10·2 | 17·4 | 15·8 | |
| 10·0 | 18·6 | 33·4 | |
| 10·0 | 18·9 | 35·2 | |
| 10·4 | 18·9 | 22·6 | |
| 10·4 | 23·4 | 25·7 | |
| 10·2 | 28·9 | 19·9 | |
| 10·4 | 29·9 | 17·3 | |
| 10·0 | 32·9 | 32·0 | |
| 10·0 | 34·5 | 59·9 | |
| 10·4 | 38·9 | 46·0 | |
| 10·0 | 39·0 | 59·5 | |
| 10·4 | 43·9 | 27·0 | |
| 10·1 | 43·9 | 5·2 | |
| 9·6 | 44·4 | 47·0 | |
| 10·4 | 44·5 | 30·9 | |

## 7141—7200.

| mag. | 15h.–16h. m s | −53° ′ | |
|---|---|---|---|
| 10·0 | 58 46·4 | 42·2 | |
| 9·6 | 48·9 | 18·8 | |
| 8·7 | 49·9 | 36·2 | 8·5 G |
| 10·4 | 51·4 | 58·1 | |
| 10·4 | 52·5 | 38·0 | |
| 10·2 | 54·5 | 26·1 | |
| 10·0 | 56·0 | 0·9 | |
| 10·2 | 58·4 | 15·0 | |
| 9·8 | 58·4 | 41·0 | |
| 10·0 | 59·4 | 31·8 | |
| 8·6 | 59 0·4 | 27·4 | 8·5 |
| 10·4 | 4·4 | 52·8 | |
| 10·0 | 5·9 | 29·8 | |
| 10·4 | 10·5 | 31·1 | |
| 9·3 | 10·9 | 34·8 | |
| 8·8 | 14·4 | 48·0 | 9·2 |
| 10·4 | 16·9 | 50·6 | |
| 10·4 | 17·4 | 24·2 | |
| 9·4 | 17·9 | 2·0 | |
| 10·4 | 17·9 | 51·4 | |
| 10·4 | 20·4 | 51·1 | |
| 10·2 | 20·5 | 41·7 | |
| 9·6 | 22·4 | 19·3 | |
| 10·2 | 23·4 | 28·2 | |
| 10·2 | 30·4 | 23·6 | |
| 10·2 | 31·4 | 53·3 | |
| 10·4 | 31·5 | 26·7 | |
| 10·4 | 33·2 | 57·5 | |
| 10·1 | 34·9 | 31·2 | |
| 9·8 | 36·4 | 33·4 | |
| 10·4 | 36·4 | 26·0 | |
| 9·8 | 36·9 | 17·6 | |
| 10·1 | 37·9 | 17·2 | |
| 10·4 | 38·9 | 4·2 | |
| 10·4 | 43·4 | 47·8 | |
| 10·4 | 51·4 | 48·3 | |
| 10·4 | 51·9 | 10·9 | |
| 9·8 | 55·9 | 31·2 | |
| 10·0 | 55·9 | 32·0 | |
| 10·4 | 56·4 | 23·1 | |
| 9·8 | 57·7 | 57·0 | |
| 9·8 | 0 1·4 | 44·5 | |
| 10·2 | 3·4 | 15·0 | |
| 10·4 | 5·7 | 58·7 | |
| 10·1 | 5·9 | 13·0 | |
| 10·2 | 11·4 | 18·6 | |
| 10·4 | 16·4 | 53·1 | |
| 9·8 | 17·9 | 41·8 | 9·5 |
| 10·0 | 18·9 | 23·2 | |
| 9·8 | 20·9 | 28·7 | |
| 10·4 | 22·6 | 59·6 | |
| 10·0 | 23·4 | 19·3 | |
| 10·2 | 23·9 | 32·9 | |
| 10·4 | 24·9 | 22·9 | |
| 10·1 | 28·4 | 20·6 | |
| 10·2 | 29·9 | 45·0 | |
| 10·0 | 33·9 | 54·7 | |
| 10·1 | 35·9 | 30·6 | |
| 10·2 | 36·4 | 53·6 | |
| 10·4 | 39·9 | 25·2 | |

## 7201—7260.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10·4 | 0 39·9 | 24·0 | |
| 10·2 | 40·4 | 8·2 | |
| 10·0 | 40·4 | 22·1 | |
| 10·2 | 41·4 | 35·6 | |
| 8·4 | 43·4 | 6·1 | 8·2 |
| 10·1 | 46·9 | 32·2 | |
| 10·0 | 47·4 | 40·0 | |
| 9·5 | 47·4 | 54·4 | |
| 10·4 | 48·7 | 0·2 | |
| 10·4 | 48·9 | 20·8 | |
| 10·4 | 49·9 | 48·3 | |
| 9·2 | 51·9 | 31·2 | |
| 8·4 | 52·4 | 59·6 | 8·8 |
| 9·0 | 52·4 | 32·1 | 8·0 |
| 9·2 | 52·9 | 45·2 | 9·5 |
| 10·0 | 54·4 | 35·0 | |
| 10·1 | 58·4 | 14·2 | |
| 9·6 | 1 0·9 | 27·6 | |
| 10·4 | 3·4 | 17·8 | |
| 9·8 | 6·4 | 52·9 | |
| 10·0 | 6·9 | 10·6 | |
| 10·2 | 6·9 | 53·1 | |
| 10·0 | 8·9 | 54·1 | |
| 9·3 | 11·9 | 47·0 | |
| 10·4 | 12·4 | 15·5 | |
| 10·4 | 14·4 | 4·2 | |
| 10·4 | 15·4 | 27·9 | |
| 10·4 | 19·3 | 36·6 | |
| 10·2 | 21·9 | 39·5 | |
| 10·0 | 23·9 | 50·7 | |
| 9·8 | 24·4 | 43·5 | |
| 10·4 | 25·4 | 4·2 | |
| 9·8 | 27·4 | 13·8 | |
| 10·4 | 28·3 | 19·7 | |
| 10·4 | 28·3 | 20·1 | |
| 9·5 | 30·2 | 57·0 | |
| 9·6 | 30·4 | 27·2 | |
| 10·1 | 30·4 | 48·5 | |
| 10·0 | 30·9 | 12·5 | |
| 9·2 | 32·4 | 25·9 | 9·5 |
| 9·6 | 33·9 | 30·0 | 9·5 |
| 10·0 | 35·4 | 25·7 | |
| 10·4 | 38·9 | 25·9 | |
| 10·4 | 39·9 | 13·7 | |
| 9·8 | 40·4 | 32·0 | |
| 10·2 | 42·4 | 36·3 | |
| 9·8 | 42·7 | 59·1 | |
| 9·6 | 43·9 | 10·4 | 9·0 |
| 10·4 | 44·4 | 23·9 | |
| 8·9 | 48·4 | 59·0 | 9·0 |
| 9·2 | 48·9 | 53·0 | 8·5 |
| 9·8 | 52·6 | 59·9 | |
| 9·8 | 52·9 | 58·2 | |
| 10·0 | 55·7 | 58·3 | |
| 9·2 | 2 0·4 | 34·6 | |
| 10·0 | 0·9 | 45·5 | |
| 10·4 | 1·9 | 17·8 | |
| 9·8 | 1·9 | 46·2 | |
| 10·2 | 2·9 | 56·3 | |
| 10·1 | 3·4 | 3·1 | |

## 7261—7320.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10·0 | 2 3·9 | 41·4 | |
| 10·4 | 4·9 | 15·0 | |
| 10·4 | 7·4 | 39·2 | |
| 10·4 | 8·4 | 22·9 | |
| 8·7 | 9·4 | 59·7 | 8·8 |
| 10·1 | 9·9 | 29·3 | |
| 9·6 | 10·4 | 25·4 | |
| 10·1 | 13·9 | 51·7 | |
| 10·1 | 14·4 | 51·5 | |
| 9·2 | 17·4 | 57·4 | |
| 10·1 | 18·9 | 57·8 | |
| 10·4 | 19·4 | 59·5 | |
| 9·8 | 19·9 | 48·8 | |
| 10·4 | 20·9 | 19·0 | |
| 10·2 | 20·9 | 18·8 | |
| 9·8 | 21·9 | 33·3 | |
| 9·8 | 22·9 | 32·2 | |
| 9·2 | 23·4 | 3·8 | 9·0 |
| 10·2 | 23·9 | 28·9 | |
| 9·8 | 27·4 | 59·7 | |
| 10·4 | 27·4 | 31·0 | |
| 10·4 | 27·4 | 14·9 | |
| 10·2 | 29·2 | 2·2 | |
| 10·2 | 31·4 | 54·9 | |
| 10·4 | 31·6 | 59·1 | |
| 10·2 | 32·4 | 35·9 | |
| 10·4 | 32·4 | 23·2 | |
| 9·2 | 32·4 | 54·4 | 8·5 |
| 10·4 | 33·4 | 27·7 | |
| 10·0 | 33·4 | 22·3 | |
| 10·2 | 36·3 | 38·6 | |
| 10·4 | 36·6 | 58·6 | |
| 9·8 | 37·9 | 47·1 | |
| 10·4 | 40·9 | 45·0 | |
| 10·0 | 41·9 | 27·3 | |
| 10·2 | 42·6 | 50·3 | |
| 10·4 | 43·1 | 56·1 | |
| 10·2 | 43·6 | 58·8 | |
| 9·8 | 45·4 | 45·0 | |
| 10·4 | 46·1 | 50·1 | |
| 10·4 | 46·3 | 12·2 | |
| 10·4 | 46·6 | 55·4 | |
| 10·2 | 49·3 | 49·8 | |
| 10·0 | 50·4 | 11·1 | |
| 9·8 | 50·6 | 55·6 | |
| 10·0 | 51·4 | 28·5 | |
| 10·2 | 51·6 | 56·0 | |
| 10·1 | 52·1 | 58·1 | |
| 10·2 | 52·3 | 33·4 | |
| 10·2 | 52·6 | 56·5 | |
| 10·4 | 53·3 | 41·9 | |
| 10·2 | 53·4 | 28·5 | |
| 10·1 | 54·4 | 31·1 | |
| 10·0 | 54·6 | 53·9 | |
| 10·1 | 55·4 | 47·1 | |
| 10·4 | 56·6 | 58·0 | |
| 9·6 | 56·6 | 59·6 | |
| 10·4 | 57·6 | 49·4 | |
| 10·1 | 57·6 | 53·0 | |
| 9·6 | 59·4 | 41·0 | |



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### 7321—7380.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10·0 | 2 59·4 | 24·7 | |
| 10·0 | 3 0·4 | 18·1 | |
| 10·0 | 0·6 | 57·1 | |
| 10·0 | 0·6 | 51·3 | |
| 10·1 | 1·1 | 52·7 | |
| 10·2 | 2·6 | 53·9 | |
| 10·4 | 3·1 | 56·7 | |
| 10·4 | 3·4 | 37·3 | |
| 10·4 | 3·6 | 59·6 | |
| 10·4 | 3·6 | 59·1 | |
| 10·2 | 3·6 | 54·6 | |
| 10·4 | 3·6 | 57·5 | |
| 10·4 | 4·3 | 34·4 | |
| 9·8 | 4·6 | 51·2 | |
| 10·1 | 4·6 | 52·1 | |
| 10·4 | 4·9 | 18·1 | |
| 10·4 | 6·6 | 57·2 | |
| 10·4 | 6·6 | 56·1 | |
| 9·8 | 7·1 | 50·1 | |
| 10·4 | 7·3 | 16·1 | |
| 10·4 | 7·6 | 56·4 | |
| 10·4 | 8·6 | 53·2 | |
| 9·8 | 9·1 | 50·0 | |
| 9·6 | 9·1 | 53·7 | 8·5 : |
| 10·1 | 10·1 | 48·8 | |
| 10·4 | 10·1 | 54·9 | |
| 9·6 | 10·1 | 57·8 | |
| 9·2 | 10·4 | 16·9 | 9·5 |
| 10·4 | 11·6 | 58·6 | |
| 8·4 | 11·9 | 44·3 | 8·5 |
| 10·4 | 12·3 | 59·7 | |
| 10·4 | 12·6 | 55·9 | |
| 8·8 | 12·6 | 52·0 | |
| 10·1 | 12·9 | 15·7 | |
| 9·8 | 12·9 | 18·9 | |
| 10·4 | 13·3 | 19·9 | |
| 10·4 | 13·6 | 58·1 | |
| 10·4 | 13·6 | 55·9 | |
| 10·2 | 14·1 | 54·0 | |
| 9·8 | 14·1 | 53·6 | |
| 10·0 | 14·6 | 51·2 | |
| 10·0 | 15·1 | 54·4 | : |
| 9·8 | 15·6 | 52·4 | |
| 9·8 | 16·6 | 52·8 | 8·5 |
| 10·4 | 16·9 | 42·9 | |
| 9·8 | 17·1 | 54·9 | 9·0 |
| 10·1 | 17·9 | 16·9 | |
| 9·6 | 18·4 | 23·8 | |
| 10·2 | 18·6 | 56·8 | |
| 10·1 | 18·6 | 54·5 | |
| 10·4 | 19·1 | 53·0 | |
| 10·0 | 19·6 | 55·4 | |
| 10·4 | 19·9 | 42·1 | |
| 10·4 | 20·1 | 54·3 | |
| 10·4 | 20·6 | 57·0 | |
| 10·4 | 20·6 | 51·3 | |
| 9·8 | 20·9 | 35·7 | |
| 10·4 | 21·6 | 52·3 | |
| 10·2 | 21·6 | 49·3 | |
| 9·8 | 21·9 | 8·1 | |

### 7381—7440.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10·2 | 3 22·6 | 51·6 | |
| 10·2 | 23·6 | 51·5 | |
| 10·1 | 23·6 | 52·8 | |
| 9·6 | 23·6 | 57·9 | |
| 10·0 | 24·6 | 49·2 | |
| 10·0 | 25·6 | 54·9 | |
| 10·4 | 25·6 | 54·1 | |
| 9·8 | 26·1 | 57·7 | |
| 10·4 | 26·6 | 53·6 | |
| 10·0 | 26·6 | 56·9 | |
| 10·4 | 27·1 | 52·4 | |
| 10·1 | 27·1 | 52·2 | |
| 10·0 | 27·6 | 51·8 | |
| 9·6 | 27·9 | 46·7 | |
| 10·1 | 28·1 | 49·3 | |
| 10·4 | 28·6 | 57·2 | |
| 10·0 | 28·6 | 56·8 | |
| 10·1 | 28·6 | 55·7 | |
| 10·4 | 29·6 | 59·7 | |
| 8·5 | 29·6 | 54·6 | 8·5 |
| 10·4 | 29·9 | 41·6 | |
| 9·6 | 30·6 | 50·5 | |
| 10·4 | 30·6 | 50·9 | |
| 9·6 | 30·6 | 53·2 | |
| 10·4 | 31·1 | 56·9 | |
| 10·4 | 31·3 | 33·2 | |
| 10·0 | 31·6 | 58·3 | |
| 10·4 | 31·9 | 40·5 | |
| 10·4 | 32·3 | 41·2 | |
| 10·4 | 32·6 | 57·8 | |
| 10·4 | 32·6 | 53·0 | |
| 9·6 | 33·3 | 23·6 | |
| 7·8 | 33·4 | 20·7 | 6·5 GSc |
| 10·2 | 33·6 | 55·9 | |
| 10·4 | 33·6 | 53·4 | |
| 10·1 | 33·6 | 50·3 | |
| 10·2 | 33·6 | 50·5 | |
| 10·4 | 33·6 | 52·6 | |
| 9·6 | 35·6 | 54·3 | : |
| 10·4 | 35·6 | 52·3 | |
| 10·0 | 37·3 | 30·8 | |
| 10·4 | 37·6 | 55·0 | |
| 10·0 | 37·9 | 39·0 | |
| 10·4 | 38·1 | 52·4 | |
| 10·4 | 38·4 | 47·0 | |
| 9·6 | 38·6 | 54·5 | |
| 9·8 | 38·6 | 58·3 | |
| 10·4 | 41·1 | 53·1 | |
| 10·1 | 41·6 | 52·2 | |
| 9·8 | 42·4 | 25·8 | |
| 10·4 | 43·1 | 55·0 | |
| 10·4 | 43·1 | 55·3 | |
| 10·4 | 43·4 | 35·8 | |
| 10·4 | 43·6 | 52·9 | |
| 10·2 | 43·6 | 53·4 | |
| 10·4 | 43·6 | 54·6 | |
| 10·4 | 44·6 | 57·6 | |
| 10·2 | 44·9 | 43·1 | |
| 10·2 | 45·3 | 38·7 | |
| 10·4 | 46·3 | 34·9 | |

### 7441—7500.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 9·8 | 3 48·1 | 50·0 | |
| 8·9 | 48·4 | 48·1 | 8·5 |
| 10·4 | 50·6 | 59·1 | |
| 10·1 | 50·9 | 27·7 | |
| 9·8 | 51·1 | 50·7 | |
| 10·4 | 51·1 | 59·9 | |
| 10·4 | 51·2 | 46·5 | |
| 10·4 | 52·6 | 57·5 | |
| 10·2 | 53·6 | 53·0 | |
| 10·0 | 53·7 | 35·2 | |
| 10·4 | 54·6 | 49·4 | |
| 10·4 | 55·1 | 58·4 | |
| 10·4 | 56·1 | 49·8 | |
| 10·2 | 56·1 | 57·5 | |
| 10·4 | 57·1 | 21·3 | |
| 10·0 | 57·6 | 50·4 | |
| 10·1 | 57·7 | 26·0 | |
| 9·6 | 58·1 | 55·4 | |
| 10·4 | 58·1 | 48·2 | |
| 10·4 | 58·1 | 52·8 | |
| 9·8 | 4 0·1 | 51·1 | |
| 10·4 | 1·7 | 40·8 | |
| 9·8 | 2·6 | 53·1 | |
| 10·4 | 3·1 | 10·9 | |
| 10·0 | 3·1 | 51·8 | |
| 10·4 | 4·2 | 14·0 | |
| 9·6 | 6·1 | 59·3 | |
| 10·4 | 7·1 | 36·5 | |
| 10·1 | 7·6 | 51·9 | |
| 10·2 | 8·7 | 38·9 | |
| 10·4 | 10·1 | 33·2 | |
| 9·8 | 10·2 | 54·5 | |
| 10·1 | 11·3 | 57·1 | |
| 9·8 | 13·2 | 43·4 | |
| 10·1 | 13·2 | 32·4 | |
| 10·4 | 14·1 | 10·9 | |
| 10·4 | 15·6 | 51·2 | |
| 10·2 | 16·2 | 29·0 | |
| 10·1 | 16·7 | 34·4 | |
| 9·8 | 17·0 | 50·4 | |
| 9·8 | 17·2 | 26·1 | |
| 10·4 | 21·7 | 30·0 | |
| 9·8 | 22·2 | 43·2 | |
| 8·3 | 23·2 | 50·8 | 8·0 |
| 10·4 | 24·2 | 6·6 | |
| 10·2 | 25·2 | 44·8 | |
| 10·4 | 25·7 | 14·1 | |
| 10·1 | 27·0 | 59·9 | |
| 10·4 | 28·2 | 47·0 | |
| 10·4 | 29·2 | 47·5 | |
| 10·2 | 30·2 | 26·3 | |
| 10·4 | 30·7 | 13·8 | |
| 10·2 | 33·2 | 17·4 | |
| 10·0 | 33·2 | 26·2 | |
| 10·1 | 33·2 | 26·5 | |
| 9·8 | 33·7 | 55·7 | |
| 10·1 | 34·7 | 49·1 | |
| 10·4 | 37·2 | 24·4 | |
| 10·0 | 38·2 | 54·4 | |
| 9·8 | 38·7 | 55·9 | |

### 7501—7560.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 9·8 | 4 42·7 | 38·5 | |
| 10·2 | 46·6 | 24·0 | |
| 10·1 | 46·7 | 30·9 | |
| 9·8 | 49·6 | 42·3 | |
| 9·8 | 50·1 | 45·6 | |
| 8·4 | 50·6 | 14·2 | 8·5 |
| 10·2 | 52·1 | 58·2 | |
| 9·0 | 5 0·1 | 41·7 | 8·5 |
| 9·8 | 2·1 | 33·5 | |
| 10·0 | 4·6 | 17·2 | |
| 10·4 | 5·6 | 49·6 | |
| 10·4 | 5·6 | 18·0 | |
| 10·2 | 6·1 | 13·9 | |
| 10·4 | 6·1 | 49·8 | |
| 10·2 | 6·1 | 28·2 | |
| 10·1 | 12·1 | 38·4 | |
| 10·2 | 13·1 | 1·0 | |
| 10·2 | 18·1 | 27·5 | |
| 10·4 | 18·6 | 56·9 | |
| 10·4 | 20·1 | 25·2 | |
| 10·4 | 20·1 | 43·9 | |
| 9·6 | 20·6 | 50·2 | 8·8 |
| 9·6 | 21·1 | 45·1 | |
| 10·0 | 22·1 | 38·8 | |
| 10·2 | 22·6 | 11·4 | |
| 9·6 | 22·6 | 30·2 | |
| 10·4 | 26·6 | 14·6 | |
| 10·4 | 27·6 | 10·1 | |
| 9·6 | 32·1 | 5·8 | |
| 9·8 | 32·1 | 47·3 | |
| 10·0 | 32·1 | 25·3 | |
| 10·1 | 32·1 | 47·9 | |
| 10·0 | 32·6 | 36·0 | |
| 10·0 | 37·1 | 52·3 | |
| 10·4 | 39·1 | 5·3 | |
| 9·8 | 39·1 | 35·0 | |
| 8·4 | 47·2 | 0·7 | |
| 10·2 | 47·6 | 42·4 | |
| 10·4 | 49·6 | 56·8 | |
| 10·1 | 50·6 | 54·2 | |
| 10·4 | 52·1 | 46·8 | |
| 10·0 | 53·6 | 4·0 | |
| 10·2 | 54·1 | 37·1 | |
| 8·3 | 55·6 | 43·7 | 8·0 |
| 9·8 | 6 1·6 | 53·3 | |
| 10·2 | 1·9 | 34·4 | |
| 10·4 | 2·6 | 39·7 | |
| 9·8 | 3·4 | 52·5 | |
| 8·8 | 4·4 | 34·2 | 8·5 |
| 10·4 | 4·9 | 41·8 | |
| 10·4 | 6·4 | 57·6 | |
| 9·8 | 6·9 | 51·1 | |
| 10·4 | 6·9 | 6·0 | |
| 10·0 | 7·0 | 33·3 | |
| 10·2 | 7·9 | 4·3 | |
| 10·4 | 8·0 | 42·9 | |
| 10·0 | 8·4 | 46·0 | |
| 10·2 | 10·0 | 54·3 | |
| 10·4 | 11·4 | 13·8 | |
| 10·4 | 13·4 | 3·4 | |

25 prec.

| | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 0 | 116 | 4·2 |
| | 10 | 117 | 3·9 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 0 | 116 | 4.2 |
| | 10 | 117 | 3.9 |
| | 20 | 118 | 3.5 |

## 7561—7620.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 9.6 | 6 13.9 | 44.4 | |
| 10.4 | 14.4 | 9.9 | |
| 10.4 | 14.9 | 27.4 | |
| 10.0 | 15.9 | 14.0 | |
| 10.4 | 18.0 | 26.0 | |
| 10.4 | 19.4 | 13.4 | |
| 9.8 | 19.9 | 28.5 | |
| 10.4 | 19.9 | 47.3 | |
| 10.2 | 21.4 | 27.0 | |
| 9.8 | 22.4 | 10.8 | |
| 10.0 | 22.9 | 32.8 | |
| 10.2 | 24.9 | 38.1 | |
| 10.4 | 26.4 | 39.5 | |
| 9.8 | 26.4 | 52.0 | 9.0 |
| 10.2 | 26.9 | 43.3 | |
| 9.8 | 29.9 | 58.3 | |
| 10.0 | 30.9 | 8.3 | |
| 10.4 | 31.4 | 45.9 | |
| 9.6 | 35.9 | 17.8 | |
| 10.1 | 36.9 | 6.8 | |
| 9.6 | 37.4 | 21.0 | 9.0 |
| 9.5 | 37.4 | 29.9 | |
| 10.4 | 37.9 | 23.6 | |
| 10.4 | 39.9 | 59.9 | |
| 8.4 | 42.4 | 51.8 | 8.0 G |
| 10.0 | 45.4 | 50.9 | |
| 10.0 | 45.4 | 42.2 | |
| 10.4 | 47.9 | 21.7 | |
| 10.2 | 49.4 | 22.7 | |
| 10.4 | 49.9 | 56.3 | |
| 10.1 | 51.4 | 38.8 | |
| 10.2 | 55.3 | 28.7 | |
| 10.4 | 56.8 | 4.5 | |
| 7.5 | 57.3 | 29.7 | 6.0 GSct |
| 9.4 | 57.3 | 32.7 | |
| 10.4 | 58.3 | 13.0 | |
| 10.1 | 7 0.3 | 12.4 | |
| 10.4 | 0.8 | 44.2 | |
| 8.2 | 1.3 | 24.7 | 8.0 G |
| 9.6 | 1.8 | 36.9 | |
| 10.4 | 1.8 | 46.7 | |
| 10.4 | 1.8 | 45.2 | |
| 10.4 | 2.8 | 40.1 | |
| 10.4 | 3.8 | 2.9 | |
| 10.1 | 8.8 | 52.9 | |
| 10.4 | 14.3 | 48.9 | |
| 7.4 | 14.3 | 22.6 | 7.3 GSt |
| 10.0 | 15.3 | 45.0 | |
| 10.4 | 15.8 | 35.1 | |
| 10.0 | 17.8 | 5.7 | |
| 10.4 | 18.8 | 12.8 | |
| 10.4 | 20.8 | 16.2 | |
| 10.2 | 26.8 | 1.5 | |
| 10.4 | 26.8 | 25.0 | |
| 10.0 | 27.8 | 9.1 | |
| 10.1 | 31.3 | 24.7 | |
| 9.8 | 31.8 | 12.9 | |
| 9.6 | 32.8 | 8.1 | |
| 10.4 | 33.3 | 39.4 | |
| 8.6 | 33.8 | 28.7 | 8.5 |

## 7621—7680.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10.2 | 7 36.8 | 16.6 | |
| 10.4 | 36.8 | 55.1 | |
| 10.4 | 37.3 | 52.1 | |
| 9.8 | 38.8 | 22.8 | |
| 9.8 | 39.8 | 32.8 | |
| 10.1 | 40.3 | 15.9 | |
| 10.4 | 40.3 | 18.2 | |
| 10.4 | 40.8 | 34.3 | |
| 9.8 | 41.8 | 17.7 | |
| 10.0 | 41.8 | 43.1 | |
| 9.6 | 43.3 | 52.7 | |
| 10.4 | 43.8 | 27.2 | |
| 9.2 | 44.8 | 7.5 | |
| 9.8 | 45.3 | 53.1 | |
| 10.2 | 45.8 | 52.9 | |
| 10.4 | 45.8 | 26.0 | |
| 10.4 | 46.3 | 39.2 | |
| 10.4 | 46.8 | 14.9 | |
| 10.4 | 48.3 | 43.1 | |
| 10.2 | 50.3 | 0.1 | |
| 10.0 | 54.2 | 35.6 | |
| 10.1 | 54.3 | 36.2 | |
| 9.8 | 55.3 | 50.0 | |
| 10.4 | 55.7 | 32.0 | |
| 10.1 | 56.2 | 9.0 | |
| 10.4 | 56.7 | 42.8 | |
| 10.4 | 59.2 | 30.4 | |
| 10.4 | 8 0.2 | 17.5 | |
| 10.2 | 1.2 | 6.2 | |
| 7.6 | 2.2 | 14.4 | 7.7 GSt |
| 9.8 | 3.2 | 51.1 | |
| 9.3 | 3.7 | 55.6 | |
| 10.4 | 5.7 | 30.4 | |
| 10.4 | 8.7 | 11.0 | |
| 10.2 | 10.2 | 24.8 | |
| 10.4 | 16.2 | 7.8 | |
| 9.6 | 18.7 | 21.6 | |
| 10.2 | 22.2 | 15.4 | |
| 10.4 | 22.7 | 35.2 | |
| 10.4 | 22.7 | 36.2 | |
| 9.8 | 22.7 | 39.6 | |
| 10.4 | 23.7 | 55.0 | |
| 9.8 | 25.2 | 42.7 | |
| 10.4 | 26.7 | 48.0 | |
| 10.4 | 32.7 | 20.1 | |
| 9.8 | 32.7 | 42.8 | |
| 10.2 | 32.7 | 54.2 | |
| 9.3 | 34.7 | 9.4 | |
| 10.4 | 35.7 | 17.2 | |
| 10.4 | 35.7 | 39.2 | |
| 9.8 | 35.7 | 55.6 | |
| 10.4 | 36.7 | 41.0 | |
| 10.4 | 36.7 | 35.9 | |
| 10.4 | 37.7 | 37.0 | |
| 9.8 | 38.2 | 19.3 | |
| 10.0 | 38.2 | 58.9 | |
| 10.4 | 39.2 | 9.0 | |
| 10.4 | 39.7 | 24.1 | |
| 8.4 | 47.2 | 19.2 | 8.3 |
| 10.4 | 48.2 | 10.6 | |

## 7681—7740.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10.0 | 8 48.7 | 39.2 | |
| 10.4 | 50.2 | 27.1 | |
| 9.5 | 50.7 | 39.0 | |
| 10.4 | 51.2 | 18.0 | |
| 9.6 | 52.2 | 41.1 | |
| 10.2 | 54.7 | 3.6 | |
| 9.0 | 55.2 | 0.6 | |
| 10.2 | 55.7 | 45.9 | |
| 10.0 | 57.2 | 22.2 | 9.5 |
| 9.6 | 57.7 | 58.9 | |
| 8.4 | 9 1.2 | 19.8 | 8.5 |
| 10.0 | 1.2 | 6.0 | |
| 8.8 | 6.2 | 23.1 | 8.0 |
| 10.4 | 9.6 | 20.0 | |
| 10.0 | 10.7 | 24.9 | |
| 10.0 | 11.2 | 11.8 | |
| 10.4 | 12.6 | 37.3 | |
| 10.1 | 13.7 | 26.1 | |
| 10.2 | 16.6 | 27.0 | |
| 10.4 | 16.6 | 9.9 | |
| 10.4 | 17.2 | 10.8 | |
| : 10.0 | 17.4 | 58.8 | |
| 10.4 | 18.7 | 11.2 | |
| 8.8 | 18.9 | 58.6 | |
| 10.4 | 21.2 | 43.6 | |
| 10.4 | 21.2 | 50.0 | |
| 10.4 | 21.7 | 23.8 | |
| 10.4 | 25.2 | 30.2 | |
| 10.1 | 26.7 | 18.7 | |
| 9.6 | 27.2 | 22.8 | 8.5 |
| 9.8 | 30.2 | 43.2 | |
| 9.8 | 30.7 | 56.6 | |
| 10.4 | 31.6 | 38.9 | |
| 10.0 | 31.7 | 38.4 | |
| 9.6 | 32.7 | 7.6 | |
| 10.4 | 34.2 | 27.9 | |
| 10.4 | 39.2 | 4.8 | |
| 10.4 | 40.6 | 49.3 | |
| 10.0 | 41.1 | 1.7 | |
| 10.4 | 41.7 | 35.2 | |
| 9.8 | 42.7 | 33.0 | |
| 9.8 | 43.7 | 3.6 | |
| 10.2 | 44.6 | 9.4 | |
| 9.2 | 44.7 | 7.8 | |
| 10.1 | 45.2 | 18.6 | |
| 10.4 | 45.4 | 58.9 | |
| 9.8 | 45.7 | 14.8 | 9.5 G |
| 10.1 | 47.2 | 24.0 | |
| 10.0 | 47.4 | 59.9 | |
| 9.6 | 49.2 | 43.6 | |
| 10.0 | 49.7 | 29.4 | |
| 8.6 | 51.7 | 3.6 | 9.0 |
| 10.4 | 51.7 | 51.7 | |
| 10.4 | 52.2 | 7.6 | |
| 10.2 | 52.6 | 12.9 | |
| 10.0 | 56.2 | 56.0 | |
| 8.4 | 57.2 | 12.1 | 8.5 G |
| 10.2 | 57.6 | 34.9 | |
| 9.8 | 59.6 | 14.4 | |
| 10.4 | 59.7 | 12.6 | |

## 7741—7800.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10.4 | 9 59.7 | 26.0 | |
| 10.4 | 10 1.1 | 28.1 | |
| 10.4 | 1.6 | 42.9 | |
| 8.8 | 3.1 | 16.8 | 9.0 |
| 9.3 | 5.1 | 29.0 | |
| 10.4 | 5.3 | 59.8 | |
| 10.1 | 5.6 | 13.8 | |
| 10.0 | 5.8 | 2.1 | |
| 10.4 | 7.1 | 42.4 | |
| 10.2 | 8.1 | 34.8 | |
| 9.6 | 8.6 | 15.1 | |
| 10.1 | 9.6 | 27.4 | |
| 10.1 | 13.1 | 4.6 | |
| 9.8 | 14.1 | 32.1 | |
| 10.4 | 15.1 | 45.0 | |
| 9.2 | 16.1 | 51.9 | |
| 9.8 | 19.0 | 1.9 | |
| 9.8 | 20.1 | 17.0 | |
| 10.4 | 21.6 | 27.3 | |
| 10.4 | 22.1 | 27.9 | |
| 9.8 | 22.6 | 29.1 | |
| 10.4 | 22.6 | 8.2 | |
| 10.0 | 24.6 | 8.9 | |
| 10.4 | 24.6 | 54.0 | |
| 9.3 | 25.6 | 49.2 | |
| 10.4 | 28.1 | 20.9 | |
| 10.4 | 28.6 | 0.5 | |
| 10.0 | 29.6 | 31.7 | |
| 10.1 | 30.1 | 35.2 | |
| 10.4 | 30.6 | 23.6 | |
| 10.4 | 32.1 | 38.1 | |
| 9.5 | 33.6 | 1.6 | |
| 10.4 | 34.6 | 26.4 | |
| 10.4 | 35.3 | 0.5 | |
| 10.4 | 37.1 | 56.0 | |
| 10.4 | 41.6 | 2.3 | |
| 10.4 | 41.6 | 56.3 | |
| 10.2 | 45.1 | 31.2 | |
| 9.6 | 45.6 | 47.2 | |
| 9.4 | 45.6 | 32.8 | |
| 10.4 | 45.6 | 24.9 | |
| 10.2 | 45.6 | 29.8 | |
| 10.0 | 46.4 | 57.7 | |
| 10.2 | 51.3 | 2.9 | |
| 9.3 | 51.6 | 58.9 | |
| 10.4 | 54.9 | 59.1 | |
| 10.1 | 56.6 | 19.1 | |
| 10.0 | 58.1 | 12.1 | |
| 9.8 | 58.1 | 39.1 | |
| : 10.4 | 59.6 | 54.1 | |
| 9.8 | 59.6 | 14.0 | 9.0 |
| 10.0 | 11 6.6 | 22.1 | |
| 10.4 | 8.6 | 14.9 | |
| 10.2 | 11.1 | 1.7 | |
| 10.4 | 12.1 | 20.0 | |
| 10.2 | 15.6 | 33.4 | |
| 10.4 | 15.6 | 59.4 | |
| 10.4 | 16.1 | 6.3 | |
| 9.8 | 19.6 | 4.9 | |
| 9.8 | 22.6 | 8.8 | |



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## 7801—7860.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 11 | 22·6 | 59·0 | |
| 9·2 | | 24·6 | 1·1 | 8·5 |
| 9·8 | | 25·1 | 15·5 | |
| 10·0 | | 25·6 | 49·2 | |
| 9·6 | | 26·1 | 17·0 | |
| 10·2 | | 26·6 | 34·2 | |
| 10·4 | | 28·1 | 33·3 | |
| 10·1 | | 28·6 | 17·5 | |
| 10·4 | | 29·6 | 36·8 | |
| 10·4 | | 30·1 | 43·9 | |
| 9·5 | | 31·6 | 17·3 | |
| 10·1 | | 32·7 | 37·8 | |
| 10·2 | | 33·1 | 31·0 | |
| 10·4 | | 34·1 | 36·4 | |
| 10·4 | | 38·1 | 38·8 | |
| 10·4 | | 40·6 | 10·0 | |
| 10·4 | | 40·7 | 17·0 | |
| 10·4 | | 41·1 | 23·6 | |
| 9·8 | | 43·6 | 15·5 | |
| 8·8 | | 44·0 | 0·3 | |
| 10·0 | | 47·1 | 5·8 | |
| 10·4 | | 48·6 | 8·1 | |
| 10·2 | | 48·7 | 31·1 | |
| 9·8 | | 51·1 | 40·3 | |
| 9·8 | | 51·1 | 37·2 | |
| 9·8 | | 53·6 | 52·5 | |
| 10·0 | | 54·1 | 37·0 | |
| 10·4 | | 55·1 | 20·9 | |
| 10·2 | | 55·6 | 18·3 | |
| 10·0 | | 55·7 | 41·1 | |
| 9·8 | | 56·1 | 8·4 | |
| 10·4 | | 56·6 | 16·7 | |
| 10·4 | | 58·6 | 51·9 | |
| 10·2 | | 59·6 | 40·1 | |
| 10·1 | | 59·6 | 6·1 | |
| 10·2 | 12 | 4·5 | 20·9 | |
| 9·8 | | 6·6 | 51·8 | |
| 9·6 | | 6·6 | 28·7 | |
| 10·4 | | 9·5 | 32·1 | |
| 9·2 | | 10·6 | 44·7 | 9·5 |
| 10·0 | | 10·6 | 31·5 | |
| 9·8 | | 11·1 | 31·9 | 9·0 |
| 10·0 | | 11·6 | 14·6 | |
| 10·4 | | 14·6 | 56·0 | |
| 10·2 | | 15·5 | 3·8 | |
| 10·4 | | 20·6 | 40·9 | |
| 10·0 | | 21·1 | 9·3 | |
| 8·2 | | 21·6 | 3·5 | 9·5 |
| 9·8 | | 22·6 | 0·5 | |
| 10·4 | | 28·1 | 37·8 | |
| 10·1 | | 29·6 | 18·5 | |
| 9·6 | | 31·1 | 7·3 | |
| 10·0 | | 32·8 | 58·5 | |
| 10·4 | | 34·6 | 5·8 | |
| 10·4 | | 35·5 | 45·0 | |
| 9·8 | | 35·6 | 38·5 | |
| 10·4 | | 36·1 | 13·7 | |
| 10·4 | | 38·1 | 9·5 | |
| 10·0 | | 39·6 | 39·5 | |
| 10·1 | | 40·1 | 36·1 | |

## 7861—7920.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·1 | 12 | 41·1 | 53·3 | |
| 9·5 | | 43·6 | 53·1 | |
| 9·8 | | 44·1 | 54·1 | |
| 10·4 | | 45·5 | 59·6 | |
| 8·3 | | 49·6 | 36·1 | 8·0 |
| 10·0 | | 50·1 | 10·9 | |
| 10·4 | | 50·6 | 13·9 | |
| 10·1 | | 53·1 | 6·5 | |
| 10·4 | | 55·6 | 27·7 | |
| 10·4 | | 55·6 | 13·9 | |
| 9·6 | | 55·6 | 15·4 | |
| 10·1 | | 55·9 | 59·2 | |
| 10·4 | | 58·1 | 16·1 | |
| 9·6 | 13 | 0·1 | 30·5 | |
| 10·4 | | 2·6 | 25·5 | |
| 10·4 | | 2·6 | 2·3 | |
| 10·2 | | 9·1 | 44·5 | |
| 9·8 | | 10·1 | 2·1 | |
| 8·4 | | 12·1 | 22·9 | 8·5 |
| 10·4 | | 12·1 | 6·1 | |
| 10·1 | | 14·5 | 41·8 | |
| 9·8 | | 15·1 | 18·1 | 9·2 |
| 10·0 | | 16·2 | 39·5 | |
| 10·4 | | 16·6 | 9·9 | |
| 10·2 | | 18·1 | 13·7 | |
| 10·2 | | 18·4 | 1·9 | |
| 10·4 | | 19·6 | 53·8 | |
| 10·1 | | 26·2 | 38·5 | |
| 9·8 | | 29·4 | 56·8 | |
| 10·2 | | 31·1 | 1·7 | |
| 10·4 | | 31·2 | 4·5 | |
| 10·0 | | 31·4 | 57·3 | |
| 10·4 | | 33·2 | 7·7 | |
| 10·4 | | 35·7 | 7·0 | |
| 10·4 | | 36·2 | 23·7 | |
| 10·4 | | 37·7 | 54·1 | |
| 9·6 | | 39·2 | 23·9 | |
| 10·4 | | 40·1 | 45·7 | |
| 10·4 | | 42·2 | 19·9 | |
| 9·6 | | 43·2 | 26·3 | |
| 10·2 | | 59·2 | 8·0 | |
| 10·1 | 14 | 2·7 | 55·9 | |
| 10·2 | | 6·2 | 37·7 | |
| 9·8 | | 12·2 | 13·7 | |
| 10·4 | | 13·2 | 49·0 | |
| 9·6 | | 13·7 | 30·9 | |
| 10·4 | | 16·2 | 39·1 | |
| 8·8 | | 16·9 | 58·5 | |
| 10·4 | | 19·7 | 9·9 | |
| 10·4 | | 22·7 | 13·0 | |
| 10·2 | | 24·2 | 49·7 | |
| 10·4 | | 26·1 | 14·6 | |
| 9·8 | | 28·2 | 8·1 | 9·5 |
| 10·4 | | 28·7 | 46·0 | |
| 9·6 | | 31·2 | 13·6 | |
| 10·2 | | 31·7 | 43·3 | |
| 9·8 | | 36·7 | 56·6 | |
| 10·4 | | 36·7 | 12·8 | |
| 10·1 | | 36·9 | 57·9 | |
| 10·4 | | 37·2 | 17·1 | |

## 7921—7980.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 14 | 45·0 | 3·5 | |
| 10·4 | | 45·0 | 37·9 | |
| 10·4 | | 50·5 | 11·1 | |
| 10·4 | | 50·9 | 31·4 | |
| 9·8 | | 52·0 | 44·3 | |
| 10·4 | | 53·0 | 52·5 | |
| 10·1 | | 54·8 | 0·5 | |
| 8·2 | | 56·9 | 10·0 | 9·1 |
| 10·0 | | 57·0 | 37·3 | |
| 8·0 | | 59·0 | 17·2 | 8·0 G |
| 9·6 | 15 | 1·4 | 0·9 | |
| 10·4 | | 2·0 | 6·9 | |
| 10·4 | | 4·0 | 4·2 | |
| 10·0 | | 4·0 | 55·5 | |
| 10·0 | | 9·0 | 24·9 | |
| 10·0 | | 10·5 | 3·5 | |
| 10·4 | | 10·9 | 44·4 | |
| 10·4 | | 12·9 | 53·1 | |
| 10·4 | | 16·0 | 45·1 | |
| 10·4 | | 19·0 | 52·4 | |
| 9·2 | | 20·2 | 32·9 | 9·0 |
| 9·8 | | 20·9 | 48·8 | |
| 10·0 | | 21·5 | 20·4 | |
| 9·5 | | 23·0 | 49·5 | |
| 9·0 | | 25·9 | 2·2 | |
| 10·4 | | 27·5 | 49·7 | |
| 9·0 | | 29·2 | 5·3 | |
| 10·4 | | 38·0 | 30·9 | |
| 10·4 | | 39·0 | 36·1 | |
| 10·4 | | 41·0 | 5·9 | |
| 10·2 | | 41·0 | 4·1 | |
| 10·4 | | 43·0 | 19·7 | |
| 10·4 | | 46·0 | 7·3 | |
| 10·0 | | 53·5 | 0·0 | |
| 10·1 | | 54·0 | 53·9 | |
| 9·6 | | 54·0 | 26·8 | |
| 9·6 | | 57·0 | 36·7 | |
| 9·8 | | 59·0 | 30·9 | |
| 10·4 | 16 | 1·8 | 20·1 | |
| 9·6 | | 2·8 | 45·2 | |
| 10·0 | | 9·3 | 51·4 | |
| 9·8 | | 9·8 | 57·7 | |
| 10·2 | | 12·3 | 26·2 | |
| 9·8 | | 12·8 | 15·9 | |
| 9·2 | | 14·6 | 51·9 | 8·5 G |
| 10·4 | | 16·8 | 17·0 | |
| 10·4 | | 16·8 | 51·0 | |
| 8·5 | | 19·3 | 57·3 | 9·0 |
| 10·4 | | 20·3 | 4·5 | |
| 10·0 | | 21·8 | 7·8 | |
| 10·4 | | 22·8 | 6·2 | |
| 9·8 | | 24·8 | 54·1 | |
| 10·2 | | 26·8 | 22·0 | |
| 9·8 | | 33·5 | 42·1 | |
| 8·9 | | 34·8 | 8·5 | 8·0 G |
| 9·8 | | 34·9 | 33·4 | 9·5 |
| 9·8 | | 41·9 | 35·7 | |
| 9·8 | | 46·4 | 41·0 | |
| 9·4 | | 54·4 | 18·0 | |
| 9·3 | | 57·6 | 0·9 | 9·2 |

## 7981—8040.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 16 | 57·9 | 43·6 | |
| 9·6 | 17 | 3·4 | 46·4 | |
| 9·8 | | 6·9 | 35·2 | |
| 9·7 | | 9·9 | 48·0 | |
| 9·4 | | 16·4 | 31·9 | 9·0 |
| 9·4 | | 18·9 | 19·6 | |
| 9·5 | | 19·4 | 47·7 | |
| 9·8 | | 23·5 | 47·4 | |
| 9·7 | | 26·4 | 1·0 | |
| 9·6 | | 36·9 | 33·4 | |
| 8·6 | | 37·9 | 49·5 | 9·0 |
| 9·5 | | 38·4 | 46·7 | |
| 9·8 | | 48·9 | 26·9 | |
| 9·8 | | 51·9 | 4·2 | |
| 9·8 | | 52·9 | 2·8 | |
| 9·2 | | 53·4 | 28·5 | |
| 9·0 | 18 | 0·4 | 14·8 | 9·5 |
| 9·8 | | 2·4 | 35·2 | |
| 9·5 | | 6·9 | 21·6 | 9·0 |
| 9·2 | | 8·4 | 22·9 | |
| 9·0 | | 8·9 | 19·5 | 8·6 |
| 9·6 | | 11·5 | 35·0 | |
| 9·7 | | 12·9 | 19·4 | |
| 9·8 | | 13·9 | 7·0 | |
| 9·7 | | 23·7 | 2·2 | |
| 9·4 | | 28·9 | 15·1 | 8·8 |
| 9·8 | | 32·9 | 34·8 | |
| 9·1 | | 35·9 | 49·4 | 9·5 |
| 9·0 | | 36·4 | 41·8 | |
| 8·8 | | 39·9 | 50·7 | 9·0 |
| 9·4 | | 40·9 | 37·5 | |
| 8·4 | | 42·4 | 55·0 | 8·5 |
| 9·5 | | 46·4 | 39·1 | |
| 9·2 | | 48·4 | 56·7 | |
| 9·2 | | 50·2 | 59·7 | 9·0 |
| 9·6 | 19 | 3·4 | 37·9 | |
| 8·9 | | 5·9 | 21·9 | 9·0 |
| 9·8 | | 6·9 | 16·9 | |
| 9·6 | | 9·9 | 41·6 | |
| 9·2 | | 25·9 | 54·7 | |
| 9·8 | | 29·9 | 55·9 | |
| 9·8 | | 39·9 | 47·9 | |
| 9·3 | | 51·9 | 7·9 | |
| 9·6 | | 52·9 | 56·4 | |
| 9·4 | 20 | 4·9 | 37·9 | 9·0 |
| 9·7 | | 37·4 | 32·3 | |
| 9·6 | | 43·4 | 3·4 | |
| 9·8 | | 51·4 | 57·6 | |
| 8·9 | | 58·9 | 16·2 | 9·2 |
| 9·3 | 21 | 0·4 | 5·0 | 9·5 |
| 9·7 | | 1·9 | 37·9 | |
| 9·8 | | 12·7 | 0·9 | |
| 9·8 | | 28·7 | 1·5 | |
| 9·4 | | 42·9 | 38·9 | |
| 9·8 | 22 | 13·4 | 45·3 | |
| 9·6 | | 14·4 | 49·9 | |
| 9·8 | | 17·9 | 43·1 | |
| 9·8 | | 18·4 | 38·7 | |
| 9·8 | | 42·9 | 30·3 | |
| 9·8 | | 46·4 | 53·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 10 | 117 | 3·9 |
| | 20 | 118 | 3·5 |
| | 30 | 119 | 3·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 16 | 20 | 118 | 3·5 |
| | 30 | 119 | 3·2 |
| | 40 | 119 | 2·9 |
| | 50 | 120 | 2·5 |
| 17 | 0 | 120 | 2·2 |

## 8041—8100.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 22 | 49·4 | 6·1 | |
| 9·8 | 23 | 9·9 | 28·9 | 9·2 |
| 9·5 | | 30·4 | 37·1 | |
| 9·5 | | 37·4 | 28·9 | |
| 9·8 | | 40·4 | 25·8 | |
| 8·7 | | 42·4 | 4·2 | 9·0 |
| 9·4 | | 43·9 | 4·4 | 9·5 |
| 9·8 | | 48·4 | 50·0 | |
| 9·7 | 24 | 5·4 | 37·1 | |
| 9·6 | | 9·1 | 57·7 | 9·0 |
| 9·6 | | 10·4 | 7·1 | |
| 9·6 | | 15·4 | 29·0 | |
| 9·5 | | 24·4 | 57·5 | |
| 8·8 | | 31·9 | 17·7 | 9·2 |
| 9·4 | | 35·9 | 24·7 | 9·0 |
| 9·8 | | 38·4 | 14·4 | |
| 9·6 | | 49·9 | 55·9 | |
| 9·8 | 25 | 1·4 | 39·0 | |
| 9·8 | | 6·9 | 17·5 | |
| 9·8 | | 10·4 | 23·7 | |
| 9·6 | | 12·4 | 17·9 | |
| 9·8 | | 15·4 | 17·1 | |
| 9·5 | | 15·9 | 47·0 | |
| 7·6 | | 26·9 | 22·8 | 7·5 GSt |
| 9·5 | | 37·6 | 1·7 | |
| 9·8 | | 43·4 | 24·6 | |
| 9·4 | | 44·9 | 52·0 | |
| 9·5 | | 52·4 | 13·0 | |
| 9·0 | | 57·9 | 29·1 | 8·5 |
| 8·2 | 26 | 0·4 | 43·1 | 8·0 G |
| 10·0† | | 2·4 | 1·2 | |
| 9·3 | | 2·9 | 42·6 | 9·0 |
| 9·8 | | 11·9 | 57·5 | |
| 9·7 | | 21·9 | 13·4 | |
| 9·6 | | 25·9 | 55·1 | |
| 8·4 | | 29·4 | 57·4 | 8·0 |
| 9·8 | | 30·9 | 23·4 | |
| 9·8 | | 44·4 | 26·4 | |
| 8·8 | | 46·4 | 39·5 | 8·0 G |
| 9·4 | | 48·9 | 12·2 | |
| 9·6 | | 52·4 | 9·9 | |
| 9·8 | | 55·9 | 51·1 | |
| 9·2 | 27 | 4·4 | 5·8 | |
| 9·8 | | 12·4 | 7·2 | |
| 9·8 | | 17·9 | 28·9 | |
| 9·8 | | 18·7 | 0·0 | |
| 9·5 | | 19·9 | 52·4 | |
| 9·8 | | 21·9 | 0·9 | |
| 9·2 | | 22·0 | 24·5 | |
| 10·0† | | 24·5 | 2·0 | |
| 8·2 | | 25·9 | 31·0 | 8·2 G |
| 8·9 | | 29·9 | 3·8 | 9·0 |
| 9·6 | | 32·4 | 50·1 | |
| 9·6 | | 51·9 | 31·1 | |
| 10·0† | | 59·0 | 0·8 | |
| 9·8 | 28 | 9·9 | 11·2 | |
| 9·8 | | 18·9 | 43·4 | |
| 9·0 | | 29·7 | 2·4 | |
| 9·6 | | 37·9 | 18·9 | |
| 9·8 | | 41·4 | 23·0 | |

## 8101—8160.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·7 | 28 | 42·4 | 16·9 | |
| 9·8 | | 48·9 | 55·0 | |
| 9·7 | | 50·4 | 46·8 | |
| 9·8 | | 53·9 | 1·0 | |
| 9·6 | 29 | 2·4 | 41·5 | |
| 9·5 | | 4·9 | 22·9 | 9·0 |
| 9·6 | | 6·4 | 51·6 | |
| 9·6 | | 10·5 | 1·4 | |
| 9·8 | | 14·0 | 2·1 | |
| 9·0 | | 26·4 | 7·1 | 8·5 |
| 8·6 | | 39·4 | 6·3 | 8·5 |
| 9·5 | | 53·9 | 53·0 | |
| 9·8 | | 56·6 | 2·5 | |
| 9·8 | 30 | 0·9 | 19·7 | 10·0 |
| 9·6 | | 1·9 | 44·8 | |
| 9·5 | | 2·4 | 6·3 | 9·0 |
| 8·6 | | 6·4 | 44·3 | 9·0 |
| 9·6 | | 9·4 | 30·3 | |
| 9·8 | | 12·9 | 53·1 | |
| 8·6 | | 13·9 | 19·2 | 8·5 |
| 9·7 | | 20·4 | 51·0 | |
| 7·8 | | 38·4 | 53·2 | 7·8 GSt |
| 9·4 | | 43·9 | 20·3 | |
| 9·8 | | 48·4 | 11·0 | |
| 8·8 | | 49·4 | 35·8 | 9·0 |
| 9·2 | | 55·9 | 45·3 | 8·5 |
| 9·2 | | 55·9 | 56·0 | |
| 9·8 | 31 | 0·4 | 20·2 | |
| 9·7 | | 14·9 | 15·0 | |
| 9·8 | | 16·9 | 54·0 | |
| 8·8 | | 22·9 | 31·4 | 9·0 |
| 9·8 | | 24·4 | 7·2 | |
| 9·8 | | 30·4 | 49·0 | |
| 9·8 | | 31·8 | 0·4 | |
| 9·8 | | 36·9 | 54·9 | |
| 8·6 | | 55·4 | 52·8 | 8·5 |
| 9·8 | 32 | 13·9 | 51·4 | |
| 9·8 | | 19·3 | 57·7 | 10·0 |
| 8·6 | | 22·4 | 55·8 | 7·7 GSt |
| 9·0 | | 23·4 | 45·0 | 9·2 |
| 9·8 | | 29·4 | 26·4 | |
| 9·8 | | 30·3 | 13·0 | 10·0 |
| 9·8 | | 31·9 | 41·0 | |
| 9·8 | | 38·9 | 47·3 | |
| 9·8 | | 46·7 | 1·2 | |
| 9·7 | 33 | 3·4 | 30·0 | |
| 8·5 | | 9·4 | 35·1 | 8·5 |
| 9·7 | | 18·9 | 46·8 | |
| 9·7 | | 25·9 | 35·8 | |
| 9·7 | | 32·9 | 57·0 | |
| 9·2 | | 33·9 | 50·2 | 9·5 |
| 9·8 | | 36·9 | 19·4 | |
| 8·6 | | 53·9 | 15·0 | 8·5 |
| 9·7 | | 55·9 | 27·8 | |
| 8·8 | 34 | 0·4 | 26·8 | 9·5 |
| 9·6 | | 36·4 | 38·5 | |
| 9·8 | 35 | 0·9 | 49·4 | |
| 9·8 | | 1·6 | 1·0 | |
| 9·6 | | 3·9 | 55·3 | |
| 8·8 | | 15·4 | 42·4 | 9·2 |

## 8161—8220.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 35 | 31·9 | 1·7 | |
| 9·0 | | 33·9 | 33·0 | 9·5 |
| 9·8 | 36 | 0·4 | 1·9 | |
| 9·5 | | 4·9 | 46·3 | |
| 9·6 | | 21·8 | 48·8 | |
| 9·8 | | 33·6 | 57·9 | |
| 9·8 | | 38·8 | 46·9 | |
| 9·6 | | 39·8 | 15·1 | 9·0 |
| 9·5 | 37 | 4·8 | 35·9 | |
| 9·8 | | 7·8 | 14·4 | |
| 9·8 | | 14·8 | 20·7 | |
| 9·8 | | 25·8 | 47·2 | |
| 9·8 | | 28·3 | 27·0 | |
| 9·4 | | 32·8 | 25·5 | |
| 9·6 | | 40·3 | 28·9 | |
| 8·0 | | 42·8 | 25·4 | 8·7 |
| 9·8 | 38 | 14·3 | 33·5 | |
| 10·0† | | 27·5 | 1·5 | |
| 9·8 | | 42·8 | 6·8 | |
| 9·4 | | 50·8 | 36·0 | 9·5 |
| 9·8 | 39 | 2·3 | 25·5 | |
| 9·8 | | 10·8 | 53·0 | |
| 9·6 | | 23·3 | 31·2 | 9·5 |
| 9·5 | | 39·3 | 16·1 | |
| 9·8 | | 43·3 | 40·5 | |
| 9·2 | 40 | 17·8 | 59·0 | 9·5 |
| 9·3 | | 26·3 | 48·8 | |
| 9·4 | | 33·3 | 32·9 | |
| 9·8 | 41 | 6·3 | 25·2 | |
| 9·8 | | 26·2 | 47·4 | |
| 9·8 | | 58·3 | 6·1 | |
| 8·7 | 42 | 3·3 | 36·8 | 9·5 |
| 9·8 | | 11·2 | 55·7 | |
| 8·8 | | 12·3 | 17·0 | 9·2 |
| 9·8 | | 16·0 | 46·3 | 9·5 |
| 9·8 | | 16·6 | 58·1 | |
| 9·7 | | 22·8 | 33·5 | |
| 9·8 | | 26·8 | 33·3 | |
| 9·7 | | 29·8 | 44·4 | |
| 9·8 | | 30·3 | 5·2 | |
| 8·9 | | 33·3 | 45·2 | 9·0 |
| 9·8 | | 40·3 | 5·4 | |
| 9·8 | | 40·8 | 39·6 | 9·0 |
| 9·9† | | 41·0 | 1·0 | |
| 8·6 | | 45·3 | 4·3 | 9·0 |
| 9·8 | | 48·0 | 58·0 | 9·0 |
| 8·8 | | 55·5 | 56·8 | 8·5 |
| 9·9† | 43 | 9·7 | 0·9 | |
| 10·0† | | 13·5 | 0·2 | |
| 9·5 | | 19·3 | 21·2 | |
| 9·8 | | 31·3 | 44·7 | |
| 8·1 | | 55·3 | 44·3 | 8·5 |
| 9·8 | | 59·8 | 34·2 | |
| 9·8 | 44 | 2·3 | 19·0 | |
| 9·8 | | 4·8 | 13·7 | |
| 9·8 | | 11·3 | 7·1 | 9·5 |
| 9·7 | | 14·8 | 21·8 | |
| 9·5 | | 18·0 | 2·0 | |
| 8·0 | | 25·8 | 3·5 | 8·5 |
| 9·9† | | 30·7 | 0·1 | |

## 8221—8280.

| mag. | 16h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 44 | 51·3 | 12·9 | |
| 9·9† | | 53·0 | 2·7 | |
| 9·8 | | 54·5 | 24·5 | |
| 9·4 | 45 | 5·3 | 30·9 | 9·5 |
| 9·6 | | 7·8 | 18·4 | |
| 9·2 | | 35·0 | 2·4 | |
| 9·7 | | 52·3 | 32·0 | |
| 9·8 | 46 | 5·8 | 24·3 | |
| 9·5 | | 19·6 | 1·3 | |
| 9·8 | | 49·8 | 9·8 | |
| 9·8 | 47 | 1·8 | 22·3 | |
| 9·4 | | 7·8 | 21·4 | 9·5 |
| 9·6 | | 9·8 | 37·1 | |
| 9·8 | | 12·3 | 55·2 | |
| 9·8 | | 14·0 | 50·9 | |
| 9·8 | | 28·0 | 48·7 | |
| 9·4 | | 30·0 | 33·7 | |
| 8·9 | | 40·7 | 4·9 | 8·3 |
| 10·1 | | 40·7 | 10·6 | |
| 10·1 | | 42·2 | 36·9 | |
| 8·1 | | 51·2 | 38·4 | 8·0 GS |
| 10·1 | | 54·2 | 52·9 | |
| 10·1 | | 54·2 | 8·1 | |
| 8·0 | | 55·0 | 38·3 | 8·0 GS |
| 9·8 | | 59·0 | 46·1 | |
| 10·0 | | 59·7 | 38·9 | |
| 9·8 | 48 | 6·7 | 44·6 | |
| 9·0 | | 12·0 | 2·7 | 8·0 |
| 7·8 | | 13·5 | 43·2 | 8·0 G |
| 10·0 | | 16·2 | 2·9 | |
| 10·1 | | 29·7 | 50·7 | |
| 10·0 | | 31·7 | 48·7 | |
| 9·8 | | 33·7 | 16·9 | |
| 10·1 | | 37·7 | 51·7 | |
| 9·6 | | 41·0 | 11·0 | |
| 8·8 | | 44·2 | 48·0 | 9·2 |
| 10·1 | | 48·7 | 39·2 | |
| 10·0 | | 49·7 | 48·0 | |
| 9·6 | | 49·7 | 24·7 | |
| 10·0 | | 51·2 | 5·2 | |
| 9·8 | | 58·2 | 49·0 | |
| 10·1 | 49 | 6·2 | 21·1 | |
| 10·1 | | 10·2 | 41·3 | |
| 10·1 | | 11·2 | 33·7 | |
| 10·1 | | 11·2 | 29·9 | |
| 10·1 | | 11·7 | 53·0 | |
| 9·6 | | 12·2 | 26·1 | |
| 10·1 | | 15·2 | 3·2 | |
| 10·0 | | 23·2 | 59·6 | |
| 9·6 | | 39·7 | 42·6 | |
| 9·6 | | 41·2 | 55·9 | |
| 9·6 | | 46·7 | 56·4 | |
| 10·0 | | 51·7 | 31·2 | |
| 9·8 | | 57·2 | 10·2 | |
| 9·6 | | 57·2 | 31·7 | |
| 9·3 | | 58·7 | 53·8 | 10·0 |
| 10·1 | 50 | 3·7 | 41·5 | |
| 9·6 | | 11·2 | 9·4 | |
| 9·6 | | 12·7 | 4·3 | |
| 9·6 | | 12·7 | 49·5 | |



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### 8281—8340.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 10·1 | 50 17·2 | 39·8 | |
| 10·1 | 21·2 | 33·8 | |
| 9·6 | 31·2 | 38·0 | |
| 10·0 | 32·2 | 16·3 | |
| 10·1 | 33·7 | 32·9 | |
| 10·0 | 34·2 | 47·3 | |
| 9·8 | 34·2 | 36·0 | |
| 10·1 | 51·7 | 2·9 | |
| 9·5 | 59·7 | 13·3 | 9·2 |
| 9·8 | 51 3·2 | 48·5 | |
| 8·8 | 3·2 | 47·2 | 8·2 |
| 9·5 | 3·4 | 57·7 | |
| 10·1 | 17·2 | 35·6 | |
| 9·6 | 22·2 | 16·5 | 9·2 G |
| 10·0 | 22·2 | 28·0 | |
| 10·1 | 27·7 | 47·0 | |
| 9·6 | 28·7 | 53·2 | |
| 9·6 | 30·2 | 8·8 | |
| 10·1 | 34·2 | 21·6 | |
| 10·1 | 42·9 | 58·0 | |
| 10·1 | 44·2 | 41·6 | |
| 10·1 | 46·7 | 0·2 | |
| 9·6 | 49·7 | 33·0 | |
| 10·1 | 51·7 | 5·4 | |
| 8·0 | 53·2 | 47·2 | 8·5 |
| 8·2 | 52 0·4 | 57·9 | 8·0 G |
| 10·0 | 0·7 | 2·9 | |
| 10·0 | 1·7 | 7·6 | |
| 10·0 | 4·2 | 33·0 | |
| 9·8 | 11·7 | 40·0 | |
| 9·8 | 18·2 | 58·8 | |
| 9·6 | 20·2 | 0·4 | |
| 10·1 | 26·7 | 36·4 | |
| 10·0 | 27·7 | 52·1 | |
| 10·0 | 59·2 | 44·8 | |
| 6·7 | 53 10·2 | 2·9 | 6·0 GSctr |
| 10·0 | 10·7 | 23·2 | |
| 9·1 | 14·7 | 17·9 | |
| 10·1 | 17·7 | 48·2 | |
| 10·0 | 20·2 | 14·4 | |
| 9·8 | 21·7 | 32·9 | |
| 9·4 | 31·2 | 28·0 | 9·5 |
| 10·1 | 36·2 | 56·2 | |
| 10·1 | 36·7 | 55·8 | |
| 9·6 | 36·7 | 28·2 | 10·0 |
| 10·1 | 44·7 | 5·0 | |
| 9·2 | 54 6·2 | 29·0 | 9·4 |
| 9·8 | 11·7 | 48·0 | |
| 9·8 | 21·7 | 15·2 | |
| 9·6 | 22·7 | 56·4 | |
| 9·2 | 27·7 | 0·8 | |
| 8·5 | 33·2 | 25·4 | 8·8 |
| 10·1 | 35·2 | 2·6 | |
| 9·6 | 37·2 | 47·8 | |
| 10·1 | 37·7 | 50·0 | |
| 10·1 | 44·2 | 13·6 | |
| 9·6 | 49·7 | 14·2 | 9·2 |
| 10·1 | 53·7 | 43·4 | |
| 10·1 | 55 7·2 | 33·1 | |
| 10·1 | 8·4 | 39·0 | |

### 8341—8400.

| mag. | 16h. m s | −53° ′ | |
|---|---|---|---|
| 9·6 | 55 12·2 | 45·8 | |
| 10·1 | 12·7 | 20·2 | |
| 10·1 | 31·7 | 58·8 | |
| 8·4 | 32·2 | 35·2 | 9·0 |
| 9·6 | 35·2 | 17·1 | |
| 9·1 | 41·7 | 33·5 | 9·5 |
| 9·6 | 48·2 | 2·6 | |
| 10·1 | 49·7 | 21·2 | |
| 9·5 | 51·2 | 41·1 | 10·0 |
| 10·0 | 52·7 | 27·9 | |
| 10·0 | 56 3·2 | 17·2 | |
| 10·1 | 7·7 | 31·2 | |
| 10·1 | 11·4 | 43·9 | |
| 10·1 | 14·2 | 15·0 | |
| 10·1 | 18·7 | 13·4 | |
| 10·0 | 21·2 | 46·4 | |
| 9·4 | 26·2 | 39·8 | |
| 10·1 | 27·7 | 18·8 | |
| 9·5 | 30·2 | 0·8 | |
| 9·2 | 33·2 | 54·2 | 8·5 |
| 9·6 | 36·2 | 22·8 | |
| 10·1 | 44·7 | 27·5 | |
| 9·8 | 54·7 | 38·0 | |
| 10·0 | 57 1·7 | 15·2 | |
| 10·0 | 4·3 | 0·0 | |
| 9·0 | 6·2 | 17·2 | 9·5 |
| 9·8 | 9·7 | 41·2 | |
| 10·1 | 14·7 | 25·0 | |
| 9·6 | 18·1 | 44·1 | |
| 7·9 | 22·2 | 34·8 | 8·0 G |
| 9·6 | 22·2 | 33·4 | |
| 10·1 | 25·7 | 37·4 | |
| 9·6 | 26·2 | 49·2 | 9·0 |
| 10·0 | 28·7 | 25·2 | |
| 10·1 | 33·1 | 34·0 | |
| 9·6 | 35·2 | 2·2 | |
| 10·0 | 40·7 | 34·2 | |
| 10·0 | 42·2 | 20·3 | |
| 10·0 | 42·2 | 35·0 | |
| 10·1 | 43·2 | 44·1 | |
| 10·1 | 43·7 | 44·8 | |
| 10·1 | 48·7 | 43·2 | |
| 10·1 | 50·7 | 55·6 | |
| 9·8 | 52·2 | 9·4 | |
| 9·6 | 53·2 | 9·8 | |
| 9·6 | 53·7 | 46·8 | |
| 10·0 | 58 4·2 | 19·6 | |
| 10·1 | 9·2 | 32·6 | |
| 9·8 | 12·2 | 26·4 | |
| 9·5 | 14·7 | 41·9 | 9·0 |
| 10·1 | 23·2 | 13·0 | |
| 10·1 | 24·2 | 24·0 | |
| 10·0 | 30·2 | 43·2 | |
| 10·0 | 35·7 | 47·2 | |
| 10·0 | 40·2 | 37·4 | |
| 10·1 | 47·7 | 51·8 | |
| 9·8 | 49·7 | 1·4 | |
| 9·1 | 51·2 | 13·2 | 9·0 |
| 10·1 | 54·7 | 53·2 | |
| 10·1 | 55·4 | 34·7 | |

### 8401—8460.

| mag. | 16h.–17h. m s | −53° ′ | |
|---|---|---|---|
| 10·1 | 59 1·2 | 24·0 | |
| 9·6 | 9·7 | 33·8 | |
| 10·1 | 11·7 | 14·0 | |
| 10·0 | 16·7 | 50·6 | |
| 8·5 | 20·2 | 13·4 | 8·8 |
| 10·1 | 31·2 | 40·0 | |
| 9·4 | 31·7 | 59·9 | |
| 9·6 | 43·2 | 53·2 | |
| 9·6 | 46·2 | 3·6 | |
| 10·2 | 48·2 | 22·2 | |
| 10·1 | 48·4 | 34·6 | |
| 10·1 | 50·2 | 46·2 | |
| 9·8 | 57·3 | 0·8 | |
| 10·1 | 0 3·7 | 7·0 | |
| 10·1 | 9·7 | 25·6 | |
| 9·3 | 14·3 | 2·8 | |
| 10·0 | 18·2 | 9·0 | |
| 10·1 | 27·7 | 36·2 | |
| 10·1 | 31·2 | 58·0 | |
| 8·8 | 31·2 | 46·8 | 9·5 |
| 10·0 | 31·7 | 40·8 | |
| 10·1 | 33·2 | 16·2 | |
| 9·8 | 35·2 | 4·8 | |
| 10·1 | 39·2 | 7·0 | |
| 9·5 | 39·7 | 4·2 | |
| 10·1 | 40·7 | 58·6 | |
| 9·5 | 45·7 | 9·7 | |
| 9·0 | 55·7 | 58·2 | 9·5 |
| 9·8 | 1 5·7 | 42·4 | |
| 10·1 | 7·2 | 45·6 | |
| 8·5 | 10·7 | 39·8 | 8·0 G |
| 9·8 | 10·7 | 30·4 | |
| 10·1 | 20·7 | 26·6 | |
| 10·1 | 24·7 | 12·9 | |
| 10·0 | 25·2 | 17·4 | |
| 10·0 | 36·2 | 3·3 | |
| 9·8 | 44·2 | 36·8 | |
| 10·1 | 50·2 | 31·4 | |
| 9·6 | 51·2 | 14·2 | |
| 10·1 | 59·7 | 58·2 | |
| 10·0 | 59·7 | 9·0 | |
| 9·6 | 2 0·7 | 37·2 | |
| 10·0 | 6·2 | 40·2 | |
| 9·6 | 9·7 | 15·2 | |
| 8·3 | 12·2 | 13·0 | 7·7 GSt |
| 10·1 | 12·2 | 35·0 | |
| 10·1 | 16·2 | 8·7 | |
| 9·6 | 16·2 | 5·2 | |
| 9·6 | 21·2 | 41·9 | |
| 10·1 | 22·2 | 33·9 | |
| 10·0 | 22·7 | 44·0 | |
| 9·6 | 29·3 | 38·2 | |
| 10·1 | 34·2 | 6·6 | |
| 9·8 | 39·7 | 45·9 | |
| 10·1 | 40·7 | 36·0 | |
| 9·3 | 43·2 | 25·0 | |
| 9·6 | 47·7 | 56·0 | |
| 10·0 | 56·7 | 40·0 | |
| 9·8 | 3 7·2 | 36·1 | |
| 10·1 | 8·7 | 42·0 | |

### 8461—8520.

| mag. | 17h. m s | −53° ′ | |
|---|---|---|---|
| 8·5 | 3 12·2 | 30·6 | 9·5 |
| 10·1 | 21·2 | 13·2 | |
| 10·0 | 22·7 | 43·2 | |
| 9·8 | 23·7 | 10·6 | |
| 9·6 | 26·7 | 58·1 | |
| 10·0 | 27·2 | 30·6 | |
| 7·6 | 30·2 | 18·4 | 8·2 G |
| 10·1 | 37·2 | 35·1 | |
| 10·1 | 38·7 | 15·1 | |
| 8·4 | 39·7 | 25·5 | 9·0 |
| 9·6 | 49·2 | 3·0 | |
| 10·1 | 50·2 | 39·0 | |
| 10·1 | 4 1·7 | 23·8 | |
| 9·8 | 2·7 | 22·9 | |
| 9·4 | 6·2 | 15·2 | |
| 10·1 | 9·3 | 11·8 | |
| 10·0 | 11·7 | 31·0 | |
| 9·6 | 12·2 | 50·4 | |
| 10·0 | 34·2 | 21·8 | |
| 10·1 | 34·7 | 0·9 | |
| 8·8 | 36·2 | 32·8 | 9·0 |
| 9·2 | 40·7 | 34·2 | 9·5 |
| 10·1 | 42·2 | 25·0 | |
| 10·0 | 47·7 | 20·2 | |
| 10·1 | 57·2 | 9·2 | |
| 9·8 | 5 6·2 | 20·3 | |
| 10·1 | 12·2 | 43·8 | |
| 10·0 | 28·2 | 7·9 | |
| 10·1 | 33·7 | 18·4 | |
| 10·1 | 35·7 | 25·7 | |
| 9·5 | 47·7 | 54·8 | |
| 8·3 | 51·2 | 47·6 | 8·0 G |
| 8·0 | 52·2 | 13·8 | 8·5 |
| 10·1 | 54·4 | 0·5 | |
| 10·1 | 59·2 | 43·5 | |
| 10·0 | 6 0·7 | 42·5 | |
| 10·0 | 4·2 | 58·0 | |
| 9·8 | 10·2 | 20·9 | |
| 9·8 | 11·2 | 9·2 | |
| 10·0 | 11·7 | 36·0 | |
| 9·8 | 16·2 | 25·8 | |
| 10·1 | 17·7 | 41·4 | |
| 10·0 | 22·2 | 3·6 | |
| 10·0 | 23·2 | 36·0 | |
| 9·0 | 30·7 | 43·2 | 9·0 |
| 9·8 | 46·7 | 39·2 | |
| 10·0 | 49·7 | 41·5 | |
| 10·0 | 54·7 | 40·0 | |
| 9·0 | 59·2 | 53·9 | 9·5 |
| 9·8 | 7 0·2 | 19·0 | |
| 10·1 | 3·2 | 52·0 | |
| 10·0 | 13·2 | 57·0 | |
| 10·0 | 19·7 | 23·9 | |
| 10·0 | 23·7 | 0·0 | |
| 9·6 | 25·2 | 7·1 | |
| 9·3 | 38·7 | 44·7 | 9·2 |
| 9·6 | 41·2 | 15·9 | |
| 10·0 | 48·7 | 31·1 | |
| 9·1 | 53·7 | 38·8 | 9·5 |
| 9·1 | 8 4·2 | 46·2 | 9·5 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 50 | 120 | 2·5 |
| 17 | 0 | 120 | 2·2 |
| | 10 | 121 | 1·8 |



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25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 17 | 0 | 120 | 2·2 |
| | 10 | 121 | 1·8 |
| | 20 | 121 | 1·5 |
| | 30 | 122 | 1·1 |
| | 40 | 122 | 0·7 |

## 8521—8580.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·1 | 8 | 11·3 | 37·5 | |
| 9·4 | | 13·7 | 48·2 | |
| 9·6 | | 16·2 | 56·6 | |
| 9·4 | | 51·2 | 32·6 | 9·5 |
| 10·1 | | 52·2 | 0·5 | |
| 10·1 | | 57·2 | 2·1 | |
| 9·6 | 9 | 8·7 | 19·5 | |
| 10·0 | | 8·7 | 25·2 | |
| 8·6 | | 16·2 | 14·6 | 8·0 GS |
| 10·1 | | 20·2 | 50·5 | |
| 8·6 | | 21·2 | 14·0 | 8·5 G |
| 9·2 | | 22·2 | 14·9 | 9·5 |
| 10·0 | | 30·2 | 2·1 | |
| 8·0 | | 30·7 | 40·8 | 8·0 G |
| 10·0 | | 34·2 | 58·0 | |
| 9·6 | | 48·2 | 50·4 | |
| 10·0 | | 54·0 | 59·2 | |
| 10·1 | | 54·2 | 2·4 | |
| 9·6 | 10 | 3·2 | 57·7 | |
| 9·4 | | 7·5 | 27·6 | 9·5 |
| 10·1 | | 16·0 | 16·1 | |
| 9·3 | | 18·5 | 23·0 | |
| 9·6 | | 20·0 | 44·4 | |
| 10·1 | | 20·5 | 30·0 | |
| 10·1 | | 32·0 | 18·7 | |
| 10·1 | | 33·5 | 7·5 | |
| 9·0 | | 50·0 | 26·2 | 9·0 |
| 9·3 | | 50·5 | 14·2 | |
| 9·8 | | 52·0 | 28·4 | |
| 9·3 | | 56·0 | 7·4 | |
| 10·1 | | 59·0 | 51·6 | |
| 9·8 | 11 | 0·0 | 11·8 | |
| 10·0 | | 12·5 | 15·6 | |
| 9·6 | | 13·5 | 20·2 | |
| 10·1 | | 33·2 | 58·9 | |
| 10·0 | | 35·5 | 28·0 | |
| 10·1 | | 37·5 | 50·8 | |
| 10·1 | | 38·0 | 29·0 | |
| 9·6 | | 52·5 | 53·9 | |
| 10·0 | 12 | 2·0 | 48·2 | |
| 10·1 | | 21·0 | 50·9 | |
| 10·1 | | 29·5 | 33·4 | |
| 8·2 | | 30·0 | 26·5 | 9·0 |
| 9·6 | | 34·0 | 27·4 | |
| 10·1 | | 38·5 | 7·2 | |
| 10·0 | | 51·0 | 52·2 | |
| 10·0 | | 53·0 | 8·2 | |
| 10·0 | | 53·5 | 50·0 | |
| 10·1 | | 53·5 | 20·3 | |
| 10·1 | | 57·5 | 19·7 | |
| 9·8 | 13 | 1·0 | 6·0 | |
| 9·4 | | 9·5 | 4·9 | 9·0 |
| 10·0 | | 15·0 | 5·8 | |
| 9·6 | | 18·5 | 57·1 | |
| 9·8 | | 19·0 | 32·7 | |
| 9·5 | | 22·0 | 54·3 | 9·0 |
| 9·8 | | 34·0 | 6·0 | |
| 10·0 | | 41·0 | 46·5 | |
| 10·1 | | 53·5 | 53·6 | |
| 10·1 | | 56·0 | 50·6 | |

## 8581—8640.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·1 | 14 | 7·5 | 54·5 | |
| 10·0 | | 8·5 | 20·2 | |
| 10·1 | | 11·5 | 46·8 | |
| 9·5 | | 17·0 | 43·8 | |
| 10·1 | | 22·0 | 17·2 | |
| 9·0 | | 22·0 | 30·7 | 9·5 |
| 9·3 | | 26·0 | 51·5 | |
| 10·0 | | 29·5 | 51·8 | |
| 9·6 | | 34·5 | 50·9 | |
| 9·6 | | 41·5 | 58·1 | |
| 10·0 | | 41·5 | 45·5 | |
| 8·6 | | 42·5 | 31·7 | 9·0 |
| 10·1 | | 48·0 | 6·6 | |
| 9·5 | | 50·5 | 30·0 | |
| 9·8 | | 50·8 | 59·0 | |
| 9·6 | 15 | 0·0 | 10·4 | |
| 10·1 | | 18·5 | 2·9 | |
| 9·8 | | 27·8 | 29·5 | |
| 10·0 | | 31·3 | 19·7 | |
| 10·1 | | 32·3 | 22·1 | |
| 10·1 | | 39·8 | 46·2 | |
| 9·8 | | 40·8 | 41·2 | |
| 10·1 | | 44·8 | 15·3 | |
| 10·1 | | 53·8 | 5·0 | |
| 10·1 | | 59·8 | 20·0 | |
| 10·1 | 16 | 9·3 | 38·0 | |
| 8·8 | | 13·9 | 0·6 | |
| 10·1 | | 27·3 | 32·4 | |
| 10·0 | | 45·3 | 9·2 | |
| 10·1 | | 48·3 | 40·2 | |
| 9·6 | | 49·3 | 29·8 | |
| 9·4 | | 49·8 | 38·8 | 9·5 |
| 10·1 | 17 | 8·3 | 0·8 | |
| 9·6 | | 10·8 | 35·6 | |
| 9·8 | | 15·8 | 43·0 | |
| 10·1 | | 16·3 | 41·4 | |
| 9·6 | | 23·3 | 33·2 | |
| 9·3 | | 27·8 | 42·6 | |
| 8·0 | | 29·8 | 6·6 | 7·5 GS |
| 10·1 | | 31·3 | 0·0 | |
| 10·0 | | 52·8 | 4·9 | |
| 10·1 | | 54·8 | 53·2 | |
| 7·6 | 18 | 12·3 | 54·6 | 7·5 GSg |
| 8·4 | | 15·8 | 23·2 | 7·5 G |
| 9·6 | | 19·3 | 12·6 | 10·0 |
| 10·1 | | 19·8 | 36·8 | |
| 8·8 | | 26·2 | 38·8 | 9·0 |
| 9·0 | | 30·2 | 55·8 | 8·2 |
| 9·6 | | 34·7 | 39·7 | |
| 9·8 | | 37·7 | 14·9 | |
| 9·6 | | 38·2 | 25·6 | |
| 10·1 | | 39·7 | 31·0 | |
| 10·0 | | 43·2 | 49·8 | |
| 10·0 | | 52·2 | 6·4 | |
| 9·0 | | 55·7 | 2·4 | 9·0 |
| 10·0 | 19 | 7·7 | 11·0 | |
| 10·1 | | 8·2 | 26·6 | |
| 9·6 | | 9·2 | 53·8 | |
| 10·1 | | 13·5 | 35·9 | |
| 9·8 | | 23·2 | 25·7 | |

## 8641—8700.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 19 | 28·2 | 14·1 | |
| 10·1 | | 29·2 | 4·8 | |
| 9·3 | | 33·5 | 56·7 | |
| 10·1 | | 37·7 | 45·0 | |
| 9·5 | | 40·5 | 3·8 | |
| 8·8 | | 42·7 | 53·6 | 8·2 |
| 9·6 | | 46·4 | 54·8 | |
| 9·6 | | 47·5 | 35·0 | |
| 10·1 | | 59·7 | 19·4 | |
| 9·4 | 20 | 9·6 | 1·4 | |
| 9·8 | | 10·7 | 34·8 | |
| 9·6 | | 11·7 | 33·6 | |
| 10·1 | | 14·4 | 52·0 | |
| 10·1 | | 17·7 | 21·0 | |
| 9·4 | | 25·7 | 39·7 | |
| 10·1 | | 37·2 | 11·5 | |
| 9·5 | | 37·2 | 9·5 | |
| 10·1 | | 47·9 | 37·4 | |
| 9·6 | | 56·2 | 26·9 | 9·2 |
| 8·0 | 21 | 0·7 | 22·5 | 8·5 |
| 10·0 | | 3·7 | 8·8 | |
| 9·8 | | 16·7 | 8·8 | |
| 9·8 | | 19·2 | 47·7 | |
| 9·2 | | 33·2 | 20·1 | 9·5 |
| 9·6 | | 36·2 | 58·6 | |
| 10·0 | | 47·7 | 46·8 | |
| 9·8 | 22 | 21·2 | 8·0 | |
| 9·8 | | 21·7 | 34·9 | |
| 10·0 | | 28·2 | 49·2 | 9·5 |
| 10·1 | | 31·2 | 1·0 | |
| 9·8 | | 39·7 | 25·9 | |
| 9·1 | | 59·7 | 39·2 | 9·5 |
| 9·8 | 23 | 25·2 | 51·7 | |
| 10·0 | | 29·7 | 13·3 | |
| 10·1 | 24 | 8·2 | 40·0 | |
| 8·8 | | 21·2 | 15·0 | 8·5 |
| 8·8 | | 22·7 | 20·0 | 8·0 |
| 8·0 | | 39·2 | 49·2 | 8·0 G |
| 10·1 | | 47·7 | 24·2 | |
| 9·8 | | 49·2 | 32·1 | |
| 10·0 | 25 | 3·2 | 44·0 | |
| 6·8 | | 13·7 | 15·8 | 6·5 GSct |
| 10·1 | | 51·7 | 34·4 | |
| 8·6 | 26 | 5·2 | 43·6 | 8·5 |
| 10·0 | | 10·8 | 23·0 | |
| 10·1 | | 11·8 | 38·2 | |
| 9·6 | | 46·0 | 1·2 | |
| 10·0 | | 50·3 | 58·4 | |
| 10·0 | | 56·8 | 5·2 | |
| 10·1 | | 59·8 | 58·2 | |
| 10·0 | 27 | 0·3 | 11·2 | |
| 10·0 | | 4·3 | 34·8 | |
| 9·6 | | 13·8 | 23·7 | |
| 10·1 | | 16·3 | 21·0 | |
| 9·8 | | 22·8 | 39·4 | |
| 9·5 | | 31·8 | 18·6 | |
| 9·5 | | 38·3 | 26·0 | |
| 10·0 | | 39·8 | 49·8 | |
| 9·4 | | 47·8 | 13·2 | |
| 10·0 | 28 | 16·8 | 59·1 | |

## 8701—8760.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 28 | 17·8 | 4·2 | |
| 10·0 | | 22·3 | 49·2 | |
| 10·0 | | 51·8 | 25·2 | |
| 8·0 | 29 | 11·3 | 7·8 | G |
| 9·8 | | 34·8 | 38·8 | |
| 10·0 | | 35·1 | 58·2 | |
| 9·8 | 30 | 9·5 | 36·5 | |
| 10·0 | | 10·3 | 37·4 | |
| 10·1 | | 19·3 | 32·6 | |
| 9·1 | | 21·8 | 43·6 | 9·5 |
| 10·1 | | 24·3 | 20·8 | |
| 10·0 | | 27·7 | 37·2 | |
| 10·0 | | 28·2 | 35·5 | |
| 10·1 | | 28·8 | 40·8 | |
| 9·8 | | 30·2 | 36·7 | |
| 10·1 | | 31·0 | 45·6 | |
| 10·0 | | 31·2 | 35·3 | G |
| 9·6 | | 31·2 | 36·0 | |
| 10·0 | | 32·8 | 40·2 | |
| 10·1 | | 33·2 | 35·7 | |
| 10·1 | | 35·2 | 36·5 | |
| 9·8 | | 38·2 | 35·4 | |
| 10·0 | | 39·2 | 35·9 | G |
| 10·0 | | 40·7 | 36·8 | |
| 10·1 | | 42·2 | 36·7 | |
| 10·1 | | 52·3 | 27·0 | |
| 9·0 | 31 | 7·8 | 45·0 | 9·0 |
| 10·0 | | 15·8 | 33·2 | |
| 10·0 | | 16·8 | 4·2 | |
| 9·0 | | 17·3 | 43·8 | 9·5 |
| 8·0 | | 22·3 | 24·0 | 8·5 GS |
| 10·1 | | 28·3 | 36·8 | |
| 10·0 | | 33·3 | 57·8 | |
| 9·5 | | 35·0 | 57·7 | |
| 10·1 | | 38·3 | 36·3 | |
| 10·1 | | 44·8 | 29·0 | |
| 10·1 | 32 | 0·3 | 4·0 | |
| 9·8 | | 1·8 | 55·4 | |
| 9·5 | | 3·3 | 24·6 | |
| 9·6 | | 25·8 | 53·7 | |
| 10·1 | | 26·3 | 45·2 | |
| 9·8 | | 58·8 | 46·8 | |
| 10·0 | 33 | 7·8 | 39·4 | |
| 10·0 | | 7·8 | 8·6 | |
| 10·1 | | 10·8 | 18·6 | |
| 9·0 | | 21·3 | 2·9 | |
| 10·1 | | 30·7 | 59·7 | |
| 9·8 | | 34·3 | 23·8 | |
| 9·4 | | 51·8 | 47·7 | |
| 10·1 | | 55·3 | 10·0 | |
| 9·6 | | 57·8 | 2·7 | |
| 8·5 | 34 | 19·8 | 39·4 | 9·0 Gg |
| 10·1 | | 21·3 | 32·8 | |
| 10·1 | | 29·3 | 36·1 | |
| 10·1 | | 40·8 | 2·0 | |
| 10·1 | | 43·5 | 58·6 | |
| 10·0 | | 45·3 | 43·4 | |
| 9·6 | | 51·8 | 3·3 | |
| 9·8 | 35 | 0·3 | 4·9 | |
| 10·0 | | 9·3 | 13·3 | |



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## 8761—8820.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·1 | 35 | 9·3 | 54·9 | |
| 9·8 | | 22·3 | 44·8 | |
| 9·4 | | 35·8 | 31·8 | |
| 9·5 | | 41·8 | 25·3 | |
| 9·6 | | 44·8 | 27·3 | |
| 10·1 | | 49·8 | 53·2 | |
| 10·1 | | 56·3 | 6·9 | |
| 9·8 | | 59·8 | 49·6 | |
| 9·8 | 36 | 4·8 | 19·9 | |
| 10·1 | | 6·3 | 57·1 | |
| 10·1 | | 20·7 | 57·3 | |
| 9·4 | | 25·3 | 44·4 | |
| 9·5 | | 34·8 | 46·3 | |
| 9·8 | | 49·3 | 4·1 | |
| 9·2 | | 50·8 | 12·4 | |
| 10·1 | | 54·3 | 35·4 | |
| 10·1 | 37 | 1·8 | 38·3 | |
| 9·8 | | 7·3 | 0·7 | |
| 9·6 | | 17·3 | 47·3 | |
| 9·8 | | 20·2 | 59·7 | |
| 9·5 | | 26·3 | 51·5 | |
| 10·1 | | 52·8 | 21·1 | |
| 9·4 | | 57·8 | 8·9 | |
| 10·0 | | 58·3 | 52·3 | |
| 8·8 | 38 | 19·8 | 18·0 | |
| 9·4 | | 21·8 | 18·5 | |
| 9·0 | | 27·8 | 3·7 | 9·0 |
| 10·1 | | 42·8 | 29·6 | |
| 10·1 | 39 | 1·3 | 59·9 | |
| 9·6 | | 3·3 | 46·1 | |
| 10·0 | | 21·8 | 44·2 | |
| 9·6 | | 23·3 | 26·2 | |
| 10·1 | | 29·3 | 20·6 | |
| 8·3 | | 43·3 | 16·7 | 8·5 G |
| 10·1 | | 43·3 | 28·8 | |
| 9·5 | | 45·3 | 7·5 | |
| 10·1 | 40 | 4·8 | 18·6 | |
| 9·8 | | 15·8 | 9·1 | |
| 6·5 | | 18·3 | 34·1 | GSct |
| 9·5 | | 20·6 | 2·3 | |
| 10·0 | | 23·8 | 52·8 | |
| 10·0 | | 28·3 | 22·8 | |
| 10·0 | | 35·8 | 37·9 | |
| 9·4 | | 43·8 | 9·8 | |
| 9·8 | | 43·8 | 9·0 | |
| 10·1 | | 44·3 | 56·9 | |
| 10·0 | | 46·3 | 53·6 | |
| 8·6 | | 49·3 | 55·2 | |
| 9·8 | | 49·8 | 32·1 | |
| 9·8 | | 56·3 | 45·7 | |
| 10·1 | | 57·3 | 11·5 | |
| 6·8 | 41 | 4·3 | 5·3 | 6·5 GSct |
| 9·8 | | 12·3 | 54·3 | |
| 7·3 | | 13·3 | 47·7 | GSt |
| 9·6 | | 38·3 | 17·0 | |
| 8·8 | | 45·3 | 2·0 | 8·5 |
| 9·4 | | 45·3 | 22·7 | |
| 9·4 | 42 | 4·3 | 27·1 | G |
| 9·8 | | 7·8 | 15·0 | |
| 10·0 | | 11·3 | 32·7 | |

## 8821—8880.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·2 | 42 | 12·8 | 28·0 | 9·0 G |
| 10·1 | | 32·3 | 35·3 | |
| 10·0 | | 43·8 | 43·0 | |
| 9·6 | | 44·3 | 11·9 | |
| 10·1 | | 45·8 | 3·6 | |
| 9·4 | 43 | 1·3 | 54·8 | 9·0 |
| 10·1 | | 7·0 | 58·4 | |
| 10·1 | | 10·1 | 2·5 | |
| 9·6 | | 14·3 | 49·2 | |
| 10·0 | | 17·8 | 21·4 | |
| 9·6 | | 18·3 | 50·1 | |
| 8·2 | | 31·0 | 23·4 | 8·5 G |
| 9·8 | | 33·0 | 39·5 | |
| 10·0 | | 43·0 | 36·7 | |
| 10·1 | | 51·0 | 35·5 | |
| 10·0 | 44 | 8·0 | 46·3 | |
| 9·1 | | 9·5 | 52·2 | |
| 9·6 | | 27·5 | 37·1 | |
| 10·1 | | 39·5 | 49·3 | |
| 10·0 | | 42·5 | 5·9 | |
| 10·0 | 45 | 1·1 | 57·4 | |
| 10·1 | | 3·5 | 23·4 | |
| 9·6 | | 13·0 | 8·3 | |
| 10·0 | | 45·5 | 33·7 | |
| 9·8 | | 50·5 | 55·9 | |
| 9·0 | | 53·5 | 33·1 | |
| 10·1 | | 54·5 | 11·9 | |
| 10·0 | | 55·0 | 5·0 | |
| 10·1 | | 55·0 | 48·7 | |
| 8·6 | 46 | 11·5 | 18·9 | 8·5 |
| 10·0 | | 43·5 | 18·8 | |
| 10·1 | 47 | 11·5 | 18·2 | |
| 10·0 | | 25·5 | 44·8 | |
| 9·6 | | 30·3 | 58·6 | |
| 10·0 | | 32·0 | 42·4 | |
| 9·6 | | 44·0 | 1·6 | |
| 9·5 | | 45·5 | 13·1 | |
| 9·1 | | 51·5 | 43·5 | 9·5 |
| 10·1 | 48 | 24·0 | 29·1 | |
| 9·8 | | 26·5 | 41·6 | |
| 10·0 | 49 | 49·5 | 55·8 | |
| 10·1 | | 51·5 | 30·9 | |
| 10·1 | | 55·4 | 55·9 | |
| 10·1 | | 56·0 | 19·0 | |
| 10·1 | | 59·0 | 13·0 | |
| 7·8 | | 59·5 | 5·0 | 8·0 G |
| 10·1 | 50 | 6·0 | 24·7 | |
| 10·1 | | 27·5 | 25·0 | |
| 10·1 | | 30·0 | 40·5 | |
| 10·1 | | 56·0 | 37·3 | |
| 10·1 | | 57·0 | 9·3 | |
| 9·4 | 51 | 6·5 | 14·9 | 9·0 G |
| 10·1 | | 22·5 | 24·4 | |
| 10·1 | | 28·0 | 8·9 | |
| 9·5 | | 29·3 | 25·9 | |
| 9·4 | | 30·8 | 44·7 | |
| 9·4 | | 33·0 | 44·1 | |
| 9·8 | | 44·6 | 35·7 | |
| 9·6 | | 53·6 | 34·7 | |
| 9·8 | | 57·1 | 43·5 | |

## 8881—8940.

| mag. | 17h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 52 | 4·1 | 23·7 | |
| 9·7 | | 4·8 | 33·7 | |
| 9·5 | | 7·8 | 3·3 | |
| 9·8 | | 8·6 | 59·8 | |
| 9·8 | | 13·1 | 57·2 | |
| 9·5 | | 15·0 | 9·9 | |
| 9·8 | | 23·6 | 54·8 | |
| 7·8 | | 33·1 | 41·6 | 8·0 GS |
| 9·6 | | 34·6 | 47·2 | |
| 8·9 | | 40·1 | 58·9 | |
| 9·0 | | 40·1 | 34·9 | |
| 9·7 | | 47·0 | 53·1 | |
| 9·6 | | 54·0 | 43·4 | |
| 9·6 | | 54·5 | 25·9 | |
| 9·4 | 53 | 5·0 | 52·7 | |
| 9·8 | | 17·0 | 53·8 | |
| 9·7 | | 20·0 | 17·8 | |
| 9·3 | | 22·0 | 54·8 | |
| 9·8 | | 32·5 | 6·8 | |
| 9·6 | | 33·0 | 29·2 | |
| 9·8 | | 34·5 | 56·0 | |
| 9·4 | | 39·5 | 6·3 | |
| 9·5 | | 41·5 | 11·2 | |
| 9·4 | | 43·0 | 9·2 | |
| 9·8 | | 47·0 | 5·8 | |
| 9·8 | | 49·0 | 18·4 | |
| 9·6 | | 51·5 | 8·4 | |
| 9·1 | | 52·0 | 49·1 | |
| 9·6 | 54 | 4·5 | 31·0 | |
| 9·6 | | 6·5 | 12·9 | |
| 9·8 | | 31·0 | 11·5 | |
| 9·0 | | 31·2 | 57·8 | |
| 9·4 | | 36·5 | 58·2 | |
| 9·6 | | 39·5 | 41·6 | |
| 9·8 | | 47·0 | 49·9 | |
| 9·8 | | 49·5 | 31·8 | |
| 9·3 | | 57·0 | 48·9 | |
| 9·4 | | 58·5 | 55·9 | |
| 9·3 | 55 | 4·5 | 4·8 | |
| 9·7 | | 20·0 | 19·0 | |
| 9·7 | | 20·5 | 27·8 | |
| 9·3 | | 37·0 | 0·3 | |
| 9·6 | | 38·5 | 42·4 | |
| 9·4 | | 42·0 | 14·9 | |
| 9·4 | | 42·0 | 2·9 | |
| 9·6 | | 54·0 | 23·9 | |
| 9·7 | 56 | 9·0 | 52·2 | |
| 9·0 | | 18·0 | 45·5 | |
| 9·5 | | 21·0 | 17·8 | |
| 9·6 | | 27·0 | 4·1 | |
| 9·8 | | 31·0 | 43·6 | |
| 9·8 | | 33·0 | 35·0 | |
| 9·8 | | 33·5 | 44·5 | |
| 9·5 | | 44·0 | 27·8 | |
| 9·6 | | 46·0 | 3·6 | |
| 9·5 | | 55·5 | 29·9 | |
| 9·8 | 57 | 18·0 | 42·1 | |
| 9·8 | | 19·5 | 40·8 | |
| 9·4 | | 22·0 | 7·9 | |
| 9·6 | | 41·0 | 39·9 | |

## 8941—9000.

| mag. | 17h.–18h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·0 | 57 | 54·0 | 29·9 | |
| 9·6 | | 57·0 | 29·3 | |
| 9·8 | 58 | 1·0 | 44·8 | |
| 9·4 | | 1·5 | 29·3 | |
| 9·4 | | 4·5 | 42·9 | |
| 9·8 | | 7·0 | 33·3 | |
| 9·3 | | 11·5 | 51·2 | |
| 9·7 | | 12·0 | 38·0 | |
| 9·3 | | 22·0 | 22·5 | |
| 9·7 | | 37·5 | 17·2 | |
| 9·8 | | 51·0 | 9·8 | |
| 9·5 | | 53·0 | 26·2 | |
| 9·8 | | 56·5 | 45·9 | |
| 9·8 | | 58·5 | 23·1 | |
| 8·4 | 59 | 5·0 | 50·4 | 9·0 |
| 9·8 | | 10·5 | 4·8 | |
| 9·8 | | 12·0 | 29·5 | |
| 9·8 | | 14·5 | 57·0 | |
| 8·4 | | 17·5 | 4·2 | 9·5 |
| 9·3 | | 23·0 | 24·3 | |
| 9·8 | | 27·0 | 56·7 | |
| 9·8 | | 34·0 | 25·2 | |
| 9·4 | | 44·0 | 3·4 | |
| 9·5 | | 44·5 | 58·7 | |
| 9·0 | | 47·4 | 2·3 | |
| 9·6 | | 52·5 | 34·7 | |
| 9·5 | | 54·5 | 33·6 | |
| 9·1 | 0 | 14·0 | 46·4 | |
| 9·4 | | 20·5 | 20·0 | |
| 9·7 | | 38·5 | 28·6 | |
| 9·8 | | 42·0 | 14·9 | |
| 9·7 | | 51·0 | 59·1 | |
| 9·7 | 1 | 6·0 | 29·2 | |
| 9·6 | | 22·5 | 21·0 | |
| 9·8 | | 23·0 | 27·0 | |
| 9·0 | | 26·5 | 47·2 | |
| 9·0 | | 29·5 | 43·1 | |
| 9·4 | | 30·5 | 46·6 | |
| 9·3 | | 31·0 | 17·0 | |
| 9·0 | | 32·5 | 10·7 | |
| 9·4 | | 34·5 | 30·8 | |
| 9·6 | | 37·0 | 18·4 | |
| 9·6 | | 43·0 | 52·2 | |
| 9·8 | | 49·5 | 21·9 | |
| 9·8 | | 56·5 | 1·1 | |
| 9·6 | | 56·5 | 35·5 | |
| 9·8 | 2 | 1·8 | 53·1 | |
| 9·8 | | 9·0 | 47·7 | |
| 9·8 | | 12·0 | 52·6 | |
| 9·7 | | 23·0 | 39·4 | |
| 9·5 | | 30·5 | 12·4 | |
| 9·8 | | 33·0 | 35·1 | |
| 9·8 | | 34·3 | 47·9 | |
| 9·7 | | 36·3 | 31·5 | |
| 9·8 | | 49·3 | 55·9 | |
| 9·8 | | 51·3 | 55·3 | |
| 9·6 | | 55·8 | 56·1 | |
| 9·4 | 3 | 31·3 | 13·9 | |
| 9·7 | | 38·8 | 12·9 | |
| 9·8 | | 40·3 | 38·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 30 | 122 | 1·1 |
| | 40 | 122 | 0·7 |
| | 50 | 122 | 0·4 |
| 18 | 0 | 122 | 0·0 |
| | 10 | 122 | +0·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 18 | 0 | 122 | 0·0 |
| | 10 | 122 | 0·4 |
| | 20 | 122 | 0·7 |
| | 30 | 122 | 1·1 |

## 9001—9060.

| mag. | 18h. m s | −53° ′ | |
|---|---|---|---|
| 8·2 | 3 52·8 | 11·6 | 9·5 |
| 9·4 | 54·8 | 2·8 | |
| 9·1 | 56·3 | 7·1 | |
| 9·8 | 57·8 | 23·8 | |
| 9·7 | 58·3 | 13·9 | |
| 9·8 | 4 5·3 | 17·1 | |
| 9·8 | 5·3 | 49·1 | |
| 9·6 | 6·8 | 30·1 | |
| 9·8 | 9·8 | 47·2 | |
| 9·8 | 31·8 | 10·1 | |
| 8·2 | 34·3 | 6·4 | 8·5 |
| 9·5 | 37·8 | 21·4 | |
| 9·3 | 40·8 | 43·3 | |
| 9·6 | 47·1 | 57·8 | |
| 9·6 | 48·3 | 30·3 | |
| 9·7 | 49·3 | 16·1 | |
| 9·5 | 50·8 | 37·1 | |
| 9·7 | 55·8 | 0·5 | |
| 9·6 | 5 17·3 | 15·2 | |
| 9·8 | 22·8 | 2·0 | |
| 8·6 | 28·3 | 44·1 | |
| 9·8 | 32·3 | 5·4 | |
| 9·3 | 35·3 | 45·9 | |
| 9·8 | 46·8 | 14·5 | |
| 9·0 | 47·8 | 35·1 | |
| 9·4 | 6 0·3 | 36·9 | |
| 9·7 | 1·3 | 15·8 | |
| 9·8 | 4·8 | 20·7 | |
| 9·8 | 25·8 | 45·1 | |
| 9·3 | 28·8 | 15·7 | |
| 9·6 | 34·3 | 55·0 | |
| 9·8 | 34·3 | 24·2 | |
| 9·8 | 34·8 | 14·1 | |
| 9·8 | 41·8 | 16·7 | |
| 9·3 | 56·3 | 38·1 | |
| 9·5 | 7 2·3 | 25·2 | |
| 9·8 | 5·8 | 29·2 | |
| 9·3 | 21·5 | 1·5 | |
| 9·4 | 24·8 | 40·1 | |
| 9·8 | 28·8 | 36·2 | |
| 9·8 | 35·3 | 51·0 | |
| 8·2 | 42·8 | 31·5 | 9·0 |
| 9·8 | 8 1·8 | 20·4 | |
| 9·7 | 3·3 | 15·3 | |
| 9·2 | 7·8 | 41·8 | |
| 9·5 | 12·8 | 19·4 | |
| 9·8 | 13·3 | 44·8 | |
| 8·8 | 13·8 | 14·5 | |
| 9·0 | 37·3 | 21·5 | |
| 8·0 | 38·8 | 46·8 | 8·0 GS |
| 9·8 | 53·3 | 0·0 | |
| 9·4 | 55·3 | 42·0 | |
| 9·7 | 56·3 | 18·9 | |
| 9·8 | 56·8 | 29·5 | |
| 9·4 | 9 4·3 | 11·1 | |
| 9·5 | 5·3 | 24·6 | |
| 9·4 | 12·8 | 14·3 | |
| 9·8 | 17·8 | 2·0 | |
| 9·8 | 33·3 | 28·7 | |
| 9·4 | 10 12·3 | 32·9 | |

## 9061—9120.

| mag. | 18h. m s | −53° ′ | |
|---|---|---|---|
| 8·6 | 10 12·3 | 6·0 | 9·0 |
| 9·3 | 13·8 | 7·2 | |
| 8·4 | 15·8 | 46·6 | |
| 9·6 | 21·3 | 25·9 | |
| 9·8 | 35·8 | 18·7 | |
| 9·3 | 39·3 | 18·5 | |
| 9·8 | 52·8 | 27·7 | |
| 9·4 | 59·3 | 48·1 | |
| 9·0 | 59·8 | 21·0 | |
| 9·5 | 11 1·3 | 23·0 | |
| 9·6 | 4·8 | 14·8 | |
| 9·8 | 10·8 | 38·3 | |
| 9·6 | 16·3 | 26·3 | |
| 9·6 | 16·3 | 3·0 | |
| 8·6 | 32·8 | 34·0 | 9·0 |
| 8·4 | 33·3 | 47·1 | |
| 9·6 | 38·3 | 18·0 | |
| 9·5 | 45·3 | 54·5 | |
| 9·6 | 57·8 | 53·3 | |
| 9·5 | 12 14·8 | 33·0 | |
| 9·8 | 17·8 | 22·1 | |
| 9·0 | 24·3 | 47·3 | |
| 9·2 | 26·8 | 31·8 | |
| 9·3 | 58·8 | 25·0 | |
| 9·7 | 59·0 | 59·4 | |
| 8·8 | 13 9·3 | 10·2 | |
| 8·6 | 9·3 | 28·8 | 9·5 |
| 9·7 | 21·8 | 21·9 | |
| 9·7 | 24·8 | 20·2 | |
| 9·7 | 32·3 | 32·9 | |
| 9·8 | 33·4 | 0·1 | |
| 9·4 | 40·4 | 7·1 | |
| 9·8 | 50·4 | 51·0 | |
| 9·8 | 52·4 | 26·4 | |
| 9·8 | 14 2·4 | 41·2 | |
| 9·8 | 3·9 | 31·2 | |
| 9·5 | 16·4 | 5·0 | |
| 9·4 | 21·4 | 37·5 | |
| 9·4 | 24·4 | 29·8 | |
| 9·8 | 41·9 | 32·1 | |
| 8·8 | 42·4 | 56·1 | |
| 9·1 | 43·9 | 16·0 | |
| 9·6 | 46·4 | 23·9 | |
| 9·4 | 15 2·4 | 12·3 | |
| 9·4 | 2·4 | 5·9 | |
| 9·6 | 4·9 | 28·7 | |
| 9·8 | 6·4 | 27·8 | |
| 9·6 | 7·9 | 55·9 | |
| 9·6 | 8·4 | 9·1 | |
| 9·7 | 24·9 | 3·5 | |
| 9·8 | 35·4 | 27·1 | |
| 7·3 | 38·9 | 42·3 | 8·0 GSt |
| 8·5 | 40·9 | 54·1 | 9·0 |
| 9·6 | 51·9 | 7·6 | |
| 9·2 | 16 3·9 | 6·5 | |
| 9·4 | 12·4 | 31·8 | |
| 9·4 | 18·9 | 40·2 | |
| 9·8 | 24·4 | 40·2 | |
| 9·3 | 31·4 | 47·1 | |
| 9·8 | 32·9 | 26·4 | |

## 9121—9180.

| mag. | 18h. m s | −53° ′ | |
|---|---|---|---|
| 9·8 | 16 35·4 | 46·6 | |
| 9·8 | 38·9 | 47·6 | |
| 8·3 | 38·9 | 41·7 | 8·5 |
| 9·7 | 42·9 | 54·3 | |
| 9·8 | 42·9 | 2·5 | |
| 9·8 | 43·4 | 45·4 | |
| 9·8 | 51·4 | 2·8 | |
| 9·4 | 55·4 | 0·9 | |
| 7·3 | 58·5 | 10·6 | 7·5 GS |
| 9·2 | 17 3·9 | 11·0 | |
| 7·9 | 7·9 | 41·9 | 6·5 GS |
| 9·7 | 12·4 | 12·8 | |
| 9·8 | 21·4 | 4·7 | |
| 8·5 | 22·4 | 20·6 | |
| 9·5 | 25·9 | 8·2 | |
| 9·7 | 28·4 | 47·9 | |
| 9·8 | 30·5 | 14·8 | |
| 8·9 | 40·4 | 4·1 | |
| 9·8 | 41·4 | 43·6 | |
| 9·7 | 48·9 | 9·9 | |
| 9·7 | 55·4 | 54·8 | |
| 9·8 | 18 10·4 | 28·2 | |
| 9·7 | 16·9 | 32·5 | |
| 9·8 | 22·4 | 48·3 | |
| 9·6 | 23·9 | 3·2 | |
| 7·9 | 29·4 | 55·4 | 8·0 |
| 9·8 | 34·9 | 35·3 | |
| 9·4 | 38·4 | 28·7 | |
| 9·8 | 38·4 | 34·9 | |
| 9·7 | 38·9 | 31·1 | |
| 9·2 | 39·4 | 8·7 | |
| 9·5 | 39·4 | 53·9 | |
| 9·7 | 39·9 | 15·9 | |
| 9·7 | 41·9 | 53·8 | |
| 9·6 | 41·9 | 43·6 | |
| 9·6 | 47·4 | 28·9 | |
| 9·8 | 47·9 | 17·5 | |
| 9·8 | 53·9 | 54·0 | |
| 9·3 | 19 12·9 | 9·5 | |
| 9·0 | 42·4 | 33·7 | 9·0 |
| 9·4 | 43·9 | 34·4 | |
| 9·8 | 48·4 | 36·9 | |
| 9·4 | 49·0 | 4·7 | |
| 9·8 | 51·0 | 6·9 | |
| 9·4 | 20 0·0 | 8·2 | |
| 9·5 | 12·5 | 24·8 | |
| 9·4 | 19·5 | 43·4 | |
| 9·7 | 33·5 | 55·0 | |
| 9·4 | 39·0 | 10·2 | |
| 9·6 | 56·5 | 36·8 | |
| 7·6 | 21 0·0 | 36·3 | 8·0 |
| 9·6 | 9·0 | 47·1 | |
| 9·3 | 10·5 | 43·4 | |
| 9·6 | 35·0 | 34·0 | |
| 9·8 | 36·5 | 31·9 | |
| 9·8 | 38·0 | 8·5 | |
| 9·8 | 38·5 | 41·9 | |
| 9·8 | 46·0 | 1·5 | |
| 9·8 | 48·5 | 0·9 | |
| 9·5 | 56·0 | 22·4 | |

## 9181—9240.

| mag. | 18h. m s | −53° ′ | |
|---|---|---|---|
| 9·7 | 22 30·5 | 4·6 | |
| 9·6 | 38·5 | 46·8 | |
| 9·8 | 41·5 | 9·2 | |
| 9·8 | 47·2 | 10·3 | |
| 8·7 | 51·5 | 49·9 | |
| 9·8 | 52·5 | 45·2 | |
| 9·7 | 23 1·0 | 23·0 | |
| 9·8 | 3·5 | 57·9 | |
| 9·7 | 13·0 | 3·3 | |
| 9·2 | 14·8 | 1·6 | |
| 9·8 | 23·5 | 0·9 | |
| 9·6 | 35·0 | 11·8 | |
| 10·0 | 39·2 | 20·5 | |
| 9·5 | 41·2 | 53·1 | |
| 10·0 | 24 3·8 | 24·9 | |
| 9·9 | 4·2 | 52·4 | |
| 9·5 | 11·6 | 38·4 | |
| 9·6 | 14·7 | 55·4 | |
| 10·0 | 16·2 | 45·6 | |
| 9·2 | 29·7 | 37·0 | |
| 9·8 | 33·2 | 14·9 | |
| 10·0 | 37·0 | 5·5 | |
| 9·6 | 41·0 | 8·5 | |
| 10·0 | 52·7 | 47·2 | |
| 10·0 | 57·7 | 39·8 | |
| 9·6 | 25 1·5 | 3·2 | |
| 9·5 | 7·5 | 34·6 | |
| 9·5 | 10·2 | 41·0 | |
| 9·5 | 20·2 | 24·5 | |
| 10·0 | 49·2 | 1·6 | |
| 8·0 | 51·2 | 36·0 | 8·5 |
| 10·0 | 26 5·2 | 38·1 | |
| 8·6 | 18·7 | 39·4 | 9·0 |
| 10·0 | 26·2 | 4·8 | |
| 9·5 | 27·7 | 38·1 | |
| 8·8 | 31·2 | 6·9 | |
| 10·0 | 44·4 | 2·2 | |
| 10·0 | 27 12·2 | 57·8 | |
| 10·0 | 12·2 | 13·4 | |
| 10·0 | 22·2 | 38·4 | |
| 9·9 | 25·7 | 12·6 | |
| 9·9 | 26·7 | 19·5 | |
| 9·4 | 29·2 | 53·4 | |
| 9·4 | 31·7 | 14·6 | |
| 9·8 | 32·2 | 41·6 | |
| 9·4 | 35·7 | 25·6 | |
| 9·8 | 36·2 | 20·6 | |
| 9·8 | 36·2 | 39·0 | |
| 8·4 | 42·2 | 30·2 | 8·5 |
| 9·6 | 46·2 | 38·4 | |
| 10·0 | 53·7 | 22·0 | |
| 9·8 | 57·7 | 39·8 | |
| 9·4 | 28 24·2 | 50·0 | |
| 9·8 | 25·5 | 58·6 | |
| 9·4 | 29·7 | 35·0 | |
| 10·0 | 38·2 | 0·6 | |
| 8·2 | 55·7 | 5·2 | 8·0 G |
| 9·6 | 56·2 | 45·6 | |
| 10·0 | 59·7 | 57·8 | |
| 9·9 | 29 2·7 | 3·6 | 9·0 |



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### 9241—9300.

| mag. | 18h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·0 | 29 | 3·2 | 42·4 | |
| 9·4 | | 6·0 | 58·4 | |
| 9·2 | | 8·2 | 16·9 | 8·5 |
| 9·9 | | 35·2 | 44·0 | |
| 10·0 | | 36·2 | 16·6 | |
| 9·8 | | 38·2 | 8·0 | |
| 9·6 | | 43·7 | 54·8 | |
| 9·6 | | 46·7 | 31·2 | |
| 10·0 | | 50·2 | 16·0 | |
| 9·6 | | 51·2 | 13·6 | |
| 9·9 | | 51·2 | 25·4 | |
| 9·6 | 30 | 1·2 | 38·9 | |
| 9·8 | | 2·7 | 6·4 | |
| 9·5 | | 7·7 | 17·2 | |
| 9·2 | | 11·2 | 50·1 | |
| 9·6 | | 19·7 | 39·4 | |
| 9·6 | | 36·7 | 50·6 | |
| 9·6 | | 40·7 | 9·1 | |
| 10·0 | | 45·7 | 46·2 | |
| 9·2 | | 50·7 | 51·3 | |
| 8·4 | 31 | 1·7 | 30·6 | 9·0 |
| 9·4 | | 8·2 | 10·7 | 9·0 |
| 9·5 | | 17·7 | 38·0 | |
| 10·0 | | 19·7 | 40·6 | |
| 9·5 | | 26·7 | 55·4 | |
| 8·4 | | 48·2 | 15·0 | 8·5 |
| 9·2 | | 51·7 | 26·8 | |
| 10·0 | | 53·2 | 12·0 | |
| 9·8 | | 54·2 | 21·6 | |
| 9·4 | 32 | 13·7 | 45·5 | |
| 9·6 | | 14·5 | 59·0 | |
| 8·7 | | 14·7 | 46·8 | 9·0 |
| 9·8 | | 31·7 | 25·2 | |
| 9·4 | | 33·2 | 38·9 | |
| 9·9 | | 34·7 | 5·2 | |
| 9·5 | | 51·7 | 33·5 | |
| 10·0 | 33 | 7·7 | 34·9 | |
| 10·0 | | 11·7 | 19·8 | |
| 10·0 | | 12·7 | 29·5 | |
| 9·6 | | 24·7 | 45·0 | |
| 9·6 | | 25·2 | 11·0 | |
| 9·4 | | 29·2 | 32·5 | |
| 10·0 | | 36·7 | 15·0 | |
| 9·6 | | 38·7 | 20·4 | |
| 9·9 | | 48·2 | 17·6 | |
| 9·8 | | 55·7 | 12·6 | |
| 9·8 | | 57·7 | 8·4 | |
| 9·5 | 34 | 0·2 | 26·6 | |
| 9·5 | | 7·2 | 15·8 | |
| 7·4 | | 21·2 | 55·2 | 7·8 GS |
| 9·4 | | 22·7 | 11·6 | |
| 10·0 | | 28·2 | 31·8 | |
| 10·0 | 35 | 4·2 | 15·2 | |
| 10·0 | | 11·7 | 29·0 | |
| 9·2 | | 12·2 | 8·5 | |
| 10·0 | | 14·7 | 49·0 | |
| 10·0 | | 17·2 | 55·1 | |
| 9·6 | | 34·7 | 38·0 | |
| 9·9 | | 45·2 | 33·0 | |
| 10·0 | | 45·7 | 8·0 | |

### 9301—9360.

| mag. | 18h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 35 | 50·2 | 40·6 | |
| 9·9 | 36 | 13·2 | 21·6 | |
| 10·0 | | 46·7 | 34·0 | |
| 10·0 | | 48·2 | 22·2 | |
| 10·0 | | 52·7 | 45·0 | |
| 9·6 | | 57·7 | 46·8 | |
| 9·2 | 37 | 6·7 | 50·8 | |
| 9·2 | | 14·7 | 5·5 | 9·0 |
| 9·8 | | 19·7 | 43·9 | |
| 9·5 | | 21·2 | 47·7 | |
| 9·9 | | 27·2 | 47·4 | |
| 10·0 | | 36·7 | 21·4 | |
| 9·6 | | 42·7 | 23·8 | |
| 9·9 | | 56·7 | 43·8 | |
| 9·4 | | 58·7 | 48·2 | |
| 10·0 | 38 | 6·7 | 1·6 | |
| 10·0 | | 13·2 | 35·1 | |
| 10·0 | | 18·7 | 48·6 | |
| 9·4 | | 19·7 | 58·4 | |
| 10·0 | | 21·7 | 49·3 | |
| 9·6 | | 32·7 | 9·1 | |
| 9·6 | | 42·7 | 42·4 | |
| 9·5 | | 53·7 | 52·8 | |
| 9·8 | 39 | 7·7 | 49·4 | |
| 9·8 | | 9·2 | 16·5 | |
| 9·8 | | 13·6 | 0·2 | |
| 9·5 | | 29·7 | 59·8 | |
| 9·8 | | 32·7 | 37·9 | |
| 9·9 | | 32·9 | 57·6 | |
| 9·5 | | 40·7 | 4·8 | |
| 9·6 | | 41·7 | 13·0 | |
| 9·6 | | 51·7 | 24·8 | |
| 9·6 | | 59·7 | 33·2 | |
| 9·6 | 40 | 0·2 | 36·0 | |
| 9·9 | | 6·7 | 0·2 | |
| 9·9 | | 19·7 | 54·0 | |
| 9·6 | | 21·2 | 48·0 | |
| 10·0 | | 30·7 | 20·4 | |
| 10·0 | | 31·7 | 39·9 | |
| 10·0 | | 36·7 | 50·1 | |
| 9·6 | 41 | 1·7 | 28·6 | |
| 9·8 | | 16·2 | 1·6 | |
| 10·0 | | 52·2 | 32·8 | |
| 9·6 | 42 | 4·2 | 43·2 | |
| 8·2 | | 4·2 | 35·4 | |
| 10·0 | | 19·7 | 9·0 | |
| 9·9 | | 20·7 | 53·2 | |
| 9·4 | | 32·7 | 19·4 | |
| 9·4 | | 33·2 | 36·6 | |
| 9·6 | | 37·7 | 13·7 | |
| 9·4 | | 52·2 | 5·5 | |
| 8·4 | 43 | 5·7 | 40·7 | |
| 9·9 | | 25·7 | 46·1 | |
| 8·4 | | 27·7 | 56·6 | 8·5 |
| 9·4 | | 29·7 | 47·9 | |
| 9·5 | | 56·2 | 38·3 | |
| 9·9 | | 58·2 | 47·2 | |
| 9·5 | 44 | 0·7 | 5·0 | |
| 9·9 | | 1·9 | 14·9 | |
| 9·6 | | 6·7 | 16·0 | |

### 9361—9420.

| mag. | 18h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·6 | 44 | 8·2 | 10·8 | |
| 9·6 | | 14·9 | 41·0 | |
| 9·4 | | 22·2 | 27·0 | |
| 8·4 | | 24·2 | 42·2 | 8·5 |
| 9·8 | | 28·2 | 3·9 | |
| 9·6 | | 29·7 | 23·1 | |
| 10·0 | | 40·9 | 32·5 | |
| 9·4 | | 41·7 | 29·9 | |
| 8·2 | | 54·2 | 35·2 | 8·0 G |
| 9·9 | | 55·2 | 50·6 | |
| 9·6 | | 58·2 | 20·4 | |
| 9·9 | 45 | 0·7 | 34·6 | |
| 9·6 | | 3·7 | 44·8 | |
| 10·0 | | 9·7 | 29·2 | |
| 10·0 | | 18·2 | 17·8 | |
| 10·0 | | 19·7 | 2·4 | |
| 9·4 | | 21·2 | 56·5 | |
| 9·6 | | 40·7 | 25·9 | |
| 9·8 | | 41·7 | 9·2 | |
| 9·9 | | 51·2 | 47·3 | |
| 9·8 | | 59·2 | 12·9 | |
| 9·2 | 46 | 2·7 | 53·5 | |
| 10·0 | | 4·2 | 39·9 | |
| 10·0 | | 7·7 | 39·2 | |
| 9·4 | | 23·7 | 22·0 | |
| 9·6 | | 33·2 | 22·9 | |
| 10·0 | | 37·2 | 19·2 | |
| 10·0 | | 38·2 | 6·6 | |
| 9·9 | | 59·2 | 31·1 | |
| 10·0 | | 59·2 | 18·5 | |
| 9·6 | 47 | 2·7 | 36·6 | |
| 9·5 | | 4·9 | 24·6 | |
| 9·6 | | 12·4 | 50·9 | |
| 9·6 | | 20·4 | 43·2 | |
| 8·2 | | 24·9 | 26·8 | 8·5 G |
| 9·9 | | 32·9 | 58·0 | |
| 9·4 | | 37·9 | 0·5 | |
| 9·6 | | 37·9 | 50·2 | |
| 10·0 | | 49·4 | 18·2 | |
| 9·9 | | 56·9 | 18·2 | |
| 10·0 | 48 | 13·9 | 25·9 | |
| 5·2 | | 27·4 | 6·0 | 5·2 GSct |
| 9·6 | | 35·9 | 5·6 | |
| 8·7 | | 38·9 | 26·3 | 8·5 |
| 10·0 | | 39·9 | 53·2 | |
| 8·9 | | 41·4 | 3·1 | 8·5 |
| 9·2 | | 45·9 | 44·8 | |
| 9·4 | | 54·4 | 47·7 | |
| 9·9 | 49 | 12·4 | 57·9 | |
| 9·5 | | 21·4 | 15·3 | |
| 10·0 | | 37·4 | 48·6 | |
| 9·8 | | 45·4 | 55·4 | |
| 9·8 | | 54·9 | 40·3 | |
| 10·0 | | 55·9 | 44·1 | |
| 10·0 | 50 | 2·4 | 55·0 | |
| 9·9 | | 23·9 | 22·1 | |
| 9·2 | | 25·9 | 47·2 | |
| 9·2 | | 27·4 | 40·6 | |
| 9·4 | | 31·4 | 59·3 | |
| 10·0 | | 34·9 | 23·8 | |

### 9421—9480.

| mag. | 18h.–19h. m | s | 53° ′ | |
|---|---|---|---|---|
| 9·6 | 50 | 37·9 | 21·0 | |
| 9·9 | | 49·4 | 8·3 | |
| 10·0 | | 50·4 | 43·0 | |
| 9·6 | 51 | 2·9 | 24·6 | |
| 9·9 | | 11·9 | 28·4 | |
| 10·0 | | 15·9 | 29·9 | |
| 10·0 | | 27·4 | 43·4 | |
| 10·0 | | 31·9 | 0·4 | |
| 10·0 | | 32·4 | 12·6 | |
| 9·9 | | 32·9 | 41·0 | |
| 9·2 | | 38·9 | 6·1 | |
| 9·4 | | 57·4 | 41·2 | 9·5 |
| 10·0 | | 59·4 | 4·9 | |
| 9·4 | 52 | 7·4 | 12·5 | |
| 8·8 | | 7·4 | 8·4 | 9·5 G |
| 8·3 | | 16·4 | 40·8 | 8·0 G |
| 9·9 | | 18·4 | 40·4 | 9·5 G |
| 10·0 | | 20·4 | 50·9 | |
| 9·4 | | 31·4 | 37·6 | |
| 9·4 | | 36·9 | 10·1 | |
| 9·8 | | 40·9 | 5·4 | |
| 8·7 | 53 | 4·4 | 12·0 | |
| 9·6 | | 5·9 | 44·8 | |
| 9·6 | | 18·9 | 24·0 | |
| 9·5 | | 20·4 | 25·2 | |
| 9·4 | | 20·9 | 33·6 | |
| 9·6 | | 27·8 | 38·4 | |
| 9·6 | | 28·9 | 20·3 | |
| 9·6 | | 29·4 | 55·9 | |
| 9·0 | | 32·4 | 10·1 | 9·0 G |
| 10·0 | | 35·4 | 30·1 | |
| 10·0 | | 40·9 | 46·6 | |
| 10·0 | 54 | 22·4 | 32·2 | |
| 9·6 | | 37·9 | 27·1 | |
| 9·6 | 55 | 1·4 | 51·0 | |
| 9·4 | | 7·9 | 35·5 | |
| 9·4 | | 9·4 | 49·9 | |
| 9·5 | | 17·9 | 13·8 | |
| 9·8 | | 20·9 | 45·6 | |
| 9·4 | | 28·1 | 58·3 | |
| 9·5 | | 28·9 | 58·5 | |
| 8·4 | | 31·4 | 28·7 | 8·5 |
| 10·0 | | 33·4 | 14·8 | |
| 9·4 | | 43·9 | 57·1 | 9·0 |
| 9·5 | | 44·0 | 59·7 | |
| 9·6 | | 57·4 | 49·3 | |
| 9·4 | 56 | 1·4 | 47·1 | |
| 9·8 | | 5·0 | 5·9 | |
| 9·0 | | 6·4 | 24·9 | |
| 8·2 | | 7·2 | 43·5 | 8·5 G |
| 9·6 | | 9·9 | 50·9 | |
| 9·9 | | 14·3 | 5·2 | |
| 9·8 | | 24·6 | 4·4 | |
| 10·4 | | 48·6 | 52·8 | |
| 10·0 | 57 | 25·1 | 8·6 | |
| 10·4 | 58 | 27·6 | 59·9 | |
| 10·4 | 59 | 29·1 | 39·9 | |
| 10·4 | | 39·1 | 55·9 | |
| 10·2 | | 49·1 | 58·1 | |
| 9·4 | 0 | 11·6 | 3·6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 20 | 122 | 0·7 |
| | 30 | 122 | 1·1 |
| | 40 | 121 | 1·5 |
| | 50 | 121 | 1·8 |
| 19 | 0 | 120 | 2·2 |
| | 10 | 120 | 2·5 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 19 | 0 | 120 | 2.2 |
| | 10 | 120 | 2.5 |
| | 20 | 119 | 2.9 |
| | 30 | 119 | 3.2 |
| | 40 | 118 | 3.5 |
| | 50 | 117 | 3.9 |

**9481—9540.**

| | 19h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10.4 | 0 | 30.6 | 19.0 | |
| 9.6 | | 34.6 | 42.1 | |
| 10.4 | | 57.1 | 57.1 | |
| 8.7 | 1 | 45.6 | 31.2 | 9.0 |
| 10.4 | | 52.6 | 52.9 | |
| 10.4 | 2 | 0.1 | 57.7 | |
| 8.7 | | 1.6 | 5.5 | 9.2 |
| 10.4 | | 9.6 | 3.9 | |
| 9.8 | | 25.6 | 24.9 | |
| 10.4 | 3 | 11.1 | 21.9 | |
| 9.8 | | 38.1 | 41.7 | |
| 10.4 | | 52.6 | 32.1 | |
| 10.4 | 4 | 9.6 | 14.7 | |
| 10.4 | | 22.1 | 4.9 | |
| 10.0 | | 38.1 | 41.8 | |
| 10.4 | | 42.6 | 17.1 | |
| 10.4 | | 43.6 | 6.2 | |
| 9.4 | 5 | 1.1 | 31.1 | |
| 10.4 | | 1.6 | 57.5 | |
| 9.2 | | 7.1 | 45.1 | |
| 7.7 | | 14.1 | 34.7 | 8.0 GSg |
| 9.4 | | 19.6 | 52.9 | |
| 10.4 | | 26.1 | 50.7 | |
| 10.4 | 6 | 0.6 | 4.1 | |
| 9.8 | | 9.1 | 40.9 | |
| 10.4 | | 56.1 | 30.7 | |
| 9.6 | | 58.6 | 38.9 | |
| 10.2 | 7 | 19.6 | 23.7 | |
| 10.4 | | 38.1 | 30.1 | |
| 9.8 | | 47.6 | 33.7 | |
| 10.4 | | 57.1 | 27.6 | |
| 9.8 | 8 | 2.6 | 24.9 | |
| 7.0 | | 11.6 | 36.1 | 6.8 GSg |
| 9.8 | | 36.1 | 59.4 | |
| 10.4 | | 43.1 | 25.1 | |
| 10.0 | 9 | 5.6 | 24.3 | |
| 9.2 | | 27.6 | 44.1 | |
| 9.8 | | 29.1 | 7.8 | |
| 10.4 | | 31.6 | 59.7 | |
| 9.6 | | 39.1 | 24.1 | |
| 10.2 | 10 | 40.1 | 5.6 | |
| 9.4 | | 53.6 | 26.3 | |
| 9.8 | | 58.5 | 1.2 | 9.5 |
| 9.6 | | 59.6 | 27.3 | |
| 9.4 | 11 | 0.6 | 17.9 | |
| 10.2 | | 26.6 | 48.5 | |
| 10.2 | | 29.6 | 37.9 | |
| 9.8 | | 32.1 | 54.3 | |
| 10.4 | | 57.1 | 14.7 | |
| 8.8 | 12 | 7.6 | 42.1 | 9.0 |
| 9.6 | | 10.6 | 37.8 | |
| 9.6 | | 17.6 | 46.7 | |
| 9.8 | | 17.6 | 33.3 | |
| 9.8 | | 23.1 | 29.9 | |
| 10.4 | | 42.1 | 59.1 | |
| 10.4 | 13 | 0.1 | 36.9 | |
| 8.8 | | 5.1 | 53.3 | |
| 9.4 | | 5.6 | 7.8 | |
| 10.4 | | 10.6 | 45.9 | |
| 10.4 | | 22.6 | 18.3 | |

**9541—9600.**

| | 19h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10.4 | 13 | 32.6 | 21.1 | |
| 10.0 | | 46.6 | 10.1 | |
| 10.4 | | 51.1 | 21.9 | |
| 8.6 | 14 | 5.3 | 33.4 | 8.5 |
| 9.8 | | 27.8 | 40.9 | |
| 8.9 | | 32.0 | 0.2 | |
| 8.7 | | 42.3 | 36.9 | 9.0 |
| 10.4 | 15 | 0.3 | 27.9 | |
| 10.2 | | 2.3 | 12.3 | |
| 9.4 | | 11.8 | 3.6 | |
| 10.4 | | 19.3 | 23.5 | |
| 10.4 | | 29.8 | 40.8 | |
| 10.4 | | 42.0 | 59.9 | |
| 10.4 | 16 | 1.3 | 32.9 | |
| 10.0 | | 2.3 | 14.4 | |
| 9.4 | | 16.8 | 6.4 | |
| 9.4 | | 20.8 | 36.2 | |
| 10.4 | | 29.8 | 19.7 | |
| 9.4 | | 58.3 | 22.0 | |
| 10.4 | 17 | 25.8 | 48.0 | |
| 10.4 | | 32.9 | 1.0 | |
| 8.9 | | 50.3 | 1.3 | |
| 9.8 | 18 | 24.3 | 26.9 | |
| 10.4 | | 35.3 | 52.8 | |
| 9.8 | | 47.3 | 32.1 | |
| 10.4 | 19 | 11.8 | 46.5 | |
| 10.4 | | 15.3 | 2.0 | |
| 8.1 | | 18.3 | 20.6 | 8.5 |
| 10.4 | | 27.3 | 32.7 | |
| 10.4 | | 53.8 | 28.9 | |
| 7.2 | 20 | 4.8 | 52.3 | 8.0 G |
| 10.4 | | 42.3 | 21.0 | |
| 10.2 | 21 | 6.3 | 50.6 | |
| 10.4 | | 9.8 | 10.0 | |
| 10.4 | | 22.3 | 14.7 | |
| 9.4 | | 37.8 | 14.1 | |
| 8.0 | | 42.8 | 30.7 | 8.0 G |
| 9.4 | | 49.8 | 23.3 | 9.0 |
| 9.0 | | 57.8 | 37.0 | 8.0 G |
| 8.7 | 22 | 5.3 | 8.7 | |
| 10.2 | | 5.3 | 51.1 | |
| 8.7 | | 20.3 | 18.0 | |
| 10.4 | | 50.8 | 18.9 | |
| 10.4 | | 51.8 | 43.4 | |
| 6.7 | 23 | 1.3 | 26.6 | 6.5 GSct |
| 8.6 | | 1.8 | 57.6 | |
| 10.2 | | 19.0 | 59.9 | |
| 9.6 | | 23.3 | 11.4 | |
| 8.1 | | 30.8 | 44.9 | 9.0 |
| 10.4 | | 51.3 | 52.7 | |
| 10.4 | 24 | 24.8 | 20.3 | |
| 10.4 | | 36.8 | 10.1 | |
| 10.4 | | 51.8 | 34.9 | |
| 10.4 | | 58.3 | 48.4 | |
| 9.8 | 25 | 2.8 | 20.5 | |
| 7.6 | | 11.3 | 47.2 | 8.5 |
| 9.4 | | 21.8 | 11.7 | |
| 9.8 | | 28.3 | 39.0 | |
| 9.8 | | 34.8 | 14.0 | |
| 8.7 | | 40.8 | 23.2 | 8.5 G |

**9601—9660.**

| | 19h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10.4 | 26 | 0.8 | 51.8 | |
| 7.8 | | 8.3 | 16.6 | 7.0 GS |
| 10.4 | | 11.4 | 1.9 | |
| 10.0 | | 15.8 | 6.6 | |
| 10.4 | | 21.8 | 20.4 | |
| 9.6 | | 39.8 | 51.8 | |
| 10.4 | 27 | 42.0 | 36.7 | |
| 10.4 | | 47.5 | 28.5 | |
| 10.4 | 28 | 22.0 | 13.8 | |
| 9.8 | | 23.0 | 9.1 | |
| 10.2 | | 28.5 | 59.8 | |
| 10.4 | | 32.5 | 22.5 | |
| 10.4 | | 34.9 | 45.9 | |
| 9.4 | | 45.5 | 38.1 | |
| 10.0 | | 54.0 | 17.0 | |
| 9.8 | 29 | 4.0 | 6.0 | |
| 10.0 | | 16.0 | 30.3 | 9.5 |
| 10.4 | | 32.1 | 0.2 | |
| 10.4 | | 32.6 | 10.8 | |
| 10.4 | | 40.5 | 14.9 | |
| 10.0 | | 41.0 | 8.0 | |
| 9.8 | | 42.5 | 24.9 | |
| 10.4 | | 46.5 | 27.3 | |
| 9.8 | 30 | 1.5 | 59.8 | |
| 9.4 | | 2.0 | 35.4 | 9.0 |
| 10.4 | | 2.5 | 17.0 | |
| 9.8 | | 23.5 | 56.3 | |
| 10.4 | | 32.5 | 47.0 | |
| 8.5 | | 39.0 | 1.1 | 9.0 |
| 10.4 | | 42.0 | 59.4 | |
| 10.4 | | 42.5 | 3.6 | |
| 9.0 | 31 | 5.5 | 33.5 | |
| 9.8 | | 5.5 | 56.8 | |
| 10.4 | | 52.5 | 6.0 | |
| 8.2 | | 54.5 | 32.0 | |
| 7.6 | 32 | 29.5 | 14.0 | 8.0 GS |
| 10.4 | | 32.5 | 10.0 | |
| 10.4 | | 37.0 | 17.8 | |
| 9.8 | | 46.5 | 54.2 | |
| 10.4 | | 58.0 | 28.8 | |
| 10.4 | 33 | 7.0 | 6.0 | |
| 9.8 | | 16.5 | 54.9 | |
| 9.8 | | 20.4 | 44.4 | |
| 10.2 | | 29.4 | 6.9 | |
| 8.5 | | 38.1 | 59.4 | 8.0 G |
| 8.6 | | 42.9 | 5.7 | 9.0 |
| 10.2 | | 45.4 | 29.2 | |
| 10.0 | | 52.4 | 49.4 | |
| 10.4 | | 55.4 | 6.2 | |
| 9.8 | 34 | 37.9 | 33.5 | |
| 10.4 | | 45.4 | 50.9 | |
| 10.0 | | 48.4 | 25.9 | |
| 9.6 | | 49.9 | 52.6 | |
| 9.6 | | 55.9 | 56.5 | 9.0 |
| 10.4 | 35 | 7.9 | 20.2 | |
| 9.8 | | 9.9 | 33.3 | |
| 10.4 | | 16.9 | 40.6 | |
| 9.8 | | 19.4 | 25.4 | |
| 10.0 | | 20.4 | 12.3 | |
| 9.0 | | 31.4 | 30.9 | 9.5 |

**9661—9720.**

| | 19h. | | −53° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10.0 | 35 | 40.4 | 22.8 | |
| 10.4 | | 45.1 | 58.2 | |
| 9.8 | 36 | 5.4 | 7.9 | |
| 10.4 | | 19.4 | 41.8 | |
| 9.8 | | 40.4 | 23.6 | |
| 10.4 | | 40.4 | 42.5 | |
| 10.4 | | 41.9 | 38.2 | |
| 9.6 | | 45.4 | 55.7 | |
| 10.4 | | 50.4 | 41.0 | |
| 8.2 | | 57.9 | 6.6 | 8.5 |
| 10.4 | | 58.4 | 45.7 | |
| 9.6 | 37 | 35.9 | 47.4 | |
| 8.8 | | 57.7 | 22.6 | |
| 10.4 | 38 | 13.2 | 19.2 | |
| 9.8 | | 30.2 | 39.1 | |
| 9.6 | | 50.7 | 49.1 | |
| 10.2 | | 53.7 | 38.5 | |
| 7.1 | 39 | 11.2 | 11.5 | 6.5 GS |
| 9.8 | | 13.7 | 40.2 | |
| 9.6 | | 25.7 | 42.5 | |
| 8.6 | | 46.2 | 11.3 | 9.0 |
| 10.2 | | 49.2 | 35.7 | |
| 9.2 | | 59.7 | 38.9 | |
| 10.0 | 40 | 2.7 | 56.3 | |
| 10.4 | | 6.7 | 45.6 | |
| 10.4 | | 18.2 | 5.6 | |
| 10.0 | | 22.2 | 47.7 | |
| 10.4 | | 40.2 | 58.0 | |
| 10.4 | | 42.7 | 12.0 | |
| 10.4 | | 43.2 | 3.3 | |
| 8.5 | | 47.0 | 58.5 | 9.0 |
| 10.2 | | 56.7 | 51.3 | |
| 9.6 | | 59.2 | 40.9 | |
| 10.0 | 41 | 3.2 | 26.1 | |
| 10.4 | | 3.2 | 53.9 | |
| 10.0 | | 22.2 | 47.8 | |
| 9.8 | | 35.2 | 4.1 | |
| 9.6 | | 42.7 | 31.5 | 9.0 |
| 10.0 | | 50.2 | 10.5 | |
| 10.4 | | 52.2 | 31.7 | |
| 9.6 | 42 | 5.7 | 48.9 | |
| 9.8 | | 12.2 | 50.3 | |
| 10.0 | | 15.2 | 28.1 | |
| 10.4 | | 16.2 | 40.9 | |
| 10.2 | | 22.2 | 50.5 | |
| 9.2 | | 24.2 | 47.8 | |
| 10.4 | | 30.7 | 23.1 | |
| 9.8 | | 44.7 | 24.8 | |
| 10.2 | | 44.7 | 15.9 | |
| 10.4 | 43 | 0.5 | 29.4 | |
| 10.4 | | 6.0 | 6.2 | |
| 9.8 | | 11.5 | 55.5 | |
| 7.5 | | 27.5 | 24.3 | 7.0 GS |
| 10.4 | | 29.5 | 33.8 | |
| 10.4 | | 36.0 | 44.4 | |
| 10.4 | | 50.0 | 39.9 | |
| 10.2 | 44 | 1.5 | 9.7 | |
| 10.4 | | 20.0 | 12.4 | |
| 10.4 | 45 | 26.0 | 11.3 | |
| 10.4 | | 32.0 | 9.7 | |



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## 9721—9780.

| mag. | 19h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 46 | 3·5 | 12·9 | |
| 10·4 | | 14·5 | 11·1 | |
| 9·2 | | 22·0 | 7·9 | Gk |
| 9·6 | | 29·5 | 27·7 | |
| 9·8 | | 30·5 | 26·1 | |
| 10·4 | | 33·5 | 17·6 | |
| 10·4 | | 43·3 | 57·2 | |
| 9·8 | | 53·0 | 48·3 | |
| 8·9 | | 56·7 | 2·3 | G |
| 10·4 | | 57·5 | 5·1 | |
| 10·4 | 47 | 10·5 | 46·0 | |
| 9·4 | | 15·0 | 39·2 | |
| 10·0 | | 29·5 | 15·7 | |
| 10·0 | | 32·0 | 15·6 | |
| 9·8 | | 45·5 | 35·1 | |
| 9·8 | | 51·0 | 34·9 | |
| 10·4 | | 53·0 | 24·5 | |
| 9·6 | 48 | 23·0 | 12·9 | |
| 10·4 | | 30·0 | 14·9 | |
| 9·6 | | 38·0 | 37·2 | |
| 9·8 | | 45·0 | 13·6 | |
| 10·4 | | 50·1 | 53·2 | |
| 10·4 | 49 | 19·6 | 43·5 | |
| 10·4 | | 24·6 | 13·0 | |
| 9·8 | | 26·1 | 23·9 | |
| 10·4 | | 28·1 | 30·6 | |
| 10·4 | 50 | 2·1 | 18·4 | |
| 9·8 | | 2·6 | 37·5 | |
| 10·4 | | 9·6 | 17·9 | |
| 9·4 | | 12·5 | 1·8 | |
| 9·6 | | 14·6 | 26·3 | |
| 8·2 | | 39·0 | 1·4 | 7·8 G |
| 10·4 | | 57·6 | 42·6 | |
| 10·4 | | 59·1 | 16·3 | |
| 8·5 | 51 | 9·6 | 23·7 | 9·5 |
| 10·4 | | 17·1 | 45·6 | |
| 9·8 | | 20·1 | 57·8 | |
| 8·8 | | 31·1 | 24·3 | 9·5 |
| 9·4 | | 41·6 | 57·2 | |
| 9·6 | | 47·6 | 33·5 | |
| 10·4 | | 51·4 | 58·3 | |
| 10·4 | | 52·1 | 21·9 | |
| 8·6 | | 52·6 | 19·1 | 9·0 G |
| 8·8 | 52 | 2·6 | 10·0 | 9·0 G |
| 10·4 | | 2·6 | 14·3 | |
| 10·0 | | 4·1 | 5·1 | |
| 8·6 | | 5·6 | 37·7 | |
| 9·8 | | 13·6 | 51·2 | |
| 9·8 | | 17·6 | 30·5 | |
| 10·4 | | 21·1 | 48·1 | |
| 10·4 | | 36·1 | 6·9 | |
| 10·4 | | 46·6 | 29·3 | |
| 8·2 | | 50·6 | 13·6 | 8·5 |
| 10·2 | | 57·6 | 8·9 | |
| 10·0 | 53 | 8·6 | 35·2 | |
| 10·0 | | 36·1 | 29·9 | |
| 10·4 | 54 | 30·1 | 33·2 | |
| 10·4 | | 44·6 | 37·1 | |
| 9·8 | | 47·6 | 11·6 | |
| 9·6 | 55 | 17·7 | 50·2 | |

## 9781—9840.

| mag. | 19h.—20h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 55 | 30·2 | 2·4 | |
| 8·2 | | 34·7 | 2·8 | 8·7 |
| 9·8 | | 46·7 | 58·3 | |
| 8·2 | | 56·5 | 2·6 | 8·0 G |
| 10·0 | 56 | 0·7 | 20·4 | |
| 9·8 | | 19·2 | 43·0 | |
| 9·6 | | 24·2 | 22·5 | |
| 10·4 | | 57·7 | 18·2 | |
| 10·4 | | 59·2 | 1·8 | |
| 10·4 | 57 | 2·7 | 48·6 | |
| 10·2 | | 19·2 | 3·4 | |
| 10·4 | | 22·2 | 33·0 | |
| 10·0 | | 31·2 | 51·0 | |
| 7·0 | | 48·2 | 14·1 | 5·5 GSct |
| 8·8 | 58 | 1·2 | 38·0 | |
| 8·4 | | 6·7 | 27·8 | Gk |
| 8·6 | | 7·7 | 50·0 | |
| 10·0 | | 18·2 | 35·2 | |
| 8·4 | | 36·2 | 54·5 | |
| 10·2 | | 40·7 | 46·0 | |
| 10·4 | | 59·4 | 57·8 | |
| 8·9 | 59 | 3·7 | 52·5 | 8·5 |
| 10·4 | | 9·7 | 8·9 | |
| 10·4 | | 12·7 | 55·0 | |
| 9·8 | | 23·3 | 49·8 | |
| 8·9 | | 24·2 | 46·1 | |
| 9·8 | | 29·4 | 58·5 | |
| 10·0 | | 56·9 | 6·2 | |
| 10·4 | 0 | 43·2 | 35·2 | |
| 10·4 | | 48·7 | 7·6 | |
| 9·6 | | 49·6 | 56·8 | |
| 10·2 | | 51·7 | 43·4 | |
| 10·4 | | 53·4 | 59·2 | |
| 9·7 | | 57·0 | 56·0 | |
| 9·6 | 1 | 8·5 | 18·1 | |
| 9·6 | | 12·5 | 43·0 | G |
| 9·7 | | 22·1 | 57·7 | |
| 9·7 | | 30·0 | 11·6 | |
| 8·6 | | 34·5 | 42·1 | G |
| 9·4 | | 37·0 | 40·1 | |
| 9·7 | | 57·0 | 8·8 | |
| 9·2 | | 58·5 | 36·9 | |
| 9·7 | 2 | 3·5 | 29·7 | |
| 9·3 | | 8·0 | 21·8 | |
| 9·7 | | 8·5 | 20·0 | |
| 9·7 | | 17·0 | 13·0 | |
| 9·7 | | 20·0 | 22·1 | |
| 9·2 | | 41·0 | 25·0 | |
| 9·3 | 3 | 3·5 | 37·3 | |
| 9·7 | | 18·5 | 42·8 | |
| 9·6 | | 20·0 | 51·5 | |
| 9·6 | | 26·5 | 16·1 | |
| 9·2 | | 28·5 | 3·4 | |
| 8·9 | | 52·0 | 58·6 | Gk |
| 9·6 | 4 | 5·3 | 48·2 | |
| 9·7 | 5 | 19·3 | 30·0 | |
| 9·6 | | 34·8 | 47·1 | |
| 9·6 | | 41·8 | 50·4 | |
| 9·7 | | 51·8 | 31·0 | |
| 9·7 | 8 | 2·1 | 57·0 | |

## 9841—9900.

| mag. | 20h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·4 | 8 | 13·3 | 14·6 | |
| 9·4 | | 20·3 | 26·8 | |
| 8·6 | | 30·3 | 7·4 | 8·5 |
| 9·7 | | 39·3 | 17·0 | |
| 9·7 | | 57·8 | 56·2 | |
| 9·6 | 9 | 28·3 | 8·2 | |
| 9·2 | | 38·3 | 43·2 | |
| 9·4 | | 48·8 | 54·8 | |
| 9·2 | | 49·8 | 22·2 | |
| 9·7 | 10 | 44·8 | 56·2 | |
| 9·7 | | 53·8 | 26·1 | |
| 9·3 | 11 | 2·8 | 21·8 | |
| 9·0 | | 26·3 | 10·4 | 9·0 G |
| 9·6 | 12 | 5·3 | 35·9 | |
| 9·7 | 13 | 21·8 | 36·4 | |
| 9·7 | | 31·8 | 59·9 | |
| 9·7 | | 35·6 | 0·6 | |
| 9·4 | 14 | 33·3 | 15·8 | |
| 8·6 | | 36·3 | 28·4 | 9·0 |
| 9·2 | | 47·6 | 25·9 | 9·0 |
| 9·7 | | 50·1 | 3·1 | |
| 9·0 | 15 | 4·6 | 43·0 | 9·0 G |
| 9·6 | | 16·1 | 23·0 | 9·5 |
| 9·6 | | 19·6 | 26·7 | |
| 9·7 | | 45·1 | 43·0 | |
| 8·4 | 16 | 11·6 | 30·5 | 8·5 G |
| 9·0 | | 29·6 | 31·3 | 9·2 G |
| 9·6 | | 41·6 | 22·8 | |
| 9·7 | | 56·3 | 1·4 | |
| 9·4 | 17 | 19·6 | 35·7 | 9·5 |
| 9·2 | | 35·1 | 36·8 | 9·5 |
| 9·7 | | 49·6 | 40·0 | |
| 8·9 | | 52·6 | 49·2 | 9·0 |
| 9·2 | 18 | 21·1 | 4·5 | |
| 9·6 | | 31·1 | 7·9 | |
| 9·7 | | 45·1 | 20·6 | |
| 9·7 | 19 | 16·6 | 24·8 | |
| 9·7 | | 19·6 | 23·2 | |
| 9·2 | | 48·1 | 42·1 | |
| 9·7 | | 49·1 | 2·7 | |
| 9·4 | | 49·6 | 5·0 | |
| 9·7 | 20 | 22·6 | 47·7 | |
| 9·7 | | 33·6 | 4·9 | |
| 9·7 | | 48·1 | 21·6 | |
| 9·7 | | 51·6 | 28·4 | |
| 9·6 | 21 | 1·1 | 11·8 | |
| 9·6 | | 1·6 | 54·7 | |
| 9·2 | | 14·1 | 58·8 | |
| 8·6 | | 26·6 | 13·3 | 7·5 GS |
| 9·0 | | 27·6 | 17·4 | 8·5 G |
| 9·4 | 22 | 6·1 | 8·2 | |
| 9·4 | | 11·6 | 59·6 | |
| 9·6 | | 14·1 | 3·4 | |
| 9·3 | 23 | 13·1 | 6·6 | |
| 9·7 | | 21·1 | 16·5 | |
| 9·2 | | 22·6 | 47·9 | 9·0 |
| 9·6 | | 25·2 | 0·6 | |
| 9·4 | | 32·6 | 24·7 | |
| 9·7 | | 37·5 | 6·9 | |
| 9·3 | | 40·0 | 53·5 | |

## 9901—9960.

| mag. | 20h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·3 | 23 | 48·5 | 41·4 | |
| 9·4 | | 48·5 | 4·0 | |
| 8·4 | 24 | 13·0 | 55·1 | 8·0 |
| 9·4 | | 18·0 | 4·3 | |
| 9·7 | | 21·0 | 43·1 | |
| 9·6 | | 29·5 | 56·5 | |
| 8·2 | | 35·0 | 15·6 | 8·0 |
| 9·2 | 25 | 15·5 | 27·3 | |
| 9·7 | | 20·0 | 10·7 | |
| 9·7 | 26 | 30·5 | 8·2 | |
| 9·6 | | 39·0 | 55·6 | |
| 9·4 | | 54·5 | 35·2 | |
| 9·2 | | 56·5 | 6·8 | 8·5 |
| 9·6 | 27 | 12·0 | 53·7 | |
| 9·0 | | 12·5 | 10·6 | 8·5 |
| 9·2 | | 54·5 | 54·1 | |
| 9·2 | 28 | 0·5 | 29·6 | |
| 9·7 | | 0·5 | 44·4 | |
| 8·9 | | 36·0 | 10·2 | 8·8 G |
| 9·0 | | 40·5 | 14·1 | 8·0 G |
| 9·4 | | 44·5 | 57·0 | |
| 8·2 | 30 | 35·0 | 49·8 | 8·0 |
| 9·7 | 31 | 20·5 | 38·8 | |
| 9·7 | | 21·0 | 39·9 | |
| 9·7 | | 27·0 | 20·7 | |
| 9·7 | 32 | 49·5 | 13·7 | |
| 9·7 | | 50·0 | 21·6 | |
| 9·6 | 33 | 3·1 | 6·5 | |
| 10·0 | | 6·2 | 58·2 | |
| 10·4† | | 9·5 | 1·6 | |
| 10·0 | 34 | 13·2 | 56·0 | |
| 9·3 | | 41·2 | 23·0 | |
| 10·0 | | 48·7 | 19·4 | |
| 9·4 | 35 | 31·7 | 6·3 | 9·0 |
| 10·0 | 36 | 22·2 | 5·8 | |
| 10·0 | | 28·3 | 59·1 | |
| 10·0 | | 30·7 | 32·9 | |
| 9·4 | 38 | 20·2 | 13·0 | |
| 9·0 | | 57·7 | 0·9 | 8·8 |
| 10·0 | 39 | 45·7 | 14·9 | |
| 10·0 | | 48·2 | 55·7 | |
| 8·0 | 40 | 2·7 | 9·8 | 8·0 G |
| 10·0 | | 9·2 | 50·6 | |
| 10·0 | | 33·2 | 47·3 | |
| 9·3 | | 56·2 | 35·9 | |
| 9·6 | 41 | 41·7 | 4·9 | |
| 10·0 | | 43·7 | 7·9 | |
| 10·0 | | 53·2 | 53·2 | |
| 8·4 | 42 | 5·7 | 5·2 | 9·0 |
| 9·2 | | 21·2 | 26·6 | |
| 9·4 | | 45·2 | 36·2 | |
| 9·3 | | 47·7 | 47·1 | |
| 10·0 | | 53·7 | 59·9 | |
| 9·8 | 43 | 7·2 | 38·9 | |
| 10·0 | | 9·7 | 45·1 | |
| 9·3 | | 25·7 | 29·8 | 9·5 |
| 7·5 | | 30·2 | 44·2 | GS |
| 10·0 | | 34·7 | 14·0 | |
| 10·0 | | 49·7 | 20·3 | 9·0 |
| 10·0 | | 59·7 | 13·2 | |

25 prec.

| h | m | α + | δ + |
|---|---|---|---|
| 19 | 40 | 118 | 3·5 |
| | 50 | 117 | 3·9 |
| 20 | 0 | 116 | 4·2 |
| | 10 | 115 | 4·5 |
| | 20 | 114 | 4·8 |
| | 30 | 113 | 5·1 |
| | 40 | 111 | 5·4 |
| | 50 | 110 | 5·6 |

| 25 prec. | | α + | δ + |
|---|---|---|---|
| h | m | s | ′ |
| 20 | 40 | 111 | 5·4 |
| | 50 | 110 | 5·6 |
| 21 | 0 | 109 | 5·9 |
| | 10 | 107 | 6·2 |
| | 20 | 106 | 6·4 |
| | 30 | 104 | 6·6 |
| | 40 | 103 | 6·8 |
| | 50 | 101 | 7·0 |

**9961—10020.**

| mag. | 20h.–21h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 44 | 21·2 | 18·2 | |
| 9·0 | | 45·2 | 53·3 | |
| 9·8 | 45 | 19·2 | 17·0 | |
| 9·4 | 46 | 30·7 | 46·1 | |
| 9·6 | 47 | 7·7 | 54·3 | |
| 10·0 | | 19·7 | 53·9 | |
| 10·0 | | 59·8 | 2·6 | |
| 10·0 | 48 | 14·7 | 9·8 | |
| 10·0 | | 21·2 | 32·1 | |
| 10·0 | | 25·2 | 14·5 | |
| 10·0 | 49 | 4·7 | 4·2 | |
| 9·4 | | 9·7 | 29·7 | |
| 10·0 | | 19·7 | 30·9 | |
| 10·0 | 50 | 48·7 | 26·5 | |
| 8·6 | | 49·7 | 55·4 | 8·5 |
| 10·0 | 51 | 52·7 | 35·4 | |
| 9·8 | 53 | 29·2 | 7·9 | |
| 8·0 | 54 | 5·2 | 15·3 | 7·5 GS |
| 8·0 | | 29·7 | 22·7 | 7·5 GS |
| 10·0 | 55 | 23·7 | 18·3 | |
| 10·0 | | 48·7 | 16·1 | |
| 10·0 | 56 | 9·2 | 22·3 | |
| 10·0 | | 12·7 | 34·6 | |
| 9·8 | | 18·2 | 11·2 | |
| 9·4 | 57 | 1·7 | 54·7 | |
| 8·0 | | 4·7 | 24·5 | 8·0 G |
| 10·0 | | 41·7 | 7·3 | |
| 10·0 | 58 | 1·2 | 50·0 | |
| 9·4 | | 2·2 | 48·8 | |
| 9·3 | | 31·7 | 19·6 | |
| 9·0 | | 40·7 | 42·5 | |
| 10·0 | | 43·7 | 13·8 | |
| 10·0 | 59 | 12·1 | 25·0 | |
| 9·3 | | 12·1 | 32·9 | |
| 8·9 | | 28·1 | 45·9 | 9·0 |
| 10·0 | 0 | 5·1 | 14·7 | |
| 9·8 | | 17·1 | 10·5 | |
| 9·8 | | 20·6 | 42·8 | |
| 9·0 | | 46·6 | 31·9 | |
| 10·0 | 1 | 34·6 | 53·4 | |
| 10·0 | | 38·1 | 23·3 | |
| 10·0 | | 48·1 | 25·2 | |
| 9·4 | | 51·1 | 37·9 | |
| 9·3 | | 56·6 | 59·1 | 9·0 |
| 9·8 | 2 | 6·6 | 28·9 | |
| 10·0 | | 54·9 | 27·4 | |
| 10·0 | 3 | 2·6 | 52·7 | |
| 10·0 | | 20·6 | 11·9 | |
| 10·0 | | 40·6 | 30·4 | |
| 9·6 | 4 | 2·2 | 37·1 | |
| 10·0 | | 30·9 | 44·9 | |
| 9·3 | 5 | 9·3 | 49·6 | 9·0 G |
| 9·4 | 6 | 32·8 | 37·9 | |
| 10·0 | | 42·3 | 38·5 | |
| 6·2 | | 49·3 | 46·7 | 6·0 GSct |
| 8·3 | | 51·8 | 8·5 | 8·5 |
| 9·8 | | 51·8 | 51·2 | |
| 8·6 | 7 | 18·8 | 56·3 | |
| 8·6 | | 31·8 | 31·2 | 8·5 |
| 10·0 | | 46·7 | 59·9 | |

**10021—10080.**

| mag. | 21h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10·2 | 7 | 48·3 | 13·1 | |
| 9·4 | | 56·8 | 45·7 | |
| 9·8 | | 57·3 | 45·3 | |
| 9·2 | 8 | 14·8 | 15·9 | |
| 9·6 | | 19·3 | 17·5 | |
| 10·0 | | 56·8 | 30·9 | |
| 10·2 | 9 | 1·3 | 50·0 | |
| 10·2 | | 2·6 | 12·8 | |
| 9·4 | | 14·8 | 19·0 | |
| 9·8 | | 25·3 | 43·1 | |
| 9·2 | | 41·3 | 19·7 | |
| 9·6 | | 59·3 | 47·4 | |
| 10·0 | 10 | 12·8 | 40·8 | |
| 10·2 | | 15·6 | 31·0 | |
| 10·2 | | 29·3 | 58·6 | |
| 10·2 | | 43·3 | 8·9 | |
| 4·3 | | 57·3 | 58·3 | 5·0 GSctr |
| 9·8 | 11 | 20·3 | 41·0 | |
| 8·6 | | 31·8 | 15·9 | |
| 10·2 | | 35·8 | 24·5 | |
| 10·2 | | 38·8 | 26·7 | |
| 7·7 | | 58·8 | 33·5 | |
| 9·3 | 12 | 0·3 | 44·9 | |
| 8·5 | | 11·1 | 0·1 | |
| 7·9 | | 37·8 | 52·7 | 8·0 |
| 9·8 | 13 | 6·8 | 31·1 | |
| 9·0 | | 11·3 | 56·8 | |
| 8·0 | | 19·3 | 14·3 | 8·5 |
| 10·2 | | 26·3 | 20·9 | |
| 9·6 | | 48·8 | 34·0 | |
| 10·2 | 14 | 1·8 | 44·9 | |
| 10·2 | | 24·3 | 33·7 | |
| 9·8 | | 36·8 | 16·7 | |
| 10·2 | | 42·3 | 57·3 | |
| 9·4 | | 49·3 | 39·5 | |
| 10·2 | | 51·3 | 55·0 | |
| 10·2 | 15 | 21·4 | 25·5 | |
| 10·2 | | 32·9 | 4·5 | |
| 10·2 | | 55·4 | 38·3 | |
| 9·3 | 16 | 3·9 | 15·6 | 8·5 |
| 9·4 | | 14·4 | 39·1 | |
| 9·8 | | 59·4 | 47·1 | |
| 10·2 | 17 | 2·9 | 15·2 | |
| 9·0 | | 16·4 | 40·7 | 8·5 |
| 9·6 | | 20·9 | 49·9 | |
| 9·6 | | 31·4 | 23·8 | |
| 10·2 | | 31·9 | 28·9 | |
| 9·8 | | 37·4 | 40·5 | |
| 10·2 | | 38·9 | 40·1 | |
| 10·0 | | 39·4 | 47·2 | |
| 9·8 | 18 | 51·4 | 57·5 | |
| 10·2 | 19 | 9·9 | 53·7 | |
| 9·2 | | 35·4 | 21·6 | |
| 9·8 | 20 | 2·4 | 3·4 | |
| 9·4 | | 16·9 | 19·7 | |
| 10·2 | | 19·4 | 31·3 | |
| 10·0 | | 25·9 | 50·1 | |
| 9·0 | | 48·4 | 26·3 | |
| 10·0 | | 54·4 | 18·5 | |
| 10·0 | | 54·9 | 50·3 | |

**10081—10140.**

| mag. | 21h. m | s | −53° ′ | |
|---|---|---|---|---|
| 7·8 | 21 | 31·4 | 41·5 | 8·0 G |
| 8·5 | | 39·4 | 16·7 | 8·5 |
| 9·6 | | 41·4 | 18·8 | |
| 9·2 | | 47·9 | 39·1 | |
| 8·6 | 22 | 25·4 | 41·5 | 9·0 G |
| 10·2 | | 41·4 | 7·5 | |
| 10·2 | 23 | 7·9 | 36·0 | |
| 9·0 | | 8·9 | 13·1 | 9·5 |
| 10·2 | | 9·9 | 43·5 | |
| 10·2 | | 28·9 | 11·2 | |
| 9·8 | | 31·4 | 34·7 | |
| 6·8 | 24 | 37·4 | 17·2 | 6·5 GScr |
| 10·2 | | 54·4 | 37·3 | |
| 10·2 | | 58·9 | 4·2 | |
| 10·2 | 25 | 32·4 | 49·4 | |
| 9·4 | | 47·9 | 30·8 | |
| 9·4 | | 51·9 | 47·3 | 9·0 |
| 8·5 | 26 | 1·4 | 54·1 | 9·0 |
| 10·2 | | 9·4 | 58·2 | |
| 9·4 | | 16·9 | 15·7 | |
| 9·6 | | 21·4 | 52·4 | |
| 9·3 | | 22·9 | 23·0 | |
| 9·3 | | 34·9 | 51·1 | |
| 10·2 | | 58·4 | 37·1 | |
| 10·2 | 27 | 2·4 | 38·7 | |
| 10·2 | | 41·9 | 17·9 | |
| 10·0 | | 47·4 | 14·4 | |
| 10·2 | | 49·4 | 42·1 | |
| 10·2 | 28 | 5·4 | 54·7 | |
| 10·2 | | 35·4 | 27·2 | |
| 10·2 | | 47·4 | 35·7 | |
| 10·2 | | 55·4 | 26·8 | |
| 9·8 | 29 | 21·4 | 44·4 | |
| 9·3 | | 35·4 | 26·2 | 9·5 |
| 10·2 | | 57·9 | 27·2 | |
| 9·8 | 30 | 0·9 | 7·3 | |
| 9·8 | | 4·4 | 20·7 | |
| 9·6 | | 46·4 | 49·6 | |
| 10·2 | | 54·9 | 37·6 | |
| 9·8 | | 55·4 | 59·2 | |
| 10·2 | 31 | 14·9 | 55·3 | |
| 10·2 | | 40·4 | 50·4 | |
| 10·2 | | 42·5 | 40·9 | |
| 10·2 | | 46·4 | 44·5 | |
| 9·0 | | 52·9 | 6·9 | |
| 8·8 | 33 | 8·4 | 39·0 | 8·5 G |
| 10·2 | | 37·9 | 21·2 | |
| 9·4 | | 41·4 | 41·6 | |
| 9·6 | | 48·4 | 33·6 | |
| 10·2 | 34 | 11·4 | 5·4 | |
| 10·2 | | 21·4 | 26·9 | |
| 10·2 | | 41·4 | 38·1 | |
| 10·2 | | 57·4 | 7·0 | |
| 9·8 | 35 | 14·8 | 42·8 | |
| 9·6 | | 19·3 | 1·8 | |
| 9·5 | | 37·3 | 9·8 | |
| 9·8 | | 48·5 | 20·8 | |
| 9·8 | | 56·0 | 34·9 | |
| 9·2 | 36 | 30·6 | 2·5 | |
| 9·3 | | 33·2 | 34·3 | |

**10141—10200.**

| mag. | 21h. m | s | −53° ′ | |
|---|---|---|---|---|
| 8·6 | 37 | 26·2 | 40·7 | 9·0 |
| 9·5 | | 30·4 | 59·5 | |
| 9·8 | | 56·7 | 43·5 | |
| 9·8 | 38 | 22·2 | 47·3 | |
| 9·8 | | 23·7 | 44·6 | |
| 9·8 | | 25·2 | 21·8 | |
| 9·2 | | 41·7 | 30·0 | |
| 8·8 | | 43·2 | 14·6 | 9·0 |
| 9·4 | | 53·2 | 27·0 | |
| 9·2 | 39 | 5·7 | 19·9 | |
| 7·9 | | 24·7 | 30·1 | 8·5 GS |
| 9·8 | | 26·7 | 56·9 | |
| 9·8 | | 35·7 | 22·0 | |
| 9·8 | | 45·2 | 7·5 | |
| 9·5 | | 58·7 | 1·5 | |
| 9·6 | 40 | 4·4 | 58·9 | |
| 9·6 | | 11·2 | 26·9 | |
| 8·9 | | 15·7 | 35·6 | |
| 9·6 | | 35·2 | 54·4 | |
| 9·5 | | 38·2 | 36·7 | |
| 9·6 | | 38·7 | 18·2 | |
| 9·8 | | 44·2 | 18·4 | |
| 9·3 | 41 | 20·7 | 21·8 | |
| 9·8 | | 37·2 | 32·9 | |
| 9·8 | | 45·7 | 1·5 | |
| 9·3 | | 48·2 | 38·2 | |
| 9·8 | | 53·2 | 54·4 | |
| 9·2 | 42 | 13·2 | 55·3 | G |
| 9·6 | | 19·7 | 42·3 | |
| 9·6 | | 24·2 | 30·5 | |
| 8·8 | | 30·7 | 59·5 | 8·5 G |
| 9·8 | 43 | 3·2 | 46·7 | |
| 9·2 | | 4·7 | 16·3 | |
| 9·8 | | 10·7 | 27·5 | |
| 8·0 | | 11·3 | 18·7 | 8·0 GS |
| 9·4 | | 23·8 | 35·2 | |
| 9·6 | | 32·8 | 52·7 | |
| 9·6 | 44 | 3·8 | 19·4 | |
| 9·8 | | 15·3 | 43·0 | |
| 9·6 | | 31·3 | 18·0 | |
| 9·4 | | 31·8 | 43·1 | |
| 9·4 | | 57·3 | 43·0 | |
| 8·8 | 45 | 0·3 | 37·3 | 9·5 |
| 9·3 | | 1·8 | 34·7 | |
| 9·6 | | 1·8 | 17·1 | |
| 9·8 | | 2·3 | 14·7 | |
| 9·8 | | 16·2 | 57·9 | |
| 9·8 | | 22·3 | 31·1 | |
| 8·0 | | 47·3 | 42·7 | 8·5 GS |
| 9·6 | | 57·8 | 19·9 | |
| 9·4 | 46 | 15·8 | 13·1 | |
| 9·6 | | 22·3 | 41·0 | |
| 9·8 | | 49·3 | 45·1 | |
| 9·0 | 47 | 6·3 | 21·4 | |
| 8·6 | | 12·3 | 45·5 | |
| 7·4 | | 42·5 | 3·2 | 7·0 GSct |
| 8·8 | | 52·3 | 27·4 | |
| 9·8 | 48 | 0·8 | 57·1 | |
| 9·3 | | 3·3 | 47·3 | |
| 7·6 | | 6·3 | 38·3 | 8·0 GS |



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## 10201—10260.

| mag. | $21^{h}$—$22^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·8 | 48 | 13·8 | 45·1 | |
| 9·2 | | 18·3 | 50·6 | |
| 9·8 | | 45·8 | 3·5 | |
| 9·8 | 49 | 10·3 | 27·3 | |
| 9·6 | | 44·3 | 34·1 | |
| 9·8 | | 45·8 | 1·7 | |
| 9·2 | | 47·3 | 51·2 | |
| 9·2 | | 56·8 | 55·1 | |
| 8·8 | 50 | 9·3 | 37·0 | |
| 9·8 | | 22·8 | 20·8 | |
| 9·8 | | 46·2 | 24·0 | |
| 9·6 | | 51·2 | 39·9 | |
| 9·8 | | 57·7 | 31·4 | |
| 9·3 | 51 | 21·7 | 3·4 | |
| 8·8 | | 32·7 | 48·2 | 8·5 |
| 9·0 | 52 | 4·2 | 47·1 | 9·5 |
| 9·8 | | 11·7 | 8·9 | |
| 9·8 | | 20·7 | 33·0 | |
| 9·5 | | 56·2 | 26·1 | |
| 9·5 | 53 | 4·2 | 1·1 | |
| 9·5 | | 13·2 | 3·1 | |
| 8·8 | | 13·7 | 32·2 | 9·0 |
| 9·2 | | 15·7 | 9·9 | |
| 7·3 | | 16·7 | 40·7 | 7·0 GSt |
| 9·2 | | 54·7 | 43·9 | |
| 9·8 | 54 | 15·7 | 15·7 | |
| 9·8 | | 23·2 | 59·5 | |
| 9·2 | | 27·7 | 21·1 | |
| 9·3 | | 48·7 | 31·6 | |
| 9·2 | | 49·2 | 40·9 | |
| 9·6 | 55 | 5·2 | 55·0 | |
| 9·8 | | 20·7 | 35·8 | |
| 9·4 | | 36·2 | 50·2 | |
| 9·8 | | 43·2 | 21·4 | |
| 8·6 | 56 | 16·7 | 8·4 | 8·5 |
| 9·6 | | 31·7 | 17·0 | |
| 9·8 | | 50·7 | 0·2 | |
| 9·8 | | 57·7 | 43·7 | |
| 9·6 | 57 | 34·7 | 15·2 | |
| 9·8 | | 49·7 | 6·5 | |
| 9·8 | 58 | 21·7 | 3·9 | |
| 9·8 | 59 | 3·7 | 50·4 | |
| 9·8 | | 24·7 | 41·4 | |
| 9·8 | | 26·2 | 27·8 | |
| 9·6 | | 26·7 | 27·2 | |
| 9·5 | 0 | 8·5 | 26·1 | |
| 8·7 | | 10·5 | 58·0 | 9·0 |
| 9·6 | | 21·0 | 41·6 | |
| 8·8 | | 47·0 | 22·6 | |
| 9·8 | 1 | 11·5 | 16·1 | |
| 9·2 | | 22·0 | 14·2 | |
| 9·3 | 2 | 29·5 | 26·9 | |
| 9·8 | | 36·0 | 34·5 | |
| 9·6 | | 44·5 | 9·1 | |
| 9·8 | | 50·0 | 40·3 | |
| 9·8 | 3 | 23·5 | 21·7 | |
| 9·6 | 4 | 19·0 | 49·6 | |
| 9·8 | 5 | 2·5 | 16·2 | |
| 9·8 | | 28·5 | 3·9 | |
| 9·8 | | 30·5 | 55·8 | |

## 10261—10320.

| mag. | $22^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 9·3 | 5 | 54·0 | 32·8 | |
| 9·2 | 6 | 7·5 | 54·9 | |
| 9·8 | | 32·0 | 16·2 | |
| 9·3 | | 32·0 | 39·5 | |
| 9·8 | | 39·0 | 51·3 | |
| 7·6 | 7 | 12·2 | 19·1 | 8·0 GSt |
| 9·4 | | 29·7 | 33·7 | |
| 9·3 | | 33·0 | 40·8 | |
| 9·4 | 8 | 0·5 | 41·7 | |
| 9·8 | | 3·5 | 11·5 | |
| 9·6 | | 5·2 | 57·1 | |
| 9·8 | | 13·0 | 11·8 | |
| 9·3 | | 18·2 | 15·9 | |
| 9·6 | | 30·2 | 14·9 | |
| 9·4 | 9 | 31·6 | 2·2 | |
| 10·0 | 10 | 11·4 | 50·4 | |
| 10·4 | | 23·9 | 5·5 | |
| 8·9 | | 48·4 | 41·8 | 9·5 |
| 10·4 | 11 | 3·4 | 28·5 | |
| 9·6 | | 21·9 | 21·7 | |
| 8·8 | 12 | 1·9 | 36·3 | 8·5 G |
| 9·2 | 13 | 7·9 | 16·2 | |
| 9·2 | | 50·4 | 49·1 | |
| 9·0 | 14 | 39·4 | 24·6 | 9·0 |
| 9·6 | 15 | 15·4 | 33·5 | |
| 10·0 | | 28·9 | 23·0 | |
| 9·0 | | 32·4 | 14·9 | 9·2 |
| 10·3 | | 36·4 | 39·0 | |
| 10·2 | 16 | 7·9 | 32·8 | |
| 9·4 | | 31·9 | 4·7 | |
| 10·4 | 17 | 42·4 | 43·8 | |
| 10·3 | | 52·4 | 12·4 | |
| 9·4 | 18 | 7·9 | 36·7 | |
| 10·4 | | 22·4 | 30·5 | |
| 9·4 | | 31·4 | 9·5 | |
| 9·4 | | 41·4 | 18·9 | 9·0 |
| 8·6 | 19 | 5·9 | 36·0 | 8·0 |
| 10·4 | 20 | 12·4 | 22·3 | |
| 9·2 | | 22·4 | 22·6 | |
| 10·4 | | 22·9 | 21·4 | |
| 10·4 | | 41·4 | 16·4 | |
| 10·3 | 21 | 2·4 | 51·0 | |
| 10·2 | 22 | 5·4 | 51·3 | |
| 10·3 | | 35·9 | 51·3 | |
| 9·8 | 23 | 57·4 | 39·0 | |
| 9·4 | 24 | 24·4 | 24·2 | |
| 10·4 | 25 | 16·4 | 54·9 | |
| 10·4 | | 26·9 | 49·1 | |
| 10·4 | 26 | 11·4 | 25·4 | |
| 9·8 | | 59·4 | 27·4 | |
| 9·4 | 27 | 37·9 | 40·7 | |
| 10·4 | 28 | 7·4 | 15·4 | |
| 9·6 | | 36·4 | 9·5 | |
| 10·4 | | 40·4 | 23·8 | |
| 9·8 | | 42·9 | 13·5 | |
| 8·6 | | 50·4 | 46·4 | 8·0 |
| 10·2 | | 59·4 | 57·2 | |
| 10·2 | 29 | 11·4 | 3·7 | |
| 10·4 | | 35·4 | 4·1 | |
| 9·4 | | 59·9 | 31·2 | 9·0 G |

## 10321—10380.

| mag. | $22^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 30 | 2·9 | 14·4 | |
| 8·6 | | 16·9 | 25·1 | 7·8 GS |
| 10·4 | | 41·9 | 20·4 | |
| 10·4 | | 48·9 | 34·8 | |
| 10·4 | | 56·9 | 13·0 | |
| 6·6 | 31 | 23·9 | 20·4 | 6·8 GSct |
| 10·3 | | 43·9 | 17·3 | |
| 10·2 | | 51·4 | 34·1 | |
| 10·3 | 32 | 23·9 | 38·9 | |
| 10·2 | | 44·4 | 47·5 | |
| 10·4 | | 44·9 | 16·0 | |
| 10·4 | | 55·4 | 21·9 | |
| 10·4 | | 56·4 | 56·5 | |
| 9·6 | 33 | 1·4 | 53·1 | |
| 10·3 | | 57·9 | 46·1 | |
| 9·2 | 34 | 35·4 | 41·8 | |
| 9·4 | | 59·4 | 9·7 | |
| 9·6 | 35 | 49·9 | 41·2 | |
| 10·4 | 36 | 20·4 | 53·1 | |
| 8·4 | | 29·9 | 3·9 | 8·5 G |
| 9·4 | 37 | 24·4 | 32·9 | |
| 10·2 | | 54·6 | 0·1 | |
| 10·4 | 38 | 20·4 | 30·1 | |
| 9·8 | | 40·4 | 31·3 | |
| 8·8 | | 52·9 | 37·3 | |
| 10·2 | 39 | 26·8 | 42·8 | |
| 10·0 | | 30·6 | 22·1 | |
| 10·0 | | 30·9 | 49·5 | |
| 10·4 | 40 | 51·2 | 52·1 | |
| 8·8 | 41 | 47·7 | 32·0 | |
| 8·6 | | 59·2 | 58·2 | 7·5 G |
| 9·8 | 42 | 41·7 | 19·0 | |
| 10·4 | 43 | 50·2 | 7·6 | |
| 9·4 | 44 | 25·2 | 54·6 | |
| 9·8 | | 57·7 | 5·0 | |
| 10·4 | 45 | 20·7 | 3·0 | |
| 9·2 | | 41·7 | 45·1 | |
| 10·2 | | 47·2 | 28·1 | |
| 10·4 | | 51·0 | 44·6 | |
| 10·2 | 46 | 16·7 | 29·1 | |
| 10·0 | | 22·2 | 53·3 | |
| 9·4 | | 39·7 | 38·6 | |
| 9·4 | 47 | 0·7 | 15·6 | |
| 9·8 | | 5·2 | 13·0 | |
| 10·2 | | 52·2 | 13·2 | |
| 10·0 | 48 | 28·7 | 9·2 | |
| 9·8 | | 32·2 | 45·8 | |
| 10·4 | 49 | 10·7 | 41·4 | |
| 9·8 | | 14·7 | 2·8 | |
| 9·8 | | 21·7 | 16·6 | |
| 9·8 | | 31·7 | 18·4 | |
| 9·6 | 50 | 54·2 | 47·4 | |
| 9·2 | 51 | 10·2 | 27·5 | |
| 9·8 | | 10·7 | 48·0 | |
| 9·8 | 52 | 15·7 | 50·8 | |
| 10·2 | | 45·7 | 13·4 | |
| 9·0 | | 51·7 | 29·4 | 8·5 |
| 10·4 | 53 | 1·7 | 53·4 | |
| 9·8 | | 10·2 | 18·8 | |
| 9·8 | | 10·7 | 6·5 | |

## 10381—10440.

| mag. | $22^{h}$—$23^{h}$ m | s | −53° ′ | |
|---|---|---|---|---|
| 10·4 | 53 | 11·2 | 59·9 | |
| 5·5 | | 29·7 | 25·4 | 3·5 GSct |
| 10·4 | | 44·7 | 45·0 | |
| 10·4 | 54 | 19·2 | 34·6 | |
| 10·4 | | 31·7 | 30·7 | |
| 10·4 | | 33·7 | 50·0 | |
| 10·2 | 55 | 3·2 | 36·7 | |
| 9·4 | | 4·2 | 36·0 | |
| 7·4 | | 20·2 | 38·2 | GSg |
| 9·8 | | 34·0 | 0·1 | |
| 8·6 | | 43·7 | 19·2 | 8·5 G |
| 9·4 | 56 | 9·2 | 35·9 | |
| 8·8 | | 48·7 | 34·4 | |
| 10·4 | 57 | 6·7 | 46·6 | |
| 10·2 | | 37·7 | 10·2 | |
| 8·6 | 58 | 5·2 | 31·8 | 9·0 |
| 9·8 | | 15·2 | 55·0 | |
| 10·4 | | 22·6 | 54·6 | |
| 10·4 | | 25·2 | 21·9 | |
| 9·2 | | 36·2 | 14·4 | |
| 10·4 | | 47·2 | 17·5 | |
| 9·6 | 59 | 9·7 | 51·6 | |
| 10·4 | | 27·7 | 26·6 | |
| 8·2 | | 38·2 | 27·4 | 8·0 |
| 7·7 | 0 | 2·2 | 16·7 | 7·8 GS |
| 9·8 | | 6·2 | 0·0 | |
| 10·4 | | 35·7 | 30·6 | |
| 10·4 | 2 | 46·7 | 3·8 | |
| 9·8 | 3 | 23·7 | 18·9 | |
| 10·2 | 4 | 16·2 | 21·6 | |
| 10·2 | | 45·2 | 56·9 | |
| 10·4 | | 56·7 | 5·0 | |
| 10·2 | | 58·7 | 47·8 | |
| 9·2 | 5 | 6·2 | 6·2 | |
| 9·6 | | 26·2 | 52·9 | |
| 8·8 | | 33·2 | 21·0 | 9·0 G |
| 9·6 | | 40·2 | 42·0 | |
| 9·8 | 6 | 16·2 | 10·8 | |
| 10·4 | | 50·2 | 13·2 | |
| 8·6 | | 58·2 | 22·3 | |
| 10·4 | 7 | 7·8 | 22·7 | |
| 10·2 | | 9·3 | 35·1 | |
| 10·0 | | 31·8 | 40·7 | |
| 9·8 | | 49·1 | 0·4 | |
| 9·4 | | 52·8 | 33·8 | |
| 10·4 | 8 | 45·8 | 28·8 | |
| 8·6 | | 51·3 | 59·8 | 9·0 |
| 10·4 | 10 | 20·3 | 51·3 | |
| 10·4 | | 31·3 | 19·3 | |
| 8·8 | | 34·3 | 31·0 | 8·8 |
| 10·4 | | 56·3 | 30·4 | |
| 10·2 | 11 | 8·3 | 21·2 | |
| 10·4 | | 34·3 | 47·1 | |
| 10·4 | 12 | 27·7 | 10·8 | |
| 10·4 | | 32·3 | 41·9 | |
| 10·4 | | 47·8 | 34·6 | |
| 9·2 | | 57·7 | 37·3 | |
| 9·2 | | 59·2 | 35·9 | |
| 10·2 | 13 | 43·2 | 18·7 | |
| 9·2 | 14 | 21·5 | 0·3 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 40 | 103 | 6·8 |
| | 50 | 101 | 7·0 |
| 22 | 0 | 99 | 7·2 |
| | 10 | 98 | 7·4 |
| | 20 | 96 | 7·6 |
| | 30 | 94 | 7·7 |
| | 40 | 92 | 7·9 |
| | 50 | 90 | 8·0 |
| 23 | 0 | 88 | 8·1 |
| | 10 | 87 | 8·2 |
| | 20 | 85 | 8·2 |



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| | | 25 prec. α + | δ + |
|---|---|---|---|
| h | m | s | ′ |
| 23 | 10 | 87 | 8.2 |
| | 20 | 85 | 8.2 |
| | 30 | 83 | 8.3 |
| | 40 | 81 | 8.3 |
| | 50 | 79 | 8.3 |
| 0 | 0 | 77 | 8.4 |

### 10441—10478.

| mag. | 23h. m | s | −53° ′ | |
|---|---|---|---|---|
| 9.1 | 14 | 25.2 | 51.6 | 9.5 |
| 9.0 | | 30.2 | 5.8 | |
| 10.0 | 15 | 39.7 | 41.2 | |
| 8.2 | | 43.7 | 44.2 | 8.2 G |
| 10.2 | | 58.2 | 40.6 | |
| 9.8 | 16 | 21.2 | 8.8 | |
| 9.1 | | 37.7 | 13.5 | |
| 8.2 | 17 | 7.7 | 0.4 | 8.5 G |
| 9.1 | | 9.7 | 30.6 | |
| 9.8 | | 11.7 | 22.8 | |
| 8.5 | | 13.7 | 5.2 | 9.0 G |
| 9.1 | | 36.2 | 31.6 | |
| 7.3 | | 41.2 | 22.9 | 7.8 GS |
| 10.2 | | 48.2 | 17.5 | |
| 10.2 | 18 | 1.7 | 54.2 | |
| 10.2 | | 33.7 | 45.8 | |
| 9.4 | | 50.2 | 24.1 | |
| 9.4 | | 57.2 | 50.8 | |
| 9.4 | 19 | 7.7 | 58.1 | |
| 9.8 | | 13.7 | 33.5 | |
| 5.9 | | 36.2 | 24.6 | 5.8 GSctr |
| 9.6 | | 48.7 | 21.3 | |
| 9.0 | 20 | 21.2 | 21.8 | |
| 10.2 | | 29.7 | 46.7 | |
| 10.2 | 22 | 12.2 | 2.9 | |
| 9.4 | | 20.7 | 33.1 | |
| 7.0 | | 28.2 | 21.9 | 7.0 GSr |
| 9.0 | | 34.7 | 21.1 | 8.5 |
| 10.0 | 23 | 21.2 | 14.3 | |
| 10.0 | 24 | 0.2 | 46.2 | |
| 10.2 | | 25.2 | 2.8 | |
| 10.2 | | 32.2 | 32.0 | |
| 10.2 | | 51.2 | 16.0 | |
| 10.2 | 25 | 7.9 | 59.8 | |
| 9.4 | | 35.7 | 6.7 | |
| 9.6 | | 36.2 | 37.2 | |
| 9.0 | | 44.0 | 16.1 | 9.0 |
| 10.0 | | 52.0 | 18.8 | |

### 10479—10516.

| mag. | 23h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.2 | 25 | 59.0 | 45.6 | |
| 10.0 | 26 | 5.0 | 43.9 | |
| 10.2 | | 20.5 | 35.8 | |
| 9.4 | | 21.5 | 17.4 | |
| 9.2 | | 41.0 | 25.8 | |
| 10.2 | | 55.5 | 36.0 | |
| 10.2 | 27 | 3.5 | 30.8 | |
| 9.8 | | 9.0 | 40.6 | |
| 9.2 | | 36.0 | 1.3 | |
| 10.0 | | 49.0 | 21.8 | |
| 9.6 | 28 | 0.5 | 17.9 | |
| 9.2 | | 6.5 | 25.9 | |
| 9.4 | | 22.5 | 24.7 | |
| 9.0 | | 54.5 | 55.0 | |
| 10.2 | 29 | 15.0 | 37.7 | |
| 10.2 | | 38.0 | 8.1 | |
| 9.2 | | 43.5 | 5.9 | |
| 10.2 | | 56.0 | 48.9 | |
| 9.8 | 30 | 0.0 | 43.3 | |
| 10.2 | 31 | 6.0 | 40.4 | |
| 10.2 | | 8.0 | 37.4 | |
| 10.2 | | 24.5 | 37.6 | |
| 10.2 | | 29.5 | 53.6 | |
| 9.2 | | 31.0 | 10.6 | 9.0 |
| 9.2 | | 31.5 | 38.4 | |
| 9.0 | 32 | 42.0 | 23.5 | |
| 9.8 | | 45.5 | 53.0 | |
| 9.8 | 33 | 24.0 | 43.9 | |
| 9.4 | 34 | 11.0 | 35.9 | |
| 10.2 | | 54.0 | 56.2 | |
| 8.6 | 35 | 21.5 | 44.8 | 8.0 |
| 10.0 | | 21.5 | 53.3 | |
| 9.8 | | 22.1 | 19.2 | |
| 9.8 | | 54.1 | 29.0 | |
| 9.0 | 36 | 8.6 | 44.9 | 8.5 G |
| 10.0 | 37 | 13.1 | 0.7 | |
| 10.2 | | 55.6 | 48.9 | |
| 9.2 | 38 | 18.6 | 0.6 | |

### 10517—10554.

| mag. | 23h. m | s | −53° ′ | |
|---|---|---|---|---|
| 10.0 | 38 | 40.1 | 41.9 | |
| 9.2 | | 51.6 | 17.5 | |
| 10.2 | 39 | 5.6 | 2.5 | |
| 10.2 | | 6.1 | 3.5 | |
| 10.2 | | 21.8 | 59.2 | |
| 9.2 | | 40.6 | 58.3 | |
| 9.8 | 40 | 10.6 | 56.6 | |
| 9.4 | | 59.1 | 37.6 | |
| 9.6 | 41 | 58.1 | 18.9 | |
| 9.2 | 42 | 19.6 | 12.5 | |
| 9.4 | | 21.1 | 31.4 | |
| 9.4 | | 28.6 | 58.4 | |
| 10.2 | 43 | 1.6 | 53.7 | |
| 10.2 | | 25.6 | 43.5 | |
| 9.6 | | 26.2 | 6.8 | |
| 10.2 | | 43.3 | 4.9 | |
| 10.2 | | 52.1 | 29.2 | |
| 9.4 | 44 | 0.1 | 25.0 | |
| 11.0 | | 18.9 | 26.6 | |
| 10.6 | | 28.9 | 57.0 | |
| 11.0 | | 46.2 | 28.2 | |
| 10.6 | 45 | 6.4 | 41.7 | |
| 11.0 | | 31.9 | 35.0 | |
| 8.1 | | 37.9 | 1.8 | 7.8 GS |
| 10.2 | | 52.2 | 31.0 | |
| 11.0 | 46 | 19.2 | 30.1 | |
| 9.6 | | 49.2 | 23.7 | |
| 9.4 | 47 | 42.7 | 44.3 | |
| 10.6 | 48 | 29.7 | 25.2 | |
| 11.0 | | 39.7 | 34.1 | |
| 11.0 | | 41.7 | 5.6 | |
| 11.0 | 49 | 14.7 | 28.7 | |
| 11.0 | | 26.2 | 2.1 | |
| 7.4 | | 36.2 | 28.9 | 7.5 GS |
| 11.0 | | 46.2 | 40.0 | |
| 8.6 | | 57.7 | 15.9 | |
| 11.0 | 50 | 3.7 | 25.2 | |
| 11.0 | | 5.0 | 39.2 | |

### 10555—10591.

| mag. | 23h. m | s | −53° ′ | |
|---|---|---|---|---|
| 11.0 | 50 | 40.0 | 57.1 | |
| 10.6 | | 51.5 | 48.3 | |
| 10.0 | 51 | 20.5 | 43.7 | |
| 11.0 | | 25.0 | 10.5 | |
| 11.0 | | 34.0 | 34.0 | |
| 11.0 | | 52.5 | 8.6 | |
| 6.2 | 52 | 26.0 | 26.7 | 5.5 GSctr |
| 9.4 | | 33.0 | 12.3 | |
| 11.0 | | 47.5 | 52.7 | |
| 7.6 | 53 | 4.0 | 32.3 | 8.0 |
| 6.8 | 54 | 6.5 | 47.7 | 7.0 GS |
| 8.8 | | 8.5 | 19.9 | 8.5 |
| 11.0 | | 9.5 | 57.2 | |
| 10.4 | | 31.0 | 6.2 | |
| 9.4 | | 40.5 | 10.8 | 8.5 |
| 9.0 | | 47.5 | 29.6 | |
| 10.4 | | 53.0 | 49.0 | |
| 11.0 | | 56.0 | 9.3 | |
| 11.0 | 55 | 31.0 | 31.9 | |
| 9.4 | | 39.0 | 34.1 | |
| 11.0 | | 49.0 | 44.1 | |
| 10.4 | 56 | 6.5 | 55.6 | |
| 10.4 | | 8.5 | 52.7 | |
| 11.0 | 57 | 10.0 | 21.8 | |
| 10.4 | | 23.0 | 1.4 | |
| 11.0 | | 40.0 | 30.4 | |
| 11.0 | | 45.0 | 34.4 | |
| 11.0 | 58 | 2.5 | 9.1 | |
| 9.6 | | 6.5 | 15.9 | |
| 11.0 | | 11.5 | 4.3 | |
| 11.0 | | 24.0 | 46.6 | |
| 9.4 | | 35.0 | 29.1 | |
| 10.2 | | 43.0 | 48.0 | |
| 11.0 | 59 | 14.5 | 9.8 | |
| 11.0 | | 19.0 | 19.5 | |
| 8.8 | | 28.0 | 30.9 | 8.5 |
| 11.0 | | 50.8 | 7.1 | |



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# ZONE — 54°.

## 1—45.

| mag. | $0^h$ m | s | $-54°$ ′ | |
|---|---|---|---|---|
| 10·6 | 0 | 2·7 | 41·8 | |
| 11·0 | | 3·7 | 28·0 | |
| 11·0 | | 9·4 | 58·9 | |
| 10·4 | | 31·7 | 32·9 | |
| 10·4 | | 38·7 | 8·0 | |
| 11·0 | | 44·7 | 43·2 | |
| 11·0 | | 53·7 | 38·8 | |
| 10·0 | 1 | 2·7 | 12·9 | |
| 11·0 | | 4·2 | 33·5 | |
| 11·0 | | 10·7 | 37·1 | |
| 8·8 | | 54·7 | 50·9 | 8·5 |
| 10·4 | | 59·2 | 52·1 | |
| 11·0 | 2 | 0·7 | 23·9 | |
| 9·0 | | 7·7 | 8·3 | |
| 10·2 | | 14·7 | 50·1 | |
| 9·6 | | 20·2 | 3·7 | |
| 11·0 | | 31·7 | 10·3 | |
| 10·4 | | 36·2 | 5·9 | |
| 7·2 | | 42·7 | 41·8 | 6·5 GSct |
| 9·8 | | 46·2 | 38·8 | |
| 10·6 | | 55·2 | 33·3 | |
| 9·6 | | 57·7 | 25·9 | |
| 10·4 | 3 | 10·7 | 39·5 | |
| 11·0 | | 12·9 | 21·0 | |
| 11·0 | | 14·7 | 34·4 | |
| 10·0 | | 15·7 | 13·8 | |
| 11·0 | | 27·2 | 40·9 | |
| 9·6 | | 40·7 | 39·3 | |
| 11·0 | | 44·9 | 16·4 | |
| 10·6 | 4 | 19·2 | 18·9 | |
| 9·6 | | 35·7 | 59·2 | |
| 9·8 | | 55·2 | 47·1 | |
| 9·8 | 5 | 10·2 | 39·5 | |
| 11·0 | | 21·9 | 51·7 | |
| 10·0 | | 29·7 | 17·7 | |
| 8·6 | | 35·7 | 54·3 | 7·8 G |
| 10·2 | | 49·2 | 41·7 | |
| 11·0 | | 52·9 | 45·4 | |
| 11·0 | 6 | 0·7 | 57·2 | |
| 11·0 | | 21·9 | 29·9 | |
| 11·0 | | 36·2 | 18·9 | |
| 10·4 | 7 | 12·7 | 28·0 | |
| 11·0 | | 21·7 | 11·5 | |
| 9·6 | 8 | 29·7 | 58·3 | |
| 11·0 | | 30·7 | 27·7 | |

## 46—90.

| mag. | $0^h$ m | s | $-54°$ ′ | |
|---|---|---|---|---|
| 9·4 | 8 | 53·2 | 9·1 | |
| 10·6 | 9 | 4·7 | 23·8 | |
| 11·0 | | 32·2 | 13·2 | |
| 11·0 | 10 | 14·2 | 11·0 | |
| 9·8 | | 29·7 | 15·0 | |
| 11·0 | | 37·2 | 30·0 | |
| 10·4 | | 45·2 | 31·0 | |
| 11·0 | 11 | 11·7 | 1·2 | |
| 11·0 | | 30·7 | 32·9 | |
| 10·4 | | 34·2 | 6·4 | |
| 10·0 | | 41·7 | 21·4 | |
| 11·0 | | 57·2 | 47·2 | |
| 11·0 | 12 | 18·0 | 7·4 | |
| 11·0 | | 20·2 | 7·0 | |
| 9·4 | | 46·7 | 24·8 | |
| 11·0 | | 52·7 | 7·4 | |
| 8·4 | 13 | 14·7 | 32·2 | 7·8 GS |
| 8·2 | | 22·2 | 42·2 | 8·2 GS |
| 11·0 | | 37·2 | 20·8 | |
| 11·0 | | 45·2 | 39·8 | |
| 9·6 | | 46·2 | 17·6 | |
| 10·6 | | 55·9 | 58·8 | |
| 9·4 | 14 | 12·2 | 25·8 | |
| 11·0 | | 36·6 | 8·9 | |
| 11·0 | | 37·7 | 29·7 | |
| 10·4 | 15 | 7·7 | 21·5 | |
| 11·0 | | 10·7 | 16·5 | |
| 8·2 | | 30·0 | 57·6 | 8·5 GS |
| 10·2 | | 40·7 | 6·1 | |
| 11·0 | | 43·7 | 1·3 | |
| 9·4 | | 51·4 | 2·4 | |
| 11·0 | | 55·2 | 12·4 | |
| 9·4 | 16 | 0·3 | 25·3 | |
| 9·2 | | 50·0 | 40·4 | |
| 9·7 | | 54·2 | 59·6 | |
| 10·2 | 17 | 10·6 | 59·9 | |
| 9·2 | | 13·5 | 51·5 | |
| 7·5 | | 24·0 | 32·0 | 8·0 GS |
| 10·0 | | 29·0 | 43·1 | |
| 7·6 | | 30·0 | 44·9 | 7·5 GS |
| 9·4 | | 50·0 | 39·3 | |
| 9·7 | 18 | 17·5 | 10·8 | |
| 9·6 | | 30·0 | 16·1 | |
| 9·9 | | 35·5 | 40·9 | |
| 9·6 | | 38·1 | 0·7 | |

## 91—135.

| mag. | $0^h$ m | s | $-54°$ ′ | |
|---|---|---|---|---|
| 7·2 | 18 | 39·0 | 40·6 | 7·5 GS |
| 9·6 | | 49·5 | 4·9 | |
| 9·7 | | 51·5 | 34·2 | |
| 10·0 | 19 | 9·0 | 18·9 | |
| 9·8 | | 33·0 | 43·8 | |
| 9·8 | | 40·0 | 52·1 | |
| 10·2 | 20 | 8·0 | 57·4 | |
| 10·2 | | 15·0 | 10·0 | |
| 10·0 | | 45·5 | 44·7 | |
| 8·6 | 21 | 2·0 | 46·9 | 8·5 |
| 9·7 | | 10·0 | 29·8 | |
| 9·8 | | 13·5 | 33·7 | |
| 9·2 | | 58·0 | 35·0 | |
| 10·2 | 22 | 11·5 | 34·0 | |
| 9·4 | | 39·0 | 5·7 | |
| 9·0 | | 51·0 | 27·1 | |
| 8·8 | 23 | 1·0 | 58·7 | 8·5 |
| 9·6 | | 5·5 | 46·9 | |
| 9·4 | | 8·0 | 11·0 | |
| 10·2 | | 22·5 | 32·2 | |
| 9·2 | | 40·0 | 13·6 | |
| 9·4 | | 40·0 | 19·4 | |
| 10·2 | | 45·0 | 17·2 | |
| 10·2 | | 54·0 | 1·8 | |
| 10·2 | 24 | 53·0 | 19·9 | |
| 10·2 | 25 | 0·5 | 52·5 | |
| 9·8 | | 10·0 | 7·5 | |
| 10·2 | | 22·5 | 51·9 | |
| 9·2 | | 25·5 | 48·8 | |
| 8·8 | | 49·0 | 10·3 | |
| 10·0 | | 58·0 | 28·3 | |
| 9·4 | 26 | 4·5 | 25·6 | |
| 10·0 | | 6·0 | 26·0 | |
| 10·2 | | 13·0 | 24·1 | |
| 10·0 | | 19·5 | 31·9 | |
| 9·9 | 27 | 5·5 | 55·9 | |
| 9·0 | | 15·5 | 50·8 | 9·0 |
| 9·9 | | 20·5 | 59·2 | |
| 9·4 | | 21·0 | 23·4 | |
| 9·9 | | 26·5 | 20·3 | |
| 10·2 | | 28·5 | 41·2 | |
| 8·8 | 28 | 35·5 | 43·0 | |
| 10·2 | | 35·5 | 14·7 | |
| 9·6 | | 45·0 | 32·0 | |
| 10·2 | | 46·5 | 54·9 | |

## 136—180.

| mag. | $0^h$ m | s | $-54°$ ′ | |
|---|---|---|---|---|
| 7·8 | 29 | 20·5 | 14·3 | 7·6 GS |
| 9·2 | | 24·5 | 18·6 | |
| 9·7 | | 40·0 | 32·7 | |
| 8·8 | | 50·5 | 43·8 | |
| 10·2 | | 53·0 | 24·2 | |
| 10·0 | 30 | 38·0 | 0·6 | |
| 10·0 | 31 | 20·5 | 29·2 | |
| 9·0 | | 26·0 | 48·0 | |
| 8·0 | | 44·0 | 24·5 | 7·6 GS |
| 10·2 | | 49·0 | 32·2 | |
| 9·7 | 32 | 0·5 | 53·4 | |
| 10·2 | | 35·0 | 35·0 | |
| 9·8 | | 44·0 | 1·3 | |
| 9·0 | | 48·5 | 31·8 | |
| 8·6 | | 50·0 | 18·2 | 8·2 G |
| 9·7 | | 52·0 | 37·0 | |
| 9·6 | | 54·5 | 42·2 | |
| 8·8 | 34 | 23·0 | 4·0 | |
| 10·0 | | 45·0 | 45·4 | |
| 10·2 | | 54·5 | 8·4 | |
| 9·7 | 36 | 3·1 | 39·0 | |
| 9·8 | | 27·6 | 30·3 | |
| 10·2 | | 39·8 | 0·0 | |
| 8·4 | | 50·1 | 48·0 | 8·2 GSg |
| 8·4 | | 51·1 | 47·9 | 7·8 GSg |
| 9·2 | 37 | 19·6 | 20·1 | |
| 8·2 | | 33·1 | 38·2 | 8·2 |
| 9·6 | 38 | 39·6 | 11·9 | |
| 9·2 | | 45·6 | 51·8 | 8·5 G |
| 8·0 | | 49·1 | 59·9 | 7·5 GS |
| 6·6 | 39 | 14·6 | 23·8 | GSct |
| 9·8 | | 19·6 | 30·1 | |
| 10·2 | | 59·1 | 6·0 | |
| 9·7 | 40 | 8·1 | 12·1 | |
| 9·9 | | 32·6 | 23·6 | |
| 10·0 | | 43·6 | 11·6 | |
| 10·2 | | 45·6 | 29·3 | |
| 9·4 | | 49·6 | 12·6 | |
| 7·3 | | 59·6 | 47·2 | 7·8 GS |
| 10·2 | 41 | 9·6 | 55·3 | |
| 9·9 | | 29·6 | 30·4 | |
| 10·0 | | 59·6 | 15·8 | |
| 10·0 | 42 | 26·1 | 13·4 | |
| 9·9 | | 29·6 | 52·8 | |
| 8·2 | | 53·6 | 1·0 | 8·2 GS |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 75 | 8·3 |
| | 20 | 73 | 8·3 |
| | 30 | 71 | 8·3 |
| | 40 | 69 | 8·2 |
| | 50 | 67 | 8·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | + ′ |
| 0 | 40 | 69 | 8.2 |
| | 50 | 67 | 8.2 |
| 1 | 0 | 65 | 8.1 |
| | 10 | 63 | 8.0 |
| | 20 | 61 | 7.9 |
| | 30 | 59 | 7.7 |
| | 40 | 57 | 7.6 |
| | 50 | 55 | 7.4 |
| 2 | 0 | 53 | 7.2 |
| | 10 | 52 | 7.0 |

**181—240.**

| mag. | 0h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.0 | 42 | 54.1 | 32.1 | |
| 10.2 | 43 | 24.1 | 50.8 | |
| 7.2 | | 34.6 | 27.3 | 7.2 GS |
| 9.2 | | 43.6 | 21.0 | |
| 10.2 | | 57.6 | 9.9 | |
| 7.8 | | 58.6 | 50.8 | 8.2 GSg |
| 10.0 | 44 | 1.6 | 8.9 | |
| 9.9 | | 16.6 | 26.8 | |
| 9.4 | | 54.1 | 12.3 | |
| 10.2 | 45 | 10.6 | 18.6 | |
| 10.0 | | 10.6 | 55.7 | |
| 10.2 | | 13.1 | 53.7 | |
| 9.8 | | 20.1 | 49.9 | |
| 10.0 | | 39.6 | 43.0 | |
| 10.2 | | 59.6 | 33.5 | |
| 9.0 | 46 | 41.6 | 3.0 | 9.0 |
| 9.9 | 47 | 14.6 | 6.4 | |
| 10.0 | 48 | 15.1 | 57.0 | |
| 10.2 | | 29.1 | 22.7 | |
| 10.2 | | 45.1 | 25.3 | |
| 10.2 | | 48.1 | 6.0 | |
| 9.4 | | 50.3 | 11.9 | |
| 10.3 | 49 | 37.6 | 34.2 | |
| 10.3 | | 43.1 | 13.0 | |
| 9.7 | 50 | 20.6 | 6.8 | |
| 10.3 | 51 | 0.6 | 30.9 | |
| 8.8 | | 8.6 | 27.8 | |
| 8.6 | | 19.5 | 6.7 | |
| 9.8 | | 24.5 | 9.5 | |
| 8.6 | | 26.5 | 49.0 | |
| 9.0 | | 58.0 | 9.5 | |
| 10.2 | 52 | 2.5 | 55.7 | |
| 10.4 | | 15.4 | 0.3 | |
| 9.2 | | 19.0 | 35.4 | |
| 9.1 | | 26.5 | 47.1 | |
| 9.2 | | 28.0 | 32.7 | |
| 9.4 | | 30.0 | 35.1 | |
| 8.8 | | 30.5 | 31.2 | |
| 10.4 | | 52.0 | 18.1 | |
| 8.6 | 53 | 7.5 | 23.0 | 9.2 G |
| 10.2 | | 11.5 | 25.5 | |
| 9.3 | | 28.0 | 39.2 | |
| 10.4 | | 46.5 | 45.8 | |
| 9.2 | | 48.5 | 23.2 | 9.5 |
| 9.8 | 54 | 0.5 | 27.4 | |
| 8.6 | | 12.0 | 48.9 | |
| 10.0 | | 52.0 | 54.7 | |
| 10.4 | 55 | 18.5 | 17.0 | |
| 9.4 | | 30.5 | 56.9 | |
| 10.3 | | 42.5 | 33.8 | |
| 10.2 | | 52.7 | 2.8 | |
| 10.2 | | 54.5 | 30.7 | |
| 8.6 | 56 | 0.0 | 14.9 | |
| 10.0 | | 26.0 | 31.0 | |
| 9.3 | 57 | 6.0 | 40.5 | |
| 10.4 | | 7.0 | 35.0 | |
| 9.1 | | 14.5 | 20.7 | |
| 9.0 | | 20.5 | 52.1 | |
| 9.3 | | 22.0 | 25.4 | |
| 10.4 | | 40.5 | 15.8 | |

**241—300.**

| mag. | 0h.–1h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.3 | 58 | 0.0 | 48.1 | |
| 8.8 | | 0.5 | 50.0 | 9.0 |
| 10.4 | | 30.5 | 8.9 | |
| 10.4 | | 48.0 | 21.4 | |
| 9.2 | 59 | 27.5 | 19.9 | |
| 10.0 | | 29.0 | 19.2 | |
| 10.4 | | 55.0 | 59.0 | |
| 9.7 | 0 | 1.8 | 1.3 | |
| 9.7 | | 5.5 | 13.3 | |
| 10.4 | | 25.5 | 7.9 | |
| 9.8 | | 55.0 | 43.3 | |
| 8.8 | 1 | 34.5 | 1.3 | |
| 10.2 | 2 | 0.5 | 42.8 | |
| 9.7 | | 7.0 | 44.0 | |
| 10.0 | | 9.0 | 38.8 | |
| 10.4 | | 22.0 | 22.4 | |
| 8.6 | | 33.5 | 30.8 | 9.0 |
| 9.8 | | 42.5 | 14.6 | |
| 10.3 | | 46.0 | 30.3 | |
| 9.4 | 3 | 8.5 | 44.1 | |
| 9.8 | | 10.5 | 54.2 | |
| 9.8 | | 11.5 | 14.5 | |
| 8.2 | | 16.3 | 1.1 | 8.5 |
| 9.7 | | 21.5 | 29.8 | |
| 8.5 | | 30.5 | 36.4 | 9.2 G |
| 10.2 | | 40.5 | 6.9 | |
| 9.7 | | 41.0 | 26.3 | |
| 10.0 | 4 | 52.5 | 42.8 | |
| 9.4 | 5 | 0.5 | 5.1 | |
| 10.2 | | 16.0 | 56.8 | |
| 8.6 | | 50.5 | 22.9 | |
| 9.8 | | 50.5 | 51.8 | |
| 10.3 | | 54.5 | 29.7 | |
| 9.2 | 6 | 7.0 | 29.4 | G |
| 10.4 | | 29.0 | 14.7 | |
| 10.4 | | 42.0 | 35.3 | |
| 8.6 | | 55.0 | 45.5 | 8.2 G |
| 9.1 | 7 | 13.5 | 42.1 | 8.8 |
| 10.0 | 8 | 15.7 | 38.9 | |
| 9.3 | | 28.2 | 39.5 | |
| 8.8 | | 48.7 | 22.3 | 9.0 G |
| 9.8 | | 52.2 | 29.6 | |
| 10.4 | 9 | 18.2 | 31.2 | |
| 10.4 | | 20.2 | 36.8 | |
| 9.3 | | 26.2 | 40.1 | |
| 9.5 | | 30.2 | 3.8 | |
| 8.6 | | 59.7 | 45.5 | |
| 10.4 | 10 | 20.7 | 35.4 | |
| 9.4 | | 29.7 | 16.6 | |
| 7.8 | | 31.7 | 22.6 | 8.2 GS |
| 10.4 | | 39.7 | 6.9 | |
| 9.3 | | 56.7 | 24.4 | |
| 9.3 | 11 | 12.7 | 48.7 | |
| 10.3 | | 30.2 | 14.5 | |
| 9.1 | | 50.2 | 40.4 | |
| 10.4 | 12 | 18.7 | 14.2 | |
| 10.4 | | 38.7 | 46.1 | |
| 9.0 | | 47.2 | 23.4 | 9.5 |
| 8.8 | | 49.7 | 53.1 | G |
| 9.7 | 13 | 14.2 | 26.4 | |

**301—360.**

| mag. | 1h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.2 | 13 | 30.2 | 59.5 | |
| 9.5 | | 40.2 | 49.4 | |
| 8.2 | | 57.2 | 30.5 | 8.2 G |
| 10.3 | 14 | 8.7 | 26.6 | |
| 7.9 | | 10.2 | 17.7 | 7.2 GS |
| 9.2 | | 13.7 | 25.4 | |
| 10.3 | | 17.7 | 43.8 | |
| 10.2 | | 21.7 | 36.6 | |
| 9.3 | | 50.2 | 0.3 | |
| 10.4 | | 58.2 | 53.5 | |
| 9.7 | | 58.7 | 30.9 | |
| 9.2 | 15 | 36.7 | 5.0 | |
| 10.4 | | 47.2 | 31.4 | |
| 9.3 | 16 | 58.4 | 54.2 | |
| 9.4 | 17 | 21.9 | 35.1 | |
| 7.6 | 18 | 1.9 | 50.3 | 8.5 |
| 9.4 | | 5.9 | 55.8 | |
| 9.2 | | 9.9 | 38.6 | |
| 8.0 | | 28.9 | 37.2 | 8.2 G |
| 9.7 | | 41.4 | 31.9 | |
| 9.7 | | 59.9 | 30.4 | |
| 8.5 | 19 | 0.9 | 45.4 | 9.0 |
| 10.3 | | 3.4 | 8.8 | |
| 8.6 | | 38.9 | 36.6 | 9.5 |
| 8.5 | 20 | 24.9 | 11.8 | 9.0 |
| 10.4 | 21 | 20.9 | 30.4 | |
| 10.2 | | 23.9 | 10.3 | |
| 10.0 | 22 | 2.7 | 32.5 | |
| 9.6 | | 17.2 | 20.6 | |
| 10.0 | | 24.7 | 15.3 | |
| 9.6 | | 26.2 | 17.6 | |
| 9.8 | 23 | 29.2 | 24.0 | |
| 8.9 | | 39.6 | 0.9 | |
| 9.8 | | 40.2 | 22.3 | |
| 10.0 | | 40.7 | 34.3 | |
| 10.0 | | 42.2 | 35.1 | |
| 10.0 | | 51.2 | 10.3 | |
| 10.0 | 24 | 24.2 | 37.4 | |
| 8.6 | | 54.2 | 48.1 | 9.0 |
| 9.8 | 25 | 13.2 | 30.9 | |
| 10.0 | | 47.2 | 35.5 | |
| 7.8 | 26 | 36.2 | 0.9 | 7.2 GS |
| 10.0 | 27 | 40.2 | 19.9 | |
| 10.0 | 28 | 30.2 | 26.0 | |
| 10.0 | | 42.7 | 29.7 | |
| 10.0 | | 53.7 | 39.6 | |
| 9.1 | | 57.7 | 20.8 | |
| 9.6 | 29 | 53.7 | 25.9 | |
| 9.1 | | 53.7 | 36.9 | 9.0 G |
| 10.0 | 30 | 10.7 | 47.2 | |
| 10.0 | | 26.2 | 14.1 | |
| 10.0 | | 40.2 | 0.5 | |
| 10.0 | | 54.7 | 22.9 | |
| 10.0 | 32 | 16.7 | 38.3 | |
| 9.8 | | 31.7 | 38.6 | |
| 10.0 | 33 | 9.7 | 31.9 | |
| 9.8 | | 30.2 | 55.8 | |
| 6.9 | | 58.2 | 4.3 | 7.8 GSct |
| 9.4 | 34 | 4.7 | 42.3 | |
| 9.6 | | 20.2 | 59.2 | |

**361—420.**

| mag. | 1h.–2h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.5 | 34 | 48.2 | 13.5 | 9.0 |
| 10.0 | 36 | 38.7 | 3.7 | |
| 10.0 | 37 | 0.2 | 29.1 | |
| 9.4 | | 12.7 | 35.1 | |
| 6.5 | | 40.2 | 22.1 | 5.9 GSct |
| 9.6 | | 42.5 | 31.0 | |
| 9.4 | | 45.5 | 46.5 | |
| 10.0 | 38 | 7.0 | 29.4 | |
| 8.8 | | 16.0 | 51.9 | |
| 10.0 | | 35.5 | 12.0 | |
| 10.0 | | 55.0 | 12.5 | |
| 9.2 | 39 | 12.0 | 25.5 | |
| 10.0 | | 57.5 | 18.2 | |
| 8.8 | 40 | 25.0 | 38.0 | 9.0 G |
| 10.0 | | 27.5 | 13.0 | |
| 10.0 | | 50.0 | 35.2 | |
| 5.2 | 41 | 20.0 | 9.0 | 5.2 GSct |
| 8.8 | 42 | 42.5 | 30.3 | 9.5 G |
| 9.4 | 44 | 12.5 | 7.9 | |
| 10.0 | | 53.5 | 58.9 | |
| 10.0 | 45 | 21.5 | 0.5 | |
| 10.0 | | 30.0 | 20.9 | |
| 8.8 | | 56.0 | 37.9 | 9.0 |
| 10.0 | 46 | 16.0 | 48.1 | |
| 8.0 | | 22.0 | 54.0 | 7.1 GSt |
| 9.4 | | 27.5 | 27.2 | |
| 10.0 | | 48.0 | 14.7 | |
| 10.0 | | 58.0 | 53.4 | |
| 10.0 | 47 | 0.0 | 26.1 | |
| 10.0 | | 11.0 | 13.1 | |
| 10.0 | | 15.0 | 8.4 | |
| 9.4 | | 21.5 | 46.9 | 9.0 |
| 8.6 | 48 | 9.0 | 37.6 | 7.8 GS |
| 10.0 | 49 | 14.5 | 54.7 | |
| 8.8 | | 27.0 | 26.3 | |
| 8.6 | 51 | 57.5 | 51.8 | 8.5 |
| 8.8 | 52 | 20.5 | 46.3 | |
| 9.9 | | 22.7 | 17.2 | |
| 10.0 | | 24.5 | 11.0 | |
| 9.8 | | 41.5 | 57.8 | |
| 9.2 | 54 | 5.5 | 8.1 | |
| 9.8 | | 30.0 | 36.9 | |
| 9.8 | | 35.2 | 58.8 | |
| 9.1 | | 40.0 | 26.8 | |
| 9.9 | 55 | 1.0 | 57.9 | |
| 9.0 | | 14.5 | 20.2 | |
| 10.0 | 56 | 22.5 | 31.2 | |
| 9.6 | | 40.0 | 42.7 | |
| 8.3 | | 40.0 | 36.9 | 8.1 G |
| 9.1 | 59 | 0.0 | 17.3 | |
| 9.6 | | 10.0 | 47.7 | |
| 9.5 | | 25.0 | 37.4 | |
| 7.6 | | 53.2 | 57.3 | 8.5 GS |
| 9.4 | | 59.0 | 59.2 | 9.5 |
| 9.0 | 0 | 3.0 | 15.1 | 8.0 G |
| 9.0 | 1 | 5.5 | 51.2 | 9.0 |
| 8.8 | | 10.0 | 43.0 | |
| 9.2 | 2 | 40.5 | 7.0 | |
| 9.2 | 3 | 2.0 | 26.8 | 8.5 S |
| 10.0 | | 30.0 | 30.8 | |



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## 421—480.

| mag. | 2h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 3 | 45·0 | 12·0 | |
| 8·1 | | 56·5 | 5·1 | 8·0 G |
| 9·5 | 4 | 27·5 | 25·5 | |
| 9·0 | | 39·5 | 44·2 | |
| 8·3 | 5 | 5·0 | 2·9 | 8·0 G |
| 10·0 | | 19·5 | 41·9 | |
| 10·0 | | 20·0 | 25·6 | |
| 9·2 | 7 | 11·3 | 34·9 | 9·2 |
| 7·7 | | 28·8 | 38·2 | 7·5 GS |
| 9·6 | 8 | 15·8 | 25·0 | |
| 10·0 | | 24·5 | 0·2 | |
| 8·3 | | 24·8 | 19·8 | 8·0 GS |
| 8·8 | | 36·8 | 50·0 | 8·5 G |
| 10·0 | 9 | 45·3 | 52·6 | |
| 9·2 | | 50·8 | 42·6 | |
| 9·4 | | 54·8 | 47·6 | |
| 9·4 | 11 | 11·5 | 0·3 | |
| 9·9 | | 57·8 | 36·4 | |
| 8·7 | 12 | 47·8 | 24·2 | 8·5 G |
| 8·2 | 14 | 44·8 | 30·8 | 8·0 GS |
| 9·6 | 16 | 11·8 | 5·0 | |
| 9·2 | | 46·3 | 26·3 | |
| 10·0 | | 50·8 | 9·0 | |
| 9·4 | 17 | 44·1 | 44·5 | |
| 9·8 | 18 | 16·1 | 20·2 | |
| 9·6 | | 39·1 | 43·3 | |
| 8·8 | | 49·1 | 6·8 | 8·0 G |
| 8·6 | 19 | 44·1 | 11·8 | |
| 8·0 | | 56·1 | 55·7 | GS |
| 8·2 | 20 | 6·1 | 37·5 | 8·0 G |
| 8·2 | | 51·1 | 47·9 | 7·8 G |
| 10·0 | | 54·8 | 33·2 | |
| 9·8 | 21 | 22·1 | 32·0 | |
| 10·3 | 24 | 55·2 | 23·4 | |
| 9·4 | 27 | 12·4 | 47·7 | |
| 10·0 | | 53·9 | 52·0 | |
| 10·3 | 29 | 0·5 | 17·9 | |
| 9·8 | | 49·4 | 14·6 | |
| 10·0 | 32 | 30·4 | 13·7 | |
| 10·0 | | 32·4 | 12·9 | |
| 10·2 | | 54·9 | 52·0 | |
| 10·0 | 33 | 46·4 | 21·1 | |
| 10·3 | 34 | 50·4 | 58·8 | |
| 8·8 | 35 | 43·5 | 57·2 | 9·0 |
| 9·8 | 36 | 18·6 | 23·3 | |
| 10·0 | | 45·1 | 35·9 | |
| 9·6 | 39 | 2·1 | 27·1 | |
| 9·2 | | 19·6 | 38·5 | 9·2 |
| 9·8 | | 56·1 | 24·2 | |
| 10·0 | 40 | 1·1 | 18·0 | |
| 9·6 | | 22·6 | 49·8 | 9·0 |
| 9·4 | 41 | 9·6 | 31·4 | |
| 9·2 | 43 | 0·1 | 2·4 | 9·0 |
| 10·2 | | 20·1 | 38·0 | |
| 9·6 | | 49·6 | 29·2 | 9·5 |
| 9·2 | 44 | 37·6 | 55·0 | 9·5 |
| 10·0 | 45 | 29·6 | 36·2 | |
| 9·6 | 46 | 14·7 | 14·5 | |
| 9·4 | | 40·7 | 11·4 | |
| 10·0 | | 50·2 | 52·9 | |

## 481—540.

| mag. | 2h.–3h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·3 | 47 | 5·7 | 27·5 | |
| 10·2 | | 16·7 | 27·9 | |
| 9·4 | | 19·7 | 51·7 | |
| 9·4 | | 25·7 | 46·5 | |
| 7·6 | | 28·9 | 57·5 | 8·2 G |
| 9·4 | 48 | 14·7 | 39·7 | |
| 9·4 | 49 | 56·7 | 30·3 | |
| 8·8 | | 58·7 | 14·4 | 9·0 G |
| 9·4 | 50 | 44·7 | 2·9 | |
| 10·0 | 51 | 48·7 | 47·5 | |
| 8·9 | 52 | 48·7 | 22·3 | 9·5 |
| 10·0 | 53 | 2·2 | 46·5 | |
| 9·6 | 54 | 45·0 | 58·4 | |
| 7·6 | 55 | 13·3 | 11·4 | 8·0 GS |
| 9·8 | | 41·7 | 27·5 | |
| 8·9 | | 45·7 | 45·1 | |
| 7·1 | | 52·7 | 24·4 | 7·0 GSt |
| 11·0 | 56 | 20·9 | 56·2 | |
| 11·0 | | 21·8 | 29·1 | |
| 10·2 | | 31·9 | 33·3 | |
| 10·2 | 57 | 8·9 | 46·1 | |
| 11·0 | | 49·9 | 30·5 | |
| 10·8 | 58 | 24·9 | 4·8 | |
| 9·6 | | 54·4 | 48·8 | 9·5 |
| 10·8 | 59 | 14·4 | 5·1 | |
| 11·0 | | 15·9 | 25·3 | |
| 9·4 | | 29·9 | 0·8 | |
| 10·4 | | 50·4 | 8·3 | |
| 10·2 | 0 | 58·9 | 3·1 | |
| 10·2 | 1 | 4·4 | 41·7 | |
| 10·3 | | 10·4 | 19·4 | |
| 10·6 | | 23·4 | 5·6 | |
| 10·8 | | 24·9 | 12·7 | |
| 10·2 | | 31·4 | 42·7 | |
| 10·3 | 2 | 22·6 | 56·9 | |
| 11·0 | 3 | 19·9 | 39·8 | |
| 10·0 | | 39·9 | 51·4 | |
| 8·9 | 5 | 5·9 | 23·5 | 9·2 G |
| 8·9 | 6 | 24·4 | 15·9 | |
| 10·6 | | 32·9 | 28·0 | |
| 11·0 | | 39·9 | 53·6 | |
| 10·4 | 7 | 30·4 | 51·2 | |
| 11·0 | | 33·9 | 21·7 | |
| 10·3 | 8 | 59·9 | 33·2 | |
| 9·4 | 9 | 14·9 | 59·9 | |
| 10·3 | | 19·9 | 16·0 | |
| 11·0 | | 21·4 | 11·6 | |
| 10·3 | 10 | 39·9 | 44·7 | |
| 9·4 | | 49·9 | 26·1 | |
| 9·4 | | 58·4 | 57·0 | |
| 10·8 | 11 | 50·1 | 2·5 | |
| 10·8 | 12 | 34·9 | 39·2 | |
| 10·2 | | 47·4 | 43·0 | |
| 10·3 | | 57·9 | 4·6 | |
| 9·6 | 13 | 20·9 | 33·0 | 10·0 |
| 10·3 | | 21·9 | 21·5 | |
| 11·0 | 14 | 14·9 | 54·2 | |
| 10·0 | | 25·9 | 29·7 | |
| 11·0 | | 29·9 | 48·2 | |
| 9·8 | | 48·9 | 19·9 | |

## 541—600.

| mag. | 3h. m | s | −54° ′ | |
|---|---|---|---|---|
| 11·0 | 15 | 42·9 | 57·1 | |
| 11·0 | | 44·9 | 38·2 | |
| 11·0 | 17 | 17·9 | 50·2 | |
| 9·2 | | 41·9 | 50·3 | 9·5 |
| 8·7 | 18 | 13·8 | 28·1 | 8·8 G |
| 10·0 | | 14·3 | 12·3 | |
| 9·0 | 19 | 24·8 | 53·8 | |
| 8·9 | | 39·3 | 27·6 | 9·0 |
| 9·8 | | 43·8 | 25·8 | |
| 9·0 | 20 | 0·3 | 36·5 | 8·5 |
| 10·2 | | 9·8 | 33·2 | |
| 9·8 | | 29·8 | 54·4 | |
| 10·0 | 21 | 9·8 | 30·6 | |
| 10·6 | | 26·3 | 26·1 | |
| 10·8 | | 36·3 | 25·5 | |
| 9·2 | | 41·8 | 12·2 | |
| 10·0 | | 55·8 | 33·9 | |
| 9·4 | 24 | 14·8 | 15·1 | 10·0 |
| 10·8 | | 49·8 | 31·6 | |
| 10·4 | 27 | 1·1 | 8·0 | |
| 11·0 | 28 | 18·3 | 27·4 | |
| 10·2 | | 30·1 | 21·4 | |
| 9·8 | | 40·4 | 1·3 | |
| 9·0 | 30 | 22·9 | 45·0 | |
| 9·8 | | 44·4 | 47·0 | |
| 10·0 | | 46·9 | 2·0 | |
| 7·8 | | 54·4 | 55·8 | 7·5 GS |
| 8·4 | 31 | 26·9 | 9·4 | 9·0 |
| 6·6 | | 26·9 | 44·4 | 7·0 GS |
| 9·4 | | 41·5 | 20·1 | |
| 9·8 | 32 | 39·5 | 24·2 | |
| 9·6 | 33 | 30·5 | 16·7 | |
| 9·8 | 34 | 50·0 | 18·9 | |
| 10·2 | 35 | 5·5 | 46·0 | |
| 9·6 | 36 | 12·0 | 14·3 | |
| 7·6 | 37 | 22·0 | 8·4 | GS |
| 9·6 | | 30·5 | 44·4 | |
| 9·2 | | 41·0 | 26·2 | 9·0 |
| 9·7 | | 53·0 | 28·0 | |
| 9·4 | 39 | 0·5 | 5·4 | |
| 10·2 | | 38·5 | 12·3 | |
| 9·1 | | 50·5 | 4·7 | |
| 8·6 | | 54·0 | 52·1 | 8·0 G |
| 9·8 | 40 | 4·5 | 44·5 | |
| 8·8 | | 10·5 | 41·1 | 9·0 S |
| 9·0 | | 39·5 | 27·9 | 9·0 |
| 9·7 | 41 | 6·0 | 46·0 | G |
| 7·6 | | 6·5 | 52·5 | 7·0 GSct |
| 7·1 | | 22·5 | 40·0 | 6·5 GScgt |
| 10·2 | | 33·8 | 58·7 | |
| 8·4 | | 34·0 | 33·4 | 8·0 G |
| 10·2 | | 48·0 | 37·3 | |
| 10·0 | 42 | 0·0 | 52·7 | |
| 9·4 | | 0·5 | 6·7 | |
| 10·2 | 44 | 36·0 | 28·7 | |
| 9·9 | | 42·0 | 17·0 | |
| 9·8 | | 48·0 | 56·5 | |
| 8·5 | | 50·5 | 8·1 | 8·0 GS |
| 6·9 | 45 | 16·0 | 40·6 | 7·2 GS |
| 9·2 | 46 | 36·0 | 39·5 | |

## 601—660.

| mag. | 3h.–4h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 46 | 57·0 | 23·4 | |
| 9·2 | 49 | 20·5 | 50·8 | |
| 8·1 | | 54·0 | 28·4 | 8·5 |
| 10·2 | 50 | 24·5 | 52·9 | |
| 8·6 | 51 | 21·5 | 54·0 | 9·0 |
| 10·2 | | 37·5 | 8·0 | |
| 8·4 | | 49·0 | 48·8 | 8·5 G |
| 10·2 | 52 | 57·0 | 26·1 | |
| 10·2 | 53 | 3·5 | 55·8 | |
| 9·9 | 54 | 2·5 | 5·0 | |
| 7·8 | | 31·0 | 42·9 | 8·5 G |
| 10·2 | | 43·0 | 45·7 | |
| 9·8 | 56 | 6·5 | 35·6 | |
| 7·6 | | 50·5 | 30·9 | 8·0 GS |
| 9·6 | 57 | 50·0 | 56·8 | |
| 7·8 | | 50·5 | 40·4 | 8·5 Gt |
| 7·0 | | 59·5 | 44·6 | 7·0 GSt |
| 7·8 | 58 | 2·5 | 45·3 | 8·0 GSt |
| 9·4 | | 8·5 | 26·9 | |
| 9·8 | | 20·0 | 3·3 | |
| 9·7 | 59 | 30·7 | 16·9 | |
| 9·0 | 1 | 29·1 | 36·0 | |
| 9·8 | 2 | 19·3 | 1·0 | |
| 9·4 | | 40·8 | 32·0 | |
| 9·6 | 3 | 13·3 | 19·3 | |
| 9·2 | | 53·3 | 19·7 | |
| 9·4 | 5 | 3·8 | 6·2 | |
| 9·7 | | 10·5 | 28·7 | |
| 8·5 | | 44·3 | 58·1 | 9·5 |
| 9·4 | 6 | 7·3 | 56·0 | |
| 9·4 | | 41·8 | 16·9 | |
| 9·2 | 7 | 36·8 | 15·1 | |
| 8·1 | 8 | 10·3 | 21·7 | 8·2 G |
| 9·2 | | 36·3 | 33·7 | 9·5 G |
| 9·4 | 9 | 0·8 | 51·7 | |
| 9·6 | | 16·8 | 28·8 | |
| 9·6 | 10 | 1·0 | 38·0 | |
| 8·8 | | 1·0 | 20·2 | 9·0 |
| 9·9 | | 18·5 | 46·7 | |
| 9·9 | 12 | 25·0 | 17·9 | |
| 9·4 | | 28·5 | 46·8 | |
| 9·4 | | 51·0 | 52·6 | |
| 9·9 | 13 | 10·0 | 33·3 | |
| 8·8 | | 13·5 | 19·3 | |
| 9·7 | 14 | 9·5 | 3·8 | |
| 9·0 | 15 | 25·5 | 22·5 | 9·5 G |
| 9·8 | | 26·0 | 42·4 | |
| 9·7 | | 43·7 | 58·0 | |
| 7·5 | | 54·0 | 26·3 | 7·0 GS |
| 9·9 | 16 | 54·5 | 40·2 | |
| 9·4 | 17 | 10·8 | 56·6 | |
| 8·6 | | 19·8 | 59·5 | 8·5 |
| 9·4 | | 23·5 | 42·7 | |
| 9·6 | | 55·0 | 37·3 | |
| 9·0 | 18 | 21·0 | 43·2 | |
| 9·9 | | 33·5 | 22·1 | |
| 9·2 | 19 | 3·5 | 55·3 | |
| 9·0 | 20 | 45·0 | 8·4 | |
| 9·9 | 21 | 6·5 | 20·1 | |
| 9·9 | | 31·0 | 15·5 | |

25 prec.

| h | m | α + s | δ + |
|---|---|---|---|
| 2 | 0 | 53 | 7·2 |
| | 10 | 52 | 7·0 |
| | 20 | 50 | 6·8 |
| | 30 | 48 | 6·6 |
| | 40 | 47 | 6·4 |
| | 50 | 45 | 6·2 |
| 3 | 0 | 44 | 5·9 |
| | 10 | 42 | 5·6 |
| | 20 | 41 | 5·4 |
| | 30 | 40 | 5·1 |
| | 40 | 38 | 4·8 |
| | 50 | 37 | 4·5 |
| 4 | 0 | 36 | 4·2 |
| | 10 | 35 | 3·9 |
| | 20 | 34 | 3·5 |
| | 30 | 34 | 3·2 |

25 prec.

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 4 | 20 | 34 | 3.5 |
| | 30 | 34 | 3.2 |
| | 40 | 33 | 2.9 |
| | 50 | 32 | 2.5 |
| 5 | 0 | 32 | 2.2 |
| | 10 | 31 | 1.8 |
| | 20 | 31 | 1.5 |
| | 30 | 30 | 1.1 |
| | 40 | 30 | 0.7 |
| | 50 | 30 | 0.4 |

## 661—720.

| mag. | $4^h$ m | s | −54° ′ | |
|---|---|---|---|---|
| 9.4 | 21 | 45.2 | 54.2 | |
| 9.6 | 22 | 7.7 | 54.0 | |
| 9.6 | | 29.7 | 45.4 | |
| 9.9 | | 52.2 | 16.3 | |
| 8.6 | 23 | 31.2 | 31.8 | 9.0 |
| 9.4 | 24 | 1.2 | 18.0 | |
| 9.9 | | 17.7 | 45.4 | |
| 9.8 | | 23.2 | 37.0 | |
| 8.3 | 25 | 30.2 | 18.6 | 8.0 G |
| 9.2 | 26 | 4.2 | 31.4 | |
| 8.9 | | 24.7 | 40.8 | 8.5 G |
| 9.9 | | 25.2 | 24.1 | |
| 9.9 | | 51.2 | 33.6 | |
| 8.1 | 27 | 2.7 | 12.0 | 8.0 G |
| 9.4 | | 6.2 | 49.4 | |
| 9.9 | 28 | 19.7 | 20.4 | |
| 9.6 | | 31.2 | 23.2 | |
| 9.9 | 29 | 56.2 | 7.2 | |
| 8.6 | 31 | 9.8 | 56.0 | |
| 9.6 | | 15.5 | 32.4 | |
| 9.3 | 32 | 14.7 | 41.0 | |
| 9.3 | | 15.5 | 12.5 | |
| 9.2 | 33 | 11.3 | 26.9 | 9.0 |
| 9.2 | | 40.8 | 33.5 | |
| 8.0 | | 47.3 | 52.6 | 9.0 |
| 9.7 | 34 | 16.8 | 25.3 | |
| 9.2 | | 30.8 | 14.8 | |
| 8.8 | | 44.8 | 54.6 | |
| 8.6 | 36 | 27.3 | 25.1 | 9.0 |
| 9.7 | | 53.8 | 7.2 | |
| 9.1 | 37 | 41.8 | 9.6 | |
| 9.2 | | 42.8 | 11.8 | 9.5 |
| 9.2 | | 51.8 | 5.6 | |
| 8.6 | 38 | 12.8 | 6.6 | 9.0 |
| 9.3 | | 15.8 | 28.7 | |
| 8.8 | | 23.8 | 55.9 | |
| 9.6 | | 32.8 | 1.3 | |
| 9.7 | | 48.8 | 12.4 | |
| 9.7 | | 56.3 | 13.1 | |
| 9.7 | 39 | 8.3 | 9.0 | |
| 9.2 | | 18.8 | 32.9 | |
| 8.6 | 40 | 22.3 | 57.0 | 9.0 |
| 7.8 | | 31.3 | 49.2 | 7.5 GS |
| 9.1 | | 38.3 | 19.9 | |
| 9.1 | | 45.3 | 9.5 | |
| 9.3 | 42 | 29.8 | 59.5 | |
| 8.7 | | 48.8 | 28.0 | 9.5 G |
| 9.7 | | 54.3 | 11.4 | |
| 9.6 | | 58.5 | 14.2 | |
| 8.3 | 43 | 19.0 | 36.4 | 8.8 G |
| 9.6 | | 24.5 | 38.5 | |
| 9.4 | | 46.0 | 53.8 | |
| 9.7 | | 53.0 | 14.2 | |
| 9.7 | 45 | 7.8 | 59.9 | |
| 9.7 | | 28.0 | 38.4 | |
| 9.6 | | 41.0 | 2.0 | |
| 9.4 | 46 | 7.5 | 41.1 | |
| 7.9 | | 50.0 | 6.2 | 7.5 GS |
| 7.8 | 47 | 8.5 | 40.1 | 8.0 GS |
| 9.7 | | 21.5 | 21.8 | |

## 721—780.

| mag. | $4^h$–$5^h$ m | s | −54° ′ | |
|---|---|---|---|---|
| 9.2 | 47 | 25.5 | 24.8 | |
| 9.1 | | 43.5 | 21.8 | |
| 8.7 | 48 | 28.0 | 42.1 | |
| 9.7 | | 28.4 | 4.9 | |
| 8.6 | | 35.5 | 10.9 | |
| 9.7 | | 44.5 | 6.5 | |
| 8.4 | 49 | 53.1 | 31.8 | 8.5 Gt |
| 9.6 | 50 | 0.6 | 36.6 | |
| 9.4 | | 3.6 | 14.9 | |
| 9.1 | 51 | 41.6 | 40.9 | |
| 8.2 | 52 | 29.1 | 37.7 | 7.5 GSt |
| 9.7 | 53 | 12.1 | 18.9 | |
| 9.2 | | 18.6 | 28.4 | |
| 8.8 | | 25.6 | 3.2 | |
| 9.7 | | 30.1 | 19.1 | |
| 8.7 | 54 | 2.1 | 48.4 | 9.5 GSt |
| 9.4 | | 2.4 | 59.8 | |
| 9.7 | | 18.1 | 37.7 | |
| 8.5 | | 57.1 | 21.9 | GS |
| 9.1 | | 59.1 | 25.3 | |
| 9.7 | 55 | 1.1 | 27.3 | |
| 8.6 | | 8.0 | 0.6 | 9.0 |
| 9.7 | | 16.3 | 56.8 | |
| 9.7 | | 45.3 | 19.0 | |
| 9.6 | | 45.8 | 20.5 | |
| 7.8 | | 50.8 | 21.4 | 7.8 GS |
| 9.0 | 56 | 23.3 | 52.8 | |
| 9.7 | | 54.3 | 28.7 | |
| 9.1 | | 56.8 | 50.9 | |
| 9.6 | 57 | 9.8 | 25.6 | |
| 9.6 | 58 | 29.8 | 49.8 | |
| 8.0 | | 36.3 | 11.2 | 8.0 G |
| 9.4 | 59 | 4.3 | 20.3 | |
| 9.3 | | 19.8 | 6.6 | |
| 9.7 | | 44.8 | 10.2 | |
| 9.6 | | 48.3 | 16.8 | |
| 9.4 | 0 | 4.8 | 54.8 | |
| 9.4 | | 5.8 | 46.8 | |
| 9.4 | | 14.3 | 35.8 | |
| 9.0 | | 14.3 | 47.8 | |
| 9.1 | | 20.3 | 16.4 | 9.0 G |
| 9.6 | | 56.8 | 5.2 | |
| 9.2 | 1 | 16.3 | 14.3 | |
| 9.7 | | 18.3 | 35.4 | |
| 9.7 | | 52.1 | 13.8 | |
| 9.3 | 2 | 13.1 | 48.5 | |
| 9.3 | | 19.1 | 38.1 | |
| 7.8 | | 23.6 | 34.6 | 6.5 GSct |
| 9.6 | | 33.6 | 4.4 | |
| 9.1 | | 44.3 | 43.0 | |
| 9.6 | 3 | 20.6 | 17.6 | |
| 8.9 | 4 | 37.3 | 23.1 | 8.5 G |
| 9.8 | | 50.1 | 0.3 | |
| 10.0 | 5 | 3.1 | 27.4 | |
| 9.8 | | 42.6 | 4.9 | |
| 10.0 | | 59.1 | 16.8 | |
| 10.0 | 6 | 4.1 | 0.9 | |
| 10.0 | | 8.1 | 28.8 | |
| 8.8 | | 10.1 | 15.2 | |
| 9.0 | | 29.1 | 42.9 | |

## 781—840.

| mag. | $5^h$ m | s | −54° ′ | |
|---|---|---|---|---|
| 9.3 | 6 | 29.6 | 17.2 | |
| 10.0 | | 38.6 | 56.1 | |
| 8.6 | | 45.1 | 24.0 | 8.8 |
| 9.2 | 7 | 13.1 | 28.4 | 9.0 |
| 9.3 | | 18.6 | 59.4 | |
| 8.9 | | 30.6 | 30.6 | 8.5 G |
| 9.2 | | 31.1 | 35.6 | |
| 9.3 | | 31.6 | 26.0 | 9.2 |
| 10.0 | | 44.1 | 16.9 | |
| 10.0 | | 59.1 | 49.6 | |
| 8.8 | 8 | 29.3 | 2.5 | 8.5 |
| 9.8 | | 31.6 | 5.9 | |
| 10.0 | 9 | 6.6 | 13.8 | |
| 9.6 | | 31.1 | 1.1 | |
| 9.2 | | 35.1 | 18.1 | 9.0 G |
| 9.3 | | 39.6 | 18.3 | 9.0 G |
| 9.4 | 10 | 22.1 | 53.9 | |
| 10.0 | | 34.1 | 32.1 | |
| 10.0 | | 39.1 | 1.0 | |
| 9.7 | | 47.1 | 3.9 | |
| 9.6 | 11 | 17.1 | 22.2 | |
| 9.8 | 12 | 26.6 | 56.6 | |
| 10.0 | | 43.6 | 25.6 | |
| 9.4 | 13 | 9.6 | 28.2 | |
| 9.6 | | 59.1 | 35.6 | |
| 10.0 | 14 | 20.4 | 58.0 | |
| 9.7 | | 43.1 | 15.6 | |
| 9.6 | 15 | 1.1 | 55.3 | |
| 8.0 | | 9.6 | 36.2 | 7.5 GSct |
| 9.4 | | 16.6 | 14.0 | |
| 8.6 | 16 | 6.1 | 27.4 | 9.0 G |
| 10.0 | | 24.6 | 39.7 | |
| 10.0 | | 25.6 | 16.4 | |
| 9.8 | 18 | 2.1 | 7.8 | |
| 10.0 | | 7.1 | 22.1 | |
| 8.9 | | 23.1 | 31.0 | |
| 9.2 | | 53.6 | 21.2 | |
| 10.0 | | 54.6 | 32.9 | |
| 9.6 | | 58.6 | 18.0 | |
| 7.2 | 19 | 19.6 | 23.5 | 7.0 GSct |
| 8.6 | | 22.6 | 37.7 | 8.5 |
| 9.3 | | 29.6 | 52.4 | |
| 10.0 | | 49.6 | 9.5 | |
| 9.4 | 20 | 17.6 | 3.9 | |
| 9.3 | | 24.6 | 31.5 | |
| 9.8 | 21 | 2.1 | 18.0 | |
| 10.0 | | 20.1 | 16.6 | |
| 9.2 | | 53.1 | 16.1 | |
| 9.4 | | 57.1 | 45.3 | |
| 9.6 | 22 | 7.5 | 9.0 | |
| 10.0 | | 9.5 | 24.7 | |
| 7.7 | | 37.5 | 25.6 | 7.5 GS |
| 9.7 | | 55.5 | 33.6 | |
| 8.5 | 24 | 0.5 | 6.4 | 8.5 G |
| 10.0 | | 14.5 | 35.7 | |
| 9.0 | | 56.0 | 27.9 | |
| 8.9 | 25 | 5.5 | 1.5 | 9.0 |
| 9.4 | | 8.5 | 15.6 | 9.0 G |
| 9.4 | | 31.0 | 26.6 | |
| 9.7 | | 33.0 | 35.5 | |

## 841—900.

| mag. | $5^h$ m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 27 | 22.0 | 35.0 | |
| 9.6 | | 46.0 | 46.8 | |
| 9.2 | | 46.5 | 2.8 | |
| 9.6 | | 54.5 | 11.6 | |
| 9.6 | 28 | 4.0 | 35.6 | |
| 8.8 | | 24.5 | 59.6 | 9.0 |
| 9.4 | 29 | 1.5 | 11.5 | |
| 10.0 | | 2.0 | 29.7 | |
| 9.6 | | 13.5 | 32.9 | |
| 8.6 | | 59.0 | 35.2 | 8.8 |
| 9.7 | 30 | 18.0 | 59.7 | |
| 9.2 | | 39.5 | 55.3 | |
| 9.3 | 31 | 14.5 | 58.5 | |
| 7.3 | | 16.0 | 59.2 | 6.5 GSct |
| 10.0 | | 29.5 | 0.5 | |
| 9.6 | 32 | 13.5 | 24.1 | |
| 8.8 | | 48.6 | 18.8 | |
| 9.7 | 33 | 3.1 | 22.8 | |
| 9.6 | | 9.6 | 43.9 | |
| 9.6 | | 26.1 | 52.5 | |
| 9.3 | | 56.1 | 14.0 | |
| 9.4 | | 58.1 | 12.2 | |
| 9.4 | 34 | 26.6 | 27.7 | |
| 9.4 | | 28.6 | 25.1 | |
| 9.6 | 35 | 10.5 | 30.1 | |
| 9.4 | | 16.1 | 38.4 | |
| 8.2 | | 18.6 | 38.2 | 8.0 GSg |
| 8.6 | | 22.1 | 53.4 | 8.0 Gg |
| 10.0 | | 23.1 | 8.3 | |
| 9.2 | 36 | 16.6 | 30.8 | |
| 10.0 | | 26.6 | 55.8 | |
| 9.2 | 37 | 5.8 | 25.5 | |
| 9.9 | | 51.0 | 14.2 | |
| 8.6 | 38 | 32.5 | 48.0 | 7.5 G |
| 9.4 | | 33.0 | 21.0 | |
| 8.3 | | 40.5 | 31.4 | 7.8 GSt |
| 9.4 | | 51.0 | 9.8 | |
| 9.8 | 40 | 14.5 | 42.1 | |
| 9.8 | | 42.0 | 42.1 | |
| 8.2 | | 53.0 | 52.6 | 9.0 |
| 9.4 | 41 | 11.0 | 15.6 | |
| 9.1 | | 35.0 | 15.6 | |
| 9.8 | | 41.0 | 43.2 | |
| 9.4 | 42 | 6.5 | 12.1 | |
| 9.6 | | 8.5 | 14.6 | |
| 10.4 | | 47.0 | 49.8 | |
| 9.6 | 43 | 35.0 | 3.3 | |
| 9.4 | 44 | 0.0 | 30.1 | |
| 10.2 | | 25.0 | 12.6 | |
| 8.7 | | 34.5 | 20.5 | 9.5 |
| 10.2 | | 41.0 | 18.6 | 9.5 |
| 7.4 | | 42.0 | 24.2 | 6.5 GS |
| 8.0 | | 51.0 | 2.4 | 9.0 S |
| 8.4 | | 51.0 | 53.1 | 9.0 |
| 10.2 | 45 | 1.0 | 13.9 | |
| 9.6 | | 1.0 | 12.2 | |
| 10.2 | | 11.0 | 33.7 | |
| 10.4 | | 46.0 | 29.0 | |
| 10.4 | | 50.0 | 41.6 | |
| 10.4 | | 56.0 | 45.1 | |

## 901—960.

| mag. | $5^{h}$.—$6^{h}$. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 46 | 2·5 | 21·9 | |
| 9·6 | 47 | 1·0 | 13·6 | |
| 8·7 | | 10·0 | 56·9 | 9·5 |
| 9·6 | | 54·0 | 25·5 | |
| 8·8 | | 58·0 | 40·3 | |
| 9·2 | 48 | 10·5 | 46·2 | |
| 9·6 | | 25·0 | 16·7 | |
| 10·2 | | 45·5 | 26·2 | |
| 10·0 | 49 | 1·0 | 56·3 | |
| 10·4 | | 54·0 | 9·5 | |
| 10·2 | 50 | 20·0 | 16·7 | |
| 10·2 | | 25·5 | 24·6 | |
| 9·8 | | 51·0 | 44·2 | |
| 9·2 | 51 | 2·5 | 4·8 | 8·5 G |
| 10·4 | | 18·5 | 2·8 | |
| 9·8 | | 41·0 | 26·7 | |
| 9·8 | 52 | 42·0 | 58·2 | |
| 9·2 | | 58·5 | 35·6 | |
| 10·4 | 53 | 7·0 | 15·2 | |
| 8·6 | | 44·0 | 10·9 | |
| 10·4 | 54 | 5·0 | 55·1 | |
| 10·2 | | 21·0 | 5·0 | |
| 10·2 | | 25·5 | 16·0 | |
| 10·2 | 55 | 14·5 | 22·4 | |
| 10·4 | | 46·5 | 3·8 | |
| 10·2 | | 56·0 | 46·6 | |
| 9·8 | | 57·0 | 10·0 | |
| 9·6 | 56 | 1·0 | 49·8 | |
| 9·1 | | 3·0 | 24·2 | 9·5 |
| 10·2 | | 9·0 | 27·2 | |
| 10·4 | | 11·0 | 30·0 | |
| 9·8 | | 18·5 | 26·9 | |
| 9·3 | | 40·0 | 44·0 | |
| 9·6 | | 54·0 | 57·8 | |
| 9·0 | | 55·0 | 52·6 | 9·5 |
| 8·6 | 57 | 16·0 | 37·3 | 9·2 |
| 9·9 | | 36·0 | 8·9 | |
| 10·4 | | 51·0 | 11·2 | |
| 8·8 | 58 | 8·5 | 41·6 | 8·5 |
| 9·8 | | 15·6 | 1·5 | |
| 10·2 | | 29·0 | 55·0 | |
| 7·4 | | 29·5 | 57·2 | 7·5 GSt |
| 10·2 | | 29·5 | 56·2 | |
| 10·4 | | 53·5 | 21·0 | |
| 9·6 | | 58·0 | 20·5 | |
| 10·0 | 59 | 16·0 | 44·4 | |
| 9·3 | | 26·5 | 5·6 | |
| 10·4 | | 35·0 | 1·1 | |
| 9·6 | | 46·5 | 33·6 | |
| 9·0 | 0 | 5·0 | 21·8 | 9·0 |
| 8·8 | | 9·0 | 6·9 | |
| 9·8 | | 15·0 | 42·2 | |
| 10·0 | 1 | 25·0 | 41·2 | |
| 8·8 | | 26·0 | 7·4 | |
| 10·2 | | 42·0 | 54·3 | |
| 9·3 | | 42·0 | 27·6 | 9·2 |
| 10·4 | | 53·0 | 45·0 | |
| 9·6 | | 53·0 | 2·4 | |
| 7·8 | | 53·5 | 22·4 | 7·6 GSt |
| 10·4 | 2 | 19·5 | 9·0 | |

## 961—1020.

| mag. | $6^{h}$. m | s | −54° ′ | |
|---|---|---|---|---|
| 7·8 | 2 | 45·0 | 23·8 | 7·3 GSt |
| 10·0 | | 49·5 | 37·8 | |
| 9·8 | 3 | 1·0 | 15·2 | |
| 10·4 | | 1·0 | 21·4 | |
| 9·4 | | 11·0 | 22·5 | |
| 8·6 | | 16·7 | 29·7 | 8·0 |
| 9·6 | 4 | 4·2 | 13·0 | |
| 10·4 | | 11·7 | 37·1 | |
| 10·2 | | 13·7 | 42·6 | |
| 9·8 | | 19·7 | 49·3 | |
| 8·6 | | 44·2 | 39·0 | |
| 10·4 | | 49·7 | 54·8 | |
| 8·0 | 5 | 26·7 | 25·1 | 7·5 GSt |
| 9·8 | | 59·7 | 33·7 | |
| 10·4 | 6 | 8·7 | 46·8 | |
| 10·0 | | 16·5 | 1·4 | |
| 10·2 | | 30·7 | 59·0 | |
| 9·4 | | 32·7 | 9·3 | |
| 10·4 | 7 | 23·7 | 49·6 | |
| 4·4 | | 52·1 | 56·7 | 5·2 GScgt |
| 10·0 | 8 | 1·7 | 8·9 | |
| 10·4 | | 14·2 | 16·9 | |
| 9·6 | | 29·4 | 19·2 | |
| 9·9 | | 40·7 | 58·8 | |
| 9·8 | | 40·7 | 16·3 | |
| 8·2 | 9 | 0·7 | 6·1 | 8·5 G |
| 10·2 | | 2·7 | 36·7 | |
| 9·8 | | 10·5 | 41·1 | |
| 9·8 | | 16·5 | 56·0 | |
| 9·8 | | 39·0 | 59·2 | |
| 9·4 | | 41·5 | 46·8 | |
| 9·4 | | 41·5 | 1·4 | |
| 9·1 | 10 | 10·5 | 4·0 | |
| 9·2 | 11 | 6·5 | 35·1 | |
| 9·4 | | 10·5 | 52·0 | |
| 9·6 | | 35·5 | 20·1 | |
| 9·8 | | 45·0 | 20·2 | |
| 8·8 | | 53·5 | 10·5 | |
| 9·4 | 12 | 8·0 | 12·1 | |
| 8·8 | | 48·5 | 31·0 | 8·8 |
| 9·4 | | 56·0 | 4·0 | 9·0 |
| 9·4 | 13 | 16·0 | 19·5 | |
| 9·4 | | 25·5 | 11·7 | |
| 10·0 | | 26·0 | 21·0 | |
| 9·4 | | 37·0 | 27·0 | |
| 8·4 | | 37·5 | 37·9 | 8·5 |
| 8·2 | 14 | 19·0 | 34·2 | 7·2 G |
| 9·0 | | 50·0 | 3·3 | 8·8 |
| 9·8 | 15 | 20·5 | 3·0 | |
| 9·0 | | 21·5 | 56·5 | 9·2 |
| 8·8 | | 50·5 | 21·1 | 7·2 G |
| 10·0 | | 59·5 | 49·6 | |
| 9·8 | 16 | 12·5 | 56·6 | |
| 9·8 | | 15·5 | 9·3 | |
| 9·2 | | 19·3 | 0·0 | |
| 9·8 | | 21·0 | 8·9 | |
| 8·6 | | 53·0 | 48·7 | 9·0 |
| 9·2 | 17 | 31·5 | 14·0 | |
| 9·6 | | 43·0 | 28·7 | |
| 9·3 | | 54·5 | 27·4 | 9·0 G |

## 1021—1080.

| mag. | $6^{h}$. m | s | −54° ′ | |
|---|---|---|---|---|
| 8·8 | 18 | 11·3 | 23·0 | 9·5 |
| 9·8 | | 21·3 | 15·0 | |
| 9·4 | | 24·3 | 53·7 | |
| 9·3 | | 26·3 | 27·5 | |
| 9·6 | | 28·3 | 55·5 | |
| 8·8 | | 30·3 | 29·3 | |
| 8·2 | | 33·8 | 52·3 | 8·0 |
| 8·0 | | 50·3 | 17·5 | 8·0 |
| 9·3 | 19 | 46·8 | 16·0 | 9·0 |
| 9·2 | | 50·8 | 30·3 | |
| 9·6 | 20 | 17·3 | 54·9 | |
| 9·1 | 21 | 13·8 | 42·1 | |
| 9·6 | | 30·8 | 33·4 | |
| 9·6 | 22 | 14·3 | 33·4 | |
| 9·8 | | 29·3 | 48·4 | |
| 8·9 | 23 | 6·3 | 41·3 | |
| 9·8 | | 56·3 | 48·0 | |
| 8·0 | 24 | 31·3 | 57·4 | 8·0 Gt |
| 10·0 | 25 | 2·3 | 36·2 | |
| 9·4 | | 13·3 | 55·5 | 8·5 |
| 9·0 | | 40·3 | 54·5 | 9·5 |
| 9·8 | 26 | 50·3 | 22·9 | |
| 8·8 | | 58·3 | 19·6 | 9·0 |
| 8·9 | 27 | 6·3 | 34·7 | 9·5 |
| 8·9 | | 20·3 | 19·0 | 9·0 |
| 10·0 | | 25·8 | 44·0 | |
| 9·8 | 28 | 18·8 | 41·0 | |
| 9·6 | 29 | 30·9 | 58·0 | |
| 9·8 | | 40·3 | 7·6 | |
| 8·2 | 30 | 20·1 | 58·9 | 8·0 |
| 8·8 | | 20·8 | 10·3 | |
| 9·2 | | 26·8 | 52·1 | 9·0 |
| 9·6 | | 31·8 | 1·7 | |
| 10·0 | | 48·3 | 53·9 | |
| 9·8 | | 55·8 | 33·0 | |
| 8·0 | 31 | 3·5 | 1·2 | 8·0 S |
| 8·4 | | 5·8 | 29·7 | 8·8 |
| 9·8 | | 37·8 | 12·3 | |
| 9·3 | | 45·8 | 50·0 | 9·2 |
| 9·0 | | 49·8 | 53·5 | 10·0 G |
| 9·4 | 32 | 9·8 | 49·5 | |
| 9·8 | | 18·8 | 35·3 | |
| 9·8 | | 37·8 | 47·2 | |
| 9·6 | 33 | 39·8 | 55·9 | |
| 8·6 | | 42·3 | 48·8 | |
| 9·2 | | 48·8 | 47·9 | |
| 9·8 | 34 | 1·3 | 20·2 | |
| 9·2 | | 28·8 | 50·5 | 8·5 |
| 9·8 | | 50·8 | 43·3 | |
| 9·4 | | 52·3 | 52·3 | 8·5 |
| 9·1 | | 56·3 | 22·6 | 9·0 |
| 9·1 | 36 | 4·8 | 17·1 | |
| 9·4 | | 41·8 | 3·2 | |
| 9·4 | | 52·3 | 1·7 | |
| 9·4 | 37 | 19·8 | 44·5 | |
| 9·6 | | 50·8 | 15·0 | |
| 9·1 | | 51·8 | 21·1 | 8·8 |
| 9·3 | 38 | 24·3 | 49·2 | 9·5 |
| 10·0 | | 43·3 | 40·6 | |
| 10·0 | 39 | 7·1 | 13·1 | |

## 1081—1140.

| mag. | $6^{h}$. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 39 | 10·1 | 50·2 | |
| 9·6 | | 24·4 | 21·1 | |
| 10·0 | | 34·8 | 24·0 | |
| 10·0 | | 40·3 | 18·9 | |
| 9·6 | | 55·9 | 49·5 | |
| 10·0 | 40 | 2·9 | 19·0 | |
| 10·3 | | 10·4 | 45·8 | |
| 7·2 | | 24·9 | 59·5 | 7·8 GSt |
| 10·3 | | 25·1 | 13·5 | |
| 10·3 | | 39·9 | 3·9 | |
| 10·2 | | 45·9 | 23·4 | |
| 8·0 | 41 | 14·4 | 3·2 | 9·0 |
| 8·4 | | 18·9 | 26·4 | 8·7 |
| 9·6 | | 22·9 | 26·9 | |
| 10·0 | | 32·9 | 14·8 | |
| 7·1 | | 37·4 | 36·1 | 6·6 GSct |
| 6·7 | | 40·4 | 33·9 | 6·5 GSt |
| 10·2 | | 52·9 | 53·7 | |
| 10·0 | | 57·4 | 13·1 | |
| 9·8 | 42 | 2·9 | 30·9 | |
| 10·3 | | 8·4 | 39·6 | |
| 9·8 | | 21·9 | 51·3 | |
| 9·2 | | 44·9 | 36·8 | 9·2 |
| 10·3 | | 47·4 | 38·6 | |
| 8·4 | | 48·9 | 1·2 | 9·0 |
| 9·4 | 43 | 10·4 | 49·4 | |
| 9·8 | | 19·4 | 27·6 | |
| 10·1 | | 22·9 | 45·9 | 9·0 |
| 9·6 | | 23·3 | 58·1 | |
| 9·6 | | 25·9 | 47·9 | |
| 9·5 | | 26·6 | 59·9 | |
| 8·6 | | 28·3 | 53·8 | 8·5 G |
| 9·5 | | 50·3 | 36·0 | 9·3 |
| 9·8 | 44 | 1·3 | 12·3 | |
| 7·1 | | 9·8 | 33·4 | 7·0 GSt |
| 9·8 | | 40·3 | 3·9 | |
| 9·6 | 45 | 2·8 | 36·0 | |
| 8·0 | | 6·3 | 36·8 | 8·3 GSt |
| 9·0 | | 10·8 | 24·8 | 9·0 |
| 9·5 | | 29·8 | 3·2 | |
| 9·6 | 46 | 0·0 | 58·4 | |
| 10·0 | | 0·3 | 51·3 | |
| 10·0 | | 35·1 | 1·9 | |
| 9·6 | | 43·0 | 59·2 | |
| 9·6 | | 52·8 | 21·3 | |
| 10·1 | 47 | 18·8 | 18·4 | |
| 9·5 | | 40·8 | 46·4 | 9·5 |
| 9·0 | | 41·8 | 50·9 | |
| 8·8 | | 44·8 | 55·9 | 8·5 |
| 10·0 | | 45·3 | 4·4 | |
| 10·3 | | 48·8 | 49·0 | |
| 10·0 | 48 | 32·3 | 28·4 | |
| 10·2 | | 51·3 | 3·4 | |
| 8·8 | 49 | 6·8 | 13·4 | 8·5 |
| 9·6 | | 19·8 | 45·9 | |
| 10·3 | | 22·3 | 26·9 | |
| 10·0 | | 50·3 | 11·8 | |
| 9·6 | 50 | 18·3 | 34·0 | 9·2 |
| 10·0 | | 20·3 | 16·6 | |
| 9·5 | | 43·8 | 27·5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 5 | 40 | 30 | 0·7 |
| | 50 | 30 | 0·4 |
| 6 | 0 | 30 | 0·0 |
| | | | − |
| | 10 | 30 | 0·4 |
| | 20 | 30 | 0·7 |
| | 30 | 30 | 1·1 |
| | 40 | 31 | 1·5 |
| | 50 | 31 | 1·8 |
| 7 | 0 | 32 | 2·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 6 | 50 | 31 | 1.8 |
| 7 | 0 | 32 | 2.2 |
| | 10 | 32 | 2.5 |
| | 20 | 33 | 2.9 |
| | 30 | 34 | 3.2 |
| | 40 | 34 | 3.5 |
| | 50 | 35 | 3.9 |

## 1141—1200.

| mag. | 6h.—7h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.0 | 50 | 55.3 | 18.5 | 8.8 |
| 8.4 | 51 | 0.3 | 43.7 | 9.5 |
| 10.3 | | 2.3 | 46.8 | |
| 10.0 | | 10.8 | 17.4 | |
| 10.1 | | 12.8 | 16.8 | |
| 9.6 | | 13.5 | 1.9 | |
| 10.2 | | 15.8 | 8.0 | |
| 10.1 | | 16.3 | 13.8 | |
| 9.8 | 52 | 17.1 | 12.7 | |
| 10.0 | 53 | 16.1 | 26.0 | |
| 10.0 | | 49.1 | 31.2 | |
| 9.2 | 54 | 12.1 | 37.7 | 9.5 |
| 9.6 | | 13.6 | 36.3 | |
| 10.0 | | 14.1 | 42.1 | |
| 9.5 | | 15.1 | 50.4 | |
| 9.6 | | 30.1 | 21.2 | |
| 8.6 | | 32.6 | 52.8 | Gt |
| 8.8 | | 47.6 | 6.9 | 9.0 |
| 10.3 | 55 | 8.6 | 53.0 | |
| 9.5 | 56 | 4.1 | 7.2 | |
| 8.8 | | 50.1 | 55.8 | |
| 10.3 | | 52.1 | 13.7 | |
| 9.5 | | 52.1 | 12.3 | |
| 9.0 | 57 | 19.1 | 46.9 | |
| 10.0 | | 19.6 | 33.2 | |
| 9.8 | | 30.6 | 4.2 | |
| 9.6 | | 44.6 | 42.0 | |
| 9.0 | 58 | 24.1 | 30.3 | 8.7 |
| 9.0 | | 47.1 | 56.2 | 8.5 |
| 9.4 | | 57.6 | 24.6 | 9.0 |
| 9.4 | 59 | 6.6 | 7.8 | |
| 8.8 | | 50.4 | 58.2 | 9.0 |
| 9.5 | 0 | 2.6 | 37.8 | |
| 9.5 | | 29.1 | 56.6 | 9.0 |
| 9.6 | | 48.6 | 54.4 | |
| 9.8 | | 50.6 | 42.6 | |
| 9.4 | 1 | 6.6 | 45.2 | |
| 10.0 | | 22.1 | 9.5 | |
| 10.2 | | 51.6 | 37.4 | |
| 9.6 | | 51.6 | 28.4 | |
| 9.6 | 2 | 5.1 | 28.6 | |
| 10.0 | | 19.6 | 1.6 | |
| 9.4 | | 25.3 | 39.8 | |
| 10.0 | | 25.3 | 44.0 | |
| 9.8 | | 27.8 | 37.7 | |
| 10.3 | | 44.8 | 29.2 | |
| 10.2 | 3 | 9.8 | 35.3 | |
| 10.3 | | 13.3 | 21.1 | |
| 10.2 | | 59.8 | 10.3 | |
| 8.6 | 4 | 9.8 | 48.6 | 8.0 |
| 10.3 | | 18.3 | 8.8 | |
| 9.8 | | 32.3 | 28.1 | |
| 8.8 | | 37.3 | 22.8 | 8.2 |
| 10.0 | | 39.3 | 20.9 | |
| 10.3 | | 55.3 | 10.9 | |
| 9.4 | 5 | 32.8 | 25.6 | 9.0 |
| 10.3 | | 42.3 | 26.8 | |
| 8.8 | | 44.3 | 16.8 | 8.3 G |
| 10.3 | | 46.8 | 27.5 | |
| 10.1 | 7 | 6.8 | 45.3 | |

## 1201—1260.

| mag. | 7h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.8 | 7 | 29.3 | 51.6 | 8.5 |
| 8.8 | | 40.8 | 57.6 | 8.5 |
| 10.3 | 8 | 33.8 | 21.9 | |
| 9.8 | | 47.3 | 31.4 | |
| 10.3 | | 54.3 | 36.8 | |
| 9.6 | | 54.8 | 20.6 | |
| 9.8 | 9 | 4.8 | 14.8 | |
| 8.8 | | 5.3 | 4.1 | 8.5 |
| 10.2 | | 34.3 | 35.8 | |
| 9.8 | | 38.3 | 33.5 | |
| 10.0 | | 40.8 | 29.2 | |
| 10.0 | | 50.3 | 16.1 | |
| 8.6 | 10 | 1.3 | 22.1 | 9.0 |
| 9.6 | | 4.8 | 23.4 | |
| 9.4 | | 30.6 | 14.1 | |
| 9.6 | | 31.6 | 20.9 | 10.0 |
| 8.8 | 11 | 2.4 | 41.0 | 9.0 G |
| 10.3 | | 8.6 | 19.5 | |
| 9.4 | | 24.7 | 0.2 | |
| 10.3 | | 26.6 | 25.6 | |
| 8.5 | | 31.6 | 35.0 | 8.3 |
| 10.3 | | 37.1 | 12.1 | |
| 10.0 | | 44.1 | 35.7 | |
| 10.2 | 12 | 8.7 | 5.1 | |
| 8.8 | | 21.6 | 42.3 | 9.5 S |
| 9.6 | | 29.4 | 45.1 | |
| 9.2 | | 32.9 | 1.5 | |
| 8.8 | 13 | 9.1 | 16.0 | 9.0 |
| 9.2 | | 9.4 | 38.7 | 9.0 |
| 9.7 | | 11.7 | 49.4 | 9.0 |
| 7.7 | | 20.7 | 44.4 | 7.5 Gg |
| 9.6 | | 28.7 | 0.4 | |
| 9.2 | | 30.7 | 3.2 | |
| 7.4 | | 30.7 | 0.2 | 8.5 GSt |
| 9.3 | | 54.3 | 59.6 | |
| 9.3 | 14 | 15.2 | 27.0 | |
| 9.6 | | 24.7 | 37.7 | |
| 9.4 | | 27.7 | 24.1 | |
| 9.3 | | 41.7 | 29.9 | |
| 9.3 | | 43.7 | 1.9 | |
| 9.2 | | 51.5 | 41.3 | |
| 8.7 | 15 | 0.0 | 16.2 | 9.0 |
| 9.6 | | 34.5 | 51.5 | |
| 8.8 | | 40.5 | 17.3 | 9.2 |
| 9.6 | | 56.5 | 5.1 | |
| 8.6 | 16 | 11.5 | 49.3 | 9.0 |
| 9.6 | | 12.5 | 36.7 | |
| 9.2 | | 15.5 | 25.9 | 9.5 |
| 9.4 | | 31.0 | 56.8 | |
| 8.5 | 17 | 0.5 | 35.3 | 8.8 |
| 9.6 | | 16.5 | 23.0 | |
| 9.3 | | 20.5 | 38.7 | |
| 9.4 | | 58.0 | 24.3 | |
| 9.2 | 18 | 5.0 | 47.4 | |
| 8.9 | | 32.5 | 21.8 | |
| 9.4 | 19 | 0.5 | 19.5 | |
| 9.4 | | 22.5 | 29.5 | |
| 9.7 | | 22.5 | 13.5 | |
| 8.2 | | 24.0 | 11.2 | 9.5 |
| 8.5 | | 39.5 | 46.6 | |

## 1261—1320.

| mag. | 7h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.8 | 19 | 41.5 | 56.2 | |
| 9.3 | 20 | 33.5 | 26.9 | |
| 9.0 | 21 | 8.0 | 53.7 | |
| 9.7 | | 29.5 | 27.0 | |
| 9.6 | | 30.0 | 15.0 | |
| 8.6 | | 38.5 | 46.1 | 9.2 |
| 8.7 | 22 | 28.5 | 29.5 | 9.7 |
| 8.2 | 23 | 5.0 | 46.9 | 9.0 |
| 9.2 | | 9.5 | 11.0 | |
| 9.0 | | 11.0 | 13.6 | |
| 9.3 | | 25.0 | 33.1 | |
| 9.2 | | 26.5 | 19.3 | |
| 9.2 | | 29.5 | 11.7 | |
| 8.9 | | 31.5 | 24.3 | 9.5 |
| 9.6 | | 36.5 | 35.0 | |
| 9.2 | | 37.5 | 12.0 | |
| 7.9 | 24 | 2.5 | 59.6 | GSt |
| 9.6 | | 8.5 | 22.8 | |
| 9.4 | | 36.8 | 58.1 | |
| 9.2 | | 40.3 | 2.0 | 10.0 |
| 9.2 | | 45.3 | 42.7 | |
| 9.6 | | 49.3 | 27.2 | |
| 9.2 | 25 | 18.3 | 49.5 | |
| 9.4 | | 29.5 | 59.8 | |
| 9.0 | | 59.3 | 26.3 | 9.5 |
| 9.2 | 26 | 0.8 | 48.1 | |
| 8.9 | | 13.3 | 15.4 | |
| 9.4 | | 28.6 | 2.1 | |
| 9.4 | | 29.3 | 20.8 | |
| 8.2 | | 52.8 | 38.8 | 8.7 |
| 9.2 | 27 | 6.1 | 57.2 | |
| 9.7 | | 23.3 | 26.9 | |
| 8.5 | | 40.3 | 13.8 | 9.5 |
| 7.4 | | 40.8 | 8.2 | 6.5 GSct |
| 9.3 | 28 | 33.3 | 31.0 | |
| 9.7 | | 45.3 | 6.2 | |
| 9.4 | | 48.3 | 37.3 | |
| 8.7 | | 53.3 | 14.7 | 9.0 |
| 9.3 | 29 | 7.8 | 54.6 | |
| 9.0 | | 20.3 | 44.1 | 8.8 |
| 9.0 | | 50.8 | 33.0 | |
| 9.2 | 30 | 6.3 | 21.7 | |
| 8.4 | | 8.8 | 53.9 | 9.0 G |
| 9.0 | | 13.8 | 41.3 | 9.0 |
| 8.0 | | 15.3 | 53.7 | 8.0 Gt |
| 9.4 | | 15.8 | 3.5 | |
| 9.3 | | 23.8 | 22.1 | |
| 8.4 | | 41.3 | 29.1 | 9.0 |
| 8.9 | | 44.3 | 26.9 | 9.0 |
| 9.6 | | 47.3 | 12.6 | |
| 9.0 | | 55.8 | 34.9 | 9.5 |
| 9.4 | | 58.3 | 41.5 | |
| 9.3 | 31 | 50.3 | 8.0 | |
| 9.3 | | 50.3 | 5.0 | |
| 9.0 | 32 | 3.3 | 0.9 | |
| 8.2 | | 14.3 | 48.6 | 8.8 |
| 9.7 | | 20.3 | 18.5 | |
| 9.7 | | 31.3 | 17.0 | |
| 9.0 | | 42.1 | 0.2 | |
| 9.4 | | 45.1 | 38.6 | |

## 1321—1380.

| mag. | 7h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 33 | 0.1 | 16.8 | |
| 9.7 | | 2.6 | 16.1 | |
| 9.2 | | 8.1 | 51.1 | |
| 9.0 | | 21.6 | 20.8 | |
| 9.0 | | 25.6 | 52.5 | |
| 9.6 | | 32.6 | 20.5 | |
| 9.0 | | 57.6 | 59.4 | |
| 9.0 | 34 | 1.1 | 18.1 | |
| 9.2 | | 1.6 | 14.9 | |
| 9.2 | | 17.1 | 17.5 | |
| 9.2 | | 24.1 | 40.7 | |
| 9.4 | | 24.6 | 48.1 | |
| 9.3 | | 42.6 | 27.1 | |
| 9.3 | 35 | 15.1 | 54.0 | |
| 9.7 | | 24.1 | 11.8 | |
| 9.7 | | 33.1 | 44.5 | |
| 8.0 | | 44.6 | 21.1 | 8.2 |
| 9.2 | 36 | 0.1 | 56.5 | |
| 9.6 | | 9.6 | 8.0 | |
| 9.4 | | 14.6 | 36.0 | |
| 9.0 | | 18.1 | 45.1 | |
| 8.8 | | 21.1 | 47.1 | 9.5 |
| 8.0 | | 28.7 | 0.6 | 8.5 |
| 9.2 | | 36.1 | 49.5 | |
| 9.0 | 37 | 24.1 | 3.5 | |
| 9.7 | | 54.6 | 12.1 | |
| 9.2 | | 58.6 | 28.9 | |
| 7.2 | 38 | 1.1 | 24.8 | 7.0 GSct |
| 9.2 | | 23.1 | 38.7 | |
| 9.2 | | 42.6 | 3.6 | |
| 9.2 | | 50.1 | 41.0 | |
| 9.4 | | 55.6 | 25.2 | |
| 9.2 | | 57.6 | 29.4 | |
| 9.6 | | 58.1 | 39.7 | |
| 8.0 | 39 | 3.1 | 7.3 | 9.0 |
| 7.2 | | 24.1 | 53.1 | 7.0 GSt |
| 9.7 | | 43.1 | 54.4 | |
| 9.7 | | 47.3 | 5.9 | |
| 9.2 | | 49.8 | 31.7 | |
| 9.7 | 40 | 1.8 | 18.7 | |
| 9.6 | | 8.8 | 17.8 | |
| 9.2 | | 20.8 | 1.2 | |
| 9.2 | | 24.3 | 6.6 | 9.0 |
| 9.3 | | 27.8 | 9.7 | |
| 9.4 | | 51.8 | 44.6 | |
| 9.6 | 41 | 18.4 | 57.0 | |
| 8.7 | | 18.8 | 42.2 | |
| 9.6 | | 40.3 | 38.4 | |
| 8.3 | | 48.3 | 20.2 | 7.5 G |
| 9.3 | 42 | 29.3 | 16.7 | |
| 9.4 | | 29.8 | 22.4 | |
| 9.0 | | 29.8 | 32.6 | |
| 8.9 | | 30.3 | 52.4 | 9.0 |
| 9.7 | | 51.8 | 47.4 | |
| 8.6 | | 52.5 | 35.0 | |
| 10.2 | 43 | 20.2 | 10.7 | |
| 10.2 | | 22.2 | 16.7 | |
| 9.6 | | 24.0 | 15.5 | 9.5 |
| 10.2 | | 45.5 | 39.5 | |
| 9.8 | | 55.2 | 37.0 | |



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## 1381—1440.

| mag. | 7h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.5 | 44 | 1.0 | 48.3 | S |
| 9.8 | | 19.7 | 34.3 | |
| 9.4 | | 36.7 | 23.5 | |
| 10.2 | | 40.2 | 32.8 | |
| 10.2 | | 40.2 | 14.7 | |
| 10.0 | | 41.2 | 30.9 | |
| 10.2 | | 58.7 | 40.9 | |
| 8.4 | 45 | 9.2 | 6.5 | 9.0 |
| 7.4 | | 20.7 | 24.1 | 7.0 GSg |
| 10.0 | | 25.2 | 49.7 | |
| 10.2 | | 49.7 | 11.6 | |
| 10.2 | | 50.7 | 6.1 | |
| 9.6 | 46 | 15.7 | 20.3 | |
| 9.5 | | 23.2 | 45.4 | |
| 9.5 | | 32.2 | 2.0 | |
| 8.3 | | 33.2 | 26.3 | 7.8 GS |
| 7.8 | | 33.2 | 29.7 | 7.5 GSt |
| 8.3 | | 36.2 | 35.2 | 8.0 GSt |
| 9.2 | | 42.2 | 22.3 | |
| 8.8 | | 45.2 | 24.1 | 8.5 |
| 7.5 | | 47.2 | 45.7 | 7.0 GSt |
| 10.2 | | 54.7 | 36.5 | |
| 9.2 | | 56.7 | 29.8 | 9.2 |
| 10.0 | 47 | 19.2 | 43.0 | |
| 9.5 | | 20.2 | 44.5 | |
| 9.5 | | 30.7 | 53.8 | |
| 10.2 | | 39.7 | 37.3 | |
| 10.2 | | 46.7 | 38.1 | |
| 8.6 | | 47.2 | 56.7 | |
| 9.2 | 48 | 4.7 | 3.7 | |
| 10.2 | | 11.2 | 56.7 | |
| 10.2 | | 11.7 | 50.3 | |
| 10.2 | | 12.1 | 39.0 | |
| 9.4 | | 16.7 | 42.0 | |
| 9.8 | | 48.7 | 55.1 | |
| 8.8 | | 50.2 | 29.9 | 9.0 |
| 9.2 | 49 | 0.7 | 23.5 | |
| 9.4 | | 11.7 | 42.7 | 9.0 |
| 9.4 | | 20.7 | 3.9 | |
| 5.9 | | 30.7 | 2.6 | 6.0 GSt |
| 9.0 | | 40.2 | 12.0 | |
| 9.2 | | 42.7 | 0.0 | |
| 10.2 | | 49.7 | 48.8 | |
| 10.2 | | 53.7 | 36.0 | |
| 10.0 | | 55.2 | 17.1 | |
| 9.6 | 50 | 3.7 | 9.9 | |
| 9.4 | | 7.2 | 45.3 | |
| 9.4 | | 7.7 | 5.6 | |
| 9.8 | | 21.2 | 17.5 | |
| 10.2 | | 41.8 | 57.4 | |
| 9.8 | | 45.2 | 38.4 | |
| 10.2 | 51 | 10.7 | 46.5 | |
| 10.0 | | 16.7 | 32.0 | |
| 8.8 | | 49.2 | 30.0 | |
| 8.2 | 52 | 5.7 | 18.6 | 8.0 Gt |
| 10.2 | | 14.7 | 1.6 | |
| 9.8 | | 20.2 | 44.3 | |
| 9.6 | | 25.2 | 44.7 | |
| 10.0 | | 39.3 | 33.8 | |
| 10.2 | | 46.7 | 29.3 | |

## 1441—1500.

| mag. | 7h.–8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.4 | 53 | 10.2 | 43.3 | 8.0 |
| 9.8 | | 10.2 | 21.0 | |
| 8.0 | | 13.3 | 1.9 | 8.5 t |
| 10.2 | | 18.3 | 2.4 | |
| 10.2 | | 24.2 | 32.6 | |
| 9.6 | | 53.7 | 31.1 | |
| 10.0 | 54 | 0.3 | 12.8 | |
| 9.2 | | 8.7 | 6.1 | 10.0 |
| 9.8 | | 20.7 | 38.2 | |
| 10.2 | | 23.7 | 36.3 | |
| 9.4 | | 51.2 | 5.5 | |
| 9.4 | 55 | 7.6 | 0.1 | |
| 8.2 | | 30.2 | 13.7 | 7.5 GSt |
| 9.4 | | 51.7 | 41.9 | 9.0 |
| 9.8 | 56 | 2.2 | 17.5 | |
| 8.3 | | 3.2 | 12.3 | 8.0 GSt |
| 10.2 | | 10.7 | 35.9 | |
| 10.2 | | 11.2 | 53.2 | |
| 10.2 | | 15.7 | 21.2 | |
| 9.5 | | 22.7 | 23.1 | |
| 10.2 | | 43.7 | 49.3 | |
| 10.2 | | 50.7 | 33.8 | |
| 9.5 | | 51.7 | 26.4 | |
| 10.2 | | 57.7 | 4.9 | |
| 8.0 | 57 | 16.7 | 52.4 | 7.5 G |
| 9.8 | | 20.7 | 45.6 | |
| 9.6 | | 33.7 | 41.7 | |
| 10.2 | | 34.2 | 9.8 | |
| 9.8 | | 36.7 | 32.0 | |
| 6.4 | 58 | 20.7 | 10.0 | 6.5 GSct |
| 7.8 | | 21.7 | 10.7 | 8.0 t |
| 9.6 | | 21.7 | 38.2 | |
| 9.4 | | 30.7 | 12.7 | |
| 10.2 | | 52.2 | 7.2 | |
| 7.4 | | 59.2 | 18.9 | 7.0 GSt |
| 10.2 | 59 | 7.2 | 56.8 | |
| 9.2 | | 10.7 | 37.4 | |
| 9.6 | | 27.2 | 36.9 | |
| 8.9 | | 27.7 | 5.5 | |
| 9.4 | | 28.2 | 41.6 | |
| 10.2 | | 29.7 | 28.5 | |
| 8.9 | | 30.2 | 41.2 | 8.0 |
| 8.9 | | 30.2 | 49.5 | |
| 8.9 | | 40.2 | 54.2 | |
| 9.6 | | 45.7 | 12.0 | |
| 10.2 | | 50.7 | 15.1 | |
| 9.2 | 0 | 10.7 | 57.0 | |
| 10.2 | | 15.2 | 30.2 | |
| 10.2 | | 29.2 | 18.4 | |
| 9.4 | | 51.2 | 39.2 | |
| 9.0 | | 59.7 | 20.4 | 9.0 |
| 9.8 | 1 | 0.7 | 25.6 | |
| 8.6 | | 1.2 | 26.1 | 8.5 |
| 8.2 | | 10.2 | 7.2 | 8.0 GSt |
| 7.8 | | 22.7 | 38.3 | 8.0 GSt |
| 10.0 | | 25.7 | 10.5 | |
| 7.6 | | 50.7 | 38.0 | 7.8 GSt |
| 9.5 | | 55.7 | 31.5 | |
| 9.4 | 2 | 7.2 | 37.3 | 10.0 |
| 9.8 | | 11.7 | 57.9 | |

## 1501—1560.

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.5 | 2 | 15.7 | 0.7 | |
| 10.2 | | 19.7 | 22.9 | |
| 9.8 | | 34.2 | 57.2 | |
| 9.2 | | 49.2 | 47.9 | 9.5 |
| 10.2 | 3 | 0.7 | 3.1 | |
| 9.6 | | 8.7 | 14.5 | |
| 8.6 | | 26.7 | 26.7 | 9.2 |
| 9.5 | | 29.2 | 35.1 | |
| 9.6 | | 33.2 | 55.8 | |
| 10.0 | | 34.2 | 56.2 | |
| 9.8 | | 39.2 | 46.1 | |
| 8.4 | 4 | 10.7 | 34.0 | 9.0 |
| 9.8 | | 31.7 | 11.1 | |
| 8.6 | | 34.2 | 57.9 | 8.5 |
| 8.2 | | 35.7 | 42.1 | 8.5 |
| 9.4 | | 37.7 | 3.5 | 9.5 |
| 7.8 | | 38.2 | 27.6 | 8.2 Gt |
| 10.2 | 5 | 0.7 | 40.9 | |
| 10.0 | | 4.9 | 57.1 | |
| 10.2 | | 9.2 | 26.7 | |
| 9.2 | | 22.2 | 13.5 | |
| 10.2 | | 29.7 | 15.0 | |
| 9.2 | | 31.7 | 33.8 | |
| 9.4 | | 39.7 | 57.9 | 9.5 |
| 10.2 | | 54.7 | 4.7 | |
| 9.4 | 6 | 5.7 | 0.1 | |
| 9.5 | | 10.2 | 0.1 | |
| 10.0 | | 24.2 | 58.9 | |
| 9.6 | | 37.2 | 26.8 | |
| 9.2 | | 42.2 | 35.1 | |
| 9.5 | | 54.1 | 6.0 | |
| 9.4 | | 57.1 | 50.0 | |
| 9.8 | 7 | 1.6 | 59.8 | |
| 10.2 | | 19.1 | 2.8 | |
| 9.8 | | 33.1 | 28.2 | |
| 10.0 | | 42.5 | 1.4 | |
| 9.4 | | 51.6 | 47.1 | |
| 9.8 | | 53.6 | 7.9 | |
| 9.8 | | 55.1 | 9.5 | |
| 8.9 | 8 | 1.6 | 32.9 | 9.0 |
| 10.2 | | 19.6 | 8.5 | |
| 9.5 | | 38.1 | 34.9 | |
| 10.2 | | 40.1 | 13.2 | |
| 9.5 | | 42.6 | 39.5 | |
| 8.0 | 9 | 19.4 | 58.7 | 8.5 G |
| 10.0 | | 23.6 | 10.6 | |
| 8.8 | | 26.1 | 25.9 | |
| 10.2 | | 30.1 | 32.5 | |
| 10.2 | | 44.1 | 1.1 | |
| 10.2 | | 51.1 | 28.2 | |
| 10.0 | 10 | 10.1 | 0.1 | |
| 10.0 | | 31.6 | 20.6 | |
| 10.2 | | 56.6 | 17.8 | |
| 10.0 | 11 | 0.6 | 4.8 | |
| 10.0 | | 1.6 | 20.7 | |
| 8.6 | | 10.6 | 21.2 | 9.2 |
| 9.5 | | 50.6 | 32.3 | |
| 10.2 | | 58.6 | 17.3 | |
| 10.2 | 12 | 11.6 | 13.2 | |
| 9.4 | | 21.6 | 54.4 | |

## 1561—1620.

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.2 | 12 | 35.6 | 1.1 | |
| 10.2 | | 39.1 | 28.9 | |
| 10.2 | | 40.1 | 5.1 | |
| 10.2 | | 47.1 | 9.7 | |
| 10.0 | | 57.1 | 3.8 | |
| 9.8 | 13 | 7.1 | 8.4 | |
| 9.5 | | 19.1 | 44.2 | |
| 10.2 | | 26.1 | 8.4 | |
| 10.2 | | 31.6 | 14.9 | |
| 8.9 | | 34.1 | 25.7 | |
| 10.2 | | 54.2 | 18.9 | |
| 9.0 | | 59.2 | 22.1 | |
| 10.2 | 14 | 0.7 | 54.6 | |
| 9.0 | | 8.7 | 44.0 | |
| 8.6 | | 10.2 | 31.5 | 8.5 |
| 9.4 | | 10.7 | 25.1 | |
| 8.5 | | 15.7 | 6.0 | 9.0 |
| 10.0 | | 17.7 | 26.8 | |
| 10.0 | 15 | 32.7 | 13.9 | |
| 10.1 | | 33.0 | 55.3 | |
| 9.2 | | 58.0 | 8.8 | 8.5 |
| 10.2 | 16 | 4.0 | 6.2 | |
| 9.8 | | 6.0 | 50.0 | |
| 10.1 | | 13.3 | 35.5 | |
| 9.7 | | 19.5 | 15.0 | |
| 10.1 | | 33.0 | 29.4 | |
| 10.1 | | 35.0 | 27.4 | |
| 10.1 | | 47.2 | 12.5 | |
| 9.7 | | 57.8 | 43.6 | |
| 10.1 | 17 | 5.9 | 9.3 | |
| 10.1 | | 12.7 | 0.4 | |
| 8.5 | | 15.1 | 28.4 | 8.5 |
| 10.1 | | 15.7 | 33.3 | |
| 10.0 | | 22.4 | 27.8 | |
| 9.4 | | 40.4 | 48.6 | 9.0 |
| 10.0 | 18 | 0.9 | 11.8 | |
| 9.7 | | 1.4 | 15.0 | |
| 9.0 | | 5.4 | 38.2 | |
| 9.6 | | 10.4 | 37.0 | |
| 10.0 | | 12.7 | 8.4 | |
| 9.8 | | 15.4 | 44.8 | |
| 10.1 | | 15.9 | 19.3 | |
| 9.8 | | 16.4 | 17.4 | |
| 9.6 | | 16.9 | 24.5 | |
| 9.7 | | 21.4 | 6.4 | |
| 10.1 | | 22.9 | 45.6 | |
| 10.1 | | 51.4 | 16.0 | |
| 9.8 | | 56.4 | 10.4 | |
| 9.8 | | 59.4 | 31.4 | |
| 9.1 | 19 | 0.4 | 37.3 | |
| 9.0 | | 13.4 | 49.3 | 9.0 |
| 10.1 | | 18.7 | 22.5 | |
| 9.1 | | 26.4 | 15.2 | |
| 9.0 | | 34.9 | 49.0 | 9.5 |
| 7.8 | | 36.9 | 4.8 | 8.0 |
| 10.1 | 20 | 3.5 | 57.2 | |
| 10.1 | | 9.9 | 36.1 | |
| 10.1 | | 16.4 | 20.5 | |
| 9.4 | | 21.9 | 51.8 | |
| 9.8 | | 30.9 | 26.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 40 | 34 | 3.5 |
| | 50 | 35 | 3.9 |
| 8 | 0 | 36 | 4.2 |
| | 10 | 37 | 4.5 |
| | 20 | 38 | 4.8 |
| | 30 | 40 | 5.1 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 8 | 20 | 38 | 4·8 |
| | 30 | 40 | 5·1 |
| | 40 | 41 | 5·4 |
| | 50 | 42 | 5·6 |

**1621—1680.**

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 7·6 | 20 | 32·9 | 54·9 | 7·5 GSt |
| 10·1 | | 46·4 | 37·6 | |
| 9·4 | | 46·9 | 3·9 | |
| 9·8 | | 57·9 | 12·9 | |
| 10·0 | 21 | 21·9 | 58·8 | |
| 9·6 | | 31·4 | 2·2 | |
| 7·0 | | 31·9 | 57·5 | 7·0 GSgt |
| 9·8 | | 32·4 | 5·0 | |
| 9·6 | | 47·9 | 21·2 | |
| 10·1 | | 54·9 | 2·4 | |
| 9·3 | 22 | 7·7 | 20·7 | |
| 9·8 | | 15·2 | 8·6 | |
| 9·8 | | 27·7 | 40·7 | |
| 9·0 | | 33·2 | 19·6 | 10·0 |
| 10·0 | | 38·2 | 11·8 | |
| 8·9 | | 41·2 | 22·9 | 8·5 Gg |
| 9·7 | | 51·2 | 9·0 | |
| 8·8 | 23 | 0·7 | 44·1 | 9·2 |
| 8·7 | | 5·7 | 39·4 | 9·0 |
| 10·1 | | 15·2 | 15·4 | |
| 9·6 | | 24·7 | 17·6 | |
| 9·8 | | 30·2 | 5·7 | |
| 7·6 | | 36·7 | 57·2 | 7·5 GSgt |
| 9·6 | | 41·2 | 14·1 | |
| 7·6 | | 48·2 | 55·3 | 7·5 GSgt |
| 9·8 | 24 | 9·2 | 25·7 | |
| 7·3 | | 14·2 | 35·8 | 7·0 GSot |
| 9·4 | | 26·2 | 19·8 | |
| 9·6 | | 32·2 | 29·8 | |
| 10·0 | | 41·2 | 22·6 | |
| 9·0 | | 41·2 | 58·2 | |
| 9·4 | | 42·4 | 57·7 | |
| 9·4 | | 52·2 | 37·0 | |
| 9·6 | | 52·7 | 55·5 | |
| 9·7 | | 54·2 | 54·0 | |
| 9·4 | | 56·2 | 52·3 | |
| 10·1 | | 58·7 | 18·7 | |
| 9·8 | 25 | 6·2 | 3·6 | 9·5 |
| 9·4 | | 9·7 | 1·6 | |
| 9·6 | | 13·7 | 6·6 | |
| 7·9 | | 23·2 | 4·9 | 8·0 |
| 10·1 | | 28·7 | 24·4 | |
| 10·1 | | 57·7 | 15·4 | |
| 9·6 | | 59·2 | 27·4 | |
| 9·6 | 26 | 10·7 | 27·7 | |
| 10·1 | | 11·5 | 9·2 | |
| 7·4 | | 22·2 | 46·3 | 7·0 GSt |
| 10·0 | | 26·7 | 12·5 | |
| 10·1 | | 34·2 | 3·3 | |
| 9·4 | | 39·7 | 29·9 | |
| 9·6 | | 40·2 | 24·7 | |
| 8·0 | | 43·7 | 24·4 | 8·2 GSt |
| 9·3 | 27 | 27·6 | 55·9 | |
| 10·0 | | 38·1 | 34·0 | |
| 10·1 | | 42·1 | 9·0 | |
| 10·1 | 28 | 40·1 | 19·6 | |
| 10·1 | | 59·6 | 36·8 | |
| 10·0 | 29 | 0·6 | 36·4 | |
| 10·1 | | 7·6 | 31·6 | |
| 10·1 | | 13·1 | 52·0 | |

**1681—1740.**

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 7·6 | 29 | 14·6 | 59·1 | G |
| 9·8 | | 19·1 | 47·5 | |
| 7·6 | | 20·1 | 41·8 | 7·5 GSt |
| 9·6 | | 35·6 | 38·2 | |
| 9·8 | 30 | 21·1 | 21·3 | |
| 9·4 | | 21·1 | 32·3 | |
| 10·0 | | 22·1 | 10·0 | |
| 9·8 | | 22·1 | 41·7 | |
| 9·6 | | 30·1 | 11·1 | |
| 10·0 | | 31·1 | 40·5 | |
| 9·4 | | 46·1 | 29·9 | |
| 9·4 | | 58·1 | 24·3 | |
| 8·2 | 31 | 3·1 | 14·2 | 8·0 |
| 10·0 | | 3·6 | 9·4 | |
| 10·0 | | 9·1 | 41·7 | |
| 9·8 | | 20·6 | 15·1 | |
| 9·8 | | 25·6 | 55·2 | |
| 9·8 | | 44·1 | 47·7 | |
| 9·6 | | 46·1 | 4·4 | |
| 9·6 | 32 | 2·1 | 26·1 | |
| 10·1 | | 9·1 | 14·0 | |
| 8·0 | | 12·1 | 40·2 | 8·0 GSt |
| 9·1 | | 33·1 | 25·8 | |
| 9·6 | | 35·1 | 38·4 | |
| 10·0 | | 42·6 | 41·1 | |
| 10·1 | | 44·6 | 42·2 | |
| 10·1 | 33 | 2·1 | 34·1 | |
| 9·6 | | 38·1 | 11·0 | |
| 10·1 | | 43·4 | 51·3 | |
| 9·4 | | 51·4 | 49·2 | |
| 9·4 | | 51·9 | 40·2 | |
| 10·1 | | 53·4 | 52·1 | |
| 10·1 | | 53·9 | 28·0 | |
| 9·3 | 34 | 14·4 | 57·8 | |
| 10·1 | | 14·9 | 13·9 | |
| 10·1 | | 15·9 | 45·1 | |
| 8·8 | | 22·4 | 33·4 | 7·5 GSt |
| 9·3 | | 35·9 | 43·1 | 8·8 |
| 10·1 | | 39·9 | 5·0 | |
| 10·1 | | 42·4 | 5·3 | |
| 9·6 | | 49·9 | 51·2 | |
| 9·0 | | 55·4 | 18·4 | 9·5 |
| 9·1 | | 57·9 | 57·4 | |
| 9·8 | 35 | 10·9 | 22·8 | |
| 9·8 | | 12·9 | 20·8 | |
| 10·1 | | 20·4 | 30·7 | |
| 9·7 | | 33·4 | 32·5 | |
| 9·6 | | 34·9 | 52·5 | |
| 9·6 | | 39·9 | 51·5 | |
| 9·0 | 36 | 0·9 | 55·6 | |
| 9·1 | | 4·9 | 12·4 | |
| 9·3 | | 7·4 | 51·6 | |
| 9·6 | | 12·4 | 55·3 | |
| 10·1 | | 27·4 | 39·4 | |
| 10·1 | | 31·9 | 30·3 | |
| 10·1 | | 42·9 | 33·1 | |
| 9·3 | | 43·9 | 35·4 | |
| 9·4 | | 55·9 | 44·0 | |
| 9·7 | 37 | 9·9 | 39·8 | |
| 10·1 | | 10·9 | 3·8 | |

**1741—1800.**

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·1 | 37 | 11·4 | 25·4 | |
| 9·6 | | 11·9 | 9·1 | |
| 10·1 | | 20·4 | 23·5 | |
| 10·1 | | 22·4 | 46·8 | |
| 8·7 | | 24·9 | 5·8 | 9·0 |
| 10·0 | | 34·9 | 42·7 | |
| 9·6 | | 36·4 | 4·4 | |
| 10·1 | | 38·4 | 41·1 | |
| 10·0 | | 38·5 | 28·0 | |
| 9·6 | | 40·5 | 37·5 | |
| 9·8 | | 54·4 | 56·9 | |
| 9·3 | | 58·0 | 26·5 | |
| 9·1 | 38 | 7·5 | 32·1 | |
| 10·0 | | 9·0 | 51·1 | |
| 10·1 | | 15·5 | 52·1 | |
| 9·8 | | 20·5 | 5·8 | |
| 9·6 | | 20·5 | 30·0 | |
| 8·7 | | 22·5 | 19·5 | 9·0 |
| 9·0 | | 26·0 | 31·0 | |
| 9·8 | | 31·3 | 2·2 | |
| 10·0 | | 32·5 | 5·0 | |
| 10·0 | | 49·0 | 6·6 | |
| 9·8 | 39 | 7·5 | 37·2 | |
| 10·0 | | 9·5 | 34·0 | |
| 10·1 | | 9·5 | 25·0 | |
| 9·1 | | 21·5 | 47·0 | 10·0 |
| 9·6 | | 27·5 | 56·3 | |
| 9·7 | | 27·5 | 47·6 | |
| 9·6 | | 30·5 | 25·1 | |
| 10·1 | | 31·5 | 34·4 | |
| 9·8 | | 35·5 | 14·8 | |
| 10·0 | | 45·0 | 15·7 | |
| 10·0 | | 49·0 | 21·8 | |
| 9·4 | | 50·5 | 53·4 | |
| 9·8 | | 51·5 | 13·7 | |
| 9·4 | 40 | 0·0 | 27·0 | |
| 10·1 | | 0·5 | 50·1 | |
| 10·1 | | 15·5 | 29·0 | |
| 10·1 | | 17·5 | 33·1 | |
| 10·1 | | 29·5 | 2·1 | |
| 9·2 | | 36·5 | 24·6 | |
| 9·6 | | 36·5 | 11·0 | |
| 9·8 | | 39·5 | 25·6 | |
| 9·8 | | 55·0 | 41·8 | |
| 9·7 | 41 | 1·5 | 35·1 | |
| 10·1 | | 3·5 | 38·4 | |
| 10·1 | | 5·5 | 5·2 | |
| 3·5 | | 17·0 | 15·1 | 2·0 GSctrλ |
| 9·8 | | 21·6 | 6·9 | |
| 10·1 | | 24·1 | 33·1 | |
| 9·7 | | 31·1 | 23·5 | |
| 10·1 | | 35·1 | 20·9 | |
| 10·0 | | 39·1 | 39·8 | |
| 9·6 | | 43·6 | 21·9 | |
| 10·0 | | 52·6 | 12·9 | |
| 10·1 | | 53·2 | 59·3 | |
| 10·0 | | 56·6 | 30·5 | |
| 9·2 | 42 | 1·1 | 50·5 | |
| 9·6 | | 8·1 | 35·1 | |
| 10·0 | | 9·1 | 43·1 | |

**1801—1860.**

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 12·1 | 21·9 | |
| 8·7 | | 15·1 | 45·9 | 8·5 |
| 10·1 | | 20·1 | 5·3 | |
| 9·4 | | 20·6 | 24·3 | |
| 9·2 | | 30·1 | 46·0 | 9·5 |
| 7·9 | | 32·1 | 30·1 | 7·5 GSg |
| 10·1 | | 32·1 | 5·9 | |
| 9·8 | | 38·6 | 24·3 | |
| 9·3 | | 45·1 | 52·4 | |
| 9·6 | | 45·1 | 2·5 | |
| 10·1 | | 54·6 | 18·7 | |
| 10·0 | 43 | 10·6 | 2·9 | |
| 8·6 | | 19·6 | 21·7 | 9·5 |
| 9·8 | | 21·1 | 38·1 | |
| 10·1 | | 22·1 | 20·9 | |
| 8·9 | | 41·1 | 19·9 | 9·0 |
| 9·8 | | 51·6 | 5·0 | |
| 9·8 | | 51·6 | 32·0 | |
| 10·1 | 44 | 5·1 | 21·3 | |
| 10·1 | | 10·6 | 11·1 | |
| 9·6 | | 11·6 | 56·7 | |
| 10·1 | | 22·1 | 9·7 | |
| 9·6 | | 30·1 | 41·7 | |
| 10·1 | | 32·3 | 38·9 | |
| 9·6 | | 34·3 | 19·2 | |
| 10·1 | | 40·8 | 5·5 | |
| 9·6 | | 42·3 | 9·6 | |
| 9·6 | | 45·8 | 19·6 | |
| 10·0 | | 47·3 | 26·8 | |
| 10·0 | | 47·8 | 48·9 | |
| 9·4 | | 53·8 | 50·5 | |
| 9·6 | | 57·8 | 14·7 | |
| 9·7 | | 59·3 | 3·7 | |
| 7·6 | 45 | 4·3 | 59·3 | GSg |
| 10·1 | | 8·8 | 44·9 | |
| 9·4 | | 21·3 | 25·4 | |
| 10·0 | | 22·3 | 8·8 | |
| 9·8 | | 28·8 | 51·2 | |
| 9·8 | | 31·8 | 50·2 | |
| 9·7 | | 33·3 | 38·3 | |
| 10·1 | | 36·3 | 29·2 | |
| 9·2 | | 47·8 | 48·0 | 8·5 |
| 9·6 | | 47·8 | 16·9 | |
| 9·4 | | 47·8 | 26·2 | |
| 9·6 | | 50·8 | 13·1 | |
| 9·8 | | 54·8 | 53·5 | |
| 8·9 | 46 | 3·3 | 23·7 | |
| 9·3 | | 8·0 | 58·0 | |
| 8·5 | | 14·8 | 44·1 | 9·0 |
| 10·1 | | 28·3 | 41·8 | |
| 9·7 | | 31·3 | 31·8 | |
| 10·1 | | 32·3 | 40·7 | |
| 9·6 | | 32·3 | 8·1 | |
| 9·8 | | 34·0 | 28·6 | |
| 8·2 | | 34·3 | 36·7 | 8·2 |
| 9·7 | | 38·5 | 10·2 | |
| 10·1 | | 38·5 | 23·9 | |
| 10·0 | | 39·0 | 19·1 | |
| 9·6 | | 45·5 | 8·1 | |
| 9·2 | | 46·8 | 0·2 | |



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**1861—1920.**

| mag. | 8h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·1 | 46 | 47·1 | 59·2 | |
| 10·1 | | 54·0 | 55·6 | |
| 9·4 | | 57·5 | 46·9 | |
| 9·2 | | 59·5 | 7·8 | 9·0 |
| 9·6 | 47 | 2·0 | 27·6 | |
| 10·1 | | 10·0 | 15·4 | |
| 9·6 | | 10·5 | 58·9 | |
| 10·0 | | 11·5 | 31·3 | |
| 9·2 | | 18·5 | 24·3 | |
| 10·1 | | 19·5 | 42·6 | |
| 10·0 | | 29·5 | 19·4 | |
| 9·4 | | 29·5 | 18·7 | |
| 9·4 | | 31·9 | 58·1 | |
| 9·7 | | 34·0 | 27·5 | |
| 9·4 | | 34·2 | 7·5 | |
| 9·6 | | 47·2 | 10·0 | |
| 8·5 | 48 | 2·7 | 12·9 | 9·0 |
| 9·4 | | 10·7 | 38·1 | |
| 9·8 | | 11·2 | 34·6 | |
| 10·0 | | 13·5 | 53·1 | |
| 9·7 | | 16·2 | 51·9 | |
| 9·0 | | 21·4 | 28·7 | 9·5 |
| 8·4 | | 27·7 | 20·7 | 9·0 |
| 9·2 | | 31·1 | 58·3 | |
| 9·6 | | 32·5 | 7·0 | |
| 9·4 | | 37·9 | 32·1 | |
| 9·3 | | 41·4 | 3·9 | |
| 9·6 | | 46·9 | 4·0 | |
| 9·6 | | 57·4 | 22·8 | |
| 7·1 | | 57·9 | 52·3 | GSg |
| 9·6 | 49 | 8·4 | 8·5 | |
| 9·6 | | 9·9 | 51·8 | |
| 9·6 | | 17·4 | 48·6 | |
| 8·6 | | 18·4 | 13·6 | 9·5 S |
| 9·4 | | 20·9 | 41·9 | |
| 9·6 | | 26·1 | 35·8 | |
| 9·6 | | 30·4 | 37·4 | |
| 9·2 | | 31·9 | 25·7 | |
| 9·3 | | 34·9 | 14·2 | |
| 9·3 | | 38·4 | 30·6 | |
| 9·3 | | 41·9 | 32·9 | |
| 9·6 | | 44·6 | 59·1 | |
| 9·0 | | 50·4 | 53·1 | |
| 9·4 | | 59·9 | 13·7 | |
| 9·6 | 50 | 1·4 | 41·4 | |
| 9·4 | | 2·4 | 16·9 | |
| 8·2 | | 7·4 | 37·9 | 9·0 |
| 9·6 | | 17·4 | 55·2 | |
| 9·1 | | 20·4 | 19·6 | |
| 9·4 | | 21·4 | 58·7 | |
| 9·1 | | 31·4 | 44·2 | |
| 9·6 | | 37·4 | 35·9 | |
| 9·4 | | 38·9 | 29·0 | |
| 9·6 | | 41·4 | 3·3 | |
| 9·2 | | 41·9 | 33·8 | |
| 9·4 | | 47·9 | 55·9 | |
| 9·6 | 51 | 9·0 | 51·9 | |
| 9·3 | | 13·9 | 44·8 | |
| 9·6 | | 17·4 | 21·9 | |
| 9·6 | | 18·9 | 32·1 | |

**1921—1980.**

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|---|---|---|---|---|
| 9·4 | 51 | 26·9 | 5·9 | |
| 7·6 | | 27·4 | 13·4 | 7·0 Gg |
| 9·6 | | 31·0 | 47·5 | |
| 9·3 | | 38·4 | 39·9 | |
| 6·8 | | 39·4 | 29·1 | 6·2 GSg |
| 9·2 | | 41·4 | 52·1 | |
| 9·1 | | 44·8 | 0·1 | |
| 9·1 | | 52·9 | 23·2 | |
| 8·5 | 52 | 0·9 | 21·9 | 9·0 |
| 9·6 | | 5·4 | 57·4 | |
| 9·6 | | 7·9 | 24·7 | |
| 9·4 | | 21·4 | 43·3 | |
| 9·6 | | 25·4 | 34·0 | |
| 9·0 | | 29·4 | 40·9 | |
| 9·4 | | 35·4 | 39·0 | |
| 9·6 | 53 | 2·9 | 41·7 | |
| 9·6 | | 26·9 | 11·9 | |
| 9·1 | | 31·4 | 43·4 | |
| 9·6 | | 49·4 | 3·6 | |
| 9·6 | | 56·4 | 16·1 | |
| 9·4 | | 59·9 | 22·8 | |
| 9·1 | 54 | 1·4 | 37·9 | 9·0 |
| 8·5 | | 7·4 | 25·9 | 8·5 |
| 9·1 | | 17·3 | 1·5 | 9·0 |
| 9·3 | | 17·4 | 33·4 | 9·5 |
| 9·6 | | 19·9 | 14·8 | |
| 9·6 | | 27·9 | 16·0 | |
| 9·1 | | 53·9 | 24·0 | 9·2 |
| 9·1 | 55 | 7·9 | 57·1 | |
| 9·6 | | 11·0 | 12·5 | |
| 9·6 | | 11·0 | 4·7 | |
| 7·9 | | 18·4 | 8·9 | 8·0 GSt |
| 9·4 | | 43·0 | 35·0 | 9·5 |
| 9·2 | | 49·5 | 9·5 | |
| 9·0 | | 52·0 | 17·6 | |
| 9·3 | | 54·0 | 13·3 | |
| 9·3 | | 54·0 | 11·0 | |
| 8·8 | | 55·0 | 31·6 | 8·6 |
| 9·6 | 56 | 20·1 | 1·3 | |
| 9·1 | | 27·5 | 17·0 | |
| 9·6 | | 30·5 | 7·9 | |
| 9·4 | | 30·5 | 47·5 | |
| 9·6 | | 49·0 | 18·4 | |
| 9·4 | | 59·5 | 8·5 | |
| 9·6 | 57 | 10·5 | 14·0 | |
| 9·1 | | 27·0 | 25·0 | |
| 9·2 | | 38·5 | 46·0 | |
| 9·4 | | 47·5 | 28·6 | |
| 9·2 | | 51·5 | 48·4 | |
| 9·6 | | 59·5 | 34·4 | 9·5 G |
| 9·4 | | 59·9 | 0·5 | |
| 9·4 | 58 | 8·5 | 47·1 | |
| 9·6 | | 12·0 | 6·2 | |
| 9·4 | | 13·0 | 16·2 | |
| 9·6 | | 14·0 | 9·2 | |
| 9·6 | | 16·0 | 2·8 | |
| 9·6 | | 22·5 | 15·4 | |
| 9·4 | | 32·5 | 16·2 | |
| 9·4 | | 33·5 | 47·7 | |
| 9·4 | | 39·5 | 42·0 | |

**1981—2040.**

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|---|---|---|---|---|
| 9·1 | 58 | 47·0 | 20·2 | |
| 7·9 | | 48·5 | 32·2 | 7·8 GSg |
| 9·4 | | 49·5 | 55·7 | |
| 9·6 | 59 | 0·0 | 3·2 | |
| 9·6 | | 3·0 | 40·6 | |
| 9·4 | | 15·5 | 25·8 | |
| 8·2 | | 16·0 | 56·1 | 8·5 |
| 9·4 | | 21·5 | 38·2 | |
| 9·6 | | 31·1 | 52·4 | |
| 9·6 | | 36·6 | 11·8 | |
| 9·6 | | 42·6 | 26·0 | |
| 8·8 | | 47·6 | 39·4 | 9·0 |
| 9·6 | 0 | 9·6 | 13·1 | |
| 9·1 | | 13·1 | 19·1 | |
| 9·6 | | 16·1 | 2·9 | |
| 9·3 | | 18·1 | 38·7 | 9·5 |
| 9·2 | | 26·1 | 3·0 | |
| 9·0 | | 28·4 | 0·5 | |
| 9·4 | | 31·6 | 19·2 | |
| 9·4 | | 34·6 | 14·5 | |
| 8·8 | | 38·1 | 7·2 | |
| 8·5 | | 41·6 | 25·7 | 8·5 |
| 9·6 | | 42·1 | 31·8 | |
| 9·6 | 1 | 0·1 | 2·2 | |
| 9·0 | | 0·1 | 20·1 | 8·2 |
| 9·1 | | 7·6 | 42·5 | |
| 9·4 | | 8·1 | 43·1 | |
| 9·2 | | 9·6 | 13·1 | |
| 9·6 | | 10·6 | 53·1 | |
| 9·2 | | 24·1 | 54·4 | |
| 8·7 | | 31·6 | 44·5 | 8·0 |
| 9·4 | | 33·6 | 24·4 | |
| 9·6 | | 40·1 | 25·0 | |
| 9·6 | | 41·1 | 54·2 | |
| 8·6 | | 53·1 | 59·0 | 8·2 |
| 9·6 | | 53·6 | 51·8 | |
| 9·6 | 2 | 13·1 | 35·0 | |
| 8·6 | | 15·1 | 31·7 | 8·0 G |
| 8·4 | | 25·6 | 24·1 | 8·4 |
| 9·1 | | 29·1 | 13·8 | |
| 9·2 | | 29·6 | 56·6 | |
| 9·2 | | 31·6 | 32·8 | |
| 9·6 | | 45·6 | 18·0 | |
| 9·2 | | 54·1 | 47·0 | |
| 9·6 | | 55·6 | 39·0 | |
| 9·4 | 3 | 0·1 | 11·3 | |
| 9·6 | | 18·6 | 6·5 | |
| 9·6 | | 28·6 | 22·0 | |
| 9·6 | | 30·1 | 35·0 | |
| 9·2 | | 31·1 | 18·8 | |
| 9·3 | | 38·8 | 2·4 | |
| 9·3 | | 39·6 | 22·4 | |
| 9·1 | | 39·6 | 51·8 | 9·5 |
| 9·1 | | 42·1 | 7·0 | 8·5 |
| 9·1 | | 43·6 | 42·2 | |
| 9·6 | | 46·6 | 13·0 | |
| 9·0 | 4 | 0·1 | 36·2 | |
| 9·0 | | 1·6 | 4·2 | 8·5 G |
| 9·6 | | 7·6 | 36·0 | |
| 8·0 | | 14·6 | 49·2 | 8·0 G |

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|---|---|---|---|---|
| 9·4 | 4 | 21·1 | 42·0 | |
| 9·3 | | 21·6 | 25·1 | |
| 9·2 | | 23·1 | 40·2 | |
| 9·1 | | 28·6 | 52·8 | 9·5 |
| 8·2 | | 29·6 | 35·6 | 8·0 |
| 9·6 | | 39·1 | 34·6 | |
| 9·4 | | 45·8 | 1·0 | |
| 9·2 | | 46·1 | 0·0 | 9·0 |
| 9·6 | | 56·6 | 40·0 | |
| 9·4 | | 57·6 | 12·2 | |
| 9·2 | | 58·6 | 13·8 | 9·0 |
| 9·4 | 5 | 1·6 | 8·0 | |
| 9·6 | | 1·6 | 20·0 | |
| 8·6 | | 1·6 | 4·1 | 8·5 |
| 9·4 | | 13·6 | 41·3 | |
| 9·4 | | 21·1 | 25·0 | |
| 9·3 | | 21·1 | 15·6 | |
| 9·2 | | 31·6 | 46·8 | |
| 9·6 | | 48·1 | 34·8 | 9·0 |
| 9·6 | | 49·6 | 8·2 | |
| 9·6 | | 51·1 | 44·4 | |
| 9·4 | | 51·1 | 41·5 | |
| 9·1 | | 58·6 | 1·2 | |
| 9·4 | 6 | 1·6 | 41·6 | |
| 9·6 | | 4·6 | 2·5 | |
| 9·4 | | 6·1 | 35·0 | |
| 9·4 | | 8·6 | 57·0 | |
| 9·2 | | 9·6 | 10·4 | |
| 9·6 | | 11·6 | 1·1 | |
| 9·6 | | 18·0 | 25·5 | |
| 8·5 | | 18·0 | 11·2 | 8·8 |
| 9·6 | | 26·5 | 51·8 | |
| 9·4 | | 33·0 | 23·1 | |
| 9·4 | | 46·5 | 50·1 | |
| 9·4 | 7 | 3·5 | 22·7 | |
| 9·6 | | 16·5 | 3·1 | |
| 9·6 | | 19·5 | 33·7 | |
| 9·6 | | 25·0 | 26·3 | |
| 9·1 | | 27·5 | 31·2 | 9·5 |
| 9·4 | | 29·0 | 0·9 | |
| 9·4 | | 33·0 | 47·0 | |
| 9·3 | | 34·5 | 29·7 | |
| 9·6 | | 42·5 | 53·1 | |
| 9·4 | | 47·5 | 40·5 | |
| 9·4 | | 56·5 | 0·5 | |
| 9·4 | | 59·5 | 47·7 | |
| 9·6 | 8 | 8·5 | 31·1 | 10·0 |
| 9·1 | | 15·0 | 52·8 | |
| 9·3 | | 20·0 | 9·1 | |
| 8·8 | | 22·0 | 38·9 | 9·5 |
| 9·2 | | 28·5 | 13·3 | |
| 9·1 | | 36·5 | 24·0 | |
| 9·2 | | 40·0 | 48·4 | |
| 9·6 | | 41·5 | 15·9 | |
| 9·6 | | 44·5 | 18·5 | |
| 9·6 | | 59·5 | 48·5 | |
| 9·6 | | 59·5 | 37·5 | |
| 9·0 | | 59·5 | 12·8 | 9·0 |
| 9·2 | 9 | 3·0 | 24·2 | 9·0 |
| 8·7 | | 27·5 | 33·9 | 9·0 |

**25 prec.**

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 40 | 41 | 5·4 |
| | 50 | 42 | 5·6 |
| 9 | 0 | 44 | 5·9 |
| | 10 | 45 | 6·2 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ' |
| 9 | 0 | 44 | 5·9 |
| | 10 | 45 | 6·2 |
| | 20 | 47 | 6·4 |
| | 30 | 48 | 6·6 |

## 2101—2160.

| mag. | 9h. m | s | −54° ' | |
|---|---|---|---|---|
| 9·4 | 9 | 28·5 | 24·6 | |
| 9·1 | | 28·5 | 11·8 | |
| 9·3 | | 34·5 | 58·1 | |
| 9·6 | | 35·5 | 0·8 | |
| 9·2 | | 48·5 | 33·1 | |
| 8·4 | | 52·0 | 40·9 | 8·0 |
| 9·6 | | 54·0 | 44·0 | 9·5 |
| 8·6 | 10 | 2·5 | 12·7 | 9·0 |
| 8·8 | | 19·5 | 32·0 | 9·5 |
| 9·6 | | 19·5 | 47·9 | |
| 9·4 | | 30·5 | 4·4 | |
| 8·8 | | 31·5 | 8·6 | 9·0 |
| 8·8 | | 38·5 | 28·4 | 9·5 |
| 9·6 | | 39·5 | 38·9 | |
| 9·6 | | 54·0 | 50·5 | |
| 9·0 | | 56·5 | 16·2 | |
| 9·6 | 11 | 4·8 | 1·1 | |
| 9·3 | | 10·0 | 21·8 | |
| 9·6 | | 17·5 | 59·1 | |
| 9·1 | | 22·0 | 56·4 | |
| 9·2 | | 22·5 | 35·8 | |
| 9·4 | | 23·0 | 18·8 | |
| 9·6 | | 29·5 | 40·7 | |
| 9·6 | | 30·5 | 50·5 | |
| 9·4 | | 38·5 | 5·8 | |
| 9·1 | | 40·5 | 12·9 | |
| 9·2 | | 44·5 | 27·0 | |
| 9·2 | | 44·5 | 36·1 | |
| 9·6 | | 46·5 | 13·2 | |
| 8·4 | | 46·5 | 26·7 | 8·5 |
| 8·7 | | 47·5 | 27·1 | 9·3 |
| 9·6 | | 50·0 | 48·8 | |
| 8·4 | | 58·5 | 0·2 | 8·8 |
| 8·8 | 12 | 1·0 | 46·1 | |
| 9·1 | | 1·5 | 22·0 | 9·5 |
| 9·6 | | 25·0 | 4·1 | |
| 9·4 | | 30·5 | 11·6 | |
| 9·6 | | 30·5 | 3·0 | |
| 9·6 | | 32·5 | 18·3 | |
| 9·6 | | 38·0 | 17·7 | |
| 8·8 | | 39·5 | 11·0 | 8·0 |
| 9·4 | | 39·5 | 5·7 | |
| 9·6 | | 42·5 | 24·6 | |
| 9·2 | | 44·0 | 29·8 | |
| 9·0 | | 49·5 | 34·1 | |
| 8·0 | | 50·0 | 8·0 | 8·0 |
| 8·8 | | 50·0 | 52·0 | |
| 9·4 | | 51·5 | 16·0 | |
| 9·6 | | 56·5 | 42·0 | |
| 9·4 | 13 | 1·0 | 11·8 | |
| 9·4 | | 6·5 | 11·8 | |
| 9·6 | | 14·5 | 33·9 | |
| 9·4 | | 15·0 | 22·6 | |
| 9·4 | | 24·0 | 15·2 | |
| 9·4 | | 30·5 | 18·8 | |
| 9·3 | | 30·5 | 7·6 | |
| 9·6 | | 38·5 | 52·0 | |
| 9·3 | | 46·5 | 26·3 | |
| 9·6 | | 52·5 | 53·1 | |
| 9·6 | 14 | 0·0 | 42·8 | |

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|---|---|---|---|---|
| 9·6 | 14 | 3·5 | 42·8 | |
| 9·6 | | 11·5 | 14·2 | |
| 9·0 | | 31·5 | 18·0 | 8·2 |
| 8·8 | | 31·5 | 53·2 | 9·0 |
| 9·6 | | 36·5 | 30·5 | |
| 9·6 | | 39·0 | 15·8 | |
| 9·4 | | 46·0 | 47·4 | 9·5 |
| 9·6 | | 47·0 | 16·0 | |
| 9·6 | | 50·0 | 53·4 | |
| 9·3 | | 50·0 | 5·0 | |
| 9·6 | | 51·5 | 53·2 | |
| 9·6 | | 56·5 | 9·4 | |
| 9·6 | | 58·5 | 5·4 | |
| 9·4 | 15 | 1·0 | 21·0 | |
| 9·3 | | 13·4 | 39·1 | |
| 9·1 | | 13·4 | 36·6 | |
| 9·4 | | 13·9 | 43·2 | |
| 9·4 | | 21·9 | 42·2 | |
| 9·2 | | 24·4 | 36·9 | |
| 9·1 | | 28·9 | 51·0 | |
| 9·6 | | 29·4 | 46·8 | |
| 9·0 | | 31·9 | 35·0 | 9·6 |
| 9·6 | | 32·4 | 46·0 | |
| 9·4 | | 40·4 | 25·6 | |
| 9·6 | | 41·4 | 25·1 | |
| 6·4 | | 42·9 | 39·5 | 7·0 GSct |
| 9·4 | | 50·4 | 21·2 | |
| 8·6 | | 53·4 | 13·3 | 8·8 |
| 9·1 | 16 | 5·9 | 22·1 | |
| 9·3 | | 6·4 | 28·9 | |
| 9·6 | | 11·9 | 1·1 | |
| 8·6 | | 17·4 | 43·4 | 8·0 GSt |
| 9·4 | | 27·9 | 30·1 | |
| 9·0 | | 28·4 | 42·0 | |
| 9·1 | | 29·9 | 17·9 | |
| 9·6 | | 30·4 | 32·1 | |
| 9·6 | | 32·9 | 22·1 | |
| 8·8 | | 52·9 | 49·7 | 9·5 |
| 9·6 | 17 | 1·9 | 20·0 | |
| 9·6 | | 6·4 | 21·9 | |
| 8·4 | | 13·4 | 6·9 | 8·0 |
| 9·2 | | 17·0 | 1·8 | |
| 9·1 | | 20·9 | 30·8 | |
| 9·1 | | 22·9 | 10·1 | |
| 9·6 | | 24·4 | 26·5 | |
| 9·6 | | 26·4 | 34·7 | |
| 9·1 | | 27·4 | 26·2 | 9·0 |
| 9·3 | | 31·9 | 42·2 | |
| 8·7 | | 36·4 | 52·2 | 8·0 GSt |
| 8·8 | | 39·4 | 9·9 | 9·0 |
| 9·6 | | 49·4 | 5·4 | |
| 9·6 | | 49·9 | 13·0 | |
| 6·3 | 18 | 1·1 | 59·1 | 6·5 GSct |
| 9·2 | | 3·1 | 34·6 | |
| 9·2 | | 4·6 | 52·4 | |
| 9·4 | | 7·1 | 44·3 | |
| 9·3 | | 7·1 | 24·5 | |
| 8·5 | | 7·1 | 1·0 | 8·0 |
| 3·4 | | 15·1 | 28·6 | 2·8 GStrλ |
| 9·6 | | 16·3 | 2·2 | |

## 2221—2280.

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|---|---|---|---|---|
| 9·3 | 18 | 21·1 | 4·2 | |
| 9·2 | | 34·1 | 46·5 | |
| 9·4 | | 52·1 | 34·4 | |
| 9·6 | | 52·6 | 36·5 | |
| 9·6 | | 52·6 | 36·9 | |
| 9·6 | 19 | 0·1 | 8·5 | |
| 9·3 | | 3·1 | 7·0 | |
| 9·6 | | 8·1 | 34·1 | |
| 9·6 | | 12·1 | 56·6 | |
| 9·6 | | 15·6 | 20·0 | |
| 9·2 | | 16·8 | 0·8 | |
| 8·8 | | 18·1 | 31·9 | 9·0 |
| 9·0 | | 19·1 | 35·1 | 9·5 |
| 9·4 | | 20·1 | 12·2 | |
| 8·8 | | 25·2 | 29·6 | |
| 9·6 | | 33·4 | 38·1 | |
| 9·6 | | 35·9 | 44·0 | |
| 8·8 | | 40·6 | 21·3 | 9·0 |
| 9·0 | | 40·9 | 21·4 | |
| 9·6 | | 41·4 | 4·3 | |
| 9·6 | | 45·6 | 34·7 | |
| 9·6 | | 45·7 | 10·5 | |
| 9·6 | | 51·1 | 44·9 | |
| 9·1 | 20 | 0·1 | 52·8 | |
| 8·4 | | 1·1 | 18·1 | 8·8 |
| 9·6 | | 3·9 | 24·3 | |
| 10·4 | | 9·7 | 53·5 | |
| 10·4 | | 13·3 | 43·3 | |
| 10·4 | | 16·7 | 56·0 | |
| 10·4 | | 17·9 | 20·4 | |
| 9·4 | | 24·8 | 41·2 | |
| 9·6 | | 29·3 | 34·9 | |
| 10·4 | | 32·3 | 29·9 | |
| 9·8 | | 32·9 | 27·4 | |
| 10·4 | | 33·2 | 1·9 | |
| 10·4 | | 36·4 | 42·3 | |
| 10·4 | | 38·7 | 55·1 | |
| 10·0 | | 41·7 | 24·2 | |
| 10·4 | | 48·8 | 58·5 | |
| 10·2 | | 50·3 | 20·6 | |
| 10·0 | | 51·8 | 24·1 | |
| 9·0 | | 59·3 | 34·1 | 9·5 |
| 9·6 | 21 | 0·3 | 31·6 | |
| 10·0 | | 2·3 | 35·6 | |
| 9·2 | | 10·3 | 57·1 | |
| 10·0 | | 11·3 | 11·2 | |
| 10·0 | | 12·3 | 44·7 | |
| 9·2 | | 12·8 | 31·7 | |
| 10·0 | | 19·3 | 26·9 | |
| 10·0 | | 23·8 | 41·3 | |
| 10·4 | | 26·8 | 10·6 | |
| 9·8 | | 27·8 | 48·1 | 9·0 |
| 10·0 | | 30·3 | 50·7 | |
| 10·4 | | 32·3 | 34·1 | |
| 8·0 | | 32·3 | 24·2 | 8·0 G |
| 10·4 | | 34·3 | 25·1 | |
| 8·3 | | 40·3 | 28·0 | 7·5 G |
| 10·2 | | 47·3 | 9·6 | |
| 9·8 | | 51·3 | 10·9 | |
| 8·6 | | 51·8 | 44·8 | 9·0 |

## 2281—2340.

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|---|---|---|---|---|
| 9·2 | 21 | 51·8 | 38·8 | |
| 10·4 | | 55·8 | 7·6 | |
| 10·4 | | 57·3 | 53·7 | |
| 10·2 | 22 | 2·3 | 47·0 | |
| 10·4 | | 2·8 | 31·0 | |
| 10·0 | | 13·3 | 18·9 | |
| 9·0 | | 20·3 | 57·3 | |
| 10·2 | | 20·8 | 31·5 | |
| 10·2 | | 24·3 | 28·4 | |
| 7·4 | | 31·8 | 19·9 | 7·5 GSg |
| 10·0 | | 40·8 | 38·7 | |
| 9·8 | | 43·8 | 32·4 | |
| 10·4 | | 51·3 | 35·6 | |
| 8·4 | | 53·3 | 15·4 | G |
| 10·4 | | 57·8 | 17·0 | |
| 9·8 | | 59·3 | 8·1 | |
| 10·0 | 23 | 0·3 | 18·7 | |
| 10·2 | | 2·8 | 25·8 | |
| 10·0 | | 3·8 | 17·3 | |
| 10·4 | | 6·3 | 23·1 | |
| 9·8 | | 8·8 | 39·8 | |
| 8·4 | | 11·8 | 49·6 | 8·3 G |
| 9·6 | | 24·3 | 30·8 | |
| 8·6 | | 29·3 | 42·5 | 9·0 |
| 10·4 | | 30·3 | 26·8 | |
| 10·4 | | 30·3 | 32·2 | |
| 10·0 | | 37·3 | 21·6 | |
| 10·2 | | 37·8 | 42·9 | |
| 10·4 | | 38·8 | 14·7 | |
| 10·4 | | 40·3 | 9·6 | |
| 10·4 | | 42·3 | 47·9 | |
| 10·4 | | 43·3 | 49·5 | |
| 10·4 | | 43·8 | 43·4 | |
| 10·4 | | 47·8 | 20·5 | |
| 10·4 | | 49·8 | 13·7 | |
| 10·4 | | 50·3 | 24·6 | |
| 10·4 | | 52·3 | 34·0 | |
| 10·2 | | 53·8 | 16·1 | |
| 9·0 | 24 | 0·3 | 33·8 | |
| 8·6 | | 2·0 | 1·6 | 9·0 |
| 7·4 | | 2·3 | 47·5 | 8·0 G |
| 10·4 | | 7·3 | 17·4 | |
| 10·4 | | 8·8 | 6·0 | |
| 9·5 | | 9·3 | 30·2 | |
| 10·4 | | 15·8 | 26·0 | |
| 10·2 | | 17·3 | 56·7 | |
| 9·5 | | 18·3 | 36·0 | 9·5 |
| 10·0 | | 21·8 | 24·8 | |
| 10·4 | | 21·8 | 28·6 | |
| 10·4 | | 25·8 | 34·8 | |
| 10·0 | | 34·8 | 50·5 | |
| 9·5 | | 37·8 | 39·6 | |
| 9·6 | | 40·3 | 4·4 | |
| 9·4 | | 46·8 | 19·0 | 9·0 |
| 9·6 | | 47·8 | 39·8 | 9·2 |
| 10·4 | | 52·8 | 4·2 | |
| 9·6 | | 52·8 | 29·4 | |
| 9·8 | | 56·3 | 50·9 | |
| 10·4 | 25 | 1·3 | 28·8 | |
| 9·0 | | 2·3 | 14·0 | 9·5 |



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### 2341—2400.

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 25 | 3·8 | 12·0 | |
| 9·4 | | 13·8 | 35·4 | |
| 7·8 | | 18·8 | 15·0 | 8·5 GS |
| 10·4 | | 22·0 | 2·3 | |
| 10·4 | | 22·3 | 39·4 | |
| 9·6 | | 26·3 | 36·3 | |
| 9·6 | | 29·3 | 21·0 | 9·0 |
| 10·0 | | 36·3 | 26·2 | |
| 8·0 | | 38·8 | 10·6 | 8·2 GS |
| 10·0 | | 38·8 | 25·0 | |
| 10·4 | | 47·3 | 35·7 | |
| 10·2 | | 50·3 | 59·2 | |
| 10·0 | | 51·3 | 17·3 | |
| 10·0 | | 54·8 | 34·2 | 9·5 |
| 10·0 | | 55·3 | 45·0 | |
| 10·2 | | 56·8 | 42·7 | |
| 10·4 | | 58·8 | 45·2 | |
| 10·2 | | 59·3 | 52·6 | |
| 9·2 | 26 | 1·8 | 19·0 | 9·0 |
| 10·4 | | 7·3 | 36·4 | |
| 10·0 | | 8·8 | 51·8 | |
| 10·4 | | 12·3 | 8·0 | |
| 8·1 | | 13·3 | 23·4 | 8·5 |
| 10·2 | | 19·8 | 19·0 | |
| 10·4 | | 20·3 | 30·0 | |
| 10·2 | | 21·8 | 9·0 | |
| 10·4 | | 22·8 | 27·0 | |
| 8·4 | | 30·3 | 41·0 | 7·6 G |
| 10·0 | | 30·8 | 30·2 | |
| 10·4 | | 32·3 | 40·1 | |
| 8·9 | | 37·3 | 3·0 | 9·5 |
| 10·4 | | 38·3 | 19·6 | |
| 9·0 | | 42·3 | 56·8 | 9·0 |
| 9·2 | | 44·3 | 22·2 | 9·5 |
| 9·6 | | 56·3 | 50·8 | |
| 10·2 | | 56·3 | 54·6 | |
| 9·8 | 27 | 2·3 | 47·4 | |
| 10·0 | | 3·8 | 14·2 | |
| 10·4 | | 4·3 | 14·0 | |
| 10·4 | | 9·8 | 25·6 | |
| 10·4 | | 10·0 | 16·6 | |
| 9·6 | | 11·8 | 56·9 | |
| 10·4 | | 13·8 | 56·2 | |
| 10·4 | | 14·8 | 43·6 | |
| 10·4 | | 18·3 | 54·0 | |
| 10·4 | | 23·8 | 45·0 | |
| 10·4 | | 24·8 | 40·9 | |
| 9·6 | | 28·8 | 53·0 | 9·5 |
| 9·8 | | 29·3 | 55·4 | |
| 10·2 | | 30·8 | 31·8 | |
| 10·0 | | 40·3 | 37·0 | |
| 10·0 | | 40·8 | 9·1 | |
| 10·4 | | 49·8 | 2·5 | |
| 10·0 | | 51·3 | 13·0 | |
| 10·4 | | 59·3 | 36·0 | |
| 9·8 | 28 | 2·3 | 38·2 | |
| 10·2 | | 2·3 | 47·6 | |
| 10·2 | | 6·3 | 58·2 | |
| 10·2 | | 8·8 | 33·8 | |
| 10·4 | | 10·3 | 30·3 | |

### 2401—2460.

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 28 | 11·3 | 51·2 | |
| 9·4 | | 13·8 | 13·2 | |
| 10·2 | | 16·8 | 5·7 | |
| 9·6 | | 18·3 | 51·8 | |
| 10·4 | | 18·8 | 11·0 | |
| 10·2 | | 20·3 | 32·2 | |
| 10·0 | | 22·8 | 19·4 | |
| 10·0 | | 23·8 | 17·8 | |
| 10·2 | | 23·8 | 19·7 | |
| 10·4 | | 23·8 | 37·0 | |
| 10·4 | | 24·3 | 24·7 | |
| 10·4 | | 26·8 | 32·6 | |
| 9·5 | | 32·3 | 12·4 | |
| 9·8 | | 32·8 | 35·8 | |
| 10·0 | | 36·3 | 21·4 | |
| 10·2 | | 37·8 | 53·8 | |
| 7·6 | | 40·3 | 16·6 | 7·0 GSt |
| 10·4 | | 41·6 | 2·0 | |
| 9·2 | | 43·3 | 39·0 | 9·5 |
| 10·0 | | 44·8 | 47·8 | |
| 10·2 | | 45·8 | 30·7 | |
| 9·6 | | 46·3 | 6·2 | |
| 7·8 | | 49·5 | 2·6 | 8·0 G |
| 10·4 | | 55·8 | 15·0 | |
| 9·4 | | 57·8 | 17·4 | 9·5 |
| 10·0 | | 59·8 | 55·8 | |
| 9·8 | 29 | 3·8 | 50·6 | |
| 10·4 | | 5·8 | 20·4 | |
| 9·8 | | 7·3 | 7·0 | |
| 10·4 | | 10·3 | 49·2 | |
| 9·0 | | 12·3 | 42·5 | 9·5 |
| 10·0 | | 13·9 | 57·8 | |
| 10·0 | | 15·8 | 34·1 | |
| 10·0 | | 16·3 | 41·4 | |
| 10·4 | | 20·3 | 48·2 | |
| 10·4 | | 21·3 | 43·2 | |
| 10·4 | | 31·8 | 10·3 | |
| 10·4 | | 33·3 | 39·4 | |
| 9·6 | | 35·8 | 48·2 | |
| 10·0 | | 36·3 | 41·8 | |
| 10·4 | | 37·3 | 0·6 | |
| 9·8 | | 42·3 | 54·0 | |
| 9·4 | | 51·3 | 37·2 | 9·5 |
| 10·4 | 30 | 1·3 | 56·3 | |
| 9·6 | | 8·3 | 1·9 | 9·0 |
| 9·2 | | 22·3 | 10·0 | |
| 10·0 | | 23·3 | 27·0 | |
| 8·8 | | 28·3 | 48·8 | 8·2 |
| 10·4 | | 30·3 | 40·4 | |
| 9·8 | | 30·8 | 29·4 | |
| 9·6 | | 35·3 | 40·4 | 9·5 |
| 10·4 | | 35·8 | 24·2 | |
| 10·0 | | 40·3 | 39·4 | |
| 10·4 | | 42·3 | 4·1 | |
| 9·8 | | 51·8 | 36·0 | |
| 10·0 | | 52·3 | 16·4 | |
| 10·4 | | 53·3 | 25·6 | |
| 10·4 | | 53·8 | 31·8 | |
| 10·4 | | 55·3 | 59·0 | |
| 9·2 | 31 | 0·2 | 2·8 | 9·0 |

### 2461—2520.

| mag. | 9h. m | s | −54° ′ | |
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| 10·2 | 31 | 0·3 | 54·8 | |
| 10·0 | | 1·3 | 34·0 | |
| 10·2 | | 1·8 | 8·0 | |
| 10·2 | | 3·8 | 33·2 | |
| 10·0 | | 3·8 | 7·7 | |
| 10·4 | | 9·2 | 2·1 | |
| 10·0 | | 11·3 | 56·2 | |
| 10·2 | | 11·3 | 35·5 | |
| 10·0 | | 13·3 | 42·8 | |
| 10·4 | | 17·3 | 57·7 | |
| 10·2 | | 22·3 | 41·4 | |
| 9·8 | | 22·3 | 38·4 | |
| 9·0 | | 31·8 | 23·3 | 9·4 |
| 10·4 | | 37·8 | 38·1 | |
| 10·4 | | 40·3 | 33·5 | |
| 10·2 | | 42·3 | 9·0 | |
| 9·4 | | 45·3 | 7·4 | |
| 10·4 | | 45·3 | 43·6 | |
| 10·4 | | 47·2 | 2·8 | |
| 10·4 | | 53·7 | 38·2 | |
| 10·4 | | 57·2 | 10·0 | |
| 10·0 | | 58·7 | 10·2 | |
| 10·0 | 32 | 2·9 | 58·0 | |
| 10·4 | | 3·7 | 26·6 | |
| 10·0 | | 11·2 | 2·0 | |
| 10·4 | | 20·2 | 33·4 | |
| 10·4 | | 24·0 | 0·8 | |
| 10·4 | | 26·7 | 29·2 | |
| 9·6 | | 26·7 | 55·6 | |
| 10·4 | | 31·2 | 24·8 | |
| 10·4 | | 33·7 | 25·0 | |
| 9·8 | | 37·7 | 39·8 | |
| 10·2 | | 38·4 | 2·0 | |
| 10·4 | | 43·7 | 2·0 | |
| 9·8 | | 44·2 | 8·0 | |
| 10·2 | | 45·7 | 36·4 | |
| 10·4 | | 55·9 | 1·8 | |
| 10·4 | | 56·7 | 44·3 | |
| 9·8 | | 58·2 | 55·8 | |
| 9·5 | 33 | 1·6 | 57·4 | |
| 10·2 | | 5·2 | 26·3 | |
| 10·4 | | 8·2 | 57·5 | |
| 10·4 | | 10·2 | 34·9 | |
| 10·2 | | 12·7 | 4·6 | |
| 8·9 | | 15·2 | 16·2 | 9·0 G |
| 10·2 | | 17·2 | 14·0 | |
| 10·0 | | 18·2 | 32·5 | |
| 10·4 | | 19·7 | 36·8 | |
| 9·8 | | 21·2 | 29·8 | |
| 10·2 | | 22·2 | 10·2 | |
| 8·9 | | 31·7 | 22·6 | 9·7 |
| 10·2 | | 33·7 | 50·0 | |
| 10·2 | | 43·2 | 10·6 | |
| 9·2 | | 47·7 | 20·0 | 9·5 G |
| 9·5 | | 47·7 | 21·3 | |
| 9·2 | | 49·2 | 56·1 | 9·5 |
| 9·8 | | 51·2 | 22·0 | |
| 10·4 | | 51·7 | 6·0 | |
| 9·2 | | 52·2 | 8·8 | |
| 10·0 | | 56·2 | 27·4 | 9·3 |

### 2521—2580.

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 34 | 1·7 | 48·1 | |
| 10·4 | | 2·7 | 45·7 | |
| 10·0 | | 5·2 | 23·0 | |
| 10·0 | | 7·7 | 14·0 | |
| 8·4 | | 7·7 | 31·3 | 9·3 |
| 10·2 | | 11·7 | 21·3 | |
| 10·4 | | 13·7 | 21·8 | |
| 10·4 | | 20·7 | 30·8 | |
| 10·4 | | 22·7 | 34·9 | |
| 10·0 | | 22·7 | 40·0 | |
| 10·2 | | 23·7 | 19·0 | |
| 10·0 | | 30·2 | 26·4 | |
| 10·0 | | 32·7 | 33·2 | |
| 10·4 | | 36·2 | 36·9 | |
| 9·6 | | 38·7 | 55·3 | 9·5 |
| 10·4 | | 40·2 | 8·0 | |
| 10·4 | | 41·7 | 24·6 | |
| 9·8 | | 45·6 | 2·6 | |
| 10·0 | | 46·2 | 21·2 | |
| 10·2 | | 48·7 | 32·4 | |
| 10·0 | | 53·2 | 23·7 | |
| 10·4 | | 53·2 | 52·1 | |
| 10·2 | | 56·7 | 55·5 | |
| 9·4 | | 59·2 | 54·9 | 9·0 |
| 10·4 | 35 | 1·7 | 23·2 | |
| 10·4 | | 9·2 | 7·4 | |
| 10·4 | | 10·2 | 6·4 | |
| 9·4 | | 12·2 | 49·1 | 9·5 |
| 10·4 | | 15·2 | 42·0 | |
| 10·0 | | 16·7 | 35·1 | |
| 10·4 | | 16·7 | 43·8 | |
| 9·8 | | 17·9 | 58·5 | |
| 10·4 | | 19·2 | 6·3 | |
| 7·2 | | 19·7 | 11·2 | 7·0 GSt |
| 10·4 | | 20·7 | 36·6 | |
| 10·4 | | 27·2 | 50·7 | |
| 9·4 | | 37·2 | 3·6 | |
| 10·2 | | 43·7 | 47·8 | |
| 10·0 | | 43·7 | 26·5 | |
| 9·2 | | 44·2 | 45·4 | |
| 10·0 | | 46·2 | 36·7 | |
| 10·2 | | 46·7 | 35·8 | |
| 10·4 | | 48·2 | 31·0 | |
| 10·0 | | 50·2 | 44·8 | |
| 9·0 | | 50·2 | 13·0 | 9·0 |
| 9·8 | | 53·7 | 10·4 | |
| 10·4 | | 55·7 | 38·3 | |
| 10·0 | | 59·2 | 39·0 | |
| 10·4 | 36 | 2·7 | 10·4 | |
| 9·8 | | 16·2 | 45·0 | |
| 10·4 | | 21·7 | 11·1 | |
| 9·8 | | 23·2 | 15·0 | |
| 10·4 | | 24·2 | 44·0 | |
| 10·0 | | 38·5 | 39·0 | |
| 10·0 | | 41·0 | 10·7 | |
| 10·0 | | 43·5 | 10·1 | |
| 10·4 | | 46·5 | 53·1 | |
| 9·6 | | 47·0 | 13·8 | |
| 7·4 | | 49·0 | 24·9 | 7·3 GSt |
| 10·4 | | 51·5 | 8·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 20 | 47 | 6·4 |
| | 30 | 48 | 6·6 |
| | 40 | 50 | 6·8 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 9 | 30 | 48 | 6·6 |
| | 40 | 50 | 6·8 |
| | 50 | 52 | 7·0 |

**2581—2640.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 36 | 57·0 | 44·7 | |
| 9·2 | | 57·5 | 21·3 | 9·5 |
| 10·0 | 37 | 1·0 | 33·1 | |
| 10·4 | | 4·5 | 35·8 | |
| 10·4 | | 10·0 | 28·5 | |
| 10·2 | | 21·0 | 12·9 | |
| 10·4 | | 23·5 | 59·9 | |
| 9·4 | | 26·0 | 42·6 | 9·5 |
| 10·4 | | 28·0 | 50·0 | |
| 10·4 | | 28·5 | 49·2 | |
| 10·0 | | 34·5 | 38·9 | |
| 10·4 | | 37·2 | 2·2 | |
| 10·2 | | 40·5 | 35·1 | |
| 6·3 | | 41·0 | 38·6 | 6·5 GSct |
| 10·0 | | 42·5 | 3·3 | |
| 10·4 | | 43·5 | 45·0 | |
| 9·5 | | 43·5 | 54·0 | |
| 9·6 | | 46·8 | 57·9 | |
| 10·2 | | 48·5 | 39·1 | |
| 10·4 | | 52·0 | 45·8 | |
| 10·4 | | 56·5 | 53·9 | |
| 10·4 | | 58·5 | 26·2 | |
| 10·2 | 38 | 2·0 | 54·5 | |
| 9·8 | | 3·5 | 2·9 | |
| 10·4 | | 4·0 | 50·1 | |
| 10·0 | | 18·5 | 49·3 | |
| 9·0 | | 19·0 | 44·8 | 9·0 |
| 10·4 | | 23·0 | 30·4 | |
| 9·8 | | 24·5 | 46·6 | |
| 9·8 | | 24·5 | 40·8 | |
| 10·4 | | 28·5 | 27·1 | |
| 10·0 | | 31·5 | 4·3 | |
| 10·0 | | 32·5 | 2·2 | |
| 10·0 | | 37·0 | 18·0 | |
| 10·2 | | 40·0 | 2·0 | |
| 10·4 | | 42·0 | 21·8 | |
| 9·4 | | 43·5 | 0·3 | |
| 7·9 | | 46·0 | 11·7 | 8·3 |
| 9·4 | | 47·0 | 28·4 | |
| 10·4 | | 47·0 | 40·4 | |
| 10·0 | | 49·0 | 20·6 | |
| 10·4 | | 53·0 | 2·0 | |
| 10·4 | | 56·2 | 0·6 | |
| 9·6 | | 56·5 | 25·8 | |
| 9·6 | 39 | 1·5 | 24·4 | |
| 10·4 | | 2·0 | 2·9 | |
| 10·4 | | 5·5 | 5·1 | |
| 10·4 | | 6·0 | 15·2 | |
| 10·4 | | 6·0 | 40·7 | |
| 10·2 | | 11·0 | 37·0 | |
| 10·0 | | 11·0 | 55·1 | |
| 8·7 | | 14·0 | 26·8 | 9·0 |
| 10·4 | | 16·7 | 1·0 | |
| 10·0 | | 17·5 | 3·3 | |
| 9·4 | | 28·0 | 3·9 | |
| 9·8 | | 28·5 | 52·3 | |
| 10·0 | | 29·0 | 20·8 | |
| 9·5 | | 31·0 | 21·7 | |
| 10·4 | | 31·5 | 36·0 | |
| 10·0 | | 32·5 | 4·7 | |

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|---|---|---|---|---|
| 10·2 | 39 | 33·0 | 17·1 | |
| 8·6 | | 45·0 | 28·6 | 9·0 |
| 10·4 | | 49·0 | 30·2 | |
| 9·0 | | 50·0 | 14·0 | |
| 9·4 | | 58·0 | 21·8 | 10·0 |
| 10·4 | | 59·5 | 27·9 | |
| 9·8 | 40 | 2·0 | 40·4 | |
| 10·0 | | 2·0 | 55·9 | |
| 10·4 | | 2·0 | 16·8 | |
| 9·8 | | 4·0 | 6·6 | |
| 10·0 | | 8·5 | 3·1 | |
| 10·4 | | 10·2 | 0·3 | |
| 10·4 | | 11·0 | 51·8 | |
| 10·2 | | 13·0 | 7·7 | |
| 10·2 | | 20·0 | 15·1 | |
| 8·9 | | 42·0 | 31·0 | 9·0 |
| 10·4 | | 44·0 | 28·5 | |
| 9·0 | | 49·0 | 43·8 | 9·5 |
| 10·4 | | 49·5 | 24·3 | |
| 9·8 | | 51·0 | 14·2 | |
| 9·6 | | 51·0 | 15·8 | |
| 10·0 | 41 | 0·0 | 54·1 | |
| 9·8 | | 0·5 | 27·4 | |
| 10·2 | | 0·5 | 35·9 | |
| 10·4 | | 1·5 | 24·8 | |
| 9·6 | | 2·0 | 33·1 | |
| 9·4 | | 4·3 | 58·7 | |
| 10·0 | | 6·0 | 33·8 | |
| 9·0 | | 9·5 | 10·7 | 8·5 |
| 10·4 | | 10·2 | 16·0 | |
| 10·4 | | 11·5 | 47·3 | |
| 9·8 | | 17·5 | 17·2 | |
| 10·4 | | 19·0 | 2·3 | |
| 10·0 | | 20·5 | 1·9 | |
| 10·0 | | 21·5 | 2·0 | |
| 10·4 | | 28·0 | 12·3 | |
| 10·2 | | 29·0 | 26·5 | |
| 10·4 | | 29·5 | 32·6 | |
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| 10·2 | | 43·5 | 18·4 | |
| 10·0 | | 50·0 | 17·6 | |
| 9·8 | | 53·0 | 43·1 | |
| 9·8 | | 55·0 | 14·8 | |
| 10·4 | 42 | 1·5 | 1·7 | |
| 9·6 | | 1·5 | 9·0 | |
| 10·4 | | 2·5 | 2·0 | |
| 10·0 | | 6·5 | 25·7 | |
| 10·0 | | 8·0 | 7·0 | |
| 10·2 | | 10·5 | 29·7 | |
| 10·4 | | 13·5 | 4·0 | |
| 10·4 | | 14·0 | 25·7 | |
| 9·8 | | 15·0 | 10·0 | |
| 10·0 | | 17·0 | 47·2 | |
| 10·4 | | 25·0 | 44·3 | |
| 9·8 | | 25·0 | 6·2 | |
| 10·2 | | 28·0 | 42·6 | |
| 10·4 | | 31·0 | 11·8 | |
| 10·4 | | 32·0 | 30·2 | |
| 8·6 | | 32·0 | 45·8 | 9·0 |

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|---|---|---|---|---|
| 10·4 | 42 | 37·0 | 9·2 | |
| 10·4 | | 38·5 | 5·3 | |
| 9·0 | | 40·0 | 50·7 | 9·2 |
| 9·4 | | 43·0 | 24·1 | 9·5 |
| 10·2 | | 47·7 | 58·5 | |
| 9·6 | | 53·5 | 15·4 | |
| 9·6 | | 55·5 | 16·1 | 9·5 |
| 9·6 | 43 | 1·5 | 45·6 | |
| 10·4 | | 2·5 | 31·2 | |
| 10·4 | | 3·5 | 31·0 | |
| 10·4 | | 8·6 | 58·1 | |
| 10·2 | | 9·0 | 14·4 | |
| 10·4 | | 11·5 | 12·4 | |
| 10·0 | | 19·0 | 17·8 | |
| 10·4 | | 26·2 | 2·3 | |
| 10·4 | | 30·0 | 40·8 | |
| 10·0 | | 32·0 | 25·0 | |
| 10·4 | | 39·5 | 15·4 | |
| 10·4 | | 39·5 | 15·8 | |
| 10·2 | | 40·0 | 25·6 | |
| 10·4 | | 40·3 | 57·4 | |
| 9·8 | | 41·5 | 27·0 | |
| 9·8 | | 43·5 | 46·7 | |
| 10·4 | | 49·0 | 23·3 | |
| 9·0 | | 50·0 | 0·0 | 9·2 |
| 10·2 | | 51·5 | 39·6 | |
| 10·2 | | 52·0 | 40·0 | |
| 10·2 | | 52·0 | 42·5 | |
| 10·2 | | 56·0 | 34·6 | |
| 10·2 | | 58·0 | 59·7 | |
| 9·0 | 44 | 0·0 | 42·6 | 9·0 |
| 10·2 | | 2·0 | 35·4 | |
| 10·0 | | 12·2 | 21·1 | |
| 10·2 | | 18·2 | 50·9 | |
| 8·8 | | 19·7 | 58·6 | 9·0 |
| 9·5 | | 20·7 | 57·5 | |
| 9·0 | | 28·2 | 54·8 | 8·0 GS |
| 9·4 | | 29·7 | 22·5 | |
| 10·0 | | 29·7 | 56·3 | |
| 10·0 | | 39·7 | 49·1 | |
| 10·0 | | 40·7 | 31·0 | |
| 9·2 | | 46·2 | 26·7 | 9·8 |
| 10·2 | | 48·2 | 32·3 | |
| 9·4 | 45 | 7·7 | 43·9 | |
| 10·2 | | 11·7 | 49·4 | |
| 10·2 | | 19·7 | 46·5 | |
| 10·0 | | 21·7 | 40·1 | |
| 9·8 | | 22·2 | 23·8 | |
| 10·2 | | 22·7 | 18·2 | |
| 10·2 | | 30·5 | 2·3 | |
| 9·8 | | 32·7 | 24·7 | 10·0 |
| 10·4 | | 40·7 | 52·1 | |
| 10·0 | | 41·2 | 24·4 | |
| 10·2 | | 42·7 | 43·5 | |
| 10·0 | | 49·7 | 54·3 | |
| 10·0 | | 58·2 | 12·4 | |
| 9·2 | 46 | 0·7 | 57·5 | |
| 10·0 | | 2·7 | 32·9 | |
| 8·6 | | 3·2 | 41·2 | 9·0 |
| 10·2 | | 8·2 | 49·9 | |

**2761—2820.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 46 | 9·7 | 16·6 | |
| 10·4 | | 11·2 | 49·2 | |
| 10·2 | | 12·2 | 2·0 | |
| 10·4 | | 16·7 | 34·0 | |
| 9·2 | | 19·2 | 5·2 | 9·5 |
| 10·4 | | 19·7 | 5·9 | |
| 9·8 | | 19·7 | 26·4 | |
| 10·4 | | 20·7 | 40·9 | |
| 10·2 | | 24·7 | 54·0 | |
| 10·4 | | 26·7 | 39·7 | |
| 10·4 | | 29·7 | 36·0 | |
| 10·4 | | 30·7 | 6·7 | |
| 10·0 | | 34·7 | 40·9 | 9·5 |
| 10·4 | | 38·7 | 30·0 | |
| 10·4 | | 39·7 | 30·0 | |
| 10·2 | | 40·7 | 33·9 | |
| 10·4 | | 41·2 | 32·4 | |
| 10·4 | | 43·2 | 53·6 | |
| 10·4 | | 47·2 | 43·9 | |
| 10·2 | | 47·2 | 23·1 | |
| 10·2 | | 47·7 | 53·1 | |
| 10·4 | | 50·0 | 1·1 | |
| 9·8 | 47 | 1·7 | 44·6 | 9·0 |
| 10·4 | | 9·2 | 24·2 | |
| 10·0 | | 9·7 | 48·1 | |
| 9·8 | | 11·7 | 54·7 | 9·2 |
| 10·4 | | 15·7 | 38·0 | |
| 9·6 | | 19·2 | 4·9 | |
| 10·0 | | 19·7 | 46·6 | |
| 8·2 | | 21·7 | 47·8 | 8·0 GSt |
| 10·0 | | 21·7 | 22·7 | |
| 7·8 | | 23·2 | 4·2 | 7·5 GSt |
| 9·8 | | 24·7 | 19·6 | 9·0 |
| 10·4 | | 34·7 | 43·9 | |
| 10·0 | | 35·7 | 25·8 | |
| 10·0 | | 39·7 | 11·6 | |
| 10·2 | | 46·2 | 4·9 | |
| 10·0 | | 47·2 | 15·8 | |
| 10·2 | | 51·2 | 24·5 | |
| 9·0 | | 55·7 | 0·6 | 9·0 G |
| 10·2 | 48 | 3·2 | 42·8 | |
| 10·0 | | 7·2 | 18·3 | |
| 9·4 | | 7·7 | 50·5 | 9·5 |
| 10·0 | | 7·7 | 16·1 | |
| 10·4 | | 15·7 | 16·8 | |
| 10·4 | | 22·7 | 45·6 | |
| 10·4 | | 23·7 | 6·0 | |
| 8·2 | | 24·7 | 52·0 | 8·0 GSt |
| 10·2 | | 28·2 | 7·3 | |
| 10·4 | | 28·9 | 57·1 | |
| 10·4 | | 31·2 | 45·6 | |
| 9·6 | | 31·7 | 49·0 | 9·5 |
| 10·0 | | 32·2 | 9·1 | |
| 10·4 | | 41·7 | 6·3 | |
| 9·4 | | 41·7 | 9·7 | |
| 7·0 | | 44·2 | 47·1 | 7·0 GSct |
| 10·4 | | 44·2 | 55·4 | |
| 9·4 | | 45·7 | 57·2 | |
| 9·6 | | 46·3 | 52·4 | |
| 10·0 | | 49·3 | 25·9 | 8·5 |



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**2821—2880.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.2 | 48 | 51.3 | 25.7 | |
| 10.4 | | 51.3 | 25.5 | |
| 10.2 | | 54.3 | 54.6 | |
| 9.8 | | 55.8 | 35.0 | |
| 9.4 | | 57.8 | 27.9 | |
| 9.9 | | 58.3 | 35.3 | |
| 10.4 | | 59.5 | 52.7 | |
| 10.2 | 49 | 2.3 | 34.4 | |
| 10.4 | | 3.8 | 22.5 | |
| 9.6 | | 6.5 | 7.1 | |
| 9.4 | | 7.3 | 23.0 | 9.5 |
| 10.0 | | 9.3 | 48.6 | |
| 10.0 | | 11.5 | 28.8 | |
| 10.0 | | 19.3 | 40.4 | |
| 10.0 | | 20.1 | 59.9 | |
| 10.0 | | 21.3 | 33.1 | |
| 9.8 | | 28.8 | 29.6 | 9.5 |
| 10.4 | | 29.3 | 18.4 | |
| 10.4 | | 31.8 | 20.8 | |
| 8.6 | | 36.3 | 12.3 | 9.0 |
| 10.4 | | 36.8 | 24.7 | |
| 7.9 | | 38.8 | 15.4 | 8.0 G |
| 10.2 | | 41.8 | 6.3 | |
| 10.4 | | 43.3 | 42.0 | |
| 10.2 | | 47.3 | 34.5 | |
| 9.0 | | 51.3 | 30.4 | 9.5 |
| 9.8 | | 51.3 | 36.5 | |
| 10.0 | | 57.3 | 42.5 | |
| 10.4 | | 59.3 | 33.9 | |
| 10.2 | | 59.3 | 11.3 | |
| 10.4 | 50 | 0.8 | 44.9 | |
| 9.8 | | 2.3 | 37.2 | 9.0 |
| 10.2 | | 4.8 | 53.4 | |
| 10.4 | | 11.1 | 58.2 | |
| 10.0 | | 12.3 | 50.5 | |
| 10.0 | | 15.8 | 28.7 | |
| 10.2 | | 17.3 | 22.5 | |
| 10.2 | | 18.3 | 9.7 | |
| 9.5 | | 21.3 | 10.7 | |
| 10.2 | | 25.3 | 32.0 | |
| 9.8 | | 25.3 | 45.5 | 9.0 G |
| 8.2 | | 27.8 | 33.3 | 8.5 G |
| 10.2 | | 28.3 | 0.7 | |
| 10.4 | | 28.8 | 59.0 | |
| 10.4 | | 31.3 | 3.2 | |
| 10.4 | | 40.8 | 33.5 | |
| 10.4 | | 42.8 | 49.3 | |
| 10.4 | | 45.3 | 39.5 | |
| 9.8 | | 49.5 | 1.1 | |
| 10.4 | | 52.5 | 0.9 | |
| 10.4 | | 54.8 | 47.3 | |
| 10.0 | | 56.3 | 9.3 | |
| 9.0 | | 58.3 | 55.5 | 9.0 |
| 10.4 | 51 | 0.3 | 28.3 | |
| 9.5 | | 4.3 | 32.9 | 9.2 |
| 10.4 | | 9.3 | 40.1 | |
| 9.8 | | 9.8 | 29.3 | |
| 10.2 | | 11.3 | 36.9 | |
| 9.6 | | 11.8 | 14.5 | |
| 10.2 | | 13.3 | 21.8 | |

**2881—2940.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.4 | 51 | 17.8 | 18.6 | |
| 10.4 | | 22.3 | 47.5 | |
| 10.4 | | 22.3 | 35.7 | |
| 10.2 | | 25.3 | 2.1 | |
| 10.4 | | 25.8 | 52.1 | |
| 10.0 | | 29.3 | 13.1 | |
| 9.8 | | 36.3 | 51.6 | |
| 10.0 | | 42.1 | 52.7 | |
| 10.0 | | 42.3 | 11.8 | |
| 10.4 | | 44.3 | 29.1 | |
| 10.2 | | 50.8 | 30.3 | |
| 10.4 | | 52.1 | 5.2 | |
| 10.0 | | 52.1 | 6.9 | |
| 10.5 | | 52.4 | 48.1 | |
| 10.5 | | 55.1 | 25.4 | |
| 10.5 | | 57.4 | 42.2 | |
| 9.4 | | 57.6 | 33.4 | 9.1 |
| 10.2 | | 58.8 | 31.1 | |
| 10.4 | | 59.9 | 29.9 | |
| 10.2 | 52 | 2.9 | 53.5 | |
| 10.5 | | 4.9 | 17.9 | |
| 9.4 | | 7.1 | 43.9 | |
| 10.2 | | 8.6 | 30.4 | |
| 10.5 | | 12.1 | 1.8 | |
| 10.0 | | 13.9 | 51.9 | |
| 10.4 | | 15.9 | 37.9 | |
| 10.4 | | 16.1 | 44.6 | |
| 9.4 | | 18.6 | 13.5 | |
| 7.6 | | 23.4 | 29.3 | 8.1 GSt |
| 10.4 | | 23.4 | 50.7 | |
| 10.0 | | 23.9 | 34.2 | |
| 9.7 | | 23.9 | 25.6 | 9.1 |
| 10.5 | | 24.9 | 45.2 | |
| 10.0 | | 30.9 | 54.2 | |
| 9.4 | | 40.9 | 35.9 | 9.1 |
| 10.2 | | 41.4 | 20.4 | |
| 10.5 | | 41.9 | 39.0 | |
| 10.4 | | 43.9 | 52.6 | |
| 10.2 | | 51.6 | 1.8 | |
| 10.4 | | 54.5 | 43.5 | |
| 10.0 | | 54.9 | 56.5 | |
| 10.5 | 53 | 3.9 | 11.3 | |
| 10.4 | | 3.9 | 9.9 | |
| 9.7 | | 5.4 | 20.9 | |
| 10.5 | | 8.9 | 8.7 | |
| 10.0 | | 11.6 | 57.0 | |
| 10.4 | | 12.9 | 10.7 | |
| 9.6 | | 14.4 | 4.9 | |
| 9.4 | | 14.4 | 5.1 | |
| 10.0 | | 18.4 | 5.1 | |
| 9.2 | | 20.4 | 40.5 | 9.5 |
| 10.4 | | 21.5 | 0.6 | |
| 10.4 | | 22.4 | 52.7 | |
| 10.4 | | 22.6 | 0.9 | |
| 10.4 | | 22.9 | 27.6 | |
| 10.5 | | 23.5 | 22.5 | |
| 8.8 | | 25.4 | 19.4 | |
| 10.4 | | 26.4 | 15.3 | |
| 10.4 | | 27.9 | 1.9 | |
| 10.5 | | 31.9 | 33.5 | |

**2941—3000.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.2 | 53 | 35.9 | 33.9 | |
| 10.2 | | 36.9 | 55.4 | |
| 9.6 | | 42.5 | 29.2 | |
| 10.2 | | 42.4 | 7.1 | |
| 9.2 | | 44.4 | 18.5 | |
| 9.4 | | 48.4 | 42.3 | |
| 10.4 | | 49.9 | 38.9 | |
| 10.2 | | 50.9 | 40.7 | |
| 10.4 | | 54.4 | 52.0 | |
| 10.0 | | 54.9 | 34.1 | |
| 8.8 | | 55.9 | 22.7 | 9.0 |
| 9.4 | 54 | 2.3 | 18.6 | |
| 9.8 | | 4.3 | 39.9 | 9.0 |
| 10.0 | | 8.3 | 58.7 | |
| 10.5 | | 10.3 | 32.9 | |
| 9.9 | | 12.3 | 23.7 | 9.0 |
| 10.4 | | 12.3 | 8.1 | |
| 10.0 | | 13.3 | 53.5 | |
| 10.5 | | 14.8 | 31.8 | |
| 10.2 | | 16.0 | 0.5 | |
| 10.0 | | 18.3 | 1.2 | |
| 9.7 | | 20.3 | 11.5 | |
| 10.5 | | 24.8 | 51.5 | |
| 10.0 | | 26.3 | 24.3 | |
| 10.4 | | 30.3 | 9.1 | |
| 9.2 | | 31.8 | 43.3 | |
| 10.2 | | 32.3 | 0.1 | |
| 9.2 | | 32.3 | 1.5 | 8.5 |
| 10.0 | | 32.3 | 42.8 | |
| 10.4 | | 34.3 | 33.9 | |
| 10.4 | | 34.4 | 28.6 | |
| 10.5 | | 34.8 | 31.9 | |
| 10.4 | | 35.3 | 8.9 | |
| 10.2 | | 35.8 | 29.6 | |
| 9.2 | | 39.3 | 23.3 | 9.2 |
| 10.5 | | 43.8 | 35.1 | |
| 10.5 | | 46.8 | 54.7 | |
| 10.2 | | 58.8 | 33.5 | |
| 10.2 | 55 | 1.8 | 5.9 | |
| 10.2 | | 2.3 | 58.8 | |
| 9.9 | | 2.4 | 40.7 | |
| 10.5 | | 4.8 | 43.6 | |
| 9.7 | | 15.8 | 24.3 | |
| 10.2 | | 17.3 | 25.3 | |
| 10.4 | | 18.3 | 46.9 | |
| 8.8 | | 19.8 | 45.9 | 8.8 |
| 9.7 | | 20.3 | 18.6 | |
| 10.0 | | 22.3 | 5.5 | |
| 10.2 | | 22.8 | 17.9 | |
| 10.0 | | 25.8 | 31.9 | |
| 10.4 | | 27.3 | 14.1 | |
| 10.5 | | 28.3 | 30.9 | |
| 10.0 | | 29.3 | 32.7 | |
| 9.8 | | 34.3 | 36.1 | |
| 10.0 | | 38.8 | 31.9 | |
| 10.0 | | 42.0 | 57.1 | |
| 10.5 | | 43.3 | 50.0 | |
| 9.4 | | 45.3 | 38.5 | |
| 10.4 | | 49.3 | 46.5 | |
| 10.2 | | 56.8 | 44.1 | |

**3001—3060.**

| mag. | 9h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.4 | 55 | 57.3 | 6.1 | |
| 10.4 | | 59.3 | 11.7 | |
| 10.0 | 56 | 3.3 | 33.1 | |
| 10.5 | | 5.3 | 43.8 | |
| 10.2 | | 5.3 | 53.9 | 9.0 |
| 10.0 | | 5.8 | 48.9 | |
| 9.2 | | 8.3 | 32.5 | 9.3 |
| 10.5 | | 8.8 | 43.2 | |
| 10.5 | | 10.4 | 33.3 | |
| 10.5 | | 11.3 | 3.5 | |
| 10.5 | | 12.3 | 4.1 | |
| 10.4 | | 18.3 | 15.1 | |
| 9.2 | | 19.3 | 26.3 | 9.0 |
| 10.4 | | 25.8 | 55.5 | |
| 9.2 | | 27.3 | 13.9 | 9.5 |
| 10.4 | | 28.3 | 31.5 | |
| 10.0 | | 31.0 | 57.6 | |
| 9.8 | | 47.3 | 42.0 | |
| 10.2 | | 48.8 | 54.7 | |
| 9.0 | | 49.8 | 7.0 | 8.5 |
| 8.8 | | 50.5 | 58.7 | 9.0 |
| 10.5 | | 53.3 | 24.1 | |
| 10.2 | | 54.8 | 27.5 | |
| 10.5 | 57 | 2.3 | 31.5 | |
| 9.2 | | 3.3 | 12.3 | 9.5 |
| 9.6 | | 5.8 | 9.8 | 9.5 |
| 9.8 | | 7.3 | 22.5 | |
| 10.5 | | 8.3 | 39.0 | |
| 9.8 | | 8.5 | 56.5 | |
| 10.0 | | 12.3 | 52.7 | |
| 9.8 | | 13.3 | 33.6 | |
| 9.4 | | 13.8 | 24.7 | |
| 9.2 | | 13.8 | 34.4 | |
| 8.8 | | 15.8 | 53.1 | 8.5 |
| 10.5 | | 18.3 | 26.7 | |
| 9.8 | | 23.3 | 42.2 | |
| 10.2 | | 23.8 | 4.9 | |
| 10.4 | | 25.3 | 36.1 | |
| 10.0 | | 27.3 | 50.2 | |
| 9.4 | | 27.3 | 27.2 | 8.5 |
| 8.0 | | 30.8 | 24.1 | 8.0 GSt |
| 10.5 | | 35.8 | 2.8 | |
| 8.6 | | 39.3 | 22.7 | 8.0 GSt |
| 10.5 | | 43.3 | 20.7 | |
| 9.0 | | 52.3 | 13.2 | 9.0 |
| 10.0 | 58 | 5.3 | 47.5 | |
| 10.2 | | 8.5 | 57.5 | |
| 10.2 | | 9.3 | 32.3 | 9.5 |
| 10.2 | | 20.3 | 57.1 | |
| 10.4 | | 20.5 | 0.0 | |
| 10.5 | | 22.3 | 22.1 | |
| 10.5 | | 23.3 | 14.5 | |
| 10.2 | | 25.8 | 23.6 | |
| 9.9 | | 28.3 | 12.0 | |
| 9.2 | | 33.7 | 2.0 | 9.5 |
| 10.5 | | 45.8 | 24.1 | |
| 10.4 | | 48.3 | 59.5 | |
| 10.5 | | 51.4 | 45.5 | |
| 9.9 | | 52.3 | 42.0 | |
| 10.5 | | 55.3 | 6.9 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 9 | 40 | 50 | 6.8 |
| | 50 | 52 | 7.0 |
| 10 | 0 | 53 | 7.2 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 50 | 52 | 7.0 |
| 10 | 0 | 53 | 7.2 |
|  | 10 | 55 | 7.4 |

## 3061—3120.

| mag. | 9h.—10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.2 | 58 | 55.3 | 26.1 | |
| 10.2 | | 55.7 | 2.3 | |
| 8.8 | | 57.3 | 19.7 | 9.0 |
| 10.0 | | 58.3 | 33.6 | |
| 9.8 | | 58.8 | 56.1 | |
| 9.8 | 59 | 1.3 | 35.7 | |
| 10.5 | | 2.3 | 53.8 | |
| 10.5 | | 4.8 | 45.5 | |
| 10.5 | | 5.3 | 38.6 | |
| 10.5 | | 7.8 | 32.5 | |
| 10.0 | | 8.8 | 56.1 | |
| 10.0 | | 9.8 | 6.8 | |
| 10.2 | | 12.3 | 30.6 | |
| 10.0 | | 13.3 | 27.4 | |
| 10.4 | | 25.8 | 39.5 | |
| 10.5 | | 29.8 | 31.2 | |
| 9.8 | | 29.8 | 20.0 | 9.8 |
| 10.5 | | 50.8 | 54.8 | |
| 9.9 | | 53.3 | 35.8 | |
| 10.4 | | 53.8 | 34.1 | |
| 10.0 | | 54.3 | 58.9 | |
| 9.9 | | 54.3 | 26.3 | |
| 10.4 | | 55.8 | 32.4 | |
| 10.2 | | 56.8 | 46.9 | |
| 9.8 | | 58.3 | 34.1 | |
| 10.5 | 0 | 4.6 | 1.7 | |
| 9.9 | | 5.8 | 57.8 | |
| 10.0 | | 16.8 | 11.5 | |
| 7.9 | | 17.8 | 20.6 | 8.2 GSt |
| 10.4 | | 19.3 | 41.0 | |
| 10.5 | | 19.3 | 4.9 | |
| 9.9 | | 20.3 | 5.3 | |
| 9.7 | | 30.3 | 34.1 | 9.5 |
| 10.5 | | 35.8 | 30.9 | |
| 10.4 | | 36.4 | 0.3 | |
| 10.4 | | 41.8 | 22.5 | |
| 10.4 | | 45.3 | 51.5 | |
| 10.5 | | 54.3 | 19.5 | |
| 10.0 | | 56.8 | 26.2 | |
| 10.4 | | 58.1 | 57.6 | |
| 9.2 | | 59.1 | 4.8 | 9.5 |
| 10.0 | 1 | 3.1 | 2.9 | |
| 10.2 | | 3.9 | 40.5 | |
| 10.5 | | 4.6 | 48.9 | |
| 10.4 | | 6.1 | 48.5 | |
| 9.4 | | 7.6 | 18.0 | |
| 10.5 | | 8.1 | 37.5 | |
| 10.5 | | 12.1 | 32.5 | |
| 10.4 | | 14.1 | 30.5 | |
| 10.4 | | 18.1 | 44.3 | |
| 10.4 | | 19.1 | 40.5 | |
| 9.4 | | 21.6 | 28.1 | |
| 10.2 | | 24.1 | 23.8 | |
| 9.8 | | 27.6 | 37.8 | |
| 10.4 | | 36.1 | 5.5 | |
| 10.5 | | 38.6 | 1.9 | |
| 10.5 | | 41.1 | 34.9 | |
| 10.5 | | 42.1 | 21.9 | |
| 9.8 | | 42.3 | 57.2 | |
| 10.0 | | 42.6 | 5.6 | |

## 3121—3180.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.4 | 1 | 44.3 | 57.9 | |
| 10.2 | | 47.3 | 1.8 | |
| 10.0 | | 48.1 | 45.9 | |
| 10.4 | | 52.6 | 37.9 | |
| 9.8 | | 53.1 | 9.8 | |
| 10.0 | | 54.1 | 16.8 | |
| 10.0 | | 54.1 | 45.3 | |
| 10.0 | | 54.1 | 56.7 | |
| 10.0 | | 55.6 | 56.5 | |
| 10.0 | | 55.6 | 24.1 | |
| 9.7 | | 58.1 | 35.5 | |
| 10.5 | 2 | 0.1 | 3.4 | |
| 10.5 | | 3.1 | 4.6 | |
| 9.8 | | 5.6 | 10.3 | |
| 10.5 | | 5.6 | 48.0 | |
| 10.5 | | 11.6 | 10.0 | |
| 10.5 | | 14.1 | 38.4 | |
| 10.5 | | 14.1 | 20.8 | |
| 10.4 | | 15.6 | 47.8 | |
| 10.4 | | 16.1 | 39.0 | |
| 10.5 | | 23.6 | 10.1 | |
| 10.4 | | 27.1 | 6.7 | |
| 9.4 | | 28.1 | 9.6 | 9.0 |
| 10.0 | | 28.1 | 23.8 | |
| 10.0 | | 29.1 | 45.6 | |
| 10.2 | | 34.6 | 47.8 | |
| 10.2 | | 35.1 | 32.2 | |
| 10.4 | | 36.6 | 41.0 | |
| 10.2 | | 37.1 | 29.0 | |
| 9.8 | | 38.6 | 25.6 | |
| 9.4 | | 42.1 | 37.9 | 8.8 |
| 10.4 | | 42.6 | 45.0 | |
| 10.0 | | 43.1 | 50.0 | |
| 10.4 | | 47.1 | 32.0 | |
| 10.5 | | 53.1 | 39.3 | |
| 10.5 | | 57.6 | 12.9 | |
| 10.4 | | 58.1 | 59.4 | |
| 9.4 | | 59.1 | 54.6 | |
| 10.4 | | 59.1 | 44.9 | |
| 10.2 | | 59.1 | 38.6 | |
| 10.4 | 3 | 2.1 | 30.9 | |
| 10.2 | | 4.1 | 46.6 | |
| 10.2 | | 4.6 | 54.0 | |
| 10.5 | | 4.6 | 46.1 | |
| 10.4 | | 6.1 | 13.6 | |
| 9.9 | | 6.6 | 20.9 | |
| 9.2 | | 7.1 | 20.6 | 8.2 |
| 10.5 | | 11.5 | 58.8 | |
| 10.5 | | 13.1 | 0.9 | |
| 10.5 | | 20.6 | 51.4 | |
| 10.2 | | 21.1 | 20.9 | |
| 10.4 | | 23.1 | 38.2 | |
| 9.4 | | 24.1 | 35.2 | |
| 9.9 | | 25.6 | 7.6 | |
| 10.0 | | 35.6 | 43.8 | |
| 10.2 | | 38.1 | 25.8 | |
| 9.2 | | 44.6 | 9.7 | 9.0 |
| 10.4 | | 45.1 | 59.0 | |
| 10.0 | | 51.1 | 55.5 | |
| 10.5 | 4 | 0.1 | 45.7 | |

## 3181—3240.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.7 | 4 | 2.1 | 20.5 | |
| 10.5 | | 3.1 | 4.5 | |
| 10.2 | | 5.6 | 51.1 | |
| 10.2 | | 7.1 | 14.0 | |
| 10.5 | | 8.1 | 13.8 | |
| 10.4 | | 14.1 | 28.8 | |
| 10.5 | | 15.1 | 29.0 | |
| 10.4 | | 16.1 | 36.0 | |
| 9.8 | | 19.1 | 8.6 | |
| 10.4 | | 20.6 | 38.6 | |
| 10.5 | | 24.1 | 41.2 | |
| 9.8 | | 25.6 | 29.4 | |
| 10.0 | | 26.6 | 11.9 | |
| 10.5 | | 33.1 | 19.6 | |
| 9.6 | | 34.1 | 43.0 | |
| 10.2 | | 39.1 | 19.4 | |
| 10.5 | | 44.1 | 49.7 | |
| 10.4 | | 44.1 | 9.0 | |
| 10.4 | | 46.1 | 46.2 | |
| 10.4 | | 46.6 | 3.0 | |
| 9.6 | | 47.1 | 17.0 | 9.5 |
| 10.5 | | 47.1 | 15.9 | |
| 10.5 | | 57.1 | 20.0 | |
| 10.4 | | 57.1 | 7.6 | |
| 9.6 | | 57.1 | 31.8 | |
| 10.4 | 5 | 8.1 | 28.4 | |
| 9.6 | | 8.1 | 7.3 | |
| 10.0 | | 12.1 | 42.4 | |
| 9.7 | | 12.6 | 16.8 | 9.0 |
| 9.9 | | 14.1 | 39.2 | |
| 10.5 | | 14.1 | 25.5 | |
| 9.6 | | 15.1 | 32.6 | |
| 10.0 | | 15.6 | 7.0 | |
| 10.0 | | 16.1 | 29.3 | |
| 9.6 | | 16.1 | 55.0 | |
| 9.4 | | 17.1 | 35.1 | 9.0 |
| 9.8 | | 18.1 | 42.7 | |
| 9.2 | | 22.1 | 10.2 | 8.5 |
| 9.9 | | 23.6 | 44.4 | |
| 10.0 | | 25.6 | 50.5 | |
| 9.8 | | 28.1 | 26.6 | |
| 10.4 | | 30.6 | 40.3 | |
| 10.2 | | 31.6 | 56.3 | |
| 10.5 | | 32.1 | 32.1 | |
| 10.5 | | 33.6 | 47.1 | |
| 10.5 | | 42.1 | 43.8 | |
| 9.7 | | 50.6 | 40.7 | 9.5 |
| 9.8 | | 51.6 | 44.6 | |
| 9.9 | | 55.6 | 42.6 | |
| 10.4 | | 55.6 | 25.9 | |
| 10.0 | | 59.1 | 37.2 | |
| 10.4 | 6 | 0.6 | 27.0 | |
| 9.9 | | 4.1 | 40.3 | |
| 10.4 | | 5.6 | 24.8 | |
| 9.4 | | 5.6 | 51.2 | |
| 10.0 | | 13.6 | 14.1 | |
| 10.4 | | 15.1 | 12.8 | |
| 10.4 | | 23.9 | 2.2 | |
| 10.5 | | 27.1 | 36.0 | |
| 10.5 | | 30.1 | 42.5 | |

## 3241—3300.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.5 | 6 | 33.1 | 55.4 | |
| 9.6 | | 38.1 | 17.5 | 8.8 |
| 10.2 | | 53.1 | 53.7 | |
| 10.0 | | 53.6 | 1.6 | |
| 10.5 | | 55.1 | 4.5 | |
| 8.6 | | 59.1 | 20.3 | 9.2 |
| 9.8 | 7 | 0.4 | 59.0 | |
| 10.5 | | 5.1 | 24.7 | |
| 10.4 | | 5.6 | 15.0 | |
| 9.8 | | 6.6 | 29.4 | |
| 10.0 | | 7.1 | 28.8 | |
| 10.4 | | 7.7 | 55.6 | |
| 10.5 | | 10.0 | 10.1 | |
| 9.7 | | 14.9 | 58.3 | |
| 9.9 | | 16.2 | 23.8 | |
| 10.4 | | 16.2 | 26.4 | |
| 9.2 | | 19.7 | 39.4 | |
| 10.4 | | 20.2 | 51.2 | |
| 10.0 | | 21.7 | 14.8 | |
| 10.4 | | 22.7 | 20.1 | |
| 7.8 | | 23.7 | 22.0 | 7.8 GSt |
| 10.0 | | 25.2 | 59.0 | |
| 10.2 | | 26.7 | 5.2 | |
| 10.2 | | 26.7 | 5.0 | |
| 9.2 | | 27.2 | 38.8 | 9.5 |
| 10.5 | | 27.2 | 43.2 | |
| 10.4 | | 29.7 | 43.4 | |
| 10.2 | | 32.7 | 8.4 | |
| 8.8 | | 32.7 | 30.2 | 9.5 |
| 10.4 | | 32.7 | 51.2 | |
| 10.4 | | 35.2 | 30.6 | |
| 9.4 | | 35.7 | 40.8 | |
| 10.0 | | 40.7 | 22.0 | |
| 10.2 | | 40.7 | 45.2 | |
| 10.4 | | 41.7 | 51.5 | |
| 10.0 | | 47.7 | 49.5 | |
| 10.4 | | 47.7 | 7.6 | |
| 10.4 | | 51.0 | 10.6 | |
| 10.0 | | 51.2 | 5.0 | |
| 9.6 | | 53.7 | 55.5 | |
| 10.2 | | 55.2 | 7.6 | |
| 9.8 | | 59.7 | 32.0 | |
| 10.0 | 8 | 3.7 | 46.8 | |
| 9.9 | | 3.7 | 47.0 | |
| 10.0 | | 4.2 | 51.0 | |
| 9.9 | | 6.7 | 19.6 | |
| 10.4 | | 7.0 | 28.1 | |
| 10.2 | | 14.7 | 53.3 | |
| 10.2 | | 15.7 | 45.6 | |
| 10.5 | | 17.6 | 8.0 | |
| 10.0 | | 21.6 | 6.9 | |
| 9.0 | | 28.6 | 25.0 | 9.5 |
| 10.0 | | 29.6 | 26.0 | |
| 9.8 | | 31.1 | 53.0 | |
| 10.4 | | 33.1 | 30.0 | |
| 9.9 | | 34.6 | 6.6 | |
| 9.6 | | 35.1 | 4.2 | |
| 9.4 | | 37.6 | 59.9 | |
| 9.8 | | 43.1 | 48.4 | |
| 10.4 | | 44.6 | 39.0 | |



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## 3301—3360.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 8 | 45·1 | 28·1 | |
| 10·4 | | 45·1 | 9·6 | |
| 10·0 | | 47·6 | 6·5 | |
| 10·5 | | 47·6 | 23·6 | |
| 10·0 | | 49·6 | 6·0 | |
| 9·0 | | 50·1 | 26·6 | 9·5 |
| 9·6 | | 53·1 | 13·8 | |
| 10·5 | | 53·8 | 26·3 | |
| 10·5 | | 54·1 | 39·9 | |
| 9·0 | | 55·1 | 16·8 | |
| 10·4 | | 58·6 | 36·0 | |
| 9·6 | 9 | 1·6 | 31·6 | |
| 10·5 | | 1·6 | 55·6 | |
| 10·4 | | 1·8 | 25·7 | |
| 10·4 | | 3·1 | 10·9 | |
| 10·4 | | 6·1 | 41·4 | |
| 9·8 | | 6·6 | 52·2 | |
| 10·4 | | 6·6 | 46·3 | |
| 9·9 | | 9·1 | 46·0 | |
| 10·4 | | 12·6 | 7·2 | |
| 10·4 | | 12·6 | 26·2 | |
| 8·8 | | 22·6 | 17·7 | 9·5 |
| 10·2 | | 25·1 | 6·6 | |
| 9·2 | | 29·1 | 15·7 | |
| 7·7 | | 29·6 | 22·4 | 7·7 GS |
| 10·5 | | 33·4 | 51·0 | |
| 10·4 | | 37·4 | 5·0 | |
| 10·0 | | 37·9 | 10·1 | |
| 10·2 | | 39·9 | 26·7 | |
| 10·2 | | 39·9 | 53·7 | |
| 10·5 | | 40·8 | 20·0 | |
| 8·0 | | 43·4 | 31·2 | 8·0 G |
| 9·6 | | 43·4 | 10·4 | |
| 10·4 | | 47·4 | 52·7 | |
| 10·0 | | 48·9 | 8·0 | |
| 10·2 | | 49·9 | 45·0 | |
| 10·5 | | 53·9 | 11·4 | |
| 9·4 | | 54·9 | 11·7 | |
| 8·0 | | 58·4 | 40·3 | 8·0 G |
| 10·4 | 10 | 0·9 | 48·1 | |
| 10·5 | | 5·9 | 32·4 | |
| 10·5 | | 7·9 | 38·0 | |
| 10·2 | | 8·4 | 26·0 | |
| 10·2 | | 10·9 | 9·8 | |
| 10·0 | | 10·9 | 24·0 | |
| 10·0 | | 17·4 | 21·2 | |
| 10·2 | | 24·4 | 20·6 | |
| 10·4 | | 29·4 | 39·0 | |
| 10·2 | | 29·9 | 51·6 | |
| 10·5 | | 30·9 | 54·8 | |
| 10·0 | | 32·4 | 28·2 | |
| 7·9 | | 32·9 | 55·8 | GSg |
| 10·4 | | 33·9 | 35·4 | |
| 9·9 | | 34·4 | 20·3 | |
| 9·4 | | 35·9 | 8·0 | 9·0 |
| 6·5 | | 38·9 | 21·2 | 6·5 GSt |
| 10·5 | | 39·4 | 53·9 | |
| 9·4 | | 44·4 | 23·2 | |
| 10·5 | | 45·4 | 43·6 | |
| 9·2 | | 45·4 | 27·5 | 9·0 G |

## 3361—3420.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 10 | 47·4 | 7·5 | |
| 10·0 | | 47·4 | 10·8 | |
| 10·0 | | 48·8 | 37·0 | |
| 10·2 | | 48·8 | 25·1 | |
| 9·6 | | 52·3 | 17·1 | |
| 8·6 | | 53·3 | 43·5 | |
| 10·5 | | 53·3 | 7·9 | |
| 10·4 | | 53·8 | 16·4 | |
| 10·0 | | 55·8 | 7·7 | G |
| 9·9 | | 56·8 | 3·2 | |
| 9·8 | 11 | 1·1 | 58·9 | |
| 10·0 | | 4·3 | 6·9 | |
| 9·9 | | 4·3 | 37·9 | 9·0 |
| 9·8 | | 8·3 | 42·1 | |
| 10·0 | | 8·3 | 13·6 | |
| 9·6 | | 9·8 | 25·7 | |
| 9·0 | | 14·3 | 36·5 | 9·5 |
| 10·2 | | 15·8 | 32·6 | |
| 10·2 | | 18·3 | 2·7 | |
| 9·6 | | 19·3 | 52·9 | |
| 10·0 | | 19·8 | 58·5 | |
| 7·4 | | 21·3 | 53·9 | 7·0 GSg |
| 10·5 | | 34·8 | 18·6 | |
| 9·8 | | 39·3 | 37·6 | |
| 10·0 | | 41·3 | 31·0 | |
| 10·0 | | 42·8 | 30·8 | |
| 10·5 | | 43·8 | 3·7 | |
| 10·4 | | 44·3 | 17·3 | |
| 8·6 | | 44·3 | 58·6 | 8·5 G |
| 10·0 | | 44·5 | 0·9 | |
| 10·0 | | 50·3 | 5·7 | |
| 10·0 | | 50·8 | 34·4 | |
| 10·2 | | 52·3 | 26·8 | |
| 10·2 | | 52·3 | 15·6 | |
| 10·2 | | 52·6 | 2·4 | |
| 10·2 | 12 | 6·3 | 32·7 | |
| 10·0 | | 7·3 | 58·6 | |
| 9·2 | | 11·9 | 2·7 | |
| 10·4 | | 12·1 | 54·9 | |
| 10·0 | | 14·2 | 58·1 | |
| 9·8 | | 14·6 | 5·2 | |
| 9·9 | | 16·1 | 23·1 | |
| 10·2 | | 16·6 | 24·9 | |
| 10·2 | | 19·6 | 17·2 | |
| 9·8 | | 20·1 | 52·6 | |
| 9·9 | | 23·1 | 16·4 | |
| 10·2 | | 24·1 | 6·5 | |
| 10·4 | | 24·6 | 58·9 | |
| 9·2 | | 31·6 | 25·9 | |
| 10·2 | | 33·6 | 51·0 | |
| 10·2 | | 34·6 | 33·4 | |
| 10·5 | | 35·6 | 47·1 | |
| 10·2 | | 38·1 | 11·5 | |
| 10·0 | | 39·1 | 35·2 | |
| 10·0 | | 43·1 | 16·7 | |
| 10·5 | | 44·1 | 12·1 | |
| 10·5 | | 47·1 | 39·5 | |
| 10·0 | | 49·6 | 32·5 | |
| 9·8 | 13 | 4·6 | 47·3 | |
| 10·4 | | 9·6 | 22·0 | |

## 3421—3480.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·0 | 13 | 12·1 | 12·0 | |
| 9·8 | | 13·6 | 39·0 | |
| 10·2 | | 19·6 | 40·5 | |
| 10·0 | | 21·1 | 42·1 | |
| 9·6 | | 23·1 | 51·9 | |
| 8·6 | | 24·6 | 6·2 | 9·0 |
| 10·0 | | 26·1 | 44·4 | |
| 10·0 | | 32·5 | 31·2 | |
| 10·5 | | 32·5 | 46·0 | |
| 10·5 | | 34·0 | 23·4 | |
| 9·9 | | 35·0 | 57·0 | |
| 10·4 | | 38·5 | 17·4 | |
| 8·8 | | 39·0 | 32·9 | 9·5 |
| 10·4 | | 43·0 | 15·2 | |
| 10·2 | | 44·5 | 10·0 | |
| 10·4 | | 45·5 | 28·8 | |
| 10·0 | | 47·5 | 25·2 | |
| 10·0 | | 47·5 | 36·1 | |
| 9·8 | | 51·0 | 13·5 | |
| 10·0 | | 51·5 | 45·2 | |
| 9·2 | | 54·0 | 51·8 | |
| 9·9 | | 54·5 | 39·9 | |
| 8·6 | | 58·0 | 13·3 | 9·5 |
| 10·5 | | 59·5 | 1·0 | |
| 9·2 | 14 | 2·5 | 40·0 | |
| 9·7 | | 3·0 | 23·0 | |
| 9·9 | | 5·0 | 47·7 | |
| 10·5 | | 7·3 | 18·3 | |
| 10·4 | | 8·5 | 12·0 | |
| 10·5 | | 10·5 | 0·2 | |
| 9·4 | | 11·0 | 17·6 | |
| 10·2 | | 15·3 | 43·0 | |
| 10·4 | | 17·0 | 29·9 | |
| 9·7 | | 17·0 | 34·9 | |
| 10·2 | | 17·0 | 24·4 | |
| 10·0 | | 19·5 | 17·2 | |
| 8·6 | | 19·5 | 42·7 | 9·0 |
| 10·0 | | 20·0 | 25·7 | |
| 9·9 | | 22·0 | 20·6 | |
| 10·4 | | 24·0 | 4·1 | |
| 9·9 | | 25·5 | 0·2 | |
| 10·0 | | 26·0 | 53·2 | |
| 9·2 | | 27·5 | 39·8 | 9·5 |
| 10·4 | | 28·5 | 15·1 | |
| 10·5 | | 40·9 | 59·6 | |
| 9·8 | | 41·9 | 27·9 | |
| 8·8 | | 42·4 | 46·1 | |
| 10·0 | | 42·9 | 12·5 | |
| 10·0 | | 46·9 | 19·9 | |
| 9·8 | | 48·9 | 13·2 | |
| 10·5 | | 49·9 | 40·3 | |
| 10·4 | | 50·9 | 4·6 | |
| 10·4 | | 53·4 | 13·6 | |
| 7·2 | | 54·4 | 24·1 | 5·5 GSct |
| 10·4 | | 59·9 | 26·9 | |
| 10·4 | 15 | 2·9 | 45·3 | |
| 9·2 | | 8·9 | 40·1 | |
| 10·4 | | 10·9 | 16·7 | |
| 10·0 | | 10·9 | 50·8 | |
| 10·5 | | 11·4 | 9·9 | |

## 3481—3540.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·5 | 15 | 15·9 | 18·9 | |
| 9·0 | | 21·9 | 49·8 | |
| 9·4 | | 25·4 | 2·1 | |
| 10·4 | | 32·4 | 33·0 | |
| 10·2 | | 32·9 | 22·4 | |
| 10·5 | | 36·4 | 48·0 | |
| 9·7 | | 38·9 | 3·5 | |
| 10·4 | | 38·9 | 33·0 | |
| 10·5 | | 40·9 | 15·9 | |
| 8·6 | | 41·4 | 19·2 | 9·5 |
| 10·0 | | 43·9 | 9·9 | |
| 9·0 | | 47·9 | 53·9 | |
| 10·2 | | 51·4 | 24·1 | |
| 10·0 | | 52·9 | 41·7 | |
| 10·5 | | 53·9 | 3·8 | |
| 10·0 | | 58·4 | 16·4 | |
| 8·3 | | 59·9 | 41·6 | 8·5 |
| 9·8 | 16 | 0·9 | 51·6 | |
| 10·0 | | 2·4 | 36·9 | |
| 10·4 | | 3·9 | 35·3 | |
| 10·0 | | 6·4 | 49·6 | |
| 10·5 | | 10·9 | 57·1 | |
| 10·0 | | 10·9 | 27·0 | |
| 10·5 | | 14·4 | 20·1 | |
| 9·9 | | 14·4 | 28·0 | |
| 9·7 | | 16·9 | 47·5 | |
| 10·5 | | 18·4 | 14·9 | |
| 10·0 | | 23·4 | 14·1 | |
| 10·2 | | 24·9 | 12·6 | |
| 10·2 | | 29·4 | 24·8 | |
| 9·4 | | 30·9 | 4·8 | |
| 9·6 | | 39·9 | 24·9 | 9·5 |
| 10·0 | | 41·4 | 46·1 | |
| 10·5 | | 45·9 | 21·9 | |
| 10·5 | | 55·4 | 25·9 | |
| 9·7 | | 55·9 | 58·5 | |
| 10·2 | | 58·9 | 36·9 | |
| 10·2 | | 59·4 | 25·0 | |
| 9·9 | 17 | 2·9 | 8·7 | 9·5 |
| 10·4 | | 7·4 | 59·1 | |
| 9·4 | | 8·4 | 7·9 | 9·5 |
| 9·9 | | 10·9 | 7·1 | |
| 10·2 | | 16·4 | 3·4 | |
| 10·2 | | 19·9 | 26·0 | |
| 10·5 | | 29·4 | 41·8 | |
| 10·0 | | 30·4 | 18·6 | |
| 9·8 | | 31·8 | 5·9 | |
| 9·9 | | 31·9 | 12·9 | |
| 7·8 | | 34·8 | 25·3 | 8·5 GS |
| 10·5 | | 36·8 | 5·2 | |
| 10·4 | | 38·8 | 37·8 | |
| 10·0 | | 40·8 | 44·1 | |
| 10·2 | | 42·3 | 2·9 | |
| 10·5 | | 44·3 | 3·3 | |
| 10·5 | | 44·3 | 55·2 | |
| 9·9 | | 47·3 | 45·0 | |
| 10·2 | | 47·8 | 12·9 | |
| 9·2 | | 48·3 | 25·9 | |
| 9·4 | | 49·3 | 38·8 | |
| 9·8 | | 50·3 | 41·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 0 | 53 | 7·2 |
| | 10 | 55 | 7·4 |
| | 20 | 57 | 7·6 |



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25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 55 | 7·4 |
| | 20 | 57 | 7·6 |
| | 30 | 59 | 7·7 |

## 3541—3600.

| mag. | 10h. m s | −54° ′ | |
|---|---|---|---|
| 9·7 | 17 50·8 | 3·2 | |
| 10·5 | 52·8 | 5·9 | |
| 10·2 | 54·8 | 5·9 | |
| 10·0 | 57·8 | 26·8 | |
| 10·2 | 57·8 | 8·8 | |
| 10·5 | 58·8 | 26·0 | |
| 10·5 | 59·3 | 26·1 | |
| 10·2 | 18 0·8 | 21·4 | |
| 10·2 | 2·8 | 47·6 | |
| 10·4 | 2·8 | 52·5 | |
| 9·0 | 5·8 | 51·1 | |
| 10·4 | 12·8 | 25·5 | |
| 9·8 | 19·3 | 28·3 | |
| 10·5 | 19·3 | 55·3 | |
| 9·4 | 21·8 | 49·8 | 9·0 |
| 9·2 | 22·8 | 14·1 | |
| 10·4 | 22·8 | 36·5 | |
| 10·4 | 25·8 | 21·0 | |
| 10·4 | 26·8 | 8·9 | |
| 10·4 | 29·3 | 1·6 | |
| 10·4 | 33·1 | 31·9 | |
| 9·9 | 36·1 | 27·5 | |
| 10·0 | 37·6 | 26·9 | |
| 10·2 | 38·1 | 2·8 | |
| 10·2 | 39·1 | 0·1 | |
| 10·2 | 42·1 | 18·3 | |
| 10·5 | 42·1 | 56·5 | |
| 10·5 | 42·8 | 58·9 | |
| 10·2 | 46·2 | 2·1 | |
| 10·0 | 51·6 | 6·5 | |
| 10·5 | 54·1 | 13·3 | |
| 10·4 | 55·1 | 13·5 | |
| 10·4 | 55·1 | 15·5 | |
| 10·5 | 56·6 | 18·8 | |
| 9·0 | 58·1 | 42·7 | 9·5 |
| 10·0 | 59·1 | 24·4 | |
| 10·0 | 59·1 | 9·0 | |
| 10·0 | 19 2·6 | 0·6 | |
| 10·4 | 3·6 | 55·9 | |
| 9·9 | 4·1 | 43·0 | |
| 9·8 | 4·6 | 14·9 | |
| 9·0 | 20·6 | 50·6 | |
| 10·2 | 21·6 | 14·3 | |
| 10·5 | 24·6 | 11·9 | |
| 10·0 | 25·1 | 55·4 | |
| 10·4 | 28·6 | 40·7 | |
| 10·4 | 30·1 | 27·9 | |
| 9·0 | 30·6 | 4·1 | 8·5 |
| 9·4 | 31·6 | 36·8 | |
| 9·2 | 38·6 | 37·5 | 9·5 |
| 10·5 | 40·1 | 50·9 | |
| 10·0 | 47·1 | 35·9 | |
| 9·8 | 54·0 | 26·0 | |
| 10·5 | 55·5 | 56·3 | |
| 10·0 | 56·0 | 11·1 | |
| 10·5 | 58·0 | 11·0 | |
| 10·0 | 20 0·5 | 8·4 | |
| 10·0 | 1·0 | 23·0 | |
| 9·4 | 1·5 | 29·6 | |
| 10·2 | 2·5 | 11·4 | |

## 3601—3660.

| mag. | 10h. m s | −54° ′ | |
|---|---|---|---|
| 10·4 | 20 5·5 | 54·9 | |
| 10·2 | 5·5 | 53·8 | |
| 10·0 | 8·0 | 3·8 | |
| 10·4 | 8·0 | 16·1 | |
| 10·0 | 10·0 | 36·0 | |
| 10·4 | 11·5 | 7·2 | |
| 10·2 | 12·0 | 2·2 | |
| 10·5 | 14·0 | 53·9 | |
| 9·7 | 15·5 | 25·3 | |
| 9·9 | 16·0 | 11·4 | |
| 10·2 | 23·5 | 16·7 | |
| 10·4 | 24·5 | 4·4 | |
| 10·2 | 26·5 | 4·3 | |
| 10·0 | 27·0 | 39·3 | |
| 10·0 | 29·5 | 36·0 | |
| 10·5 | 31·5 | 3·1 | |
| 10·0 | 46·5 | 18·7 | |
| 10·0 | 49·0 | 46·2 | |
| 10·2 | 51·0 | 19·9 | |
| 10·2 | 52·5 | 22·0 | |
| 10·4 | 52·5 | 46·0 | |
| 10·4 | 55·0 | 33·1 | |
| 9·8 | 56·0 | 3·9 | |
| 8·0 | 21 0·0 | 21·2 | 7·5 GSgt |
| 10·2 | 0·5 | 37·5 | |
| 10·2 | 2·5 | 14·3 | |
| 10·4 | 3·0 | 16·0 | |
| 10·2 | 5·4 | 16·7 | |
| 10·0 | 5·5 | 41·0 | |
| 10·0 | 5·5 | 29·9 | |
| 10·5 | 6·9 | 51·8 | |
| 9·8 | 14·9 | 41·5 | |
| 10·2 | 16·4 | 3·2 | |
| 9·7 | 20·9 | 59·7 | |
| 8·2 | 21·9 | 49·6 | 9·0 |
| 10·2 | 22·9 | 2·7 | |
| 10·4 | 23·5 | 0·7 | |
| 10·4 | 27·7 | 37·6 | |
| 10·0 | 28·9 | 30·8 | |
| 10·2 | 29·4 | 44·2 | |
| 10·0 | 32·4 | 10·3 | |
| 8·2 | 34·4 | 50·6 | *8·5* : |
| 10·4 | 39·9 | 49·9 | |
| 10·5 | 41·4 | 51·8 | |
| 9·4 | 45·4 | 3·5 | |
| 10·2 | 48·9 | 51·4 | |
| 10·2 | 49·4 | 21·4 | |
| 10·4 | 52·4 | 35·8 | |
| 9·6 | 54·4 | 20·9 | |
| 10·0 | 54·4 | 56·3 | |
| 7·4 | 22 0·4 | 14·4 | 6·0 GSct |
| 9·4 | 1·4 | 6·0 | |
| 10·5 | 1·9 | 54·0 | |
| 10·4 | 2·4 | 46·5 | |
| 10·5 | 6·7 | 44·2 | |
| 9·9 | 7·4 | 26·0 | |
| 10·2 | 11·4 | 11·8 | |
| 10·2 | 11·9 | 55·5 | |
| 10·4 | 14·9 | 48·3 | |
| 9·8 | 17·9 | 53·0 | |

## 3661—3720.

| mag. | 10h. m s | −54° ′ | |
|---|---|---|---|
| 9·8 | 22 18·9 | 49·1 | |
| 9·8 | 19·9 | 12·7 | |
| 9·9 | 19·9 | 28·4 | |
| 10·0 | 26·3 | 39·6 | |
| 9·7 | 28·3 | 50·2 | |
| 10·2 | 28·8 | 16·2 | |
| 10·4 | 29·3 | 26·5 | |
| 9·6 | 31·3 | 41·5 | |
| 10·0 | 33·3 | 3·2 | |
| 9·4 | 37·8 | 17·9 | 9·5 |
| 10·5 | 40·3 | 39·1 | |
| 9·2 | 44·3 | 7·4 | |
| 10·2 | 44·8 | 27·8 | |
| 10·2 | 47·3 | 36·9 | |
| 10·4 | 52·5 | 2·8 | |
| 10·0 | 52·8 | 44·8 | |
| 9·0 | 55·3 | 33·0 | 9·5 |
| 9·0 | 57·8 | 45·4 | |
| 10·2 | 59·3 | 48·0 | |
| 9·7 | 23 1·3 | 19·1 | |
| 9·8 | 2·3 | 25·9 | |
| 10·4 | 7·8 | 36·9 | |
| 10·5 | 10·3 | 6·5 | |
| 10·2 | 18·8 | 21·2 | |
| 9·4 | 19·3 | 19·0 | |
| 9·8 | 20·3 | 47·0 | |
| 8·6 | 21·3 | 40·9 | 8·0 |
| 10·0 | 22·8 | 17·8 | |
| 10·2 | 24·7 | 55·6 | |
| 10·5 | 25·3 | 9·2 | |
| 10·0 | 28·5 | 30·1 | |
| 10·5 | 30·5 | 35·0 | |
| 10·0 | 34·2 | 4·1 | |
| 10·4 | 34·5 | 51·1 | |
| 10·4 | 35·8 | 19·9 | |
| 9·8 | 35·8 | 26·0 | |
| 10·4 | 37·8 | 11·7 | |
| 10·4 | 38·8 | 6·4 | |
| 10·0 | 40·3 | 8·2 | |
| 9·0 | 42·3 | 31·9 | 9·5 |
| 10·0 | 42·5 | 54·4 | |
| 10·5 | 44·2 | 11·3 | |
| 10·5 | 45·7 | 14·1 | |
| 10·0 | 45·7 | 50·6 | |
| 10·2 | 46·2 | 32·4 | |
| 10·0 | 47·7 | 35·9 | |
| 9·2 | 51·4 | 6·2 | |
| 10·0 | 52·0 | 36·8 | |
| 9·4 | 56·2 | 30·5 | |
| 8·8 | 24 0·2 | 4·8 | 9·0 |
| 10·0 | 2·0 | 39·9 | |
| 10·4 | 2·9 | 47·6 | |
| 10·5 | 3·2 | 5·8 | |
| 10·5 | 3·2 | 55·8 | |
| 9·9 | 11·2 | 56·6 | |
| 8·6 | 11·4 | 2·4 | 9·0 |
| 10·5 | 11·7 | 5·8 | |
| 10·4 | 12·2 | 5·6 | |
| 8·6 | 12·2 | 36·7 | 9·5 |
| 10·1 | 14·9 | 42·2 | |

## 3721—3780.

| mag. | 10h. m s | −54° ′ | |
|---|---|---|---|
| 10·1 | 24 15·2 | 21·3 | |
| 9·6 | 16·7 | 27·9 | |
| 9·4 | 17·2 | 30·5 | |
| 9·8 | 17·4 | 23·8 | |
| 10·0 | 17·5 | 21·6 | |
| 10·0 | 23·2 | 19·0 | |
| 9·8 | 23·3 | 43·3 | |
| 9·8 | 23·7 | 5·8 | |
| 9·6 | 26·7 | 58·7 | |
| 9·6 | 30·2 | 17·0 | |
| 10·1 | 31·3 | 56·8 | |
| 9·2 | 33·7 | 11·9 | |
| 10·1 | 34·3 | 38·1 | |
| 10·0 | 34·3 | 32·6 | |
| 10·0 | 40·2 | 45·4 | |
| 9·5 | 44·2 | 29·7 | |
| 9·8 | 48·7 | 16·0 | |
| 9·8 | 52·2 | 14·7 | |
| 9·6 | 54·7 | 29·4 | |
| 8·0 | 25 3·2 | 20·2 | 7·5 GSt |
| 9·6 | 10·2 | 24·1 | |
| 9·1 | 11·7 | 45·5 | 9·0 |
| 8·8 | 13·2 | 13·2 | 9·0 |
| 10·1 | 18·2 | 45·7 | |
| 9·5 | 20·2 | 36·0 | |
| 9·2 | 27·2 | 33·8 | |
| 10·0 | 29·3 | 1·5 | |
| 9·4 | 30·2 | 17·8 | |
| 9·5 | 30·2 | 42·0 | |
| 9·8 | 34·7 | 55·3 | |
| 10·0 | 35·7 | 49·6 | |
| 9·0 | 44·2 | 32·9 | |
| 8·8 | 45·7 | 47·6 | 8·5 |
| 9·8 | 53·2 | 47·2 | |
| 9·6 | 54·7 | 22·9 | |
| 10·0 | 55·2 | 43·5 | |
| 10·0 | 26 6·7 | 12·2 | |
| 10·1 | 15·2 | 38·2 | |
| 10·1 | 18·7 | 40·7 | |
| 9·8 | 22·2 | 54·0 | |
| 10·0 | 24·2 | 15·9 | |
| 10·1 | 33·7 | 10·1 | |
| 9·6 | 34·7 | 30·6 | |
| 9·0 | 39·7 | 34·9 | 9·0 |
| 10·0 | 40·7 | 27·0 | |
| 10·1 | 41·7 | 21·0 | |
| 10·1 | 43·7 | 24·1 | |
| 9·6 | 51·7 | 45·1 | |
| 9·6 | 54·2 | 50·0 | |
| 10·1 | 58·2 | 14·7 | |
| 10·0 | 27 2·2 | 23·0 | |
| 9·2 | 4·2 | 7·1 | |
| 8·5 | 8·2 | 19·6 | 9·2 |
| 9·6 | 8·7 | 24·8 | |
| 10·0 | 17·7 | 48·8 | |
| 9·8 | 19·2 | 40·1 | |
| 9·8 | 19·7 | 46·3 | |
| 9·8 | 21·7 | 12·0 | |
| 10·0 | 25·7 | 41·9 | |
| 10·1 | 27·7 | 37·5 | |



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## 3781—3840.

| mag. | 10ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 10.1 | 27 | 32.2 | 39.0 | |
| 9.4 | | 41.7 | 27.1 | |
| 8.8 | | 45.7 | 5.4 | 9.0 |
| 9.5 | | 45.7 | 4.1 | |
| 10.1 | | 54.2 | 7.1 | |
| 9.4 | | 57.7 | 29.7 | 9.0 |
| 9.8 | | 59.7 | 52.8 | |
| 9.5 | 28 | 5.2 | 57.6 | |
| 10.1 | | 9.7 | 11.3 | |
| 9.2 | | 12.2 | 44.5 | |
| 9.5 | | 13.2 | 54.2 | |
| 9.6 | | 13.2 | 32.6 | |
| 10.0 | | 18.2 | 4.0 | |
| 9.1 | | 21.7 | 59.5 | 9.0 |
| 8.0 | | 22.2 | 44.6 | GSg |
| 10.1 | | 23.1 | 3.6 | |
| 7.9 | | 23.2 | 44.2 | GSg |
| 10.1 | | 26.7 | 30.5 | |
| 10.1 | | 27.2 | 57.9 | |
| 10.0 | | 30.2 | 24.9 | |
| 9.8 | | 38.1 | 12.3 | |
| 10.1 | | 39.7 | 30.1 | |
| 10.1 | | 43.3 | 0.6 | |
| 9.6 | | 44.2 | 13.9 | |
| 9.6 | | 46.2 | 51.3 | |
| 10.1 | | 53.2 | 26.4 | |
| 10.1 | | 54.7 | 25.8 | |
| 10.1 | 29 | 1.2 | 40.2 | |
| 10.1 | | 10.2 | 54.1 | |
| 9.8 | | 11.2 | 12.1 | |
| 10.1 | | 12.1 | 26.6 | |
| 10.1 | | 16.2 | 50.6 | |
| 9.5 | | 22.7 | 44.6 | |
| 10.0 | | 23.2 | 19.8 | |
| 9.8 | | 26.2 | 54.3 | |
| 9.8 | | 31.7 | 42.9 | |
| 10.0 | | 31.7 | 21.3 | |
| 10.0 | | 35.2 | 18.0 | |
| 10.1 | | 39.2 | 15.5 | |
| 10.1 | | 43.2 | 37.6 | |
| 9.6 | | 48.7 | 13.4 | |
| 9.6 | | 50.2 | 5.3 | |
| 10.1 | | 50.7 | 5.6 | |
| 10.1 | | 53.7 | 23.5 | |
| 8.8 | 30 | 0.2 | 1.9 | 9.5 |
| 8.4 | | 3.7 | 45.7 | 9.0 Gg |
| 10.1 | | 5.7 | 13.4 | |
| 10.1 | | 7.7 | 47.5 | |
| 8.0 | | 10.7 | 45.8 | 7.5 GSg |
| 9.8 | | 19.2 | 43.3 | |
| 10.1 | | 25.2 | 59.8 | |
| 10.0 | | 26.7 | 23.4 | |
| 9.6 | | 27.2 | 3.5 | 9.0 |
| 10.1 | | 28.7 | 42.2 | |
| 9.8 | | 29.7 | 17.7 | |
| 10.0 | | 29.7 | 2.9 | |
| 10.1 | | 31.2 | 34.6 | |
| 10.0 | | 38.2 | 43.5 | |
| 9.6 | | 43.5 | 59.7 | |
| 9.8 | | 45.2 | 36.3 | : |

## 3841—3900.

| mag. | 10ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 10.1 | 30 | 50.2 | 27.3 | |
| 10.1 | | 50.2 | 26.9 | |
| 10.1 | | 52.2 | 4.1 | |
| 9.5 | | 53.7 | 9.1 | |
| 9.6 | | 55.7 | 21.1 | |
| 10.1 | | 55.7 | 54.7 | |
| 10.1 | 31 | 0.7 | 57.8 | |
| 9.8 | | 4.2 | 24.9 | |
| 9.4 | | 6.7 | 47.1 | 9.5 |
| 9.8 | | 10.7 | 42.1 | |
| 10.1 | | 12.7 | 40.5 | |
| 10.0 | | 16.0 | 1.1 | |
| 9.0 | | 25.2 | 11.8 | |
| 8.8 | | 29.7 | 43.1 | 9.0 |
| 9.4 | | 30.2 | 54.4 | |
| 9.0 | | 33.2 | 27.5 | 9.5 |
| 10.1 | | 35.7 | 22.9 | |
| 9.8 | | 35.7 | 6.3 | |
| 10.0 | | 36.2 | 32.2 | |
| 10.0 | | 38.2 | 55.4 | |
| 10.0 | | 39.7 | 41.3 | |
| 10.1 | | 40.2 | 55.7 | |
| 9.2 | | 46.7 | 34.2 | 8.7 G |
| 9.6 | | 49.2 | 54.1 | |
| 8.4 | | 51.2 | 40.6 | 8.7 |
| 9.6 | | 52.2 | 10.0 | |
| 10.1 | | 55.2 | 44.8 | |
| 10.1 | 32 | 0.2 | 48.1 | |
| 9.2 | | 0.7 | 18.2 | |
| 9.6 | | 5.7 | 10.1 | |
| 10.0 | | 6.2 | 24.7 | |
| 9.8 | | 9.2 | 48.6 | |
| 8.5 | | 10.7 | 32.9 | 8.6 G |
| 9.6 | | 14.7 | 18.3 | |
| 10.1 | | 14.7 | 45.1 | |
| 9.0 | | 17.7 | 16.1 | |
| 9.6 | | 19.7 | 18.6 | |
| 9.5 | | 21.2 | 11.1 | |
| 9.6 | | 21.2 | 41.2 | |
| 10.0 | | 25.2 | 40.3 | |
| 10.0 | | 36.2 | 23.0 | |
| 9.6 | | 44.2 | 55.5 | |
| 10.1 | | 47.7 | 34.3 | |
| 9.0 | | 51.5 | 2.5 | |
| 8.8 | | 56.2 | 59.4 | 9.5 |
| 9.0 | | 58.7 | 52.0 | 9.5 |
| 9.6 | | 59.7 | 53.4 | |
| 9.2 | 33 | 1.2 | 53.3 | |
| 9.5 | | 8.2 | 48.1 | |
| 9.2 | | 10.2 | 53.5 | |
| 10.0 | | 10.4 | 12.9 | |
| 9.4 | | 10.7 | 46.5 | |
| 9.1 | | 14.8 | 1.0 | |
| 8.8 | | 27.2 | 30.5 | 9.0 |
| 10.1 | | 28.2 | 29.2 | |
| 9.6 | | 34.7 | 20.6 | |
| 9.0 | | 34.7 | 48.0 | 9.0 |
| 9.6 | | 38.0 | 0.0 | |
| 8.6 | | 38.2 | 50.1 | 9.0 |
| 9.2 | | 43.2 | 14.6 | |

## 3901—3960.

| mag. | 10ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 10.0 | 33 | 44.2 | 26.3 | |
| 9.8 | | 44.2 | 47.6 | |
| 8.2 | | 49.8 | 59.7 | 9.0 |
| 10.1 | | 50.1 | 47.4 | |
| 10.1 | | 50.2 | 11.6 | |
| 10.1 | | 52.7 | 36.4 | |
| 10.1 | | 56.2 | 40.0 | |
| 10.1 | | 59.2 | 34.1 | |
| 7.6 | 34 | 1.2 | 27.8 | 7.7 GSg |
| 9.8 | | 1.7 | 56.2 | |
| 9.2 | | 6.7 | 8.9 | |
| 8.8 | | 10.2 | 12.7 | 7.7 Gg |
| 9.4 | | 18.2 | 26.0 | |
| 9.2 | | 18.2 | 9.0 | 9.0 |
| 5.8 | | 19.3 | 57.4 | 5.0 GSt |
| 6.8 | | 26.3 | 57.5 | 7.5 GSt |
| 9.8 | | 30.2 | 39.5 | |
| 9.8 | | 33.2 | 29.7 | |
| 10.1 | | 38.2 | 34.5 | |
| 9.4 | | 40.2 | 7.0 | 10.0 |
| 10.1 | | 42.7 | 28.7 | |
| 9.5 | | 44.2 | 9.8 | 9.5 |
| 10.1 | | 46.7 | 26.1 | |
| 10.1 | | 52.2 | 36.7 | |
| 10.0 | | 54.2 | 29.5 | |
| 10.0 | | 59.5 | 58.2 | |
| 10.1 | 35 | 3.1 | 27.1 | |
| 9.8 | | 3.2 | 51.2 | |
| 9.8 | | 5.2 | 42.5 | |
| 8.8 | | 11.7 | 45.1 | 9.0 |
| 10.1 | | 20.2 | 37.2 | |
| 9.8 | | 36.2 | 26.5 | |
| 9.5 | | 42.2 | 35.2 | |
| 9.4 | | 50.2 | 14.3 | |
| 10.1 | | 58.7 | 26.5 | |
| 10.0 | 36 | 5.2 | 6.8 | |
| 10.1 | | 8.7 | 27.0 | |
| 10.1 | | 9.8 | 53.2 | |
| 9.5 | | 9.8 | 41.2 | |
| 9.8 | | 10.3 | 2.2 | |
| 9.5 | | 26.8 | 46.0 | |
| 9.8 | | 28.3 | 27.6 | |
| 9.6 | | 29.3 | 54.5 | |
| 9.0 | | 33.2 | 1.2 | |
| 8.8 | | 34.3 | 10.2 | 9.5 |
| 8.6 | | 39.3 | 8.7 | 9.0 |
| 10.0 | | 41.3 | 14.6 | |
| 9.6 | | 42.3 | 24.8 | |
| 10.0 | | 47.8 | 33.2 | |
| 10.1 | | 48.3 | 55.2 | |
| 9.6 | | 52.3 | 30.6 | |
| 9.2 | | 53.3 | 57.8 | |
| 10.0 | 37 | 7.3 | 35.4 | |
| 9.6 | | 12.3 | 56.4 | |
| 10.0 | | 15.8 | 28.1 | |
| 9.2 | | 17.3 | 16.4 | |
| 10.1 | | 22.3 | 51.6 | |
| 10.1 | | 24.8 | 16.9 | |
| 10.0 | | 27.3 | 48.4 | |
| 10.0 | | 32.3 | 9.0 | |

## 3961—4020.

| mag. | 10ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 10.0 | 37 | 33.3 | 21.6 | |
| 8.8 | | 33.3 | 45.8 | 8.8 |
| 10.0 | | 40.3 | 10.2 | |
| 10.1 | | 45.3 | 44.8 | |
| 10.0 | | 53.3 | 24.2 | |
| 10.0 | | 58.3 | 3.6 | |
| 9.1 | 38 | 0.3 | 20.8 | 8.8 |
| 9.6 | | 7.3 | 26.2 | 9.5 |
| 10.1 | | 11.3 | 24.3 | |
| 10.1 | | 17.8 | 51.4 | |
| 9.4 | | 22.3 | 18.1 | |
| 9.4 | | 22.3 | 1.2 | |
| 10.1 | | 29.8 | 36.9 | |
| 8.8 | | 32.3 | 44.1 | |
| 9.8 | | 32.8 | 11.2 | |
| 9.4 | | 33.3 | 23.2 | |
| 10.1 | | 36.3 | 9.8 | |
| 10.0 | | 42.3 | 43.6 | |
| 10.0 | | 48.3 | 47.8 | |
| 10.1 | | 48.8 | 45.8 | |
| 10.0 | | 50.8 | 44.0 | |
| 9.8 | | 51.8 | 44.4 | |
| 10.0 | | 53.8 | 20.7 | |
| 10.1 | | 54.3 | 38.9 | |
| 10.1 | | 54.8 | 6.2 | |
| 9.2 | | 59.8 | 57.6 | |
| 9.4 | 39 | 0.3 | 29.2 | |
| 9.0 | | 0.8 | 15.4 | 9.0 |
| 10.1 | | 1.8 | 48.2 | |
| 9.2 | | 2.8 | 6.0 | |
| 9.0 | | 13.3 | 53.9 | 8.5 |
| 9.6 | | 15.3 | 6.2 | |
| 9.5 | | 17.3 | 37.2 | |
| 10.1 | | 21.8 | 40.1 | |
| 10.0 | | 24.8 | 30.0 | |
| 9.6 | | 24.8 | 36.0 | |
| 10.0 | | 34.8 | 33.6 | |
| 10.0 | | 36.3 | 29.2 | |
| 10.1 | | 38.8 | 22.2 | |
| 9.6 | | 42.8 | 14.1 | |
| 9.4 | | 43.8 | 2.8 | |
| 9.5 | | 45.8 | 27.4 | |
| 9.6 | | 55.8 | 39.6 | |
| 9.2 | 40 | 2.8 | 23.4 | 9.5 |
| 10.1 | | 4.8 | 11.2 | |
| 10.1 | | 5.8 | 2.0 | |
| 9.4 | | 10.3 | 50.5 | |
| 9.5 | | 10.8 | 55.8 | |
| 9.2 | | 12.3 | 21.8 | 9.0 |
| 10.1 | | 13.3 | 29.9 | |
| 10.0 | | 15.3 | 33.2 | |
| 9.5 | | 16.3 | 36.2 | |
| 9.6 | | 16.3 | 53.2 | |
| 10.1 | | 18.5 | 2.0 | |
| 10.1 | | 19.3 | 23.1 | |
| 9.8 | | 21.3 | 52.4 | |
| 10.0 | | 24.8 | 15.4 | |
| 8.8 | | 26.3 | 37.1 | 9.0 |
| 10.0 | | 27.8 | 18.2 | |
| 9.6 | | 44.3 | 4.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 20 | 57 | 7.6 |
| | 30 | 59 | 7.7 |
| | 40 | 61 | 7.9 |
| | 50 | 63 | 8.0 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 40 | 61 | 7.9 |
| | 50 | 63 | 8.0 |
| 11 | 0 | 65 | 8.1 |

## 4021—4080.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.2 | 40 | 58.8 | 31 8 | |
| 9.6 | 41 | 8.3 | 34.1 | 9.5 |
| 9.6 | | 23.3 | 39.0 | |
| 9.6 | | 34.3 | 58.2 | |
| 9.8 | | 40.0 | 57.9 | |
| 9.5 | | 46.8 | 25.2 | |
| 9.5 | | 50.3 | 10.7 | 10.0 |
| 9.6 | | 51.3 | 2.4 | |
| 8.6 | | 51.3 | 10.4 | 8.5 |
| 10.0 | | 53.3 | 25.8 | |
| 10.0 | | 55.8 | 19.7 | |
| 10.1 | 42 | 0.3 | 40.8 | |
| 10.1 | | 2.3 | 43.0 | |
| 10.0 | | 2.8 | 7.2 | |
| 10.0 | | 3.8 | 36.8 | |
| 9.5 | | 8.3 | 50.4 | |
| 9.3 | | 8.3 | 13.8 | |
| 9.6 | | 15.3 | 12.8 | |
| 10.1 | | 16.8 | 12.1 | |
| 10.1 | | 16.8 | 52.2 | |
| 10.0 | | 21.3 | 22.1 | |
| 10.1 | | 21.8 | 22.4 | |
| 10.0 | | 22.3 | 25.6 | |
| 9.6 | | 23.8 | 3.4 | |
| 8.6 | | 23.8 | 2.1 | 8.5 |
| 10.0 | | 33.3 | 54.8 | |
| 10.0 | | 35.8 | 12.5 | |
| 9.8 | | 38.3 | 36.8 | 9.5 |
| 9.4 | | 43.8 | 7.0 | |
| 9.8 | | 44.8 | 33.8 | |
| 9.5 | | 57.3 | 41.8 | |
| 9.8 | 43 | 0.3 | 29.4 | |
| 9.8 | | 5.3 | 23.0 | |
| 10.1 | | 6.3 | 28.2 | |
| 9.5 | | 8.3 | 25.4 | |
| 10.0 | | 11.3 | 9.3 | |
| 10.0 | | 13.3 | 13.0 | |
| 10.0 | | 14.3 | 5.2 | |
| 9.6 | | 16.3 | 29.3 | 9.2 |
| 9.4 | | 18.8 | 38.6 | |
| 10.0 | | 22.3 | 40.7 | |
| 10.1 | | 23.3 | 10.2 | |
| 9.8 | | 39.3 | 49.5 | |
| 8.0 | | 41.8 | 41.9 | 8.5 |
| 9.6 | | 42.3 | 0.1 | |
| 10.1 | | 42.3 | 13.3 | |
| 9.1 | | 52.3 | 3.3 | |
| 9.6 | | 52.3 | 43.7 | |
| 9.8 | | 53.5 | 12.3 | |
| 9.2 | 44 | 1.8 | 52.6 | 9.5 |
| 9.8 | | 2.8 | 30.9 | |
| 10.1 | | 7.2 | 0.2 | |
| 10.0 | | 11.3 | 30.3 | |
| 9.6 | | 22.3 | 10.3 | |
| 9.6 | | 30.3 | 19.6 | |
| 9.4 | | 37.3 | 30.4 | |
| 9.8 | | 37.3 | 5.1 | |
| 10.0 | | 39.3 | 37.6 | |
| 9.6 | | 39.8 | 47.3 | 9.5 |
| 9.6 | | 42.3 | 11.8 | 9.0 |

## 4081—4140.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.1 | 44 | 43.8 | 53.9 | |
| 9.6 | | 44.3 | 10.2 | |
| 10.0 | | 44.3 | 29.7 | |
| 10.1 | | 44.8 | 33.7 | |
| 10.0 | | 47.8 | 39.4 | |
| 9.5 | | 51.3 | 30.5 | |
| 10.0 | | 54.3 | 40.3 | |
| 10.1 | | 58.3 | 20.8 | |
| 9.1 | 45 | 10.3 | 32.8 | |
| 9.8 | | 11.8 | 8.6 | |
| 10.0 | | 13.8 | 56.9 | |
| 9.1 | | 22.3 | 56.1 | |
| 9.4 | | 26.8 | 36.7 | |
| 9.6 | | 27.3 | 19.6 | |
| 10.1 | | 32.3 | 14.0 | |
| 10.1 | | 44.8 | 20.1 | |
| 9.6 | | 48.8 | 41.6 | |
| 10.0 | | 51.3 | 13.9 | |
| 10.0 | | 53.8 | 11.1 | |
| 9.6 | | 56.8 | 6.3 | |
| 10.1 | | 59.8 | 39.2 | |
| 9.5 | 46 | 1.8 | 12.8 | |
| 10.1 | | 9.8 | 11.2 | |
| 8.8 | | 16.8 | 38.9 | 9.5 |
| 9.6 | | 21.8 | 4.6 | |
| 10.1 | | 24.8 | 34.8 | |
| 10.0 | | 31.3 | 4.8 | |
| 8.8 | | 44.8 | 51.1 | 9.8 |
| 8.0 | | 46.8 | 28.4 | 7.5 GSct |
| 10.0 | | 49.3 | 11.6 | |
| 10.0 | | 51.8 | 40.0 | |
| 9.6 | | 55.8 | 4.0 | 9.5 |
| 10.0 | | 56.3 | 18.4 | |
| 10.0 | | 57.8 | 56.3 | |
| 9.4 | 47 | 9.8 | 18.8 | |
| 9.8 | | 26.8 | 16.2 | |
| 10.0 | | 32.3 | 30.1 | |
| 9.4 | | 34.3 | 6.8 | |
| 10.0 | | 38.8 | 21.3 | |
| 9.4 | | 50.8 | 34.8 | |
| 9.6 | 48 | 0.3 | 12.3 | |
| 10.0 | | 0.8 | 45.3 | |
| 10.0 | | 15.3 | 21.1 | |
| 9.6 | | 15.8 | 43.1 | |
| 9.6 | | 19.3 | 42.9 | |
| 9.2 | | 20.3 | 23.6 | |
| 9.8 | | 29.9 | 58.5 | |
| 8.6 | | 30.3 | 36.4 | 9.0 |
| 10.0 | | 34.1 | 35.8 | |
| 9.6 | | 36.3 | 4.2 | |
| 8.8 | | 39.3 | 48.9 | 9.5 |
| 10.0 | | 41.3 | 21.6 | |
| 10.1 | | 48.8 | 44.8 | |
| 10.0 | | 49.3 | 20.7 | |
| 9.8 | | 53.8 | 52.2 | |
| 10.0 | | 55.8 | 6 8 | |
| 9.5 | | 59.8 | 11.4 | |
| 9.4 | 49 | 5.3 | 3.1 | |
| 8.3 | | 6.3 | 18.4 | 9.0 |
| 9.2 | | 14.3 | 28.1 | |

## 4141—4200.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.8 | 49 | 15.8 | 7.1 | 9.0 |
| 9.6 | | 19.3 | 5.7 | |
| 10.1 | | 20.8 | 20.6 | |
| 9.6 | | 21.3 | 46.8 | |
| 8.1 | | 23.8 | 57.3 | 7.5 GSt |
| 10.1 | | 27.8 | 30.8 | |
| 10.1 | | 31.2 | 28.1 | |
| 10.1 | | 31.8 | 22.9 | |
| 10.0 | | 33.8 | 3.1 | |
| 10.0 | | 37.3 | 20.6 | |
| 9.6 | | 42.8 | 43.2 | |
| 10.0 | | 44.3 | 50.7 | |
| 9.8 | | 46.8 | 28.6 | |
| 9.8 | | 53.8 | 30.9 | |
| 10.1 | | 54.3 | 31.1 | |
| 10.1 | | 55.8 | 39.6 | |
| 10.0 | 50 | 1.8 | 30.2 | |
| 9.8 | | 3.8 | 23.7 | |
| 9.5 | | 10.3 | 15.1 | |
| 9.6 | | 12.3 | 13.0 | |
| 9.6 | | 18.3 | 47.4 | |
| 10.0 | | 18.8 | 17.4 | |
| 10.0 | | 20.3 | 49.7 | |
| 10.0 | | 20.8 | 35.4 | |
| 8.8 | | 23.6 | 59.1 | 9.0 |
| 10.1 | | 24.8 | 44.3 | |
| 9.1 | | 25.1 | 57.8 | |
| 10.1 | | 30.3 | 41.5 | |
| 10.1 | | 33.8 | 31.4 | |
| 10.1 | | 41.3 | 40.5 | |
| 9.8 | | 42.3 | 46.1 | |
| 9.1 | | 44.3 | 34.0 | 9.0 |
| 8.6 | | 45.3 | 53.9 | 8.0 |
| 9.2 | | 53.8 | 0.1 | |
| 9.6 | | 54.3 | 47.1 | |
| 10.1 | | 54.8 | 10.1 | |
| 10.0 | | 56.8 | 21.7 | |
| 8.8 | 51 | 0.3 | 13.7 | 8.0 |
| 10.0 | | 0.3 | 45.0 | |
| 10.1 | | 2.2 | 51.3 | |
| 10.0 | | 11.8 | 53.1 | |
| 8.2 | | 14.3 | 12.3 | 8.5 |
| 10.1 | | 17.2 | 48.7 | |
| 9.4 | | 19.3 | 33.1 | |
| 9.2 | | 21.8 | 31.4 | 9.5 |
| 10.1 | | 26.8 | 20.2 | |
| 10.1 | | 31.2 | 43.4 | |
| 9.6 | | 36.3 | 3.3 | |
| 10.0 | | 46.3 | 35.5 | |
| 10.1 | | 48.2 | 36.4 | |
| 9.8 | | 49.3 | 39.3 | |
| 10.1 | | 52.3 | 23.7 | |
| 8.8 | | 53.8 | 47.7 | |
| 9.6 | | 57.8 | 43.8 | |
| 9.6 | 52 | 7.3 | 48.3 | |
| 10.1 | | 9.8 | 13.0 | |
| 10.1 | | 20.3 | 35.7 | |
| 10.0 | | 21.8 | 31.3 | |
| 10.0 | | 21.8 | 47.5 | |
| 10.1 | | 43.8 | 26.2 | |

## 4201—4260.

| mag. | 10h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 52 | 45.5 | 57.3 | |
| 9.2 | | 50.3 | 25.1 | |
| 9.6 | 53 | 5.8 | 52.3 | |
| 9.4 | | 6.8 | 3.9 | |
| 10.0 | | 8.8 | 18.0 | |
| 10.1 | | 12.7 | 59.7 | |
| 10.0 | | 13.3 | 42.0 | |
| 8.8 | | 22.3 | 16.2 | 9.0 |
| 8.6 | | 28.3 | 51.5 | 9.5 |
| 10.0 | | 33.8 | 38.7 | |
| 9.8 | | 34.8 | 30.4 | |
| 9.4 | | 35.8 | 12.0 | |
| 10.0 | | 36.3 | 7.7 | |
| 9.6 | | 39.3 | 28.5 | |
| 9.6 | | 40.8 | 27.3 | |
| 10.1 | | 42.3 | 27.8 | |
| 8.2 | | 45.8 | 13.0 | 9.0 |
| 9.0 | 54 | 0.3 | 48.2 | 9.5 |
| 9.1 | | 1.3 | 49.3 | 9.5 |
| 9.8 | | 8.3 | 34.1 | |
| 10.1 | | 14.2 | 47.6 | |
| 8.4 | | 19.3 | 21.5 | 9.0 |
| 10.1 | | 25.8 | 41.4 | |
| 10.1 | | 29.3 | 42.1 | |
| 9.6 | | 33.3 | 29.7 | |
| 9.0 | | 43.9 | 57.1 | 10.0 |
| 8.6 | | 49.3 | 59.9 | 9.0 |
| 10.1 | | 52.3 | 40.5 | |
| 9.6 | | 53.4 | 59.1 | |
| 9.6 | | 55.8 | 27.6 | |
| 9.5 | 55 | 0.3 | 33.1 | |
| 9.6 | | 0.3 | 13.7 | |
| 9.4 | | 1.8 | 20.1 | |
| 10.0 | | 9.8 | 10.6 | |
| 9.6 | | 11.4 | 10.7 | |
| 10.0 | | 11.8 | 1.3 | |
| 9.6 | | 16.1 | 59.0 | |
| 8.3 | | 22.3 | 41.1 | 9.0 |
| 9.2 | | 23.9 | 11.5 | |
| 10.1 | | 31.2 | 19.1 | |
| 9.4 | | 39.4 | 24.2 | |
| 9.5 | | 40.7 | 1.2 | |
| 9.6 | | 43.9 | 14.1 | |
| 10.1 | | 47.8 | 31.1 | |
| 10.1 | | 53.8 | 25.9 | |
| 9.1 | | 54.1 | 54.8 | |
| 10.1 | | 54.3 | 14.7 | |
| 10.1 | | 59.2 | 33.5 | |
| 9.6 | 56 | 5.6 | 33.0 | |
| 9.8 | | 6.1 | 56.4 | |
| 9.6 | | 20.1 | 44.4 | |
| 9.8 | | 23.3 | 53.2 | |
| 10.0 | | 26.6 | 30.1 | |
| 9.6 | | 30.1 | 20.8 | |
| 9.6 | | 31.9 | 5.4 | |
| 10.0 | | 49.4 | 16.0 | |
| 9.5 | 57 | 0.9 | 21.6 | |
| 9.6 | | 1.4 | 11.0 | |
| 9.8 | | 2.9 | 55.4 | |
| 10.0 | | 5.9 | 36.0 | |



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## 4261—4320.

| mag. | 10h.–11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 57 | 12·4 | 32·9 | |
| 9·8 | | 12·4 | 56·0 | |
| 10·0 | | 17·4 | 31·6 | |
| 8·3 | | 19·9 | 46·3 | 8·5 GSt |
| 9·6 | | 21·9 | 5·7 | |
| 10·0 | | 41·9 | 3·7 | |
| 9·8 | | 43·4 | 18·1 | |
| 9·4 | | 51·4 | 45·1 | |
| 9·8 | | 51·4 | 43·9 | : |
| 9·1 | | 51·9 | 5·1 | |
| 9·6 | | 52·9 | 22·9 | |
| 9·6 | | 52·9 | 23·3 | |
| 10·0 | | 54·3 | 1·2 | |
| 10·0 | 58 | 2·9 | 12·1 | |
| 10·0 | | 5·9 | 31·1 | |
| 9·8 | | 11·4 | 47·6 | |
| 10·0 | | 23·9 | 3·2 | |
| 9·0 | | 25·9 | 7·7 | |
| 10·0 | | 28·3 | 23·4 | |
| 10·0 | | 31·8 | 23·0 | |
| 9·0 | | 32·8 | 24·2 | 9·0 |
| 10·0 | | 33·3 | 42·1 | |
| 10·0 | | 35·8 | 44·1 | |
| 9·5 | | 46·8 | 20·1 | |
| 9·5 | | 49·3 | 11·0 | 9·0 |
| 10·0 | | 59·3 | 27·0 | |
| 9·8 | 59 | 3·8 | 24·5 | |
| 9·8 | | 11·3 | 7·5 | |
| 9·4 | | 14·3 | 57·2 | |
| 10·0 | | 15·8 | 1·7 | |
| 9·3 | | 18·8 | 40·1 | |
| 10·0 | | 19·5 | 58·5 | |
| 10·0 | | 20·3 | 49·3 | |
| 9·8 | | 20·8 | 34·2 | |
| 9·6 | | 26·3 | 19·0 | |
| 9·8 | | 29·3 | 39·4 | |
| 10·0 | | 37·8 | 0·2 | |
| 10·0 | | 41·8 | 33·0 | |
| 10·0 | | 43·8 | 6·5 | |
| 9·8 | 0 | 5·3 | 46·8 | |
| 9·8 | | 5·6 | 2·8 | |
| 10·0 | | 13·8 | 15·6 | |
| 9·8 | | 13·8 | 42·3 | |
| 10·0 | | 15·8 | 42·6 | |
| 9·8 | | 17·8 | 46·8 | |
| 10·0 | | 19·8 | 49·6 | |
| 9·6 | | 22·8 | 29·2 | |
| 10·0 | | 32·8 | 59·0 | |
| 9·4 | | 34·8 | 42·7 | |
| 9·4 | | 44·3 | 32·4 | |
| 10·0 | 1 | 1·3 | 32·8 | |
| 10·0 | | 2·8 | 25·0 | |
| 10·0 | | 7·8 | 40·0 | |
| 10·0 | | 8·6 | 58·7 | |
| 10·0 | | 18·3 | 24·6 | |
| 9·6 | | 26·3 | 45·5 | |
| 10·0 | | 27·8 | 3·8 | |
| 10·0 | | 29·3 | 2·2 | |
| 9·6 | | 31·3 | 44·2 | |
| 10·0 | | 31·6 | 9·4 | |

## 4321—4380.

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·3 | 1 | 34·1 | 22·9 | 9·0 |
| 10·0 | | 44·1 | 3·4 | |
| 10·0 | | 46·6 | 55·1 | |
| 9·6 | | 49·6 | 0·0 | |
| 9·1 | | 56·6 | 37·0 | 8·8 |
| 10·0 | 2 | 1·6 | 47·3 | |
| 10·0 | | 3·1 | 51·6 | |
| 9·8 | | 7·6 | 46·2 | |
| 10·0 | | 8·6 | 12·1 | |
| 10·0 | | 22·6 | 58·7 | |
| 9·1 | | 23·1 | 4·0 | |
| 9·6 | | 25·1 | 9·3 | |
| 9·8 | | 41·1 | 42·2 | |
| 9·5 | | 45·1 | 6·1 | |
| 9·6 | | 54·6 | 27·9 | |
| 10·0 | 3 | 1·1 | 0·8 | |
| 9·6 | | 14·6 | 2·3 | |
| 9·0 | | 15·1 | 40·6 | 8·5 G |
| 8·6 | | 19·6 | 14·4 | 9·0 |
| 9·4 | | 24·6 | 37·2 | 9·8 |
| 10·0 | | 29·6 | 8·9 | |
| 10·0 | | 29·6 | 44·9 | |
| 10·0 | | 32·1 | 22·0 | |
| 10·0 | | 36·6 | 28·3 | |
| 10·0 | | 42·6 | 24·6 | |
| 9·5 | | 43·6 | 29·8 | |
| 10·0 | | 47·6 | 46·1 | |
| 9·8 | | 48·6 | 23·8 | |
| 10·0 | | 51·1 | 53·1 | |
| 10·0 | | 53·1 | 54·2 | |
| 10·0 | 4 | 1·6 | 40·5 | |
| 9·6 | | 5·1 | 23·7 | |
| 10·0 | | 5·6 | 45·2 | |
| 7·7 | | 11·4 | 2·3 | 7·5 GSt |
| 8·8 | | 15·6 | 37·6 | 9·0 |
| 10·0 | | 19·6 | 10·7 | |
| 10·0 | | 23·6 | 9·9 | |
| 10·0 | | 24·1 | 57·2 | |
| 10·0 | | 30·1 | 22·7 | |
| 8·9 | | 31·0 | 33·3 | 8·0 G |
| 10·0 | | 35·0 | 2·9 | |
| 10·0 | | 39·5 | 57·2 | |
| 9·4 | | 46·0 | 33·4 | |
| 9·5 | | 46·0 | 18·8 | |
| 9·6 | | 50·5 | 47·7 | |
| 10·0 | | 56·0 | 23·8 | |
| 10·0 | 5 | 0·0 | 28·3 | |
| 9·8 | | 1·4 | 1·2 | |
| 9·8 | | 6·0 | 38·2 | |
| 9·4 | | 11·0 | 39·5 | 9·5 |
| 9·8 | | 14·5 | 41·6 | |
| 10·0 | | 20·0 | 43·3 | |
| 9·0 | | 29·5 | 36·3 | 9·0 |
| 9·8 | | 34·5 | 27·1 | |
| 10·0 | | 36·0 | 33·9 | |
| 9·8 | | 39·5 | 3·3 | |
| 9·8 | | 40·5 | 35·1 | |
| 10·0 | | 46·6 | 27·1 | |
| 9·4 | | 51·5 | 45·8 | |
| 10·0 | | 54·6 | 11·8 | |

## 4381—4440.

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 6 | 7·5 | 5·1 | |
| 10·0 | | 11·6 | 36·3 | |
| 10·0 | | 12·0 | 57·0 | |
| 10·0 | | 13·0 | 21·5 | |
| 10·0 | | 27·5 | 53·0 | |
| 9·3 | | 39·5 | 50·1 | 9·5 |
| 9·6 | | 50·5 | 44·5 | |
| 9·8 | 7 | 5·5 | 58·7 | |
| 9·6 | | 12·5 | 17·4 | 9·5 |
| 9·6 | | 17·5 | 36·4 | |
| 9·4 | | 25·5 | 41·1 | 9·0 |
| 10·0 | | 31·5 | 26·8 | |
| 10·0 | | 47·0 | 6·1 | |
| 9·8 | | 48·0 | 43·0 | |
| 9·8 | | 51·5 | 43·4 | |
| 10·0 | | 54·0 | 5·0 | |
| 9·0 | | 56·5 | 45·1 | 9·0 |
| 9·6 | | 57·5 | 45·3 | |
| 9·6 | 8 | 3·0 | 37·0 | |
| 8·6 | | 9·5 | 50·2 | 8·5 |
| 10·0 | | 12·0 | 26·2 | |
| 8·5 | | 14·0 | 49·9 | 8·0 |
| 9·8 | | 14·5 | 6·9 | |
| 9·2 | | 18·0 | 42·1 | |
| 9·8 | | 30·8 | 10·7 | |
| 9·6 | | 31·8 | 8·7 | |
| 9·6 | | 35·8 | 23·5 | |
| 8·7 | | 42·3 | 28·4 | 8·5 G |
| 9·5 | | 43·8 | 44·3 | |
| 9·8 | | 59·3 | 38·9 | |
| 10·0 | 9 | 13·0 | 38·7 | |
| 9·6 | | 13·3 | 15·7 | |
| 9·8 | | 27·8 | 55·6 | |
| 9·6 | | 29·3 | 44·6 | |
| 9·6 | | 38·3 | 28·7 | |
| 10·0 | | 46·8 | 13·0 | |
| 8·9 | | 53·8 | 3·2 | 9·5 |
| 9·0 | 10 | 4·8 | 44·5 | |
| 8·2 | | 23·3 | 31·6 | 8·0 GSt |
| 9·5 | | 25·8 | 32·7 | |
| 9·6 | | 27·3 | 32·5 | 10·0 |
| 8·6 | | 31·8 | 16·2 | 8·0 GSt |
| 9·6 | | 32·3 | 10·1 | |
| 10·0 | | 32·8 | 50·4 | |
| 9·8 | | 38·4 | 2·3 | |
| 10·0 | | 44·8 | 42·3 | |
| 8·6 | | 59·8 | 52·5 | 8·0 G |
| 9·6 | 11 | 1·8 | 4·1 | |
| 10·0 | | 4·1 | 2·3 | |
| 9·8 | | 11·0 | 29·0 | |
| 10·0 | | 11·8 | 8·1 | |
| 9·8 | | 15·8 | 21·5 | |
| 9·5 | | 16·8 | 32·6 | |
| 7·6 | | 21·3 | 5·6 | 7·5 GSt |
| 9·6 | | 24·3 | 34·6 | |
| 7·8 | | 27·0 | 56·5 | 8·0 |
| 9·2 | | 27·3 | 29·0 | |
| 10·0 | | 36·3 | 40·7 | |
| 9·4 | | 38·8 | 48·2 | |
| 9·6 | | 41·8 | 9·2 | |

## 4441—4500.

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 11 | 43·3 | 23·7 | |
| 9·8 | | 48·3 | 22·0 | |
| 9·3 | | 54·8 | 6·1 | 9·5 |
| 9·4 | | 57·3 | 15·6 | |
| 10·0 | 12 | 1·6 | 53·5 | |
| 9·4 | | 12·1 | 26·3 | |
| 9·8 | | 16·6 | 23·0 | |
| 9·4 | | 25·6 | 30·7 | |
| 9·6 | | 29·6 | 25·0 | |
| 10·0 | | 37·6 | 48·9 | |
| 9·8 | | 40·6 | 10·5 | |
| 10·0 | | 41·3 | 59·5 | |
| 10·0 | | 47·1 | 23·2 | |
| 9·8 | | 51·1 | 33·3 | |
| 10·0 | | 54·1 | 14·2 | |
| 10·0 | | 59·1 | 50·7 | |
| 10·0 | 13 | 2·1 | 2·2 | |
| 9·4 | | 11·6 | 44·3 | 10·0 |
| 10·0 | | 24·6 | 53·1 | |
| 10·0 | | 24·6 | 31·1 | |
| 9·0 | | 25·8 | 58·4 | 8·0 |
| 9·8 | | 27·1 | 46·0 | |
| 10·0 | | 32·6 | 18·9 | |
| 9·2 | | 42·1 | 40·2 | 8·5 |
| 10·0 | | 45·1 | 36·6 | |
| 9·4 | | 47·6 | 35·1 | 9·5 |
| 9·0 | 14 | 0·6 | 3·6 | 9·0 G |
| 9·5 | | 3·1 | 38·1 | |
| 9·6 | | 11·1 | 58·6 | |
| 9·8 | | 13·1 | 8·8 | |
| 10·0 | | 20·1 | 34·7 | |
| 10·0 | | 21·6 | 15·2 | |
| 9·2 | | 30·6 | 10·2 | |
| 10·0 | | 32·1 | 46·5 | |
| 10·0 | | 37·1 | 12·2 | |
| 9·8 | | 39·1 | 26·1 | |
| 10·0 | | 42·1 | 30·1 | |
| 9·2 | | 42·6 | 13·9 | |
| 10·0 | | 43·4 | 59·1 | |
| 9·2 | | 49·1 | 0·9 | |
| 10·0 | | 57·1 | 51·1 | |
| 8·8 | 15 | 9·6 | 15·1 | |
| 9·6 | | 10·6 | 19·0 | |
| 9·4 | | 19·1 | 38·6 | 9·5 |
| 9·8 | | 23·6 | 5·0 | |
| 9·6 | | 30·1 | 50·4 | |
| 9·3 | | 35·1 | 40·5 | 9·0 |
| 10·0 | | 44·0 | 1·1 | |
| 9·8 | | 48·1 | 13·4 | |
| 9·8 | 16 | 4·6 | 36·3 | 9·5 |
| 10·0 | | 10·4 | 18·1 | |
| 9·8 | | 14·2 | 2·7 | |
| 9·6 | | 14·4 | 51·4 | |
| 9·6 | | 16·4 | 22·1 | |
| 10·0 | | 20·4 | 18·0 | |
| 10·0 | | 29·4 | 56·9 | |
| 9·8 | | 31·4 | 36·7 | |
| 10·0 | | 32·4 | 15·4 | |
| 9·4 | | 50·4 | 20·5 | |
| 10·0 | 17 | 7·9 | 21·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 50 | 63 | 8·0 |
| 11 | 0 | 65 | 8·1 |
| | 10 | 67 | 8·2 |
| | 20 | 69 | 8·2 |

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| 25 prec. | | a | δ |
|---|---|---|---|
| h | m | s | ' |
| | | + | − |
| 11 | 10 | 67 | 8·2 |
| | 20 | 69 | 8·2 |
| | 30 | 71 | 8·3 |
| | 40 | 73 | 8·3 |

## 4501—4560.

| mag. | 11h m | s | −54° ' | |
|---|---|---|---|---|
| 10·0 | 17 | 19·4 | 9·7 | |
| 9·4 | | 19·9 | 35·8 | |
| 9·8 | | 26·9 | 32·5 | |
| 10·0 | | 26·9 | 1·9 | |
| 10·0 | | 31·4 | 23·9 | |
| 10·0 | | 40·9 | 3·3 | |
| 9·8 | | 43·4 | 29·5 | |
| 9·0 | | 49·4 | 9·7 | |
| 10·0 | | 51·8 | 1·0 | |
| 9·4 | | 54·4 | 42·8 | |
| 10·0 | 18 | 1·9 | 0·4 | |
| 10·0 | | 8·9 | 15·4 | |
| 9·4 | | 11·9 | 4·7 | |
| 9·4 | | 31·9 | 42·2 | |
| 10·0 | | 39·4 | 4·7 | |
| 9·4 | | 39·9 | 27·1 | 9·0 |
| 10·0 | | 41·8 | 37·1 | |
| 9·8 | | 48·9 | 52·6 | |
| 9·6 | | 56·4 | 36·3 | |
| 9·8 | 19 | 12·4 | 26·2 | 9·2 |
| 9·5 | | 17·4 | 59·9 | |
| 10·0 | | 26·4 | 19·8 | |
| 9·6 | | 28·9 | 9·6 | |
| 9·8 | | 37·4 | 28·4 | 9·2 |
| 9·3 | | 38·9 | 22·0 | 9·5 |
| 9·6 | | 45·4 | 21·8 | |
| 10·0 | | 55·4 | 2·5 | |
| 9·0 | | 55·9 | 42·0 | |
| 10·0 | | 57·9 | 43·6 | |
| 9·6 | 20 | 3·9 | 40·1 | |
| 9·8 | | 4·4 | 54·4 | |
| 10·0 | | 9·8 | 43·2 | |
| 9·1 | | 10·9 | 19·6 | 9·8 |
| 10·0 | | 18·7 | 50·2 | |
| 10·0 | | 20·2 | 50·5 | |
| 9·8 | | 27·7 | 56·0 | 9·5 |
| 10·0 | | 35·7 | 23·0 | |
| 8·8 | | 44·7 | 47·3 | 9·5 |
| 9·5 | | 45·2 | 3·8 | |
| 9·6 | | 59·2 | 50·2 | 9·5 |
| 9·6 | 21 | 8·7 | 10·4 | 9·5 |
| 10·0 | | 10·7 | 9·7 | |
| 9·4 | | 10·7 | 9·8 | 9·0 |
| 9·8 | | 15·7 | 47·4 | |
| 10·0 | | 22·2 | 0·8 | |
| 9·4 | | 23·7 | 31·7 | |
| 9·8 | | 40·2 | 33·9 | |
| 9·8 | | 54·7 | 51·4 | |
| 10·0 | 22 | 0·2 | 26·9 | |
| 10·0 | | 8·7 | 12·0 | |
| 10·0 | | 24·2 | 30·5 | |
| 9·8 | | 31·7 | 4·2 | |
| 9·6 | | 36·2 | 24·1 | |
| 10·0 | | 38·7 | 50·4 | |
| 10·0 | | 39·7 | 51·6 | |
| 9·8 | | 40·2 | 12·7 | |
| 7·7 | | 49·7 | 11·7 | 8·0 GSt |
| 9·5 | | 59·2 | 30·0 | |
| 9·0 | 23 | 0·2 | 12·0 | 9·5 |
| 10·0 | | 4·7 | 40·9 | |

## 4561—4620.

| mag. | 11h m | s | −54° ' | |
|---|---|---|---|---|
| 9·8 | 23 | 10·7 | 29·9 | |
| 10·0 | | 13·7 | 10·2 | |
| 9·0 | | 16·7 | 13·8 | 9·0 |
| 10·0 | | 16·9 | 58·7 | |
| 10·0 | | 20·2 | 44·0 | |
| 9·4 | | 22·2 | 43·1 | 9·0 |
| 9·8 | | 38·2 | 12·5 | |
| 9·3 | | 42·7 | 1·3 | |
| 10·0 | 24 | 0·7 | 21·8 | |
| 8·9 | | 4·7 | 37·8 | 8·0 G |
| 9·0 | | 8·7 | 36·2 | 9·0 G |
| 8·3 | | 8·7 | 34·4 | 8·0 GSt |
| 10·0 | | 9·7 | 20·0 | |
| 8·6 | | 18·5 | 52·2 | 9·0 |
| 10·0 | | 23·8 | 57·8 | |
| 10·0 | | 29·8 | 57·8 | |
| 10·0 | | 34·5 | 20·1 | |
| 10·0 | | 40·3 | 59·9 | |
| 10·0 | | 52·0 | 33·4 | |
| 9·6 | | 54·5 | 19·9 | |
| 9·6 | | 54·5 | 51·5 | |
| 9·8 | 25 | 10·0 | 45·7 | |
| 9·8 | | 11·5 | 33·9 | |
| 10·0 | | 18·0 | 19·6 | |
| 9·5 | | 18·5 | 48·6 | 9·5 |
| 9·4 | | 24·0 | 11·9 | |
| 9·8 | | 25·0 | 32·0 | |
| 10·0 | | 31·5 | 36·7 | |
| 9·6 | | 42·5 | 38·1 | |
| 9·6 | | 46·5 | 38·1 | |
| 8·5 | | 50·5 | 4·0 | 8·0 |
| 10·0 | 26 | 3·5 | 28·4 | |
| 10·0 | | 5·0 | 27·2 | |
| 9·8 | | 8·5 | 45·8 | |
| 9·8 | | 14·0 | 4·6 | |
| 9·4 | | 25·3 | 1·1 | |
| 10·0 | | 29·0 | 32·9 | |
| 10·0 | | 30·0 | 57·9 | |
| 9·5 | | 31·5 | 8·5 | 9·5 |
| 10·0 | | 36·5 | 56·7 | |
| 9·8 | | 39·5 | 50·0 | |
| 10·0 | | 50·0 | 49·6 | |
| 9·4 | | 55·5 | 24·5 | |
| 9·4 | 27 | 0·0 | 20·8 | |
| 9·8 | | 4·0 | 7·6 | |
| 10·0 | | 7·5 | 40·9 | |
| 8·9 | | 11·9 | 57·5 | 9·0 |
| 10·0 | | 21·9 | 52·0 | |
| 9·6 | | 31·6 | 42·9 | |
| 9·6 | | 34·6 | 41·9 | |
| 9·3 | | 39·6 | 23·7 | |
| 9·6 | | 43·4 | 43·2 | |
| 9·6 | | 43·6 | 27·2 | 9·0 |
| 9·5 | | 52·1 | 50·9 | |
| 9·4 | | 53·6 | 11·1 | |
| 9·6 | | 56·6 | 44·2 | |
| 10·0 | 28 | 0·2 | 48·6 | |
| 9·3 | | 5·4 | 38·9 | |
| 10·0 | | 9·6 | 26·0 | |
| 10·0 | | 17·1 | 41·1 | |

## 4621—4680.

| mag. | 11h m | s | −54° ' | |
|---|---|---|---|---|
| 10·0 | 28 | 17·1 | 14·1 | |
| 10·0 | | 18·6 | 5·7 | |
| 10·0 | | 18·9 | 11·5 | |
| 9·6 | | 20·9 | 14·1 | |
| 10·0 | | 21·1 | 8·9 | |
| 10·0 | | 22·5 | 15·3 | |
| 9·9 | | 29·6 | 46·1 | |
| 9·6 | | 30·8 | 51·9 | |
| 9·8 | | 31·1 | 22·8 | |
| 9·9 | | 32·1 | 42·0 | |
| 9·9 | | 39·1 | 44·3 | |
| 9·6 | | 41·6 | 26·0 | |
| 9·8 | | 54·6 | 47·9 | |
| 9·3 | | 58·1 | 20·7 | |
| 9·4 | 29 | 0·1 | 28·8 | |
| 9·8 | | 2·6 | 9·8 | |
| 9·9 | | 4·1 | 8·1 | |
| 9·8 | | 18·1 | 57·7 | |
| 9·4 | | 20·1 | 25·3 | 9·0 |
| 9·9 | | 30·6 | 29·8 | |
| 9·9 | | 31·1 | 25·6 | |
| 9·6 | | 31·1 | 24·1 | |
| 9·2 | | 34·1 | 58·0 | 9·5 |
| 9·6 | | 48·1 | 40·8 | |
| 9·2 | | 57·6 | 4·4 | |
| 9·3 | 30 | 0·6 | 43·2 | |
| 9·6 | | 9·6 | 17·1 | |
| 9·8 | | 11·6 | 24·9 | |
| 9·4 | | 22·6 | 33·6 | |
| 9·4 | | 24·1 | 49·0 | 9·0 |
| 9·9 | | 42·6 | 12·9 | |
| 8·7 | | 44·6 | 27·6 | 9·0 |
| 9·4 | | 47·1 | 14·9 | |
| 9·9 | | 50·1 | 13·8 | |
| 9·8 | | 51·1 | 47·8 | |
| 9·9 | | 52·6 | 34·6 | |
| 9·8 | | 56·1 | 56·4 | |
| 9·2 | 31 | 6·6 | 38·8 | 9·5 |
| 9·8 | | 9·1 | 31·9 | |
| 9·5 | | 12·6 | 46·2 | |
| 9·9 | | 12·6 | 23·5 | |
| 8·6 | | 13·1 | 54·3 | 9·5 |
| 9·9 | | 21·1 | 28·1 | |
| 9·8 | | 24·1 | 2·8 | |
| 8·9 | | 33·0 | 44·5 | 9·5 |
| 9·9 | | 41·0 | 20·9 | |
| 9·9 | | 42·5 | 9·3 | |
| 9·9 | | 45·5 | 43·7 | |
| 9·8 | | 50·0 | 17·5 | |
| 9·9 | | 50·8 | 21·6 | |
| 9·3 | | 54·5 | 33·9 | |
| 8·6 | 32 | 3·0 | 0·7 | 8·5 |
| 9·3 | | 9·0 | 50·9 | |
| 9·3 | | 11·5 | 37·0 | 9·5 |
| 9·6 | | 13·0 | 21·0 | |
| 9·3 | | 19·0 | 52·5 | |
| 9·3 | | 27·0 | 40·5 | |
| 9·9 | | 33·5 | 32·0 | |
| 9·9 | | 34·5 | 24·9 | |
| 8·8 | | 41·0 | 18·1 | 9·0 |

## 4681—4740.

| mag. | 11h m | s | −54° ' | |
|---|---|---|---|---|
| 9·4 | 32 | 51·0 | 33·6 | |
| 9·4 | | 54·5 | 14·0 | |
| 9·8 | | 59·0 | 36·0 | |
| 9·4 | 33 | 13·0 | 51·2 | |
| 9·8 | | 13·5 | 15·2 | |
| 9·4 | | 17·0 | 4·7 | |
| 9·6 | | 23·0 | 35·2 | |
| 9·6 | | 23·5 | 28·5 | |
| 9·6 | | 25·8 | 13·0 | |
| 9·9 | | 31·5 | 22·5 | |
| 9·0 | | 38·5 | 55·2 | 9·0 |
| 8·2 | | 39·0 | 18·2 | 8·5 |
| 9·8 | | 53·8 | 6·7 | |
| 9·2 | | 53·9 | 59·9 | 9·5 |
| 9·4 | | 54·0 | 15·6 | |
| 9·5 | | 55·5 | 52·4 | 9·5 |
| 9·5 | 34 | 4·0 | 47·9 | |
| 9·9 | | 6·0 | 40·9 | |
| 9·6 | | 7·5 | 6·9 | |
| 9·9 | | 12·5 | 52·4 | |
| 9·6 | | 21·0 | 20·6 | |
| 9·6 | | 22·0 | 56·3 | |
| 9·6 | | 24·0 | 18·4 | |
| 9·3 | | 32·5 | 41·6 | |
| 9·6 | | 38·1 | 15·2 | |
| 8·7 | | 52·1 | 24·3 | 8·0 G |
| 8·0 | | 58·6 | 53·0 | 7·0 GSg |
| 9·3 | 35 | 0·6 | 22·8 | 9·5 |
| 9·9 | | 4·6 | 27·9 | |
| 9·3 | | 7·6 | 8·9 | |
| 9·9 | | 10·4 | 58·4 | |
| 9·6 | | 17·6 | 28·5 | |
| 9·9 | | 40·6 | 9·3 | |
| 9·9 | | 48·6 | 0·2 | |
| 9·9 | | 51·5 | 10·9 | |
| 9·3 | | 52·1 | 52·0 | |
| 9·9 | 36 | 1·6 | 20·2 | |
| 9·2 | | 9·1 | 25·7 | 8·5 |
| 9·2 | | 9·1 | 59·8 | |
| 9·8 | | 42·6 | 12·3 | |
| 9·2 | | 56·1 | 12·7 | |
| 9·8 | 37 | 2·6 | 36·0 | |
| 9·4 | | 7·6 | 28·8 | 9·5 |
| 9·8 | | 10·5 | 15·9 | |
| 8·6 | | 14·1 | 53·6 | 9·0 |
| 9·9 | | 15·6 | 10·5 | |
| 9·4 | | 29·6 | 27·0 | 9·5 |
| 8·3 | | 31·6 | 30·1 | 8·5 GSt |
| 9·8 | | 33·1 | 46·8 | |
| 9·9 | | 40·6 | 8·7 | |
| 9·4 | | 43·6 | 10·2 | |
| 9·5 | | 47·6 | 42·1 | 9·5 |
| 9·3 | | 54·1 | 40·6 | |
| 8·7 | | 57·6 | 41·9 | 9·0 |
| 9·9 | 38 | 3·5 | 31·3 | |
| 9·2 | | 3·6 | 10·9 | |
| 9·8 | | 12·6 | 34·1 | |
| 9·8 | | 17·7 | 58·8 | |
| 9·6 | | 19·1 | 1·0 | |
| 9·8 | | 20·6 | 12·3 | |



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**4741—4800.**

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·9 | 38 | 24·1 | 34·3 | |
| 9·9 | | 29·9 | 16·4 | |
| 8·1 | | 46·6 | 46·1 | 8·5 GSt |
| 9·9 | | 49·1 | 19·3 | |
| 9·6 | | 52·1 | 43·9 | |
| 9·3 | 39 | 2·6 | 26·1 | |
| 9·4 | | 6·1 | 15·5 | |
| 9·6 | | 11·4 | 2·5 | |
| 9·5 | | 22·1 | 47·2 | |
| 9·9 | | 24·1 | 54·0 | |
| 9·5 | | 26·6 | 43·9 | |
| 9·6 | | 32·1 | 21·7 | |
| 9·9 | | 43·1 | 34·4 | |
| 9·6 | | 45·6 | 8·4 | |
| 9·8 | | 46·6 | 39·1 | |
| 9·9 | | 49·1 | 44·2 | |
| 9·9 | | 50·6 | 1·9 | |
| 9·5 | | 52·6 | 46·1 | |
| 8·8 | | 54·1 | 21·0 | 8·5 |
| 9·6 | | 55·6 | 32·3 | |
| 9·8 | 40 | 11·6 | 26·9 | |
| 9·8 | | 13·1 | 27·2 | |
| 9·8 | | 15·6 | 35·2 | |
| 8·5 | | 16·9 | 58·1 | |
| 9·3 | | 18·4 | 2·6 | 9·5 |
| 9·8 | | 26·1 | 8·3 | |
| 9·6 | | 27·6 | 15·1 | |
| 9·9 | | 28·6 | 43·6 | |
| 9·9 | | 30·1 | 45·7 | |
| 9·9 | | 59·6 | 41·6 | |
| 9·9 | 41 | 2·6 | 45·7 | |
| 9·4 | | 7·1 | 3·5 | |
| 9·0 | | 11·1 | 33·0 | 9·5 |
| 9·6 | | 11·6 | 31·4 | 9·5 |
| 9·8 | | 24·1 | 5·4 | |
| 9·8 | | 26·6 | 21·5 | |
| 9·6 | | 32·1 | 17·0 | |
| 9·4 | | 46·4 | 21·6 | |
| 9·9 | | 51·4 | 37·1 | |
| 9·8 | | 51·4 | 12·7 | |
| 9·9 | | 56·9 | 14·9 | |
| 9·4 | 42 | 49·9 | 10·3 | |
| 9·3 | | 49·9 | 11·1 | |
| 9·9 | | 50·9 | 44·4 | |
| 8·9 | | 51·9 | 18·2 | 8·5 |
| 9·8 | | 58·9 | 45·7 | |
| 9·9 | 43 | 3·4 | 6·0 | |
| 8·5 | | 17·9 | 48·8 | 9·5 |
| 9·9 | | 17·9 | 15·5 | |
| 9·9 | | 20·4 | 54·2 | |
| 9·3 | | 40·4 | 11·1 | |
| 9·6 | | 45·4 | 50·0 | 9·5 |
| 9·8 | | 46·9 | 25·5 | |
| 9·6 | | 52·4 | 24·1 | |
| 9·6 | | 53·4 | 9·4 | |
| 9·5 | | 57·9 | 0·5 | 10·0 |
| 9·5 | 44 | 0·9 | 7·7 | |
| 9·2 | | 7·4 | 9·1 | |
| 9·5 | | 11·4 | 44·6 | |
| 9·4 | | 18·4 | 34·0 | |

**4801—4860.**

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·9 | 44 | 18·9 | 43·5 | |
| 9·9 | | 29·5 | 11·3 | |
| 9·6 | | 33·9 | 3·5 | |
| 8·8 | | 42·4 | 11·4 | 9·8 |
| 9·4 | | 56·4 | 6·8 | |
| 9·2 | 45 | 9·4 | 9·0 | 9·5 |
| 9·9 | | 30·5 | 21·7 | |
| 9·9 | | 30·9 | 13·2 | |
| 9·3 | | 44·4 | 27·8 | 9·5 |
| 9·2 | | 51·4 | 40·5 | 9·5 |
| 9·8 | 46 | 2·9 | 19·2 | |
| 8·8 | | 22·4 | 14·5 | |
| 9·9 | | 22·9 | 45·3 | |
| 9·9 | | 23·4 | 35·2 | |
| 9·6 | | 32·1 | 32·3 | |
| 9·9 | | 40·1 | 0·4 | |
| 9·6 | | 45·2 | 0·6 | |
| 9·8 | | 50·2 | 50·0 | |
| 9·9 | | 53·2 | 44·2 | |
| 8·9 | | 56·7 | 19·0 | 9·5 |
| 9·6 | | 59·2 | 16·7 | |
| 9·1 | 47 | 1·2 | 59·6 | |
| 9·2 | | 12·2 | 24·5 | |
| 9·6 | | 13·7 | 23·0 | |
| 9·0 | | 15·7 | 15·1 | 9·8 |
| 9·0 | | 23·7 | 36·7 | 9·5 |
| 9·9 | | 38·2 | 19·7 | |
| 9·1 | | 41·7 | 41·1 | 9·0 |
| 9·8 | | 47·7 | 46·5 | |
| 9·0 | | 55·2 | 29·0 | 9·0 |
| 9·3 | 48 | 0·0 | 56·7 | |
| 9·9 | | 2·2 | 49·1 | |
| 9·9 | | 6·2 | 8·0 | |
| 9·3 | | 11·2 | 48·0 | |
| 9·6 | | 14·2 | 14·2 | |
| 8·8 | | 20·6 | 2·3 | 9·0 |
| 9·4 | | 22·2 | 31·3 | 9·0 |
| 9·6 | | 31·7 | 53·3 | |
| 9·4 | | 38·2 | 18·4 | |
| 9·9 | | 47·2 | 46·8 | |
| 9·3 | | 55·2 | 33·0 | 9·5 |
| 9·9 | 49 | 0·2 | 29·2 | |
| 9·4 | | 6·2 | 31·0 | |
| 9·6 | | 10·7 | 53·1 | |
| 9·6 | | 12·7 | 37·1 | |
| 9·8 | | 22·2 | 50·5 | |
| 9·9 | | 22·2 | 28·9 | |
| 9·6 | | 27·7 | 52·1 | |
| 9·4 | | 30·7 | 51·6 | |
| 9·6 | | 32·2 | 26·2 | |
| 9·8 | | 35·2 | 20·6 | |
| 9·5 | | 35·9 | 56·8 | |
| 9·4 | | 38·7 | 13·1 | |
| 9·9 | 50 | 7·5 | 19·3 | |
| 9·9 | | 7·5 | 17·5 | |
| 9·9 | | 12·0 | 58·4 | |
| 9·8 | | 19·0 | 8·1 | |
| 9·8 | | 22·0 | 4·8 | |
| 9·9 | | 23·0 | 52·4 | |
| 9·2 | | 26·0 | 35·1 | |

**4861—4920.**

| mag. | 11h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 50 | 26·0 | 30·3 | |
| 9·9 | | 26·5 | 31·3 | |
| 9·0 | | 28·0 | 7·1 | |
| 9·9 | | 41·5 | 27·4 | |
| 9·4 | | 46·0 | 47·9 | |
| 9·8 | | 47·5 | 33·0 | |
| 9·6 | | 48·0 | 14·5 | |
| 9·6 | | 51·5 | 52·7 | |
| 9·4 | 51 | 2·0 | 16·9 | |
| 9·4 | | 2·5 | 7·2 | |
| 9·9 | | 10·0 | 18·4 | |
| 9·3 | | 16·0 | 7·2 | 9·0 |
| 9·9 | | 29·0 | 25·8 | |
| 9·2 | | 45·5 | 42·0 | |
| 9·6 | | 50·0 | 56·1 | |
| 8·8 | | 50·0 | 50·1 | 8·5 |
| 9·0 | 52 | 1·0 | 32·6 | 9·0 |
| 9·8 | | 3·5 | 22·6 | |
| 9·2 | | 3·5 | 52·8 | |
| 9·6 | | 5·0 | 54·3 | |
| 9·9 | | 7·8 | 58·4 | |
| 9·2 | | 10·0 | 16·5 | 9·0 |
| 9·2 | | 13·0 | 5·4 | 9·0 |
| 9·9 | | 16·5 | 7·4 | |
| 9·8 | | 21·6 | 57·7 | |
| 9·5 | | 38·0 | 39·6 | |
| 9·9 | | 38·5 | 18·1 | |
| 8·8 | | 41·1 | 56·6 | |
| 9·1 | | 45·2 | 44·1 | 9·0 |
| 9·8 | | 49·7 | 40·5 | |
| 9·9 | 53 | 0·7 | 20·6 | |
| 9·8 | | 8·7 | 34·5 | |
| 9·0 | | 15·7 | 27·2 | |
| 9·4 | | 19·7 | 40·0 | |
| 9·9 | | 26·7 | 20·7 | |
| 9·2 | | 36·2 | 23·1 | |
| 8·4 | | 37·7 | 53·5 | 9·0 |
| 9·9 | | 39·2 | 44·2 | |
| 9·9 | | 39·7 | 21·6 | |
| 8·6 | | 46·2 | 33·5 | 9·0 |
| 9·8 | | 48·9 | 2·7 | |
| 9·0 | | 51·2 | 15·6 | |
| 9·3 | | 56·2 | 32·0 | |
| 9·8 | 54 | 2·7 | 25·4 | |
| 9·8 | | 11·0 | 57·3 | |
| 9·0 | | 28·4 | 1·9 | |
| 8·8 | | 31·7 | 57·9 | 9·0 |
| 9·4 | | 39·7 | 59·3 | |
| 9·1 | | 40·7 | 32·6 | 8·8 |
| 9·4 | | 43·2 | 38·0 | |
| 9·9 | | 43·7 | 59·0 | |
| 9·9 | | 47·7 | 59·1 | |
| 9·3 | | 49·7 | 41·3 | 9·0 G |
| 9·8 | | 53·2 | 5·2 | |
| 9·5 | | 54·7 | 13·6 | |
| 9·3 | | 56·2 | 37·6 | |
| 8·6 | 55 | 0·2 | 33·5 | 9·0 |
| 9·6 | | 4·7 | 0·1 | |
| 9·9 | | 11·7 | 2·9 | |
| 9·3 | | 21·7 | 32·6 | |

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| mag. | 11h.–12h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·0 | 55 | 29·7 | 57·8 | |
| 9·8 | | 35·2 | 3·2 | |
| 9·6 | | 39·7 | 12·7 | |
| 9·9 | | 45·7 | 2·1 | |
| 9·2 | | 47·2 | 26·5 | |
| 9·9 | | 48·2 | 49·5 | |
| 8·9 | | 58·0 | 52·1 | 9·0 |
| 8·5 | 56 | 9·5 | 50·1 | 7·5 G |
| 9·5 | | 11·5 | 4·1 | |
| 9·4 | | 12·5 | 54·6 | |
| 9·6 | | 27·5 | 58·7 | |
| 9·1 | | 39·5 | 30·0 | 7·8 G |
| 9·2 | | 44·5 | 7·1 | |
| 8·3 | | 58·0 | 37·7 | 7·5 G |
| 8·1 | 57 | 23·3 | 1·1 | 7·5 GSt |
| 9·4 | | 36·3 | 59·0 | |
| 9·9 | | 43·0 | 8·9 | |
| 9·9 | | 43·0 | 53·0 | |
| 9·8 | | 48·5 | 47·8 | |
| 9·9 | | 50·5 | 18·8 | |
| 9·3 | | 58·5 | 54·6 | |
| 9·9 | 58 | 4·5 | 13·4 | |
| 9·4 | | 5·0 | 56·0 | |
| 9·9 | | 8·5 | 54·6 | S |
| 9·5 | | 9·0 | 17·7 | |
| 7·8 | | 12·0 | 44·1 | 8·5 S |
| 9·9 | | 15·0 | 59·4 | |
| 9·3 | | 25·5 | 40·4 | 9·0 |
| 9·4 | | 38·0 | 21·2 | |
| 9·8 | 59 | 3·0 | 33·2 | |
| 9·4 | | 6·7 | 40·9 | 9·0 |
| 9·9 | | 13·7 | 58·1 | |
| 9·6 | | 19·1 | 19·5 | 9·0 |
| 9·9 | | 21·7 | 15·9 | |
| 9·7 | | 23·7 | 12·3 | |
| 9·6 | | 29·9 | 27·2 | |
| 9·7 | | 31·2 | 57·2 | |
| 9·0 | | 32·2 | 20·8 | 8·5 G |
| 8·4 | | 33·5 | 40·3 | 8·5 G |
| 9·8 | | 34·5 | 25·0 | |
| 9·7 | | 39·2 | 30·6 | |
| 9·8 | | 40·5 | 51·7 | |
| 9·8 | | 44·7 | 34·4 | |
| 9·9 | | 50·2 | 29·6 | |
| 9·9 | | 51·2 | 47·3 | |
| 9·9 | | 58·2 | 42·0 | |
| 9·8 | 0 | 6·2 | 57·9 | |
| 9·7 | | 8·5 | 31·0 | |
| 9·0 | | 10·2 | 22·4 | 8·5 G |
| 8·8 | | 18·2 | 19·8 | 8·5 G |
| 9·3 | | 19·2 | 35·7 | |
| 9·8 | | 20·2 | 17·8 | |
| 9·9 | | 27·7 | 38·9 | |
| 9·6 | | 28·7 | 38·8 | |
| 9·9 | | 36·2 | 50·0 | |
| 9·9 | | 37·2 | 40·9 | |
| 9·4 | | 38·5 | 27·4 | |
| 8·8 | | 42·0 | 29·7 | |
| 9·9 | | 50·2 | 24·1 | |
| 9·6 | | 52·2 | 13·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 71 | 8·3 |
| | 40 | 73 | 8·3 |
| | 50 | 75 | 8·3 |
| 12 | 0 | 77 | 8·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |
| | 30 | 83 | 8·3 |

## 4981—5040.

| mag. | 12h. m s | −54° ′ | |
|---|---|---|---|
| 9·9 | 0 52·7 | 26·6 | |
| 9·9 | 1 1·2 | 47·4 | |
| 9·3 | 13·7 | 32·9 | |
| 9·8 | 16·7 | 52·8 | |
| 9·9 | 17·7 | 20·2 | |
| 9·8 | 18·2 | 52·7 | |
| 9·9 | 19·7 | 19·4 | |
| 9·1 | 35·7 | 32·2 | |
| 9·9 | 36·2 | 58·9 | |
| 9·7 | 43·7 | 37·2 | |
| 9·9 | 46·2 | 54·8 | |
| 9·3 | 54·7 | 21·0 | |
| 9·3 | 57·2 | 7·0 | |
| 9·6 | 2 1·2 | 50·0 | |
| 9·8 | 3·2 | 40·2 | |
| 9·4 | 8·7 | 11·6 | |
| 9·8 | 10·7 | 36·9 | |
| 9·2 | 25·7 | 40·8 | 9·0 |
| 9·1 | 25·7 | 56·0 | 9·0 |
| 9·6 | 28·7 | 23·8 | 9·0 |
| 9·9 | 30·7 | 21·3 | |
| 9·7 | 34·7 | 39·2 | |
| 9·7 | 36·2 | 3·8 | |
| 9·6 | 43·7 | 50·8 | |
| 9·6 | 47·2 | 33·0 | |
| 9·0 | 47·2 | 43·5 | |
| 9·9 | 54·2 | 48·9 | |
| 9·9 | 55·2 | 52·0 | |
| 9·6 | 55·7 | 13·5 | |
| 9·3 | 59·2 | 50·4 | 9·0 |
| 9·2 | 3 3·7 | 6·3 | |
| 9·9 | 3·7 | 4·7 | |
| 9·9 | 12·7 | 25·8 | |
| 9·9 | 23·2 | 12·9 | |
| 9·8 | 23·2 | 55·9 | |
| 9·4 | 24·2 | 42·6 | |
| 9·4 | 29·2 | 41·0 | |
| 9·4 | 40·2 | 15·8 | |
| 9·7 | 44·2 | 37·4 | |
| 8·3 | 50·2 | 25·8 | 8·2 G |
| 9·4 | 4 1·7 | 11·9 | |
| 9·8 | 3·7 | 2·5 | |
| 9·8 | 11·2 | 47·9 | |
| 9·9 | 16·2 | 31·9 | |
| 9·6 | 16·7 | 21·9 | |
| 9·7 | 21·7 | 15·9 | |
| 9·6 | 36·2 | 21·0 | |
| 9·4 | 39·2 | 50·7 | |
| 9·4 | 42·2 | 46·4 | |
| 9·8 | 51·2 | 36·4 | |
| 9·7 | 52·2 | 43·2 | |
| 9·4 | 53·7 | 10·4 | |
| 9·8 | 54·2 | 28·2 | |
| 9·7 | 57·7 | 32·5 | |
| 9·2 | 5 13·7 | 26·0 | |
| 8·8 | 32·7 | 39·6 | 9·0 |
| 9·8 | 34·2 | 28·1 | |
| 9·7 | 39·7 | 59·0 | |
| 9·8 | 42·2 | 1·0 | |
| 8·5 | 46·7 | 53·7 | 8·5 |

## 5041—5100.

| mag. | 12h. m s | −54° ′ | |
|---|---|---|---|
| 9·1 | 5 50·2 | 22·8 | |
| 9·6 | 6 2·2 | 38·7 | |
| 9·3 | 3·2 | 53·5 | |
| 9·4 | 5·2 | 31·4 | |
| 9·8 | 10·7 | 55·1 | |
| 9·0 | 11·2 | 39·1 | |
| 9·6 | 13·5 | 59·1 | |
| 9·0 | 18·2 | 19·6 | |
| 9·8 | 22·2 | 36·0 | |
| 9·7 | 24·2 | 27·8 | |
| 9·4 | 28·2 | 19·8 | |
| 9·4 | 32·4 | 24·2 | |
| 9·6 | 33·9 | 13·8 | |
| 9·6 | 54·4 | 3·5 | |
| 9·9 | 55·4 | 31·0 | |
| 9·6 | 56·4 | 38·4 | |
| 9·3 | 58·4 | 41·0 | |
| 9·7 | 7 0·4 | 15·7 | |
| 9·9 | 0·9 | 10·6 | |
| 9·7 | 3·4 | 29·5 | |
| 9·7 | 3·9 | 16·2 | |
| 8·6 | 18·4 | 30·8 | |
| 9·9 | 21·9 | 45·2 | |
| 9·4 | 21·9 | 3·8 | |
| 8·6 | 26·4 | 47·2 | GSt |
| 8·8 | 27·4 | 57·6 | |
| 9·9 | 40·4 | 5·0 | |
| 9·4 | 45·9 | 23·4 | |
| 9·9 | 50·9 | 24·4 | |
| 9·7 | 51·9 | 47·0 | |
| 9·4 | 8 14·4 | 45·4 | |
| 9·4 | 18·4 | 29·6 | |
| 9·7 | 20·4 | 45·4 | |
| 9·9 | 21·4 | 52·9 | |
| 8·8 | 23·9 | 7·6 | 8·0 |
| 9·9 | 27·4 | 28·7 | |
| 9·9 | 35·9 | 19·0 | |
| 9·9 | 37·9 | 6·2 | |
| 9·2 | 46·9 | 17·4 | |
| 9·4 | 53·4 | 58·6 | |
| 9·8 | 9 5·4 | 3·0 | |
| 9·2 | 18·9 | 30·8 | 9·0 |
| 8·3 | 24·4 | 23·9 | 8·0 |
| 9·7 | 34·2 | 58·6 | 9·5 |
| 9·6 | 40·4 | 56·1 | |
| 9·7 | 42·4 | 46·0 | |
| 9·9 | 57·9 | 1·2 | |
| 9·7 | 10 0·3 | 2·8 | |
| 9·7 | 1·4 | 26·7 | |
| 9·9 | 2·4 | 38·5 | |
| 9·3 | 27·9 | 6·2 | |
| 9·0 | 32·4 | 47·1 | 9·0 |
| 8·4 | 38·4 | 23·5 | 8·2 |
| 9·6 | 41·4 | 9·5 | 9·0 |
| 8·3 | 41·9 | 11·9 | 8·5 |
| 9·4 | 50·4 | 27·9 | |
| 9·8 | 50·9 | 22·8 | |
| 9·9 | 54·4 | 20·9 | |
| 9·9 | 56·4 | 2·1 | |
| 9·7 | 11 17·9 | 47·7 | |

## 5101—5160.

| mag. | 12h. m s | −54° ′ | |
|---|---|---|---|
| 9·4 | 11 18·4 | 25·9 | |
| 9·9 | 20·3 | 2·1 | |
| 8·6 | 23·9 | 49·8 | |
| 9·2 | 36·4 | 7·2 | |
| 9·7 | 40·4 | 13·5 | |
| 9·4 | 43·9 | 42·1 | |
| 9·6 | 12 0·4 | 9·2 | |
| 9·6 | 2·4 | 20·2 | |
| 9·9 | 3·9 | 45·5 | |
| 9·8 | 13·4 | 17·9 | |
| 9·3 | 18·4 | 20·0 | 8·5 |
| 9·6 | 19·4 | 17·0 | |
| 7·1 | 20·4 | 26·8 | 6·0 GSct |
| 9·3 | 26·9 | 23·7 | |
| 9·0 | 46·9 | 37·4 | |
| 9·4 | 47·9 | 7·7 | |
| 9·7 | 51·4 | 19·7 | |
| 9·9 | 58·4 | 31·3 | |
| 9·7 | 58·9 | 48·7 | |
| 9·9 | 59·9 | 12·2 | |
| 8·8 | 13 2·4 | 41·9 | |
| 9·6 | 4·4 | 14·6 | |
| 9·9 | 4·4 | 15·5 | |
| 9·3 | 20·9 | 55·9 | |
| 9·8 | 41·4 | 55·2 | |
| 9·9 | 41·4 | 6·0 | |
| 8·6 | 41·9 | 28·4 | 8·8 |
| 9·7 | 58·9 | 52·1 | |
| 9·9 | 59·4 | 20·0 | |
| 9·6 | 59·4 | 37·5 | |
| 9·9 | 14 9·4 | 12·3 | |
| 9·0 | 14·4 | 19·6 | 9·0 |
| 9·2 | 15·4 | 7·8 | |
| 9·7 | 16·4 | 59·5 | |
| 9·8 | 16·9 | 43·7 | |
| 9·9 | 31·4 | 56·8 | |
| 9·3 | 36·4 | 23·8 | |
| 9·6 | 37·4 | 25·2 | |
| 9·3 | 38·4 | 34·9 | |
| 9·2 | 49·4 | 13·4 | 9·0 |
| 8·8 | 57·9 | 0·7 | |
| 9·3 | 15 5·9 | 7·0 | |
| 9·4 | 5·9 | 24·0 | |
| 9·4 | 7·4 | 54·1 | |
| 9·7 | 9·4 | 51·1 | |
| 9·8 | 14·9 | 42·7 | |
| 9·6 | 18·9 | 35·6 | |
| 9·6 | 22·9 | 20·3 | |
| 9·4 | 25·9 | 25·9 | |
| 9·2 | 29·9 | 33·3 | |
| 9·3 | 30·9 | 27·1 | |
| 9·8 | 34·4 | 59·5 | |
| 9·6 | 39·9 | 8·5 | |
| 9·1 | 44·4 | 33·0 | 8·5 |
| 9·9 | 46·4 | 52·5 | |
| 9·4 | 46·4 | 32·2 | 9·0 |
| 9·9 | 58·9 | 33·0 | |
| 9·7 | 16 6·4 | 37·3 | |
| 9·7 | 15·9 | 9·2 | |
| 9·9 | 21·9 | 42·1 | |

## 5161—5220.

| mag. | 12h. m s | −54° ′ | |
|---|---|---|---|
| 9·7 | 16 27·4 | 7·8 | |
| 9·6 | 28·4 | 4·7 | |
| 9·9 | 32·9 | 5·6 | |
| 9·6 | 50·4 | 5·3 | |
| 9·9 | 51·4 | 6·5 | |
| 9·8 | 53·9 | 29·0 | |
| 9·6 | 56·4 | 32·8 | |
| 9·4 | 17 6·4 | 32·4 | |
| 9·9 | 11·4 | 26·9 | |
| 9·1 | 20·4 | 39·9 | |
| 9·9 | 20·9 | 33·0 | |
| 9·4 | 21·4 | 33·4 | |
| 9·1 | 22·9 | 15·3 | |
| 9·9 | 28·4 | 37·7 | |
| 9·4 | 28·4 | 35·5 | |
| 9·2 | 28·9 | 4·0 | |
| 9·2 | 35·4 | 2·3 | |
| 9·9 | 35·9 | 34·9 | |
| 9·4 | 42·4 | 1·2 | |
| 9·9 | 46·4 | 22·6 | |
| 9·9 | 18 0·4 | 47·9 | |
| 9·6 | 16·4 | 12·4 | |
| 8·8 | 18·3 | 17·1 | |
| 9·3 | 19·4 | 12·9 | |
| 9·2 | 20·4 | 29·0 | |
| 9·7 | 26·2 | 2·1 | |
| 9·2 | 30·9 | 8·5 | |
| 9·7 | 37·4 | 33·9 | |
| 9·7 | 54·9 | 6·3 | |
| 9·9 | 59·9 | 35·0 | |
| 9·7 | 19 17·4 | 56·6 | |
| 9·4 | 23·9 | 39·3 | |
| 9·9 | 30·3 | 22·7 | |
| 9·4 | 36·9 | 14·5 | |
| 9·3 | 45·9 | 42·3 | |
| 9·6 | 47·4 | 25·0 | |
| 8·6 | 52·4 | 7·8 | 8·0 G |
| 9·3 | 20 2·4 | 12·6 | |
| 9·9 | 6·4 | 16·8 | |
| 9·6 | 13·9 | 22·0 | |
| 9·6 | 15·9 | 31·0 | |
| 9·9 | 19·9 | 52·2 | |
| 9·9 | 26·9 | 14·1 | |
| 9·4 | 56·9 | 27·8 | |
| 9·4 | 21 4·9 | 16·8 | |
| 8·8 | 6·9 | 42·7 | 9·0 |
| 9·4 | 38·4 | 56·8 | |
| 9·6 | 39·4 | 52·8 | |
| 9·4 | 48·2 | 1·4 | |
| 8·8 | 50·4 | 45·8 | 9·0 |
| 9·1 | 50·9 | 52·4 | 9·0 |
| 9·3 | 53·9 | 22·4 | |
| 9·7 | 22 1·4 | 35·0 | |
| 9·7 | 9·4 | 53·6 | |
| 9·9 | 12·9 | 24·2 | |
| 9·9 | 26·4 | 26·2 | |
| 9·2 | 31·4 | 38·2 | |
| 9·7 | 50·4 | 54·7 | |
| 9·7 | 51·4 | 12·2 | |
| 9·4 | 23 0·4 | 55·3 | |



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## 5221—5280.

| mag. | 12h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·9 | 23 | 2·9 | 18·4 | |
| 9·2 | | 12·4 | 31·1 | 8·5 |
| 9·6 | | 17·9 | 44·5 | |
| 9·9 | | 18·4 | 10·5 | |
| 8·3 | | 59·4 | 39·0 | 8·0 G |
| 9·9 | 24 | 27·4 | 37·5 | |
| 9·8 | | 34·7 | 2·1 | |
| 9·9 | | 38·4 | 17·0 | |
| 9·6 | | 45·4 | 40·7 | |
| 9·7 | | 45·9 | 4·4 | |
| 8·8 | | 53·9 | 40·0 | 8·0 G |
| 9·0 | | 55·9 | 4·5 | |
| 9·4 | 25 | 2·4 | 48·7 | |
| 9·7 | | 20·4 | 8·7 | |
| 9·9 | | 39·4 | 20·7 | |
| 9·9 | | 49·2 | 0·9 | |
| 9·7 | | 51·9 | 30·5 | |
| 9·6 | 26 | 3·4 | 12·6 | |
| 9·0 | | 10·9 | 53·1 | 9·0 |
| 9·9 | | 13·9 | 20·0 | |
| 7·5 | | 25·9 | 17·4 | 7·5 GSt |
| 9·6 | | 32·9 | 37·1 | |
| 9·9 | | 36·4 | 12·3 | |
| 9·3 | | 36·9 | 28·7 | 9·5 |
| 9·9 | | 37·9 | 25·6 | |
| 9·1 | | 45·4 | 13·9 | 9·0 |
| 9·7 | | 58·9 | 18·0 | 9·2 |
| 9·4 | 27 | 0·9 | 8·8 | |
| 9·7 | | 9·4 | 13·4 | |
| 9·4 | | 18·4 | 30·0 | 9·0 |
| 9·7 | | 32·4 | 25·4 | 9·0 |
| 9·8 | | 42·4 | 4·7 | |
| 9·6 | | 50·4 | 5·6 | |
| 9·7 | | 52·9 | 52·0 | |
| 9·4 | 28 | 0·4 | 57·6 | |
| 9·6 | | 2·4 | 1·6 | |
| 9·2 | | 17·9 | 17·9 | |
| 9·7 | | 20·9 | 5·1 | |
| 9·7 | | 23·4 | 45·5 | |
| 9·9 | | 32·9 | 21·4 | |
| 9·3 | | 39·4 | 37·7 | |
| 9·4 | | 40·4 | 25·7 | |
| 9·6 | | 50·2 | 59·3 | |
| 9·9 | | 53·4 | 17·0 | |
| 9·9 | | 54·4 | 34·1 | |
| 9·2 | 29 | 12·4 | 50·9 | |
| 9·9 | | 18·4 | 18·9 | |
| 8·8 | | 25·9 | 1·1 | 9·0 |
| 9·8 | | 38·4 | 40·0 | |
| 9·1 | | 48·2 | 0·1 | 9·5 |
| 9·2 | | 55·4 | 15·6 | |
| 9·4 | 30 | 21·4 | 3·1 | |
| 9·7 | | 25·4 | 29·9 | |
| 9·9 | | 38·4 | 28·5 | |
| 9·8 | | 41·9 | 34·3 | |
| 9·9 | | 43·4 | 17·4 | |
| 9·2 | | 46·4 | 31·3 | 9·0 |
| 9·6 | 31 | 9·9 | 14·7 | |
| 8·8 | | 15·1 | 13·1 | |
| 9·6 | | 16·5 | 1·3 | |

## 5281—5340.

| mag. | 12h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 31 | 30·4 | 55·8 | |
| 9·8 | | 30·4 | 56·2 | |
| 9·9 | | 44·1 | 41·3 | |
| 8·8 | | 54·9 | 18·0 | 9·0 |
| 9·4 | 32 | 2·1 | 37·1 | 9·5 |
| 9·9 | | 2·4 | 24·5 | |
| 9·9 | | 2·8 | 49·4 | |
| 9·4 | | 4·7 | 32·9 | |
| 8·5 | | 20·2 | 57·9 | 8·2 |
| 9·7 | | 39·3 | 14·5 | |
| 9·7 | | 43·2 | 39·1 | |
| 9·7 | | 50·8 | 43·9 | |
| 9·6 | | 55·3 | 12·5 | |
| 9·2 | | 56·3 | 21·1 | |
| 9·6 | | 56·7 | 58·3 | |
| 9·0 | | 59·0 | 5·0 | |
| 9·7 | 33 | 13·5 | 59·9 | |
| 9·4 | | 13·7 | 50·3 | |
| 9·4 | | 52·2 | 9·5 | |
| 9·7 | | 56·7 | 0·1 | |
| 9·4 | 34 | 4·7 | 42·1 | |
| 9·0 | | 8·2 | 25·5 | |
| 8·6 | | 12·2 | 38·5 | |
| 9·6 | | 13·2 | 56·9 | |
| 9·7 | | 20·2 | 52·3 | |
| 7·7 | 35 | 3·2 | 4·5 | 7·0 GSt |
| 9·2 | | 9·2 | 21·7 | |
| 9·7 | | 14·2 | 47·3 | |
| 9·2 | | 31·7 | 0·6 | |
| 9·2 | | 41·6 | 36·8 | |
| 9·2 | 36 | 2·1 | 7·0 | |
| 9·4 | | 9·6 | 49·6 | |
| 9·0 | | 10·1 | 35·4 | |
| 9·4 | | 10·6 | 3·6 | |
| 9·0 | | 28·1 | 11·2 | |
| 9·2 | | 52·1 | 26·5 | |
| 9·2 | 37 | 11·1 | 3·0 | |
| 9·7 | | 22·1 | 41·6 | |
| 9·2 | | 35·6 | 37·7 | |
| 9·6 | | 36·6 | 49·3 | |
| 9·2 | | 39·6 | 31·6 | |
| 9·2 | | 40·1 | 8·0 | |
| 9·2 | 38 | 0·6 | 40·0 | |
| 9·7 | | 31·8 | 27·3 | |
| 9·2 | | 35·1 | 20·0 | |
| 9·6 | | 47·6 | 7·4 | |
| 9·3 | 39 | 16·6 | 16·6 | |
| 9·2 | | 42·1 | 47·7 | |
| 9·4 | | 48·6 | 15·8 | |
| 9·2 | 40 | 5·1 | 53·4 | 9·5 |
| 8·8 | | 20·1 | 15·4 | |
| 9·7 | | 55·9 | 57·9 | |
| 9·7 | | 57·1 | 6·2 | |
| 9·7 | 41 | 14·1 | 27·5 | |
| 9·4 | | 27·6 | 46·1 | |
| 9·2 | | 32·6 | 46·0 | |
| 9·7 | | 45·6 | 3·0 | |
| 9·7 | | 58·6 | 3·1 | |
| 9·4 | 42 | 1·6 | 19·5 | |
| 8·6 | | 11·1 | 2·4 | |

## 5341—5400.

| mag. | 12h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·7 | 42 | 41·1 | 24·8 | |
| 9·0 | | 46·6 | 51·4 | 9·5 |
| 9·2 | 43 | 0·0 | 48·3 | |
| 9·2 | | 0·5 | 21·9 | |
| 9·3 | | 19·0 | 0·7 | |
| 8·0 | | 52·0 | 43·7 | 8·5 |
| 9·4 | 44 | 13·0 | 39·9 | |
| 9·6 | | 22·5 | 39·0 | |
| 9·0 | | 27·5 | 36·8 | 9·5 |
| 9·2 | | 31·5 | 52·7 | |
| 9·2 | | 44·0 | 8·4 | |
| 9·0 | | 44·5 | 40·8 | 9·5 |
| 9·3 | | 50·5 | 22·9 | |
| 9·6 | | 54·5 | 2·5 | |
| 8·6 | | 59·0 | 10·9 | |
| 9·7 | 45 | 1·9 | 43·3 | |
| 9·3 | | 10·0 | 11·0 | |
| 9·6 | | 25·0 | 37·8 | |
| 9·7 | | 30·0 | 6·3 | |
| 7·7 | | 51·5 | 16·3 | GSct |
| 9·6 | | 51·5 | 32·0 | |
| 8·6 | | 55·5 | 38·5 | |
| 9·6 | | 58·5 | 6·5 | |
| 9·7 | 46 | 14·0 | 19·3 | |
| 9·3 | | 55·0 | 56·2 | |
| 9·4 | 47 | 4·0 | 27·0 | |
| 9·6 | | 10·0 | 7·4 | |
| 9·6 | | 22·0 | 43·6 | |
| 8·4 | | 31·5 | 27·8 | 8·2 |
| 9·4 | 48 | 21·5 | 46·5 | |
| 9·3 | | 23·5 | 6·5 | |
| 9·3 | | 29·5 | 4·1 | |
| 9·2 | | 36·5 | 52·6 | |
| 9·6 | | 47·5 | 18·0 | |
| 9·7 | 49 | 0·0 | 16·7 | |
| 8·3 | | 0·5 | 53·0 | 7·5 GSt |
| 9·6 | | 2·0 | 20·4 | |
| 9·6 | | 3·9 | 34·8 | |
| 9·6 | | 22·5 | 5·4 | |
| 8·9 | | 28·5 | 28·4 | |
| 8·6 | | 29·0 | 57·7 | 8·8 G |
| 9·7 | | 31·5 | 5·9 | |
| 9·4 | | 47·0 | 25·2 | |
| 9·7 | 50 | 32·4 | 25·2 | |
| 8·6 | | 39·9 | 6·0 | |
| 9·0 | | 41·9 | 34·2 | 8·5 |
| 9·4 | | 53·4 | 41·7 | |
| 9·7 | | 57·9 | 42·6 | |
| 8·8 | 51 | 11·9 | 28·2 | 9·0 |
| 9·0 | | 23·9 | 30·5 | 8·5 G |
| 9·0 | | 28·4 | 41·8 | 9·0 |
| 9·3 | | 34·6 | 59·5 | 9·2 |
| 9·6 | | 51·6 | 1·4 | |
| 9·7 | | 51·9 | 58·1 | |
| 8·6 | | 55·6 | 2·2 | |
| 9·6 | 52 | 6·9 | 15·8 | |
| 9·6 | | 16·4 | 37·0 | |
| 8·6 | | 20·4 | 54·1 | 8·2 |
| 9·4 | | 47·9 | 56·4 | |
| 8·8 | | 55·4 | 14·8 | |

## 5401—5460.

| mag. | 12h.—13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·7 | 53 | 9·9 | 12·8 | |
| 9·0 | | 21·9 | 24·6 | 9·0 |
| 9·2 | | 31·4 | 8·1 | |
| 9·7 | | 39·4 | 19·0 | |
| 9·6 | | 41·4 | 17·0 | |
| 9·3 | 54 | 5·4 | 30·0 | |
| 9·3 | | 21·9 | 4·9 | |
| 9·1 | | 26·9 | 4·0 | |
| 8·4 | | 32·4 | 54·0 | 8·0 G |
| 9·0 | | 34·4 | 43·3 | |
| 9·7 | | 35·9 | 4·1 | |
| 8·8 | | 39·7 | 2·8 | |
| 9·4 | | 50·9 | 5·3 | |
| 9·7 | | 52·9 | 4·0 | |
| 9·4 | | 59·9 | 0·5 | |
| 9·7 | 55 | 6·9 | 56·4 | |
| 9·4 | | 11·9 | 29·9 | |
| 9·2 | | 13·4 | 19·0 | |
| 9·7 | | 19·9 | 38·7 | |
| 9·4 | | 31·4 | 11·1 | |
| 8·8 | 56 | 0·0 | 55·3 | |
| 9·3 | | 9·5 | 14·0 | |
| 9·6 | | 11·5 | 35·6 | |
| 9·7 | | 27·5 | 46·0 | |
| 9·7 | | 40·0 | 57·7 | |
| 9·7 | | 41·5 | 30·9 | |
| 9·6 | | 46·0 | 1·0 | |
| 9·4 | 57 | 2·0 | 31·3 | |
| 9·6 | | 21·0 | 34·9 | |
| 9·4 | | 23·5 | 56·2 | |
| 9·6 | 58 | 9·5 | 20·9 | |
| 9·7 | | 16·5 | 52·2 | |
| 9·7 | | 21·0 | 46·3 | |
| 8·8 | | 23·0 | 40·6 | 8·5 |
| 9·7 | | 39·5 | 46·3 | |
| 9·3 | | 42·5 | 22·2 | |
| 8·0 | | 47·1 | 56·6 | 7·2 GSt |
| 9·6 | 59 | 1·5 | 25·2 | |
| 9·6 | | 5·0 | 7·0 | |
| 9·6 | | 46·5 | 47·9 | |
| 9·4 | | 59·5 | 8·0 | |
| 9·6 | 0 | 1·5 | 21·6 | |
| 9·6 | | 1·5 | 22·0 | |
| 9·3 | | 5·5 | 25·4 | |
| 8·6 | | 20·0 | 50·7 | 8·5 |
| 9·7 | | 26·0 | 47·1 | |
| 9·6 | | 43·5 | 10·8 | |
| 9·7 | 1 | 8·5 | 31·0 | |
| 9·6 | | 11·0 | 22·7 | |
| 9·0 | | 21·2 | 57·6 | |
| 9·7 | | 25·2 | 58·2 | |
| 9·4 | | 25·5 | 25·7 | |
| 9·4 | | 26·0 | 56·3 | |
| 9·2 | | 31·0 | 52·1 | |
| 9·2 | | 47·2 | 31·8 | |
| 9·7 | 2 | 9·3 | 7·0 | |
| 9·4 | | 12·7 | 48·0 | |
| 9·0 | | 29·2 | 47·3 | 9·0 |
| 9·3 | | 45·2 | 14·6 | |
| 9·7 | | 47·2 | 12·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 20 | 81 | 8·3 |
| | 30 | 83 | 8·3 |
| | 40 | 85 | 8·2 |
| | 50 | 87 | 8·2 |
| 13 | 0 | 89 | 8·1 |
| | 10 | 91 | 8·0 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 13 | 0 | 89 | 8.1 |
| | 10 | 91 | 8.0 |
| | 20 | 93 | 7.9 |
| | 30 | 95 | 7.7 |
| | 40 | 97 | 7.6 |

## 5461—5520.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.7 | 2 | 48.2 | 13.3 | |
| 9.7 | | 50.6 | 55.5 | |
| 8.6 | 3 | 0.2 | 5.8 | |
| 9.2 | | 4.2 | 16.7 | |
| 9.6 | | 7.2 | 5.2 | |
| 9.4 | | 28.2 | 24.0 | |
| 9.0 | | 33.7 | 56.8 | |
| 9.7 | | 35.2 | 31.0 | |
| 8.9 | | 37.7 | 42.1 | |
| 9.0 | | 40.4 | 50.8 | 8.2 |
| 9.6 | | 54.9 | 21.6 | |
| 7.4 | | 56.4 | 41.4 | 8.0 |
| 9.3 | 4 | 1.8 | 36.6 | |
| 9.1 | | 8.0 | 27.9 | 9.5 |
| 9.6 | | 23.0 | 45.1 | |
| 9.8 | | 27.8 | 39.2 | |
| 9.3 | | 37.8 | 31.7 | |
| 9.9 | | 38.0 | 18.7 | |
| 9.8 | 5 | 1.5 | 8.3 | |
| 9.6 | | 2.0 | 31.9 | |
| 8.6 | | 14.0 | 26.6 | 8.0 |
| 9.8 | | 36.0 | 22.8 | |
| 9.3 | | 39.5 | 2.6 | |
| 9.6 | | 52.5 | 45.3 | |
| 9.9 | | 58.0 | 58.0 | |
| 9.4 | 6 | 18.5 | 8.0 | |
| 9.2 | | 33.0 | 11.7 | 8.5 G |
| 9.4 | | 34.2 | 0.8 | 9.5 |
| 8.7 | | 34.2 | 1.9 | 8.5 G |
| 9.2 | | 41.5 | 5.3 | |
| 8.6 | | 51.5 | 17.9 | 7.5 G |
| 9.1 | | 52.0 | 35.6 | |
| 9.9 | | 54.0 | 3.8 | |
| 9.9 | 7 | 2.0 | 52.1 | |
| 9.9 | | 2.5 | 28.8 | |
| 9.2 | | 4.5 | 55.7 | |
| 9.2 | | 7.0 | 58.9 | |
| 9.9 | | 7.0 | 40.3 | |
| 9.4 | | 19.0 | 16.2 | |
| 9.0 | | 20.5 | 41.3 | |
| 9.9 | | 31.5 | 45.5 | |
| 8.3 | | 31.5 | 18.4 | 7.5 G |
| 8.8 | | 45.0 | 43.1 | 9.0 |
| 9.9 | | 45.5 | 21.2 | |
| 8.6 | | 46.5 | 40.5 | 8.5 |
| 9.6 | | 48.5 | 8.4 | |
| 9.9 | | 52.0 | 7.5 | |
| 9.7 | | 53.5 | 44.4 | |
| 9.4 | | 58.2 | 1.5 | |
| 8.6 | 8 | 0.0 | 43.4 | 8.5 |
| 9.8 | | 15.5 | 13.7 | |
| 9.6 | | 23.5 | 38.9 | |
| 9.4 | | 55.5 | 6.1 | |
| 9.4 | 9 | 10.0 | 45.3 | |
| 9.2 | | 13.0 | 48.7 | |
| 8.7 | | 32.0 | 9.4 | |
| 9.4 | | 42.5 | 47.4 | |
| 9.8 | | 44.0 | 43.0 | |
| 9.9 | | 48.0 | 2.1 | |
| 9.4 | | 52.5 | 7.5 | |

## 5521—5580.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.8 | 9 | 58.0 | 22.9 | |
| 9.8 | 10 | 10.0 | 27.9 | |
| 9.3 | | 19.5 | 53.6 | |
| 9.8 | | 27.0 | 20.3 | |
| 8.7 | | 29.5 | 35.5 | |
| 9.4 | | 30.5 | 3.8 | |
| 8.8 | | 39.0 | 9.1 | |
| 9.9 | | 49.5 | 58.2 | |
| 9.4 | | 53.5 | 26.8 | |
| 9.9 | | 59.0 | 24.1 | |
| 9.9 | | 59.5 | 59.9 | |
| 9.4 | 11 | 0.5 | 50.1 | |
| 9.4 | | 2.5 | 41.4 | |
| 9.7 | | 13.5 | 38.5 | |
| 9.2 | | 14.5 | 26.2 | 9.0 |
| 9.6 | | 16.5 | 54.2 | |
| 9.9 | | 21.5 | 52.1 | |
| 9.9 | | 25.0 | 37.2 | |
| 8.9 | | 31.5 | 16.9 | 9.0 |
| 9.2 | | 35.5 | 8.9 | |
| 9.7 | | 40.0 | 17.6 | |
| 9.4 | | 50.5 | 42.6 | |
| 9.3 | | 56.5 | 18.6 | 9.5 G |
| 9.6 | 12 | 13.0 | 19.6 | |
| 9.2 | | 14.3 | 2.2 | |
| 9.9 | | 16.5 | 58.0 | |
| 8.8 | | 21.5 | 36.9 | 9.0 |
| 9.3 | | 25.0 | 3.1 | |
| 9.9 | | 30.1 | 57.9 | |
| 9.4 | | 34.5 | 37.2 | 9.2 |
| 9.6 | | 38.0 | 36.2 | |
| 9.4 | | 41.0 | 7.7 | |
| 9.9 | | 44.3 | 58.8 | |
| 9.7 | 13 | 2.0 | 19.7 | |
| 9.6 | | 10.0 | 47.0 | |
| 9.4 | | 24.5 | 37.7 | 10.0 |
| 9.2 | | 27.0 | 1.9 | |
| 9.9 | | 42.0 | 17.5 | |
| 7.9 | 14 | 4.5 | 45.7 | 8.0 Gt |
| 9.7 | | 6.5 | 3.4 | |
| 9.9 | | 15.0 | 23.0 | |
| 9.6 | | 16.5 | 21.4 | |
| 9.6 | | 29.0 | 16.1 | |
| 9.2 | | 32.5 | 53.0 | |
| 9.2 | | 38.5 | 53.0 | 8.5 |
| 9.9 | | 44.0 | 38.4 | |
| 9.2 | | 50.5 | 36.2 | 9.5 |
| 9.9 | | 51.0 | 23.9 | |
| 9.8 | | 56.6 | 2.5 | |
| 9.4 | 15 | 10.0 | 22.9 | |
| 8.7 | | 26.5 | 33.2 | 8.5 G |
| 9.9 | | 48.5 | 36.2 | |
| 9.9 | | 59.5 | 40.1 | |
| 9.9 | 16 | 3.0 | 55.5 | |
| 8.6 | | 4.0 | 44.0 | 8.0 G |
| 9.9 | | 33.0 | 43.0 | |
| 8.7 | | 47.0 | 33.8 | 9.0 |
| 8.4 | | 47.5 | 47.8 | 8.2 |
| 9.2 | | 47.5 | 5.2 | |
| 9.9 | | 52.5 | 7.8 | |

## 5581—5640.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.4 | 16 | 54.0 | 55.5 | |
| 9.6 | 17 | 5.0 | 16.2 | |
| 9.7 | | 30.0 | 52.1 | |
| 9.4 | | 32.0 | 34.1 | |
| 9.6 | | 32.5 | 50.5 | |
| 9.9 | | 34.5 | 45.5 | |
| 9.9 | | 52.5 | 57.2 | |
| 8.6 | | 57.3 | 0.6 | |
| 9.7 | 18 | 2.0 | 28.6 | 9.5 |
| 9.2 | | 20.0 | 35.3 | |
| 9.2 | | 20.5 | 41.3 | 9.5 |
| 9.0 | | 29.5 | 5.3 | 9.5 |
| 9.9 | | 37.0 | 6.1 | |
| 9.4 | 19 | 4.5 | 8.0 | |
| 9.4 | | 25.0 | 17.8 | |
| 9.4 | | 31.5 | 13.5 | |
| 9.6 | | 34.5 | 12.7 | |
| 9.9 | | 47.0 | 12.3 | |
| 9.8 | 20 | 6.5 | 4.5 | |
| 9.9 | | 9.0 | 6.0 | |
| 9.6 | | 10.0 | 24.0 | |
| 9.6 | | 14.0 | 23.2 | |
| 9.9 | | 57.7 | 59.9 | |
| 9.6 | 21 | 13.0 | 4.4 | |
| 9.9 | | 21.0 | 29.9 | |
| 8.4 | | 24.5 | 16.2 | GS |
| 9.9 | | 27.0 | 17.7 | |
| 9.4 | | 34.0 | 45.1 | |
| 9.9 | | 40.0 | 28.0 | |
| 9.4 | | 46.5 | 49.8 | |
| 9.7 | | 54.0 | 17.8 | |
| 9.9 | | 54.7 | 59.0 | |
| 9.6 | 22 | 3.0 | 3.9 | |
| 9.7 | | 3.0 | 6.6 | |
| 9.6 | | 16.0 | 15.5 | |
| 9.2 | | 24.5 | 47.2 | 9.0 |
| 9.4 | | 25.0 | 39.7 | |
| 9.9 | | 32.5 | 0.0 | |
| 9.4 | | 35.5 | 32.0 | |
| 9.6 | | 44.5 | 55.1 | |
| 9.6 | | 55.5 | 46.7 | 9.2 |
| 9.6 | 23 | 8.0 | 12.7 | |
| 9.2 | | 10.0 | 19.3 | |
| 9.2 | | 29.5 | 36.7 | |
| 9.9 | | 34.0 | 33.0 | |
| 9.9 | | 48.5 | 35.9 | |
| 9.1 | 24 | 9.0 | 25.7 | |
| 9.3 | | 24.0 | 9.0 | |
| 9.9 | | 24.5 | 25.4 | |
| 9.8 | | 26.5 | 40.6 | |
| 9.3 | | 40.0 | 0.7 | |
| 9.2 | | 41.0 | 52.3 | |
| 9.9 | | 42.0 | 9.2 | |
| 9.3 | | 43.0 | 4.2 | |
| 9.4 | | 53.5 | 37.4 | |
| 9.4 | | 55.0 | 3.9 | |
| 9.9 | 25 | 11.7 | 59.8 | |
| 9.0 | | 33.0 | 14.1 | |
| 9.8 | | 37.0 | 14.4 | |
| 9.4 | | 38.5 | 47.8 | |

## 5641—5700.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.9 | 26 | 0.5 | 26.6 | |
| 9.4 | | 0.5 | 25.1 | |
| 9.4 | | 3.0 | 4.7 | |
| 9.6 | | 9.0 | 55.3 | |
| 9.9 | | 10.0 | 52.2 | |
| 9.9 | | 24.0 | 40.0 | |
| 8.8 | | 29.8 | 0.2 | 9.0 G |
| 9.4 | | 50.5 | 47.7 | |
| 9.4 | 27 | 3.5 | 39.6 | |
| 8.8 | | 20.0 | 26.2 | 9.0 |
| 9.8 | | 31.5 | 42.9 | |
| 9.8 | | 34.5 | 35.1 | |
| 9.8 | | 44.0 | 49.6 | |
| 9.6 | | 44.9 | 17.3 | |
| 9.4 | | 52.5 | 47.1 | |
| 9.4 | | 58.0 | 22.4 | 8.8 |
| 9.7 | | 58.5 | 21.6 | |
| 9.4 | 28 | 0.0 | 1.5 | |
| 9.4 | | 1.5 | 38.3 | |
| 9.7 | | 1.5 | 3.4 | |
| 9.9 | | 7.0 | 29.1 | |
| 8.7 | | 10.0 | 17.8 | 8.0 |
| 8.8 | | 16.0 | 37.0 | 8.0 G |
| 8.9 | | 21.5 | 3.4 | |
| 9.7 | | 39.5 | 14.3 | |
| 9.2 | | 55.0 | 21.0 | 8.5 |
| 9.6 | | 57.0 | 51.4 | |
| 9.4 | 29 | 6.5 | 24.5 | |
| 9.4 | | 8.0 | 24.9 | |
| 9.6 | | 27.5 | 8.0 | |
| 9.9 | | 29.0 | 49.1 | |
| 9.8 | | 29.5 | 35.5 | |
| 9.4 | | 42.5 | 33.0 | |
| 9.8 | | 44.0 | 21.7 | |
| 9.8 | | 47.5 | 47.1 | |
| 9.4 | | 55.5 | 5.9 | |
| 9.4 | 30 | 4.0 | 8.3 | |
| 9.4 | | 16.5 | 56.1 | |
| 9.2 | | 23.1 | 0.1 | |
| 7.8 | | 56.0 | 23.2 | 7.3 GS |
| 9.1 | 31 | 11.0 | 17.5 | |
| 9.3 | | 21.0 | 37.4 | 8.5 |
| 9.8 | | 31.0 | 21.8 | |
| 9.4 | | 32.0 | 34.6 | 9.0 |
| 8.8 | | 33.5 | 41.2 | 8.8 |
| 9.6 | | 35.5 | 12.7 | |
| 8.8 | | 39.0 | 8.9 | 9.0 |
| 9.4 | | 44.0 | 46.0 | |
| 9.4 | 32 | 28.5 | 19.1 | |
| 9.9 | | 45.5 | 32.1 | |
| 8.6 | | 58.0 | 11.0 | |
| 9.8 | 33 | 8.5 | 54.3 | |
| 9.9 | | 21.5 | 6.1 | |
| 9.8 | | 35.5 | 16.2 | |
| 8.5 | | 44.5 | 24.6 | 8.2 |
| 8.8 | | 55.0 | 16.0 | 8.5 |
| 9.9 | | 56.5 | 3.5 | |
| 9.3 | 34 | 0.0 | 20.2 | 8.5 |
| 9.9 | | 13.0 | 54.8 | |
| 9.6 | | 47.0 | 42.2 | |



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## 5701—5760.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 34 | 55·0 | 52·5 | |
| 9·9 | 35 | 7·0 | 11·8 | |
| 9·6 | | 11·0 | 24·7 | |
| 9·2 | | 29·6 | 14·0 | 9·0 |
| 9·3 | | 39·8 | 58·1 | |
| 9·9 | | 50·0 | 58·4 | |
| 9·4 | | 51·6 | 8·2 | |
| 9·8 | | 56·1 | 34·2 | |
| 9·6 | 36 | 10·0 | 34·5 | |
| 9·2 | | 15·1 | 35·8 | |
| 9·7 | | 15·3 | 3·4 | |
| 9·9 | | 20·0 | 41·2 | |
| 9·9 | | 21·5 | 49·5 | |
| 9·8 | | 30·6 | 10·1 | |
| 9·6 | | 31·5 | 14·0 | |
| 9·7 | | 34·6 | 3·5 | |
| 9·4 | | 59·6 | 34·6 | |
| 8·2 | 37 | 14·1 | 41·6 | 8·8 G |
| 9·6 | | 19·1 | 32·0 | |
| 9·4 | | 28·1 | 6·5 | 10·0 |
| 10·0 | | 31·1 | 41·0 | |
| 9·4 | | 35·8 | 57·6 | |
| 10·0 | | 50·6 | 43·1 | |
| 10·0 | | 58·1 | 26·1 | |
| 7·0 | 38 | 10·1 | 3·3 | 7·0 GSt |
| 9·6 | | 16·6 | 52·4 | |
| 10·0 | | 29·1 | 45·6 | |
| 9·8 | | 34·1 | 46·0 | |
| 9·6 | | 44·1 | 45·9 | |
| 8·8 | | 51·1 | 22·7 | 9·0 |
| 9·4 | 39 | 5·6 | 9·0 | |
| 9·0 | | 15·6 | 11·9 | |
| 8·7 | | 25·6 | 37·6 | 9·0 |
| 9·8 | | 26·1 | 17·2 | |
| 9·8 | | 31·6 | 25·1 | |
| 9·6 | | 48·6 | 15·4 | 9·0 |
| 10·0 | | 57·1 | 39·8 | |
| 10·0 | 40 | 14·1 | 23·6 | |
| 9·6 | | 14·6 | 45·3 | |
| 8·2 | | 23·9 | 59·3 | 7·8 G |
| 10·0 | | 25·6 | 36·5 | |
| 9·0 | | 36·6 | 13·1 | |
| 9·6 | | 49·1 | 41·1 | |
| 9·4 | | 50·6 | 35·3 | |
| 9·2 | 41 | 8·1 | 45·3 | 8·0 G |
| 10·0 | | 17·1 | 24·0 | |
| 9·4 | | 27·1 | 42·4 | |
| 9·4 | | 33·3 | 59·2 | |
| 9·2 | | 37·6 | 32·2 | 10·0 |
| 10·0 | | 40·6 | 40·7 | |
| 9·0 | | 52·6 | 56·2 | 9·0 |
| 9·6 | | 57·1 | 46·2 | |
| 10·0 | 42 | 10·6 | 35·0 | |
| 9·7 | | 26·6 | 3·6 | |
| 9·4 | | 27·8 | 59·7 | |
| 9·4 | | 32·1 | 47·1 | |
| 9·6 | | 32·6 | 17·0 | |
| 9·8 | | 38·1 | 12·5 | |
| 9·7 | 43 | 15·8 | 59·2 | |
| 10·0 | | 17·7 | 52·8 | |

## 5761—5820.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 43 | 25·8 | 59·1 | |
| 9·6 | | 37·6 | 49·7 | |
| 9·6 | | 43·1 | 40·6 | |
| 10·0 | | 51·6 | 48·2 | |
| 9·7 | | 52·1 | 13·6 | |
| 10·0 | 44 | 14·6 | 53·9 | |
| 10·0 | | 20·7 | 24·3 | |
| 9·4 | | 23·1 | 43·2 | |
| 10·0 | | 24·6 | 44·2 | |
| 10·0 | | 25·1 | 8·7 | |
| 9·6 | | 25·4 | 57·2 | |
| 8·8 | | 29·6 | 55·3 | |
| 9·8 | | 31·1 | 46·1 | |
| 10·0 | | 57·1 | 29·6 | |
| 8·6 | 45 | 1·6 | 27·1 | 9·0 S |
| 8·4 | | 35·9 | 56·3 | 8·0 |
| 9·8 | | 39·6 | 34·4 | |
| 10·0 | | 40·6 | 52·1 | |
| 9·2 | | 49·1 | 16·5 | 9·0 |
| 10·0 | 46 | 14·6 | 0·9 | |
| 9·1 | | 19·6 | 0·0 | |
| 10·0 | | 20·6 | 31·6 | |
| 8·2 | | 22·1 | 27·2 | 7·2 GS |
| 9·4 | | 27·1 | 20·1 | 9·5 G |
| 10·0 | | 36·1 | 43·7 | |
| 9·7 | | 37·1 | 20·6 | 9·5 |
| 10·0 | | 39·1 | 54·5 | |
| 8·2 | | 41·1 | 51·5 | |
| 9·8 | | 43·1 | 9·6 | |
| 8·9 | | 44·6 | 28·2 | 9·2 |
| 8·4 | | 45·6 | 24·2 | 7·2 GS |
| 9·6 | | 48·1 | 17·3 | |
| 9·2 | | 48·1 | 24·8 | |
| 10·0 | | 50·1 | 22·5 | |
| 9·6 | | 52·1 | 25·8 | |
| 10·0 | 47 | 16·1 | 49·9 | |
| 10·0 | | 24·1 | 26·8 | |
| 10·0 | | 34·6 | 50·8 | |
| 9·8 | | 43·6 | 28·9 | |
| 9·4 | | 47·6 | 36·9 | |
| 10·0 | | 53·1 | 16·6 | |
| 9·1 | | 54·6 | 5·7 | |
| 10·0 | | 55·1 | 38·2 | |
| 10·0 | | 56·5 | 58·8 | |
| 9·8 | 48 | 0·6 | 51·8 | |
| 7·4 | | 19·6 | 5·0 | 7·0 GSct |
| 9·8 | | 28·8 | 2·4 | |
| 9·0 | | 35·6 | 14·6 | 9·0 |
| 10·0 | | 36·6 | 14·9 | |
| 9·7 | | 37·6 | 16·2 | |
| 9·6 | | 40·6 | 42·6 | |
| 9·4 | | 49·1 | 26·6 | |
| 10·0 | 49 | 1·1 | 58·3 | |
| 10·0 | | 4·6 | 9·4 | |
| 10·0 | | 27·1 | 16·4 | |
| 9·6 | | 34·6 | 21·2 | |
| 9·8 | | 40·6 | 53·4 | |
| 9·4 | | 43·6 | 43·2 | |
| 10·0 | | 48·1 | 1·2 | |
| 10·0 | 50 | 2·9 | 10·3 | |

## 5821—5880.

| mag. | 13h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·1 | 50 | 7·6 | 27·0 | 9·5 |
| 9·6 | | 18·1 | 14·5 | |
| 10·0 | | 19·1 | 4·1 | |
| 9·6 | | 23·1 | 52·2 | |
| 9·0 | | 26·1 | 13·9 | |
| 8·8 | | 26·1 | 38·3 | |
| 10·0 | | 26·6 | 30·3 | |
| 9·6 | | 45·6 | 23·4 | |
| 10·0 | | 50·6 | 25·2 | |
| 10·0 | 51 | 12·1 | 25·9 | |
| 10·0 | | 16·1 | 42·3 | |
| 10·0 | | 19·6 | 31·6 | |
| 9·7 | | 38·1 | 6·9 | |
| 9·6 | | 38·1 | 8·3 | |
| 9·4 | | 55·1 | 20·2 | |
| 10·0 | 52 | 1·1 | 43·4 | |
| 9·4 | | 12·1 | 43·1 | |
| 9·8 | | 21·1 | 8·5 | |
| 10·0 | | 30·1 | 49·4 | |
| 9·2 | | 39·1 | 21·1 | 9·0 |
| 10·0 | | 41·1 | 11·7 | |
| 10·0 | | 49·6 | 15·0 | |
| 9·8 | | 54·1 | 49·9 | |
| 10·0 | 53 | 1·6 | 7·7 | |
| 10·0 | | 3·1 | 12·9 | |
| 10·0 | | 5·3 | 1·5 | |
| 10·0 | | 18·6 | 48·0 | |
| 9·8 | | 28·1 | 33·9 | |
| 9·4 | | 31·1 | 15·6 | |
| 9·4 | | 35·6 | 22·8 | |
| 9·4 | | 50·6 | 51·7 | |
| 9·8 | | 53·1 | 31·3 | |
| 8·8 | 54 | 2·6 | 46·5 | 9·5 |
| 9·6 | | 16·6 | 33·1 | |
| 10·0 | | 23·1 | 6·9 | 9·0 |
| 9·2 | | 29·6 | 13·7 | 9·5 |
| 9·2 | | 38·6 | 8·4 | 9·5 |
| 10·0 | | 39·6 | 24·5 | |
| 9·2 | | 40·6 | 44·8 | |
| 9·4 | | 48·1 | 24·1 | |
| 9·8 | | 50·1 | 16·0 | |
| 10·0 | | 50·6 | 10·1 | |
| 9·2 | | 50·6 | 45·0 | 10·0 |
| 10·0 | 55 | 1·6 | 55·3 | |
| 9·4 | | 2·1 | 49·1 | |
| 9·8 | | 5·1 | 36·4 | |
| 10·0 | | 7·6 | 14·5 | |
| 10·0 | | 22·1 | 0·1 | |
| 10·0 | | 26·8 | 25·0 | |
| 10·0 | | 27·6 | 44·3 | |
| 9·4 | | 31·6 | 9·5 | |
| 9·4 | | 40·6 | 31·5 | |
| 9·8 | | 46·6 | 27·4 | |
| 9·6 | | 55·1 | 32·3 | |
| 9·6 | | 55·6 | 41·6 | |
| 9·2 | 56 | 0·6 | 22·7 | |
| 9·6 | | 10·6 | 53·5 | |
| 9·8 | | 14·6 | 57·2 | |
| 9·8 | | 26·1 | 5·9 | |
| 9·8 | | 32·1 | 54·2 | |

## 5881—5940.

| mag. | 13h.—14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 56 | 38·1 | 24·0 | |
| 10·0 | | 40·6 | 14·8 | |
| 8·7 | | 46·3 | 58·2 | |
| 9·6 | | 55·1 | 5·7 | |
| 9·8 | 57 | 3·1 | 9·9 | |
| 9·4 | | 19·1 | 27·9 | 9·0 |
| 7·2 | | 25·1 | 4·1 | 7·0 GSct |
| 9·7 | | 35·1 | 24·3 | |
| 9·6 | | 37·1 | 14·3 | |
| 9·1 | | 41·6 | 58·7 | |
| 9·6 | | 54·7 | 47·4 | |
| 9·0 | | 59·2 | 18·1 | |
| 10·0 | 58 | 12·2 | 16·1 | |
| 9·6 | | 18·7 | 22·9 | |
| 10·0 | | 26·2 | 46·5 | |
| 9·6 | | 39·2 | 13·7 | |
| 9·4 | | 50·2 | 16·9 | |
| 9·8 | 59 | 25·2 | 57·9 | |
| 10·0 | | 40·2 | 7·5 | |
| 8·9 | | 50·2 | 45·3 | |
| 10·0 | | 53·2 | 38·9 | |
| 10·0 | 0 | 2·2 | 41·3 | |
| 9·4 | | 7·2 | 21·0 | |
| 10·0 | | 10·5 | 43·1 | |
| 10·0 | | 29·2 | 17·7 | |
| 9·4 | | 32·7 | 11·2 | |
| 10·0 | | 41·5 | 26·2 | |
| 8·2 | 1 | 0·2 | 46·1 | 8·0 |
| 9·6 | | 11·7 | 31·3 | |
| 9·7 | 2 | 0·2 | 24·2 | |
| 9·6 | | 11·2 | 24·8 | |
| 10·0 | | 28·2 | 54·2 | |
| 7·6 | | 32·7 | 51·3 | GS |
| 8·9 | | 34·2 | 18·2 | 8·5 G |
| 8·4 | | 53·7 | 2·3 | 8·5 |
| 9·4 | | 58·7 | 25·1 | |
| 10·0 | 3 | 8·7 | 55·0 | |
| 10·0 | | 9·2 | 8·1 | |
| 9·4 | | 50·7 | 34·5 | |
| 8·7 | | 54·2 | 30·4 | |
| 8·6 | 4 | 4·2 | 53·3 | 8·0 GSt |
| 9·8 | | 14·2 | 25·6 | |
| 9·7 | | 20·2 | 34·9 | |
| 9·8 | | 28·7 | 7·2 | |
| 8·6 | | 29·2 | 44·6 | 9·5 |
| 9·8 | | 35·2 | 48·4 | |
| 10·0 | | 36·7 | 59·7 | |
| 9·8 | | 37·7 | 16·1 | |
| 9·2 | | 40·7 | 54·2 | 9·5 |
| 8·7 | | 48·7 | 17·8 | |
| 10·0 | | 48·7 | 7·9 | |
| 9·7 | | 56·7 | 30·7 | |
| 7·2 | 5 | 10·7 | 2·3 | 6·5 GSt |
| 10·0 | | 18·7 | 26·5 | |
| 9·7 | | 21·2 | 15·1 | |
| 10·0 | | 47·7 | 53·1 | |
| 10·0 | 6 | 40·2 | 50·0 | |
| 10·0 | | 54·2 | 25·1 | |
| 9·4 | 7 | 16·5 | 37·3 | 8·8 |
| 10·0 | | 43·5 | 56·2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 30 | 95 | 7·7 |
| | 40 | 97 | 7·6 |
| | 50 | 98 | 7·4 |
| 14 | 0 | 100 | 7·2 |
| | 10 | 102 | 7·0 |



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| 25 prc. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 14 | 0 | 100 | 7·2 |
| | 10 | 102 | 7·0 |
| | 20 | 104 | 6·8 |
| | 30 | 105 | 6·6 |
| | 40 | 107 | 6·4 |
| | 50 | 108 | 6·2 |

## 5941—6000.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 8 | 1·3 | 13·2 | |
| 10·0 | | 16·2 | 27·9 | |
| 10·0 | | 29·2 | 24·1 | |
| 8·2 | | 30·5 | 56·4 | 8·5 |
| 10·2 | | 31·8 | 13·4 | |
| 10·2 | | 49·8 | 44·7 | |
| 10·2 | | 56·1 | 9·2 | |
| 9·4 | | 58·8 | 41·8 | |
| 9·8 | 9 | 13·3 | 21·2 | |
| 9·2 | | 38·3 | 41·0 | |
| 9·6 | 10 | 30·8 | 53·8 | |
| 9·6 | | 31·8 | 49·2 | |
| 10·0 | | 31·8 | 33·3 | |
| 10·0 | | 42·3 | 26·2 | |
| 9·8 | | 42·8 | 21·0 | |
| 9·0 | | 45·8 | 35·7 | 9·5 |
| 10·2 | | 52·8 | 19·8 | |
| 9·4 | | 58·3 | 54·0 | |
| 9·6 | 11 | 10·3 | 37·1 | |
| 9·6 | | 13·3 | 48·4 | |
| 10·2 | | 30·8 | 51·1 | |
| 9·4 | | 40·8 | 18·9 | |
| 9·8 | | 44·8 | 13·8 | |
| 10·0 | | 50·8 | 22·8 | |
| 9·0 | 12 | 4·3 | 41·6 | |
| 9·5 | | 4·3 | 52·4 | |
| 8·2 | | 26·8 | 57·2 | 8·0 |
| 9·8 | | 34·3 | 49·8 | |
| 8·8 | | 50·8 | 31·6 | 9·0 |
| 9·5 | 13 | 0·8 | 52·0 | |
| 9·6 | | 22·8 | 49·9 | |
| 10·2 | | 39·3 | 2·8 | |
| 8·9 | | 59·3 | 32·8 | 10·0 |
| 10·0 | | 59·8 | 9·2 | |
| 7·2 | 14 | 2·8 | 51·5 | 7·5 GSt |
| 9·8 | | 3·1 | 44·6 | |
| 8·8 | | 17·8 | 36·8 | 9·5 |
| 9·6 | | 32·8 | 48·8 | |
| 9·4 | | 57·5 | 58·9 | |
| 10·0 | 15 | 10·8 | 34·0 | |
| 9·2 | | 17·8 | 4·9 | |
| 10·0 | | 50·8 | 8·0 | |
| 8·4 | | 50·8 | 47·8 | 8·5 G |
| 10·2 | | 54·3 | 33·6 | |
| 10·2 | 16 | 2·8 | 5·7 | |
| 10·2 | | 6·8 | 14·7 | |
| 9·6 | | 26·8 | 33·4 | |
| 9·4 | | 40·8 | 14·1 | |
| 10·2 | | 41·0 | 40·0 | |
| 7·6 | | 42·3 | 26·9 | 7·2 GSt |
| 8·7 | | 43·0 | 0·9 | 9·0 |
| 9·4 | | 50·8 | 13·6 | |
| 9·4 | | 54·3 | 14·7 | |
| 9·5 | | 55·3 | 14·3 | |
| 10·0 | 17 | 0·8 | 22·1 | |
| 9·2 | | 5·8 | 33·5 | 9·2 |
| 10·2 | | 7·8 | 25·8 | |
| 9·5 | | 11·3 | 14·0 | |
| 10·0 | | 12·8 | 13·3 | |
| 9·4 | | 20·8 | 13·7 | |

## 6001—6060.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 17 | 22·8 | 14·3 | |
| 10·0 | | 26·7 | 0·6 | |
| 9·0 | | 40·3 | 41·5 | 8·0 |
| 9·4 | | 54·3 | 5·1 | 9·0 |
| 8·0 | 18 | 10·3 | 39·5 | 8·2 |
| 10·2 | | 26·3 | 4·6 | |
| 10·2 | | 32·8 | 30·3 | |
| 10·2 | | 37·3 | 23·3 | |
| 9·8 | | 38·8 | 6·7 | |
| 10·2 | | 49·3 | 33·1 | |
| 9·5 | | 50·8 | 9·1 | |
| 9·6 | | 56·3 | 52·8 | |
| 9·8 | 19 | 2·8 | 25·6 | |
| 9·4 | | 8·8 | 16·8 | |
| 8·6 | | 11·8 | 54·3 | |
| 9·2 | | 14·3 | 27·5 | 8·8 |
| 9·8 | | 28·8 | 14·1 | |
| 10·0 | | 32·3 | 30·1 | |
| 9·6 | | 36·8 | 24·0 | 9·8 G |
| 9·6 | | 43·3 | 25·9 | |
| 7·8 | | 57·8 | 39·5 | 8·0 Gt |
| 9·4 | 20 | 6·3 | 33·5 | 9·5 |
| 9·2 | | 17·8 | 46·3 | 9·0 |
| 8·8 | 21 | 6·3 | 43·3 | 9·0 |
| 10·2 | | 12·8 | 53·3 | |
| 9·8 | | 19·8 | 38·3 | |
| 10·0 | | 19·8 | 12·1 | 9·5 |
| 10·0 | | 22·3 | 42·1 | |
| 10·0 | | 40·8 | 38·0 | |
| 10·0 | | 40·8 | 46·0 | |
| 9·5 | | 57·3 | 37·2 | |
| 9·5 | 22 | 8·8 | 40·9 | |
| 9·8 | | 10·8 | 13·2 | |
| 10·2 | | 11·3 | 43·1 | |
| 10·0 | | 21·3 | 41·4 | |
| 8·5 | | 32·3 | 31·0 | 8·5 |
| 9·8 | | 40·8 | 56·6 | |
| 9·4 | 23 | 1·3 | 32·1 | |
| 9·8 | | 6·3 | 38·3 | |
| 10·2 | | 13·3 | 39·0 | |
| 10·2 | | 23·3 | 7·9 | |
| 9·8 | | 32·2 | 0·4 | |
| 9·6 | | 39·3 | 19·3 | |
| 7·4 | | 42·3 | 54·6 | 7·5 Gt |
| 8·7 | 24 | 1·3 | 40·3 | |
| 10·0 | | 13·3 | 23·1 | |
| 10·2 | | 23·3 | 32·3 | |
| 9·5 | | 28·8 | 33·7 | |
| 8·9 | | 35·3 | 34·0 | |
| 9·8 | | 38·3 | 40·4 | |
| 9·5 | | 40·3 | 33·6 | |
| 10·2 | | 43·8 | 13·1 | |
| 6·9 | | 46·3 | 26·7 | 6·5 GS |
| 9·5 | | 50·8 | 59·4 | |
| 9·4 | 25 | 0·8 | 9·5 | |
| 10·2 | | 10·8 | 10·9 | |
| 10·0 | | 32·8 | 5·9 | |
| 9·5 | | 46·8 | 21·3 | |
| 9·4 | | 50·8 | 22·1 | 9·5 |
| 10·2 | 26 | 11·8 | 15·9 | |

## 6061—6120.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 26 | 15·8 | 54·2 | |
| 10·2 | | 24·8 | 21·9 | |
| 9·5 | | 30·8 | 46·4 | |
| 10·2 | | 30·8 | 19·0 | |
| 10·0 | | 38·3 | 57·6 | |
| 8·6 | | 44·3 | 56·4 | |
| 9·4 | | 55·8 | 3·5 | |
| 9·4 | 27 | 4·3 | 35·2 | |
| 9·2 | | 6·8 | 6·8 | |
| 9·8 | | 14·3 | 42·0 | |
| 10·2 | | 15·8 | 20·9 | |
| 9·6 | | 30·8 | 42·7 | |
| 10·2 | | 31·3 | 18·2 | |
| 9·4 | | 44·8 | 28·1 | |
| 9·6 | | 51·3 | 6·7 | |
| 8·8 | 28 | 6·8 | 52·5 | 9·2 |
| 10·2 | | 14·1 | 1·6 | |
| 9·0 | | 22·8 | 41·0 | 9·5 |
| 8·6 | | 30·3 | 21·0 | 9·0 |
| 9·4 | | 32·8 | 50·1 | |
| 9·8 | | 48·3 | 55·2 | |
| 9·4 | | 59·3 | 21·2 | 9·2 |
| 10·2 | 29 | 0·8 | 24·9 | |
| 9·6 | | 9·3 | 50·6 | |
| 9·6 | | 10·8 | 15·2 | |
| 10·2 | | 20·8 | 11·0 | |
| 9·6 | | 27·8 | 37·3 | |
| 8·8 | | 36·8 | 31·4 | 9·0 |
| 9·4 | 30 | 0·8 | 35·3 | 9·0 |
| 10·2 | | 8·1 | 37·4 | |
| 9·8 | | 15·3 | 43·7 | |
| 9·8 | | 41·3 | 37·1 | |
| 8·6 | | 47·3 | 52·7 | |
| 9·4 | | 50·8 | 2·4 | |
| 9·6 | | 51·8 | 24·4 | |
| 9·8 | 31 | 2·3 | 21·0 | |
| 10·2 | | 3·3 | 4·9 | |
| 9·4 | | 9·8 | 10·7 | |
| 10·2 | | 15·3 | 38·5 | |
| ? 10·2 | | 24·3 | 32·0 | |
| 10·0 | | 26·8 | 49·9 | |
| 8·9 | | 30·3 | 50·4 | |
| 10·2 | | 30·8 | 53·4 | |
| 9·4 | | 34·5 | 58·7 | |
| 10·2 | | 52·8 | 10·6 | |
| 9·4 | 32 | 1·3 | 25·9 | 9·0 |
| 9·4 | | 2·6 | 3·0 | |
| 9·5 | | 15·3 | 45·3 | |
| 10·0 | | 29·3 | 46·7 | |
| 8·8 | | 31·3 | 44·9 | |
| 9·0 | | 32·8 | 29·2 | 9·5 |
| 10·2 | | 38·3 | 21·3 | |
| 10·0 | | 50·3 | 42·7 | |
| 10·2 | | 59·8 | 44·6 | |
| 9·8 | 33 | 33·3 | 22·2 | |
| 7·4 | | 39·8 | 3·8 | 8·0 GS |
| 10·0 | | 41·3 | 57·5 | |
| 10·0 | | 41·3 | 57·8 | |
| 8·2 | | 42·8 | 2·5 | 9·0 |
| 7·6 | | 50·8 | 38·7 | 7·5 |

## 6121—6180.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 33 | 52·3 | 21·1 | |
| 10·2 | | 54·8 | 46·7 | |
| 9·4 | 34 | 0·3 | 30·1 | |
| 10·2 | | 1·8 | 54·0 | |
| 10·0 | | 4·3 | 38·0 | |
| 8·8 | | 14·6 | 1·3 | 9·0 |
| 10·2 | | 21·8 | 53·7 | |
| 9·5 | | 23·3 | 36·9 | |
| 9·4 | | 26·8 | 10·2 | |
| 7·6 | | 30·8 | 18·9 | 8·0 GS |
| 10·2 | | 35·8 | 22·2 | |
| 9·8 | | 45·3 | 53·2 | |
| 8·7 | | 56·3 | 43·0 | 9·0 |
| 9·4 | | 58·8 | 55·6 | |
| 9·6 | | 58·8 | 37·2 | 9·2 |
| 10·0 | 35 | 2·8 | 7·8 | |
| 9·5 | | 15·8 | 34·7 | |
| 9·8 | | 20·3 | 35·9 | 9·0 |
| 9·4 | | 38·8 | 32·9 | 8·8 |
| 9·8 | | 39·3 | 47·5 | |
| 10·0 | | 40·3 | 44·6 | |
| 9·4 | | 46·3 | 20·0 | |
| 10·2 | | 50·8 | 2·7 | |
| 10·0 | | 59·3 | 9·0 | |
| 10·0 | 36 | 15·8 | 54·2 | |
| 10·0 | | 24·3 | 57·7 | |
| 10·2 | | 25·9 | 59·5 | |
| 10·2 | | 28·3 | 13·8 | |
| 8·8 | | 29·8 | 35·0 | 9·0 |
| 10·2 | | 34·3 | 43·7 | |
| 10·0 | | 36·3 | 13·5 | |
| 10·2 | 37 | 5·8 | 30·6 | |
| 9·8 | | 18·8 | 22·8 | |
| 10·2 | | 41·8 | 53·9 | |
| 8·0 | | 52·8 | 15·0 | 8·5 |
| 8·0 | | 54·3 | 17·4 | 8·0 |
| 9·8 | 38 | 0·8 | 4·4 | |
| 9·8 | | 6·5 | 59·1 | |
| 9·2 | | 8·8 | 29·6 | |
| 9·6 | | 31·8 | 58·7 | |
| 10·0 | | 39·3 | 51·1 | |
| 9·2 | 39 | 2·8 | 54·0 | |
| 8·8 | | 14·3 | 51·6 | |
| 9·8 | | 18·3 | 33·1 | |
| 10·0 | | 22·3 | 10·8 | |
| 10·2 | | 23·0 | 31·1 | |
| 10·2 | | 47·8 | 47·9 | |
| 9·8 | | 48·5 | 0·2 | |
| 9·8 | 40 | 3·3 | 0·6 | |
| 10·2 | | 8·3 | 0·7 | |
| 10·2 | | 35·8 | 40·2 | |
| 9·4 | | 41·0 | 18·0 | |
| 10·0 | | 45·0 | 55·1 | |
| 10·1 | | 59·5 | 33·2 | |
| 9·6 | 41 | 17·0 | 59·6 | |
| 9·4 | | 25·0 | 32·0 | |
| 9·4 | | 34·0 | 51·0 | |
| 9·2 | | 38·5 | 54·0 | 8·5 |
| 8·3 | | 42·5 | 29·2 | 7·5 GSg |
| 10·1 | | 44·5 | 42·0 | |



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## 6181—6240.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 41 | 47·0 | 50·6 | |
| 9·4 | 42 | 3·5 | 55·3 | 9·5 |
| 10·1 | | 12·5 | 48·9 | |
| 10·1 | | 21·5 | 54·2 | |
| 9·6 | | 22·0 | 40·2 | |
| 9·4 | | 37·0 | 35·0 | |
| 9·8 | | 51·5 | 24·2 | |
| 9·8 | 43 | 0·5 | 8·9 | |
| 9·4 | | 9·5 | 58·8 | |
| 10·1 | | 14·0 | 1·5 | |
| 9·6 | | 20·0 | 46·7 | |
| 9·4 | | 21·5 | 8·0 | 9·5 |
| 9·6 | | 40·5 | 31·6 | |
| 10·1 | | 42·5 | 17·0 | |
| 9·8 | | 59·0 | 14·1 | |
| 10·1 | 44 | 2·0 | 52·7 | |
| 10·1 | | 15·5 | 11·4 | |
| 9·8 | | 16·0 | 22·5 | |
| 9·4 | | 22·5 | 4·9 | 9·0 |
| 10·0 | | 30·0 | 54·0 | |
| 8·4 | | 34·5 | 34·2 | 8·5 |
| 10·1 | | 41·0 | 0·0 | |
| 10·1 | | 45·5 | 21·8 | |
| 10·1 | | 48·0 | 23·4 | |
| 8·6 | | 51·0 | 31·8 | 7·8 |
| 10·1 | 45 | 21·7 | 11·1 | |
| 9·8 | | 30·2 | 9·6 | |
| 10·1 | | 31·0 | 58·0 | |
| 10·1 | | 38·7 | 22·5 | |
| 9·6 | | 55·7 | 38·1 | |
| 10·1 | 46 | 3·9 | 59·0 | |
| 10·1 | | 11·2 | 10·0 | |
| 10·0 | | 14·2 | 12·7 | |
| 8·2 | | 18·2 | 55·2 | 8·5 |
| 9·6 | | 22·7 | 14·9 | |
| 10·1 | | 29·5 | 2·4 | |
| 9·4 | | 35·7 | 7·2 | |
| 9·4 | | 44·2 | 27·8 | |
| 9·4 | | 49·2 | 53·0 | 9·5 |
| 10·1 | 47 | 4·2 | 14·9 | |
| 10·1 | | 10·7 | 41·9 | |
| 9·6 | | 32·2 | 4·1 | 9·2 |
| 10·1 | | 44·0 | 59·4 | |
| 10·1 | | 51·2 | 10·4 | 9·5 |
| 9·0 | 48 | 27·2 | 33·9 | 9·2 |
| 10·0 | | 31·2 | 51·6 | |
| 9·4 | | 51·2 | 34·0 | |
| 10·1 | | 52·2 | 38·4 | |
| 9·7 | | 56·7 | 17·3 | 9·5 |
| 10·1 | 49 | 32·7 | 17·0 | |
| 10·1 | | 46·7 | 40·2 | |
| 9·7 | | 49·7 | 19·2 | |
| 9·2 | | 50·2 | 57·7 | 9·0 |
| 10·1 | 50 | 0·2 | 42·0 | |
| 10·1 | | 9·0 | 15·0 | |
| 9·0 | | 31·2 | 12·9 | |
| 10·1 | | 32·7 | 42·3 | |
| 10·1 | | 43·2 | 31·9 | |
| 10·1 | | 43·2 | 18·8 | |
| 10·1 | | 49·2 | 29·3 | |

## 6241—6300.

| mag. | 14h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8·7 | 50 | 56·1 | 32·9 | 9·2 |
| 9·4 | 51 | 6·6 | 51·6 | |
| 9·4 | | 12·6 | 26·3 | |
| 9·6 | | 12·6 | 29·0 | 9·0 |
| 9·8 | | 14·6 | 57·0 | |
| 10·1 | | 14·6 | 14·0 | |
| 10·1 | | 25·6 | 53·2 | |
| 9·8 | | 31·1 | 31·0 | 9·5 |
| 10·1 | | 31·6 | 32·9 | |
| 9·6 | | 33·1 | 32·1 | |
| 9·4 | | 33·4 | 3·1 | |
| 9·4 | | 33·6 | 48·4 | |
| 9·6 | | 39·6 | 32·5 | |
| 9·7 | | 41·1 | 57·5 | |
| 9·6 | | 44·1 | 30·9 | 9·2 |
| 9·8 | | 53·1 | 26·7 | |
| 10·0 | | 58·1 | 36·0 | |
| 10·1 | 52 | 7·1 | 27·9 | |
| 9·8 | | 19·1 | 9·9 | |
| 9·0 | | 21·6 | 28·2 | 9·5 |
| 9·6 | | 21·6 | 54·3 | |
| 9·7 | | 22·1 | 25·9 | |
| 9·4 | | 34·1 | 42·8 | |
| 9·7 | | 37·1 | 13·6 | |
| 9·8 | | 39·1 | 6·5 | |
| 9·6 | | 40·1 | 14·9 | |
| 9·4 | | 40·6 | 37·1 | |
| 10·0 | | 43·9 | 8·1 | |
| 9·2 | | 44·1 | 58·7 | |
| 10·1 | | 46·1 | 6·2 | |
| 10·1 | | 49·1 | 35·0 | |
| 10·1 | | 49·6 | 29·8 | |
| 9·6 | 53 | 7·6 | 39·0 | |
| 10·1 | | 9·1 | 26·7 | |
| 8·8 | | 24·6 | 49·0 | |
| 10·1 | | 26·9 | 0·3 | |
| 8·6 | | 28·8 | 0·3 | 9·0 |
| 9·7 | | 32·1 | 27·3 | |
| 9·4 | | 33·6 | 52·1 | |
| 9·8 | | 45·1 | 19·6 | |
| 10·1 | | 47·4 | 1·7 | |
| 10·1 | 54 | 0·9 | 0·5 | |
| 10·0 | | 3·1 | 16·4 | |
| 9·7 | | 6·1 | 31·5 | |
| 9·8 | | 6·6 | 31·0 | |
| 9·7 | | 10·6 | 13·0 | |
| 10·1 | | 11·6 | 18·9 | |
| 9·8 | | 15·1 | 3·0 | |
| 9·8 | | 22·1 | 48·7 | |
| 10·1 | | 22·6 | 34·7 | |
| 9·8 | | 23·6 | 6·3 | |
| 9·7 | | 24·1 | 36·2 | |
| 9·8 | | 32·1 | 26·9 | |
| 9·8 | | 32·6 | 5·3 | |
| 9·8 | | 33·6 | 8·0 | |
| 8·8 | | 43·1 | 39·1 | 9·5 |
| 9·4 | | 46·6 | 3·5 | |
| 10·0 | | 51·6 | 19·4 | |
| 10·0 | | 56·1 | 22·1 | |
| 10·1 | 55 | 9·1 | 38·4 | |

## 6301—6360.

| mag. | 14h.–15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 11·1 | 40·0 | |
| 9·8 | | 18·6 | 2·1 | |
| 10·1 | | 21·6 | 6·3 | |
| 9·6 | | 22·1 | 2·2 | |
| 9·7 | | 28·1 | 4·0 | |
| 9·6 | | 29·1 | 33·2 | |
| 9·2 | | 32·6 | 25·2 | 9·5 |
| 10·1 | | 40·6 | 0·2 | |
| 9·6 | | 41·1 | 1·0 | |
| 9·8 | | 44·6 | 55·4 | |
| 10·1 | | 47·1 | 7·6 | |
| 9·2 | 56 | 13·1 | 5·7 | |
| 9·8 | | 16·6 | 7·3 | |
| 9·7 | | 20·6 | 16·4 | |
| 9·7 | | 27·6 | 31·2 | |
| 9·6 | | 36·1 | 13·4 | 9·2 |
| 9·8 | | 36·6 | 22·5 | |
| 10·1 | | 45·6 | 53·3 | |
| 10·1 | | 49·1 | 18·8 | |
| 9·4 | 57 | 7·2 | 1·4 | 9·0 |
| 9·4 | | 7·2 | 6·5 | |
| 9·8 | | 34·9 | 0·6 | |
| 9·8 | | 44·7 | 20·4 | |
| 10·0 | | 46·6 | 52·2 | |
| 10·1 | | 49·7 | 26·3 | |
| 10·1 | | 54·7 | 58·1 | |
| 9·6 | | 56·7 | 43·8 | |
| 10·1 | 58 | 2·2 | 58·1 | |
| 9·4 | | 9·7 | 31·3 | 9·0 |
| 9·6 | | 17·7 | 43·0 | |
| 10·1 | | 17·7 | 34·3 | |
| 9·8 | | 23·2 | 7·0 | |
| 9·2 | | 31·7 | 4·0 | |
| 10·1 | | 32·7 | 9·0 | |
| 9·6 | | 38·2 | 19·5 | 9·0 |
| P 9·8 | | 38·7 | 21·1 | |
| 10·1 | | 38·7 | 8·7 | |
| 10·1 | | 40·2 | 13·1 | |
| 10·1 | | 41·7 | 26·5 | |
| 9·6 | | 57·7 | 42·2 | |
| 9·4 | 59 | 2·2 | 41·2 | |
| 10·0 | | 2·2 | 27·0 | |
| 10·1 | | 4·9 | 1·3 | |
| 9·7 | | 14·2 | 24·1 | 9·5 |
| 10·0 | | 14·7 | 15·0 | |
| 10·0 | | 17·7 | 12·8 | |
| 9·8 | | 22·2 | 44·6 | |
| 10·1 | | 23·7 | 53·3 | |
| 9·7 | | 28·2 | 14·3 | |
| 10·1 | | 41·7 | 59·6 | |
| 10·1 | | 44·2 | 4·3 | |
| 9·4 | | 51·7 | 26·6 | 8·5 |
| 9·6 | | 52·7 | 13·8 | |
| 10·1 | | 59·2 | 4·2 | |
| 9·4 | 0 | 2·7 | 15·6 | |
| 9·6 | | 18·7 | 0·7 | |
| 10·0 | | 24·2 | 52·4 | |
| 10·1 | | 40·7 | 10·5 | |
| 9·6 | | 45·5 | 10·3 | 9·0 |
| 9·6 | | 49·5 | 6·5 | |

## 6361—6420.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·7 | 0 | 52·0 | 2·6 | |
| 9·7 | 1 | 2·0 | 42·6 | |
| 9·4 | | 6·7 | 1·1 | |
| 9·8 | | 36·8 | 58·7 | |
| 9·4 | | 42·5 | 9·3 | 9·0 |
| 9·4 | | 53·5 | 21·5 | |
| 7·4 | | 58·5 | 52·2 | 6·5 GSctr |
| 9·6 | 2 | 0·3 | 2·3 | |
| 9·2 | | 12·5 | 14·8 | 9·0 |
| 9·6 | | 13·5 | 48·9 | |
| 9·4 | | 34·0 | 38·9 | |
| 9·4 | | 36·0 | 39·8 | |
| 9·4 | | 38·0 | 28·6 | 9·0 |
| 9·8 | | 39·0 | 27·7 | |
| 10·1 | | 39·0 | 54·4 | |
| 9·8 | | 50·0 | 44·0 | |
| 9·4 | 3 | 3·5 | 25·7 | |
| 9·6 | | 9·0 | 28·5 | |
| 9·2 | | 14·5 | 50·3 | |
| 9·8 | | 25·5 | 16·8 | |
| 9·6 | | 29·5 | 40·9 | |
| 9·6 | | 34·0 | 16·8 | |
| 10·1 | | 38·5 | 43·3 | |
| 8·7 | | 43·0 | 5·3 | 8·5 |
| 9·0 | | 45·0 | 25·7 | 9·5 |
| 9·6 | | 46·5 | 16·9 | |
| 9·7 | | 48·0 | 41·0 | |
| 9·8 | | 53·5 | 53·8 | |
| 10·1 | 4 | 2·5 | 17·4 | |
| 9·6 | | 3·0 | 23·7 | |
| 9·7 | | 7·5 | 40·5 | |
| 10·1 | | 19·5 | 20·3 | |
| 9·8 | | 28·0 | 43·2 | |
| 10·1 | | 36·5 | 3·4 | |
| 9·4 | | 38·5 | 3·4 | |
| 9·8 | | 40·0 | 11·0 | |
| 8·3 | | 41·0 | 9·5 | 9·0 |
| 9·8 | | 41·8 | 17·6 | |
| 10·0 | | 41·8 | 7·8 | |
| 8·6 | | 45·3 | 48·4 | 9·2 |
| 10·1 | 5 | 1·1 | 55·5 | |
| 9·7 | | 8·3 | 27·9 | |
| 9·8 | | 20·3 | 37·9 | |
| 9·8 | | 21·3 | 21·0 | |
| 9·2 | | 24·3 | 44·0 | 9·0 |
| 10·0 | | 33·3 | 8·2 | |
| 10·1 | | 50·3 | 28·3 | |
| 10·1 | | 53·8 | 39·6 | |
| 9·6 | | 59·8 | 9·0 | 9·5 |
| 8·2 | 6 | 4·3 | 6·0 | 8·5 |
| 10·0 | | 5·3 | 10·6 | |
| 9·8 | | 9·8 | 55·6 | |
| 8·2 | | 19·8 | 29·7 | 8·2 |
| 8·9 | | 19·8 | 45·1 | |
| 9·8 | | 23·3 | 38·2 | |
| 10·1 | | 28·3 | 13·0 | |
| 10·1 | | 34·8 | 30·1 | |
| 9·4 | | 36·3 | 59·4 | |
| 10·1 | | 38·8 | 2·4 | |
| 9·6 | | 51·8 | 7·2 | 9·5 |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 14 | 40 | 107 | 6·4 |
| | 50 | 108 | 6·2 |
| 15 | 0 | 110 | 5·9 |
| | 10 | 111 | 5·6 |

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| h | m | 25 prec. α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 110 | 5·9 |
| | 10 | 111 | 5·6 |
| | 20 | 113 | 5·4 |
| | 30 | 114 | 5·1 |
| | 40 | 115 | 4·8 |

## 6421—6480.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 6 | 53·3 | 43·2 | |
| 9·7 | | 58·8 | 4·0 | |
| 9·4 | | 59·8 | 8·4 | |
| 9·2 | 7 | 1·8 | 19·5 | |
| 10·1 | | 10·1 | 3·4 | |
| 10·1 | | 11·8 | 3·4 | |
| 9·4 | | 12·8 | 7·2 | 9·5 |
| 9·4 | | 29·3 | 36·7 | |
| 9·6 | | 31·8 | 59·6 | |
| 10·1 | | 45·3 | 25·2 | |
| 9·8 | | 48·3 | 9·2 | |
| 9·7 | | 57·3 | 30·6 | |
| 10·1 | | 59·8 | 36·6 | |
| 9·7 | 8 | 25·3 | 22·4 | |
| 8·6 | | 29·8 | 2·2 | 9·2 |
| 10·1 | 9 | 1·4 | 33·2 | |
| 8·8 | | 9·9 | 12·2 | |
| 10·1 | | 11·4 | 53·0 | |
| 9·8 | | 28·1 | 58·0 | |
| 8·8 | | 31·9 | 43·4 | 8·5 |
| 10·1 | | 54·4 | 34·8 | |
| 9·6 | 10 | 9·4 | 22·1 | 10·0 |
| 10·1 | | 10·9 | 54·4 | |
| 9·4 | | 11·4 | 36·2 | |
| 9·0 | | 32·9 | 38·1 | |
| 10·1 | | 33·9 | 52·1 | |
| 9·2 | | 35·4 | 44·2 | |
| 9·2 | | 50·4 | 55·4 | |
| 9·4 | | 56·4 | 5·6 | |
| 9·4 | 11 | 9·3 | 0·0 | |
| 10·1 | | 13·7 | 21·4 | |
| 9·8 | | 17·2 | 31·8 | |
| 9·7 | | 17·9 | 30·0 | |
| 9·4 | | 23·7 | 14·3 | 9·5 |
| 10·1 | | 31·4 | 56·8 | |
| 9·6 | | 32·9 | 33·9 | |
| 9·6 | | 39·6 | 5·4 | |
| 9·6 | | 46·9 | 18·8 | |
| 10·0 | | 49·4 | 17·6 | |
| 9·4 | | 57·2 | 48·9 | |
| 10·0 | | 59·9 | 38·9 | |
| 9·6 | 12 | 9·7 | 57·4 | |
| 10·1 | | 9·9 | 10·4 | |
| 10·2 | | 21·4 | 29·5 | |
| 10·1 | | 31·7 | 52·7 | |
| 10·1 | | 31·7 | 14·1 | |
| 9·2 | | 32·9 | 30·8 | 9·5 |
| 9·7 | | 34·9 | 9·5 | |
| 9·6 | | 36·9 | 47·1 | |
| 9·6 | | 43·4 | 53·3 | |
| 9·1 | | 44·9 | 27·0 | 9·0 |
| 9·2 | | 56·4 | 50·5 | |
| 9·2 | 13 | 17·4 | 47·8 | |
| 9·6 | | 22·9 | 28·0 | |
| 10·0 | | 23·4 | 7·7 | |
| 9·8 | | 51·0 | 57·2 | |
| 10·2 | 14 | 12·9 | 43·5 | |
| 9·1 | | 19·4 | 33·4 | 10·0 |
| 9·8 | | 21·9 | 20·5 | |
| 9·4 | | 37·4 | 21·1 | |

## 6481—6540.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 14 | 52·9 | 18·5 | |
| 9·9 | | 54·4 | 46·3 | |
| 10·2 | | 57·9 | 3·4 | |
| 10·2 | 15 | 9·4 | 29·6 | |
| 9·7 | | 9·4 | 32·9 | |
| 9·6 | | 15·8 | 56·5 | 10·0 |
| 9·6 | | 20·8 | 13·6 | |
| 9·2 | | 20·8 | 37·1 | 8·8 |
| 10·2 | | 21·3 | 53·3 | |
| 9·9 | | 29·3 | 47·7 | |
| 10·2 | | 36·9 | 55·4 | |
| 8·5 | | 37·3 | 11·8 | 9·0 |
| 9·0 | | 42·3 | 10·3 | |
| 10·2 | | 52·8 | 11·9 | |
| 9·7 | 16 | 2·3 | 29·2 | |
| 10·2 | | 2·8 | 9·1 | |
| 9·9 | | 30·3 | 31·8 | |
| 9·8 | | 36·8 | 55·6 | |
| 9·6 | | 47·8 | 55·7 | |
| 10·2 | | 49·3 | 6·3 | |
| 9·0 | | 49·8 | 52·7 | |
| 10·2 | | 54·3 | 5·7 | |
| 9·9 | 17 | 4·8 | 48·3 | |
| 9·7 | | 16·8 | 47·2 | |
| 10·2 | | 19·3 | 46·5 | |
| 7·8 | | 25·3 | 34·4 | 8·2 |
| 9·7 | | 28·5 | 57·8 | |
| 9·9 | | 34·3 | 15·3 | |
| 9·4 | | 36·8 | 59·1 | |
| 10·2 | | 38·8 | 28·8 | |
| 10·0 | | 38·8 | 13·7 | |
| 9·7 | | 39·8 | 51·9 | |
| 10·0 | | 43·3 | 44·7 | |
| 10·1 | | 54·3 | 45·4 | |
| 8·8 | 18 | 6·8 | 53·4 | 9·0 |
| 9·9 | | 18·3 | 9·2 | |
| 10·2 | | 29·3 | 18·0 | |
| 9·8 | | 33·3 | 8·6 | |
| 9·3 | | 36·5 | 58·9 | |
| 10·2 | | 48·8 | 6·3 | |
| 8·2 | | 52·3 | 32·6 | 9·0 |
| 10·2 | | 56·9 | 9·8 | |
| 10·0 | 19 | 4·3 | 10·2 | |
| 10·0 | | 6·3 | 8·3 | |
| 9·9 | | 8·8 | 28·1 | |
| 10·1 | | 10·8 | 26·6 | |
| 10·0 | | 11·3 | 28·9 | |
| 10·2 | | 19·8 | 48·9 | |
| 10·2 | | 33·8 | 25·8 | |
| 9·2 | | 42·8 | 20·5 | 9·0 |
| 9·9 | | 48·8 | 28·8 | |
| 10·2 | | 58·3 | 17·4 | |
| 10·1 | | 58·3 | 59·6 | |
| 10·2 | 20 | 6·8 | 54·5 | |
| 10·2 | | 7·0 | 31·1 | |
| 10·2 | | 19·3 | 44·1 | |
| 9·6 | | 22·3 | 23·6 | |
| 10·1 | | 25·8 | 53·2 | |
| 10·2 | | 52·3 | 56·3 | |
| 10·2 | 21 | 3·8 | 6·2 | |

## 6541—6600.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 21 | 5·3 | 38·3 | |
| 10·1 | | 16·3 | 6·5 | |
| 10·2 | | 24·0 | 23·4 | |
| 9·6 | | 31·8 | 35·9 | |
| 10·0 | | 33·9 | 2·8 | |
| 9·7 | | 45·8 | 45·4 | |
| 9·1 | | 56·8 | 28·4 | |
| 9·8 | 22 | 3·8 | 14·3 | |
| 9·4 | | 7·8 | 51·6 | |
| 10·0 | | 11·3 | 20·4 | |
| 9·9 | | 14·3 | 30·0 | |
| 10·2 | | 19·3 | 25·7 | |
| 9·9 | | 25·8 | 0·6 | |
| 10·0 | | 32·3 | 53·6 | |
| 9·9 | | 33·8 | 13·7 | |
| 10·1 | | 43·8 | 53·4 | |
| 9·6 | | 49·3 | 42·4 | |
| 9·4 | | 53·8 | 50·4 | |
| 8·3 | | 57·6 | 17·3 | 8·5 |
| 10·2 | 23 | 7·6 | 14·2 | |
| 8·9 | | 11·1 | 29·9 | 9·0 |
| 9·8 | | 14·1 | 52·1 | |
| 9·3 | | 25·1 | 28·0 | 8·8 |
| 9·9 | | 28·6 | 9·5 | |
| 9·8 | | 38·3 | 1·4 | |
| 9·7 | | 43·1 | 36·5 | |
| 8·7 | | 43·6 | 20·9 | 8·8 G |
| 9·6 | 24 | 20·1 | 12·1 | |
| 10·0 | | 31·6 | 40·2 | |
| 9·7 | | 31·6 | 49·0 | |
| 10·1 | | 32·6 | 28·2 | |
| 10·2 | | 33·1 | 4·1 | |
| 10·1 | | 33·6 | 41·2 | |
| 9·4 | | 40·6 | 48·7 | |
| 10·2 | | 56·1 | 11·4 | |
| 9·4 | 25 | 0·6 | 15·4 | |
| 10·1 | | 26·6 | 25·9 | |
| 10·0 | | 42·1 | 54·6 | |
| 9·7 | | 52·1 | 26·0 | |
| 10·0 | 26 | 2·1 | 26·1 | |
| 10·2 | | 2·6 | 3·7 | |
| 9·6 | | 6·1 | 14·6 | 10·0 |
| 8·5 | | 12·1 | 18·1 | 9·5 |
| 9·1 | | 18·1 | 45·1 | 9·0 |
| 10·2 | | 36·6 | 12·1 | |
| 10·1 | | 52·6 | 21·8 | |
| 10·0 | | 59·1 | 25·4 | |
| 10·2 | 27 | 1·6 | 41·7 | |
| 9·8 | | 1·6 | 29·0 | |
| 10·2 | | 4·8 | 27·5 | |
| 10·2 | | 5·1 | 9·8 | |
| 10·2 | | 7·1 | 28·2 | |
| 9·9 | | 11·6 | 53·0 | |
| 10·1 | | 14·6 | 13·7 | |
| 9·4 | | 16·1 | 58·4 | |
| 10·2 | | 32·8 | 32·9 | |
| 10·1 | | 40·8 | 48·2 | |
| 9·6 | | 42·8 | 41·2 | |
| 8·4 | | 44·8 | 4·7 | 9·0 G |
| 9·9 | | 47·8 | 13·0 | |

## 6601—6660.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 7·9 | 27 | 48·8 | 3·1 | 8·5 GS |
| 10·2 | | 52·3 | 9·5 | |
| 9·0 | | 53·8 | 55·6 | 9·5 |
| 9·8 | 28 | 2·0 | 59·5 | |
| 10·2 | | 4·8 | 39·4 | |
| 9·4 | | 30·3 | 32·7 | |
| 7·4 | | 31·8 | 6·4 | 7·5 GSt |
| 10·2 | | 40·3 | 19·2 | |
| 9·7 | | 42·3 | 3·8 | |
| 8·2 | | 53·3 | 47·6 | 9·0 |
| 9·1 | | 54·3 | 46·1 | 10·0 |
| 9·4 | 29 | 0·3 | 49·1 | 9·5 |
| 9·7 | | 14·3 | 38·0 | |
| 9·8 | | 19·3 | 12·1 | |
| 9·8 | | 20·8 | 56·1 | |
| 8·2 | | 37·5 | 56·9 | 9·0 |
| 9·8 | | 39·3 | 53·1 | |
| 9·9 | | 42·3 | 44·3 | |
| 9·9 | 30 | 2·3 | 23·0 | |
| 9·4 | | 18·8 | 15·3 | |
| 9·6 | | 28·8 | 25·9 | |
| 10·2 | | 40·8 | 55·4 | |
| 9·7 | | 50·8 | 53·5 | |
| 9·4 | | 55·8 | 9·1 | |
| 9·8 | | 56·3 | 22·5 | |
| 9·4 | 31 | 0·3 | 21·2 | |
| 10·1 | | 0·3 | 22·1 | |
| 10·2 | | 10·5 | 25·1 | |
| 8·2 | | 13·8 | 40·9 | 8·5 |
| 10·2 | | 41·5 | 7·6 | |
| 10·2 | 32 | 4·5 | 21·5 | |
| 10·0 | | 14·5 | 13·9 | |
| 10·2 | | 17·5 | 4·9 | |
| 9·4 | | 24·0 | 31·7 | |
| 8·8 | | 31·5 | 28·6 | 9·5 |
| 10·0 | | 42·0 | 54·4 | 9·0 |
| 9·7 | | 44·0 | 28·9 | |
| 9·7 | | 46·0 | 41·0 | |
| 9·9 | | 55·0 | 30·6 | |
| 9·4 | | 55·5 | 14·9 | |
| 9·7 | | 59·5 | 36·9 | |
| 9·7 | 33 | 15·5 | 15·0 | |
| 9·9 | | 23·5 | 52·3 | |
| 9·7 | | 29·5 | 24·3 | |
| 9·8 | | 35·0 | 59·9 | |
| 10·0 | | 42·0 | 25·9 | |
| 9·6 | | 42·5 | 15·2 | |
| 10·0 | 34 | 1·0 | 6·1 | |
| 9·6 | | 19·0 | 58·3 | |
| 9·6 | | 22·0 | 13·6 | |
| 7·9 | | 26·5 | 35·1 | S |
| 10·2 | | 31·0 | 20·0 | |
| 9·4 | 35 | 1·0 | 35·9 | |
| 7·9 | | 10·0 | 42·0 | 8·0 GS |
| 9·1 | | 20·0 | 10·5 | |
| 9·6 | | 25·5 | 28·1 | |
| 10·2 | | 42·0 | 3·8 | |
| 9·4 | | 43·0 | 31·5 | |
| 9·9 | | 45·5 | 12·4 | |
| 9·7 | 36 | 2·0 | 43·5 | |

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### 6661—6720.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·7 | 36 | 10·0 | 25·5 | |
| 10·0 | | 31·3 | 8·2 | |
| 10·1 | | 40·3 | 13·8 | |
| 9·6 | | 51·3 | 23·1 | |
| 9·8 | | 55·8 | 10·0 | |
| 9·7 | 37 | 1·3 | 54·8 | |
| 9·7 | | 8·3 | 30·0 | |
| 9·1 | | 9·8 | 48·1 | 9·0 |
| 9·6 | | 22·8 | 9·4 | |
| 9·4 | | 23·3 | 5·9 | |
| 9·6 | | 25·8 | 10·2 | |
| 9·8 | | 29·3 | 10·6 | |
| 9·6 | | 32·8 | 32·0 | |
| 9·7 | | 43·8 | 41·0 | |
| 10·2 | 38 | 5·3 | 34·8 | |
| 10·2 | | 9·8 | 17·6 | |
| 10·0 | | 11·3 | 5·8 | |
| 10·2 | | 15·8 | 56·0 | |
| 9·9 | | 17·9 | 0·2 | |
| 9·9 | | 23·8 | 13·7 | |
| 10·2 | | 28·3 | 47·6 | |
| 10·2 | | 28·3 | 15·0 | |
| 9·6 | | 31·3 | 0·4 | 9·5 |
| 8·7 | | 37·8 | 12·2 | 9·5 |
| 9·8 | | 53·3 | 41·5 | |
| 9·6 | 39 | 2·3 | 28·2 | |
| 7·9 | | 11·8 | 0·4 | 8·2 GSctr |
| 10·2 | | 15·8 | 24·5 | |
| 10·2 | | 16·3 | 24·8 | |
| 9·7 | | 17·3 | 45·9 | |
| 10·0 | | 19·1 | 30·9 | |
| 7·9 | | 19·4 | 1·1 | 8·2 GScr |
| 10·2 | | 23·1 | 38·1 | |
| 9·6 | | 23·3 | 49·5 | |
| 10·1 | | 28·3 | 51·2 | |
| 9·6 | | 30·8 | 0·8 | |
| 8·8 | | 38·8 | 12·2 | 9·5 |
| 9·6 | | 43·8 | 7·2 | 9·5 |
| 9·4 | | 47·8 | 41·0 | |
| 9·8 | | 58·3 | 1·3 | |
| 10·1 | 40 | 5·1 | 25·0 | |
| 9·7 | | 10·8 | 2·5 | |
| 9·7 | | 19·6 | 41·2 | |
| 10·0 | | 25·6 | 31·8 | |
| 8·6 | | 31·6 | 22·4 | 9·2 |
| 10·0 | | 42·6 | 3·6 | |
| 9·8 | | 45·6 | 28·1 | |
| 9·6 | 41 | 6·1 | 18·8 | 9·5 |
| 9·2 | | 13·1 | 15·4 | 8·5 |
| 8·8 | | 18·1 | 36·4 | 9·5 |
| 6·7 | | 24·6 | 40·3 | *6·1* GSc |
| 9·6 | | 29·1 | 20·6 | |
| 9·8 | | 31·1 | 51·5 | |
| 9·6 | | 32·1 | 40·8 | |
| 9·6 | | 41·1 | 7·9 | |
| 9·6 | | 48·6 | 23·3 | |
| 10·2 | | 51·6 | 13·0 | |
| 9·8 | 42 | 13·3 | 59·0 | |
| 10·2 | | 13·6 | 28·7 | |
| 9·7 | | 23·6 | 20·2 | |

### 6721—6780.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 42 | 24·1 | 29·7 | |
| 9·7 | | 35·3 | 58·4 | |
| 10·1 | | 37·1 | 49·8 | |
| 10·2 | | 50·1 | 24·3 | |
| 10·1 | | 51·6 | 3·2 | |
| 9·1 | | 52·6 | 3·6 | 9·0 |
| 9·8 | 43 | 0·6 | 10·3 | |
| 10·2 | | 23·9 | 18·1 | |
| 10·4 | | 26·4 | 58·5 | |
| 10·4 | | 32·4 | 53·1 | |
| 10·0 | | 43·9 | 10·1 | |
| 8·5 | | 47·7 | 15·3 | 9·0 |
| 8·9 | | 48·2 | 16·5 | 9·5 |
| 10·0 | | 54·9 | 22·9 | |
| 9·8 | | 55·4 | 32·9 | |
| 10·1 | | 56·4 | 47·4 | |
| 9·6 | | 58·4 | 46·3 | |
| 9·6 | | 58·4 | 33·0 | |
| 10·0 | | 59·4 | 9·2 | |
| 9·8 | 44 | 0·4 | 23·7 | |
| 10·4 | | 0·4 | 0·1 | |
| 10·4 | | 7·4 | 58·9 | |
| 10·4 | | 9·2 | 1·6 | |
| 10·2 | | 9·4 | 23·5 | |
| 10·4 | | 12·4 | 16·7 | |
| 10·2 | | 15·9 | 23·9 | |
| 10·4 | | 20·4 | 38·4 | |
| 10·4 | | 22·4 | 26·7 | |
| 9·6 | | 23·7 | 17·0 | |
| 10·0 | | 25·9 | 8·6 | |
| 10·4 | | 25·9 | 19·6 | |
| 10·0 | | 26·4 | 44·4 | |
| 10·4 | | 27·9 | 51·9 | |
| 9·6 | | 28·9 | 59·0 | |
| 9·8 | | 30·4 | 33·3 | |
| 10·4 | | 33·4 | 11·0 | |
| 10·4 | | 33·4 | 34·2 | |
| 10·4 | | 35·9 | 45·0 | |
| 8·3 | | 36·2 | 57·3 | 9·0 |
| 10·4 | | 38·5 | 26·3 | |
| 10·4 | | 38·9 | 55·7 | |
| 10·4 | | 39·3 | 58·3 | |
| 9·5 | | 43·4 | 35·5 | |
| 9·8 | | 44·9 | 42·5 | |
| 10·4 | | 45·4 | 19·1 | |
| 8·8 | | 48·2 | 2·3 | 9·0 |
| 10·4 | | 48·5 | 30·5 | |
| 10·4 | | 52·4 | 17·7 | |
| 10·4 | | 53·4 | 47·9 | |
| 10·0 | | 54·4 | 6·5 | |
| 10·0 | | 56·4 | 27·9 | |
| 10·4 | | 56·9 | 32·9 | |
| 10·4 | 45 | 1·9 | 38·5 | |
| 9·6 | | 1·9 | 11·5 | |
| 9·8 | | 3·9 | 1·5 | |
| 9·8 | | 3·9 | 12·3 | |
| 9·6 | | 8·2 | 1·0 | |
| 9·0 | | 14·4 | 14·1 | |
| 10·4 | | 18·4 | 34·0 | |
| 10·4 | | 25·2 | 0·5 | |

### 6781—6840.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 45 | 26·4 | 45·8 | |
| 9·8 | | 31·9 | 52·1 | |
| 9·8 | | 36·4 | 29·3 | |
| 10·0 | | 36·9 | 27·6 | |
| 10·4 | | 40·9 | 51·7 | |
| 10·1 | | 42·9 | 41·4 | |
| 9·0 | | 43·9 | 23·0 | |
| 8·8 | | 51·9 | 24·2 | |
| 10·2 | | 53·9 | 13·3 | |
| 10·4 | | 54·9 | 21·4 | |
| 9·6 | | 58·4 | 16·2 | |
| 10·4 | | 59·4 | 17·4 | |
| 10·2 | 46 | 1·4 | 47·9 | |
| 10·0 | | 2·4 | 34·0 | |
| 9·6 | | 3·9 | 6·9 | |
| 10·4 | | 6·9 | 28·0 | |
| 9·6 | | 10·4 | 50·0 | |
| 10·4 | | 13·4 | 31·4 | |
| 10·4 | | 13·9 | 41·1 | |
| 10·4 | | 18·9 | 8·0 | |
| 10·2 | | 20·9 | 50·0 | 8·8 G |
| 8·6 | | 21·9 | 34·8 | |
| 10·0 | | 22·4 | 16·0 | |
| 9·8 | | 23·9 | 21·9 | |
| 9·6 | | 25·9 | 49·3 | |
| 8·8 | | 27·9 | 7·6 | 9·0 |
| 9·2 | | 28·4 | 20·0 | |
| 10·4 | | 28·4 | 41·5 | |
| 10·1 | | 31·9 | 48·3 | |
| 10·4 | | 37·9 | 16·0 | |
| 10·0 | | 38·9 | 32·8 | |
| 10·1 | | 39·9 | 41·5 | |
| 9·8 | | 40·4 | 29·5 | |
| 10·4 | | 42·4 | 36·1 | |
| 10·4 | | 43·9 | 18·0 | |
| 10·1 | | 45·9 | 35·7 | |
| 10·1 | | 50·4 | 32·0 | |
| 9·8 | | 58·9 | 40·5 | |
| 9·8 | | 58·9 | 24·5 | |
| 9·6 | 47 | 0·9 | 31·4 | |
| 10·4 | | 1·4 | 26·8 | |
| 10·2 | | 3·9 | 37·9 | |
| 10·4 | | 5·9 | 44·0 | |
| 10·4 | | 7·4 | 34·1 | |
| 10·4 | | 7·4 | 6·3 | |
| 10·4 | | 8·4 | 12·9 | |
| 10·2 | | 15·4 | 7·7 | |
| 10·2 | | 22·4 | 45·9 | |
| 9·8 | | 23·9 | 46·8 | |
| 9·2 | | 24·9 | 51·1 | |
| 10·4 | | 27·3 | 50·1 | |
| 10·0 | | 30·3 | 49·6 | |
| 10·4 | | 30·3 | 15·5 | |
| 10·1 | | 32·3 | 11·2 | |
| 10·2 | | 33·3 | 9·8 | |
| 10·4 | | 36·3 | 39·3 | |
| 8·5 | | 37·3 | 9·6 | 9·0 |
| 10·4 | | 38·3 | 49·5 | |
| 10·2 | | 48·8 | 52·2 | |
| 9·8 | | 53·8 | 57·3 | |

### 6841—6900.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 47 | 54·4 | 0·6 | |
| 10·2 | | 58·3 | 3·6 | |
| 10·0 | 48 | 0·3 | 51·4 | |
| 10·4 | | 6·8 | 44·0 | |
| 10·4 | | 7·8 | 31·9 | |
| 9·6 | | 8·3 | 11·6 | |
| 10·4 | | 8·8 | 32·1 | |
| 9·2 | | 9·8 | 34·8 | |
| 8·8 | | 10·3 | 1·6 | 8·8 |
| 10·4 | | 11·5 | 56·9 | |
| 10·4 | | 12·3 | 2·0 | |
| 9·8 | | 13·8 | 9·9 | |
| 10·0 | | 20·3 | 43·8 | |
| 10·4 | | 26·3 | 41·9 | |
| 8·8 | | 27·8 | 59·2 | |
| 10·4 | | 30·8 | 53·9 | |
| 9·3 | | 30·8 | 29·3 | |
| 9·6 | | 32·8 | 34·6 | |
| 10·0 | | 32·8 | 40·8 | |
| 10·0 | | 33·8 | 50·4 | |
| 9·8 | | 36·8 | 35·4 | |
| 9·6 | | 39·3 | 6·2 | |
| 10·4 | | 39·8 | 44·6 | |
| 10·4 | | 47·3 | 43·6 | |
| 10·4 | | 47·3 | 52·2 | |
| 10·4 | | 48·3 | 3·8 | |
| 9·8 | | 49·3 | 49·7 | |
| 9·2 | | 56·8 | 20·6 | 8·5 |
| 9·6 | 49 | 0·3 | 53·1 | |
| 10·0 | | 0·8 | 24·0 | |
| 9·8 | | 1·8 | 36·8 | |
| 10·1 | | 4·8 | 46·3 | |
| 10·0 | | 6·3 | 31·8 | |
| 10·4 | | 8·8 | 29·5 | |
| 8·8 | | 9·3 | 16·7 | 9·0 |
| 10·4 | | 14·8 | 18·2 | |
| 9·6 | | 19·3 | 13·6 | |
| 9·0 | | 19·8 | 3·0 | 9·0 |
| 9·8 | | 22·3 | 5·0 | |
| 10·4 | | 26·8 | 48·0 | |
| 10·0 | | 27·3 | 20·9 | |
| 9·2 | | 30·3 | 20·8 | |
| 10·0 | | 32·3 | 48·3 | |
| 10·1 | | 32·3 | 26·9 | |
| 9·6 | | 36·3 | 54·0 | |
| 10·4 | | 40·3 | 10·9 | |
| 10·2 | | 40·3 | 30·2 | |
| 10·4 | | 41·3 | 59·0 | |
| 8·8 | | 43·8 | 12·6 | 8·0 |
| 9·6 | | 44·8 | 7·0 | |
| 9·8 | | 46·8 | 51·0 | |
| 10·4 | | 54·3 | 23·2 | |
| 9·8 | | 55·3 | 33·8 | |
| 10·0 | | 59·3 | 12·3 | |
| 10·4 | 50 | 2·3 | 9·0 | |
| 10·1 | | 6·3 | 6·0 | |
| 10·4 | | 18·8 | 25·0 | |
| 10·0 | | 22·3 | 0·4 | |
| 10·2 | | 23·3 | 45·0 | |
| 9·3 | | 23·3 | 49·0 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 15 | 30 | 114 | 5·1 |
| | 40 | 115 | 4·8 |
| | 50 | 116 | 4·5 |
| 16 | 0 | 117 | 4·2 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 15 | 50 | 116 | 4·5 |
| 16 | 0 | 117 | 4·2 |
| | 10 | 118 | 3·9 |

## 6901—6960.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 50 | 24·8 | 56·1 | |
| 9·8 | | 26·3 | 15·0 | |
| 9·8 | | 28·3 | 37·6 | |
| 9·6 | | 33·8 | 44·3 | |
| 10·0 | | 36·8 | 53·6 | |
| 10·4 | | 36·8 | 31·8 | |
| 9·2 | | 38·3 | 5·2 | 9·0 |
| 9·8 | | 38·3 | 42·0 | |
| 10·0 | | 40·0 | 57·0 | |
| 10·4 | | 41·8 | 28·8 | |
| 10·4 | | 45·3 | 40·9 | |
| 10·1 | | 46·8 | 35·8 | |
| 9·6 | | 47·3 | 37·9 | |
| 9·8 | 51 | 0·3 | 48·2 | |
| 9·8 | | 3·8 | 39·6 | |
| 10·4 | | 8·3 | 35·8 | |
| 10·4 | | 10·3 | 3·8 | |
| 10·4 | | 10·4 | 11·9 | |
| 10·0 | | 13·3 | 23·5 | |
| 10·0 | | 15·3 | 20·3 | |
| 10·0 | | 20·8 | 59·2 | |
| 7·2 | | 22·8 | 13·2 | 6·5 GSct |
| 10·4 | | 25·8 | 15·1 | |
| 10·0 | | 32·3 | 27·2 | |
| 10·1 | | 34·6 | 1·0 | |
| 10·4 | | 35·3 | 45·2 | |
| 10·2 | | 38·3 | 34·3 | |
| 10·4 | | 39·3 | 13·8 | |
| 9·0 | | 45·8 | 31·6 | 9·0 |
| 10·2 | | 46·3 | 46·6 | |
| 9·6 | | 48·8 | 2·6 | |
| 10·4 | | 49·8 | 1·1 | |
| 10·0 | | 53·8 | 53·4 | |
| 9·6 | | 56·3 | 2·5 | |
| 9·6 | 52 | 0·3 | 24·0 | |
| 10·4 | | 4·3 | 31·6 | |
| 9·6 | | 5·3 | 36·2 | |
| 9·0 | | 6·3 | 29·4 | 9·5 |
| 10·4 | | 6·3 | 59·2 | |
| 10·2 | | 10·3 | 46·2 | |
| 10·0 | | 15·3 | 16·5 | |
| 10·4 | | 17·3 | 0·6 | |
| 10·4 | | 20·8 | 38·2 | |
| 10·4 | | 20·8 | 27·9 | |
| 10·4 | | 21·3 | 4·0 | |
| 10·0 | | 23·3 | 13·6 | |
| 10·4 | | 23·3 | 29·6 | |
| 10·0 | | 25·8 | 28·6 | |
| 10·0 | | 27·3 | 27·7 | |
| 10·2 | | 28·3 | 28·9 | |
| 10·4 | | 35·3 | 12·2 | |
| 10·4 | | 43·8 | 49·8 | |
| 10·4 | | 46·8 | 26·9 | |
| 10·1 | | 48·3 | 52·0 | |
| 10·4 | | 50·8 | 53·2 | |
| 10·0 | | 51·8 | 50·6 | |
| 10·0 | | 53·8 | 54·9 | |
| 9·5 | 53 | 0·3 | 41·4 | |
| 10·1 | | 1·3 | 10·9 | |
| 9·8 | | 6·8 | 52·2 | |

## 6961—7020.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·2 | 53 | 7·3 | 7·4 | |
| 10·0 | | 11·3 | 41·1 | |
| 10·4 | | 18·8 | 14·1 | |
| 9·6 | | 28·8 | 7·5 | |
| 10·2 | | 35·8 | 20·7 | |
| 9·0 | | 35·8 | 31·0 | 9·2 |
| 10·2 | | 37·3 | 32·8 | |
| 9·8 | | 38·3 | 41·0 | |
| 10·4 | | 40·3 | 33·8 | |
| 10·4 | | 41·3 | 27·0 | |
| 10·0 | | 42·3 | 30·4 | |
| 10·0 | | 47·3 | 29·6 | |
| 10·4 | | 49·8 | 52·9 | |
| 10·4 | | 53·8 | 37·7 | |
| 10·4 | | 55·3 | 51·2 | |
| 10·1 | | 55·3 | 9·8 | |
| 9·8 | | 55·8 | 8·8 | |
| 10·4 | | 56·5 | 58·9 | |
| 10·4 | 54 | 0·0 | 57·5 | |
| 10·4 | | 1·8 | 8·4 | |
| 10·0 | | 6·3 | 0·6 | |
| 10·4 | | 8·8 | 21·1 | |
| 10·4 | | 13·8 | 16·9 | |
| 10·4 | | 14·3 | 47·2 | |
| 10·4 | | 29·8 | 1·8 | |
| 10·0 | | 37·3 | 33·5 | |
| 9·8 | | 42·3 | 10·7 | |
| 10·4 | | 43·8 | 16·7 | |
| 10·2 | | 47·8 | 51·8 | |
| 10·1 | | 49·3 | 54·2 | |
| 10·0 | 55 | 1·8 | 46·0 | |
| 10·4 | | 4·8 | 28·5 | |
| 7·9 | | 8·8 | 47·6 | |
| 10·4 | | 12·3 | 8·6 | |
| 9·8 | | 16·8 | 34·2 | |
| 9·8 | | 18·4 | 15·3 | |
| 10·4 | | 20·8 | 6·6 | |
| 9·2 | | 23·8 | 15·2 | |
| 10·2 | | 30·8 | 28·6 | |
| 9·6 | | 32·3 | 45·6 | |
| 9·3 | | 32·8 | 42·6 | |
| 10·0 | | 33·5 | 58·0 | |
| 8·0 | | 37·1 | 2·0 | 8·5 G |
| 10·4 | | 37·3 | 26·7 | |
| 10·1 | | 38·8 | 13·5 | |
| 8·8 | | 39·8 | 41·7 | |
| 9·8 | | 42·8 | 35·8 | |
| 9·6 | | 50·3 | 21·4 | |
| 10·4 | | 52·3 | 6·1 | |
| 10·4 | | 58·3 | 40·0 | |
| 10·4 | 56 | 1·8 | 29·0 | |
| 10·0 | | 3·3 | 46·2 | |
| 8·7 | | 5·3 | 34·1 | 9·5 |
| 10·4 | | 6·7 | 0·8 | |
| 9·2 | | 6·8 | 56·0 | |
| 10·0 | | 10·3 | 16·8 | |
| 10·4 | | 22·3 | 59·1 | |
| 10·4 | | 23·8 | 30·7 | |
| 10·4 | | 26·8 | 32·1 | |
| 10·1 | | 37·8 | 46·8 | |

## 7021—7080.

| mag. | 15h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 56 | 41·3 | 34·0 | |
| 10·4 | | 47·3 | 54·2 | |
| 10·2 | | 50·3 | 1·5 | |
| 10·4 | | 52·1 | 2·3 | |
| 9·6 | | 53·3 | 12·6 | |
| 10·4 | | 58·8 | 19·0 | |
| 10·2 | 57 | 2·8 | 28·2 | |
| 9·6 | | 3·3 | 5·0 | |
| 10·4 | | 5·8 | 9·2 | |
| 10·4 | | 12·3 | 20·6 | |
| 10·0 | | 12·8 | 2·8 | |
| 10·4 | | 13·8 | 53·4 | |
| 10·4 | | 14·8 | 42·3 | |
| 10·4 | | 15·3 | 38·2 | |
| 10·4 | | 15·8 | 53·0 | |
| 10·4 | | 16·8 | 1·6 | |
| 9·6 | | 21·8 | 57·2 | |
| 10·0 | | 21·8 | 29·0 | |
| 9·8 | | 22·3 | 32·1 | |
| 10·4 | | 33·8 | 35·2 | |
| 10·1 | | 33·8 | 36·2 | |
| 9·6 | | 37·3 | 34·2 | |
| 9·8 | | 38·8 | 47·8 | |
| 10·2 | | 42·8 | 13·1 | |
| 7·8 | | 46·8 | 18·6 | 8·0 G |
| 9·6 | | 48·3 | 22·4 | |
| 10·4 | | 51·8 | 26·5 | |
| 10·4 | | 52·3 | 54·8 | |
| 10·4 | | 52·3 | 8·0 | |
| 9·8 | | 54·8 | 49·0 | |
| 9·8 | | 55·1 | 22·5 | |
| 10·0 | | 55·6 | 37·2 | |
| 10·0 | | 56·6 | 23·2 | |
| 10·1 | | 57·8 | 58·0 | |
| 10·1 | | 59·6 | 48·6 | |
| 10·0 | | 59·6 | 56·0 | |
| 10·0 | 58 | 1·1 | 0·1 | |
| 10·4 | | 3·1 | 55·5 | |
| 10·0 | | 5·6 | 31·8 | |
| 8·6 | | 7·1 | 47·4 | |
| 10·4 | | 12·1 | 35·6 | |
| 8·6 | | 15·6 | 27·8 | |
| 9·8 | | 17·1 | 33·4 | |
| 9·8 | | 18·6 | 30·0 | |
| 10·4 | | 19·1 | 50·0 | |
| 10·4 | | 19·1 | 57·4 | |
| 10·2 | | 20·1 | 12·8 | |
| 10·0 | | 21·1 | 10·0 | |
| 10·4 | | 23·2 | 1·2 | |
| 9·6 | | 26·8 | 59·6 | |
| 10·0 | | 27·6 | 42·4 | |
| 10·4 | | 27·6 | 2·2 | |
| 10·0 | | 28·6 | 10·8 | |
| 9·6 | | 31·6 | 33·8 | |
| 10·0 | | 32·6 | 34·6 | |
| 9·8 | | 33·1 | 50·6 | |
| 10·4 | | 33·1 | 1·6 | |
| 9·8 | | 37·1 | 33·0 | |
| 10·4 | | 37·1 | 11·6 | |
| 10·4 | | 38·6 | 27·0 | |

## 7081—7140.

| | mag. | 15h.–16h. m | s | −54° ′ | |
|---|---|---|---|---|---|
| | 10·2 | 58 | 45·9 | 23·2 | |
| | 10·4 | | 46·3 | 58·2 | |
| | 9·4 | | 46·6 | 8·2 | |
| | 10·0 | | 50·6 | 8·2 | |
| | 10·4 | | 55·4 | 13·2 | |
| | 10·0 | | 56·9 | 21·4 | |
| | 9·8 | | 57·9 | 55·6 | |
| | 10·0 | | 59·4 | 47·5 | |
| | 9·8 | 59 | 0·9 | 3·7 | |
| | 10·0 | | 2·4 | 32·6 | |
| | 9·8 | | 3·4 | 30·6 | |
| | 9·8 | | 4·4 | 36·6 | |
| P | 7·9 | | 5·9 | 11·6 | 8·0 G |
| | 9·4 | | 6·4 | 56·4 | |
| | 10·4 | | 7·4 | 38·7 | |
| | 10·4 | | 7·9 | 23·2 | |
| | 9·8 | | 12·9 | 6·2 | |
| | 9·6 | | 17·4 | 28·2 | |
| | 8·3 | | 19·4 | 50·6 | 7·0 G |
| | 10·2 | | 21·9 | 19·1 | |
| | 10·4 | | 23·9 | 23·2 | |
| | 8·7 | | 25·9 | 46·6 | 9·0 |
| | 10·4 | | 27·9 | 30·4 | |
| | 10·2 | | 28·2 | 58·4 | |
| | 10·4 | | 28·9 | 13·0 | |
| | 10·2 | | 31·4 | 48·6 | |
| | 10·2 | | 33·4 | 25·9 | |
| | 10·4 | | 36·4 | 14·0 | |
| | 10·2 | | 38·7 | 2·6 | |
| | 10·0 | | 40·1 | 2·8 | |
| | 9·8 | | 45·9 | 49·2 | |
| | 10·0 | | 48·4 | 41·8 | |
| | 9·4 | | 48·9 | 24·4 | 9·0 |
| | 10·0 | 0 | 1·9 | 40·0 | |
| | 10·4 | | 1·9 | 33·6 | |
| | 10·4 | | 8·1 | 0·7 | |
| | 10·0 | | 8·9 | 46·4 | |
| | 10·4 | | 10·9 | 23·4 | |
| | 10·0 | | 11·9 | 38·2 | |
| | 10·4 | | 12·4 | 13·3 | |
| | 9·6 | | 16·4 | 15·4 | |
| | 10·0 | | 19·9 | 42·5 | |
| | 10·0 | | 20·9 | 31·2 | |
| | 10·0 | | 29·4 | 51·5 | |
| | 10·4 | | 31·9 | 3·4 | |
| | 10·4 | | 33·1 | 1·6 | |
| | 9·8 | | 33·4 | 27·8 | |
| | 10·1 | | 36·4 | 16·3 | |
| | 9·6 | | 36·9 | 8·2 | |
| | 8·5 | | 39·9 | 39·9 | 8·5 |
| | 9·2 | | 40·4 | 48·3 | |
| | 9·8 | | 41·9 | 6·5 | |
| | 10·4 | | 43·4 | 21·4 | |
| | 8·8 | | 44·9 | 43·4 | |
| | 9·4 | | 45·4 | 0·0 | |
| | 10·2 | | 48·9 | 49·4 | |
| | 9·8 | | 49·9 | 55·5 | |
| | 10·4 | | 49·9 | 21·2 | |
| | 9·6 | | 52·9 | 50·3 | |
| | 10·4 | | 53·9 | 23·0 | |



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**7141—7200.**

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 0 | 56.4 | 10.7 | |
| 10.1 | | 56.4 | 6.9 | |
| 10.0 | | 58.9 | 43.0 | |
| 10.4 | 1 | 2.9 | 5.9 | |
| 9.8 | | 4.7 | 57.6 | |
| 10.0 | | 7.9 | 18.1 | |
| 10.4 | | 10.4 | 9.2 | |
| 10.4 | | 14.9 | 57.0 | |
| 9.6 | | 17.9 | 8.0 | |
| 10.0 | | 19.9 | 51.4 | |
| 9.6 | | 20.9 | 27.0 | |
| 9.5 | | 21.9 | 5.9 | |
| 10.2 | | 22.4 | 15.8 | |
| 9.8 | | 23.9 | 16.2 | |
| 8.9 | | 25.9 | 9.2 | |
| 10.2 | | 26.4 | 8.8 | |
| 10.1 | | 27.1 | 0.0 | |
| 10.1 | | 27.4 | 13.2 | |
| 8.8 | | 32.7 | 1.5 | 9.0 |
| 10.4 | | 32.9 | 53.2 | |
| 10.4 | | 35.4 | 12.8 | |
| 10.2 | | 35.9 | 23.2 | |
| 10.0 | | 39.9 | 31.7 | |
| 9.6 | | 40.4 | 32.9 | |
| 10.4 | | 42.4 | 14.2 | |
| 10.4 | | 42.9 | 23.1 | |
| 10.4 | | 46.9 | 13.2 | |
| 9.2 | | 49.9 | 3.0 | 8.5 |
| 10.4 | | 49.9 | 45.6 | |
| 10.2 | | 51.9 | 28.4 | |
| 8.4 | | 53.9 | 16.0 | |
| 10.4 | | 55.4 | 45.8 | |
| 9.8 | | 57.9 | 59.2 | |
| 10.0 | 2 | 0.9 | 31.8 | |
| 10.4 | | 1.9 | 4.6 | |
| 10.0 | | 2.9 | 50.6 | |
| 10.2 | | 5.9 | 34.6 | |
| 10.0 | | 6.4 | 31.4 | |
| 9.8 | | 6.4 | 47.0 | |
| 10.4 | | 6.9 | 22.9 | |
| 8.6 | | 7.4 | 36.3 | |
| 10.2 | | 7.9 | 57.1 | |
| 10.4 | | 8.4 | 46.8 | |
| 10.1 | | 9.9 | 23.8 | |
| 7.0 | | 10.1 | 1.4 | 7.2 GSt |
| 9.5 | | 12.9 | 35.0 | |
| 10.4 | | 13.3 | 2.0 | |
| 10.4 | | 17.4 | 44.2 | |
| 9.8 | | 18.9 | 6.2 | |
| 10.4 | | 19.9 | 5.0 | |
| 10.0 | | 27.9 | 9.2 | |
| 10.4 | | 28.4 | 20.4 | |
| 10.4 | | 29.4 | 56.4 | |
| 10.1 | | 29.9 | 13.4 | |
| 10.1 | | 31.9 | 21.0 | |
| 9.6 | | 32.4 | 38.0 | |
| 10.0 | | 34.9 | 5.4 | |
| 9.6 | | 38.4 | 10.0 | |
| 9.8 | | 39.9 | 13.0 | |
| 10.2 | | 39.9 | 50.4 | |

**7201—7260.**

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.8 | 2 | 42.4 | 40.1 | |
| 10.4 | | 42.9 | 47.0 | |
| 10.2 | | 43.4 | 11.4 | |
| 9.8 | | 44.4 | 19.8 | |
| 10.0 | | 45.9 | 49.0 | |
| 9.8 | | 46.4 | 14.5 | |
| 10.4 | | 46.9 | 41.2 | |
| 10.0 | | 50.7 | 38.9 | |
| 9.8 | | 55.4 | 43.0 | |
| 10.2 | | 56.8 | 1.3 | |
| 10.0 | | 57.4 | 44.4 | |
| 10.2 | | 58.9 | 3.0 | |
| 9.8 | | 59.9 | 2.5 | |
| 10.0 | | 59.9 | 6.8 | |
| 10.4 | 3 | 0.9 | 33.7 | |
| 10.4 | | 2.9 | 3.2 | |
| 10.4 | | 3.8 | 0.2 | |
| 10.4 | | 3.8 | 1.8 | |
| 9.6 | | 4.9 | 17.7 | |
| 10.2 | | 6.0 | 1.5 | |
| 10.1 | | 7.4 | 34.8 | |
| 9.8 | | 7.9 | 12.3 | |
| 10.4 | | 9.9 | 12.6 | |
| 10.4 | | 11.9 | 4.7 | |
| 10.1 | | 12.4 | 28.6 | |
| 8.0 | | 13.9 | 2.1 | 7.5 GSt |
| 10.2 | | 14.4 | 22.2 | |
| 10.2 | | 14.9 | 47.0 | |
| 9.5 | | 14.9 | 3.6 | |
| 9.6 | | 17.4 | 8.0 | |
| 10.0 | | 17.8 | 0.9 | |
| 10.2 | | 19.9 | 18.1 | |
| 10.4 | | 20.8 | 1.1 | |
| 9.6 | | 22.4 | 37.4 | |
| 9.8 | | 22.9 | 35.6 | |
| 10.4 | | 25.9 | 4.4 | |
| 10.4 | | 26.3 | 2.5 | |
| 10.4 | | 27.3 | 0.6 | |
| 9.6 | | 27.3 | 0.2 | |
| 10.0 | | 28.4 | 12.0 | |
| 8.6 | | 31.9 | 48.1 | 9.0 |
| 10.2 | | 31.9 | 47.2 | |
| 10.4 | | 32.4 | 4.2 | |
| 9.6 | | 36.8 | 0.5 | |
| 7.4 | | 37.9 | 18.2 | GSct |
| 9.6 | | 39.4 | 5.0 | |
| 10.4 | | 40.8 | 0.7 | |
| 9.3 | | 41.4 | 54.7 | |
| 9.6 | | 43.4 | 31.1 | |
| 9.8 | | 52.4 | 54.1 | |
| 9.5 | | 53.4 | 8.4 | |
| 9.6 | | 54.9 | 38.0 | |
| 10.4 | | 56.9 | 29.2 | |
| 10.0 | | 59.4 | 43.5 | |
| 10.2 | | 59.9 | 38.2 | |
| 10.4 | 4 | 1.4 | 36.0 | |
| 10.4 | | 1.9 | 21.6 | |
| 10.2 | | 2.4 | 24.6 | |
| 10.4 | | 3.4 | 42.2 | |
| 9.5 | | 5.4 | 35.4 | |

**7261—7320.**

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.4 | 4 | 9.4 | 37.5 | |
| 10.4 | | 9.9 | 43.7 | |
| 10.4 | | 11.9 | 2.9 | |
| 9.3 | | 12.8 | 46.2 | |
| 10.0 | | 20.8 | 42.2 | |
| 10.2 | | 22.9 | 33.2 | |
| 10.4 | | 25.9 | 6.0 | |
| 10.4 | | 27.3 | 8.0 | |
| 10.0 | | 28.3 | 35.4 | |
| 10.1 | | 29.8 | 57.4 | |
| 10.1 | | 31.3 | 36.6 | |
| 10.2 | | 33.3 | 8.2 | |
| 10.0 | | 37.8 | 39.8 | |
| 10.0 | | 39.3 | 8.8 | |
| 10.4 | | 39.8 | 4.4 | |
| 10.2 | | 39.9 | 42.6 | |
| 10.4 | | 40.9 | 6.8 | |
| 10.4 | | 45.8 | 47.8 | |
| 10.0 | | 47.3 | 21.4 | |
| 9.6 | | 50.8 | 7.2 | |
| 10.0 | | 50.8 | 26.8 | |
| 10.0 | | 51.8 | 26.4 | |
| 9.8 | | 53.7 | 1.1 | |
| 10.2 | 5 | 1.7 | 1.3 | |
| 10.4 | | 6.3 | 52.1 | |
| 10.4 | | 7.3 | 37.2 | |
| 9.8 | | 7.8 | 14.1 | |
| 10.1 | | 8.3 | 29.1 | |
| 10.4 | | 8.3 | 31.1 | |
| 10.4 | | 16.3 | 41.9 | |
| 10.2 | | 16.8 | 39.0 | |
| 10.2 | | 18.3 | 57.0 | |
| 10.4 | | 18.3 | 19.2 | |
| 9.0 | | 18.3 | 15.3 | |
| 10.1 | | 19.6 | 17.0 | |
| 10.4 | | 20.4 | 0.2 | |
| 10.4 | | 22.1 | 1.4 | |
| 10.4 | | 23.1 | 47.6 | |
| 9.8 | | 24.6 | 33.9 | |
| 9.8 | | 24.6 | 17.1 | |
| 9.2 | | 25.1 | 57.8 | 9.0 |
| 9.3 | | 28.1 | 9.9 | |
| 10.4 | | 29.1 | 46.9 | |
| 10.4 | | 30.6 | 16.2 | |
| 10.4 | | 32.1 | 29.8 | |
| 10.4 | | 33.1 | 31.6 | |
| 10.2 | | 34.6 | 3.0 | |
| 9.8 | | 35.1 | 59.4 | |
| 9.6 | | 37.6 | 39.9 | |
| 10.0 | | 38.6 | 20.8 | |
| 9.8 | | 39.6 | 8.8 | |
| 10.4 | | 39.6 | 51.0 | |
| 9.8 | | 41.1 | 29.9 | |
| 10.0 | | 41.6 | 15.0 | |
| 9.8 | | 43.1 | 11.4 | 10.0 |
| 10.4 | | 45.7 | 56.0 | |
| 9.8 | | 47.8 | 58.1 | |
| 10.1 | | 51.6 | 17.8 | |
| 9.4 | | 54.6 | 56.9 | |
| 9.6 | | 57.6 | 52.7 | |

**7321—7380.**

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.4 | 5 | 57.7 | 47.2 | |
| 10.4 | | 58.1 | 36.2 | |
| 10.4 | | 58.6 | 12.4 | |
| 9.5 | 6 | 1.6 | 4.9 | |
| 10.0 | | 3.1 | 10.0 | |
| 10.2 | | 3.1 | 11.4 | |
| 10.0 | | 3.1 | 43.0 | |
| 9.8 | | 5.6 | 5.8 | |
| 10.4 | | 5.6 | 52.6 | |
| 9.2 | | 5.6 | 9.4 | 9.0 |
| 10.4 | | 6.1 | 1.6 | |
| 10.2 | | 10.6 | 52.4 | |
| 10.4 | | 10.6 | 14.2 | |
| 10.4 | | 11.7 | 10.2 | |
| 10.4 | | 12.6 | 14.3 | |
| 9.8 | | 15.6 | 49.8 | |
| 10.4 | | 17.5 | 12.2 | |
| 10.0 | | 18.1 | 34.2 | |
| 10.1 | | 19.1 | 55.2 | |
| 8.2 | | 20.1 | 9.4 | 8.5 |
| 10.1 | | 20.6 | 16.7 | |
| 10.0 | | 24.6 | 40.9 | |
| 10.4 | | 27.1 | 3.8 | |
| 9.4 | | 28.6 | 0.3 | |
| 8.8 | | 30.6 | 4.6 | 9.0 |
| 10.4 | | 30.6 | 33.8 | |
| 10.4 | | 32.6 | 45.3 | |
| 10.0 | | 33.1 | 30.0 | |
| 10.4 | | 38.1 | 9.2 | |
| 10.0 | | 39.8 | 59.9 | |
| 9.2 | | 41.6 | 40.8 | |
| 10.4 | | 41.6 | 32.2 | |
| 9.5 | | 45.6 | 43.6 | |
| 9.2 | | 45.6 | 23.2 | |
| 9.0 | | 55.1 | 26.8 | |
| 10.4 | | 55.5 | 19.8 | |
| 10.4 | | 55.6 | 23.2 | |
| 10.4 | | 56.1 | 56.1 | |
| 10.0 | | 59.6 | 49.7 | |
| 10.0 | | 59.6 | 41.6 | |
| 9.6 | 7 | 2.6 | 17.4 | |
| 9.5 | | 4.6 | 25.5 | |
| 9.5 | | 7.6 | 24.0 | |
| 10.2 | | 11.6 | 18.2 | |
| 8.6 | | 12.6 | 27.9 | 8.5 |
| 10.4 | | 13.5 | 38.0 | |
| 10.4 | | 15.1 | 48.0 | |
| 9.8 | | 19.1 | 27.0 | |
| 10.0 | | 19.6 | 49.7 | |
| 8.8 | | 23.6 | 28.1 | 9.2 |
| 9.0 | | 26.6 | 39.6 | 9.5 |
| 10.1 | | 31.6 | 21.2 | |
| 8.6 | | 34.6 | 42.2 | 8.7 |
| 10.1 | | 36.6 | 32.6 | |
| 10.4 | | 37.6 | 16.0 | |
| 10.1 | | 38.6 | 14.2 | |
| 10.1 | | 39.6 | 51.4 | |
| 10.4 | | 40.1 | 34.3 | |
| 10.4 | | 40.6 | 0.5 | |
| 10.4 | | 41.1 | 53.4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 117 | 4.2 |
| | 10 | 118 | 3.9 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 0 | 117 | 4·2 |
| | 10 | 118 | 3·9 |
| | 20 | 119 | 3·5 |

## 7381—7440.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 7 | 43·1 | 47·6 | |
| 10·0 | | 43·6 | 27·0 | |
| 10·1 | | 47·2 | 1·6 | |
| 10·2 | | 47·6 | 51·2 | |
| 10·4 | | 52·6 | 28·5 | |
| 10·0 | | 52·6 | 46·9 | |
| 8·8 | | 54·6 | 34·8 | 9·0 |
| 8·7 | | 54·6 | 53·8 | 8·0 |
| 10·1 | | 54·6 | 46·2 | |
| 10·1 | | 55·1 | 11·0 | |
| 10·1 | | 55·6 | 45·7 | |
| 10·1 | | 59·6 | 14·9 | |
| 8·9 | 8 | 3·1 | 34·1 | 9·0 |
| 10·4 | | 3·1 | 24·9 | |
| 10·4 | | 4·6 | 19·3 | |
| 10·4 | | 6·1 | 30·4 | |
| 10·2 | | 6·6 | 54·9 | |
| 10·4 | | 10·6 | 33·3 | |
| 10·4 | | 11·5 | 48·0 | |
| 10·0 | | 11·6 | 11·5 | |
| 8·4 | | 15·1 | 19·8 | 8·5 G |
| 9·8 | | 15·6 | 48·6 | |
| 10·1 | | 18·6 | 36·6 | |
| 10·4 | | 19·6 | 45·0 | |
| 10·2 | | 20·6 | 13·1 | |
| 10·0 | | 22·1 | 29·0 | |
| 10·1 | | 25·4 | 1·1 | |
| 10·4 | | 25·5 | 3·0 | |
| 9·8 | | 26·1 | 51·0 | |
| 10·1 | | 28·1 | 44·2 | |
| 10·0 | | 28·1 | 49·9 | |
| 9·8 | | 32·1 | 2·9 | |
| 10·4 | | 32·6 | 44·3 | |
| 9·0 | | 35·6 | 43·7 | |
| 9·2 | | 35·6 | 38·9 | |
| 10·0 | | 37·1 | 22·0 | |
| 10·0 | | 37·1 | 32·0 | |
| 9·0 | | 38·1 | 36·2 | 9·5 |
| 10·4 | | 39·6 | 54·0 | |
| 9·0 | | 40·1 | 36·2 | 9·5 |
| 9·8 | | 40·6 | 43·7 | |
| 10·4 | | 41·6 | 2·1 | |
| 9·2 | | 46·1 | 7·9 | |
| 9·8 | | 46·6 | 20·7 | |
| 10·4 | | 48·6 | 18·0 | |
| 8·7 | | 49·1 | 38·7 | 9·1 |
| 9·6 | | 49·6 | 37·8 | |
| 9·0 | | 51·6 | 19·6 | |
| 10·4 | | 51·6 | 30·8 | |
| 8·9 | | 54·6 | 57·8 | |
| 8·8 | | 55·1 | 9·9 | |
| 10·0 | | 56·6 | 3·2 | |
| 10·4 | | 56·6 | 30·8 | |
| 10·4 | | 56·6 | 34·4 | |
| 10·2 | | 57·6 | 14·4 | |
| 9·4 | | 59·1 | 17·8 | |
| 10·2 | 9 | 1·6 | 20·9 | |
| 10·4 | | 1·6 | 28·1 | |
| 8·6 | | 2·6 | 25·3 | |
| 10·0 | | 3·6 | 10·4 | |

## 7441—7500.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 9 | 4·6 | 28·1 | |
| 9·0 | | 5·1 | 40·0 | |
| 10·4 | | 5·6 | 49·2 | |
| 10·4 | | 6·1 | 48·2 | |
| 10·0 | | 6·1 | 43·2 | |
| 9·0 | | 9·6 | 36·9 | |
| 10·0 | | 12·1 | 7·0 | |
| 9·8 | | 15·4 | 2·7 | |
| 10·1 | | 15·6 | 35·6 | |
| 10·2 | | 15·6 | 39·4 | |
| 10·1 | | 15·6 | 57·7 | |
| 8·0 | | 17·6 | 39·1 | 8·3 |
| 9·6 | | 20·6 | 45·2 | |
| 7·7 | | 26·6 | 12·1 | GSt |
| 10·4 | | 29·6 | 9·6 | |
| 9·2 | | 29·6 | 5·8 | |
| 9·3 | | 30·9 | 59·7 | |
| 8·7 | | 31·1 | 39·3 | 9·5 |
| 9·3 | | 32·6 | 42·2 | |
| 9·6 | | 34·6 | 3·6 | |
| 9·5 | | 34·6 | 53·0 | |
| 10·0 | | 35·6 | 39·8 | |
| 8·0 | | 37·6 | 34·2 | 8·5 |
| 9·8 | | 38·1 | 0·4 | |
| 10·0 | | 40·6 | 10·3 | |
| 10·4 | | 40·6 | 14·6 | |
| 8·8 | | 42·1 | 52·7 | 9·0 |
| 10·4 | | 45·1 | 11·0 | |
| 10·4 | | 51·6 | 3·1 | |
| 9·8 | | 52·6 | 26·9 | |
| 10·0 | | 52·6 | 39·0 | |
| 10·0 | | 53·6 | 42·5 | |
| 8·4 | | 54·6 | 46·6 | 9·0 |
| 10·2 | | 55·1 | 44·8 | |
| 9·8 | | 56·6 | 25·6 | |
| 10·2 | | 56·6 | 22·7 | |
| 10·4 | | 57·4 | 40·9 | |
| 10·1 | | 58·6 | 56·3 | |
| 8·9 | 10 | 0·6 | 42·2 | |
| 9·6 | | 3·6 | 38·2 | |
| 10·4 | | 3·6 | 50·0 | |
| 10·4 | | 7·6 | 15·2 | |
| 9·8 | | 12·6 | 34·1 | |
| 9·6 | | 13·6 | 39·1 | |
| 10·0 | | 15·6 | 19·9 | |
| 10·1 | | 17·6 | 39·7 | |
| 9·5 | | 18·6 | 38·6 | |
| 8·0 | | 19·1 | 16·5 | 8·5 |
| 10·2 | | 19·6 | 49·3 | |
| 8·6 | | 24·6 | 36·7 | 9·0 |
| 9·6 | | 25·1 | 35·4 | |
| 9·6 | | 26·1 | 37·1 | |
| 7·2 | | 26·6 | 50·0 | 6·5 GScr |
| 9·6 | | 27·6 | 29·7 | |
| 10·4 | | 28·1 | 32·5 | |
| 10·0 | | 31·1 | 51·5 | |
| 9·5 | | 32·6 | 39·4 | |
| 9·8 | | 34·6 | 23·9 | |
| 10·2 | | 35·1 | 33·2 | |
| 9·8 | | 35·6 | 27·0 | |

## 7501—7560.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 10 | 36·1 | 14·0 | |
| 10·4 | | 36·5 | 34·1 | |
| 9·4 | | 37·1 | 42·8 | |
| 10·0 | | 41·6 | 30·9 | |
| 10·2 | | 41·6 | 54·2 | |
| 10·4 | | 42·5 | 39·0 | |
| 10·4 | | 43·1 | 40·3 | |
| 10·4 | | 45·6 | 36·0 | |
| 10·2 | | 47·1 | 30·4 | |
| 10·4 | | 49·1 | 31·5 | |
| 10·4 | | 49·6 | 29·5 | |
| 9·6 | | 51·1 | 11·7 | |
| 9·8 | | 53·6 | 41·0 | |
| 9·6 | | 54·6 | 9·8 | |
| 9·6 | | 55·1 | 21·3 | |
| 10·1 | | 55·6 | 31·8 | |
| 10·0 | | 56·1 | 17·9 | |
| 10·1 | 11 | 1·6 | 20·6 | |
| 10·2 | | 1·6 | 32·6 | |
| 7·7 | | 2·1 | 36·5 | 8·0 GSt |
| 10·0 | | 9·1 | 8·0 | |
| 8·4 | | 9·6 | 17·1 | 8·5 |
| 9·8 | | 9·6 | 48·1 | |
| 9·8 | | 10·6 | 15·3 | |
| 10·0 | | 12·6 | 16·9 | |
| 10·2 | | 16·6 | 45·7 | |
| 10·4 | | 17·3 | 7·9 | |
| 10·0 | | 20·1 | 34·4 | |
| 9·6 | | 20·1 | 14·6 | |
| 10·4 | | 21·6 | 27·3 | |
| 10·2 | | 21·6 | 45·0 | |
| 10·2 | | 21·8 | 2·5 | |
| 9·2 | | 24·1 | 17·8 | 9·5 |
| 10·2 | | 28·1 | 24·6 | |
| 10·4 | | 29·6 | 55·6 | |
| 10·2 | | 29·6 | 37·8 | |
| 10·2 | | 30·1 | 49·8 | |
| 10·4 | | 32·6 | 4·2 | |
| 10·4 | | 33·6 | 44·1 | |
| 10·0 | | 34·1 | 44·6 | |
| 10·1 | | 35·6 | 4·7 | |
| 10·4 | | 36·6 | 29·4 | |
| 9·8 | | 40·6 | 37·5 | |
| 10·1 | | 46·6 | 24·5 | |
| 9·5 | | 48·1 | 35·8 | |
| 10·4 | | 52·6 | 57·0 | |
| 10·4 | | 59·1 | 33·5 | |
| 9·2 | | 59·6 | 11·5 | |
| 9·0 | 12 | 0·6 | 26·1 | 9·2 |
| 10·2 | | 2·1 | 10·9 | |
| 10·0 | | 3·6 | 3·3 | |
| 8·5 | | 9·1 | 56·0 | 9·0 |
| 9·8 | | 10·6 | 22·0 | |
| 10·2 | | 11·6 | 45·8 | |
| 9·8 | | 12·6 | 5·8 | |
| 10·4 | | 15·1 | 23·6 | |
| 10·0 | | 16·6 | 9·4 | |
| 9·8 | | 17·6 | 53·1 | |
| 9·0 | | 19·6 | 49·1 | |
| 10·4 | | 20·6 | 14·2 | |

## 7561—7620.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 12 | 25·6 | 10·5 | |
| 10·2 | | 27·6 | 36·6 | |
| 8·0 | | 27·8 | 1·4 | 8·0 |
| 10·1 | | 29·1 | 16·4 | |
| 9·4 | | 29·6 | 46·1 | |
| 8·3 | | 32·6 | 19·9 | 8·0 G |
| 10·2 | | 34·6 | 34·9 | |
| 10·2 | | 35·1 | 5·0 | |
| 10·4 | | 37·6 | 34·7 | |
| 10·4 | | 38·6 | 12·6 | |
| 10·2 | | 39·6 | 48·0 | |
| 10·0 | | 39·6 | 54·1 | |
| 10·4 | | 44·1 | 42·6 | |
| 9·5 | | 46·1 | 23·2 | 9·0 |
| 8·9 | | 47·6 | 51·3 | |
| 10·4 | | 49·6 | 1·0 | |
| 9·8 | | 50·1 | 51·0 | |
| 9·6 | | 51·1 | 53·2 | |
| 10·0 | | 51·6 | 20·3 | |
| 10·4 | | 52·6 | 49·7 | |
| 9·8 | | 52·6 | 4·1 | |
| 10·4 | | 54·6 | 5·4 | |
| 10·2 | | 55·1 | 31·9 | |
| 7·8 | | 57·1 | 44·2 | G |
| 10·1 | | 58·1 | 15·7 | |
| 10·0 | | 58·6 | 5·3 | |
| 10·2 | | 59·6 | 18·9 | |
| 10·4 | 13 | 2·1 | 12·6 | |
| 10·4 | | 5·1 | 40·4 | |
| 10·2 | | 7·6 | 42·0 | |
| 9·8 | | 8·1 | 37·6 | |
| 10·2 | | 9·6 | 2·5 | |
| 10·4 | | 16·1 | 36·1 | |
| 10·0 | | 17·1 | 31·2 | |
| 9·2 | | 19·1 | 21·8 | |
| 8·6 | | 22·1 | 20·7 | 9·0 |
| 10·0 | | 22·6 | 28·1 | |
| 9·8 | | 27·6 | 0·2 | |
| 10·2 | | 28·6 | 36·5 | |
| 10·1 | | 30·6 | 53·6 | |
| 10·1 | | 30·6 | 18·1 | |
| 10·4 | | 31·1 | 53·1 | |
| 10·4 | | 34·6 | 31·4 | |
| 9·8 | | 36·6 | 8·9 | |
| 10·4 | | 39·7 | 2·0 | |
| 9·6 | | 40·1 | 25·7 | |
| 10·4 | | 41·2 | 2·4 | |
| 10·4 | | 41·6 | 45·1 | |
| 10·4 | | 51·1 | 2·3 | |
| 10·4 | | 51·1 | 34·0 | |
| 9·2 | | 54·6 | 5·7 | |
| 10·4 | | 56·1 | 26·0 | |
| 10·4 | 14 | 4·6 | 29·2 | |
| 10·4 | | 5·1 | 48·6 | |
| 10·4 | | 9·1 | 50·9 | |
| 10·4 | | 9·6 | 5·9 | |
| 10·4 | | 10·6 | 6·9 | |
| 10·2 | | 11·1 | 32·6 | |
| 10·2 | | 12·6 | 40·9 | |
| 9·0 | | 12·6 | 29·7 | 8·7 |



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### 7621—7680.

| mag. | 16h m | s | −54° ′ | |
|---|---|---|---|---|
| 9·5 | 14 | 13·1 | 43·6 | |
| 9·8 | | 14·6 | 43·8 | |
| 10·4 | | 15·6 | 40·1 | |
| 7·4 | | 15·6 | 55·6 | 8·0 Gt |
| 10·4 | | 15·6 | 4·3 | |
| 10·4 | | 18·6 | 20·7 | |
| 10·4 | | 21·1 | 39·5 | |
| 10·2 | | 21·1 | 49·7 | |
| 10·0 | | 23·1 | 27·3 | 9·5 |
| 10·2 | | 25·4 | 2·8 | |
| 10·1 | | 26·1 | 45·1 | |
| 7·8 | | 26·1 | 25·8 | 8·2 GSt |
| 9·8 | | 27·2 | 1·5 | |
| 10·1 | | 29·6 | 47·6 | |
| 10·2 | | 31·1 | 9·9 | |
| 9·6 | | 31·1 | 33·4 | |
| 10·0 | | 37·6 | 1·7 | |
| 8·6 | | 43·6 | 20·4 | 9·5 |
| 9·8 | | 44·6 | 24·8 | |
| 10·4 | | 45·6 | 33·2 | |
| 10·0 | | 47·6 | 22·5 | |
| 10·4 | | 51·6 | 34·6 | |
| 10·2 | | 54·6 | 23·4 | |
| 9·6 | | 55·1 | 49·3 | |
| 9·8 | | 55·6 | 10·8 | |
| 10·4 | | 55·6 | 29·7 | |
| 9·8 | | 59·6 | 6·0 | |
| 9·0 | | 59·6 | 44·1 | 9·0 |
| 10·0 | 15 | 2·1 | 49·6 | |
| 9·2 | | 2·6 | 59·7 | |
| 10·4 | | 4·1 | 10·9 | |
| 10·4 | | 7·1 | 0·3 | |
| 9·8 | | 7·6 | 41·2 | |
| 10·4 | | 9·6 | 15·1 | |
| 10·4 | | 13·1 | 17·6 | |
| 10·0 | | 16·1 | 30·7 | |
| 10·1 | | 17·4 | 13·6 | |
| 8·6 | | 17·4 | 48·0 | 9·5 |
| 10·4 | | 19·4 | 29·4 | |
| 10·4 | | 21·4 | 47·8 | |
| 10·4 | | 26·5 | 23·0 | |
| 10·0 | | 27·4 | 29·3 | |
| 9·6 | | 27·9 | 4·2 | |
| 10·4 | | 30·5 | 7·9 | |
| 10·1 | | 34·2 | 2·0 | |
| 9·8 | | 34·4 | 15·6 | |
| 10·4 | | 39·4 | 44·1 | |
| 10·1 | | 39·4 | 23·3 | |
| 10·0 | | 40·4 | 23·8 | |
| 9·6 | | 41·1 | 0·2 | |
| 8·4 | | 42·9 | 55·9 | 8·2 G |
| 10·4 | | 48·9 | 39·3 | |
| 10·4 | | 48·9 | 22·5 | |
| 9·8 | | 50·7 | 23·4 | |
| 10·4 | | 52·5 | 14·4 | |
| 10·4 | | 54·4 | 25·5 | |
| 10·4 | | 55·4 | 24·8 | |
| 10·0 | 16 | 8·9 | 15·1 | |
| 10·4 | | 9·4 | 6·6 | |
| 10·4 | | 11·4 | 25·5 | |

### 7681—7740.

| mag. | 16h m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 16 | 12·4 | 4·7 | |
| 9·2 | | 14·4 | 55·1 | 9·5 |
| 10·4 | | 17·4 | 48·5 | |
| 10·4 | | 19·4 | 34·5 | |
| 10·4 | | 24·4 | 23·0 | |
| 10·4 | | 25·4 | 59·9 | |
| 9·5 | | 25·4 | 9·3 | 9·5 |
| 9·8 | | 28·5 | 26·5 | |
| 9·0 | | 32·5 | 20·3 | |
| 9·8 | | 32·5 | 25·8 | |
| 8·9 | | 36·5 | 29·2 | |
| 9·8 | | 38·5 | 23·7 | |
| 9·8 | | 41·0 | 25·1 | |
| 9·7 | | 45·0 | 7·7 | |
| 9·8 | | 56·0 | 53·0 | |
| 9·7 | 17 | 1·0 | 10·7 | |
| 9·2 | | 5·5 | 57·0 | |
| 7·6 | | 7·5 | 40·5 | 8·0 G |
| 9·8 | | 10·5 | 15·7 | |
| 9·4 | | 26·0 | 13·6 | |
| 8·8 | | 36·0 | 50·3 | |
| 9·5 | | 49·0 | 5·4 | |
| 9·5 | | 53·0 | 29·0 | |
| 9·1 | 18 | 15·0 | 19·2 | |
| 9·8 | | 15·5 | 16·8 | |
| 9·3 | | 22·9 | 33·6 | |
| 9·8 | | 26·9 | 19·2 | |
| 9·1 | | 30·4 | 48·6 | |
| 9·6 | | 30·4 | 39·6 | 9·5 |
| 9·6 | | 31·9 | 43·0 | |
| 9·6 | | 31·9 | 30·5 | |
| 9·7 | | 32·4 | 26·5 | |
| 9·8 | | 41·9 | 41·9 | |
| 9·4 | | 55·9 | 29·3 | |
| 9·8 | | 57·4 | 39·4 | |
| 9·6 | 19 | 15·9 | 22·0 | |
| 8·7 | | 16·9 | 44·0 | 8·5 |
| 9·8 | | 19·4 | 8·4 | |
| 8·6 | | 21·9 | 16·2 | 9·0 |
| 9·5 | | 41·9 | 13·0 | |
| 9·7 | | 54·4 | 4·7 | |
| 9·8 | | 57·9 | 15·6 | |
| 9·8 | 20 | 0·9 | 6·3 | |
| 9·7 | | 14·5 | 57·4 | |
| 9·4 | | 16·4 | 12·7 | |
| 9·8 | | 18·4 | 40·5 | |
| 9·4 | | 20·4 | 41·1 | |
| 9·0 | | 40·4 | 53·1 | |
| 9·5 | | 41·9 | 33·9 | |
| 9·5 | | 46·9 | 22·0 | |
| 9·6 | | 47·1 | 1·2 | |
| 9·7 | | 47·4 | 0·6 | |
| 9·1 | 21 | 2·9 | 35·7 | 9·5 |
| 9·8 | | 25·9 | 16·2 | |
| 9·8 | | 33·9 | 0·0 | |
| 8·3 | | 42·9 | 47·4 | |
| 9·6 | | 54·4 | 6·8 | |
| 9·5 | 22 | 6·4 | 43·4 | |
| 8·8 | | 56·4 | 35·8 | 9·0 |
| 9·6 | 23 | 0·9 | 20·0 | |

### 7741—7800.

| mag. | 16h m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 23 | 7·4 | 30·4 | |
| 9·8 | | 8·4 | 13·2 | |
| 9·4 | | 27·8 | 48·2 | |
| 9·5 | | 44·4 | 57·3 | 9·0 |
| 9·7 | | 50·8 | 16·7 | |
| 9·5 | | 51·8 | 10·9 | |
| 9·6 | | 57·3 | 38·3 | |
| 9·8 | 24 | 3·3 | 26·3 | |
| 9·5 | | 8·9 | 59·5 | |
| 9·4 | | 9·3 | 10·8 | |
| 9·5 | | 11·8 | 32·1 | |
| 9·8 | | 15·8 | 50·0 | |
| 9·4 | | 33·3 | 16·8 | |
| 9·6 | | 51·8 | 38·9 | |
| 9·8 | 25 | 8·8 | 34·8 | |
| 9·8 | | 10·8 | 19·2 | |
| 9·4 | | 19·8 | 29·2 | |
| 9·8 | | 20·8 | 40·1 | |
| 8·8 | | 30·3 | 33·4 | 9·5 G |
| 9·4 | | 41·8 | 54·6 | |
| 9·1 | | 46·8 | 1·4 | 9·0 |
| 9·8 | | 53·0 | 46·9 | |
| 9·8 | | 58·8 | 55·8 | |
| 8·7 | 26 | 19·3 | 36·7 | 9·0 |
| 8·1 | | 52·8 | 43·4 | 7·5 G |
| 8·4 | 27 | 16·8 | 37·1 | 8·5 G |
| 9·8 | | 24·8 | 47·9 | |
| 9·8 | | 38·3 | 16·7 | |
| 7·8 | | 46·3 | 35·9 | 8·1 G |
| 9·8 | | 48·3 | 25·3 | |
| 9·2 | 28 | 3·3 | 6·0 | |
| 8·7 | | 8·8 | 33·7 | 9·0 |
| 9·8 | | 27·8 | 51·8 | |
| 9·4 | | 58·8 | 36·4 | |
| 9·3 | 29 | 12·8 | 40·5 | |
| 9·7 | | 14·3 | 27·6 | |
| 9·8 | | 15·3 | 42·3 | |
| 8·8 | | 15·8 | 27·0 | 9·2 |
| 9·8 | | 22·3 | 5·8 | |
| 9·6 | | 22·8 | 27·4 | |
| 9·5 | | 32·3 | 33·2 | |
| 9·8 | | 41·8 | 10·0 | |
| 9·8 | | 43·8 | 19·6 | |
| 9·8 | | 44·3 | 45·6 | |
| 9·4 | | 45·8 | 19·6 | 9·5 |
| 9·8 | | 51·8 | 45·8 | |
| 9·8 | | 53·6 | 0·7 | |
| 9·6 | | 59·3 | 19·6 | 9·5 |
| 9·7 | 30 | 2·3 | 16·1 | |
| 9·6 | | 7·8 | 14·2 | |
| 9·7 | | 8·3 | 1·6 | |
| 9·5 | | 9·3 | 8·4 | |
| 9·8 | | 10·3 | 1·2 | |
| 9·3 | | 30·3 | 5·7 | |
| 9·5 | | 34·3 | 32·1 | |
| 9·7 | | 45·8 | 13·2 | |
| 9·3 | | 55·8 | 52·1 | |
| 9·8 | 31 | 1·8 | 13·0 | |
| 9·2 | | 2·3 | 44·5 | 9·0 |
| 9·3 | | 10·8 | 55·0 | |

### 7801—7860.

| mag. | 16h m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 31 | 12·8 | 52·5 | |
| 9·5 | | 24·3 | 45·1 | |
| 9·8 | | 30·8 | 24·1 | |
| 9·8 | | 32·3 | 3·5 | |
| 9·6 | | 34·8 | 51·3 | |
| 8·3 | | 43·8 | 38·5 | 7·9 G |
| 8·6 | | 46·3 | 29·8 | 8·1 G |
| 9·5 | | 55·8 | 29·6 | |
| 9·2 | 32 | 9·8 | 51·3 | |
| 8·4 | | 18·3 | 54·9 | 8·8 |
| 9·8 | | 20·8 | 7·8 | |
| 9·8 | | 21·8 | 7·4 | |
| 9·7 | | 23·3 | 34·9 | |
| 9·8 | | 25·8 | 5·9 | |
| 9·6 | | 29·8 | 16·1 | |
| 9·8 | | 35·8 | 13·0 | |
| 9·7 | | 43·8 | 4·2 | |
| 8·6 | 33 | 4·3 | 32·1 | 8·0 G |
| 9·8 | | 23·0 | 55·8 | |
| 8·8 | | 25·8 | 2·5 | 8·0 G |
| 9·8 | | 27·0 | 37·9 | |
| 9·5 | | 30·8 | 17·3 | |
| 9·6 | | 34·8 | 46·6 | |
| 9·5 | | 49·3 | 7·7 | |
| 9·3 | | 51·8 | 43·0 | 9·5 |
| 9·8 | | 52·8 | 56·6 | |
| 9·6 | 34 | 1·8 | 16·8 | |
| 9·8 | | 9·0 | 1·3 | |
| 9·4 | | 11·8 | 14·6 | |
| 9·7 | | 18·8 | 3·1 | |
| 9·8 | | 28·3 | 48·0 | |
| 8·7 | | 31·6 | 1·6 | 9·0 |
| 9·3 | | 44·3 | 37·4 | 9·0 |
| 9·4 | | 46·8 | 46·9 | |
| 9·0 | 35 | 24·8 | 42·2 | 9·5 |
| 9·8 | | 28·8 | 34·0 | |
| 9·6 | | 33·3 | 3·9 | |
| 9·8 | | 34·8 | 39·5 | |
| 9·8 | | 57·3 | 30·2 | |
| 9·8 | 36 | 18·8 | 41·3 | |
| 8·9 | | 29·8 | 2·5 | 8·8 |
| 9·2 | | 30·8 | 9·5 | 10·0 |
| 9·6 | | 36·8 | 5·6 | |
| 9·6 | 37 | 17·3 | 14·0 | |
| 9·2 | | 41·8 | 32·6 | |
| 9·8 | | 47·8 | 6·1 | |
| 9·6 | | 50·8 | 12·5 | |
| 9·8 | 38 | 39·3 | 8·3 | |
| 9·7 | | 42·3 | 11·7 | |
| 9·1 | | 43·8 | 18·1 | 8·5 |
| 9·6 | | 45·8 | 55·3 | |
| 9·8 | | 54·8 | 55·7 | |
| 9·1 | 39 | 4·3 | 26·8 | 9·2 |
| 9·4 | | 19·3 | 14·5 | |
| 8·6 | | 23·3 | 13·2 | 8·5 |
| 9·8 | | 40·8 | 52·1 | |
| 9·5 | | 57·3 | 16·4 | |
| 8·4 | | 57·8 | 15·5 | 8·5 |
| 9·5 | 40 | 26·6 | 59·9 | |
| 9·7 | | 28·3 | 25·6 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 10 | 118 | 3·9 |
| | 20 | 119 | 3·5 |
| | 30 | 120 | 3·2 |
| | 40 | 121 | 2·9 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 16 | 40 | 121 | 2.9 |
| | 50 | 121 | 2.5 |
| 17 | 0 | 122 | 2.2 |
| | 10 | 123 | 1.8 |

### 7861—7920.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.8 | 40 | 42.3 | 41.9 | |
| 8.6 | | 43.3 | 42.8 | 9.0 |
| 9.8 | | 49.8 | 47.7 | |
| 9.5 | | 55.8 | 37.3 | |
| 8.7 | | 58.8 | 30.6 | 9.3 |
| 9.2 | 41 | 0.3 | 21.4 | |
| 9.8 | | 0.4 | 58.3 | |
| 9.5 | | 8.3 | 51.8 | |
| 9.8 | | 16.2 | 28.4 | |
| 9.6 | | 16.8 | 50.5 | |
| 9.6 | | 24.3 | 17.3 | |
| 9.4 | | 25.8 | 0.8 | |
| 9.6 | | 26.8 | 6.4 | |
| 9.6 | | 29.1 | 0.5 | |
| 9.3 | | 30.3 | 24.0 | 9.5 |
| 9.5 | | 37.3 | 18.0 | |
| 9.7 | | 52.3 | 48.2 | |
| 8.6 | 42 | 10.3 | 0.6 | 9.0 |
| 8.2 | | 22.3 | 38.8 | 8.5 |
| 9.6 | | 26.3 | 41.1 | |
| 9.4 | | 34.8 | 20.1 | 9.5 |
| 9.5 | | 52.3 | 48.8 | |
| 9.8 | 43 | 20.7 | 43.9 | |
| 8.0 | | 21.7 | 3.7 | 7.8 GS |
| 9.2 | | 23.7 | 15.7 | 9.5 |
| 9.8 | | 37.7 | 21.7 | 9.5 |
| 8.3 | | 45.2 | 8.9 | 7.5 GS |
| 7.8 | | 45.2 | 51.6 | 8.0 G |
| 9.8 | | 50.0 | 47.6 | |
| 9.5 | | 50.2 | 35.0 | |
| 9.8 | | 51.7 | 55.8 | |
| 7.4 | | 56.7 | 13.6 | 7.2 GSt |
| 9.6 | | 56.7 | 12.7 | |
| 9.7 | | 56.7 | 53.0 | |
| 9.6 | 44 | 0.2 | 17.1 | |
| 9.8 | | 17.2 | 48.4 | 9.5 |
| 9.6 | | 30.7 | 34.8 | |
| 9.8 | | 43.0 | 25.5 | |
| 9.6 | | 43.7 | 3.9 | |
| 9.5 | 45 | 3.2 | 48.5 | |
| 9.7 | | 10.2 | 1.5 | 9.0 |
| 8.9 | | 30.7 | 21.6 | 8.5 |
| 9.6 | | 32.2 | 44.4 | |
| 9.8 | | 55.7 | 28.4 | |
| 9.6 | | 56.7 | 10.9 | |
| 9.8 | | 57.2 | 58.3 | |
| 9.8 | 46 | 20.7 | 42.6 | |
| 9.0 | | 33.7 | 6.1 | 9.2 |
| 9.5 | | 48.2 | 38.9 | |
| 8.6 | | 52.2 | 13.1 | 8.8 |
| 9.5 | 47 | 15.0 | 0.8 | |
| 9.4 | | 15.2 | 4.0 | 9.5 |
| 9.2 | | 17.7 | 19.3 | |
| 8.9 | | 40.2 | 40.2 | 9.0 |
| 9.8 | | 54.2 | 36.9 | |
| 10.1 | | 58.2 | 59.2 | |
| 9.8 | | 59.2 | 49.3 | |
| 9.8 | 48 | 30.9 | 28.9 | 9.0 |
| 10.0 | | 31.5 | 52.1 | |
| 9.8 | | 36.0 | 50.9 | |

### 7921—7980.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.1 | 48 | 39.5 | 1.1 | |
| 10.1 | | 41.1 | 15.0 | |
| 9.3 | | 42.9 | 43.9 | |
| 10.0 | | 47.2 | 14.7 | |
| 9.8 | | 55.7 | 40.7 | |
| 9.5 | | 58.2 | 22.4 | |
| 9.5 | 49 | 3.2 | 20.1 | |
| 10.1 | | 4.1 | 9.9 | |
| 10.1 | | 6.7 | 30.1 | |
| 10.1 | | 8.2 | 24.5 | |
| 9.8 | | 9.2 | 41.6 | |
| 7.9 | | 10.2 | 40.6 | 8.0 G |
| 10.0 | | 11.2 | 32.5 | |
| 8.8 | | 22.7 | 33.3 | 9.0 |
| 10.1 | | 26.7 | 45.1 | |
| 9.8 | | 29.2 | 27.6 | |
| 9.0 | | 29.2 | 23.0 | |
| 10.0 | | 31.2 | 54.1 | |
| 10.1 | | 37.7 | 8.1 | |
| 10.1 | | 38.2 | 34.7 | |
| 10.1 | | 38.7 | 8.1 | |
| 10.0 | | 44.7 | 19.7 | |
| 10.0 | | 44.7 | 16.3 | |
| 9.6 | | 45.2 | 29.1 | |
| 9.0 | | 47.7 | 17.4 | 9.5 |
| 10.0 | | 51.7 | 6.1 | |
| 7.0 | | 58.7 | 23.9 | 6.5 GSc |
| 10.1 | 50 | 0.0 | 59.5 | |
| 9.0 | | 0.7 | 54.9 | 8.2 |
| 10.1 | | 0.7 | 46.8 | |
| 10.1 | | 0.7 | 45.1 | |
| 9.1 | | 2.7 | 9.8 | 9.5 |
| 10.1 | | 6.2 | 5.3 | |
| 10.0 | | 24.2 | 7.2 | |
| 10.1 | | 28.7 | 17.5 | |
| 10.1 | | 30.2 | 5.5 | |
| 9.0 | | 48.7 | 48.1 | 9.0 |
| 10.1 | | 50.2 | 32.1 | |
| 10.0 | | 52.7 | 24.4 | |
| 10.1 | | 53.7 | 57.9 | |
| 9.6 | | 57.7 | 46.9 | 9.0 |
| 9.5 | | 57.7 | 7.5 | 9.5 |
| 10.1 | | 58.2 | 1.8 | |
| 9.4 | | 59.2 | 42.8 | 9.0 G |
| 10.0 | 51 | 6.2 | 29.3 | p |
| 10.1 | | 16.2 | 32.3 | |
| 10.1 | | 42.7 | 12.3 | |
| 9.6 | | 44.2 | 34.7 | 9.0 |
| 9.6 | | 53.2 | 4.3 | 9.0 |
| 8.6 | | 56.7 | 44.2 | 9.0 G |
| 10.1 | | 59.7 | 58.6 | |
| 10.0 | 52 | 0.2 | 2.9 | |
| 10.1 | | 1.9 | 0.0 | |
| 10.1 | | 16.2 | 12.8 | |
| 10.1 | | 19.7 | 53.1 | G |
| 9.8 | | 22.7 | 52.9 | G |
| 9.6 | | 23.2 | 13.3 | |
| 9.0 | | 32.7 | 42.3 | 9.5 |
| 9.6 | | 33.7 | 18.3 | |
| 7.4 | | 35.2 | 22.3 | 8.0 GS |

### 7981—8040.

| mag. | 16h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 52 | 36.7 | 12.3 | |
| 9.6 | | 39.2 | 56.3 | |
| 9.4 | | 39.2 | 43.1 | |
| 9.6 | | 39.2 | 41.1 | |
| 10.1 | | 41.2 | 36.0 | |
| 10.1 | | 42.7 | 51.8 | |
| 10.1 | | 50.2 | 4.5 | |
| 10.1 | 53 | 11.2 | 13.6 | |
| 10.1 | | 14.7 | 5.8 | |
| 10.0 | | 15.2 | 12.8 | |
| 9.5 | | 22.7 | 37.3 | |
| 8.2 | | 23.2 | 10.3 | 8.5 |
| 10.1 | | 24.7 | 17.1 | |
| 10.0 | | 30.2 | 20.1 | 10.0 |
| 10.1 | | 30.2 | 53.4 | |
| 10.1 | | 34.2 | 27.3 | |
| 9.5 | | 42.7 | 44.8 | 9.0 |
| 10.1 | | 45.2 | 49.4 | |
| 10.0 | 54 | 16.7 | 42.8 | |
| 10.1 | | 22.7 | 6.9 | |
| 9.4 | | 34.2 | 33.7 | |
| 10.1 | | 38.2 | 27.9 | |
| 10.1 | | 39.7 | 54.3 | |
| 10.0 | | 44.2 | 28.5 | |
| 10.1 | | 58.7 | 14.3 | |
| 9.5 | 55 | 2.7 | 36.9 | |
| 10.1 | | 8.7 | 0.1 | |
| 8.8 | | 10.7 | 25.3 | 9.5 |
| 9.8 | | 11.7 | 47.9 | |
| 10.1 | | 13.2 | 10.3 | |
| 9.6 | | 15.2 | 31.1 | |
| 10.0 | | 18.7 | 40.6 | |
| 10.1 | | 22.1 | 19.1 | |
| 10.1 | | 24.2 | 38.1 | |
| 9.6 | | 30.7 | 6.5 | |
| 10.1 | | 36.3 | 58.3 | |
| 10.1 | | 37.7 | 24.8 | |
| 10.0 | | 37.7 | 46.2 | |
| 9.4 | | 41.7 | 15.2 | |
| 9.6 | | 56.7 | 22.0 | |
| 8.8 | 56 | 7.1 | 9.7 | 9.0 |
| 9.6 | | 17.9 | 1.8 | 9.0 |
| 10.1 | | 18.7 | 9.8 | |
| 10.0 | | 21.7 | 28.8 | |
| 10.1 | | 24.7 | 26.6 | |
| 9.8 | | 41.7 | 36.6 | |
| 9.5 | | 51.2 | 26.4 | |
| 9.3 | 57 | 10.7 | 50.2 | |
| 10.1 | | 29.2 | 47.3 | |
| 10.1 | | 33.7 | 24.1 | |
| 9.6 | | 42.5 | 2.0 | |
| 10.1 | | 52.2 | 26.1 | |
| 10.0 | 58 | 2.2 | 52.1 | |
| 10.1 | | 16.9 | 44.9 | |
| 10.1 | | 21.4 | 24.5 | |
| 10.1 | | 21.9 | 28.4 | |
| 10.1 | | 30.4 | 10.4 | |
| 9.8 | | 30.9 | 54.2 | |
| 10.1 | | 37.4 | 9.8 | |
| 10.1 | 59 | 9.9 | 20.2 | |

### 8041—8100.

| mag. | 16h.–17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.0 | 59 | 14.4 | 30.7 | |
| 9.8 | | 21.4 | 17.8 | 10.0 |
| 10.0 | | 23.9 | 45.8 | |
| 10.1 | | 24.4 | 28.4 | |
| 9.4 | | 27.8 | 0.1 | |
| 8.4 | | 34.9 | 10.0 | 8.3 |
| 10.0 | | 39.4 | 54.0 | |
| 9.8 | | 47.4 | 39.7 | |
| 10.1 | | 51.8 | 40.1 | |
| 10.0 | | 51.9 | 37.6 | |
| 10.1 | | 52.9 | 50.7 | |
| 9.6 | 0 | 0.4 | 35.2 | |
| 10.1 | | 5.8 | 9.0 | |
| 10.0 | | 8.4 | 53.9 | |
| 9.8 | | 8.9 | 37.6 | |
| 9.3 | | 12.4 | 5.2 | |
| 9.3 | | 17.4 | 19.6 | |
| 10.0 | | 18.4 | 12.7 | |
| 10.0 | | 25.9 | 11.0 | |
| 10.0 | | 26.4 | 41.5 | |
| 9.8 | | 33.4 | 13.5 | |
| 9.8 | | 34.4 | 19.3 | |
| 10.1 | | 40.8 | 36.3 | |
| 9.1 | | 41.4 | 39.8 | |
| 9.8 | | 43.4 | 17.3 | |
| 9.8 | | 44.9 | 32.1 | |
| 10.1 | | 44.9 | 6.3 | |
| 10.1 | | 48.9 | 26.6 | |
| 9.6 | | 59.4 | 7.2 | |
| 9.5 | 1 | 5.9 | 43.4 | 9.0 |
| 9.6 | | 10.9 | 45.3 | |
| 10.1 | | 17.4 | 33.7 | |
| 10.1 | | 19.9 | 21.1 | |
| 10.1 | | 24.4 | 23.6 | |
| 9.8 | | 27.4 | 48.8 | |
| 10.1 | | 38.9 | 22.0 | |
| 9.3 | | 40.4 | 18.4 | |
| 9.6 | | 40.4 | 40.3 | |
| 10.1 | | 40.9 | 5.1 | |
| 10.1 | | 44.4 | 26.8 | |
| 10.0 | | 48.9 | 48.0 | |
| 9.8 | | 52.9 | 30.9 | |
| 10.1 | | 52.4 | 20.8 | |
| 10.1 | | 52.9 | 41.8 | |
| 10.0 | | 53.9 | 39.9 | |
| 10.1 | | 54.5 | 59.3 | |
| 10.1 | | 55.9 | 3.2 | |
| 10.1 | | 58.4 | 22.0 | |
| 10.1 | 2 | 3.9 | 40.2 | |
| 10.1 | | 18.4 | 2.5 | |
| 10.1 | | 20.9 | 28.1 | |
| 10.0 | | 22.4 | 24.4 | |
| 10.1 | | 22.9 | 7.8 | |
| 9.3 | | 40.4 | 44.5 | 9.2 |
| 10.1 | | 43.4 | 29.8 | |
| 7.9 | | 47.9 | 41.6 | 7.5 GSt |
| 10.1 | | 49.4 | 18.9 | |
| 9.5 | | 51.4 | 30.3 | |
| 9.6 | | 57.4 | 20.4 | |
| 9.8 | | 58.9 | 47.2 | |



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## 8101—8160.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·1 | 3 | 14·4 | 45·5 | |
| 10·1 | | 22·4 | 40·1 | |
| 9·6 | | 23·9 | 5·3 | |
| 10·1 | | 24·9 | 19·4 | |
| 9·3 | | 32·9 | 16·0 | 10·0 |
| 9·6 | | 38·4 | 36·1 | |
| 10·1 | | 40·9 | 56·2 | |
| 9·6 | | 46·9 | 23·9 | |
| 10·1 | | 48·4 | 41·7 | |
| 10·1 | | 52·4 | 12·9 | |
| 10·1 | | 54·4 | 46·1 | |
| 10·1 | | 58·9 | 45·9 | |
| 9·8 | 4 | 5·4 | 31·1 | |
| 10·1 | | 6·4 | 8·9 | |
| 8·3 | | 22·4 | 12·9 | 8·5 |
| 9·6 | | 27·9 | 30·3 | |
| 10·1 | | 29·9 | 39·9 | |
| 10·1 | | 39·4 | 41·3 | |
| 10·1 | | 44·9 | 6·1 | |
| 10·1 | | 45·9 | 43·7 | |
| 10·0 | | 48·9 | 50·3 | |
| 9·8 | | 48·9 | 1·8 | |
| 9·8 | | 53·9 | 18·8 | |
| 10·1 | | 57·4 | 11·1 | |
| 10·1 | 5 | 2·4 | 48·7 | |
| 10·1 | | 4·4 | 38·5 | |
| 10·1 | | 17·9 | 30·1 | |
| 10·1 | | 18·9 | 8·1 | |
| 9·8 | | 19·9 | 49·4 | |
| 9·0 | | 19·9 | 42·8 | 9·0 |
| 9·8 | | 26·4 | 33·4 | |
| 10·0 | | 31·9 | 33·4 | |
| 9·6 | | 32·4 | 32·3 | |
| 10·0 | | 39·4 | 40·3 | |
| 9·3 | | 42·4 | 18·9 | |
| 10·0 | | 46·4 | 1·3 | |
| 9·6 | | 48·4 | 20·2 | |
| 10·1 | | 52·4 | 23·5 | |
| 10·0 | | 52·8 | 0·0 | |
| 9·8 | | 56·4 | 55·7 | |
| 9·5 | | 57·4 | 59·1 | |
| 10·0 | 6 | 5·4 | 35·1 | |
| 9·8 | | 7·9 | 21·7 | |
| 10·1 | | 12·4 | 25·9 | |
| 9·6 | | 13·9 | 30·8 | |
| 10·1 | | 21·4 | 20·2 | |
| 9·6 | | 25·4 | 48·9 | |
| 10·1 | | 27·4 | 53·3 | |
| 10·0 | | 27·9 | 29·7 | |
| 10·1 | | 29·9 | 45·3 | |
| 9·4 | | 30·4 | 16·7 | |
| 10·1 | | 30·9 | 29·5 | |
| 10·1 | | 36·2 | 51·2 | |
| 10·1 | | 37·9 | 52·5 | |
| 10·1 | | 37·9 | 22·5 | |
| 8·2 | | 43·9 | 37·7 | 8·0 G |
| 10·1 | | 52·4 | 52·7 | |
| 10·1 | | 59·9 | 44·3 | |
| 9·4 | 7 | 2·4 | 52·3 | |
| 9·2 | | 2·7 | 57·7 | |

## 8161—8220.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 7 | 9·9 | 36·3 | |
| 9·8 | | 10·9 | 55·5 | |
| 10·1 | | 13·9 | 49·1 | |
| 8·3 | | 28·9 | 43·7 | 8·8 |
| 8·8 | | 30·4 | 59·9 | |
| 9·3 | | 30·4 | 54·2 | |
| 10·1 | | 47·9 | 23·1 | |
| 9·8 | | 55·4 | 55·7 | |
| 9·6 | | 56·9 | 3·7 | 9·5 |
| 9·4 | | 57·6 | 2·7 | |
| 9·8 | 8 | 1·9 | 3·7 | |
| 8·8 | | 5·4 | 1·0 | |
| 10·1 | | 6·9 | 30·2 | |
| 9·4 | | 20·4 | 52·3 | |
| 10·0 | | 26·9 | 28·1 | |
| 10·1 | | 28·9 | 20·8 | |
| 10·1 | | 31·4 | 7·1 | |
| 10·1 | | 33·8 | 37·7 | |
| 10·0 | | 33·9 | 47·3 | |
| 10·1 | | 39·9 | 39·7 | |
| 10·1 | | 42·4 | 21·0 | |
| 10·1 | | 42·4 | 29·4 | |
| 9·4 | | 46·4 | 13·4 | 9·5 |
| 9·8 | | 48·9 | 43·6 | |
| 9·6 | | 49·4 | 53·1 | |
| 9·6 | | 51·4 | 44·3 | |
| 10·1 | | 59·4 | 7·2 | |
| 9·8 | 9 | 0·4 | 28·2 | |
| 9·6 | | 9·9 | 21·8 | |
| 10·0 | | 10·4 | 38·8 | |
| 7·6 | | 12·2 | 58·8 | 8·0 GS |
| 10·1 | | 12·4 | 46·1 | |
| 8·3 | | 16·9 | 13·4 | 8·5 |
| 10·0 | | 17·9 | 52·1 | |
| 9·6 | | 17·9 | 41·7 | |
| 10·1 | | 22·4 | 34·1 | |
| 10·1 | | 31·9 | 50·9 | |
| 10·1 | | 33·4 | 53·7 | |
| 10·1 | | 38·9 | 49·3 | |
| 9·6 | | 40·4 | 45·2 | 9·5 |
| 10·1 | | 41·9 | 0·1 | |
| 10·0 | | 44·7 | 57·1 | |
| 8·8 | | 49·9 | 24·7 | 9·0 |
| 10·1 | | 50·4 | 48·1 | |
| 10·0 | | 52·9 | 52·5 | |
| 9·8 | 10 | 19·9 | 33·1 | |
| 10·1 | | 21·9 | 39·1 | |
| 10·0 | | 32·4 | 51·1 | |
| 9·0 | | 32·9 | 47·1 | |
| 10·0 | | 33·4 | 49·1 | |
| 9·5 | | 34·9 | 9·7 | |
| 9·8 | | 38·9 | 58·7 | |
| 9·2 | | 40·4 | 16·7 | 8·0 |
| 10·1 | | 50·4 | 30·1 | |
| 10·0 | | 51·4 | 33·8 | |
| 9·3 | | 52·9 | 21·1 | |
| 9·8 | | 53·7 | 57·9 | |
| 10·0 | 11 | 3·4 | 25·3 | |
| 10·1 | | 8·9 | 35·3 | |
| 10·1 | | 18·4 | 49·1 | |

## 8221—8280.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·1 | 11 | 21·9 | 57·3 | |
| 9·0 | | 37·4 | 6·7 | 9·5 |
| 10·0 | | 38·9 | 59·6 | |
| 9·8 | | 42·4 | 50·1 | |
| 10·0 | 12 | 11·9 | 43·9 | |
| 10·0 | | 12·9 | 18·3 | |
| 7·5 | | 16·9 | 9·3 | 7·5 GS |
| 10·0 | | 17·4 | 56·9 | |
| 9·1 | | 17·9 | 49·7 | |
| 10·1 | | 22·8 | 49·6 | |
| 10·0 | | 24·4 | 18·1 | |
| 10·0 | | 38·4 | 20·2 | |
| 10·1 | | 40·4 | 34·7 | |
| 9·2 | | 42·9 | 26·2 | |
| 10·0 | | 43·9 | 38·7 | |
| 8·8 | | 47·9 | 11·5 | 9·0 |
| 10·1 | 13 | 0·8 | 22·8 | |
| 10·1 | | 2·9 | 9·3 | |
| 10·1 | | 3·4 | 6·0 | |
| 10·1 | | 4·5 | 1·1 | |
| 10·1 | | 7·4 | 45·1 | |
| 9·1 | | 11·4 | 19·3 | |
| 10·0 | | 13·2 | 2·9 | |
| 10·1 | | 19·6 | 1·2 | |
| 9·4 | | 28·2 | 56·2 | |
| 10·1 | | 29·5 | 30·0 | |
| 10·0 | | 31·2 | 36·9 | |
| 10·0 | | 33·2 | 52·2 | |
| 9·4 | | 39·7 | 5·8 | |
| 9·8 | | 41·7 | 30·3 | |
| 10·0 | | 42·7 | 17·6 | |
| 9·3 | | 43·1 | 57·5 | 8·5 |
| 9·8 | | 47·7 | 16·3 | |
| 10·1 | | 49·7 | 4·4 | |
| 10·1 | | 52·2 | 43·7 | |
| 10·1 | 14 | 0·7 | 45·2 | |
| 9·8 | | 1·7 | 5·3 | |
| 10·1 | | 6·2 | 41·3 | |
| 10·1 | | 6·2 | 37·9 | |
| 9·8 | | 14·7 | 38·3 | |
| 10·0 | | 17·2 | 49·3 | |
| 9·6 | | 17·7 | 10·2 | |
| 9·1 | | 18·7 | 22·1 | |
| 8·1 | | 21·2 | 37·5 | 8·0 |
| 10·0 | | 24·2 | 3·6 | |
| 9·8 | | 28·7 | 40·1 | |
| 8·4 | | 30·2 | 17·0 | 8·5 |
| 9·0 | | 30·7 | 20·0 | 8·5 |
| 7·4 | | 33·2 | 26·3 | 7·5 GS |
| 10·1 | | 33·5 | 17·0 | |
| 10·0 | | 49·7 | 10·4 | |
| 10·1 | | 50·2 | 57·3 | |
| 10·0 | 15 | 12·7 | 32·5 | |
| 9·3 | | 16·7 | 11·1 | |
| 10·0 | | 18·7 | 30·6 | |
| 9·6 | | 19·2 | 54·0 | |
| 9·4 | | 20·7 | 50·1 | |
| 10·1 | | 27·5 | 2·8 | |
| 10·1 | | 28·2 | 10·4 | |
| 10·1 | | 31·2 | 48·4 | |

## 8281—8340.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·1 | 15 | 35·0 | 49·8 | |
| 9·8 | | 36·0 | 48·1 | |
| 10·1 | | 45·1 | 51·1 | |
| 10·1 | | 51·5 | 5·0 | |
| 10·0 | | 52·5 | 38·0 | |
| 10·0 | | 56·5 | 23·2 | |
| 9·6 | | 59·0 | 55·8 | |
| 10·1 | 16 | 26·5 | 40·0 | |
| 10·0 | | 28·5 | 23·9 | |
| 9·8 | | 29·5 | 2·1 | |
| 9·6 | | 36·5 | 34·9 | |
| 10·1 | | 37·5 | 44·9 | |
| 9·8 | | 38·5 | 45·7 | |
| 10·1 | | 40·5 | 41·1 | |
| 10·1 | | 42·0 | 48·2 | |
| 10·1 | | 50·7 | 0·3 | |
| 10·1 | | 53·5 | 45·7 | |
| 10·1 | 17 | 3·0 | 45·3 | |
| 10·0 | | 7·0 | 28·1 | |
| 9·6 | | 7·5 | 38·6 | |
| 9·6 | | 8·0 | 6·0 | |
| 9·6 | | 12·0 | 12·0 | |
| 9·1 | | 14·5 | 35·1 | |
| 8·8 | | 15·5 | 48·7 | |
| 10·1 | | 16·1 | 6·5 | |
| 10·1 | | 18·0 | 55·2 | |
| 10·1 | | 20·1 | 38·2 | |
| 9·5 | | 22·4 | 0·9 | |
| 9·6 | | 24·5 | 1·2 | |
| 10·0 | | 25·0 | 6·3 | |
| 10·1 | | 27·2 | 59·9 | |
| 8·4 | | 28·0 | 22·1 | 8·8 |
| 10·0 | | 32·0 | 36·9 | |
| 8·4 | | 36·0 | 25·8 | 8·3 |
| 10·0 | | 37·0 | 57·6 | |
| 9·8 | | 44·0 | 0·1 | |
| 9·4 | | 47·5 | 34·7 | 9·5 |
| 9·6 | | 57·5 | 33·2 | |
| 10·0 | 18 | 8·5 | 55·8 | |
| 10·0 | | 10·3 | 49·9 | |
| 10·1 | | 17·3 | 2·2 | |
| 9·8 | | 19·8 | 4·5 | |
| 8·6 | | 28·3 | 28·8 | 8·8 |
| 10·0 | | 38·3 | 5·8 | |
| 9·6 | | 42·3 | 21·0 | |
| 9·8 | | 47·3 | 18·8 | |
| 10·0 | 19 | 5·3 | 39·7 | |
| 10·1 | | 7·3 | 28·7 | |
| 10·1 | | 13·3 | 53·6 | |
| 10·1 | | 20·8 | 53·9 | |
| 9·4 | | 22·3 | 32·9 | |
| 9·6 | | 22·8 | 6·8 | |
| 9·4 | | 23·1 | 58·2 | |
| 10·1 | | 29·3 | 24·8 | |
| 10·1 | | 30·3 | 11·6 | |
| 9·6 | | 38·4 | 33·5 | |
| 9·1 | | 39·3 | 41·6 | 9·0 |
| 10·0 | | 40·8 | 41·1 | |
| 9·2 | | 42·3 | 9·3 | 9·0 |
| 9·8 | | 46·1 | 26·2 | |

| h | m | ·25 prec. α + s | δ − ″ |
|---|---|---|---|
| 17 | 0 | 122 | 2·2 |
| | 10 | 123 | 1·8 |
| | 20 | 123 | 1·5 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 10 | 123 | 1·8 |
| | 20 | 123 | 1·5 |
| | 30 | 123 | 1·1 |
| | 40 | 123 | 0·7 |
| | 50 | 124 | 0·4 |

## 8341—8400.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·3 | 19 | 49·6 | 44·6 | |
| 10·1 | | 52·0 | 39·6 | |
| 10·1 | | 56·3 | 16·6 | |
| 10·0 | | 59·8 | 6·3 | |
| 9·4 | 20 | 3·3 | 7·7 | |
| 9·6 | | 8·3 | 3·6 | |
| 10·1 | | 10·8 | 18·0 | |
| 10·1 | | 12·8 | 52·1 | |
| 7·7 | | 13·3 | 8·1 | 8·0 |
| 9·6 | | 15·3 | 49·0 | |
| 9·8 | | 25·1 | 29·0 | |
| 9·5 | | 28·3 | 45·8 | |
| 9·5 | | 31·8 | 39·5 | |
| 10·0 | | 34·3 | 4·0 | |
| 9·8 | | 36·3 | 33·1 | |
| 10·1 | | 41·8 | 9·3 | |
| 9·8 | | 43·5 | 39·7 | 9·5 |
| 8·6 | | 49·0 | 40·4 | 8·9 |
| 10·1 | | 50·0 | 12·5 | |
| 10·1 | 21 | 6·0 | 15·3 | |
| 8·2 | | 8·0 | 35·1 | 8·0 G |
| 10·1 | | 12·0 | 46·4 | |
| 9·2 | | 27·0 | 46·6 | |
| 9·0 | | 27·0 | 15·1 | |
| 10·0 | | 32·0 | 38·6 | |
| 10·1 | | 33·0 | 32·2 | |
| 9·4 | | 36·5 | 30·9 | |
| 10·0 | | 38·5 | 59·9 | |
| 9·8 | | 45·5 | 43·9 | |
| 9·8 | | 47·5 | 54·9 | |
| 9·8 | 22 | 10·0 | 28·6 | |
| 10·0 | | 12·0 | 9·2 | |
| 9·8 | | 18·0 | 36·7 | |
| 10·1 | | 28·5 | 46·5 | |
| 9·4 | | 30·0 | 48·4 | 9·0 |
| 9·4 | | 30·0 | 51·2 | 9·0 |
| 10·1 | | 34·5 | 11·6 | |
| 9·4 | | 50·0 | 31·7 | 8·5 |
| 10·1 | | 50·0 | 14·6 | |
| 10·1 | 23 | 13·0 | 28·0 | |
| 8·8 | | 24·5 | 38·1 | 9·2 |
| 10·0 | | 35·0 | 23·9 | |
| 8·2 | | 43·5 | 44·2 | 8·5 |
| 9·8 | | 47·5 | 46·8 | |
| 10·0 | | 50·0 | 6·3 | |
| 9·8 | | 51·0 | 13·1 | |
| 7·7 | | 52·0 | 47·6 | 7·5 GS |
| 10·1 | 24 | 7·0 | 54·1 | |
| 10·0 | | 27·5 | 20·9 | |
| 10·1 | | 35·0 | 2·4 | |
| 9·2 | | 42·5 | 18·7 | |
| 10·1 | 25 | 53·0 | 35·9 | |
| 10·0 | 26 | 1·0 | 3·6 | |
| 9·8 | | 9·5 | 43·3 | |
| 9·2 | | 42·0 | 50·0 | |
| 10·0 | | 42·0 | 42·1 | |
| 10·1 | | 43·0 | 33·1 | |
| 10·1 | | 46·5 | 25·6 | |
| 9·6 | | 56·0 | 59·6 | 9·0 |
| 9·6 | 27 | 6·0 | 17·1 | |

## 8401—8460.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 27 | 13·5 | 30·1 | |
| 9·6 | | 28·5 | 32·1 | 9·5 |
| 6·5 | | 50·0 | 24·7 | 6·0 GSct |
| 9·2 | | 50·3 | 52·3 | |
| 9·6 | | 50·8 | 39·1 | |
| 10·1 | 28 | 12·3 | 33·0 | |
| 9·4 | | 22·3 | 23·9 | 9·5 |
| 8·8 | | 23·3 | 23·2 | 9·0 |
| 9·1 | | 28·3 | 51·7 | |
| 9·8 | | 32·3 | 19·8 | |
| 10·0 | | 35·3 | 48·4 | |
| 9·5 | | 42·8 | 26·1 | |
| 9·2 | | 44·0 | 58·4 | 8·5 |
| 10·0 | | 45·3 | 27·8 | |
| 8·8 | | 48·8 | 22·9 | 9·5 |
| 9·5 | 29 | 5·3 | 51·0 | |
| 10·1 | | 8·3 | 44·5 | |
| 10·1 | | 9·3 | 25·7 | |
| 10·1 | | 18·8 | 2·8 | |
| 9·2 | | 19·8 | 6·2 | 9·0 |
| 8·6 | | 26·8 | 12·6 | 9·5 |
| 8·8 | | 28·3 | 55·0 | 8·5 |
| 8·2 | | 31·3 | 16·7 | 7·5 G |
| 10·1 | | 32·3 | 54·5 | |
| 9·0 | | 33·3 | 34·0 | 8·0 |
| 8·6 | | 34·8 | 45·6 | 8·8 |
| 10·1 | | 39·8 | 15·1 | |
| 10·1 | | 40·3 | 43·7 | |
| 10·1 | | 56·3 | 43·9 | |
| 9·5 | 30 | 2·3 | 37·3 | |
| 10·1 | | 4·3 | 30·1 | |
| 9·8 | | 12·3 | 58·4 | |
| 9·8 | | 12·8 | 50·9 | |
| 9·5 | | 15·3 | 24·1 | |
| 10·0 | | 18·8 | 15·0 | |
| 10·1 | | 26·8 | 12·7 | |
| 9·5 | | 28·8 | 34·3 | |
| 10·0 | | 34·3 | 45·9 | |
| 10·0 | | 53·3 | 21·9 | |
| 10·0 | 31 | 14·3 | 9·2 | |
| 10·0 | | 15·8 | 40·0 | |
| 10·0 | | 18·3 | 18·9 | |
| 10·0 | | 32·3 | 25·7 | |
| 9·4 | | 46·8 | 46·6 | 9·5 |
| 9·8 | | 55·3 | 50·7 | |
| 10·1 | 32 | 0·3 | 7·7 | |
| 9·4 | | 1·3 | 39·5 | |
| 10·0 | | 3·3 | 38·3 | |
| 9·1 | | 17·8 | 37·3 | |
| 9·6 | | 27·8 | 57·1 | |
| 10·1 | | 32·3 | 47·7 | |
| 10·1 | | 41·8 | 58·3 | |
| 9·1 | 33 | 6·8 | 13·8 | 9·0 |
| 9·5 | | 13·3 | 20·4 | |
| 10·1 | | 15·3 | 8·3 | |
| 9·2 | | 26·8 | 38·4 | |
| 10·0 | | 41·3 | 3·4 | |
| 10·0 | | 41·8 | 7·4 | |
| 10·0 | | 43·8 | 14·9 | |
| 10·1 | | 50·3 | 18·3 | |

## 8461—8520.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·2 | 33 | 53·8 | 41·8 | 9·0 |
| 9·0 | 34 | 10·8 | 49·5 | 9·0 |
| 10·1 | | 11·3 | 21·0 | |
| 10·1 | | 21·8 | 30·9 | |
| 9·2 | | 22·3 | 42·8 | |
| 10·1 | | 23·3 | 54·3 | |
| 9·4 | | 48·3 | 19·0 | |
| 7·5 | | 50·3 | 4·4 | |
| 10·1 | 35 | 2·8 | 49·7 | |
| 10·1 | | 3·3 | 25·1 | |
| 9·4 | | 6·3 | 45·9 | 9·0 |
| 10·0 | | 7·8 | 4·4 | |
| 10·0 | | 21·3 | 10·3 | |
| 10·0 | | 38·8 | 52·5 | |
| 9·8 | | 38·8 | 22·2 | |
| 10·1 | | 48·8 | 52·4 | |
| 9·6 | | 59·8 | 11·3 | |
| 9·8 | 36 | 1·8 | 42·4 | |
| 9·5 | | 1·8 | 5·7 | |
| 9·6 | | 15·3 | 47·4 | |
| 10·1 | | 16·3 | 16·3 | |
| 10·0 | | 41·6 | 26·2 | |
| 10·0 | | 56·1 | 58·1 | |
| 9·4 | 37 | 15·6 | 46·1 | |
| 10·1 | | 17·6 | 19·9 | |
| 8·6 | | 26·1 | 38·4 | 8·5 |
| 10·1 | | 29·1 | 19·3 | |
| 10·1 | | 30·1 | 44·2 | |
| 10·0 | | 31·6 | 40·7 | |
| 10·1 | | 38·6 | 58·8 | |
| 8·3 | | 40·6 | 39·1 | 8·5 |
| 10·1 | | 42·1 | 57·8 | |
| 8·4 | | 45·6 | 23·7 | 8·5 |
| 10·1 | | 47·1 | 24·6 | |
| 10·1 | 38 | 0·1 | 28·0 | |
| 8·6 | | 9·6 | 31·5 | 9·0 |
| 9·6 | | 14·6 | 59·0 | |
| 10·0 | | 46·1 | 3·1 | |
| 10·1 | | 48·6 | 40·4 | |
| 10·1 | | 51·1 | 3·4 | |
| 10·1 | | 53·1 | 39·0 | |
| 10·0 | | 55·1 | 15·2 | |
| 10·1 | 39 | 9·6 | 23·9 | |
| 9·8 | | 10·1 | 46·5 | |
| 8·8 | | 18·2 | 2·1 | 9·0 |
| 10·1 | | 26·6 | 23·5 | |
| 10·0 | | 26·6 | 27·0 | |
| 10·0 | | 33·3 | 15·4 | |
| 10·0 | | 52·8 | 18·1 | |
| 8·5 | | 54·8 | 5·1 | |
| 10·1 | 40 | 0·3 | 16·4 | |
| 9·5 | | 5·3 | 46·6 | |
| 8·2 | | 10·8 | 41·1 | 8·0 G |
| 10·1 | | 15·8 | 49·1 | |
| 8·4 | | 21·8 | 17·3 | |
| 10·1 | | 26·5 | 58·8 | |
| 9·2 | | 27·3 | 9·6 | |
| 10·1 | | 27·8 | 48·7 | |
| 9·6 | | 31·8 | 33·8 | |
| 8·2 | | 49·8 | 13·3 | |

## 8521—8580.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 40 | 58·3 | 42·9 | |
| 10·0 | 41 | 1·8 | 19·6 | |
| 9·8 | | 13·3 | 2·2 | |
| 10·1 | | 14·8 | 34·2 | |
| 10·0 | | 16·3 | 17·6 | |
| 9·8 | | 29·3 | 19·1 | |
| 10·1 | | 43·3 | 37·6 | |
| 10·0 | | 46·3 | 22·2 | |
| 10·0 | | 56·3 | 13·8 | |
| 9·8 | | 59·3 | 1·5 | |
| 10·0 | 42 | 0·8 | 49·7 | |
| 9·2 | | 16·8 | 34·4 | |
| 9·8 | | 21·8 | 8·9 | |
| 9·4 | 43 | 9·1 | 0·0 | |
| 9·4 | | 10·8 | 47·7 | |
| 9·4 | | 13·8 | 43·5 | |
| 9·5 | | 19·2 | 27·3 | |
| 10·1 | | 30·7 | 52·3 | |
| 9·4 | | 41·7 | 32·9 | |
| 10·0 | | 43·2 | 45·3 | |
| 9·5 | | 58·2 | 31·0 | |
| 9·4 | 44 | 2·7 | 38·6 | |
| 9·5 | | 9·2 | 19·3 | |
| 9·4 | | 16·2 | 23·0 | |
| 9·4 | | 31·7 | 44·6 | |
| 9·6 | | 39·7 | 54·9 | |
| 9·8 | | 41·2 | 52·8 | |
| 10·0 | | 45·2 | 11·0 | |
| 9·6 | | 46·2 | 48·8 | |
| 8·8 | | 52·7 | 18·3 | 9·5 |
| 8·8 | 45 | 8·7 | 25·6 | |
| 10·0 | | 12·2 | 2·2 | |
| 10·0 | | 14·7 | 24·4 | |
| 10·1 | | 16·6 | 0·7 | |
| 8·8 | | 25·2 | 1·8 | 9·5 |
| 10·1 | | 29·7 | 22·1 | |
| 10·1 | | 30·0 | 58·5 | |
| 10·1 | | 30·2 | 12·0 | |
| 10·0 | | 31·2 | 20·1 | |
| 8·3 | | 32·2 | 9·6 | 9·0 |
| 10·0 | | 43·2 | 46·7 | |
| 9·5 | | 49·7 | 53·2 | |
| 9·6 | 46 | 5·2 | 23·0 | 9·5 |
| 7·6 | | 7·7 | 21·1 | 8·0 G |
| 9·5 | | 8·7 | 54·3 | |
| 10·1 | | 10·2 | 43·1 | |
| 10·0 | | 11·5 | 13·1 | |
| 9·8 | | 18·7 | 43·2 | |
| 10·0 | | 19·7 | 17·6 | |
| 10·0 | | 22·2 | 15·7 | |
| 10·0 | | 22·7 | 7·0 | |
| 10·0 | | 23·7 | 54·8 | |
| 10·1 | | 26·7 | 55·6 | |
| 10·1 | | 29·6 | 38·8 | |
| 10·1 | | 32·6 | 9·5 | |
| 10·0 | | 34·1 | 3·3 | |
| 9·1 | | 37·6 | 11·0 | |
| 9·8 | | 46·6 | 7·0 | |
| 10·0 | 47 | 2·6 | 11·7 | |
| 9·5 | | 4·6 | 36·9 | |



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### 8581—8640.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.1 | 47 | 10.5 | 57.8 | |
| 10.0 | | 27.1 | 1.9 | |
| 10.1 | | 32.6 | 48.4 | |
| 9.4 | | 39.1 | 4.9 | |
| 10.0 | | 45.6 | 7.6 | |
| 10.1 | | 48.6 | 53.2 | |
| 9.2 | 48 | 24.1 | 43.7 | |
| 8.6 | | 29.6 | 33.6 | 8.8 |
| 9.8 | | 31.4 | 28.9 | 9.5 |
| 10.0 | | 35.1 | 26.0 | |
| 9.4 | | 35.1 | 51.1 | |
| 9.6 | | 35.6 | 36.0 | |
| 9.5 | | 41.6 | 43.6 | |
| 9.8 | | 54.6 | 37.8 | |
| 10.0 | 49 | 0.1 | 15.5 | |
| 10.0 | | 1.6 | 9.9 | |
| 9.8 | | 22.6 | 17.0 | |
| 10.1 | | 24.8 | 27.3 | |
| 10.0 | | 36.8 | 12.9 | |
| 9.6 | | 41.8 | 55.6 | |
| 10.1 | | 49.8 | 17.4 | |
| 9.5 | | 54.3 | 50.3 | |
| 10.1 | 50 | 13.8 | 40.1 | |
| 8.4 | | 14.8 | 20.3 | 8.5 |
| 9.6 | | 28.8 | 33.6 | |
| 10.1 | | 34.3 | 31.5 | |
| 9.6 | | 41.3 | 34.6 | |
| 10.0 | | 44.3 | 42.2 | |
| 10.1 | | 47.3 | 15.8 | |
| 10.1 | | 51.8 | 32.5 | |
| 9.8 | | 51.8 | 23.1 | |
| 10.1 | 51 | 5.8 | 24.1 | |
| 10.1 | | 9.3 | 4.1 | |
| 9.8 | | 10.8 | 23.3 | |
| 9.2 | | 17.0 | 5.7 | 9.0 |
| 9.8 | | 22.7 | 34.2 | |
| 9.3 | | 22.7 | 12.4 | |
| 9.2 | | 28.7 | 17.8 | |
| 9.8 | | 34.7 | 41.4 | |
| 9.8 | | 37.7 | 48.0 | |
| 9.3 | | 40.2 | 53.8 | |
| 8.9 | | 42.7 | 4.2 | |
| 9.8 | | 46.2 | 41.6 | |
| 9.8 | | 46.4 | 1.2 | |
| 9.4 | | 47.5 | 30.5 | |
| 9.8 | 52 | 9.7 | 55.8 | |
| 9.4 | | 13.0 | 34.7 | |
| 9.8 | | 26.0 | 58.7 | |
| 9.4 | | 31.2 | 34.7 | |
| 9.5 | | 32.7 | 31.6 | |
| 9.8 | | 37.2 | 25.4 | |
| 9.8 | | 40.2 | 48.7 | |
| 9.8 | | 47.7 | 31.0 | |
| 9.4 | | 50.7 | 31.5 | |
| 9.4 | 53 | 1.2 | 20.6 | |
| 9.6 | | 9.7 | 39.8 | |
| 9.8 | | 13.2 | 13.6 | |
| 9.3 | | 38.2 | 9.3 | |
| 9.5 | | 43.2 | 36.8 | |
| 9.4 | | 45.2 | 25.8 | |

### 8641—8700.

| mag. | 17h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.8 | 53 | 49.2 | 1.6 | |
| 9.4 | | 49.2 | 49.9 | |
| 9.8 | | 52.2 | 22.2 | |
| 9.7 | | 57.0 | 26.0 | |
| 9.8 | 54 | 4.0 | 41.3 | |
| 9.6 | | 4.5 | 8.5 | |
| 9.3 | | 7.0 | 13.1 | |
| 9.8 | | 10.0 | 58.8 | |
| 9.8 | | 13.5 | 28.2 | |
| 9.8 | | 19.5 | 52.5 | |
| 9.0 | | 22.5 | 6.5 | |
| 9.3 | | 28.0 | 39.1 | |
| 9.8 | | 31.0 | 23.3 | |
| 8.9 | | 33.0 | 10.0 | 9.0 |
| 9.8 | | 41.0 | 49.9 | |
| 9.6 | | 41.5 | 0.4 | |
| 9.6 | | 42.5 | 25.3 | |
| 9.0 | | 57.0 | 39.9 | 9.0 |
| 9.7 | | 57.1 | 21.9 | |
| 9.8 | 55 | 0.7 | 0.3 | |
| 9.7 | | 6.5 | 6.2 | |
| 9.8 | | 8.0 | 22.3 | |
| 9.4 | | 10.0 | 52.0 | |
| 9.8 | | 13.0 | 50.7 | |
| 9.4 | | 17.0 | 10.3 | |
| 9.6 | | 31.0 | 17.7 | |
| 9.8 | | 37.0 | 41.9 | |
| 9.8 | | 41.0 | 33.3 | |
| 9.8 | | 49.5 | 22.8 | |
| 9.8 | | 54.0 | 25.9 | |
| 9.8 | 56 | 0.7 | 1.0 | |
| 9.8 | | 1.0 | 30.7 | |
| 9.6 | | 10.7 | 1.7 | |
| 9.8 | | 15.5 | 13.7 | |
| 9.5 | | 17.0 | 27.7 | |
| 9.4 | | 19.5 | 39.6 | |
| 9.6 | | 21.0 | 18.3 | |
| 9.2 | | 23.0 | 47.4 | |
| 9.8 | | 32.5 | 38.0 | |
| 9.4 | | 34.5 | 48.0 | |
| 7.8 | | 37.5 | 11.0 | 7.5 G |
| 9.1 | | 38.0 | 0.1 | 9.0 |
| 9.4 | | 42.0 | 51.4 | |
| 9.0 | | 50.5 | 39.3 | 9.0 |
| 9.8 | | 54.7 | 57.0 | |
| 9.7 | | 55.5 | 58.3 | |
| 9.8 | 57 | 9.5 | 36.2 | |
| 9.6 | | 11.5 | 32.8 | |
| 9.4 | | 17.0 | 31.5 | |
| 7.5 | | 21.0 | 9.4 | 8.0 |
| 8.9 | | 22.5 | 20.8 | 9.0 |
| 9.2 | | 23.0 | 11.4 | 9.5 |
| 9.4 | | 33.0 | 2.6 | |
| 9.6 | | 37.0 | 27.6 | |
| 9.3 | | 41.0 | 44.6 | 9.5 |
| 9.7 | | 51.0 | 52.9 | |
| 8.5 | | 53.0 | 16.1 | 8.5 |
| 9.8 | | 56.0 | 28.0 | |
| 9.2 | 58 | 7.0 | 7.7 | |
| 9.6 | | 15.2 | 59.5 | |

### 8701—8760.

| mag. | 17h.—18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.8 | 58 | 26.0 | 5.3 | |
| 9.2 | | 30.5 | 10.8 | |
| 9.8 | | 35.2 | 23.8 | |
| 9.7 | | 37.0 | 16.7 | |
| 9.4 | | 49.5 | 54.8 | |
| 9.8 | | 53.5 | 22.9 | |
| 9.8 | | 58.0 | 43.9 | |
| 9.8 | 59 | 1.0 | 2.9 | |
| 9.6 | | 8.0 | 41.8 | |
| 9.7 | | 10.5 | 23.3 | |
| 9.2 | | 11.7 | 56.9 | |
| 9.8 | | 21.0 | 48.1 | |
| 9.5 | | 24.5 | 41.9 | |
| 9.4 | | 30.8 | 10.6 | |
| 9.2 | | 39.3 | 23.6 | |
| 9.2 | | 40.8 | 0.5 | |
| 9.5 | | 50.3 | 53.3 | |
| 9.5 | 0 | 1.8 | 15.2 | |
| 9.3 | | 2.8 | 52.4 | |
| 9.8 | | 3.3 | 44.1 | |
| 9.6 | | 6.8 | 54.9 | |
| 9.8 | | 7.1 | 51.7 | |
| 9.7 | | 8.3 | 23.6 | |
| 9.6 | | 8.8 | 7.5 | |
| 9.8 | | 14.3 | 40.5 | |
| 9.6 | | 16.8 | 38.0 | |
| 9.0 | | 18.3 | 15.2 | |
| 9.3 | | 22.8 | 0.9 | |
| 9.8 | | 38.8 | 17.4 | |
| 9.8 | | 40.8 | 28.0 | |
| 9.8 | | 42.3 | 37.5 | |
| 9.2 | | 49.3 | 9.9 | |
| 9.8 | | 51.3 | 24.7 | |
| 9.5 | | 53.8 | 26.8 | |
| 9.6 | 1 | 0.8 | 14.8 | |
| 9.0 | | 5.8 | 16.2 | 9.5 |
| 9.8 | | 8.8 | 54.0 | |
| 9.8 | | 11.3 | 39.2 | |
| 9.8 | | 18.7 | 59.4 | |
| 8.7 | | 32.3 | 8.3 | 9.0 |
| 9.8 | | 36.3 | 5.4 | |
| 9.6 | | 50.8 | 18.6 | |
| 9.8 | | 54.3 | 56.3 | |
| 9.6 | 2 | 1.1 | 1.4 | |
| 9.7 | | 4.3 | 5.1 | |
| 8.5 | | 20.3 | 49.0 | 8.5 |
| 9.8 | | 21.8 | 50.4 | |
| 8.9 | | 22.3 | 24.4 | |
| 9.8 | | 22.8 | 5.5 | |
| 9.7 | | 37.8 | 31.2 | |
| 9.8 | | 40.8 | 16.1 | |
| 9.8 | | 41.8 | 42.0 | |
| 9.8 | | 47.3 | 45.1 | |
| 9.4 | | 50.8 | 5.9 | |
| 9.8 | | 58.8 | 45.9 | |
| 9.4 | 3 | 7.8 | 47.4 | |
| 9.6 | | 11.3 | 7.3 | |
| 9.8 | | 11.8 | 4.5 | |
| 9.8 | | 14.3 | 35.5 | |
| 9.8 | | 24.3 | 33.3 | |

### 8761—8820.

| mag. | 18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 8.4 | 3 | 29.3 | 23.5 | 8.8 |
| 9.3 | | 29.3 | 32.4 | |
| 9.5 | | 30.8 | 40.7 | |
| 9.6 | | 39.8 | 33.3 | |
| 8.8 | | 40.8 | 46.2 | |
| 9.8 | | 42.3 | 23.6 | |
| 9.3 | | 51.8 | 17.3 | |
| 9.4 | | 52.8 | 25.2 | |
| 9.6 | 4 | 2.8 | 17.0 | |
| 9.8 | | 7.3 | 15.5 | |
| 8.5 | | 7.8 | 4.9 | 8.5 |
| 9.6 | | 7.8 | 52.9 | |
| 9.8 | | 9.3 | 16.1 | |
| 9.2 | | 13.3 | 7.7 | |
| 9.8 | | 15.3 | 44.5 | |
| 9.6 | | 20.3 | 40.2 | |
| 9.8 | | 23.3 | 16.1 | |
| 9.7 | | 27.3 | 30.8 | |
| 9.2 | | 30.3 | 32.7 | |
| 9.4 | | 30.8 | 15.9 | |
| 9.8 | | 37.3 | 27.8 | |
| 9.4 | | 47.3 | 13.9 | |
| 9.8 | | 55.8 | 39.0 | |
| 8.8 | | 55.8 | 23.6 | |
| 9.6 | 5 | 9.3 | 18.5 | |
| 9.8 | | 20.7 | 41.2 | |
| 9.8 | | 28.7 | 34.9 | |
| 9.5 | | 57.7 | 35.3 | |
| 9.7 | 6 | 1.7 | 50.2 | |
| 9.7 | | 6.2 | 51.8 | |
| 9.8 | | 6.7 | 23.2 | |
| 9.3 | | 10.2 | 57.0 | |
| 9.8 | | 25.2 | 49.1 | |
| 9.2 | | 31.7 | 12.1 | |
| 9.7 | | 46.7 | 22.0 | |
| 9.3 | | 48.2 | 49.7 | 9.5 |
| 9.7 | | 57.2 | 37.0 | |
| 9.8 | 7 | 0.7 | 24.7 | |
| 9.0 | | 2.7 | 12.2 | 9.5 |
| 9.2 | | 11.7 | 4.2 | |
| 9.8 | | 12.2 | 52.5 | |
| 9.8 | | 31.7 | 4.0 | |
| 9.8 | | 36.2 | 52.6 | |
| 9.6 | | 52.7 | 49.3 | |
| 9.6 | | 56.7 | 41.3 | |
| 8.0 | 8 | 3.2 | 22.2 | 7.3 GS |
| 9.2 | | 10.7 | 13.0 | |
| 9.8 | | 12.7 | 36.4 | |
| 9.8 | | 15.7 | 0.3 | |
| 9.4 | | 27.2 | 0.8 | |
| 9.4 | | 30.7 | 17.8 | |
| 9.5 | | 34.2 | 33.2 | |
| 9.8 | | 47.2 | 0.8 | |
| 8.8 | 9 | 14.1 | 0.9 | |
| 9.8 | | 22.1 | 40.2 | |
| 9.8 | | 24.1 | 9.9 | |
| 9.8 | | 24.6 | 24.1 | |
| 9.7 | | 28.6 | 11.0 | |
| 9.8 | | 36.6 | 10.2 | |
| 8.7 | | 39.6 | 44.0 | 7.5 G |

| | | 25 prec. α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 17 | 40 | 123 | 0.7 |
| | 50 | 124 | 0.4 |
| 18 | 0 | 124 | 0.0 |
| | | | + |
| | 10 | 124 | 0.4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 18 | 0 | 124 | 0·0 |
| | 10 | 124 | 0·4 |
| | 20 | 123 | 0·7 |
| | 30 | 123 | 1·1 |
| | 40 | 123 | 1·5 |

**8821—8880.**

| mag. | 18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 9 | 49·4 | 0·4 | |
| 9·8 | | 51·1 | 13·2 | |
| 9·1 | | 52·6 | 38·8 | 9·5 |
| 9·8 | | 54·1 | 56·0 | |
| 9·7 | | 55·3 | 58·6 | |
| 9·8 | | 58·6 | 57·0 | |
| 9·2 | 10 | 12·1 | 12·6 | |
| 8·6 | | 12·6 | 5·4 | |
| 9·8 | | 14·6 | 42·0 | |
| 8·8 | | 18·1 | 27·2 | 8·0 |
| 9·7 | | 26·1 | 44·0 | |
| 9·8 | | 47·1 | 20·5 | |
| 9·8 | | 56·6 | 18·6 | |
| 9·4 | 11 | 14·6 | 36·0 | |
| 8·8 | | 22·6 | 14·2 | |
| 9·4 | | 24·1 | 31·9 | |
| 9·8 | | 32·1 | 28·4 | |
| 9·8 | | 33·1 | 47·0 | |
| 9·8 | | 36·6 | 45·3 | |
| 9·3 | | 39·6 | 6·6 | |
| 9·4 | | 40·6 | 34·3 | |
| 9·7 | | 53·0 | 58·9 | |
| 9·8 | 12 | 6·1 | 43·3 | |
| 9·6 | | 21·6 | 24·2 | |
| 9·6 | | 21·6 | 56·0 | |
| 9·7 | | 37·3 | 17·4 | |
| 9·8 | | 49·8 | 50·0 | |
| 9·8 | | 51·3 | 59·5 | |
| 9·8 | | 51·3 | 30·8 | |
| 8·4 | 13 | 18·8 | 52·2 | 8·0 |
| 9·8 | | 30·8 | 8·0 | |
| 9·8 | | 33·8 | 8·0 | |
| 9·8 | | 33·8 | 12·2 | |
| 9·3 | | 36·3 | 56·1 | |
| 9·8 | | 45·3 | 33·3 | |
| 9·8 | | 47·8 | 16·6 | |
| 9·0 | | 55·8 | 37·0 | |
| 9·6 | 14 | 1·3 | 26·4 | |
| 9·8 | | 5·8 | 56·1 | |
| 9·7 | | 14·3 | 4·5 | |
| 9·6 | | 22·1 | 0·2 | |
| 9·3 | | 24·3 | 22·9 | |
| 9·8 | | 27·3 | 37·3 | |
| 9·6 | | 33·8 | 36·4 | |
| 9·2 | | 37·3 | 55·0 | |
| 9·8 | | 44·3 | 3·5 | |
| 8·6 | | 53·8 | 41·9 | |
| 9·6 | 15 | 0·3 | 25·6 | |
| 9·8 | | 3·8 | 30·1 | |
| 9·4 | | 3·8 | 40·8 | |
| 8·8 | | 6·8 | 6·0 | |
| 9·8 | | 8·8 | 23·7 | |
| 9·8 | | 19·8 | 46·7 | |
| 9·3 | | 22·8 | 11·5 | |
| 9·7 | | 25·8 | 31·0 | |
| 9·8 | | 26·8 | 39·0 | |
| 9·8 | | 32·3 | 51·2 | |
| 9·4 | | 58·3 | 37·6 | |
| 9·6 | 16 | 12·3 | 0·2 | |
| 9·5 | | 20·8 | 4·6 | |

**8881—8940.**

| mag. | 18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·6 | 16 | 21·6 | 34·0 | |
| 9·0 | | 31·6 | 57·9 | G |
| 9·4 | | 46·1 | 51·7 | |
| 9·7 | | 51·1 | 24·0 | |
| 9·2 | | 51·6 | 40·1 | |
| 9·0 | 17 | 0·1 | 42·9 | |
| 9·3 | | 22·6 | 23·9 | 9·0 |
| 8·4 | | 24·6 | 6·0 | |
| 9·7 | | 42·1 | 10·3 | |
| 9·8 | | 53·1 | 11·9 | |
| 9·2 | 18 | 2·1 | 7·0 | |
| 9·8 | | 3·6 | 30·3 | |
| 9·8 | | 13·1 | 57·6 | |
| 9·8 | | 16·1 | 5·0 | |
| 8·6 | | 30·1 | 45·9 | 8·5 |
| 9·2 | | 51·6 | 30·8 | |
| 9·0 | 19 | 0·1 | 32·2 | |
| 9·6 | | 10·1 | 51·4 | |
| 9·8 | | 15·6 | 23·0 | |
| 9·8 | | 21·6 | 20·2 | |
| 9·8 | | 23·1 | 7·2 | |
| 9·8 | | 24·1 | 58·3 | |
| 9·8 | | 34·4 | 2·5 | |
| 9·3 | | 45·6 | 27·1 | |
| 9·8 | | 46·6 | 32·9 | |
| 9·5 | | 51·6 | 6·9 | |
| 9·8 | | 52·1 | 54·9 | |
| 9·4 | 20 | 2·1 | 3·0 | |
| 9·3 | | 28·6 | 22·1 | |
| 9·7 | | 36·1 | 43·9 | |
| 7·6 | | 45·1 | 43·4 | 8·0 G |
| 9·4 | | 50·6 | 40·7 | |
| 9·6 | | 53·6 | 19·4 | |
| 9·0 | 21 | 27·8 | 15·5 | 9·0 |
| 9·4 | | 38·3 | 44·9 | |
| 9·8 | | 41·8 | 43·5 | |
| 9·3 | | 41·8 | 41·5 | |
| 9·3 | | 51·8 | 41·7 | |
| 9·8 | 22 | 19·8 | 27·1 | |
| 8·6 | | 25·8 | 37·6 | 9·0 G |
| 9·5 | | 29·8 | 47·6 | |
| 8·5 | | 51·8 | 20·5 | 8·5 |
| 9·8 | 23 | 15·3 | 37·6 | |
| 9·8 | | 17·8 | 24·1 | |
| 9·3 | | 22·8 | 31·4 | |
| 9·1 | | 29·3 | 10·1 | |
| 9·3 | | 29·8 | 40·6 | |
| 9·8 | | 33·3 | 45·0 | |
| 9·4 | | 39·3 | 55·1 | |
| 9·8 | | 39·8 | 4·6 | |
| 9·8 | | 51·3 | 43·9 | |
| 9·7 | | 52·8 | 15·1 | |
| 9·8 | | 57·8 | 51·8 | |
| 9·8 | 24 | 2·8 | 11·2 | |
| 9·8 | | 7·2 | 40·3 | |
| 9·6 | | 10·5 | 50·2 | |
| 7·4 | | 11·8 | 10·5 | 7·0 GSt |
| 9·2 | | 13·0 | 1·3 | |
| 9·6 | | 15·5 | 45·7 | |
| 9·4 | | 15·8 | 29·7 | |

**8941—9000.**

| mag. | 18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 24 | 17·3 | 32·9 | |
| 9·6 | | 32·3 | 2·7 | |
| 9·4 | | 39·0 | 10·0 | |
| 9·8 | | 39·6 | 22·9 | |
| 10·0 | | 46·8 | 46·8 | |
| 9·0 | | 48·8 | 39·9 | |
| 9·9 | | 49·8 | 33·3 | |
| 9·9 | | 51·8 | 32·7 | |
| 9·8 | | 52·8 | 45·0 | |
| 10·0 | 25 | 2·8 | 10·1 | |
| 10·0 | | 10·3 | 2·0 | |
| 8·8 | | 20·8 | 53·3 | |
| 9·5 | | 37·8 | 49·1 | |
| 10·0 | | 40·8 | 18·5 | |
| 8·7 | | 42·3 | 24·9 | |
| 9·6 | | 47·3 | 33·9 | |
| 9·4 | | 48·3 | 14·4 | |
| 10·0 | | 52·8 | 0·6 | |
| 9·4 | | 54·3 | 18·1 | |
| 9·9 | 26 | 0·8 | 30·9 | |
| 9·8 | | 3·3 | 47·9 | |
| 10·0 | | 23·8 | 41·5 | |
| 8·4 | | 31·3 | 25·4 | 8·5 |
| 10·0 | | 42·8 | 37·7 | |
| 9·5 | 27 | 0·8 | 48·9 | |
| 10·0 | | 1·8 | 47·0 | |
| 10·0 | | 2·3 | 2·3 | |
| 9·9 | | 13·3 | 58·9 | |
| 8·8 | | 25·8 | 14·3 | |
| 9·4 | | 26·8 | 36·3 | |
| 9·9 | | 26·8 | 12·8 | |
| 9·6 | | 30·8 | 46·8 | |
| 9·6 | | 39·8 | 32·5 | |
| 9·2 | | 45·3 | 55·7 | |
| 10·0 | 28 | 0·8 | 12·3 | |
| 8·8 | | 5·3 | 29·8 | 9·0 |
| 9·8 | | 11·3 | 51·1 | |
| 10·0 | | 19·3 | 13·7 | |
| 9·6 | | 23·8 | 1·0 | |
| 9·4 | | 24·8 | 58·9 | |
| 9·4 | | 27·3 | 1·9 | |
| 9·5 | | 40·3 | 33·8 | |
| 9·4 | | 44·8 | 10·3 | |
| 8·8 | | 51·8 | 46·9 | |
| 10·0 | | 58·3 | 25·3 | |
| 10·0 | 29 | 8·8 | 40·0 | |
| 8·1 | | 18·8 | 15·1 | 9·0 |
| 9·0 | | 29·8 | 46·7 | |
| 8·6 | | 31·3 | 48·3 | 8·5 |
| 10·0 | | 32·8 | 36·9 | |
| 9·4 | | 41·3 | 16·8 | |
| 10·0 | | 44·8 | 51·0 | |
| 9·6 | | 53·8 | 28·7 | |
| 10·0 | | 57·8 | 18·9 | |
| 9·8 | 30 | 7·3 | 34·3 | |
| 10·0 | | 9·8 | 10·8 | |
| 8·9 | | 15·8 | 51·8 | 9·0 |
| 8·8 | | 26·3 | 45·5 | 9·5 |
| 9·4 | | 28·3 | 48·1 | |
| 10·0 | | 35·8 | 59·0 | |

**9001—9060.**

| mag. | 18h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·9 | 30 | 44·8 | 3·9 | |
| 9·4 | | 49·8 | 14·9 | |
| 9·9 | | 58·3 | 17·1 | |
| 10·0 | | 58·3 | 14·4 | |
| 9·9 | 31 | 4·8 | 17·1 | |
| 9·2 | | 20·3 | 52·0 | |
| 9·4 | | 24·0 | 1·5 | |
| 10·0 | | 27·8 | 48·5 | |
| 10·0 | | 46·8 | 54·7 | |
| 9·4 | | 49·8 | 13·8 | |
| 9·9 | | 50·8 | 22·9 | |
| 9·9 | | 53·8 | 53·9 | |
| 9·5 | | 54·3 | 16·4 | |
| 9·9 | 32 | 3·3 | 14·0 | |
| 9·2 | | 16·8 | 30·7 | 9·0 |
| 9·9 | | 20·3 | 24·5 | |
| 10·0 | | 26·3 | 58·8 | |
| 8·7 | | 31·8 | 35·7 | 8·4 G |
| 8·7 | | 31·8 | 5·7 | 8·8 G |
| 10·0 | | 37·3 | 13·8 | |
| 9·6 | | 37·5 | 1·9 | |
| 10·0 | | 41·4 | 58·7 | |
| 9·6 | 33 | 1·8 | 8·4 | |
| 9·8 | | 3·3 | 11·7 | |
| 9·4 | | 4·3 | 28·0 | |
| 9·6 | | 15·8 | 59·8 | |
| 10·0 | | 17·8 | 29·5 | |
| 9·8 | | 19·8 | 19·1 | |
| 10·0 | | 20·8 | 22·6 | |
| 9·2 | | 25·3 | 9·9 | |
| 10·0 | | 27·8 | 21·3 | |
| 9·4 | | 34·8 | 18·7 | |
| 8·4 | | 36·8 | 23·9 | 8·9 |
| 10·0 | | 45·2 | 1·9 | |
| 8·9 | | 59·8 | 10·8 | 9·0 |
| 10·0 | 34 | 1·8 | 23·3 | |
| 9·4 | | 13·8 | 43·9 | |
| 10·0 | | 15·8 | 35·9 | |
| 9·6 | | 18·8 | 32·3 | |
| 9·8 | | 20·8 | 3·1 | |
| 9·8 | | 27·3 | 21·9 | |
| 9·9 | | 31·8 | 21·4 | |
| 8·7 | | 33·3 | 1·3 | 9·0 |
| 8·6 | | 38·5 | 0·8 | 9·0 |
| 8·8 | | 41·3 | 57·3 | |
| 9·8 | | 49·7 | 8·4 | |
| 9·4 | | 50·7 | 40·6 | |
| 9·6 | | 53·2 | 10·7 | |
| 9·4 | | 54·7 | 23·1 | |
| 9·8 | | 54·7 | 47·9 | |
| 10·0 | | 56·5 | 34·7 | |
| 10·0 | 35 | 1·7 | 58·9 | |
| 9·2 | | 2·2 | 8·9 | |
| 9·8 | | 3·2 | 49·8 | |
| 10·0 | | 19·7 | 3·1 | |
| 10·0 | | 29·7 | 18·6 | |
| 8·7 | | 35·7 | 56·0 | 9·0 |
| 10·0 | | 35·7 | 6·5 | |
| 9·0 | | 38·2 | 10·4 | 9·0 |
| 9·6 | | 58·7 | 36·4 | |



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## 9061—9120.

| mag. | 18ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 36 | 11·7 | 2·0 | |
| 9·4 | | 19·7 | 32·1 | |
| 10·0 | | 26·2 | 33·9 | |
| 9·4 | | 26·7 | 40·0 | |
| 9·4 | | 27·7 | 31·1 | |
| 9·4 | | 42·2 | 4·0 | |
| 9·4 | | 42·2 | 47·9 | |
| 9·5 | | 49·7 | 16·8 | |
| 9·6 | | 59·2 | 31·6 | |
| 9·6 | 37 | 1·2 | 53·2 | |
| 9·4 | | 3·2 | 53·5 | |
| 9·6 | | 13·2 | 17·8 | |
| 9·8 | | 19·7 | 44·0 | |
| 9·2 | | 27·4 | 58·0 | |
| 9·6 | | 30·2 | 24·9 | |
| 10·0 | | 44·7 | 17·6 | |
| 9·6 | | 55·2 | 4·5 | |
| 10·0 | 38 | 0·5 | 51·8 | |
| 9·4 | | 2·7 | 21·0 | |
| 8·8 | | 5·2 | 41·9 | |
| 9·8 | | 15·2 | 55·6 | |
| 9·0 | | 29·6 | 39·0 | 9·0 G |
| 9·4 | | 51·6 | 24·6 | |
| 10·0 | | 51·6 | 55·4 | |
| 9·8 | | 52·6 | 33·2 | |
| 9·6 | | 59·6 | 54·2 | |
| 9·4 | 39 | 25·6 | 44·2 | |
| 10·0 | | 36·1 | 48·3 | |
| 8·8 | | 39·1 | 40·1 | 8·5 G |
| 9·1 | | 41·6 | 53·9 | |
| 9·4 | | 49·6 | 3·8 | |
| 7·7 | | 52·6 | 35·9 | 7·9 G |
| 9·4 | | 55·1 | 0·6 | |
| 8·3 | 40 | 0·6 | 29·7 | 8·0 G |
| 9·6 | | 2·6 | 20·0 | |
| 9·8 | | 15·1 | 19·2 | |
| 9·2 | | 18·1 | 8·7 | 9·5 |
| 9·0 | | 20·1 | 51·0 | 9·0 G |
| 10·0 | | 21·6 | 3·1 | |
| 8·2 | | 26·6 | 6·1 | 8·5 |
| 10·0 | | 31·6 | 0·6 | |
| 10·0 | | 44·1 | 5·1 | |
| 10·0 | | 44·6 | 15·9 | |
| 9·9 | | 45·3 | 59·5 | |
| 10·0 | | 46·6 | 37·1 | |
| 9·8 | | 51·6 | 49·3 | |
| 10·0 | 41 | 8·0 | 58·3 | |
| 9·6 | | 9·2 | 1·5 | |
| 9·5 | | 21·1 | 17·1 | |
| 9·2 | | 23·6 | 51·2 | |
| 9·4 | | 26·6 | 51·8 | |
| 10·0 | | 32·1 | 42·1 | |
| 10·0 | | 47·0 | 1·4 | |
| 8·4 | | 49·1 | 26·5 | 8·7 G |
| 9·0 | | 51·6 | 4·1 | |
| 9·8 | | 57·6 | 48·7 | |
| 10·0 | | 58·1 | 24·4 | |
| 9·9 | 42 | 1·1 | 12·2 | |
| 10·0 | | 3·6 | 53·7 | |
| 9·1 | | 9·1 | 30·1 | 9·2 |

## 9121—9180.

| mag. | 18ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 9·9 | 42 | 24·6 | 23·6 | |
| 9·9 | | 27·1 | 6·1 | |
| 9·6 | | 30·6 | 12·1 | |
| 9·9 | | 31·6 | 17·7 | |
| 9·9 | | 34·1 | 53·1 | |
| 10·0 | | 40·6 | 28·1 | |
| 9·9 | | 41·1 | 41·4 | |
| 9·8 | | 44·1 | 44·6 | |
| 9·6 | | 49·6 | 31·2 | |
| 9·9 | | 50·6 | 28·8 | |
| 10·0 | | 51·1 | 16·9 | |
| 8·8 | | 56·6 | 41·2 | |
| 10·0 | | 58·6 | 21·4 | |
| 10·0 | 43 | 0·1 | 48·6 | |
| 9·4 | | 3·1 | 26·5 | |
| 8·7 | | 7·6 | 35·0 | 9·0 |
| 8·7 | | 13·1 | 25·0 | 9·0 |
| 9·6 | | 16·1 | 38·2 | |
| 9·5 | | 19·1 | 16·2 | |
| 9·2 | | 31·6 | 39·0 | |
| 9·8 | | 36·6 | 12·9 | |
| 8·8 | | 51·6 | 30·1 | 9·0 |
| 10·0 | 44 | 0·1 | 29·3 | |
| 10·0 | | 20·3 | 59·0 | |
| 9·2 | | 20·6 | 30·0 | |
| 9·4 | | 25·6 | 42·1 | |
| 9·4 | | 29·1 | 10·7 | |
| 9·8 | | 29·6 | 45·0 | |
| 9·1 | | 31·6 | 50·7 | |
| 10·0 | | 34·6 | 27·0 | |
| 10·0 | | 36·1 | 31·9 | |
| 9·6 | | 43·6 | 21·9 | |
| 10·0 | | 44·1 | 27·0 | |
| 10·0 | | 46·6 | 5·1 | |
| 9·9 | 45 | 2·6 | 18·0 | |
| 9·2 | | 8·1 | 17·7 | |
| 9·4 | | 13·1 | 21·7 | |
| 9·4 | | 20·6 | 25·7 | |
| 10·0 | | 22·1 | 40·5 | |
| 9·4 | | 23·6 | 11·7 | |
| 9·6 | | 25·6 | 3·7 | |
| 9·9 | | 41·6 | 17·7 | |
| 9·4 | | 42·6 | 19·1 | |
| 10·0 | | 52·1 | 1·3 | |
| 10·0 | | 58·1 | 6·7 | |
| 7·4 | 46 | 20·6 | 43·3 | 8·0 G |
| 9·6 | | 26·1 | 44·8 | |
| 9·4 | | 26·6 | 8·0 | |
| 10·0 | | 42·1 | 32·9 | |
| 10·0 | | 47·8 | 58·0 | |
| 10·0 | | 47·9 | 1·1 | |
| 10·0 | 47 | 3·1 | 30·1 | |
| 10·0 | | 3·1 | 18·1 | |
| 10·0 | | 15·1 | 30·7 | |
| 10·0 | | 15·6 | 22·9 | |
| 9·6 | | 20·6 | 44·1 | |
| 9·5 | | 26·1 | 28·5 | |
| 9·2 | | 40·1 | 23·5 | 9·5 |
| 9·4 | | 41·6 | 56·1 | |
| 9·2 | | 55·6 | 34·8 | |

## 9181—9240.

| mag. | 18ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 47 | 57·6 | 44·9 | |
| 9·2 | 48 | 0·1 | 31·5 | |
| 9·9 | | 3·1 | 9·9 | |
| 9·6 | | 16·1 | 31·5 | |
| 9·2 | | 18·1 | 36·9 | |
| 9·2 | | 23·6 | 26·1 | 9·0 |
| 10·0 | | 29·6 | 35·9 | |
| 9·8 | | 30·1 | 33·9 | |
| 10·0 | | 43·1 | 20·3 | |
| 10·0 | | 48·1 | 19·0 | |
| 10·0 | | 53·1 | 26·7 | |
| 9·4 | | 55·3 | 58·1 | |
| 9·6 | | 56·1 | 7·1 | |
| 8·6 | 49 | 14·3 | 0·1 | 8·5 |
| 9·5 | | 28·6 | 20·3 | |
| 9·2 | | 29·1 | 8·2 | |
| 10·0 | | 32·6 | 46·9 | |
| 8·8 | | 37·4 | 6·6 | 9·0 |
| 9·4 | | 44·4 | 44·0 | |
| 10·0 | 50 | 0·2 | 2·4 | |
| 9·6 | | 9·4 | 7·8 | |
| 9·4 | | 18·4 | 33·7 | |
| 9·9 | | 30·4 | 13·2 | |
| 10·0 | | 31·4 | 20·1 | |
| 9·8 | | 55·9 | 35·8 | |
| 9·8 | 51 | 23·4 | 55·7 | |
| 10·0 | | 26·9 | 25·9 | |
| 10·0 | | 27·9 | 52·7 | |
| 10·0 | | 35·4 | 48·8 | |
| 9·8 | | 40·9 | 23·9 | |
| 9·9 | | 45·4 | 19·5 | |
| 10·0 | | 48·9 | 19·8 | |
| 9·9 | | 52·9 | 24·9 | |
| 9·6 | | 54·9 | 43·7 | |
| 9·4 | 52 | 15·4 | 14·9 | |
| 9·6 | | 15·9 | 56·6 | |
| 9·4 | | 24·9 | 47·3 | |
| 10·0 | | 24·9 | 50·8 | |
| 9·9 | | 25·9 | 30·1 | |
| 10·0 | | 41·4 | 18·6 | |
| 8·4 | | 43·4 | 22·8 | 8·5 G |
| 10·0 | | 44·4 | 31·6 | |
| 8·0 | | 49·9 | 44·9 | 8·0 G |
| 10·0 | | 51·4 | 49·7 | |
| 9·4 | 53 | 5·4 | 21·4 | |
| 9·6 | | 19·4 | 56·1 | |
| 8·9 | | 31·4 | 7·2 | |
| 9·5 | | 43·9 | 36·9 | |
| 9·6 | | 51·4 | 6·0 | |
| 10·0 | 54 | 11·4 | 47·0 | |
| 9·9 | | 15·4 | 5·5 | |
| 9·6 | | 18·4 | 2·7 | |
| 9·8 | | 22·4 | 41·9 | |
| 9·8 | | 24·4 | 21·1 | |
| 8·6 | | 31·4 | 33·7 | 9·5 |
| 10·0 | | 42·4 | 43·1 | |
| 9·6 | | 49·4 | 8·7 | |
| 9·6 | | 49·4 | 48·4 | |
| 9·6 | | 56·4 | 16·8 | |
| 9·5 | | 58·7 | 0·6 | |

## 9241—9300.

| mag. | 18ʰ–19ʰ m | s | −54° ′ | |
|---|---|---|---|---|
| 9·4 | 55 | 0·9 | 39·4 | |
| 10·0 | | 2·9 | 41·9 | |
| 9·4 | | 21·4 | 9·0 | |
| 9·1 | | 22·9 | 51·3 | |
| 10·0 | | 36·9 | 6·8 | |
| 10·0 | | 37·9 | 5·6 | |
| 9·8 | | 42·4 | 41·3 | |
| 10·0 | 56 | 1·4 | 45·2 | |
| 9·2 | | 7·6 | 17·1 | |
| 10·2 | | 30·0 | 57·4 | |
| 10·3 | | 55·6 | 57·0 | |
| 10·3 | 57 | 19·8 | 16·1 | |
| 10·3 | | 48·8 | 28·0 | |
| 10·0 | 58 | 19·8 | 28·0 | |
| 9·8 | | 25·8 | 15·2 | |
| 9·4 | | 30·3 | 36·0 | 10·0 |
| 10·0 | | 37·8 | 25·5 | |
| 8·6 | | 44·8 | 13·6 | 8·8 G |
| 10·0 | | 46·3 | 49·6 | |
| 9·4 | | 48·3 | 18·0 | 9·2 |
| 9·8 | 59 | 13·8 | 28·4 | |
| 10·3 | | 15·8 | 51·8 | |
| 10·3 | | 16·3 | 14·8 | |
| 10·3 | | 37·8 | 3·8 | |
| 9·4 | | 44·8 | 32·9 | |
| 10·3 | | 50·8 | 14·9 | |
| 9·2 | | 56·3 | 21·2 | 9·1 |
| 9·0 | 0 | 4·3 | 29·9 | 9·2 |
| 8·9 | | 4·8 | 19·8 | 8·6 |
| 9·4 | | 26·3 | 45·2 | |
| 9·8 | 1 | 12·8 | 51·0 | |
| 10·3 | | 17·8 | 19·9 | |
| 9·6 | | 20·3 | 43·1 | |
| 9·8 | | 59·8 | 23·2 | |
| 10·3 | 2 | 17·8 | 58·2 | |
| 8·8 | | 49·3 | 41·2 | 8·6 |
| 9·8 | | 52·8 | 27·2 | |
| 9·8 | | 59·8 | 26·8 | |
| 8·6 | 3 | 1·8 | 42·4 | 9·0 |
| 9·8 | | 24·8 | 26·7 | |
| 10·2 | | 25·8 | 36·8 | |
| 10·3 | | 26·8 | 51·0 | |
| 9·2 | | 45·3 | 56·9 | |
| 10·3 | | 49·8 | 49·4 | |
| 10·3 | | 51·8 | 45·0 | |
| 10·3 | | 59·8 | 48·6 | |
| 9·8 | 4 | 22·3 | 57·2 | |
| 10·3 | | 29·8 | 54·0 | |
| 9·2 | | 51·8 | 12·6 | |
| 10·3 | | 57·8 | 33·5 | |
| 9·8 | 5 | 2·3 | 33·4 | |
| 10·2 | | 4·8 | 11·9 | |
| 10·3 | | 11·3 | 20·8 | |
| 10·0 | | 26·3 | 38·1 | |
| 8·7 | | 40·8 | 4·2 | 9·0 |
| 9·6 | | 40·8 | 42·4 | |
| 10·0 | | 43·8 | 25·2 | |
| 9·6 | 6 | 9·8 | 53·1 | |
| 10·3 | | 15·3 | 53·5 | |
| 10·3 | | 27·8 | 7·8 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 30 | 123 | 1·1 |
| | 40 | 123 | 1·5 |
| | 50 | 123 | 1·8 |
| 19 | 0 | 122 | 2·2 |
| | 10 | 121 | 2·5 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 0 | 122 | 2.2 |
| | 10 | 121 | 2.5 |
| | 20 | 121 | 2.9 |
| | 30 | 120 | 3.2 |
| | 40 | 119 | 3.5 |
| | 50 | 118 | 3.9 |

## 9301—9360.

| mag. | 19h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 6 | 36.3 | 38.6 | |
| 10.3 | | 37.8 | 10.0 | |
| 10.3 | | 38.8 | 42.2 | |
| 9.8 | | 53.8 | 42.3 | |
| 9.2 | | 56.8 | 50.2 | |
| 10.3 | | 59.8 | 56.0 | |
| 10.3 | 7 | 13.8 | 54.0 | |
| 10.3 | | 30.8 | 1.4 | |
| 10.2 | | 39.3 | 53.3 | |
| 10.3 | | 41.8 | 5.0 | |
| 9.2 | | 46.3 | 25.0 | 8.5 |
| 10.0 | | 46.3 | 53.2 | |
| 9.4 | | 46.3 | 54.6 | |
| 10.2 | | 48.3 | 56.0 | |
| 9.2 | | 58.3 | 49.0 | |
| 10.3 | 8 | 7.3 | 13.2 | |
| 9.8 | | 21.3 | 44.0 | |
| 10.2 | | 30.8 | 15.4 | |
| 10.3 | | 54.3 | 24.2 | |
| 9.4 | 9 | 21.8 | 57.3 | 9.0 |
| 8.4 | | 51.3 | 40.8 | 8.8 |
| 10.3 | 10 | 11.8 | 12.5 | |
| 9.4 | | 19.8 | 50.2 | |
| 10.0 | | 33.3 | 53.1 | |
| 10.3 | | 37.8 | 23.8 | |
| 10.0 | | 38.3 | 51.6 | |
| 9.4 | | 54.3 | 23.4 | |
| 9.8 | | 55.8 | 49.1 | |
| 9.8 | | 58.8 | 24.0 | |
| 8.0 | 11 | 15.8 | 48.6 | 8.5 |
| 8.0 | | 38.3 | 24.6 | 8.0 |
| 10.3 | 12 | 7.8 | 51.0 | |
| 10.3 | | 9.8 | 31.2 | |
| 10.3 | | 11.8 | 31.0 | |
| 10.3 | | 17.5 | 1.2 | |
| 10.3 | | 20.8 | 56.8 | |
| 9.2 | | 40.3 | 50.8 | 8.2 |
| 10.3 | | 41.3 | 15.4 | |
| 5.6 | | 45.8 | 39.2 | 5.5 GSct |
| 10.3 | | 50.8 | 26.1 | |
| 7.6 | | 52.3 | 46.0 | 7.2 GS |
| 9.8 | 13 | 18.3 | 47.1 | |
| 10.2 | | 30.3 | 2.3 | |
| 7.4 | | 35.8 | 10.8 | 7.0 GSct |
| 10.3 | | 44.3 | 7.4 | |
| 9.2 | | 44.8 | 16.4 | |
| 10.0 | | 53.8 | 33.2 | |
| 10.3 | 14 | 0.8 | 4.8 | |
| 10.3 | | 1.8 | 4.5 | : |
| 9.0 | | 55.8 | 44.6 | 9.0 |
| 9.4 | 15 | 0.8 | 34.8 | G |
| 9.8 | | 9.3 | 39.2 | |
| 9.6 | | 15.3 | 38.2 | |
| 9.2 | | 21.8 | 7.3 | |
| 10.3 | | 28.3 | 36.0 | |
| 8.8 | | 35.8 | 12.0 | |
| 9.2 | | 39.8 | 4.6 | |
| 9.4 | | 52.1 | 1.0 | |
| 8.4 | | 52.8 | 19.8 | |
| 9.8 | 16 | 11.8 | 39.3 | |

## 9361—9420.

| mag. | 19h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.3 | 16 | 23.3 | 10.4 | |
| 9.6 | | 34.8 | 50.6 | |
| 9.6 | | 45.8 | 50.7 | |
| 10.3 | | 49.8 | 17.8 | |
| 9.4 | | 52.8 | 35.8 | |
| 10.3 | | 55.8 | 13.0 | |
| 10.3 | 17 | 20.3 | 23.0 | |
| 9.8 | | 25.8 | 22.4 | |
| 7.8 | | 37.8 | 34.6 | 8.5 G |
| 10.3 | | 39.8 | 39.9 | |
| 7.2 | | 45.3 | 34.2 | 6.0 GSct |
| 9.8 | 18 | 12.8 | 32.0 | |
| 10.3 | | 27.3 | 12.1 | |
| 10.3 | | 50.3 | 38.0 | |
| 10.2 | | 58.8 | 35.3 | |
| 8.6 | 19 | 11.8 | 11.8 | |
| 10.3 | | 45.3 | 52.9 | |
| 9.8 | | 49.8 | 36.8 | |
| 10.3 | | 51.3 | 55.1 | |
| 10.3 | 20 | 8.8 | 59.8 | |
| 9.8 | | 19.8 | 16.8 | |
| 9.8 | | 20.8 | 48.1 | |
| 9.6 | | 24.9 | 59.3 | |
| 9.8 | | 25.8 | 43.8 | |
| 10.0 | | 25.8 | 2.8 | |
| 9.6 | | 49.8 | 54.9 | |
| 9.4 | 21 | 25.3 | 50.5 | |
| 9.6 | | 39.8 | 31.8 | |
| 9.8 | | 40.2 | 49.8 | |
| 10.3 | | 43.7 | 21.6 | |
| 7.8 | | 57.7 | 25.3 | 7.5G St |
| 9.6 | 22 | 2.2 | 13.1 | |
| 8.4 | | 9.7 | 56.4 | |
| 10.3 | | 9.8 | 39.5 | |
| 10.3 | | 39.2 | 35.5 | |
| 9.8 | | 57.7 | 29.8 | |
| 10.3 | | 57.7 | 52.8 | |
| 8.2 | 23 | 4.7 | 47.4 | 8.5 G |
| 10.3 | | 9.7 | 37.6 | |
| 10.3 | | 20.7 | 10.4 | |
| 10.3 | | 30.5 | 1.4 | |
| 10.3 | | 31.2 | 28.2 | |
| 10.2 | | 59.6 | 59.5 | |
| 10.3 | 24 | 1.5 | 32.2 | |
| 8.4 | | 19.2 | 48.0 | |
| 10.3 | | 21.2 | 12.4 | |
| 10.3 | | 41.2 | 43.5 | |
| 9.4 | | 59.7 | 22.9 | |
| 10.3 | 25 | 1.5 | 23.6 | |
| 10.2 | | 21.5 | 26.7 | |
| 9.6 | | 27.7 | 8.2 | |
| 10.3 | | 31.2 | 10.4 | |
| 9.6 | | 55.2 | 35.0 | |
| 10.2 | 26 | 18.2 | 46.2 | |
| 9.4 | | 39.7 | 55.4 | |
| 9.4 | | 47.2 | 37.4 | |
| 10.0 | 27 | 0.7 | 2.0 | |
| 8.0 | | 12.7 | 25.6 | 8.0 GS |
| 10.3 | | 21.7 | 37.8 | |
| 10.3 | | 25.7 | 23.8 | |

## 9421—9480.

| mag. | 19h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9.6 | 27 | 32.8 | 10.9 | |
| 10.3 | | 35.2 | 7.8 | |
| 9.6 | 28 | 0.5 | 43.8 | |
| 10.0 | | 26.8 | 58.2 | |
| 9.4 | | 32.3 | 25.4 | 10.0 |
| 9.6 | | 35.3 | 53.3 | 9.5 |
| 10.4 | | 47.8 | 13.8 | |
| 10.0 | | 48.8 | 58.9 | |
| 10.4 | | 50.8 | 38.1 | |
| 9.6 | 29 | 6.3 | 23.7 | |
| 9.8 | | 6.8 | 24.4 | |
| 10.4 | | 11.5 | 24.3 | |
| 10.2 | | 52.3 | 58.9 | |
| 9.6 | | 54.3 | 5.9 | |
| 10.4 | 30 | 0.3 | 32.0 | |
| 9.8 | | 8.8 | 45.0 | |
| 10.4 | | 14.1 | 2.8 | |
| 7.6 | | 18.8 | 41.9 | 6.5 GSt |
| 10.4 | | 25.3 | 37.3 | |
| 10.4 | | 31.3 | 52.5 | |
| 10.4 | | 39.3 | 52.7 | |
| 10.2 | | 43.8 | 33.2 | |
| 7.1 | | 45.3 | 29.5 | 7.0 GSt |
| 10.4 | 31 | 14.2 | 55.3 | |
| 9.4 | | 28.7 | 21.8 | 10.0 |
| 10.2 | | 33.2 | 52.3 | |
| 9.6 | | 49.1 | 2.2 | |
| 10.4 | | 54.7 | 19.0 | |
| 10.4 | 32 | 20.2 | 10.3 | |
| 10.4 | | 34.7 | 35.0 | |
| 10.4 | | 43.7 | 5.9 | |
| 10.4 | | 56.2 | 15.8 | |
| 10.4 | 33 | 0.2 | 34.6 | |
| 10.4 | | 7.7 | 52.6 | |
| 9.6 | | 11.2 | 49.7 | |
| 10.2 | | 19.7 | 11.2 | |
| 8.4 | | 26.7 | 5.4 | 8.0 G |
| 10.4 | | 35.2 | 53.0 | |
| 10.4 | | 50.2 | 40.0 | |
| 10.4 | | 54.7 | 11.2 | |
| 10.0 | 34 | 2.7 | 36.3 | |
| 10.4 | | 3.7 | 30.1 | |
| 10.4 | | 21.2 | 5.5 | |
| 9.6 | | 45.2 | 42.8 | |
| 10.4 | | 46.2 | 54.1 | |
| 10.4 | 35 | 0.7 | 14.1 | |
| 8.4 | 36 | 2.2 | 17.0 | 8.0 G |
| 10.4 | | 20.2 | 38.2 | |
| 10.4 | | 26.2 | 21.9 | |
| 10.4 | | 28.8 | 57.8 | |
| 10.4 | | 42.2 | 30.1 | |
| 8.8 | | 49.7 | 53.2 | 9.5 |
| 9.2 | | 53.2 | 14.8 | |
| 10.4 | 37 | 15.7 | 50.0 | |
| 9.8 | | 21.2 | 34.6 | |
| 10.4 | | 32.2 | 13.1 | |
| 9.6 | | 38.8 | 2.9 | |
| 10.2 | | 48.2 | 57.4 | |
| 10.4 | 38 | 22.2 | 9.5 | |
| 10.4 | | 23.2 | 9.9 | |

## 9481—9540.

| mag. | 19h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10.4 | 38 | 42.2 | 36.9 | |
| 10.2 | | 44.2 | 7.4 | |
| 9.6 | | 51.7 | 22.8 | 9.5 |
| 10.4 | | 53.0 | 21.9 | |
| 9.6 | 39 | 21.7 | 53.6 | |
| 9.4 | | 29.2 | 49.9 | |
| 10.4 | 40 | 2.0 | 47.4 | |
| 9.8 | | 16.2 | 27.2 | |
| 9.6 | | 18.7 | 22.1 | |
| 9.6 | | 36.2 | 17.2 | |
| 9.4 | | 36.2 | 24.9 | |
| 10.4 | | 41.7 | 25.5 | |
| 10.2 | | 42.2 | 42.7 | |
| 9.6 | | 44.9 | 0.1 | 9.5 |
| 10.2 | | 47.2 | 50.9 | |
| 9.2 | | 56.7 | 26.0 | |
| 9.8 | 41 | 10.7 | 49.5 | |
| 10.4 | | 19.7 | 25.9 | |
| 9.1 | | 22.2 | 31.6 | |
| 9.6 | | 42.2 | 12.1 | |
| 10.4 | | 50.2 | 11.2 | |
| 9.8 | | 51.7 | 56.0 | |
| 10.2 | 42 | 31.2 | 12.9 | |
| 10.4 | | 40.2 | 18.3 | |
| 9.8 | | 47.7 | 35.2 | |
| 10.0 | | 58.2 | 35.5 | |
| 10.4 | 43 | 2.0 | 2.1 | |
| 10.4 | | 19.7 | 34.2 | |
| 9.6 | | 32.7 | 48.4 | |
| 8.2 | | 46.2 | 14.8 | 8.5 |
| 10.4 | | 55.7 | 4.1 | |
| 8.4 | 44 | 0.2 | 41.0 | 8.0 G |
| 9.1 | | 2.7 | 27.4 | |
| 10.2 | | 20.2 | 26.0 | |
| 9.8 | | 41.7 | 48.0 | |
| 9.8 | | 42.2 | 46.2 | |
| 10.4 | | 49.2 | 55.0 | |
| 10.4 | | 58.2 | 12.8 | |
| 10.0 | 45 | 0.0 | 26.0 | |
| 10.0 | | 13.5 | 26.9 | |
| 10.4 | | 25.0 | 48.2 | |
| 8.4 | | 40.0 | 16.2 | GSt |
| 10.4 | | 50.0 | 38.9 | |
| 10.4 | | 56.0 | 18.2 | |
| 9.8 | 46 | 0.0 | 51.0 | |
| 10.4 | | 2.5 | 5.0 | |
| 10.4 | | 3.5 | 56.0 | |
| 10.4 | | 11.0 | 44.9 | |
| 9.8 | | 20.0 | 18.3 | |
| 9.0 | | 25.0 | 25.5 | 9.5 |
| 10.4 | | 25.0 | 38.8 | |
| 10.0 | | 26.5 | 33.9 | |
| 9.2 | | 30.0 | 19.5 | |
| 9.2 | | 32.0 | 27.2 | 9.2 |
| 10.4 | | 45.0 | 38.7 | |
| 10.4 | | 54.0 | 3.3 | |
| 10.4 | | 56.5 | 23.2 | |
| 8.2 | 47 | 25.5 | 33.7 | 8.5 G |
| 10.4 | 48 | 0.0 | 28.3 | |
| 9.6 | | 1.0 | 31.4 | 9.2 |



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## 9541—9600.

| mag. | 19h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·4 | 48 | 13·0 | 14·1 | |
| 10·4 | | 17·5 | 57·2 | |
| 10·0 | | 18·0 | 23·0 | |
| 10·2 | | 31·3 | 2·1 | |
| 10·4 | | 33·0 | 50·8 | |
| 8·8 | | 45·0 | 22·5 | 9·0 |
| 8·8 | | 53·5 | 8·7 | 9·0 |
| 10·0 | | 55·3 | 2·4 | |
| 9·6 | 49 | 0·5 | 25·8 | |
| 8·8 | | 1·5 | 5·0 | 9·5 |
| 10·4 | | 27·0 | 32·4 | |
| 10·4 | | 29·0 | 54·0 | |
| 10·4 | | 32·0 | 55·2 | |
| 10·4 | | 40·0 | 52·4 | |
| 10·4 | | 48·0 | 16·0 | |
| 10·0 | | 48·5 | 6·5 | |
| 10·2 | | 49·5 | 49·0 | |
| 9·8 | | 55·0 | 53·2 | |
| 10·4 | 50 | 0·0 | 24·6 | |
| 10·2 | | 4·3 | 8·1 | |
| 10·2 | | 8·8 | 59·3 | |
| 9·8 | | 11·8 | 32·2 | |
| 10·4 | | 18·3 | 0·9 | |
| 10·0 | | 23·3 | 9·9 | |
| 10·4 | | 49·8 | 20·1 | |
| 9·2 | | 50·3 | 8·9 | |
| 9·6 | 51 | 7·3 | 17·1 | |
| 9·8 | | 40·8 | 21·9 | |
| 10·4 | 52 | 11·3 | 7·1 | |
| 9·8 | | 46·3 | 41·3 | |
| 10·2 | | 47·8 | 38·5 | |
| 10·0 | | 51·3 | 25·9 | |
| 10·4 | 53 | 1·8 | 46·9 | |
| 8·9 | | 16·3 | 27·6 | |
| 9·0 | | 19·3 | 37·9 | 9·5 |
| 10·4 | | 28·3 | 28·9 | |
| 9·6 | | 29·8 | 16·9 | |
| 9·6 | | 30·3 | 59·9 | |
| 8·6 | | 30·8 | 52·9 | |
| 10·2 | | 37·8 | 35·9 | |
| 10·4 | | 41·8 | 15·1 | |
| 8·6 | 54 | 21·3 | 31·1 | 9·0 G |
| 9·8 | | 22·3 | 50·3 | |
| 10·4 | | 30·3 | 8·2 | |
| 8·9 | | 36·8 | 20·8 | |
| 9·8 | | 47·3 | 13·1 | |
| 9·8 | | 51·3 | 38·8 | |
| 10·0 | | 55·3 | 22·8 | |
| 9·8 | 55 | 0·0 | 28·4 | |
| 10·0 | | 7·8 | 30·7 | |
| 10·0 | | 9·8 | 40·9 | |
| 10·2 | | 10·8 | 11·4 | |
| 10·4 | | 13·8 | 30·6 | |
| 10·4 | | 21·8 | 32·5 | |
| 9·8 | | 29·3 | 11·9 | |
| 10·0 | | 35·3 | 50·6 | |
| 9·6 | | 52·2 | 0·5 | |
| 10·0 | 56 | 6·1 | 46·3 | |
| 10·0 | | 9·9 | 0·7 | |
| 8·9 | | 26·6 | 9·3 | |

## 9601—9660.

| mag. | 19h.—20h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·8 | 56 | 32·1 | 52·6 | |
| 9·6 | | 37·1 | 59·8 | |
| 8·0 | | 47·6 | 26·1 | 8·5 |
| 10·4 | | 48·6 | 6·7 | |
| 9·8 | | 50·1 | 14·9 | |
| 8·8 | | 57·1 | 5·2 | |
| 8·8 | 57 | 13·1 | 32·5 | 8·0 G |
| 10·2 | | 38·1 | 13·1 | |
| 10·4 | | 41·1 | 14·6 | |
| 10·0 | | 46·1 | 52·0 | |
| 10·2 | 58 | 7·1 | 53·8 | |
| 9·6 | | 7·1 | 32·7 | |
| 10·2 | | 11·6 | 44·2 | |
| 9·8 | | 18·1 | 37·5 | |
| 8·6 | | 42·6 | 40·5 | |
| 10·4 | | 43·6 | 12·7 | |
| 9·1 | | 59·1 | 33·7 | |
| 10·4 | 59 | 3·1 | 54·8 | |
| 10·4 | | 8·1 | 28·1 | |
| 10·4 | | 11·6 | 35·3 | |
| 8·3 | | 20·1 | 40·1 | 8·0 |
| 10·4 | | 31·6 | 27·2 | |
| 10·4 | | 37·6 | 57·3 | |
| 10·0 | 0 | 4·0 | 49·9 | |
| 9·6 | | 39·2 | 1·3 | |
| 8·6 | | 42·6 | 24·3 | 9·0 |
| 10·4 | | 50·6 | 22·1 | |
| 9·8 | | 53·5 | 46·3 | |
| 9·4 | | 57·3 | 7·9 | |
| 9·0 | 1 | 54·3 | 56·6 | |
| 9·7 | 2 | 8·3 | 15·2 | |
| 9·7 | | 11·8 | 44·3 | |
| 8·4 | | 17·8 | 13·3 | 8·0 G |
| 9·7 | | 26·8 | 26·9 | |
| 9·7 | 3 | 1·8 | 34·4 | |
| 9·7 | | 19·8 | 19·9 | |
| 9·2 | | 49·3 | 57·8 | |
| 9·6 | | 58·3 | 4·0 | |
| 9·0 | 4 | 15·3 | 38·1 | |
| 9·6 | | 24·8 | 12·3 | |
| 9·6 | | 49·8 | 20·1 | |
| 8·9 | 5 | 20·8 | 52·5 | |
| 9·7 | | 25·3 | 13·2 | |
| 9·4 | | 45·8 | 59·0 | |
| 9·6 | | 49·8 | 29·9 | |
| 9·6 | | 51·8 | 25·3 | |
| 9·6 | | 57·8 | 12·6 | |
| 9·7 | 6 | 8·3 | 50·5 | |
| 9·7 | | 27·3 | 26·2 | |
| 9·2 | | 37·3 | 7·9 | 9·5 G |
| 9·6 | | 37·3 | 17·0 | |
| 9·4 | 7 | 1·8 | 47·2 | |
| 9·6 | | 2·8 | 28·0 | |
| 9·7 | | 3·3 | 38·1 | |
| 9·7 | | 7·8 | 47·4 | |
| 9·7 | | 20·8 | 5·0 | |
| 8·4 | | 40·8 | 43·5 | 8·5 G |
| 9·7 | 8 | 7·8 | 11·8 | G |
| 9·3 | | 16·8 | 21·3 | |
| 9·0 | | 39·8 | 32·7 | 8·5 G |

## 9661—9720.

| mag. | 20h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·3 | 9 | 26·3 | 49·0 | |
| 9·7 | | 28·8 | 3·9 | |
| 9·0 | | 31·3 | 55·7 | |
| 9·4 | | 35·3 | 16·9 | |
| 9·7 | | 37·8 | 35·8 | |
| 9·7 | | 46·8 | 58·5 | |
| 9·7 | 10 | 14·8 | 27·0 | |
| 9·2 | | 34·8 | 26·7 | G |
| 9·7 | | 54·5 | 1·4 | |
| 9·2 | 11 | 48·3 | 50·9 | |
| 9·2 | 12 | 10·8 | 27·1 | |
| 9·7 | | 47·8 | 14·5 | |
| 8·4 | 13 | 1·3 | 39·4 | 8·2 G |
| 9·7 | | 7·8 | 1·6 | |
| 9·7 | 14 | 21·8 | 3·0 | |
| 9·4 | | 25·8 | 40·4 | |
| 7·8 | | 30·8 | 56·4 | 8·0 GS |
| 9·6 | | 33·8 | 20·5 | |
| 9·3 | | 48·3 | 34·1 | |
| 9·3 | | 54·8 | 25·2 | 9·5 |
| 8·7 | 15 | 44·8 | 19·9 | 9·0 |
| 9·7 | | 51·3 | 38·9 | |
| 9·7 | 16 | 8·3 | 3·2 | |
| 9·7 | | 12·6 | 7·1 | |
| 9·7 | | 23·1 | 23·0 | |
| 9·7 | | 23·6 | 32·9 | |
| 8·7 | 17 | 3·6 | 13·4 | 8·5 G |
| 9·3 | | 39·6 | 24·8 | |
| 9·7 | | 42·1 | 20·2 | |
| 9·2 | | 44·1 | 35·8 | 10·0 G |
| 9·7 | | 49·1 | 28·0 | |
| 9·6 | 18 | 6·1 | 20·8 | |
| 8·7 | | 11·1 | 49·9 | |
| 9·7 | | 17·6 | 9·4 | |
| 8·6 | | 31·6 | 42·6 | 9·0 G |
| 9·3 | 19 | 1·6 | 45·3 | |
| 9·7 | | 20·6 | 27·1 | |
| 9·6 | | 43·1 | 17·8 | |
| 9·7 | 20 | 2·6 | 29·1 | |
| 9·3 | | 5·6 | 19·8 | 8·5 |
| 9·7 | | 11·1 | 4·0 | |
| 9·2 | | 26·3 | 58·8 | 10·0 G |
| 9·2 | 21 | 0·1 | 13·1 | |
| 9·7 | | 26·6 | 10·1 | |
| 9·4 | 22 | 11·6 | 18·0 | |
| 9·6 | | 14·1 | 20·6 | |
| 9·6 | | 37·3 | 58·9 | |
| 9·7 | | 49·6 | 28·9 | |
| 8·6 | 23 | 16·6 | 56·2 | 9·5 G |
| 9·4 | | 43·6 | 41·7 | |
| 9·0 | | 51·6 | 17·3 | |
| 9·7 | 24 | 2·6 | 6·8 | |
| 9·6 | | 3·1 | 19·0 | |
| 9·6 | | 12·1 | 19·1 | |
| 9·2 | | 17·6 | 52·7 | Gk |
| 9·2 | | 37·8 | 16·1 | |
| 9·0 | 25 | 12·8 | 7·1 | 9·0 |
| 9·3 | | 30·3 | 1·3 | |
| 9·7 | | 37·8 | 53·8 | |
| 9·6 | 26 | 4·8 | 50·3 | |

## 9721—9780.

| mag. | 20h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·0 | 26 | 19·8 | 22·6 | |
| 9·2 | | 24·3 | 34·7 | |
| 9·6 | | 30·8 | 55·1 | |
| 9·4 | | 56·8 | 46·5 | |
| 9·2 | 27 | 5·8 | 50·9 | |
| 9·7 | | 39·3 | 36·9 | |
| 9·2 | 29 | 7·8 | 25·1 | |
| 9·7 | | 18·8 | 0·4 | |
| 8·2 | | 37·3 | 17·1 | 8·0 G |
| 9·7 | 30 | 26·3 | 29·9 | |
| 9·7 | | 32·4 | 29·4 | |
| 9·6 | | 47·4 | 36·4 | |
| 8·6 | 31 | 2·8 | 27·0 | 8·8 G |
| 9·6 | | 30·8 | 26·3 | |
| 9·7 | 32 | 10·8 | 12·8 | |
| 10·0 | 33 | 0·0 | 49·3 | |
| 9·8 | | 0·1 | 11·1 | |
| 9·4 | | 6·6 | 40·1 | 9·0 |
| 9·3 | | 26·4 | 17·0 | |
| 10·0 | 34 | 22·4 | 8·1 | |
| 8·0 | | 56·4 | 17·3 | 8·0 G |
| 9·8 | 35 | 0·4 | 17·9 | 9·0 |
| 9·8 | | 6·9 | 42·9 | |
| 10·0 | 36 | 8·9 | 34·6 | |
| 9·8 | | 23·4 | 26·7 | |
| 10·0 | 37 | 24·9 | 48·1 | |
| 10·0 | | 37·1 | 57·8 | |
| 9·3 | | 47·0 | 56·5 | |
| 10·0 | 38 | 5·4 | 11·5 | |
| 10·0 | | 43·1 | 34·9 | |
| 10·0 | 39 | 9·9 | 29·3 | |
| 10·0 | | 52·9 | 31·9 | |
| 10·0 | 40 | 6·9 | 11·5 | |
| 10·0 | | 12·9 | 51·2 | 10·0 |
| 10·0 | | 27·7 | 57·7 | |
| 9·3 | | 30·9 | 5·1 | 9·5 G |
| 10·0 | | 52·9 | 31·2 | |
| 8·9 | 41 | 58·4 | 40·9 | 8·8 G |
| 10·0 | 42 | 33·9 | 26·9 | |
| 10·0 | 44 | 28·1 | 1·0 | |
| 8·8 | 45 | 10·9 | 3·5 | G |
| 8·8 | | 12·9 | 35·3 | |
| 9·0 | | 13·9 | 38·5 | |
| 9·0 | | 33·4 | 54·9 | |
| 7·5 | 46 | 8·4 | 3·7 | 7·5 GS |
| 9·2 | | 16·9 | 19·3 | |
| 10·0 | | 20·9 | 56·2 | |
| 10·0 | | 24·9 | 0·4 | |
| 10·0 | | 37·9 | 48·6 | |
| 8·7 | | 54·4 | 21·2 | 8·0 G |
| 10·0 | | 59·4 | 33·4 | |
| 8·6* | 47 | 8·5 | 47·9 | 9·5 |
| 9·8 | | 46·4 | 55·4 | |
| 9·6 | | 47·4 | 3·1 | |
| 9·2 | | 56·4 | 35·9 | |
| 9·2 | 49 | 16·9 | 50·6 | 9·0 |
| 10·0 | | 48·4 | 9·3 | |
| 9·0 | 50 | 16·9 | 13·1 | 8·0 |
| 9·0 | | 23·9 | 28·7 | 9·0 |
| 9·2 | | 24·4 | 4·8 | 9·0 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 40 | 119 | 3·5 |
| | 50 | 118 | 3·9 |
| 20 | 0 | 117 | 4·2 |
| | 10 | 116 | 4·5 |
| | 20 | 115 | 4·8 |
| | 30 | 114 | 5·1 |
| | 40 | 113 | 5·4 |
| | 50 | 111 | 5·6 |
| 21 | 0 | 110 | 5·9 |

* Neither on measuring nor on check plate; taken from rejected plates Nos. 779 and 791.



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ' |
| 20 | 50 | 111 | 5·6 |
| 21 | 0 | 110 | 5·9 |
| | 10 | 108 | 6·2 |
| | 20 | 107 | 6·4 |
| | 30 | 105 | 6·6 |
| | 40 | 104 | 6·8 |
| | 50 | 102 | 7·0 |
| 22 | 0 | 100 | 7·2 |

## 9781—9840.

| mag. | 20h.–21h. m | s | −54° ' | |
|---|---|---|---|---|
| 10·0 | 50 | 44·1 | 42·7 | |
| 10·0 | | 44·4 | 53·5 | |
| 9·3 | | 47·0 | 5·0 | |
| 9·6 | 51 | 2·5 | 38·6 | |
| 7·2 | | 34·0 | 13·2 | 7·5 GSctr |
| 10·0 | 52 | 4·5 | 34·0 | |
| 9·0 | | 5·0 | 20·1 | 9·2 G |
| 10·0 | | 16·0 | 48·6 | |
| 10·0 | | 41·0 | 11·0 | |
| 10·0 | | 52·5 | 50·9 | |
| 9·8 | 53 | 5·0 | 20·6 | |
| 10·0 | 54 | 4·0 | 35·1 | |
| 10·0 | | 39·0 | 10·6 | |
| 8·4 | 55 | 3·0 | 52·8 | |
| 9·6 | | 9·0 | 54·4 | |
| 10·0 | | 14·7 | 57·6 | |
| 9·0 | 56 | 6·5 | 17·7 | |
| 8·8 | | 11·5 | 39·7 | |
| 10·0 | | 20·5 | 9·0 | |
| 10·0 | | 42·5 | 13·9 | |
| 9·6 | 57 | 1·0 | 12·2 | |
| 10·0 | 58 | 1·5 | 28·2 | |
| 6·9 | | 44·0 | 42·8 | 7·8 GSctr |
| 10·0 | 59 | 2·0 | 2·0 | |
| 9·2 | | 20·0 | 46·2 | |
| 9·8 | | 25·0 | 25·8 | |
| 10·0 | | 25·5 | 53·0 | |
| 10·0 | 0 | 42·0 | 31·4 | |
| 9·6 | | 54·0 | 54·8 | |
| 10·0 | 1 | 19·0 | 12·6 | |
| 10·0 | | 28·7 | 29·2 | |
| 10·0 | 2 | 32·5 | 6·0 | |
| 9·3 | | 33·5 | 16·2 | |
| 9·8 | 3 | 10·0 | 55·2 | |
| 9·3 | | 16·5 | 32·8 | |
| 10·0 | | 21·5 | 34·9 | |
| 10·2 | | 28·1 | 0·0 | |
| 10·2 | | 58·6 | 46·1 | |
| 10·2 | 4 | 17·1 | 49·4 | |
| 9·6 | | 39·1 | 8·6 | |
| 10·2 | | 52·3 | 20·0 | |
| 10·2 | 5 | 43·1 | 49·2 | |
| 10·2 | | 43·1 | 14·4 | |
| 10·2 | 6 | 20·6 | 26·5 | |
| 10·2 | | 44·6 | 22·6 | |
| 9·0 | | 52·1 | 55·1 | |
| 9·0 | 7 | 0·6 | 35·3 | |
| 9·2 | | 1·6 | 6·1 | |
| 10·0 | | 4·1 | 52·1 | |
| 9·8 | | 22·1 | 27·7 | |
| 9·4 | | 55·6 | 34·4 | |
| 9·3 | 8 | 5·6 | 20·1 | |
| 9·6 | | 14·1 | 22·5 | |
| 10·2 | | 19·1 | 38·3 | |
| 7·6 | | 23·1 | 32·1 | 7·5 GSg |
| 8·6 | | 25·1 | 50·6 | |
| 9·6 | | 46·6 | 24·2 | |
| 9·4 | | 58·1 | 1·0 | |
| 9·4 | 9 | 13·1 | 40·9 | |
| 9·3 | | 20·6 | 29·1 | |

## 9841—9900.

| mag. | 21h. m | s | −54° ' | |
|---|---|---|---|---|
| 9·8 | 9 | 27·1 | 15·6 | |
| 10·2 | 10 | 0·6 | 43·0 | |
| 9·8 | | 1·1 | 57·2 | |
| 10·0 | | 21·1 | 16·1 | |
| 9·0 | | 24·6 | 44·1 | |
| 9·0 | | 38·1 | 8·1 | 9·0 |
| 9·2 | 11 | 41·6 | 51·1 | |
| 10·2 | 12 | 1·3 | 57·8 | |
| 8·6 | | 41·6 | 12·7 | 8·5 |
| 10·2 | 13 | 21·6 | 42·2 | |
| 10·2 | | 39·6 | 42·2 | |
| 9·8 | 14 | 10·6 | 32·2 | |
| 9·3 | | 10·6 | 14·7 | |
| 9·2 | | 19·1 | 53·6 | |
| 10·2 | | 19·6 | 13·5 | |
| 10·2 | | 38·1 | 19·2 | |
| 9·0 | | 49·1 | 42·4 | |
| 10·2 | | 59·6 | 58·0 | |
| 9·0 | 15 | 45·1 | 53·3 | |
| 9·6 | | 49·6 | 19·9 | |
| 9·8 | 16 | 14·6 | 32·6 | |
| 9·4 | | 31·1 | 37·1 | |
| 9·8 | | 36·6 | 34·5 | |
| 10·2 | 17 | 7·6 | 53·0 | |
| 10·2 | | 39·1 | 43·4 | |
| 10·0 | 18 | 0·1 | 8·0 | |
| 9·8 | | 17·6 | 52·8 | |
| 10·2 | | 27·1 | 22·7 | |
| 9·8 | | 48·6 | 46·4 | |
| 9·4 | | 53·1 | 27·1 | |
| 9·8 | 19 | 51·1 | 36·0 | |
| 6·9 | 20 | 11·1 | 14·9 | 6·5 GSct |
| 10·2 | | 27·6 | 6·2 | |
| 10·2 | | 51·1 | 24·1 | |
| 9·8 | | 52·1 | 49·1 | |
| 9·2 | 22 | 2·1 | 59·8 | |
| 10·2 | | 29·8 | 0·6 | |
| 10·2 | | 41·6 | 53·1 | |
| 10·2 | | 51·6 | 46·5 | |
| 9·4 | 23 | 4·6 | 0·9 | |
| 8·4 | | 9·1 | 44·3 | 9·0 |
| 10·2 | 24 | 19·6 | 43·0 | |
| 9·4 | | 31·6 | 26·2 | |
| 9·6 | | 32·6 | 43·2 | |
| 10·2 | | 35·6 | 44·2 | |
| 8·2 | | 40·1 | 42·3 | 8·8 |
| 10·2 | | 49·6 | 53·4 | |
| 9·6 | 25 | 14·8 | 53·8 | |
| 10·0 | | 45·3 | 2·6 | |
| 9·6 | | 53·3 | 5·9 | |
| 10·0 | 26 | 16·8 | 54·2 | |
| 9·0 | | 41·8 | 42·8 | |
| 10·2 | 27 | 16·3 | 34·5 | |
| 9·2 | | 20·8 | 40·3 | |
| 10·2 | | 28·3 | 22·2 | |
| 8·8 | | 30·3 | 59·2 | |
| 9·8 | | 38·8 | 46·6 | |
| 9·4 | | 42·7 | 21·5 | |
| 8·2 | | 46·8 | 44·8 | 8·5 G |
| 10·2 | | 49·3 | 17·1 | |

## 9901—9960.

| mag. | 21h. m | s | −54° ' | |
|---|---|---|---|---|
| 8·5 | 27 | 58·3 | 47·3 | 9·0 G |
| 9·0 | | 59·3 | 32·0 | |
| 10·2 | 28 | 10·3 | 6·9 | |
| 9·0 | | 19·8 | 37·9 | |
| 9·8 | | 21·3 | 18·8 | |
| 10·2 | 29 | 5·3 | 35·5 | |
| 10·2 | | 11·3 | 27·5 | |
| 10·2 | | 13·3 | 35·7 | |
| 10·2 | | 19·3 | 5·6 | |
| 10·2 | | 37·8 | 26·4 | |
| 10·2 | | 46·8 | 8·8 | |
| 10·2 | | 59·3 | 37·2 | |
| 10·2 | 30 | 16·8 | 23·3 | |
| 10·2 | | 45·3 | 44·3 | |
| 10·2 | 31 | 32·1 | 0·3 | |
| 9·8 | | 39·3 | 6·0 | |
| 9·6 | | 41·3 | 4·3 | |
| 9·8 | 32 | 2·8 | 22·6 | |
| 10·2 | | 52·8 | 29·9 | |
| 9·4 | 33 | 17·8 | 4·9 | |
| 10·2 | | 57·8 | 11·3 | |
| 9·0 | 34 | 16·3 | 57·8 | |
| 10·2 | | 27·5 | 51·4 | |
| 9·8 | | 57·5 | 53·0 | |
| 10·2 | | 58·3 | 2·2 | |
| 10·2 | | 58·5 | 41·8 | |
| 10·0 | | 58·5 | 59·4 | |
| 10·0 | 35 | 5·0 | 12·8 | |
| 7·7 | | 11·0 | 32·8 | 7·8 GS |
| 10·2 | | 13·0 | 1·6 | |
| 9·8 | | 21·7 | 46·6 | |
| 9·2 | | 42·7 | 5·6 | |
| 9·6 | | 43·7 | 36·6 | |
| 9·0 | | 51·2 | 42·5 | |
| 9·8 | | 56·2 | 19·6 | |
| 9·8 | | 57·2 | 27·9 | |
| 9·8 | 36 | 6·7 | 39·2 | |
| 9·4 | | 26·7 | 7·9 | |
| 9·5 | | 36·6 | 20·6 | |
| 8·9 | 37 | 16·7 | 35·1 | 10·0 |
| 9·8 | | 30·6 | 53·4 | |
| 9·4 | | 34·1 | 5·2 | |
| 9·8 | | 41·6 | 10·0 | |
| 9·3 | | 51·6 | 46·2 | |
| 9·8 | | 55·1 | 16·4 | |
| 9·8 | 38 | 14·1 | 46·4 | |
| 9·0 | | 44·1 | 54·4 | 9·0 |
| 8·7 | | 46·6 | 13·7 | 9·5 |
| 9·8 | 39 | 10·6 | 31·2 | |
| 9·6 | | 23·6 | 24·8 | |
| 9·4 | | 29·1 | 15·0 | |
| 9·5 | | 32·6 | 46·3 | |
| 9·4 | 40 | 1·6 | 20·4 | |
| 9·5 | | 8·1 | 45·2 | |
| 9·8 | | 34·1 | 52·0 | |
| 9·8 | | 46·6 | 2·1 | |
| 9·8 | | 55·6 | 28·2 | |
| 9·6 | 41 | 2·6 | 31·4 | |
| 9·3 | | 4·6 | 21·1 | |
| 9·8 | | 15·1 | 56·6 | |

## 9961—10020.

| mag. | 21h. m | s | −54° ' | |
|---|---|---|---|---|
| 8·7 | 41 | 47·6 | 58·8 | 9·5 G |
| 9·3 | 42 | 42·6 | 46·1 | |
| 9·8 | 43 | 10·1 | 47·6 | |
| 9·6 | | 26·1 | 16·0 | |
| 9·6 | 44 | 1·1 | 49·4 | |
| 9·8 | | 29·1 | 26·9 | |
| 9·3 | 45 | 14·6 | 52·4 | |
| 9·3 | | 25·6 | 11·8 | |
| 9·6 | | 48·1 | 26·4 | |
| 9·0 | | 49·1 | 17·8 | 9·5 |
| 9·8 | | 58·2 | 22·0 | |
| 9·8 | 46 | 22·7 | 41·2 | |
| 9·0 | 47 | 32·2 | 37·8 | 9·5 |
| 9·2 | | 33·2 | 55·5 | 9·0 |
| 9·6 | | 42·2 | 43·2 | |
| 9·8 | 48 | 9·7 | 43·2 | |
| 9·3 | | 18·2 | 7·4 | |
| 9·6 | | 35·2 | 17·9 | |
| 9·4 | | 38·7 | 17·8 | |
| 9·6 | | 42·2 | 34·2 | |
| 9·8 | 49 | 32·2 | 39·2 | |
| 8·2 | | 36·2 | 8·6 | 8·5 |
| 9·8 | | 58·2 | 9·4 | |
| 8·2 | 50 | 7·7 | 34·9 | 8·0 |
| 8·6 | | 18·7 | 49·2 | |
| 9·8 | | 35·7 | 16·4 | |
| 9·8 | | 44·7 | 32·2 | |
| 9·8 | | 44·7 | 31·0 | |
| 8·8 | | 54·2 | 21·6 | 9·0 |
| 9·8 | 51 | 6·7 | 1·1 | |
| 9·4 | | 40·2 | 6·4 | |
| 9·2 | 52 | 10·2 | 19·4 | |
| 8·2 | | 11·2 | 42·4 | G |
| 9·8 | | 27·7 | 25·9 | |
| 9·8 | | 40·2 | 29·0 | |
| 9·6 | | 53·9 | 59·0 | |
| 9·2 | | 56·2 | 30·4 | |
| 9·6 | 53 | 3·7 | 28·8 | |
| 7·8 | | 15·7 | 45·2 | 8·0 GS |
| 8·8 | | 23·7 | 40·6 | |
| 9·8 | | 32·2 | 50·6 | |
| 9·2 | | 47·2 | 37·7 | |
| 9·8 | | 54·7 | 12·4 | |
| 9·2 | 54 | 12·8 | 24·6 | |
| 9·6 | 55 | 22·8 | 50·0 | |
| 9·8 | 56 | 6·3 | 27·2 | |
| 9·6 | | 14·8 | 55·9 | |
| 9·2 | | 17·3 | 10·5 | |
| 9·8 | 57 | 19·3 | 30·0 | |
| 9·8 | | 38·8 | 10·0 | |
| 8·9 | | 43·8 | 29·2 | 9·5 |
| 9·8 | | 48·8 | 40·5 | |
| 9·8 | 58 | 2·8 | 49·6 | |
| 9·8 | | 5·3 | 12·1 | |
| 9·6 | | 33·3 | 36·9 | |
| 9·8 | | 34·0 | 0·7 | |
| 9·8 | | 37·8 | 33·1 | |
| 9·2 | | 40·3 | 14·9 | |
| 9·2 | | 43·8 | 23·2 | 9·5 |
| 9·4 | | 53·3 | 27·8 | |



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## 10021—10080.

| mag. | $22^h$ m s | −54° ′ | |
|---|---|---|---|
| 9·4 | 0 1·8 | 12·1 | |
| 9·4 | 10·8 | 35·3 | |
| 9·8 | 15·8 | 15·1 | |
| 9·2 | 19·3 | 7·8 | |
| 9·5 | 22·3 | 5·1 | |
| 9·6 | 30·3 | 40·6 | |
| 9·8 | 47·3 | 58·6 | |
| 9·8 | 2 8·3 | 17·2 | |
| 9·0 | 10·8 | 37·1 | |
| 9·4 | 3 8·3 | 4·9 | |
| 9·4 | 45·8 | 46·1 | |
| 9·6 | 46·8 | 51·1 | |
| 9·8 | 4 16·3 | 30·8 | |
| 7·4 | 22·3 | 54·3 | 8·0 GS |
| 9·8 | 5 21·0 | 27·7 | |
| 9·8 | 25·0 | 6·3 | |
| 9·8 | 41·5 | 9·5 | |
| 7·7 | 6 22·0 | 11·5 | 8·0 G |
| 9·2 | 30·5 | 51·7 | |
| 8·0 | 7 10·0 | 36·0 | 8·2 G |
| 9·2 | 25·0 | 49·9 | |
| 8·4 | 26·5 | 50·6 | 8·0 |
| 9·3 | 36·4 | 33·6 | |
| 8·3 | 8 1·0 | 10·3 | |
| 9·3 | 5·0 | 56·3 | |
| 9·3 | 6·4 | 9·1 | |
| 8·7 | 17·0 | 50·6 | |
| 8·6 | 45·7 | 26·3 | 9·0 |
| 9·8 | 50·5 | 21·4 | |
| 9·4 | 9 2·7 | 41·9 | |
| 7·0 | 4·2 | 56·7 | 7·2 GScgt |
| 9·0 | 36·4 | 22·9 | 9·5 |
| 10·0 | 38·4 | 55·3 | |
| 10·4 | 47·4 | 0·9 | |
| 6·2 | 10 3·9 | 13·8 | 5·8 GScg |
| 10·2 | 7·9 | 10·9 | |
| 9·8 | 20·4 | 46·3 | |
| 10·4 | 27·9 | 31·3 | |
| 9·2 | 12 3·4 | 21·3 | |
| 9·6 | 42·9 | 15·3 | |
| 9·8 | 54·4 | 0·1 | |
| 10·4 | 55·4 | 21·9 | |
| 10·4 | 13 16·4 | 52·1 | |
| 10·4 | 36·9 | 37·5 | |
| 9·8 | 36·9 | 25·4 | |
| 9·6 | 52·4 | 13·5 | |
| 7·2 | 14 0·4 | 29·3 | 7·5 GSg |
| 10·4 | 59·9 | 48·2 | |
| 10·4 | 15 5·4 | 48·1 | |
| 10·4 | 10·9 | 34·6 | |
| 9·6 | 26·9 | 55·3 | |
| 10·0 | 16 39·9 | 18·7 | |
| 8·6 | 17 1·4 | 26·1 | 8·7 G |
| 9·4 | 34·9 | 6·9 | |
| 10·4 | 18 39·9 | 10·1 | |
| 9·2 | 50·4 | 19·6 | |
| 9·4 | 19 21·9 | 44·3 | |
| 9·4 | 45·9 | 15·1 | 9·0 |
| 10·2 | 52·9 | 55·9 | |
| 10·0 | 20 26·1 | 25·9 | |

## 10081—10140.

| mag. | $22^h$ m s | −54° ′ | |
|---|---|---|---|
| 9·6 | 20 28·6 | 8·4 | |
| 10·2 | 31·1 | 31·5 | |
| 10·4 | 50·1 | 24·5 | |
| 10·4 | 21 45·1 | 26·1 | |
| 9·4 | 22 8·6 | 9·9 | 9·2 |
| 10·4 | 8·8 | 59·2 | |
| 9·4 | 31·6 | 42·7 | |
| 9·0 | 23 23·6 | 19·7 | 9·0 G |
| 9·0 | 39·6 | 1·4 | 8·0 GS |
| 9·8 | 45·1 | 27·3 | |
| 10·4 | 24 15·6 | 12·7 | |
| 9·4 | 20·6 | 4·3 | |
| 9·8 | 49·1 | 2·4 | |
| 9·8 | 54·6 | 10·3 | |
| 9·8 | 25 2·1 | 18·9 | |
| 7·0 | 26 24·6 | 56·5 | 7·5 GSct |
| 10·4 | 26·6 | 51·1 | |
| 9·2 | 48·1 | 50·0 | 9·5 |
| 10·4 | 57·1 | 31·1 | |
| 9·4 | 27 3·6 | 14·9 | |
| 10·4 | 18·1 | 6·9 | |
| 9·2 | 20·1 | 15·2 | |
| 9·0 | 46·6 | 3·1 | 9·0 |
| 10·4 | 28 20·1 | 33·6 | |
| 10·4 | 52·3 | 1·1 | |
| 10·4 | 29 1·6 | 27·2 | |
| 9·4 | 9·6 | 3·8 | |
| 10·0 | 55·1 | 45·0 | |
| 10·2 | 55·1 | 17·7 | |
| 8·9 | 30 26·6 | 36·0 | 8·5 |
| 9·2 | 30·6 | 0·4 | 9·5 |
| 7·5 | 58·1 | 22·7 | 7·8 GS |
| 10·0 | 31 24·6 | 15·1 | |
| 8·4 | 32 6·6 | 46·6 | 8·5 |
| 10·4 | 30·1 | 57·1 | |
| 8·9 | 34 14·7 | 35·9 | 9·0 |
| 10·4 | 35 20·2 | 15·6 | |
| 9·4 | 47·7 | 31·1 | |
| 9·8 | 36 28·2 | 23·3 | |
| 10·0 | 37 2·7 | 20·4 | |
| 10·4 | 5·2 | 22·9 | |
| 9·6 | 19·2 | 45·0 | |
| 5·8 | 56·7 | 9·4 | 4·5 GSct |
| 10·4 | 38 0·7 | 37·7 | |
| 9·4 | 7·2 | 34·3 | |
| 10·4 | 15·8 | 24·8 | |
| 10·4 | 28·2 | 12·0 | |
| 9·6 | 35·2 | 30·1 | |
| 10·4 | 39 5·0 | 47·1 | |
| 10·4 | 19·7 | 38·2 | |
| 9·6 | 40 52·7 | 46·9 | |
| 9·2 | 59·2 | 4·0 | |
| 10·4 | 41 0·3 | 59·5 | |
| 10·4 | 20·5 | 2·6 | |
| 10·4 | 21·1 | 54·0 | |
| 9·8 | 32·7 | 57·1 | |
| 7·8 | 45·5 | 35·8 | 8·2 |
| 10·4 | 42 46·0 | 45·4 | |
| 10·4 | 43 1·5 | 9·4 | |
| 10·0 | 19·0 | 27·9 | |

## 10141—10200.

| mag. | $22^h$ m s | −54° ′ | |
|---|---|---|---|
| 9·6 | 43 20·5 | 28·4 | |
| 9·4 | 22·0 | 49·7 | |
| 10·4 | 30·5 | 20·9 | |
| 10·2 | 52·0 | 7·6 | |
| 10·4 | 44 12·5 | 54·6 | |
| 9·4 | 54·0 | 24·9 | |
| 9·0 | 45 11·5 | 39·9 | |
| 10·4 | 18·5 | 6·6 | |
| 9·0 | 29·5 | 35·6 | |
| 9·8 | 57·0 | 28·1 | |
| 10·4 | 46 8·5 | 33·1 | |
| 10·4 | 21·5 | 30·9 | |
| 10·4 | 30·5 | 24·5 | |
| 9·8 | 31·5 | 16·7 | |
| 9·4 | 41·5 | 12·1 | |
| 10·2 | 56·0 | 47·0 | |
| 10·0 | 47 9·0 | 32·0 | G |
| 10·4 | 23·5 | 37·7 | |
| 9·6 | 35·5 | 23·7 | |
| 9·8 | 43·5 | 24·8 | |
| 8·5 | 52·5 | 31·6 | 9·2 G |
| 9·4 | 55·0 | 8·5 | |
| 9·4 | 56·5 | 1·1 | |
| 9·2 | 48 9·0 | 40·6 | 9·5 |
| 10·2 | 34·0 | 26·4 | |
| 10·4 | 49 9·0 | 4·5 | |
| 9·8 | 13·5 | 35·0 | |
| 9·6 | 24·0 | 31·5 | |
| 9·8 | 53·5 | 40·0 | |
| 10·4 | 50 0·0 | 37·1 | |
| 10·4 | 49·5 | 15·6 | |
| 10·4 | 51 3·0 | 40·4 | |
| 10·4 | 31·0 | 26·1 | |
| 10·0 | 32·5 | 9·2 | |
| 10·4 | 48·5 | 2·6 | |
| 9·4 | 53·0 | 1·8 | 9·0 |
| 8·8 | 52 44·5 | 46·4 | 9·0 G |
| 9·2 | 57·5 | 26·4 | |
| 9·8 | 53 2·5 | 19·3 | |
| 9·4 | 3·0 | 48·9 | |
| 9·4 | 31·0 | 53·2 | |
| 9·4 | 39·5 | 6·6 | |
| 10·4 | 55·5 | 39·8 | |
| 9·4 | 54 31·5 | 13·1 | |
| 8·5 | 50·6 | 41·2 | 8·2 |
| 9·0 | 55 10·1 | 31·2 | 8·5 |
| 10·0 | 14·1 | 31·8 | |
| 8·2 | 17·1 | 27·2 | 7·8 G |
| 10·4 | 46·1 | 27·1 | |
| 10·4 | 56 0·1 | 3·2 | |
| 10·2 | 12·1 | 47·4 | |
| 8·6 | 26·6 | 45·6 | 8·5 |
| 10·2 | 34·6 | 15·1 | |
| 9·8 | 41·6 | 44·0 | |
| 10·4 | 42·6 | 27·5 | |
| 10·0 | 57 1·6 | 34·2 | |
| 6·9 | 15·1 | 38·0 | 5·8 GSc |
| 10·4 | 49·1 | 45·5 | |
| 8·6 | 52·1 | 24·2 | 8·0 |
| 8·5 | 58 10·1 | 57·3 | 8·5 |

## 10201—10260.

| mag. | $22^h$.–$23^h$. m s | −54° ′ | |
|---|---|---|---|
| 10·0 | 58 14·9 | 1·7 | |
| 10·2 | 40·6 | 20·4 | |
| 8·8 | 47·6 | 14·9 | |
| 10·4 | 59 15·1 | 44·0 | |
| 10·0 | 20·6 | 54·4 | |
| 9·2 | 0 17·1 | 18·0 | |
| 7·7 | 31·6 | 45·0 | 8·0 GS |
| 10·0 | 1 0·1 | 26·5 | |
| 9·8 | 10·6 | 27·6 | |
| 10·2 | 2 0·1 | 41·6 | |
| 9·5 | 3·6 | 10·1 | |
| 10·4 | 19·6 | 3·1 | |
| 8·6 | 23·4 | 1·8 | 8·0 G |
| 9·4 | 30·1 | 25·1 | |
| 9·8 | 35·6 | 47·9 | |
| 9·8 | 38·1 | 29·6 | |
| 8·8 | 40·6 | 50·1 | 9·0 |
| 10·4 | 3 10·1 | 2·0 | |
| 9·8 | 30·6 | 39·0 | |
| 9·8 | 4 39·6 | 15·3 | |
| 10·4 | 49·6 | 7·0 | |
| 9·8 | 59·6 | 18·9 | |
| 10·4 | 5 3·1 | 40·4 | |
| 10·4 | 9·1 | 48·3 | |
| 7·2 | 40·1 | 52·0 | 8·0 GSt |
| 8·5 | 49·8 | 58·0 | 8·5 GS |
| 10·2 | 56·6 | 31·0 | |
| 10·4 | 59·1 | 40·0 | |
| 9·4 | 6 14·6 | 32·0 | |
| 10·4 | 35·1 | 30·9 | |
| 8·6 | 46·6 | 37·6 | 8·5 |
| 10·2 | 47·1 | 50·8 | |
| 10·2 | 59·1 | 49·5 | |
| 10·4 | 7 11·1 | 40·5 | |
| 10·4 | 18·1 | 38·1 | |
| 10·2 | 30·6 | 2·0 | |
| 8·8 | 40·1 | 56·2 | |
| 10·4 | 8 5·1 | 3·5 | |
| 10·4 | 21·6 | 53·4 | |
| 10·2 | 24·6 | 17·4 | |
| 9·4 | 38·6 | 44·2 | |
| 10·0 | 39·6 | 26·4 | |
| 9·6 | 9 23·1 | 18·5 | |
| 9·4 | 51·1 | 0·5 | |
| 10·2 | 55·1 | 35·9 | |
| 10·4 | 56·1 | 38·0 | |
| 9·8 | 10 25·6 | 42·4 | |
| 8·6 | 29·1 | 56·6 | 9·5 |
| 9·4 | 56·1 | 15·5 | 9·5 |
| 9·4 | 11 6·1 | 1·8 | |
| 10·4 | 7·3 | 57·1 | |
| 10·2 | 22·3 | 2·5 | |
| 8·8 | 25·1 | 8·8 | 9·0 |
| 10·4 | 31·4 | 7·6 | |
| 10·2 | 50·1 | 13·9 | |
| 10·4 | 12 7·9 | 55·1 | |
| 8·2 | 15·8 | 6·2 | 7·5 G |
| 10·4 | 18·3 | 53·8 | |
| 10·4 | 29·7 | 44·6 | |
| 10·4 | 30·7 | 5·6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 22 | 0 | 100 | 7·2 |
| | 10 | 98 | 7·4 |
| | 20 | 97 | 7·6 |
| | 30 | 95 | 7·7 |
| | 40 | 93 | 7·9 |
| | 50 | 91 | 8·0 |
| 23 | 0 | 89 | 8·1 |
| | 10 | 87 | 8·2 |
| | 20 | 85 | 8·2 |



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| h | m | 25 prec. α + s | δ + ′ |
|---|---|---|---|
| 23 | 10 | 87 | 8·2 |
| | 20 | 85 | 8·2 |
| | 30 | 83 | 8·3 |
| | 40 | 81 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

**10261—10303.**

| mag. | 23h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·0 | 12 | 42·8 | 9·8 | |
| 10·4 | | 49·3 | 58·8 | |
| 10·2 | | 53·2 | 52·4 | |
| 10·2 | | 57·5 | 12·2 | |
| 10·0 | 13 | 7·2 | 10·5 | |
| 10·2 | | 21·2 | 47·5 | |
| 9·6 | | 35·2 | 19·1 | |
| 10·2 | | 35·8 | 38·3 | |
| 9·8 | | 41·2 | 32·0 | |
| 10·2 | | 45·7 | 54·1 | |
| 9·4 | | 50·7 | 39·1 | |
| 10·2 | 14 | 7·7 | 0·0 | |
| 10·0 | | 25·2 | 54·1 | |
| 10·2 | 15 | 0·2 | 7·7 | |
| 9·4 | | 12·7 | 51·5 | |
| 10·2 | | 15·4 | 29·8 | |
| 10·0 | | 42·2 | 44·9 | |
| 10·0 | 16 | 9·7 | 9·3 | |
| 10·2 | | 16·2 | 21·5 | |
| 6·8 | | 48·2 | 29·9 | 7·5 GSct |
| 6·4 | | 50·2 | 29·5 | 6·6 GScg |
| 9·2 | 17 | 22·2 | 42·7 | |
| 8·8 | | 40·2 | 25·9 | 8·5 G |
| 8·8 | 18 | 41·2 | 42·6 | |
| 9·4 | 20 | 4·4 | 58·4 | |
| 8·8 | | 37·2 | 32·7 | |
| 10·0 | | 44·7 | 42·1 | |
| 9·8 | | 55·2 | 11·3 | |
| 10·2 | 21 | 18·2 | 21·9 | |
| 10·2 | | 40·7 | 37·2 | |
| 9·8 | | 41·7 | 23·9 | |
| 9·4 | | 57·7 | 10·3 | |
| 9·1 | 22 | 12·2 | 51·7 | G |
| 8·1 | | 40·7 | 6·5 | 9·5 |
| 9·4 | | 52·7 | 6·5 | |
| 10·2 | 23 | 4·2 | 59·0 | |
| 10·2 | | 28·2 | 24·4 | |
| 10·0 | | 42·2 | 11·7 | |
| 10·2 | | 51·2 | 31·9 | |
| 10·0 | | 59·7 | 8·4 | |
| 8·6 | 24 | 18·7 | 41·0 | 8·8 |
| 9·0 | | 25·2 | 35·2 | |
| 9·1 | | 32·5 | 3·3 | |

**10304—10346.**

| mag. | 23h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 24 | 40·0 | 52·7 | |
| 7·8 | | 46·5 | 27·3 | 8·0 GS |
| 10·2 | | 50·0 | 31·0 | |
| 9·4 | | 55·5 | 32·5 | |
| 9·6 | | 55·5 | 1·5 | |
| 9·6 | 26 | 35·5 | 47·2 | |
| 10·2 | | 40·0 | 21·8 | |
| 8·6 | | 44·5 | 20·7 | 8·8 |
| 10·2 | | 51·5 | 59·2 | |
| 9·4 | 27 | 47·5 | 43·8 | |
| 10·2 | 28 | 2·5 | 45·2 | |
| 10·2 | | 17·5 | 7·4 | |
| 10·0 | | 28·0 | 8·9 | |
| 9·8 | | 31·5 | 10·1 | |
| 10·2 | | 52·0 | 59·8 | |
| 10·0 | | 53·5 | 34·2 | |
| 9·8 | | 58·5 | 22·1 | |
| 8·6 | 29 | 3·0 | 22·5 | |
| 9·2 | | 40·0 | 44·5 | |
| 10·2 | 30 | 33·5 | 10·0 | |
| 9·1 | | 45·0 | 52·8 | 8·7 G |
| 10·2 | 31 | 27·5 | 2·2 | |
| 10·0 | | 42·5 | 35·4 | |
| 9·8 | | 56·5 | 18·8 | |
| 10·2 | 32 | 1·5 | 12·4 | |
| 10·0 | | 15·0 | 10·9 | |
| 9·0 | | 34·0 | 4·8 | |
| 9·0 | | 41·5 | 13·0 | |
| 9·2 | | 56·5 | 19·4 | |
| 9·6 | 33 | 56·5 | 8·4 | |
| 9·8 | 35 | 14·5 | 14·0 | |
| 10·2 | | 21·5 | 1·7 | |
| 9·2 | | 22·5 | 3·5 | 9·0 |
| 10·2 | | 22·5 | 12·7 | |
| 8·0 | | 25·5 | 7·0 | 7·5 GS |
| 10·2 | 36 | 13·0 | 15·0 | |
| 9·4 | | 40·0 | 11·8 | |
| 9·4 | | 56·0 | 6·0 | |
| 10·2 | 37 | 2·5 | 3·9 | |
| 8·2 | | 21·5 | 54·0 | 8·5 |
| 9·8 | | 31·0 | 49·2 | |
| 9·4 | | 44·0 | 15·3 | |
| 9·2 | | 49·0 | 1·9 | |

**10347—10389.**

| mag. | 23h. m | s | −54° ′ | |
|---|---|---|---|---|
| 9·1 | 37 | 56·5 | 53·4 | |
| 9·1 | 38 | 21·5 | 41·0 | |
| 10·2 | | 24·5 | 29·1 | |
| 10·2 | | 25·0 | 54·1 | |
| 10·2 | | 51·5 | 7·5 | |
| 9·1 | | 52·5 | 10·6 | |
| 10·2 | 39 | 19·5 | 38·8 | |
| 9·2 | | 20·0 | 9·9 | |
| 8·8 | | 40·5 | 54·9 | |
| 10·2 | | 51·8 | 1·5 | |
| 10·2 | 40 | 3·0 | 2·7 | |
| 9·8 | | 24·5 | 11·6 | |
| 9·2 | | 58·0 | 7·2 | |
| 9·4 | 41 | 0·0 | 35·8 | |
| 10·2 | | 19·0 | 6·2 | |
| 10·2 | | 28·0 | 13·0 | |
| 10·2 | | 59·0 | 43·0 | |
| 9·1 | 42 | 6·5 | 29·7 | |
| 9·1 | | 11·0 | 18·1 | |
| 9·4 | | 25·5 | 39·4 | |
| 9·2 | | 39·0 | 39·8 | |
| 10·2 | | 49·7 | 0·1 | |
| 9·8 | 43 | 26·2 | 56·6 | |
| 9·4 | | 50·7 | 23·0 | 8·5 |
| 11·0 | | 54·5 | 40·1 | |
| 11·0 | 44 | 18·7 | 57·0 | |
| 11·0 | | 20·2 | 50·9 | |
| 11·0 | | 39·7 | 9·5 | |
| 8·8 | 45 | 1·2 | 46·6 | |
| 8·8 | | 2·9 | 35·3 | 8·2 G |
| 10·0 | | 12·2 | 31·7 | |
| 10·4 | | 19·7 | 54·6 | |
| 11·0 | | 35·2 | 31·1 | |
| 10·0 | | 42·0 | 58·5 | |
| 9·6 | | 45·7 | 27·8 | |
| 10·0 | | 59·7 | 12·4 | |
| 10·4 | 46 | 18·7 | 56·1 | |
| 10·4 | | 24·2 | 52·2 | |
| 10·0 | | 36·7 | 24·0 | |
| 8·3 | 48 | 16·7 | 35·4 | 8·0 G |
| 9·6 | | 19·2 | 36·2 | |
| 10·2 | | 26·2 | 18·7 | |
| 10·2 | | 29·7 | 19·2 | |

**10390—10431.**

| mag. | 23h. m | s | −54° ′ | |
|---|---|---|---|---|
| 10·2 | 49 | 4·2 | 20·0 | |
| 11·0 | | 4·2 | 18·0 | |
| 9·0 | | 7·2 | 44·6 | 8·5 G |
| 7·2 | | 11·7 | 30·9 | 7·5 GSg |
| 10·2 | | 23·7 | 21·3 | |
| 10·0 | | 56·7 | 3·1 | |
| 10·6 | 50 | 4·7 | 32·7 | |
| 10·4 | | 6·2 | 1·6 | |
| 11·0 | | 34·7 | 30·7 | |
| 10·4 | 51 | 21·7 | 30·8 | |
| 11·0 | | 23·7 | 25·7 | |
| 10·4 | | 27·7 | 37·3 | |
| 11·0 | | 51·7 | 30·5 | |
| 11·0 | | 59·7 | 6·1 | |
| 11·0 | 52 | 10·2 | 26·0 | |
| 9·4 | | 13·7 | 30·9 | |
| 9·2 | | 25·7 | 27·5 | |
| 10·6 | | 36·2 | 5·9 | |
| 10·2 | | 37·7 | 41·5 | |
| 10·4 | | 45·7 | 28·9 | |
| 11·0 | | 50·2 | 2·1 | |
| 11·0 | | 59·7 | 50·5 | |
| 9·8 | 53 | 2·4 | 2·5 | |
| 9·6 | 54 | 1·7 | 46·3 | |
| 11·0 | | 37·2 | 48·7 | |
| 11·0 | | 56·2 | 31·5 | |
| 11·0 | | 56·2 | 13·6 | |
| 11·0 | 55 | 16·2 | 18·6 | |
| 10·4 | | 43·7 | 27·0 | |
| 10·2 | | 44·2 | 43·4 | |
| 9·6 | 56 | 36·2 | 43·3 | |
| 11·0 | | 45·7 | 58·3 | |
| 9·0 | | 49·7 | 37·9 | G |
| 11·0 | | 56·2 | 55·9 | |
| 11·0 | 57 | 2·7 | 12·0 | |
| 11·0 | | 32·7 | 59·1 | |
| 8·6 | | 56·7 | 36·3 | 8·5 |
| 8·8 | 58 | 27·4 | 2·8 | |
| 11·0 | | 33·7 | 30·1 | |
| 10·2 | 59 | 41·2 | 29·4 | |
| 11·0 | | 46·9 | 41·9 | |
| 9·8 | | 56·2 | 5·1 | |



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# ZONE — 55°.

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 75 | 8·3 |
| | 20 | 73 | 8·3 |
| | 30 | 70 | 8·3 |
| | 40 | 68 | 8·2 |
| | 50 | 66 | 8·2 |

## 1—45.

| mag. | 0h. m | s | −55° ′ | |
|---|---|---|---|---|
| 11·0 | 0 | 13·3 | 19·8 | |
| 8·8 | | 32·7 | 51·3 | 8·5 |
| 11·0 | | 36·2 | 3·8 | |
| 9·8 | | 45·7 | 52·8 | |
| 10·3 | 1 | 2·2 | 9·0 | |
| 11·0 | | 10·2 | 48·7 | |
| 10·6 | | 14·2 | 20·0 | |
| 9·4 | | 20·7 | 5·0 | |
| 11·0 | | 38·2 | 8·6 | |
| 9·6 | 2 | 12·0 | 2·1 | |
| 10·3 | 3 | 13·7 | 42·7 | |
| 11·0 | | 22·7 | 17·3 | |
| 10·2 | | 51·7 | 44·6 | |
| 10·6 | | 58·2 | 58·0 | |
| 11·0 | 4 | 7·2 | 37·0 | |
| 8·6 | | 25·7 | 5·8 | 8·5 GS |
| 11·0 | | 54·7 | 47·2 | |
| 9·0 | 5 | 1·7 | 14·8 | 9·0 |
| 10·2 | | 7·2 | 11·8 | |
| 10·2 | | 21·2 | 21·2 | |
| 11·0 | | 25·7 | 27·0 | |
| 8·3 | | 46·2 | 26·8 | 8·0 GS |
| 11·0 | | 50·2 | 15·1 | |
| 8·8 | | 50·7 | 3·6 | 8·2 G |
| 9·8 | 6 | 11·7 | 25·6 | |
| 9·8 | | 32·2 | 11·3 | |
| 11·0 | | 33·7 | 54·0 | |
| 10·0 | | 34·7 | 35·6 | |
| 11·0 | | 58·2 | 0·6 | |
| 11·0 | 7 | 1·7 | 3·5 | |
| 11·0 | | 33·2 | 54·2 | |
| 11·0 | | 35·7 | 12·0 | |
| 11·0 | | 47·7 | 47·2 | |
| 10·4 | | 51·7 | 10·8 | |
| 7·2 | 8 | 1·7 | 45·8 | 6·5 GSc |
| 9·4 | | 31·2 | 27·0 | |
| 10·0 | | 32·7 | 5·0 | |
| 10·0 | 9 | 16·7 | 11·2 | |
| 10·4 | | 21·7 | 36·0 | |
| 11·0 | | 48·7 | 14·4 | |
| 11·0 | | 51·7 | 5·3 | |
| 10·0 | | 59·7 | 12·6 | |
| 11·0 | 10 | 0·2 | 31·0 | |
| 11·0 | | 2·2 | 53·2 | |
| 10·2 | | 6·2 | 29·8 | |

## 46—90.

| mag. | 0h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 10 | 36·2 | 6·2 | |
| 10·4 | | 42·2 | 44·8 | |
| 9·6 | | 44·2 | 39·0 | |
| 9·8 | | 50·2 | 9·0 | |
| 10·6 | 11 | 37·7 | 52·8 | |
| 11·0 | | 40·7 | 48·0 | |
| 10·4 | 12 | 31·7 | 7·6 | |
| 10·4 | 13 | 13·7 | 10·2 | |
| 9·8 | | 22·7 | 38·0 | |
| 11·0 | 14 | 0·2 | 31·9 | |
| 10·2 | | 14·7 | 38·2 | |
| 9·6 | | 28·2 | 30·3 | |
| 11·0 | | 35·9 | 59·0 | |
| 9·4 | | 44·4 | 23·0 | |
| 11·0 | | 51·7 | 25·7 | |
| 11·0 | | 57·7 | 47·5 | |
| 11·0 | 15 | 13·7 | 32·1 | |
| 9·4 | | 14·1 | 25·3 | |
| 8·2 | | 15·9 | 16·1 | 9·0 |
| 10·4 | | 27·7 | 23·0 | |
| 9·4 | | 29·9 | 18·1 | |
| 9·6 | | 53·7 | 22·6 | |
| 11·0 | 16 | 1·2 | 5·0 | |
| 10·4 | | 21·9 | 30·8 | |
| 10·2 | | 32·4 | 9·0 | |
| 10·2 | | 49·8 | 34·7 | |
| 10·2 | | 56·8 | 32·3 | |
| 9·4 | 17 | 37·5 | 33·1 | |
| 8·6 | | 38·5 | 13·9 | GS |
| 10·0 | | 40·0 | 41·4 | |
| 9·8 | | 44·5 | 13·8 | |
| 10·2 | | 52·0 | 36·3 | |
| 9·0 | | 54·0 | 56·9 | |
| 9·4 | | 59·3 | 59·6 | |
| 9·0 | 18 | 1·5 | 49·4 | |
| 6·8 | | 9·5 | 15·4 | GS |
| 9·6 | | 19·5 | 28·9 | |
| 9·8 | | 21·5 | 37·8 | |
| 9·9 | | 39·5 | 49·8 | |
| 9·0 | | 39·5 | 52·3 | |
| 10·2 | 19 | 12·0 | 1·0 | |
| 10·2 | | 21·0 | 35·3 | |
| 10·0 | | 24·0 | 3·4 | |
| 9·0 | | 55·5 | 22·3 | |
| 10·2 | 20 | 2·5 | 12·7 | |

## 91—135.

| mag. | 0h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 20 | 43·5 | 22·5 | |
| 10·0 | 21 | 47·5 | 3·1 | |
| 10·2 | 22 | 14·5 | 10·5 | |
| 8·0 | | 15·0 | 18·8 | GS |
| 10·2 | | 20·5 | 35·6 | |
| 9·9 | | 36·0 | 17·0 | |
| 10·2 | | 41·5 | 18·3 | |
| 9·8 | | 42·0 | 44·6 | |
| 7·8 | | 43·0 | 7·3 | GS |
| 9·8 | 23 | 2·5 | 4·6 | |
| 9·2 | | 47·5 | 43·0 | |
| 8·4 | | 52·0 | 26·2 | |
| 9·4 | | 57·3 | 57·8 | |
| 10·2 | 24 | 0·5 | 46·6 | |
| 10·2 | | 20·0 | 22·2 | |
| 9·4 | | 21·0 | 43·6 | G |
| 7·1 | | 44·0 | 39·7 | GS |
| 8·4 | 25 | 31·7 | 34·3 | G |
| 10·2 | 26 | 38·7 | 6·3 | |
| 10·2 | | 44·2 | 13·8 | |
| 10·2 | 27 | 19·2 | 47·0 | |
| 10·0 | | 27·7 | 22·7 | |
| 9·2 | | 27·7 | 6·0 | |
| 10·2 | 28 | 29·7 | 8·1 | |
| 9·2 | | 29·7 | 25·3 | |
| 9·4 | | 47·2 | 25·0 | |
| 6·5 | 29 | 42·2 | 30·4 | GSct |
| 8·2 | | 56·7 | 51·4 | |
| 8·8 | 30 | 5·2 | 33·6 | |
| 9·4 | | 9·7 | 47·1 | |
| 9·8 | | 11·7 | 56·6 | |
| 8·8 | | 15·7 | 8·6 | 9·5 |
| 8·8 | | 15·7 | 6·7 | |
| 9·0 | | 15·7 | 28·9 | |
| 8·8 | | 28·2 | 31·2 | |
| 9·8 | | 45·7 | 24·3 | |
| 9·6 | 31 | 7·2 | 34·6 | |
| 8·8 | | 19·7 | 10·0 | 9·5 |
| 10·0 | | 24·2 | 3·3 | |
| 7·2 | | 29·2 | 4·9 | 6·2 GSct |
| 9·4 | | 39·7 | 32·5 | |
| 9·2 | 32 | 14·7 | 16·5 | |
| 9·8 | | 19·7 | 4·6 | |
| 9·6 | | 29·0 | 57·4 | |
| 10·0 | | 35·2 | 45·2 | |

## 136—180.

| mag. | 0h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 32 | 52·7 | 8·2 | |
| 10·2 | | 58·7 | 26·0 | |
| 10·2 | 33 | 1·7 | 24·0 | |
| 10·0 | | 2·1 | 2·2 | |
| 9·4 | | 58·2 | 33·9 | |
| 8·4 | 34 | 20·2 | 16·9 | |
| 10·2 | | 28·7 | 43·0 | |
| 9·2 | 35 | 29·7 | 16·5 | |
| 9·6 | 36 | 11·4 | 19·8 | |
| 10·2 | | 32·4 | 46·8 | |
| 10·2 | 37 | 9·9 | 55·1 | |
| 10·2 | | 30·9 | 34·1 | |
| 9·9 | | 59·9 | 4·7 | |
| 8·4 | 39 | 50·5 | 1·2 | 8·5 GS |
| 9·7 | | 51·9 | 57·0 | |
| 10·0 | | 59·9 | 14·6 | |
| 10·0 | 40 | 6·9 | 51·0 | |
| 9·2 | | 43·4 | 33·3 | |
| 10·0 | | 44·9 | 2·1 | |
| 9·4 | | 47·9 | 49·7 | |
| 9·4 | | 55·9 | 50·5 | |
| 9·9 | 41 | 2·4 | 18·2 | |
| 10·2 | | 45·9 | 1·2 | |
| 9·4 | 42 | 9·7 | 57·2 | |
| 9·4 | | 34·9 | 40·0 | |
| 9·4 | | 39·7 | 59·8 | |
| 10·2 | | 41·9 | 42·9 | |
| 10·2 | 43 | 58·4 | 14·1 | |
| 9·0 | 44 | 11·9 | 16·6 | |
| 10·2 | | 34·4 | 32·1 | |
| 10·2 | | 40·9 | 44·4 | |
| 8·6 | 45 | 56·4 | 31·5 | |
| 10·2 | 46 | 38·9 | 45·3 | |
| 10·2 | | 49·1 | 55·9 | |
| 10·2 | | 56·1 | 35·2 | |
| 10·0 | 47 | 2·9 | 21·8 | |
| 10·2 | | 17·2 | 15·1 | |
| 10·0 | | 41·6 | 11·2 | |
| 9·6 | | 42·4 | 1·5 | |
| 9·2 | | 44·8 | 29·3 | |
| 9·5 | | 56·1 | 59·7 | |
| 9·3 | 48 | 0·8 | 21·2 | |
| 9·4 | | 14·6 | 33·7 | |
| 7·6 | | 25·8 | 16·2 | 7·0 GS |
| 10·4 | 49 | 17·8 | 43·9 | |



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25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 0 | 40 | 68 | 8·2 |
| | 50 | 66 | 8·2 |
| 1 | 0 | 64 | 8·1 |
| | 10 | 62 | 8·0 |
| | 20 | 60 | 7·9 |
| | 30 | 58 | 7·7 |
| | 40 | 56 | 7·6 |
| | 50 | 54 | 7·4 |
| 2 | 0 | 52 | 7·2 |
| | 10 | 51 | 7·0 |
| | 20 | 49 | 6·8 |

**181—240.**

| mag. | 0h.–1h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 49 | 38·3 | 30·0 | |
| 10·4 | | 59·3 | 49·1 | |
| 8·5 | 50 | 4·8 | 41·0 | 8·5 |
| 10·4 | | 25·3 | 31·7 | |
| 10·0 | | 32·8 | 6·0 | |
| 8·4 | 51 | 5·3 | 38·2 | 9·0 G |
| 9·1 | | 10·8 | 42·0 | |
| 10·4 | | 33·3 | 37·0 | |
| 9·6 | 52 | 8·8 | 56·0 | |
| 10·4 | | 10·8 | 6·0 | |
| 8·6 | | 32·3 | 55·3 | 8·5 |
| 10·4 | | 37·8 | 8·2 | |
| 10·4 | | 54·8 | 23·7 | |
| 9·3 | 53 | 10·8 | 1·1 | |
| 9·4 | | 38·8 | 47·8 | |
| 10·4 | | 40·8 | 46·2 | |
| 9·0 | | 47·3 | 36·6 | |
| 8·6 | 54 | 32·3 | 10·3 | 9·0 |
| 9·1 | | 52·3 | 21·8 | |
| 8·6 | 55 | 6·8 | 37·8 | |
| 10·2 | | 16·4 | 0·0 | |
| 8·8 | | 30·6 | 57·3 | 9·0 |
| 9·8 | | 42·8 | 31·8 | |
| 9·6 | 56 | 4·3 | 9·3 | |
| 9·6 | | 34·8 | 8·1 | |
| 10·4 | | 50·8 | 25·3 | |
| 10·0 | | 58·8 | 24·8 | |
| 9·2 | 57 | 17·8 | 54·6 | |
| 10·4 | | 19·3 | 3·1 | |
| 9·5 | | 20·6 | 40·3 | |
| 9·3 | | 22·8 | 9·1 | |
| 8·5 | | 31·3 | 35·2 | |
| 8·6 | | 50·8 | 37·2 | |
| 10·4 | | 53·3 | 50·6 | |
| 10·0 | 58 | 7·3 | 12·0 | |
| 10·0 | | 20·3 | 28·3 | |
| 10·4 | | 44·3 | 9·8 | |
| 8·6 | | 54·8 | 43·5 | 8·5 G |
| 10·4 | 59 | 0·8 | 6·9 | |
| 9·0 | | 1·3 | 32·9 | |
| 9·4 | | 8·8 | 27·8 | |
| 10·4 | | 11·3 | 40·7 | |
| 9·2 | | 11·8 | 40·0 | |
| 10·2 | | 20·3 | 48·2 | |
| 9·6 | | 31·3 | 33·4 | |
| 9·3 | | 36·3 | 12·4 | |
| 8·6 | | 40·3 | 43·5 | |
| 9·6 | | 55·8 | 42·6 | |
| 10·4 | 1 | 1·8 | 41·9 | |
| 8·8 | | 17·0 | 50·0 | |
| 9·2 | | 18·0 | 51·7 | |
| 9·2 | | 21·5 | 3·7 | |
| 9·5 | | 22·0 | 43·1 | |
| 10·4 | | 28·5 | 53·1 | |
| 10·4 | | 34·5 | 9·1 | |
| 9·6 | | 43·5 | 21·7 | |
| 9·6 | | 50·5 | 47·6 | |
| 10·2 | | 59·5 | 22·1 | |
| 10·4 | 2 | 51·0 | 33·8 | |
| 10·0 | 3 | 2·0 | 13·1 | |

**241—300.**

| mag. | 1h. m | s | −55° ′ | |
|---|---|---|---|---|
| 3·2 | 3 | 8·5 | 54·9 | 4·5 GSct |
| 10·4 | | 20·5 | 8·1 | |
| 8·8 | 4 | 0·5 | 18·9 | |
| 9·0 | | 3·5 | 59·5 | |
| 9·4 | 5 | 7·0 | 13·6 | |
| 10·0 | | 20·0 | 5·2 | |
| 9·5 | | 38·5 | 36·5 | |
| 9·3 | | 39·5 | 23·5 | |
| 9·4 | 6 | 5·0 | 38·4 | |
| 9·8 | | 11·5 | 12·3 | |
| 10·4 | | 18·0 | 36·3 | |
| 10·4 | | 32·5 | 51·6 | |
| 10·2 | | 43·5 | 15·8 | |
| 10·4 | | 52·0 | 54·0 | |
| 10·2 | 7 | 1·5 | 44·0 | |
| 9·8 | | 13·0 | 28·8 | |
| 10·2 | | 15·5 | 45·0 | |
| 10·4 | | 18·0 | 56·4 | |
| 10·4 | | 25·5 | 19·5 | |
| 10·4 | | 39·7 | 2·2 | |
| 9·2 | | 46·0 | 41·2 | |
| 9·8 | 8 | 0·5 | 49·5 | |
| 10·4 | | 2·5 | 15·3 | |
| 8·2 | | 44·5 | 54·3 | 8·5 G |
| 9·2 | 9 | 9·0 | 3·2 | |
| 10·4 | | 32·5 | 17·7 | |
| 10·0 | | 46·0 | 22·8 | |
| 9·4 | | 51·8 | 15·6 | |
| 9·6 | | 52·8 | 45·8 | |
| 9·4 | 10 | 20·3 | 3·0 | |
| 9·8 | | 32·8 | 53·7 | |
| 9·3 | | 40·3 | 12·2 | |
| 9·6 | 11 | 37·3 | 19·6 | |
| 8·6 | 12 | 46·8 | 56·6 | |
| 10·4 | | 54·8 | 51·0 | |
| 9·3 | 13 | 35·5 | 2·3 | |
| 9·4 | | 42·3 | 44·9 | |
| 9·6 | | 45·8 | 8·6 | |
| 9·2 | | 50·3 | 5·6 | |
| 8·8 | | 50·3 | 34·2 | |
| 9·6 | 14 | 22·8 | 4·2 | |
| 10·4 | | 27·3 | 43·1 | |
| 10·4 | | 46·3 | 45·7 | |
| 9·6 | 15 | 10·1 | 57·2 | |
| 10·4 | | 20·3 | 22·5 | |
| 9·8 | | 41·3 | 29·8 | |
| 9·6 | | 50·3 | 17·6 | |
| 8·4 | 16 | 0·3 | 36·8 | 7·5 G |
| 9·6 | | 8·8 | 44·8 | |
| 10·2 | | 12·3 | 25·1 | |
| 10·2 | | 12·3 | 13·6 | |
| 9·0 | | 38·3 | 22·6 | |
| 8·8 | | 40·3 | 6·8 | 9·0 |
| 9·6 | | 52·3 | 18·0 | |
| 10·2 | | 54·3 | 57·0 | |
| 8·5 | 17 | 2·3 | 53·8 | |
| 8·5 | | 21·8 | 12·3 | |
| 9·3 | | 40·1 | 0·7 | |
| 9·6 | | 52·3 | 31·0 | |
| 8·8 | | 53·3 | 43·4 | 8·5 |

**301—360.**

| mag. | 1h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 18 | 0·3 | 23·6 | |
| 9·2 | | 2·8 | 21·4 | |
| 10·4 | | 11·3 | 52·7 | |
| 8·6 | | 32·3 | 1·5 | |
| 9·1 | | 56·9 | 54·2 | |
| 9·8 | 19 | 33·8 | 55·6 | |
| 10·0 | 20 | 0·8 | 34·5 | |
| 9·2 | | 10·3 | 45·1 | |
| 9·1 | | 29·3 | 44·1 | |
| 10·4 | | 49·3 | 17·6 | |
| 10·0 | | 53·1 | 36·8 | |
| 10·4 | | 59·8 | 8·4 | |
| 9·4 | 21 | 42·0 | 34·6 | |
| 9·6 | | 46·0 | 57·9 | |
| 8·0 | 22 | 7·5 | 43·9 | 8·0 GSt |
| 10·0 | | 38·5 | 53·4 | |
| 10·0 | 23 | 41·9 | 25·8 | |
| 9·4 | 24 | 7·5 | 2·9 | |
| 10·0 | | 34·5 | 4·3 | |
| 10·0 | | 57·0 | 12·3 | |
| 9·0 | 27 | 42·5 | 23·0 | |
| 9·6 | 29 | 10·5 | 35·0 | |
| 9·8 | 30 | 2·5 | 3·9 | |
| 10·0 | | 38·0 | 54·1 | |
| 10·0 | | 38·7 | 12·7 | |
| 7·9 | | 51·7 | 53·0 | 7·0 GS |
| 8·8 | 31 | 3·7 | 44·3 | 9·5 |
| 9·4 | | 11·2 | 40·9 | |
| 10·0 | | 18·7 | 55·7 | |
| 9·6 | | 23·7 | 33·2 | |
| 9·6 | 32 | 13·2 | 11·8 | |
| 9·4 | | 20·7 | 7·1 | |
| 9·8 | 33 | 8·2 | 57·1 | |
| 9·2 | | 36·2 | 12·1 | |
| 9·2 | 34 | 8·2 | 58·2 | |
| 8·9 | | 22·2 | 53·1 | |
| 8·3 | 35 | 3·7 | 47·1 | GS |
| 9·8 | 36 | 40·5 | 58·1 | |
| 7·8 | 38 | 5·7 | 19·6 | 8·5 G |
| 8·4 | | 19·7 | 29·1 | 9·0 G |
| 9·4 | | 34·7 | 35·7 | |
| 10·0 | 40 | 5·7 | 5·5 | |
| 9·8 | | 51·2 | 4·1 | |
| 9·8 | 41 | 15·2 | 52·3 | |
| 9·8 | | 26·7 | 5·7 | |
| 10·0 | | 27·2 | 36·3 | |
| 10·0 | 43 | 0·7 | 5·6 | |
| 9·2 | | 38·2 | 24·5 | 9·5 |
| 9·8 | 44 | 20·2 | 11·3 | |
| 9·6 | | 21·7 | 24·9 | |
| 8·3 | 45 | 28·5 | 5·1 | 7·9 GSt |
| 10·0 | | 33·2 | 2·4 | |
| 10·0 | 46 | 30·0 | 17·4 | |
| 8·5 | | 32·0 | 49·8 | 8·5 |
| 9·8 | | 50·0 | 20·2 | |
| 10·0 | 47 | 13·3 | 1·8 | |
| 10·0 | | 18·0 | 15·7 | |
| 10·0 | | 23·0 | 56·1 | |
| 10·0 | | 55·5 | 49·6 | |
| 10·0 | 48 | 5·0 | 55·8 | |

**361—420.**

| mag. | 1h.–2h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 48 | 6·5 | 39·4 | |
| 9·8 | | 31·7 | 40·9 | |
| 9·6 | | 34·7 | 6·0 | |
| 10·0 | 49 | 1·2 | 39·9 | |
| 8·3 | | 18·7 | 22·2 | 8·0 G |
| 10·0 | | 54·4 | 55·9 | |
| 7·0 | 51 | 19·3 | 41·1 | 7·0 GS |
| 10·0 | | 20·7 | 13·9 | |
| 8·9 | | 37·2 | 1·0 | 9·0 |
| 9·6 | | 54·7 | 20·1 | |
| 9·4 | 52 | 30·7 | 14·0 | |
| 8·6 | | 40·7 | 45·1 | 9·5 |
| 9·6 | 53 | 9·9 | 19·3 | |
| 10·0 | | 27·9 | 23·6 | |
| 10·0 | | 33·1 | 57·2 | |
| 10·0 | | 46·9 | 59·4 | |
| 8·3 | 55 | 39·9 | 1·8 | 8·5 |
| 7·1 | | 50·9 | 37·1 | 7·0 GS |
| 9·1 | 56 | 26·4 | 50·8 | 8·0 G |
| 7·8 | | 49·9 | 44·9 | 7·5 GS |
| 10·0 | 57 | 45·9 | 45·7 | |
| 10·0 | 58 | 20·4 | 54·6 | |
| 9·4 | 59 | 30·4 | 13·9 | |
| 10·0 | | 40·9 | 49·2 | |
| 6·9 | 0 | 11·4 | 28·7 | 6·5 GS |
| 8·8 | 1 | 4·9 | 38·0 | |
| 9·6 | | 49·9 | 37·1 | |
| 7·4 | 2 | 9·4 | 40·8 | 7·0 GSct |
| 9·9 | | 11·9 | 19·0 | |
| 8·7 | | 12·4 | 31·2 | 8·5 |
| 9·0 | | 48·4 | 44·8 | 9·0 |
| 9·6 | 3 | 59·9 | 40·1 | |
| 8·7 | 4 | 4·4 | 26·6 | |
| 9·0 | | 28·9 | 4·4 | 9·5 |
| 9·4 | | 55·9 | 6·2 | 9·0 |
| 10·0 | 5 | 14·9 | 48·1 | |
| 9·8 | | 44·9 | 45·1 | |
| 9·6 | | 49·4 | 6·1 | |
| 8·7 | | 49·9 | 43·6 | |
| 8·7 | 6 | 1·9 | 15·2 | 9·5 |
| 9·4 | 7 | 17·4 | 39·6 | |
| 9·4 | | 45·4 | 57·3 | |
| 9·9 | 9 | 17·4 | 21·7 | |
| 8·8 | 10 | 37·9 | 2·1 | 9·0 |
| 10·0 | | 48·6 | 1·0 | |
| 10·0 | 11 | 29·9 | 41·8 | |
| 7·6 | | 40·4 | 51·6 | 8·0 GS |
| 9·9 | 12 | 18·4 | 32·2 | |
| 9·4 | | 23·9 | 44·6 | |
| 10·0 | | 42·8 | 42·9 | |
| 9·8 | | 49·9 | 53·8 | |
| 9·0 | 13 | 16·4 | 8·2 | |
| 9·8 | 14 | 6·4 | 36·4 | |
| 9·4 | | 9·4 | 17·4 | |
| 8·6 | | 32·4 | 26·1 | 8·8 G |
| 9·8 | 15 | 15·4 | 52·5 | |
| 8·1 | | 31·9 | 35·5 | 8·0 G |
| 9·6 | 16 | 14·9 | 12·6 | |
| 9·8 | 17 | 59·9 | 2·5 | |
| 9·2 | 18 | 4·9 | 48·5 | |



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## 421—480.

| mag. | 2h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.6 | 18 | 18.4 | 19.1 | |
| 8.8 | | 29.9 | 20.8 | |
| 8.6 | 19 | 0.4 | 5.9 | GS |
| 8.0 | | 31.4 | 6.6 | GS |
| 9.5 | | 32.9 | 24.0 | |
| 9.6 | | 39.9 | 40.4 | |
| 9.9 | | 46.9 | 8.6 | |
| 9.1 | 20 | 19.9 | 28.9 | G |
| 9.8 | | 56.4 | 2.4 | |
| 9.4 | 21 | 11.4 | 44.7 | G |
| 10.0 | 22 | 37.9 | 13.9 | |
| 8.8 | | 40.4 | 6.0 | 9.5 G |
| 9.4 | 23 | 14.9 | 17.4 | |
| 10.0 | | 15.9 | 1.6 | |
| 9.8 | 24 | 20.4 | 56.6 | 9.5 |
| 10.3 | 25 | 0.4 | 2.1 | |
| 10.0 | 28 | 40.4 | 53.7 | |
| 9.2 | 29 | 38.4 | 26.7 | |
| 8.9 | | 46.4 | 28.9 | |
| 10.3 | 32 | 23.4 | 11.2 | |
| 9.4 | | 57.9 | 10.0 | |
| 9.2 | 33 | 21.4 | 44.4 | |
| 9.6 | | 48.4 | 39.0 | |
| 8.3 | 35 | 2.9 | 22.8 | 9.0 GSg |
| 7.5 | | 3.4 | 22.5 | 7.8 GSg |
| 6.1 | 36 | 46.2 | 5.2 | 5.2 GSct |
| 9.6 | 37 | 0.2 | 8.1 | |
| 10.0 | | 3.2 | 2.9 | |
| 10.0 | | 8.7 | 49.1 | |
| 9.6 | | 35.6 | 59.2 | |
| 9.0 | | 43.7 | 24.2 | 9.0 |
| 9.8 | 39 | 1.7 | 3.5 | |
| 10.3 | | 21.2 | 4.8 | |
| 8.8 | 40 | 1.9 | 19.3 | 9.0 G |
| 9.4 | | 17.9 | 29.1 | |
| 10.3 | | 37.2 | 56.1 | |
| 10.3 | | 37.4 | 28.8 | |
| 9.8 | 41 | 52.2 | 58.1 | |
| 9.4 | 42 | 0.4 | 2.6 | |
| 9.4 | | 35.7 | 59.0 | |
| 9.2 | | 45.2 | 33.2 | |
| 9.2 | | 47.1 | 58.7 | 9.5 G |
| 9.6 | 43 | 9.4 | 2.9 | |
| 9.4 | | 43.1 | 59.1 | |
| 9.0 | 44 | 5.2 | 47.3 | 9.5 |
| 10.3 | 45 | 40.2 | 22.0 | |
| 8.7 | 46 | 13.2 | 39.1 | 8.5 GS |
| 10.2 | | 21.2 | 15.9 | |
| 9.6 | | 40.2 | 58.9 | |
| 8.3 | 47 | 40.2 | 35.4 | 8.5 GS |
| 9.8 | 49 | 5.2 | 58.1 | |
| 9.4 | 51 | 31.9 | 50.2 | |
| 9.4 | 52 | 44.9 | 44.9 | |
| 9.2 | | 54.9 | 8.5 | |
| 9.6 | 53 | 14.4 | 28.9 | |
| 7.2 | | 59.9 | 31.0 | 6.8 GSct |
| 9.6 | 54 | 9.9 | 6.9 | |
| 8.8 | | 42.9 | 44.1 | 9.0 |
| 10.8 | 55 | 11.5 | 18.4 | |
| 11.0 | | 39.5 | 49.6 | |

## 481—540.

| mag. | 2h.—3h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.6 | 55 | 50.5 | 54.8 | |
| 8.7 | 59 | 1.2 | 27.5 | 8.8 GS |
| 10.8 | | 10.2 | 32.4 | |
| 10.2 | | 17.7 | 33.0 | |
| 10.3 | | 49.7 | 58.3 | |
| 10.6 | 0 | 5.2 | 47.3 | |
| 10.6 | | 43.2 | 54.1 | |
| 10.2 | 1 | 9.7 | 24.1 | |
| 11.0 | | 29.2 | 46.0 | |
| 11.0 | 3 | 18.2 | 39.0 | |
| 10.3 | 4 | 20.2 | 12.1 | |
| 10.3 | | 30.7 | 34.2 | |
| 10.2 | 5 | 31.7 | 26.9 | |
| 9.0 | 6 | 13.7 | 29.9 | 9.5 |
| 8.4 | | 21.8 | 57.8 | 8.2 GSt |
| 11.0 | | 34.2 | 43.4 | |
| 11.0 | | 38.7 | 53.3 | |
| 9.2 | 7 | 27.7 | 29.8 | 9.5 |
| 8.9 | | 34.2 | 38.0 | 9.5 |
| 8.1 | | 40.2 | 21.5 | 9.2 |
| neb. | 8 | 50.2 | 41.1 | |
| 8.8 | 9 | 10.7 | 38.9 | 9.2 G |
| 11.0 | | 30.9 | 23.9 | |
| 8.6 | 11 | 9.5 | 42.5 | 9.5 |
| 9.0 | | 48.5 | 43.2 | 9.5 |
| 8.8 | 12 | 2.0 | 5.3 | 9.2 G |
| 11.0 | | 15.0 | 15.3 | |
| 11.0 | | 35.5 | 25.6 | |
| 11.0 | 13 | 33.0 | 44.4 | |
| 10.8 | | 41.0 | 9.6 | |
| 10.6 | | 50.0 | 45.7 | |
| 8.9 | 14 | 18.2 | 56.4 | 9.0 G |
| 10.3 | | 41.0 | 42.4 | |
| 10.0 | 15 | 8.5 | 38.0 | |
| 9.4 | 16 | 48.7 | 0.0 | 9.5 G |
| 10.8 | 17 | 39.5 | 8.9 | |
| 9.8 | 18 | 3.0 | 26.9 | |
| 10.2 | | 32.0 | 51.6 | |
| 8.7 | | 58.5 | 8.1 | 8.5 G |
| 10.3 | 19 | 49.5 | 27.7 | |
| 9.6 | 20 | 9.5 | 42.0 | |
| 10.8 | | 18.5 | 30.9 | |
| 10.6 | 21 | 39.0 | 45.9 | |
| 9.0 | 22 | 44.9 | 2.0 | 10.0 G |
| 8.7 | 23 | 2.0 | 19.7 | 8.2 GS |
| 9.6 | | 5.0 | 50.7 | |
| 8.9 | | 32.5 | 54.2 | 9.0 |
| 9.4 | 24 | 18.0 | 13.0 | 9.0 G |
| 10.6 | | 19.5 | 18.4 | |
| 9.6 | | 20.0 | 50.8 | |
| 10.0 | 25 | 15.0 | 25.7 | |
| 10.8 | | 34.0 | 35.2 | |
| 9.0 | 26 | 14.0 | 12.7 | 9.0 Gg |
| 8.0 | 27 | 6.0 | 14.2 | 8.0 GSg |
| 10.2 | | 16.5 | 42.4 | |
| 10.8 | | 55.7 | 11.2 | |
| 7.7 | 28 | 4.0 | 40.5 | 7.0 GS |
| 9.9 | | 17.3 | 33.1 | |
| 10.2 | 29 | 8.5 | 51.6 | |
| 10.2 | | 10.0 | 48.9 | |

## 541—600.

| mag. | 3h.—4h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8.6 | 29 | 25.0 | 18.7 | 9.2 |
| 10.2 | | 35.2 | 27.2 | |
| 9.4 | | 47.5 | 15.4 | |
| 9.0 | 31 | 0.0 | 2.0 | 8.8 G |
| 10.0 | | 22.5 | 23.6 | |
| 9.4 | 32 | 0.0 | 36.8 | |
| 10.2 | | 56.2 | 26.4 | |
| 9.2 | 33 | 22.0 | 33.6 | |
| 9.4 | | 47.0 | 21.7 | |
| 9.0 | 34 | 30.0 | 36.2 | |
| 9.1 | | 38.0 | 48.2 | 8.0 G |
| 10.0 | 35 | 30.5 | 29.9 | |
| 10.2 | | 40.2 | 5.7 | |
| 10.0 | 36 | 4.0 | 39.6 | |
| 10.2 | | 10.0 | 52.6 | |
| 10.2 | | 30.0 | 48.0 | |
| 8.8 | | 42.5 | 47.7 | |
| 7.8 | | 58.0 | 57.0 | 7.5 GS |
| 10.2 | 37 | 31.5 | 42.9 | |
| 8.6 | | 37.0 | 27.7 | 8.5 |
| 8.4 | 39 | 20.0 | 51.1 | |
| 10.2 | | 30.0 | 23.8 | |
| 8.8 | 40 | 5.5 | 5.9 | 8.8 G |
| 8.8 | 41 | 0.0 | 17.7 | 9.0 |
| 9.6 | | 6.0 | 27.2 | |
| 8.8 | 42 | 3.5 | 23.0 | |
| 9.0 | 43 | 18.0 | 3.9 | 9.5 G |
| 10.2 | 45 | 43.2 | 0.4 | |
| 7.8 | | 47.5 | 22.8 | 7.5 GS |
| 8.8 | 46 | 31.5 | 43.7 | |
| 9.8 | | 41.5 | 51.5 | |
| 8.6 | 48 | 10.5 | 51.6 | 9.0 G |
| 9.4 | 49 | 10.0 | 26.7 | 9.5 |
| 9.4 | | 28.0 | 38.6 | |
| 10.0 | | 31.5 | 57.8 | |
| 9.1 | | 49.5 | 53.8 | |
| 7.2 | 50 | 20.5 | 13.2 | GS |
| 9.4 | | 21.0 | 9.8 | |
| 9.6 | 51 | 24.5 | 16.1 | |
| 10.2 | 52 | 10.0 | 52.8 | |
| 10.0 | | 31.5 | 36.9 | |
| 9.0 | | 40.5 | 0.1 | |
| 9.8 | | 50.5 | 22.9 | |
| 10.0 | 53 | 53.5 | 49.8 | |
| 9.4 | 54 | 10.0 | 15.2 | |
| 9.2 | | 16.0 | 27.0 | |
| 9.4 | 55 | 6.5 | 28.4 | |
| 10.0 | | 18.0 | 15.7 | |
| 8.8 | 56 | 1.5 | 11.7 | |
| 9.9 | | 20.0 | 21.0 | |
| 9.4 | 57 | 0.0 | 23.9 | |
| 9.6 | | 6.0 | 42.8 | |
| 9.8 | 58 | 29.1 | 48.5 | |
| 8.9 | 59 | 39.6 | 5.6 | 8.5 |
| 9.9 | | 51.1 | 26.9 | |
| 8.8 | 0 | 8.6 | 56.8 | 8.5 G |
| 9.9 | | 16.6 | 29.6 | |
| 7.6 | 1 | 0.8 | 44.4 | 8.0 GS |
| 9.6 | | 59.6 | 12.7 | |
| 9.4 | 2 | 50.6 | 48.8 | |

## 601—660.

| mag. | 4h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.9 | 3 | 1.6 | 48.0 | |
| 8.6 | | 25.6 | 34.8 | |
| 9.9 | | 38.6 | 43.6 | |
| 9.4 | 5 | 4.1 | 43.8 | |
| 9.4 | 6 | 14.6 | 21.7 | |
| 9.6 | 7 | 9.1 | 9.8 | 9.5 |
| 9.2 | | 17.6 | 6.7 | 9.5 |
| 9.4 | | 19.1 | 36.4 | |
| 9.4 | 9 | 0.1 | 14.2 | |
| 9.4 | | 31.6 | 10.6 | |
| 9.7 | | 31.7 | 57.8 | |
| 9.6 | 10 | 9.6 | 36.3 | |
| 9.0 | | 22.6 | 48.7 | 9.0 |
| 9.4 | | 55.1 | 38.1 | |
| 9.4 | 11 | 10.6 | 53.1 | |
| 8.8 | | 32.6 | 1.6 | 8.5 |
| 9.8 | 12 | 22.5 | 9.5 | |
| 9.2 | | 26.5 | 10.6 | 9.0 |
| 9.8 | | 34.5 | 13.3 | |
| 8.9 | 13 | 7.0 | 57.3 | 8.5 G |
| 9.4 | | 9.0 | 26.1 | |
| 9.9 | | 38.5 | 42.2 | |
| 9.6 | 14 | 20.0 | 32.7 | |
| 9.8 | | 20.5 | 49.2 | |
| 9.4 | | 58.0 | 35.0 | |
| 8.8 | 15 | 13.0 | 36.8 | |
| 9.8 | | 49.0 | 31.2 | |
| 9.8 | | 51.5 | 30.9 | |
| 8.9 | 16 | 9.5 | 15.8 | |
| 9.8 | | 23.2 | 1.4 | |
| 8.3 | | 40.0 | 11.4 | 8.5 |
| 9.9 | 17 | 0.0 | 56.4 | |
| 9.7 | | 8.8 | 58.9 | |
| 9.2 | | 34.0 | 24.6 | |
| 9.9 | 18 | 6.5 | 56.9 | |
| 8.4 | 19 | 49.5 | 23.2 | 8.5 GS |
| 9.6 | 20 | 19.0 | 36.0 | |
| 9.6 | | 20.5 | 43.2 | |
| 9.2 | | 27.0 | 38.0 | |
| 9.7 | | 38.0 | 34.1 | |
| 9.4 | 21 | 19.5 | 36.3 | |
| 9.0 | | 21.5 | 58.8 | |
| 9.4 | | 59.5 | 23.6 | |
| 9.2 | 22 | 20.0 | 27.2 | |
| 9.0 | | 43.5 | 13.1 | |
| 9.2 | | 45.0 | 12.2 | |
| 9.2 | 23 | 10.0 | 23.1 | |
| 9.2 | | 14.5 | 8.3 | |
| 9.8 | | 17.5 | 15.4 | |
| 8.8 | | 53.5 | 29.3 | 8.5 GS |
| 8.8 | | 55.5 | 42.1 | |
| 9.7 | 24 | 2.8 | 39.1 | |
| 9.4 | 26 | 10.8 | 40.4 | |
| 9.9 | | 19.8 | 16.8 | |
| 9.6 | | 34.8 | 30.9 | |
| 9.8 | | 53.8 | 8.8 | |
| 9.2 | 27 | 20.3 | 47.4 | |
| 9.7 | 28 | 59.3 | 29.1 | |
| 9.6 | 29 | 29.8 | 27.2 | |
| 9.8 | | 53.8 | 52.6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 2 | 10 | 51 | 7.0 |
| | 20 | 49 | 6.8 |
| | 30 | 47 | 6.6 |
| | 40 | 46 | 6.4 |
| | 50 | 44 | 6.2 |
| 3 | 0 | 42 | 5.9 |
| | 10 | 41 | 5.6 |
| | 20 | 40 | 5.4 |
| | 30 | 38 | 5.1 |
| | 40 | 37 | 4.8 |
| | 50 | 36 | 4.5 |
| 4 | 0 | 35 | 4.2 |
| | 10 | 34 | 3.9 |
| | 20 | 33 | 3.5 |
| | 30 | 32 | 3.2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 30 | 32 | 3·2 |
| | 40 | 31 | 2·9 |
| | 50 | 30 | 2·5 |
| 5 | 0 | 30 | 2·2 |
| | 10 | 29 | 1·8 |
| | 20 | 29 | 1·5 |
| | 30 | 29 | 1·1 |
| | 40 | 28 | 0·7 |
| | 50 | 28 | 0·4 |
| 6 | 0 | 28 | 0·0 |

**661—720.**

| mag. | $4^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 30 | 1·3 | 31·8 | |
| 8·1 | | 6·3 | 51·9 | 7·5 GS |
| 4·1 | 31 | 18·8 | 18·2 | 3·0 GSgtλ |
| 8·6 | | 26·8 | 18·6 | |
| 8·6 | | 34·8 | 37·0 | 9·5 |
| 9·2 | 32 | 1·3 | 17·6 | |
| 9·9 | | 3·8 | 39·2 | |
| 9·4 | | 7·3 | 15·1 | |
| 9·7 | | 18·3 | 49·7 | |
| 9·4 | | 29·8 | 26·0 | |
| 7·7 | | 46·3 | 8·9 | 8·0 GS |
| 9·0 | | 50·4 | 6·6 | 9·5 |
| 9·2 | | 55·9 | 5·6 | |
| 9·7 | 33 | 31·4 | 15·0 | |
| 9·7 | | 37·9 | 47·2 | |
| 9·1 | | 59·9 | 9·7 | |
| 9·2 | 34 | 8·4 | 47·6 | |
| 9·2 | | 17·4 | 36·0 | |
| 8·6 | | 25·9 | 6·8 | 9·5 |
| 9·3 | | 56·3 | 58·0 | |
| 9·7 | 35 | 18·9 | 34·4 | |
| 9·1 | 36 | 42·4 | 58·6 | |
| 8·8 | 37 | 28·9 | 6·6 | |
| 9·0 | | 37·4 | 19·2 | |
| 8·1 | 39 | 19·1 | 2·2 | 8·0 GS |
| 9·2 | | 49·4 | 27·0 | |
| 8·9 | 40 | 34·6 | 2·2 | |
| 9·1 | 42 | 21·9 | 26·8 | |
| 9·2 | | 38·9 | 52·0 | |
| 9·1 | 43 | 41·4 | 48·8 | |
| 8·2 | | 50·4 | 5·5 | 8·5 |
| 9·4 | 44 | 16·9 | 4·0 | |
| 9·1 | 46 | 9·8 | 5·3 | |
| 9·0 | 47 | 31·8 | 13·6 | |
| 9·7 | 48 | 0·3 | 50·6 | |
| 9·2 | | 57·3 | 23·5 | |
| 8·7 | 49 | 13·3 | 49·5 | 9·0 G |
| 9·7 | | 22·8 | 29·0 | |
| 9·7 | | 38·3 | 16·0 | |
| 9·2 | | 39·8 | 21·0 | |
| 9·4 | | 47·4 | 29·9 | |
| 7·5 | | 59·4 | 54·2 | 8·0 GS |
| 9·7 | 50 | 29·9 | 23·0 | |
| 9·2 | 51 | 18·4 | 33·2 | |
| 9·4 | | 18·6 | 59·0 | |
| 9·6 | | 31·9 | 59·0 | |
| 9·3 | | 57·9 | 18·4 | |
| 9·2 | 52 | 29·9 | 30·0 | |
| 9·7 | | 30·9 | 17·0 | |
| 9·4 | | 37·6 | 34·1 | |
| 9·1 | 53 | 2·6 | 26·0 | |
| 9·6 | | 50·6 | 3·7 | |
| 9·2 | 54 | 9·6 | 0·4 | |
| 9·1 | | 20·3 | 58·2 | |
| 8·9 | | 21·6 | 24·0 | |
| 8·8 | | 31·6 | 20·0 | |
| 8·0 | | 37·6 | 48·2 | 8·0 G |
| 9·2 | | 51·1 | 21·5 | |
| 9·6 | 55 | 10·1 | 14·0 | |
| 9·6 | | 11·6 | 3·4 | |

**721—780.**

| mag. | $4^h$–$5^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 8·7 | 55 | 15·1 | 54·4 | |
| 8·5 | | 20·1 | 42·1 | 8·5 |
| 8·7 | 56 | 1·6 | 39·6 | 8·5 G |
| 9·2 | 57 | 42·5 | 13·3 | |
| 9·7 | 58 | 14·0 | 12·8 | |
| 9·7 | | 19·0 | 18·8 | |
| 9·1 | 59 | 1·2 | 0·0 | 8·5 |
| 9·6 | | 37·5 | 37·2 | |
| 9·6 | 0 | 4·5 | 21·9 | |
| 9·0 | | 14·5 | 50·9 | 9·0 |
| 8·7 | | 22·7 | 58·4 | 9·0 |
| 9·4 | 1 | 1·5 | 43·8 | |
| 9·6 | | 22·0 | 29·4 | |
| 9·4 | 2 | 11·1 | 48·9 | |
| 8·7 | | 12·1 | 6·5 | |
| 8·7 | | 13·1 | 40·2 | GS |
| 9·7 | | 28·1 | 53·2 | |
| 8·6 | | 33·6 | 31·4 | GS |
| 7·9 | | 36·4 | 37·1 | GS |
| 9·6 | 4 | 6·6 | 40·3 | |
| 9·7 | | 39·0 | 26·7 | |
| 9·0 | | 39·0 | 56·7 | 8·5 |
| 9·3 | | 59·6 | 55·6 | |
| 7·5 | 5 | 3·7 | 9·1 | 7·5 GSct |
| 9·6 | | 38·4 | 42·9 | |
| 9·2 | 6 | 8·4 | 58·9 | |
| 9·4 | | 9·4 | 21·3 | G |
| 9·0 | | 18·9 | 44·2 | |
| 8·6 | | 29·4 | 9·2 | 9·5 |
| 10·0 | | 37·4 | 42·1 | |
| 10·0 | | 47·9 | 43·0 | |
| 9·6 | 7 | 29·4 | 53·7 | |
| 9·4 | | 38·6 | 43·0 | |
| 9·4 | | 50·6 | 48·9 | |
| 9·4 | 8 | 10·6 | 14·6 | |
| 8·4 | | 19·1 | 40·4 | 9·0 |
| 10·0 | | 20·1 | 19·8 | |
| 10·0 | | 59·6 | 27·6 | |
| 10·0 | | 59·6 | 27·8 | |
| 8·9 | 9 | 5·6 | 55·9 | |
| 9·2 | | 17·1 | 10·0 | |
| 10·0 | | 24·6 | 34·8 | |
| 8·8 | | 38·4 | 58·5 | |
| 10·0 | | 52·6 | 40·9 | |
| 9·0 | 10 | 18·1 | 44·8 | |
| 7·6 | 11 | 1·6 | 42·6 | 7·5 GSt |
| 10·0 | | 38·6 | 15·9 | |
| 8·8 | 12 | 3·1 | 47·7 | 9·2 |
| 10·0 | | 4·1 | 10·3 | |
| 9·0 | | 49·1 | 33·3 | 9·0 |
| 10·0 | | 56·6 | 2·7 | |
| 8·8 | 13 | 7·6 | 21·9 | |
| 10·0 | | 18·6 | 48·6 | |
| 10·0 | | 37·7 | 44·6 | |
| 10·0 | | 48·2 | 51·0 | |
| 8·9 | | 49·7 | 45·1 | |
| 9·0 | | 53·2 | 49·0 | |
| 10·0 | 14 | 17·7 | 46·9 | |
| 9·3 | | 20·7 | 12·3 | |
| 10·0 | | 31·2 | 38·9 | |

**781—840.**

| mag. | $5^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 14 | 41·7 | 17·1 | |
| 10·0 | | 46·2 | 39·6 | |
| 9·0 | | 52·7 | 42·1 | |
| 10·0 | 15 | 15·7 | 30·7 | |
| 9·4 | | 34·2 | 8·8 | |
| 10·0 | | 41·2 | 31·8 | |
| 8·8 | | 42·2 | 50·3 | 9·0 G |
| 10·0 | 16 | 3·2 | 55·0 | |
| 8·6 | 17 | 58·2 | 11·9 | 9·5 |
| 9·7 | 18 | 8·7 | 12·9 | |
| 8·8 | | 26·7 | 53·2 | 8·5 GS |
| 9·3 | | 39·2 | 5·9 | |
| 9·3 | 19 | 1·7 | 48·5 | |
| 10·0 | | 22·7 | 21·3 | |
| 10·0 | 20 | 0·2 | 40·0 | |
| 10·0 | | 15·2 | 18·4 | |
| 10·0 | | 17·7 | 41·1 | |
| 9·8 | | 46·7 | 6·2 | |
| 9·7 | | 48·7 | 4·1 | |
| 9·4 | 21 | 13·7 | 40·7 | |
| 8·8 | | 14·7 | 42·3 | 9·5 |
| 9·4 | | 24·7 | 53·2 | |
| 9·4 | | 49·2 | 46·4 | |
| 9·4 | | 50·7 | 9·3 | |
| 9·6 | 22 | 21·7 | 46·8 | |
| 9·4 | | 49·7 | 44·2 | |
| 9·8 | | 57·2 | 7·8 | |
| 9·8 | 23 | 19·7 | 45·9 | |
| 9·3 | | 48·7 | 31·9 | |
| 9·4 | 24 | 20·3 | 15·9 | |
| 10·0 | | 45·3 | 10·9 | |
| 9·4 | 25 | 28·8 | 7·8 | |
| 9·4 | | 33·3 | 28·7 | |
| 9·8 | 26 | 9·8 | 35·1 | |
| 9·4 | | 53·8 | 20·9 | |
| 9·6 | 27 | 49·8 | 16·3 | |
| 9·4 | | 57·8 | 13·7 | |
| 9·7 | | 58·3 | 11·7 | |
| 9·6 | 28 | 19·3 | 46·1 | |
| 9·7 | | 22·3 | 3·3 | |
| 9·6 | | 38·3 | 47·1 | |
| 10·0 | 29 | 1·8 | 21·7 | |
| 9·6 | | 2·8 | 9·9 | |
| 9·6 | | 2·8 | 16·9 | |
| 9·7 | | 45·8 | 18·8 | |
| 9·6 | | 53·3 | 40·1 | |
| 10·0 | 30 | 9·3 | 54·7 | |
| 9·8 | | 46·8 | 28·1 | |
| 10·0 | | 51·3 | 54·3 | |
| 9·4 | 31 | 2·8 | 14·9 | |
| 9·8 | | 7·8 | 58·9 | |
| 9·3 | | 13·3 | 13·7 | |
| 9·7 | | 49·3 | 38·5 | |
| 10·0 | | 54·8 | 18·6 | |
| 9·0 | 32 | 18·8 | 20·1 | |
| 9·3 | | 29·8 | 33·6 | |
| 9·8 | | 35·3 | 28·5 | |
| 9·4 | 33 | 52·8 | 30·5 | |
| 8·8 | | 54·8 | 29·1 | 9·5 |
| 10·0 | 34 | 12·3 | 3·3 | |

**841—900.**

| mag. | $5^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 34 | 42·3 | 28·2 | |
| 9·7 | 35 | 29·8 | 23·9 | |
| 9·7 | | 33·1 | 27·7 | |
| 9·7 | | 56·4 | 53·6 | |
| 8·1 | | 59·6 | 1·5 | 7·5 GSt |
| 9·4 | 36 | 0·4 | 18·4 | |
| 10·4 | | 11·6 | 18·0 | |
| 9·0 | 37 | 1·3 | 40·5 | |
| 10·4 | | 1·9 | 9·0 | |
| 9·1 | | 15·4 | 39·7 | |
| 9·6 | | 51·4 | 28·1 | |
| 10·4 | 38 | 3·4 | 39·3 | |
| 9·4 | | 12·4 | 27·8 | |
| 9·6 | | 31·6 | 57·7 | |
| 9·4 | | 59·9 | 35·6 | |
| 10·2 | 39 | 18·9 | 27·8 | |
| 9·0 | | 28·9 | 19·6 | |
| 10·4 | | 45·9 | 33·4 | |
| 10·2 | 40 | 27·8 | 26·8 | |
| 9·6 | 41 | 32·8 | 6·1 | |
| 9·6 | | 45·8 | 0·6 | |
| 7·8 | | 53·8 | 44·9 | 8·0 GSgt |
| 10·0 | 42 | 26·3 | 53·2 | |
| 7·8 | | 55·8 | 46·3 | 8·5 GSgt |
| 10·4 | 43 | 2·8 | 13·5 | |
| 7·2 | | 10·8 | 37·5 | 7·5 GSgt |
| 10·0 | | 25·8 | 37·6 | |
| 10·2 | | 41·8 | 48·5 | |
| 9·1 | 44 | 0·8 | 35·5 | |
| 8·0 | | 5·8 | 59·0 | 8·5 GSgt |
| 8·7 | | 45·3 | 36·6 | |
| 9·9 | | 48·8 | 26·0 | |
| 10·2 | | 50·8 | 6·6 | |
| 8·1 | 45 | 8·3 | 4·8 | 9·0 |
| 9·1 | | 20·8 | 26·1 | |
| 9·6 | | 59·8 | 14·4 | |
| 9·9 | 46 | 0·8 | 1·1 | |
| 9·4 | | 4·8 | 0·8 | |
| 8·7 | | 27·8 | 53·7 | |
| 10·4 | | 42·8 | 58·5 | |
| 9·3 | 47 | 12·8 | 26·1 | |
| 10·4 | | 13·8 | 53·7 | |
| 9·0 | | 14·8 | 25·8 | |
| 10·4 | | 42·8 | 2·4 | |
| 10·4 | | 44·8 | 27·4 | |
| 7·5 | | 46·8 | 7·0 | 7·5 GS |
| 8·0 | | 49·3 | 38·8 | 9·0 GS |
| 7·6 | | 50·8 | 5·2 | 7·5 GS |
| 8·8 | 48 | 2·8 | 19·2 | |
| 9·6 | | 45·8 | 27·1 | |
| 10·4 | 49 | 20·8 | 41·1 | |
| 10·2 | | 34·8 | 14·6 | |
| 9·6 | | 35·8 | 3·9 | |
| 10·2 | | 50·8 | 31·4 | |
| 9·4 | | 54·8 | 3·7 | |
| 9·6 | | 58·3 | 55·7 | |
| 9·6 | 50 | 3·8 | 4·5 | |
| 10·0 | | 21·3 | 27·8 | |
| 10·4 | | 31·8 | 8·7 | |
| 9·4 | | 36·7 | 43·0 | |



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## 901—960.

| mag. | $5^h$–$6^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 51 | 13·7 | 46·0 | |
| 8·8 | | 30·2 | 7·0 | |
| 8·8 | 52 | 13·2 | 52·3 | |
| 8·4 | | 36·7 | 14·8 | 9·5 |
| 8·8 | 53 | 15·7 | 49·0 | |
| 10·2 | | 21·7 | 33·8 | |
| 10·2 | | 25·1 | 0·4 | |
| 9·6 | | 47·7 | 13·1 | |
| 9·1 | 54 | 16·2 | 35·8 | |
| 9·4 | | 19·2 | 23·4 | |
| 10·4 | 55 | 4·7 | 18·3 | |
| 9·8 | | 12·7 | 30·4 | |
| 9·4 | 56 | 1·2 | 12·8 | |
| 10·2 | | 6·2 | 5·0 | |
| 10·4 | | 17·2 | 54·0 | |
| 10·2 | | 32·2 | 48·8 | |
| 10·4 | 57 | 0·2 | 43·4 | |
| 10·2 | | 8·2 | 53·0 | |
| 9·4 | | 17·2 | 22·2 | 9·5 |
| 9·6 | | 27·2 | 34·6 | |
| 8·7 | | 36·2 | 13·4 | 9·2 G |
| 10·2 | | 38·2 | 5·3 | |
| 8·4 | 58 | 6·2 | 5·4 | 8·5 Gt |
| 10·4 | | 56·7 | 39·0 | |
| 10·4 | 59 | 1·2 | 42·9 | |
| 9·6 | | 11·7 | 19·0 | |
| 9·3 | | 12·2 | 13·0 | |
| 9·3 | | 13·2 | 47·0 | |
| 10·4 | 0 | 37·7 | 47·0 | |
| 9·6 | | 48·2 | 39·6 | |
| 9·3 | 1 | 0·2 | 48·1 | 9·5 |
| 9·0 | | 7·4 | 46·1 | 9·5 |
| 8·8 | | 10·4 | 13·1 | |
| 10·4 | | 21·4 | 56·9 | |
| 9·6 | | 24·9 | 17·1 | |
| 8·4 | | 56·1 | 56·4 | 9·0 |
| 8·8 | 2 | 24·4 | 56·1 | 8·5 G |
| 8·8 | 3 | 14·9 | 5·7 | |
| 10·4 | | 15·4 | 48·3 | |
| 8·2 | | 45·6 | 57·4 | 7·8 Gg |
| 9·4 | | 51·4 | 16·1 | |
| 10·2 | | 56·9 | 43·9 | |
| 10·4 | 4 | 7·4 | 56·7 | |
| 8·7 | | 27·4 | 18·1 | |
| 9·4 | | 53·4 | 50·5 | |
| 10·2 | | 53·9 | 27·5 | |
| 8·1 | 5 | 17·4 | 41·1 | 8·0 GSg |
| 9·6 | | 23·4 | 21·1 | |
| 9·9 | | 36·9 | 22·7 | |
| 9·8 | | 48·9 | 36·2 | |
| 9·6 | | 52·9 | 38·3 | |
| 8·7 | | 53·9 | 13·2 | 8·8 |
| 10·2 | 6 | 32·9 | 2·8 | |
| 10·2 | | 51·4 | 22·7 | |
| 10·0 | | 58·7 | 0·7 | |
| 9·1 | 7 | 21·4 | 38·9 | 9·0 |
| 9·8 | | 31·9 | 37·8 | |
| 10·0 | | 44·9 | 23·5 | |
| 9·8 | 8 | 11·4 | 7·4 | |
| 10·0 | | 41·4 | 57·9 | |

## 961—1020.

| mag. | $6^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 8 | 45·9 | 5·2 | |
| 10·4 | | 51·4 | 3·6 | |
| 10·0 | | 57·4 | 31·1 | |
| 8·8 | 9 | 24·1 | 46·3 | 8·8 |
| 9·6 | | 57·4 | 28·3 | |
| 9·2 | 10 | 11·4 | 45·4 | 9·2 |
| 9·6 | | 28·9 | 49·0 | |
| 10·0 | 11 | 11·9 | 42·9 | |
| 9·8 | 12 | 1·9 | 8·6 | |
| 8·7 | | 21·9 | 45·9 | |
| 9·2 | | 40·9 | 17·1 | 9·0 |
| 10·0 | 13 | 6·4 | 24·7 | |
| 9·8 | | 7·9 | 6·3 | |
| 10·0 | | 8·9 | 55·1 | |
| 9·2 | | 28·4 | 15·0 | |
| 9·4 | | 59·4 | 45·2 | |
| 10·0 | 14 | 15·9 | 31·7 | |
| 9·4 | | 24·9 | 15·5 | |
| 7·4 | | 42·0 | 21·9 | 7·5 GSt |
| 8·8 | | 47·5 | 24·3 | 9·0 |
| 9·0 | 15 | 22·5 | 32·2 | |
| 9·4 | | 36·0 | 21·3 | |
| 9·4 | | 39·0 | 23·1 | |
| 9·3 | | 46·5 | 21·9 | |
| 10·0 | 16 | 10·5 | 12·6 | |
| 9·1 | 18 | 28·5 | 36·9 | |
| 9·8 | | 49·0 | 40·7 | |
| 9·8 | 20 | 23·5 | 33·7 | |
| 9·8 | | 40·5 | 53·7 | |
| 10·0 | | 45·5 | 43·8 | |
| 9·6 | 21 | 3·5 | 3·7 | |
| 10·0 | | 19·5 | 33·3 | |
| 9·6 | | 53·5 | 30·9 | |
| 10·0 | 22 | 0·5 | 8·8 | |
| 9·0 | | 31·0 | 46·4 | 9·2 |
| 7·6 | | 45·5 | 39·3 | 7·5 G |
| 8·8 | 23 | 10·5 | 41·0 | 9·2 |
| 8·7 | | 18·0 | 5·3 | |
| 10·0 | | 25·0 | 29·8 | |
| 9·4 | | 35·0 | 2·0 | |
| 9·1 | | 40·5 | 30·4 | |
| 9·8 | 24 | 18·0 | 48·5 | |
| 9·8 | 25 | 33·5 | 51·8 | |
| 9·4 | | 58·0 | 36·6 | |
| 7·9 | 26 | 26·5 | 50·1 | 8·2 GSt |
| 9·8 | | 45·5 | 33·2 | |
| 8·4 | 27 | 0·4 | 25·5 | 8·0 G |
| 9·1 | | 9·9 | 53·6 | 9·0 |
| 9·6 | | 24·4 | 15·7 | |
| 9·8 | | 33·4 | 45·6 | |
| 9·8 | 29 | 38·4 | 18·0 | |
| 8·2 | 30 | 10·4 | 33·0 | 8·5 GSt |
| 9·8 | | 44·4 | 25·2 | |
| 9·1 | | 49·9 | 19·4 | |
| 9·0 | | 54·4 | 19·3 | 9·0 |
| 10·0 | 31 | 5·9 | 59·2 | |
| 9·8 | | 10·4 | 45·7 | |
| 8·7 | | 54·9 | 8·4 | 8·5 |
| 9·1 | | 58·4 | 19·6 | |
| 9·6 | 32 | 0·4 | 44·0 | |

## 1021—1080.

| mag. | $6^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·1 | 32 | 29·9 | 2·1 | 9·5 |
| 9·2 | 33 | 19·9 | 54·2 | |
| 8·0 | | 28·4 | 14·6 | Gt |
| 9·3 | 34 | 21·4 | 30·8 | |
| 9·8 | | 39·9 | 8·6 | |
| 8·8 | | 49·9 | 19·2 | 9·0 |
| 9·6 | 35 | 7·9 | 8·4 | |
| 7·2 | | 9·9 | 14·0 | 7·0 GSt |
| 9·8 | | 51·4 | 40·5 | |
| 9·2 | 36 | 21·9 | 33·4 | |
| 8·6 | | 30·9 | 11·1 | 9·0 |
| 9·2 | | 49·4 | 50·6 | |
| 9·6 | 37 | 4·4 | 22·2 | |
| 9·2 | | 6·4 | 13·8 | |
| 9·6 | | 19·9 | 29·7 | |
| 9·3 | | 39·9 | 26·6 | |
| 9·4 | | 49·4 | 25·2 | |
| 9·6 | 38 | 1·0 | 54·8 | |
| 9·1 | | 39·0 | 5·5 | |
| 10·0 | | 40·0 | 20·6 | |
| 8·7 | 39 | 17·0 | 52·7 | 8·5 G |
| 9·0 | | 21·5 | 23·3 | |
| 10·0 | | 30·0 | 31·1 | |
| 10·0 | | 38·0 | 1·0 | |
| 9·8 | 40 | 3·6 | 49·7 | |
| 10·3 | | 10·4 | 49·8 | |
| 7·8 | | 30·2 | 53·5 | 8·0 GSt |
| 9·8 | | 46·2 | 7·0 | |
| 9·2 | | 49·7 | 0·2 | 8·8 |
| 8·3 | | 50·7 | 6·2 | 8·2 |
| 9·8 | | 51·7 | 50·2 | |
| 9·5 | | 55·9 | 0·7 | |
| 9·5 | 41 | 13·2 | 18·5 | |
| 9·5 | | 13·7 | 37·9 | |
| 9·8 | | 28·7 | 30·6 | |
| 9·2 | | 30·7 | 4·2 | 8·2 |
| 9·5 | | 51·7 | 19·4 | |
| 9·1 | 43 | 23·7 | 5·1 | |
| 10·0 | | 34·7 | 40·3 | |
| 10·2 | | 38·2 | 50·6 | |
| 10·0 | 44 | 10·2 | 37·6 | |
| 9·2 | | 43·2 | 8·0 | 9·0 |
| 7·4 | | 53·2 | 24·1 | 6·0 GScgt |
| 8·6 | 45 | 5·7 | 7·6 | 8·5 |
| 9·0 | | 15·7 | 15·1 | 8·5 |
| 10·1 | | 18·7 | 19·0 | |
| 10·1 | | 39·7 | 5·3 | |
| 8·8 | | 50·2 | 18·8 | 9·0 |
| 8·5 | | 53·7 | 56·7 | 8·5 |
| 9·5 | | 54·7 | 3·6 | |
| 10·0 | 46 | 8·2 | 5·8 | |
| 9·5 | | 25·7 | 26·8 | |
| 9·7 | 47 | 1·2 | 18·6 | |
| 10·3 | | 1·7 | 42·1 | |
| 7·4 | | 39·7 | 45·3 | 8·0 GSt |
| 9·5 | | 50·7 | 31·5 | |
| 10·3 | 48 | 1·2 | 15·6 | |
| 8·2 | | 5·2 | 35·6 | 9·0 |
| 9·8 | | 40·2 | 25·4 | |
| 9·5 | 49 | 3·7 | 7·1 | |

## 1081—1140.

| mag. | $6^h$–$7^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 8·5 | 49 | 8·2 | 26·2 | 8·5 |
| 9·2 | | 8·7 | 33·6 | |
| 9·2 | | 14·7 | 42·1 | |
| 8·8 | | 38·2 | 48·1 | 8·0 |
| 9·2 | | 49·7 | 57·4 | |
| 10·3 | | 59·7 | 15·3 | |
| 9·4 | 50 | 41·7 | 19·8 | |
| 10·0 | | 43·7 | 47·8 | |
| 10·0 | | 50·2 | 18·3 | |
| 10·3 | | 50·2 | 1·7 | |
| 10·1 | 51 | 9·7 | 56·0 | |
| 10·3 | | 26·2 | 15·0 | |
| 8·8 | | 33·7 | 37·2 | 9·0 |
| 10·2 | | 47·2 | 46·3 | |
| 8·4 | 52 | 21·2 | 5·6 | 8·0 Gt |
| 9·2 | | 29·7 | 38·8 | 9·0 |
| 9·6 | | 50·7 | 6·0 | |
| 9·6 | 53 | 2·2 | 4·9 | |
| 10·3 | | 13·2 | 39·4 | |
| 10·3 | | 30·2 | 51·6 | |
| 9·4 | | 30·2 | 26·0 | |
| 9·1 | | 31·2 | 25·7 | |
| 10·0 | | 59·2 | 55·2 | |
| 8·8 | | 59·2 | 55·5 | 8·8 |
| 9·4 | | 59·2 | 20·3 | 9·0 |
| 9·6 | 54 | 0·2 | 23·0 | |
| 10·0 | | 1·7 | 40·7 | |
| 10·1 | | 19·7 | 58·8 | |
| 10·3 | | 31·7 | 34·4 | |
| 9·0 | | 32·2 | 38·0 | |
| 8·8 | | 46·7 | 44·8 | 8·5 GSg |
| 7·4 | 55 | 0·7 | 29·9 | 7·8 GSg |
| 8·0 | | 0·7 | 56·1 | 8·0 GSt |
| 10·2 | | 29·7 | 6·2 | |
| 10·3 | | 42·7 | 55·4 | |
| 7·4 | 56 | 12·7 | 33·2 | 7·0 GSct |
| 9·0 | | 13·2 | 27·1 | 9·0 |
| 9·6 | | 30·2 | 22·9 | 10·0 |
| 10·1 | 57 | 11·7 | 17·1 | |
| 10·0 | | 14·2 | 9·9 | |
| 10·0 | | 24·2 | 4·9 | |
| 9·5 | | 25·2 | 42·0 | |
| 8·8 | | 32·2 | 32·9 | |
| 10·3 | | 46·2 | 51·3 | |
| 10·1 | 58 | 20·2 | 45·4 | |
| 9·5 | | 21·2 | 49·1 | |
| 10·0 | | 22·7 | 39·0 | |
| 9·8 | | 26·9 | 2·5 | |
| 9·5 | | 36·7 | 3·2 | |
| 10·2 | | 50·7 | 52·0 | |
| 10·1 | 59 | 8·3 | 58·2 | |
| 8·6 | | 40·7 | 15·4 | 8·2 Gt |
| 10·0 | 0 | 35·8 | 59·7 | |
| 9·6 | | 36·7 | 19·8 | |
| 9·5 | | 44·7 | 9·6 | |
| 8·8 | | 44·7 | 19·0 | 8·0 |
| 8·4 | | 47·2 | 27·4 | 8·5 |
| 8·6 | 1 | 0·2 | 37·5 | 8·8 |
| 8·2 | | 1·7 | 45·8 | 7·8 GSgt |
| 10·3 | | 10·2 | 24·0 | |

25 prec.

| h | m | a + s | δ + |
|---|---|---|---|
| 5 | 50 | 28 | 0·4 |
| 6 | 0 | 28 | 0·0 |
| | | | − |
| | 10 | 28 | 0·4 |
| | 20 | 28 | 0·7 |
| | 30 | 29 | 1·1 |
| | 40 | 29 | 1·5 |
| | 50 | 29 | 1·8 |
| 7 | 0 | 30 | 2·2 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ' |
| 7 | 0 | 30 | 2.2 |
| | 10 | 30 | 2.5 |
| | 20 | 31 | 2.9 |
| | 30 | 32 | 3.2 |
| | 40 | 33 | 3.5 |
| | 50 | 34 | 3.9 |
| 8 | 0 | 35 | 4.2 |

**1141—1200.**

| mag. | 7h. m | s | −55° ' | |
|---|---|---|---|---|
| 10.0 | 1 | 42.2 | 14.7 | |
| 10.1 | | 42.7 | 6.6 | |
| 10.3 | | 54.7 | 17.2 | |
| 10.3 | 2 | 10.2 | 20.0 | |
| 10.3 | | 20.2 | 23.0 | |
| 9.6 | | 21.7 | 20.6 | |
| 9.6 | | 47.7 | 47.6 | |
| 10.1 | 3 | 15.7 | 39.0 | |
| 10.3 | | 16.2 | 39.9 | |
| 10.2 | | 54.7 | 28.0 | |
| 9.8 | 4 | 6.3 | 56.9 | |
| 10.3 | | 22.2 | 16.0 | |
| 9.8 | | 23.2 | 33.2 | |
| 9.6 | | 25.7 | 57.3 | |
| 9.6 | | 31.2 | 43.2 | |
| 9.0 | | 33.2 | 34.7 | 9.5 |
| 9.4 | | 42.7 | 46.2 | |
| 10.0 | | 55.7 | 18.0 | |
| 9.5 | 5 | 15.7 | 55.6 | |
| 10.3 | | 20.0 | 16.8 | |
| 9.4 | | 34.0 | 42.9 | |
| 9.4 | | 41.0 | 12.1 | |
| 10.0 | | 41.0 | 21.9 | |
| 9.0 | | 54.0 | 16.0 | |
| 9.0 | | 57.0 | 56.9 | |
| 10.3 | 6 | 15.5 | 40.3 | |
| 10.2 | | 21.5 | 54.2 | |
| 10.3 | | 47.0 | 33.1 | |
| 9.6 | | 52.0 | 26.8 | |
| 9.0 | 7 | 2.0 | 42.5 | |
| 9.0 | | 14.0 | 31.2 | 8.5 |
| 9.8 | | 19.5 | 45.9 | |
| 9.6 | | 50.0 | 13.1 | |
| 7.6 | | 51.5 | 22.8 | 7.7 GSt |
| 9.4 | 8 | 2.0 | 46.0 | |
| 10.3 | | 4.0 | 9.5 | |
| 10.3 | | 11.0 | 35.5 | |
| 9.8 | | 12.5 | 22.9 | |
| 9.1 | | 14.0 | 32.0 | 9.5 |
| 9.6 | | 17.5 | 21.2 | |
| 9.6 | | 26.0 | 20.7 | |
| 9.2 | | 40.5 | 52.5 | |
| 9.5 | 9 | 9.7 | 57.4 | |
| 9.4 | | 15.5 | 16.5 | 9.5 |
| 7.4 | | 28.7 | 56.9 | 7.0 GS |
| 9.5 | | 29.5 | 51.9 | |
| 9.8 | | 52.0 | 19.2 | |
| 9.2 | 10 | 4.0 | 27.2 | |
| 9.5 | | 14.0 | 23.1 | 9.5 |
| 10.3 | | 19.5 | 0.4 | |
| 10.1 | | 45.0 | 16.6 | |
| 9.5 | | 48.5 | 25.1 | 10.0 |
| 9.0 | | 49.5 | 21.5 | 9.2 |
| 9.5 | | 59.5 | 21.9 | |
| 9.8 | 11 | 1.5 | 8.0 | |
| 9.8 | | 11.0 | 25.0 | |
| 10.1 | | 31.8 | 1.9 | |
| 9.5 | | 40.0 | 29.7 | |
| 10.1 | | 43.0 | 59.2 | |
| 9.6 | 12 | 17.6 | 53.0 | |

**1201—1260.**

| mag. | 7h. m | s | −55° ' | |
|---|---|---|---|---|
| 8.8 | 12 | 55.9 | 28.8 | 8.8 |
| 8.9 | | 57.8 | 35.9 | |
| 9.3 | | 58.8 | 20.0 | |
| 8.0 | 13 | 24.8 | 30.7 | 8.2 G |
| 8.4 | | 53.3 | 53.1 | 8.5 G |
| 9.4 | | 53.8 | 22.5 | |
| 9.6 | 14 | 6.3 | 10.2 | |
| 8.2 | | 9.3 | 42.9 | 8.5 |
| 7.7 | 16 | 8.3 | 3.1 | 8.0 G |
| 9.2 | | 10.8 | 27.0 | |
| 9.4 | | 14.8 | 34.7 | |
| 9.0 | | 32.8 | 36.3 | |
| 8.0 | | 44.3 | 22.9 | 8.2 |
| 8.0 | | 50.3 | 44.3 | 8.0 GSt |
| 9.0 | 17 | 1.3 | 40.2 | |
| 9.7 | | 1.8 | 13.0 | |
| 9.3 | | 2.8 | 14.4 | 9.0 |
| 9.2 | | 7.3 | 30.0 | |
| 9.7 | | 36.8 | 25.1 | |
| 8.6 | 18 | 9.8 | 8.7 | 9.0 G |
| 9.7 | | 52.3 | 6.6 | |
| 9.2 | | 55.8 | 6.5 | |
| 9.7 | 19 | 2.3 | 52.1 | |
| 7.8 | | 16.8 | 31.8 | GS |
| 9.6 | | 24.3 | 49.4 | |
| 8.9 | 20 | 3.3 | 19.6 | 8.5 G |
| 7.8 | | 20.8 | 20.2 | 7.2 GSt |
| 8.8 | | 51.3 | 0.2 | 9.0 |
| 8.6 | 21 | 24.3 | 29.3 | 9.0 |
| 9.2 | | 30.8 | 39.6 | |
| 9.0 | | 56.8 | 43.1 | |
| 8.4 | 22 | 0.3 | 41.8 | 9.5 |
| 9.7 | | 17.3 | 39.4 | |
| 9.7 | | 29.8 | 40.8 | |
| 9.0 | | 43.3 | 33.1 | 9.2 |
| 9.4 | | 59.3 | 29.5 | |
| 8.2 | 23 | 11.3 | 6.7 | 8.5 Gt |
| 9.2 | | 46.3 | 25.8 | |
| 8.6 | 24 | 28.6 | 59.6 | 9.0 |
| 8.1 | | 28.8 | 34.7 | 9.0 |
| 8.3 | | 55.8 | 9.2 | 8.8 Gt |
| 8.8 | 25 | 0.3 | 51.0 | |
| 9.0 | | 6.3 | 43.3 | |
| 9.0 | | 19.8 | 53.6 | |
| 8.9 | | 41.3 | 23.1 | |
| 9.3 | 26 | 36.3 | 20.1 | |
| 8.0 | | 49.8 | 2.8 | 8.5 GSt |
| 9.2 | | 55.3 | 48.0 | 9.5 |
| 9.2 | | 58.8 | 38.1 | |
| 9.6 | 27 | 5.3 | 13.9 | |
| 9.7 | | 12.3 | 22.6 | |
| 9.4 | | 28.3 | 4.2 | |
| 9.0 | | 50.3 | 20.9 | |
| 9.6 | | 53.3 | 16.0 | |
| 9.7 | | 59.6 | 34.9 | |
| 8.7 | 28 | 7.1 | 18.4 | |
| 9.7 | | 14.6 | 18.3 | |
| 8.6 | | 36.1 | 54.7 | |
| 9.2 | 29 | 17.6 | 14.5 | |
| 9.6 | | 29.5 | 58.5 | |

**1261—1320.**

| mag. | 7h. m | s | −55° ' | |
|---|---|---|---|---|
| 9.0 | 29 | 36.1 | 24.0 | |
| 9.7 | | 38.3 | 18.0 | |
| 9.7 | | 40.3 | 17.2 | |
| 9.3 | | 48.6 | 7.5 | |
| 9.6 | 30 | 8.1 | 4.8 | |
| 9.2 | | 10.1 | 11.7 | |
| 9.4 | | 40.1 | 34.0 | |
| 9.6 | | 44.1 | 33.6 | |
| 9.7 | | 59.1 | 51.9 | |
| 9.2 | 31 | 45.1 | 25.4 | |
| 9.6 | | 45.6 | 34.7 | |
| 9.6 | | 51.6 | 56.2 | |
| 8.3 | 32 | 9.6 | 29.8 | 7.8 G |
| 9.4 | | 12.1 | 6.0 | |
| 9.7 | | 20.6 | 53.7 | |
| 8.6 | | 30.1 | 33.4 | 8.2 |
| 9.6 | | 42.6 | 38.4 | |
| 9.6 | | 46.3 | 41.5 | |
| 8.6 | | 48.1 | 51.3 | |
| 9.2 | | 50.1 | 22.7 | |
| 9.4 | 33 | 20.1 | 10.2 | |
| 7.2 | | 21.6 | 36.4 | 7.0 GSct |
| 9.0 | | 24.6 | 14.2 | |
| 9.7 | | 25.3 | 50.3 | |
| 9.6 | 34 | 0.1 | 45.5 | |
| 9.0 | | 0.1 | 13.1 | |
| 9.7 | | 2.1 | 32.0 | |
| 9.4 | | 22.1 | 55.2 | 8.5 |
| 9.6 | | 26.1 | 55.1 | 9.5 |
| 9.0 | 35 | 10.1 | 52.7 | |
| 8.2 | | 13.6 | 53.8 | 8.6 Gt |
| 9.4 | | 15.1 | 27.4 | |
| 9.3 | | 15.6 | 29.0 | |
| 9.2 | | 16.1 | 33.5 | |
| 9.2 | | 19.6 | 25.2 | |
| 9.6 | | 40.3 | 0.5 | |
| 9.7 | | 54.0 | 38.6 | |
| 9.6 | | 54.3 | 57.6 | 9.5 |
| 7.9 | 36 | 0.0 | 56.6 | 7.0 GSt |
| 9.3 | | 0.0 | 10.2 | |
| 8.5 | | 20.0 | 26.7 | 8.5 |
| 8.9 | | 40.0 | 29.9 | 9.5 |
| 9.2 | | 49.0 | 30.9 | 9.0 |
| 9.7 | 37 | 35.5 | 45.9 | |
| 9.7 | | 40.0 | 48.5 | |
| 9.7 | | 45.0 | 38.0 | |
| 9.7 | | 53.0 | 47.3 | |
| 7.3 | | 58.0 | 21.5 | 7.7 GSg |
| 9.7 | 38 | 14.0 | 23.2 | |
| 9.2 | | 19.0 | 11.2 | |
| 9.7 | | 30.0 | 40.1 | |
| 9.7 | | 50.0 | 39.4 | |
| 9.2 | | 50.0 | 39.7 | |
| 9.7 | | 57.8 | 0.3 | |
| 9.6 | 39 | 9.0 | 10.1 | |
| 8.3 | | 15.5 | 12.9 | 8.5 |
| 9.2 | | 29.5 | 21.3 | |
| 9.4 | | 35.5 | 22.6 | |
| 7.4 | | 44.0 | 51.0 | 7.0 GSct |
| 7.6 | 40 | 4.5 | 1.0 | 7.2 GSt |

**1321—1380.**

| mag. | 7h. m | s | −55° ' | |
|---|---|---|---|---|
| 8.7 | 41 | 0.0 | 14.9 | 8.0 |
| 9.7 | | 14.5 | 46.9 | |
| 9.2 | | 20.0 | 53.1 | |
| 9.3 | 42 | 1.0 | 10.1 | |
| 9.2 | | 22.0 | 30.2 | |
| 9.3 | | 50.8 | 58.3 | |
| 9.0 | | 52.5 | 45.8 | |
| 8.2 | | 52.5 | 22.6 | |
| 9.6 | | 58.5 | 16.1 | |
| 9.6 | | 59.9 | 48.8 | |
| 8.6 | 43 | 0.9 | 0.6 | 9.5 |
| 8.1 | | 19.4 | 53.2 | 9.0 |
| 9.2 | | 19.9 | 9.4 | |
| 8.9 | | 24.4 | 21.0 | |
| 9.7 | | 40.9 | 48.6 | |
| 9.3 | | 53.9 | 52.4 | |
| 9.6 | 44 | 2.0 | 2.2 | |
| 10.2 | | 11.6 | 49.4 | |
| 9.8 | | 31.3 | 8.6 | |
| 9.2 | | 35.8 | 30.6 | 8.5 |
| 9.2 | | 49.8 | 48.6 | |
| 9.8 | 45 | 1.8 | 11.8 | |
| 9.8 | | 3.8 | 12.4 | |
| 10.2 | | 5.3 | 39.8 | |
| 9.6 | | 7.8 | 30.0 | 9.5 |
| 10.2 | | 21.3 | 37.6 | |
| 8.5 | | 29.3 | 20.4 | 8.5 |
| 9.6 | | 29.8 | 22.4 | |
| 10.2 | | 40.7 | 7.9 | |
| 9.4 | | 51.2 | 24.7 | 9.0 |
| 10.0 | | 59.7 | 20.3 | |
| 8.6 | 46 | 7.7 | 41.7 | |
| 10.0 | | 10.7 | 55.1 | |
| 10.0 | | 10.7 | 3.6 | |
| 10.0 | | 16.2 | 40.5 | |
| 10.2 | | 27.2 | 3.7 | |
| 10.2 | | 30.7 | 42.9 | |
| 10.2 | | 32.7 | 51.9 | |
| 10.0 | | 48.2 | 9.1 | |
| 10.2 | | 51.7 | 35.3 | |
| 8.0 | | 57.2 | 38.9 | |
| 9.8 | 47 | 20.2 | 32.3 | |
| 8.4 | | 42.2 | 15.9 | 9.0 |
| 8.4 | | 43.7 | 19.5 | 8.5 |
| 9.0 | 48 | 0.2 | 7.5 | |
| 9.4 | | 3.2 | 16.5 | 8.5 |
| 9.8 | | 10.2 | 33.6 | |
| 9.4 | | 21.2 | 55.3 | |
| 8.9 | | 31.7 | 6.3 | |
| 9.4 | | 45.7 | 7.5 | |
| 9.6 | | 52.2 | 17.6 | |
| 8.0 | 49 | 0.2 | 22.7 | 7.5 GSt |
| 9.8 | | 21.7 | 36.9 | |
| 9.4 | | 37.2 | 50.3 | |
| 9.8 | | 49.2 | 16.9 | |
| 8.6 | | 57.2 | 23.1 | 9.0 |
| 9.5 | 50 | 14.2 | 4.5 | |
| 10.2 | | 28.2 | 20.1 | |
| 10.2 | | 43.7 | 0.9 | |
| 9.8 | | 44.2 | 34.9 | |



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### 1381—1440.

| mag. | 7h.–8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 51 | 9·7 | 36·5 | |
| 8·6 | | 12·2 | 20·3 | 9·5 |
| 10·2 | | 20·9 | 0·9 | |
| 10·0 | | 42·0 | 33·3 | |
| 9·2 | | 49·0 | 21·4 | 9·5 |
| 9·8 | | 52·5 | 47·8 | |
| 10·2 | 52 | 0·5 | 58·6 | |
| 8·8 | | 7·5 | 1·9 | 9·0 |
| 9·6 | | 13·0 | 29·6 | |
| 10·2 | | 20·0 | 32·0 | |
| 10·2 | | 22·0 | 45·5 | |
| 8·6 | | 26·0 | 11·0 | 9·0 |
| 10·0 | | 37·0 | 57·9 | |
| 10·2 | | 56·0 | 53·1 | |
| 9·4 | | 58·5 | 29·2 | |
| 10·2 | 53 | 2·4 | 57·6 | |
| 9·4 | | 20·5 | 4·1 | |
| 9·8 | | 47·0 | 10·6 | |
| 10·0 | | 50·5 | 31·4 | |
| 9·4 | 54 | 4·5 | 48·2 | |
| 10·2 | | 4·5 | 27·6 | |
| 10·0 | | 29·5 | 37·8 | |
| 8·2 | 55 | 34·5 | 30·2 | 8·2 |
| 8·6 | 56 | 2·0 | 40·3 | 8·5 |
| 10·2 | | 9·0 | 23·9 | |
| 10·2 | | 11·5 | 8·4 | |
| 10·2 | | 19·0 | 4·9 | |
| 10·2 | | 30·5 | 55·2 | |
| 9·4 | | 31·5 | 3·8 | |
| 9·8 | | 41·5 | 41·9 | |
| 9·8 | | 54·0 | 13·1 | |
| 9·5 | 57 | 4·0 | 53·1 | |
| 9·6 | | 20·0 | 1·9 | |
| 9·5 | | 49·0 | 38·8 | |
| 9·4 | | 53·5 | 23·0 | 8·5 |
| 9·6 | | 57·0 | 45·2 | |
| 10·2 | 58 | 25·5 | 44·7 | |
| 10·2 | | 26·0 | 47·7 | |
| 6·1 | | 36·0 | 6·3 | 6·5 GScgt |
| 9·2 | | 50·6 | 10·8 | |
| 10·2 | | 57·6 | 7·1 | |
| 10·2 | 59 | 11·1 | 26·5 | |
| 9·0 | | 11·6 | 21·2 | |
| 7·3 | | 12·1 | 15·2 | 7·5 GSg |
| 6·7 | | 20·6 | 11·4 | 7·0 GSg |
| 9·5 | | 23·6 | 8·7 | |
| 9·8 | | 30·1 | 10·7 | |
| 8·8 | | 33·6 | 35·1 | |
| 8·6 | | 41·2 | 57·2 | 8·5 |
| 9·8 | | 47·6 | 28·5 | |
| 9·0 | | 56·1 | 16·2 | |
| 9·2 | 0 | 1·1 | 43·7 | |
| 10·2 | | 2·6 | 21·0 | |
| 9·2 | | 22·6 | 45·4 | 9·0 |
| 10·2 | | 24·6 | 40·7 | |
| 10·0 | | 26·1 | 11·9 | |
| 9·4 | | 34·6 | 34·2 | |
| 10·2 | | 40·6 | 5·8 | |
| 10·2 | | 50·6 | 15·1 | |
| 10·2 | 1 | 0·6 | 5·7 | |

### 1441—1500.

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·0 | 1 | 40·1 | 25·7 | |
| 9·6 | | 45·1 | 15·7 | |
| 9·2 | | 50·6 | 33·0 | |
| 9·4 | | 52·1 | 17·8 | |
| 10·2 | 2 | 16·1 | 27·5 | |
| 10·2 | | 24·6 | 50·1 | |
| 9·8 | | 37·6 | 48·9 | |
| 9·6 | | 41·6 | 28·7 | |
| 10·0 | | 54·1 | 15·6 | |
| 8·4 | 3 | 3·1 | 48·4 | |
| 9·6 | | 10·1 | 17·0 | |
| 9·6 | | 19·6 | 47·1 | |
| 10·0 | | 25·6 | 34·6 | |
| 9·6 | | 35·6 | 39·4 | |
| 10·2 | | 37·6 | 12·7 | |
| 9·2 | | 42·6 | 54·9 | 9·0 |
| 10·2 | | 53·2 | 58·4 | |
| 9·4 | | 55·1 | 43·2 | |
| 10·0 | 4 | 0·1 | 41·9 | |
| 10·2 | | 17·7 | 9·8 | |
| 9·5 | | 35·2 | 27·2 | |
| 9·2 | | 58·7 | 6·9 | |
| 9·4 | 5 | 0·7 | 3·0 | |
| 10·2 | | 24·8 | 8·9 | |
| 8·5 | | 52·2 | 4·0 | 8·5 |
| 10·2 | 6 | 20·2 | 55·4 | |
| 5·9 | | 39·2 | 43·0 | 6·0 GSct |
| 9·8 | 7 | 7·7 | 18·6 | |
| 9·4 | | 40·7 | 27·2 | |
| 9·8 | | 40·7 | 8·2 | |
| 10·2 | | 56·8 | 15·4 | |
| 8·9 | 8 | 0·6 | 0·4 | |
| 10·2 | | 5·7 | 51·2 | |
| 10·0 | | 10·7 | 38·2 | |
| 10·2 | | 18·2 | 5·9 | |
| 10·2 | | 19·2 | 45·6 | |
| 8·6 | | 25·7 | 48·7 | 9·0 G |
| 9·8 | | 28·7 | 11·5 | |
| 9·2 | | 30·2 | 49·7 | G |
| 9·5 | | 30·7 | 6·4 | |
| 8·8 | | 40·5 | 59·3 | 8·8 |
| 10·2 | | 40·7 | 13·6 | |
| 10·0 | 9 | 0·7 | 12·4 | |
| 8·6 | | 7·2 | 4·8 | 9·0 |
| 9·6 | | 46·2 | 40·5 | |
| 9·4 | 10 | 10·7 | 3·5 | |
| 9·6 | | 50·2 | 11·2 | |
| 10·2 | | 50·2 | 38·7 | |
| 9·4 | 11 | 6·2 | 27·7 | |
| 10·0 | | 41·7 | 15·6 | |
| 8·8 | | 52·7 | 8·0 | 9·0 |
| 10·2 | 12 | 20·7 | 57·0 | |
| 8·8 | | 26·2 | 2·0 | 9·5 |
| 8·4 | 13 | 40·2 | 19·7 | 9·0 |
| 9·6 | 14 | 14·9 | 2·5 | |
| 9·8 | | 18·7 | 7·6 | |
| 10·0 | | 39·4 | 40·4 | |
| 7·6 | | 42·9 | 23·1 | 7·0 GSg |
| 7·8 | | 43·4 | 30·2 | 7·5 GSg |
| 9·8 | | 52·3 | 56·5 | |

### 1501—1560.

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·0 | 15 | 9·0 | 12·4 | |
| 10·2 | | 12·4 | 49·6 | |
| 10·2 | | 27·3 | 24·0 | |
| 10·0 | | 35·9 | 49·0 | |
| 8·6 | | 45·4 | 5·3 | 9·0 |
| 10·0 | | 45·9 | 23·1 | |
| 10·1 | | 53·6 | 35·1 | |
| 9·7 | 16 | 15·6 | 8·1 | |
| 10·1 | | 20·0 | 47·1 | |
| 9·6 | | 31·1 | 9·7 | |
| 10·1 | | 52·1 | 39·6 | |
| 8·5 | | 54·1 | 51·3 | 8·5 |
| 9·8 | 17 | 10·1 | 6·6 | |
| 9·6 | | 12·6 | 34·1 | |
| 9·4 | | 32·1 | 32·8 | |
| 10·0 | | 36·6 | 31·3 | |
| 10·1 | | 40·6 | 40·3 | |
| 9·4 | 18 | 0·1 | 16·8 | |
| 9·8 | | 1·1 | 36·8 | |
| 9·4 | | 10·1 | 24·7 | |
| 9·8 | | 30·5 | 56·5 | |
| 9·6 | | 46·1 | 10·6 | |
| 9·4 | | 49·6 | 59·1 | |
| 9·8 | | 53·6 | 14·7 | |
| 9·8 | 19 | 14·1 | 4·7 | |
| 10·1 | | 30·6 | 7·1 | |
| 10·0 | | 31·6 | 4·9 | |
| 10·0 | | 43·6 | 34·2 | |
| 9·3 | | 44·6 | 44·9 | |
| 9·8 | | 47·1 | 40·8 | |
| 8·7 | | 56·1 | 36·1 | 9·0 |
| 9·6 | 20 | 0·1 | 32·1 | 9·5 |
| 9·7 | | 17·1 | 7·7 | |
| 10·1 | | 19·3 | 59·8 | |
| 10·0 | | 22·1 | 18·9 | |
| 10·1 | | 31·1 | 31·0 | |
| 10·1 | 21 | 3·6 | 59·9 | |
| 9·4 | | 10·1 | 32·7 | |
| 8·4 | | 16·6 | 23·0 | 7·5 GS |
| 9·4 | | 30·1 | 32·6 | |
| 9·6 | | 49·6 | 55·9 | |
| 9·6 | | 51·3 | 59·4 | |
| 7·2 | 22 | 1·1 | 3·9 | 7·0 GScgt |
| 7·4 | | 15·1 | 20·4 | 7·5 GSg |
| 8·5 | | 18·1 | 19·3 | 8·5 GSg |
| 9·6 | | 19·1 | 11·9 | |
| 9·6 | | 31·8 | 56·9 | |
| 9·7 | | 35·1 | 32·4 | |
| 9·8 | | 36·1 | 8·9 | |
| 10·1 | 23 | 27·2 | 58·9 | |
| 9·2 | | 35·1 | 43·7 | |
| 9·6 | | 41·6 | 42·0 | |
| 9·6 | | 42·1 | 4·5 | |
| 9·4 | | 50·6 | 48·2 | |
| 8·7 | 24 | 3·6 | 50·9 | 9·0 |
| 9·6 | | 7·6 | 24·4 | |
| 9·8 | | 11·1 | 19·2 | |
| 10·1 | | 20·0 | 4·4 | |
| 9·6 | | 21·0 | 6·4 | |
| 10·0 | | 23·5 | 27·8 | |

### 1561—1620.

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 24 | 29·0 | 54·7 | |
| 10·1 | | 30·5 | 48·9 | |
| 8·2 | 25 | 17·5 | 37·6 | 8·5 Gg |
| 10·1 | | 24·0 | 21·6 | |
| 10·1 | | 24·5 | 49·2 | |
| 10·1 | | 25·0 | 20·5 | |
| 9·4 | | 25·5 | 16·3 | |
| 9·2 | | 31·5 | 32·9 | 9·0 |
| 9·8 | | 33·0 | 7·5 | |
| 10·1 | 26 | 2·0 | 35·3 | |
| 9·4 | | 7·0 | 50·9 | |
| 8·0 | | 22·8 | 0·0 | 8·0 |
| 10·0 | | 34·0 | 27·1 | |
| 10·1 | | 43·5 | 45·8 | |
| 9·7 | | 45·5 | 2·0 | |
| 10·1 | 27 | 15·0 | 4·0 | |
| 10·1 | | 26·5 | 37·0 | |
| 10·0 | | 30·5 | 16·4 | |
| 10·0 | | 32·0 | 34·6 | |
| 9·7 | | 39·0 | 14·5 | |
| 10·1 | | 50·0 | 21·3 | |
| 10·0 | 28 | 2·5 | 20·9 | |
| 10·0 | | 6·3 | 2·2 | |
| 8·7 | | 6·5 | 35·5 | 9·5 |
| 9·0 | | 13·0 | 34·7 | 9·0 |
| 9·6 | | 21·0 | 40·4 | |
| 9·4 | | 27·5 | 28·9 | |
| 8·7 | | 31·0 | 22·5 | 8·0 GSg |
| 8·9 | | 37·0 | 22·8 | 9·0 Gg |
| 10·0 | | 40·0 | 57·8 | |
| 8·7 | | 52·5 | 56·9 | 7·8 g |
| 9·8 | | 56·0 | 39·5 | |
| 9·4 | | 57·0 | 39·1 | |
| 10·0 | 29 | 24·8 | 0·5 | |
| 7·7 | | 27·8 | 2·7 | GSt |
| 8·9 | | 30·5 | 32·4 | 9·0 |
| 10·1 | | 30·5 | 47·3 | |
| 9·8 | | 32·0 | 16·3 | |
| 9·0 | | 34·5 | 26·9 | 8·5 |
| 9·7 | | 34·5 | 53·0 | |
| 10·1 | | 36·2 | 22·9 | |
| 10·0 | | 43·0 | 44·9 | |
| 9·6 | | 47·5 | 14·1 | |
| 9·4 | | 51·5 | 3·0 | |
| 10·1 | | 55·0 | 43·9 | |
| 7·4 | | 59·5 | 58·2 | 7·8 GS |
| 9·4 | 30 | 10·5 | 4·9 | |
| 9·1 | | 11·5 | 3·5 | |
| 8·5 | | 12·5 | 49·5 | 8·5 |
| 10·1 | | 18·0 | 4·9 | |
| 9·6 | | 23·0 | 51·7 | |
| 9·6 | | 24·5 | 27·3 | |
| 9·8 | | 31·0 | 18·5 | |
| 9·4 | | 31·5 | 7·2 | |
| 10·0 | | 37·0 | 51·5 | |
| 10·1 | | 53·0 | 27·7 | |
| 9·7 | | 54·5 | 31·5 | |
| 10·1 | 31 | 3·0 | 46·5 | |
| 9·8 | | 11·5 | 27·0 | |
| 10·0 | | 18·2 | 10·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 50 | 34 | 3·9 |
| 8 | 0 | 35 | 4·2 |
| | 10 | 36 | 4·5 |
| | 20 | 37 | 4·8 |
| | 30 | 38 | 5·1 |
| | 40 | 40 | 5·4 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 8 | 30 | 38 | 5·1 |
| | 40 | 40 | 5·4 |
| | 50 | 41 | 5·6 |
| 9 | 0 | 42 | 5·9 |

**1621—1680.**

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 31 | 25·5 | 51·4 | |
| 10·0 | | 39·5 | 27·3 | |
| 10·1 | | 59·5 | 21·9 | |
| 10·1 | 32 | 0·0 | 45·9 | |
| 8·9 | | 2·0 | 37·1 | 9·5 |
| 9·8 | | 2·0 | 10·9 | |
| 10·0 | | 10·0 | 45·9 | |
| 10·1 | | 29·5 | 5·5 | |
| 10·1 | | 31·0 | 29·3 | |
| 7·5 | | 45·5 | 56·6 | 7·8 GSg |
| 9·3 | | 45·5 | 15·0 | |
| 10·1 | | 58·0 | 52·9 | |
| 10·1 | 33 | 1·0 | 16·1 | |
| 9·8 | | 2·5 | 31·7 | |
| 9·7 | | 6·0 | 25·5 | |
| 10·1 | | 13·0 | 32·1 | |
| 10·1 | | 19·2 | 47·4 | |
| 9·4 | | 47·5 | 25·7 | 9·0 |
| 10·1 | | 51·5 | 45·0 | |
| 9·7 | 34 | 1·0 | 16·9 | |
| 10·1 | | 1·0 | 27·8 | |
| 9·2 | | 12·0 | 22·7 | |
| 8·9 | | 24·0 | 49·5 | |
| 9·8 | | 32·0 | 5·3 | |
| 10·0 | | 33·5 | 43·0 | |
| 9·6 | | 33·5 | 7·4 | |
| 10·0 | | 37·0 | 15·0 | |
| 10·1 | | 45·5 | 11·1 | |
| 10·0 | | 51·0 | 33·2 | |
| 8·7 | | 56·0 | 17·7 | 9·5 |
| 9·4 | 35 | 13·7 | 56·9 | |
| 10·0 | | 21·0 | 55·5 | |
| 9·2 | | 22·0 | 23·7 | G |
| 10·0 | | 24·5 | 52·7 | |
| 9·4 | | 29·5 | 31·2 | |
| 9·8 | | 31·5 | 26·4 | |
| 10·0 | | 38·5 | 28·2 | |
| 9·8 | | 46·0 | 17·9 | 9·5 |
| 9·6 | | 47·0 | 6·5 | |
| 8·0 | | 50·0 | 30·1 | 7·5 GSg |
| 9·6 | | 57·0 | 53·3 | |
| 10·0 | 36 | 26·0 | 9·9 | |
| 10·0 | | 28·0 | 33·9 | |
| 9·4 | | 31·0 | 19·9 | |
| 9·6 | | 32·7 | 41·4 | |
| 9·8 | | 33·5 | 8·1 | |
| 9·8 | | 35·2 | 35·6 | |
| 9·8 | | 37·0 | 58·1 | |
| 10·1 | | 41·2 | 6·3 | |
| 9·8 | | 44·7 | 46·7 | |
| 10·1 | 37 | 12·2 | 47·9 | |
| 9·4 | | 28·7 | 42·3 | |
| 10·1 | | 32·0 | 28·6 | |
| 7·7 | | 34·2 | 43·3 | 8·0 |
| 9·8 | | 35·2 | 17·4 | |
| 9·6 | | 48·7 | 44·5 | |
| 9·0 | | 55·7 | 15·6 | 9·5 |
| 9·6 | 38 | 28·2 | 9·9 | |
| 9·7 | | 31·7 | 7·9 | |
| 10·0 | | 38·7 | 52·5 | |

**1681—1740.**

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 38 | 54·7 | 42·7 | |
| 10·1 | | 55·2 | 10·3 | |
| 9·8 | | 56·2 | 40·9 | |
| 10·1 | | 58·0 | 42·0 | |
| 10·0 | 39 | 1·7 | 33·0 | |
| 9·8 | | 2·7 | 46·0 | |
| 8·8 | | 4·2 | 16·5 | |
| 7·7 | | 4·2 | 19·6 | 7·0 GSg |
| 9·6 | | 10·7 | 42·3 | |
| 10·0 | | 21·2 | 28·9 | |
| 9·8 | | 23·2 | 15·1 | |
| 10·1 | | 26·7 | 56·9 | |
| 8·7 | | 29·2 | 54·0 | 9·0 |
| 10·1 | | 31·2 | 56·3 | |
| 9·4 | | 31·7 | 11·0 | 9·0 |
| 10·1 | | 48·7 | 37·1 | |
| 9·7 | | 54·2 | 23·1 | |
| 10·1 | | 55·7 | 32·3 | |
| 9·0 | | 59·7 | 54·7 | |
| 10·0 | 40 | 5·2 | 19·4 | |
| 9·4 | | 7·2 | 12·0 | 9·5 |
| 9·2 | | 10·2 | 33·0 | |
| 9·8 | | 10·7 | 59·1 | |
| 9·6 | | 28·0 | 57·9 | |
| 9·8 | | 44·4 | 15·2 | |
| 8·4 | | 46·9 | 19·1 | 8·5 |
| 10·1 | | 48·4 | 47·0 | |
| 9·8 | | 50·4 | 13·4 | |
| 9·6 | | 51·4 | 44·7 | |
| 9·6 | 41 | 9·4 | 58·9 | |
| 10·0 | | 12·4 | 10·6 | |
| 10·1 | | 13·4 | 57·0 | |
| 10·1 | | 13·4 | 5·1 | |
| 10·1 | | 21·4 | 4·7 | |
| 9·3 | | 22·9 | 38·6 | |
| 10·1 | | 23·4 | 51·6 | |
| 9·6 | | 39·4 | 46·3 | |
| 10·0 | | 39·6 | 57·5 | |
| 9·6 | | 40·4 | 58·2 | |
| 10·0 | | 42·4 | 27·0 | |
| 9·6 | | 50·4 | 30·8 | |
| 9·6 | 42 | 2·4 | 17·3 | |
| 10·1 | | 4·4 | 48·3 | |
| 10·0 | | 10·9 | 46·3 | |
| 9·3 | | 22·4 | 15·2 | 8·5 |
| 9·1 | | 23·9 | 16·6 | |
| 7·5 | | 24·9 | 24·1 | 7·5 GSt |
| 10·0 | | 25·4 | 14·8 | |
| 9·4 | | 26·9 | 16·9 | |
| 8·4 | | 36·9 | 39·3 | |
| 9·8 | | 38·9 | 47·8 | |
| 9·8 | | 39·9 | 16·6 | |
| 10·0 | | 41·4 | 0·7 | |
| 10·1 | | 44·9 | 24·6 | |
| 9·8 | | 49·4 | 36·8 | |
| 9·7 | 43 | 0·4 | 26·2 | |
| 9·6 | | 5·4 | 2·7 | |
| 10·0 | | 9·4 | 22·5 | |
| 9·8 | | 10·4 | 16·9 | |
| 10·0 | | 11·4 | 54·4 | |

**1741—1800.**

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 43 | 21·9 | 8·5 | |
| 10·1 | | 22·4 | 44·7 | |
| 9·7 | | 26·6 | 31·8 | |
| 9·8 | | 27·5 | 25·6 | |
| 9·8 | | 28·5 | 37·6 | |
| 10·1 | | 29·5 | 11·1 | |
| 9·2 | | 30·0 | 20·8 | |
| 9·6 | | 30·0 | 16·6 | |
| 9·1 | | 31·0 | 33·9 | |
| 8·8 | | 31·0 | 15·8 | 9·0 |
| 9·8 | | 40·5 | 24·3 | |
| 9·8 | | 41·0 | 44·1 | |
| 9·6 | | 46·0 | 22·5 | 9·5 |
| 9·8 | | 46·0 | 10·6 | |
| 9·6 | | 49·0 | 13·2 | |
| 9·0 | | 53·5 | 22·6 | 9·5 |
| 10·0 | 44 | 2·5 | 13·9 | |
| 8·2 | | 18·0 | 55·2 | 8·5 |
| 10·0 | | 20·5 | 39·1 | |
| 9·4 | | 22·0 | 56·1 | 9·0 |
| 10·1 | | 25·5 | 4·0 | |
| 10·1 | | 29·0 | 19·0 | |
| 9·8 | | 29·5 | 11·4 | |
| 10·1 | | 30·2 | 4·7 | |
| 10·0 | | 31·5 | 44·8 | |
| 10·0 | | 33·0 | 47·8 | |
| 9·2 | | 35·0 | 27·4 | |
| 10·1 | | 46·0 | 26·1 | |
| 10·0 | | 50·0 | 5·0 | |
| 9·4 | | 51·5 | 19·0 | |
| 10·1 | 45 | 9·2 | 22·7 | |
| 9·7 | | 15·0 | 25·8 | |
| 10·1 | | 18·0 | 23·2 | |
| 9·4 | | 22·0 | 25·3 | |
| 10·1 | | 22·5 | 26·0 | |
| 10·1 | | 28·0 | 20·4 | |
| 10·1 | | 28·5 | 10·7 | |
| 9·4 | | 28·5 | 2·7 | |
| 10·0 | | 31·5 | 54·6 | |
| 10·0 | | 36·5 | 21·6 | |
| 10·0 | | 36·5 | 29·1 | |
| 9·8 | | 39·5 | 12·4 | |
| 10·0 | | 47·5 | 34·9 | |
| 9·4 | | 54·0 | 28·7 | |
| 9·4 | | 55·5 | 5·2 | |
| 9·0 | 46 | 3·7 | 16·5 | |
| 9·6 | | 5·2 | 32·2 | |
| 8·4 | | 9·2 | 41·6 | 8·5 |
| 10·1 | | 9·2 | 23·6 | |
| 10·0 | | 9·7 | 9·9 | |
| 9·8 | | 9·7 | 24·5 | |
| 9·6 | | 12·7 | 56·5 | |
| 10·1 | | 24·7 | 9·3 | |
| 10·1 | | 31·7 | 59·9 | |
| 9·7 | | 38·7 | 27·1 | |
| 8·9 | | 45·7 | 41·9 | 9·0 |
| 9·8 | | 49·2 | 26·7 | |
| 9·8 | 47 | 0·2 | 57·0 | |
| 9·8 | | 7·7 | 10·8 | |
| 9·6 | | 11·2 | 15·7 | |

**1801—1860.**

| mag. | 8h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 47 | 19·2 | 16·8 | |
| 10·1 | | 20·0 | 21·4 | |
| 10·0 | | 28·0 | 56·9 | |
| 10·0 | | 46·2 | 24·4 | |
| 10·0 | | 49·7 | 19·4 | |
| 9·4 | | 52·0 | 39·7 | |
| 9·4 | | 55·2 | 0·8 | |
| 9·6 | 48 | 0·7 | 18·2 | |
| 9·6 | | 0·7 | 14·0 | |
| 9·3 | | 8·2 | 49·0 | |
| 9·6 | | 10·3 | 18·7 | |
| 10·0 | | 10·7 | 20·7 | |
| 9·0 | | 10·7 | 25·9 | 9·5 |
| 9·6 | | 18·7 | 27·5 | |
| 7·3 | | 21·7 | 20·3 | 7·0 GSg |
| 10·0 | | 35·7 | 38·2 | |
| 9·0 | | 36·5 | 41·3 | |
| 9·6 | | 47·8 | 30·1 | |
| 8·6 | | 57·8 | 33·3 | 9·0 |
| 7·2 | | 59·8 | 46·2 | 7·5 GSg |
| 9·6 | 49 | 2·3 | 33·9 | |
| 8·6 | | 2·3 | 32·9 | 9·0 |
| 9·6 | | 4·1 | 1·5 | |
| 9·6 | | 5·8 | 46·1 | |
| 9·6 | | 18·8 | 6·4 | |
| 9·6 | | 19·3 | 44·9 | |
| 8·6 | | 23·8 | 31·1 | 8·0 |
| 9·4 | | 29·3 | 46·9 | |
| 9·4 | | 29·3 | 38·3 | |
| 8·6 | | 48·3 | 55·9 | |
| 9·6 | | 50·8 | 19·7 | |
| 9·4 | | 54·8 | 4·5 | |
| 9·4 | 50 | 19·8 | 14·9 | |
| 9·4 | | 37·3 | 24·7 | |
| 9·2 | | 41·8 | 48·8 | 9·0 |
| 9·4 | | 43·8 | 17·8 | |
| 9·4 | | 43·8 | 4·0 | |
| 9·4 | | 46·3 | 45·8 | |
| 9·6 | 51 | 0·9 | 1·5 | |
| 8·8 | | 10·3 | 45·3 | 9·5 |
| 8·8 | | 19·8 | 4·3 | |
| 9·4 | | 19·8 | 35·3 | |
| 9·1 | | 31·3 | 45·6 | |
| 9·2 | 52 | 9·8 | 11·0 | |
| 9·4 | | 10·3 | 30·9 | |
| 9·1 | | 14·8 | 51·1 | 8·5 |
| 9·6 | | 20·8 | 58·1 | 9·5 |
| 9·0 | | 20·8 | 8·0 | |
| 9·6 | | 27·7 | 5·0 | |
| 9·4 | | 29·7 | 31·3 | |
| 9·6 | | 34·8 | 43·3 | |
| 8·6 | | 41·3 | 2·0 | 8·0 GS |
| 8·6 | | 41·3 | 3·0 | 7·5 GS |
| 9·6 | | 43·8 | 22·0 | |
| 8·4 | | 47·3 | 28·5 | |
| 9·3 | 53 | 10·8 | 39·4 | |
| 9·6 | | 19·5 | 45·9 | |
| 8·8 | | 48·3 | 48·1 | 9·5 |
| 9·6 | | 48·3 | 47·1 | |
| 9·4 | | 50·3 | 45·5 | |



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## 1861—1920.

| mag. | 8h.–9h. m s | −55° ′ | |
|---|---|---|---|
| 9·4 | 53 56·3 | 45·6 | |
| 9·4 | 59·3 | 32·6 | |
| 9·2 | 54 15·8 | 54·2 | |
| 9·4 | 21·3 | 25·0 | |
| 9·6 | 31·3 | 47·0 | |
| 9·6 | 37·3 | 13·6 | |
| 9·4 | 37·8 | 13·0 | |
| 9·3 | 41·3 | 21·8 | |
| 8·9 | 59·3 | 10·3 | 9·5 |
| 9·2 | 55 2·8 | 2·8 | |
| 9·6 | 9·3 | 41·0 | |
| 9·4 | 22·8 | 45·0 | |
| 9·6 | 28·1 | 1·3 | |
| 9·0 | 31·8 | 24·8 | |
| 9·1 | 34·3 | 39·0 | |
| 9·6 | 37·3 | 34·4 | |
| 9·3 | 37·3 | 21·0 | |
| 9·0 | 38·3 | 8·0 | 9·0 |
| 9·4 | 44·8 | 6·2 | 9·0 |
| 9·6 | 57·5 | 4·7 | |
| 8·8 | 57·8 | 52·8 | 9·2 |
| 9·2 | 56 14·3 | 2·9 | 9·5 |
| 9·6 | 15·8 | 13·6 | |
| 9·6 | 22·3 | 49·0 | |
| 9·6 | 31·3 | 9·0 | |
| 8·6 | 32·8 | 13·2 | 9·0 |
| 9·1 | 37·3 | 10·2 | |
| 9·4 | 44·3 | 32·2 | |
| 8·5 | 45·8 | 5·8 | 8·8 G |
| 9·4 | 46·1 | 1·4 | |
| 9·6 | 51·3 | 31·4 | |
| 9·0 | 57 1·3 | 55·2 | |
| 9·0 | 11·8 | 52·4 | 9·5 |
| 9·4 | 20·8 | 53·8 | 9·5 |
| 9·6 | 24·3 | 53·8 | |
| 9·0 | 29·3 | 15·8 | |
| 9·0 | 29·8 | 52·6 | 9·5 |
| 8·4 | 32·8 | 59·2 | 9·0 |
| 9·2 | 41·8 | 16·2 | |
| 8·4 | 59·3 | 9·4 | 9·0 |
| 9·4 | 58 9·3 | 58·8 | 9·2 |
| 9·4 | 12·8 | 26·4 | |
| 9·0 | 17·8 | 58·1 | 9·1 |
| 9·6 | 23·3 | 16·9 | |
| 9·4 | 28·8 | 52·1 | |
| 9·6 | 28·8 | 58·4 | 9·5 |
| 9·0 | 31·8 | 35·8 | |
| 9·6 | 41·3 | 0·2 | |
| 9·6 | 43·8 | 59·6 | |
| 8·9 | 59 9·3 | 54·5 | 9·0 |
| 8·5 | 13·8 | 7·0 | 8·0 |
| 9·3 | 18·3 | 24·1 | 9·5 |
| 8·4 | 24·3 | 40·8 | 8·5 |
| 9·6 | 31·3 | 25·0 | |
| 9·6 | 59·3 | 9·1 | |
| 9·6 | 0 1·3 | 51·8 | |
| 9·4 | 10·3 | 5·4 | |
| 9·2 | 18·3 | 19·5 | |
| 8·7 | 29·8 | 50·4 | 9·5 |
| 9·4 | 38·3 | 25·8 | |

## 1921—1980.

| mag. | 9h. m s | −55° ′ | |
|---|---|---|---|
| 9·4 | 0 40·3 | 39·6 | |
| 9·6 | 59·4 | 50·3 | |
| 9·0 | 59·7 | 1·4 | 9·5 |
| 7·1 | 1 1·4 | 50·7 | 7·3 GSt |
| 9·0 | 4·9 | 32·1 | |
| 9·3 | 6·9 | 50·1 | |
| 9·4 | 10·4 | 23·7 | |
| 9·1 | 11·9 | 7·9 | |
| 9·6 | 12·9 | 3·9 | |
| 9·0 | 16·4 | 55·2 | 9·5 |
| 9·1 | 20·9 | 30·9 | |
| 9·1 | 29·9 | 25·4 | |
| 9·0 | 32·4 | 29·7 | |
| 9·3 | 37·0 | 0·9 | |
| 8·8 | 39·4 | 23·5 | |
| 9·6 | 39·9 | 28·9 | |
| 8·4 | 44·4 | 32·1 | |
| 9·6 | 49·4 | 35·7 | |
| 8·9 | 49·4 | 23·4 | |
| 9·4 | 51·4 | 8·8 | |
| 9·1 | 57·4 | 27·4 | |
| 9·4 | 57·9 | 36·1 | |
| 8·8 | 59·4 | 29·6 | |
| 9·4 | 2 6·9 | 53·5 | 9·0 |
| 8·4 | 9·4 | 14·3 | 9·0 |
| 9·0 | 21·9 | 24·7 | 9·0 |
| 9·0 | 22·9 | 50·5 | 9·5 |
| 9·1 | 31·9 | 47·8 | |
| 9·6 | 41·9 | 4·1 | |
| 9·2 | 42·4 | 35·8 | |
| 8·8 | 44·4 | 20·5 | 9·0 |
| 9·3 | 44·9 | 28·7 | |
| 9·1 | 49·4 | 46·5 | 9·0 |
| 9·4 | 57·4 | 37·1 | |
| 9·1 | 57·4 | 39·7 | 9·5 |
| 9·6 | 57·9 | 50·5 | |
| 5·8 | 59·4 | 18·0 | 6·7 GSg |
| 9·1 | 59·9 | 22·1 | |
| 9·4 | 3 0·4 | 11·9 | |
| 9·6 | 2·9 | 10·5 | |
| 9·0 | 6·9 | 21·9 | 9·0 |
| 9·6 | 11·4 | 36·0 | |
| 9·4 | 11·4 | 4·1 | |
| 9·6 | 27·4 | 25·9 | |
| 9·1 | 32·6 | 56·0 | |
| 9·6 | 38·1 | 35·1 | |
| 9·1 | 39·6 | 24·8 | |
| 9·6 | 40·6 | 34·7 | |
| 9·0 | 43·1 | 13·7 | 9·0 |
| 9·6 | 46·1 | 52·0 | |
| 9·4 | 4 2·6 | 7·1 | |
| 9·3 | 8·1 | 15·5 | |
| 9·3 | 24·1 | 56·1 | 9·0 |
| 9·4 | 33·1 | 44·4 | |
| 9·6 | 38·1 | 7·9 | |
| 9·0 | 43·1 | 14·8 | |
| 9·1 | 50·6 | 14·9 | |
| 9·2 | 5 10·1 | 29·4 | |
| 9·1 | 12·3 | 56·6 | 9·5 |
| 9·3 | 15·1 | 55·2 | |

## 1981—2040.

| mag. | 9h. m s | −55° ′ | |
|---|---|---|---|
| 9·2 | 5 35·1 | 15·3 | |
| 9·4 | 41·3 | 58·1 | |
| 9·2 | 50·1 | 8·0 | |
| 9·6 | 6 1·6 | 21·1 | |
| 9·1 | 3·1 | 37·0 | |
| 9·6 | 10·1 | 25·6 | |
| 9·1 | 12·6 | 10·9 | |
| 9·2 | 21·1 | 59·5 | |
| 9·6 | 21·6 | 56·3 | |
| 9·3 | 29·1 | 47·9 | |
| 9·6 | 33·1 | 49·3 | |
| 9·6 | 40·1 | 2·1 | |
| 9·4 | 46·1 | 7·9 | |
| 9·3 | 48·1 | 47·4 | |
| 9·2 | 53·1 | 52·7 | |
| 9·6 | 7 0·6 | 31·1 | |
| 9·1 | 4·9 | 59·0 | 9·2 |
| 9·2 | 7·6 | 49·4 | |
| 9·4 | 11·1 | 8·1 | |
| 9·3 | 13·1 | 56·2 | 9·8 |
| 9·4 | 19·1 | 23·1 | |
| 9·6 | 19·3 | 59·4 | |
| 9·1 | 25·1 | 48·8 | |
| 9·4 | 34·1 | 39·9 | |
| 9·2 | 48·6 | 29·1 | |
| 9·6 | 8 2·1 | 26·7 | |
| 8·6 | 8·1 | 6·2 | 9·0 |
| 9·6 | 21·1 | 5·1 | |
| 9·2 | 21·6 | 38·7 | |
| 9·3 | 37·6 | 51·1 | |
| 9·3 | 38·6 | 24·5 | |
| 9·6 | 47·6 | 13·7 | |
| 9·6 | 9 0·1 | 29·5 | |
| 9·6 | 3·6 | 43·3 | |
| 8·6 | 11·1 | 17·4 | 9·0 |
| 9·6 | 11·6 | 18·3 | |
| 9·4 | 14·6 | 22·4 | |
| 9·4 | 19·6 | 8·5 | |
| 9·4 | 24·6 | 53·3 | |
| 9·6 | 31·6 | 17·1 | |
| 9·4 | 32·1 | 44·7 | |
| 9·4 | 35·8 | 0·2 | |
| 9·4 | 37·6 | 29·9 | |
| 9·0 | 42·1 | 17·8 | 9·5 |
| 8·9 | 44·1 | 20·2 | 9·0 |
| 9·2 | 56·1 | 3·7 | |
| 9·3 | 10 7·7 | 51·6 | 10·0 |
| 7·9 | 9·1 | 1·4 | 8·5 G |
| 8·6 | 9·2 | 53·7 | 9·0 |
| 9·2 | 15·2 | 53·2 | |
| 9·0 | 15·2 | 20·2 | |
| 9·0 | 18·2 | 4·4 | 9·0 |
| 8·2 | 19·2 | 9·7 | 8·5 |
| 9·0 | 28·2 | 34·4 | 8·5 |
| 7·1 | 36·2 | 3·2 | 6·0 GSct |
| 9·4 | 41·2 | 37·2 | |
| 7·3 | 11 4·7 | 7·3 | 7·0 GS |
| 9·6 | 5·7 | 55·2 | |
| 8·9 | 18·2 | 32·8 | 9·0 |
| 9·0 | 21·2 | 31·9 | |

## 2041—2100.

| mag. | 9h. m s | −55° ′ | |
|---|---|---|---|
| 9·3 | 11 29·7 | 21·0 | |
| 9·4 | 32·1 | 2·1 | 9·0 |
| 9·4 | 42·7 | 48·4 | |
| 8·5 | 51·2 | 44·4 | 7·8 G |
| 9·3 | 54·2 | 32·8 | 9·0 |
| 9·2 | 12 0·7 | 30·0 | |
| 9·6 | 14·2 | 28·9 | |
| 9·4 | 15·7 | 3·4 | |
| 8·2 | 18·1 | 2·2 | 8·0 |
| 9·6 | 31·2 | 2·7 | |
| 8·8 | 41·2 | 7·4 | 8·5 |
| 9·0 | 41·7 | 29·6 | |
| 9·3 | 49·7 | 14·1 | |
| 9·6 | 59·2 | 13·4 | |
| 9·0 | 13 8·2 | 58·8 | 8·2 |
| 9·6 | 19·7 | 45·4 | |
| 9·3 | 26·2 | 41·1 | |
| 9·4 | 29·7 | 32·1 | 9·0 |
| 8·1 | 49·2 | 24·7 | 7·5 G |
| 9·6 | 49·2 | 37·9 | |
| 9·2 | 49·7 | 6·7 | 9·5 |
| 9·6 | 14 4·2 | 1·2 | |
| 9·4 | 9·7 | 45·3 | |
| 9·6 | 10·7 | 20·1 | |
| 9·4 | 11·2 | 13·1 | |
| 9·4 | 19·2 | 47·9 | |
| 9·6 | 20·5 | 1·7 | |
| 9·1 | 22·7 | 45·4 | |
| 9·6 | 23·7 | 29·5 | |
| 9·6 | 27·9 | 1·0 | |
| 9·4 | 28·7 | 30·0 | |
| 9·0 | 29·7 | 20·0 | |
| 9·4 | 37·2 | 42·0 | |
| 9·4 | 41·2 | 27·7 | |
| 9·3 | 50·2 | 25·3 | |
| 8·6 | 15 11·7 | 31·9 | 8·0 G |
| 9·4 | 15·8 | 2·1 | |
| 9·6 | 16·2 | 15·4 | |
| 9·3 | 25·7 | 45·1 | |
| 7·4 | 28·0 | 50·3 | 7·3 GSg |
| 9·6 | 43·5 | 3·7 | |
| 9·3 | 51·0 | 39·6 | |
| 9·3 | 58·0 | 26·8 | |
| 9·6 | 58·0 | 48·0 | |
| 9·0 | 16 0·5 | 25·7 | |
| 9·3 | 7·0 | 48·0 | |
| 9·0 | 7·0 | 50·6 | |
| 9·6 | 20·0 | 14·0 | |
| 8·8 | 20·0 | 20·5 | 9·5 |
| 9·2 | 22·5 | 45·3 | |
| 9·6 | 25·5 | 17·7 | |
| 9·4 | 30·0 | 48·6 | |
| 9·1 | 30·0 | 43·8 | |
| 9·3 | 30·5 | 43·3 | |
| 9·3 | 36·5 | 35·6 | |
| 9·4 | 39·0 | 26·0 | |
| 9·6 | 41·5 | 15·9 | |
| 9·6 | 43·5 | 15·2 | |
| 8·6 | 52·5 | 57·2 | 8·5 G |
| 9·4 | 58·0 | 45·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 50 | 41 | 5·6 |
| 9 | 0 | 42 | 5·9 |
| | 10 | 44 | 6·2 |
| | 20 | 46 | 6·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 9 | 10 | 44 | 6·2 |
| | 20 | 46 | 6·4 |
| | 30 | 47 | 6·6 |
| | 40 | 49 | 6·8 |

## 2101—2160.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 16 | 59·5 | 36·8 | |
| 8·0 | 17 | 8·0 | 16·8 | 8·3 |
| 9·6 | | 9·0 | 47·5 | |
| 9·6 | | 21·0 | 28·0 | |
| 9·4 | | 22·0 | 47·6 | |
| 9·0 | | 22·5 | 52·1 | 9·0 |
| 9·2 | | 25·5 | 32·0 | |
| 9·6 | | 30·5 | 2·6 | |
| 9·1 | | 45·0 | 43·0 | |
| 9·3 | | 48·0 | 11·0 | 10·0 |
| 9·6 | | 49·0 | 34·8 | |
| 9·6 | | 49·0 | 35·4 | |
| 9·4 | | 52·0 | 22·4 | |
| 9·4 | | 55·5 | 11·9 | |
| 9·4 | 18 | 1·5 | 10·7 | |
| 9·3 | | 11·0 | 25·5 | |
| 9·6 | | 16·0 | 33·9 | |
| 8·2 | | 29·0 | 25·6 | 8·0 G |
| 9·3 | | 29·5 | 26·1 | |
| 9·4 | | 34·0 | 15·6 | |
| 9·4 | | 34·0 | 34·6 | |
| 9·1 | | 36·0 | 23·6 | |
| 8·6 | | 42·0 | 41·8 | 9·0 |
| 9·6 | | 50·0 | 11·5 | |
| 8·8 | | 59·0 | 7·0 | 9·5 |
| 8·8 | 19 | 7·0 | 12·1 | 9·0 |
| 9·0 | | 7·0 | 55·8 | |
| 9·4 | | 15·0 | 7·3 | |
| 8·8 | | 23·0 | 27·5 | : |
| 8·9 | | 24·5 | 35·8 | |
| 9·6 | | 26·5 | 31·9 | |
| 9·2 | | 27·5 | 3·5 | : |
| 9·0 | | 30·0 | 32·0 | |
| 9·6 | | 30·2 | 59·9 | |
| 9·1 | | 30·5 | 4·6 | |
| 9·2 | | 30·5 | 20·0 | |
| 9·4 | | 31·0 | 53·4 | |
| 8·7 | | 38·5 | 18·9 | 9·2 |
| 10·4 | | 51·5 | 31·0 | |
| 10·4 | | 54·2 | 58·5 | |
| 10·4 | 20 | 1·0 | 44·9 | |
| 10·2 | | 10·0 | 17·1 | |
| 10·4 | | 10·0 | 41·6 | |
| 8·2 | | 12·0 | 13·9 | 9·0 |
| 9·2 | | 12·0 | 56·9 | 9·5 |
| 9·6 | | 28·5 | 32·1 | |
| 10·2 | | 30·0 | 23·9 | |
| 8·6 | | 42·5 | 16·3 | 9·0 |
| 10·2 | | 47·5 | 16·5 | |
| 10·4 | | 47·5 | 45·2 | |
| 10·2 | | 51·0 | 44·7 | |
| 10·4 | 21 | 2·5 | 49·9 | |
| 10·4 | | 28·5 | 4·4 | |
| 10·0 | | 29·5 | 32·4 | 9·0 |
| 10·4 | | 30·9 | 0·8 | |
| 10·4 | | 38·5 | 25·7 | |
| 9·8 | | 39·0 | 9·9 | |
| 10·4 | | 54·0 | 45·0 | |
| 9·0 | | 58·2 | 59·9 | |
| 9·8 | 22 | 0·5 | 42·1 | |

## 2161—2220.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·0 | 22 | 1·0 | 17·7 | 9·5 |
| 10·ↄ | | 9·5 | 16·1 | |
| 7·7 | | 10·0 | 32·9 | 8·0 GSg |
| 10·4 | | 16·0 | 24·3 | |
| 10·2 | | 18·0 | 48·2 | |
| 10·2 | | 29·0 | 16·6 | |
| 8·6 | | 38·0 | 56·1 | 9·5 |
| 10·4 | | 40·0 | 6·3 | |
| 10·4 | | 41·5 | 12·9 | |
| 10·4 | | 42·5 | 7·0 | |
| 8·8 | | 47·0 | 30·7 | 9·0 |
| 9·6 | | 48·0 | 35·3 | |
| 9·8 | | 48·5 | 20·7 | |
| 10·4 | | 49·0 | 5·3 | |
| 8·8 | | 51·5 | 25·0 | 8·5 |
| 8·9 | | 52·0 | 23·6 | 8·5 |
| 10·2 | 23 | 0·0 | 45·9 | |
| 10·2 | | 10·0 | 11·9 | |
| 9·8 | | 12·0 | 26·6 | |
| 10·0 | | 12·5 | 23·2 | |
| 9·8 | | 28·5 | 21·0 | |
| 10·4 | | 30·0 | 45·0 | |
| 10·0 | | 35·0 | 15·9 | |
| 10·4 | | 36·0 | 32·3 | |
| 10·4 | | 36·5 | 15·1 | |
| 10·0 | | 40·0 | 19·2 | |
| 10·4 | | 40·0 | 52·5 | |
| 10·0 | | 43·0 | 24·9 | |
| 10·4 | | 49·5 | 56·2 | |
| 10·2 | | 59·5 | 39·2 | |
| 9·4 | 24 | 0·0 | 18·7 | 9·0 |
| 9·8 | | 0·6 | 2·0 | |
| 10·4 | | 7·5 | 15·2 | |
| 10·0 | | 8·5 | 37·9 | |
| 10·4 | | 17·5 | 37·0 | |
| 9·5 | | 18·0 | 22·8 | 9·0 |
| 10·0 | | 19·2 | 57·6 | |
| 10·0 | | 21·7 | 58·1 | |
| 10·2 | | 24·0 | 40·9 | |
| 10·4 | | 28·7 | 58·5 | |
| 10·4 | | 29·5 | 45·7 | |
| 10·2 | | 29·8 | 2·2 | |
| 10·0 | | 38·0 | 25·9 | |
| 10·4 | | 40·0 | 22·0 | |
| 10·0 | | 48·5 | 15·3 | |
| 9·8 | | 48·5 | 28·0 | |
| 10·2 | | 49·0 | 14·7 | |
| 10·0 | | 53·0 | 17·5 | |
| 9·8 | 25 | 0·5 | 49·0 | |
| 10·2 | | 1·5 | 27·8 | |
| 10·0 | | 2·0 | 6·0 | |
| 10·4 | | 6·5 | 20·5 | |
| 9·4 | | 16·5 | 42·4 | 9·0 |
| 9·4 | | 17·5 | 43·1 | |
| 10·2 | | 23·0 | 10·4 | |
| 10·4 | | 32·0 | 15·5 | |
| 10·4 | | 39·5 | 38·6 | |
| 7·8 | | 40·0 | 59·5 | 8·0 GSg |
| 10·4 | | 46·0 | 4·6 | |
| 10·2 | | 52·0 | 51·2 | |

## 2221—2280.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 26 | 0·9 | 1·3 | |
| 8·9 | | 1·0 | 28·8 | 9·5 |
| 10·4 | | 3·5 | 51·2 | |
| 9·4 | | 9·5 | 35·5 | 9·0 |
| 10·4 | | 9·5 | 33·3 | |
| 9·2 | | 10·0 | 1·7 | |
| 10·2 | | 13·2 | 59·0 | |
| 10·4 | | 17·0 | 31·5 | |
| 10·2 | | 19·5 | 5·0 | |
| 10·4 | | 20·0 | 42·7 | |
| 9·2 | | 20·0 | 45·1 | |
| 10·0 | | 23·5 | 13·8 | |
| 10·4 | | 26·5 | 26·3 | |
| 10·4 | | 28·5 | 45·5 | |
| 10·c | | 31·5 | 54·2 | |
| 10·0 | | 37·0 | 27·9 | |
| 10·0 | | 39·0 | 11·4 | |
| 9·6 | | 44·0 | 16·7 | |
| 10·2 | | 48·0 | 11·5 | : |
| 10·2 | | 50·0 | 14·1 | |
| 10·4 | | 51·0 | 0·4 | |
| 10·4 | | 52·5 | 58·2 | |
| 10·4 | | 58·0 | 10·4 | |
| 8·6 | 27 | 2·0 | 5·3 | 8·5 |
| 10·2 | | 3·0 | 39·0 | |
| 10·4 | | 6·5 | 31·1 | |
| 9·8 | | 12·0 | 3·2 | |
| 10·4 | | 13·5 | 32·0 | |
| 8·7 | | 16·5 | 1·1 | 8·2 |
| 10·4 | | 17·5 | 19·8 | |
| 9·5 | | 18·0 | 26·0 | |
| 10·4 | | 19·0 | 56·8 | |
| 10·4 | | 24·5 | 53·0 | |
| 10·4 | | 26·5 | 54·9 | |
| 10·4 | | 28·0 | 19·5 | |
| 8·6 | | 29·0 | 52·7 | 8·5 |
| 10·4 | | 31·5 | 54·4 | |
| 9·5 | | 31·5 | 50·5 | |
| 10·4 | | 33·0 | 22·0 | |
| 10·4 | | 33·0 | 33·9 | |
| 10·2 | | 33·5 | 38·3 | |
| 10·0 | | 38·4 | 0·7 | |
| 10·2 | | 44·5 | 54·3 | |
| 10·0 | | 45·5 | 28·7 | |
| 9·8 | | 47·5 | 12·2 | |
| 9·8 | | 48·5 | 8·4 | |
| 10·4 | | 51·5 | 23·7 | |
| 9·5 | | 51·5 | 22·7 | |
| 8·9 | 28 | 0·0 | 28·3 | |
| 9·8 | | 2·0 | 22·8 | |
| 10·0 | | 7·0 | 57·1 | |
| 10·4 | | 9·5 | 22·5 | |
| 10·0 | | 10·0 | 24·2 | |
| 9·8 | | 12·0 | 31·6 | |
| 10·2 | | 12·5 | 14·9 | |
| 10·4 | | 16·5 | 18·3 | |
| 8·2 | | 18·0 | 27·1 | 8·5 |
| 10·4 | | 22·5 | 45·1 | |
| 10·0 | | 31·0 | 57·1 | |
| 10·2 | | 31·5 | 37·6 | |

## 2281—2340.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 28 | 32·0 | 48·1 | |
| 9·6 | | 48·5 | 5·0 | |
| 9·6 | | 57·0 | 23·0 | 9·5 |
| 9·4 | | 59·0 | 16·3 | 9·2 |
| 10·4 | 29 | 1·5 | 52·3 | |
| 10·4 | | 2·0 | 43·1 | |
| 10·4 | | 6·5 | 10·1 | |
| 10·2 | | 9·0 | 16·1 | |
| 9·6 | | 10·5 | 3·5 | |
| 10·2 | | 13·0 | 16·2 | |
| 10·0 | | 16·5 | 0·0 | |
| 10·2 | | 16·5 | 36·3 | |
| 10·4 | | 18·0 | 39·9 | |
| 10·0 | | 18·5 | 3·8 | |
| 10·2 | | 34·0 | 51·1 | |
| 9·2 | | 36·5 | 20·2 | |
| 9·2 | | 40·5 | 33·2 | |
| 10·0 | | 41·0 | 42·6 | |
| 9·4 | | 53·0 | 21·7 | |
| 10·0 | | 54·5 | 5·7 | |
| 10·0 | | 57·5 | 38·9 | |
| 10·4 | 30 | 0·0 | 52·3 | |
| 10·4 | | 2·0 | 36·9 | – |
| 10·4 | | 9·5 | 40·7 | |
| 9·8 | | 10·5 | 32·6 | |
| 10·4 | | 11·5 | 4·6 | |
| 10·4 | | 12·0 | 20·0 | |
| 10·2 | | 20·0 | 0·0 | |
| 9·5 | | 20·5 | 39·1 | 9·0 |
| 10·4 | | 22·0 | 12·1 | |
| 9·5 | | 26·5 | 33·0 | |
| 10·2 | | 30·0 | 34·0 | |
| 10·4 | | 37·0 | 42·7 | |
| 9·0 | | 42·5 | 51·1 | |
| 9·8 | | 42·5 | 11·4 | |
| 10·4 | | 44·0 | 38·3 | |
| 8·7 | | 46·0 | 56·0 | 8·2 |
| 10·0 | | 50·0 | 17·4 | |
| 10·4 | 31 | 1·0 | 16·9 | |
| 10·2 | | 2·0 | 25·4 | |
| 10·0 | | 10·0 | 4·1 | |
| 9·6 | | 16·0 | 39·6 | |
| 10·4 | | 22·5 | 14·7 | |
| 10·4 | | 24·0 | 6·1 | |
| 10·4 | | 28·5 | 6·9 | |
| 10·4 | | 29·0 | 25·4 | |
| 10·4 | | 31·5 | 17·9 | |
| 10·0 | | 41·5 | 41·1 | |
| 10·4 | | 41·5 | 4·0 | |
| 10·2 | | 46·5 | 33·9 | |
| 10·0 | | 49·0 | 11·0 | |
| 10·0 | | 59·0 | 16·7 | |
| 10·2 | | 59·5 | 13·3 | |
| 10·4 | 32 | 0·0 | 15·9 | |
| 9·6 | | 0·0 | 2·1 | |
| 10·4 | | 0·1 | 58·5 | |
| 10·4 | | 2·0 | 27·1 | |
| 10·4 | | 5·2 | 59·0 | |
| 10·4 | | 12·0 | 50·3 | |
| 10·4 | | 12·5 | 28·2 | |



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### 2341—2400.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 32 | 19·0 | 55·5 | |
| 9·6 | | 20·5 | 38·0 | |
| 10·4 | | 35·5 | 37·1 | |
| 9·4 | | 40·0 | 35·3 | 9·5 |
| 10·4 | | 42·5 | 16·1 | |
| 10·4 | | 45·0 | 4·7 | |
| 10·2 | | 51·5 | 29·0 | |
| 10·2 | | 51·5 | 29·2 | |
| 9·6 | 33 | 1·5 | 25·0 | |
| 9·5 | | 2·0 | 26·9 | |
| 9·8 | | 4·5 | 38·9 | |
| 10·0 | | 7·5 | 31·3 | |
| 9·8 | | 8·0 | 17·1 | |
| 9·5 | | 9·0 | 40·1 | 9·5 |
| 10·2 | | 20·5 | 42·4 | |
| 10·4 | | 20·7 | 44·2 | |
| 10·4 | | 23·5 | 13·8 | |
| 10·4 | | 38·5 | 12·8 | |
| 10·2 | | 41·0 | 38·4 | |
| 10·4 | | 43·5 | 2·4 | |
| 9·5 | | 45·3 | 2·6 | |
| 10·0 | | 48·5 | 21·0 | |
| 10·4 | | 52·0 | 51·8 | |
| 9·6 | | 52·0 | 12·0 | |
| 9·6 | | 55·5 | 16·8 | |
| 10·2 | | 55·5 | 33·4 | |
| 9·0 | 34 | 1·5 | 23·0 | 9·2 |
| 9·8 | | 3·0 | 15·6 | |
| 10·2 | | 3·0 | 34·2 | |
| 8·4 | | 8·1 | 45·4 | 8·0 G |
| 10·4 | | 8·5 | 47·6 | |
| 9·8 | | 10·0 | 14·6 | |
| 9·0 | | 13·5 | 48·2 | |
| 10·4 | | 22·5 | 37·6 | |
| 10·4 | | 24·0 | 48·9 | |
| 9·0 | | 27·0 | 38·6 | 9·2 |
| 9·6 | | 30·0 | 25·5 | |
| 9·6 | | 40·6 | 0·2 | |
| 10·4 | | 50·0 | 34·2 | |
| 10·4 | | 53·5 | 31·7 | |
| 10·4 | | 53·5 | 21·6 | |
| 10·0 | | 56·0 | 8·6 | |
| 10·4 | | 59·0 | 18·6 | |
| 10·4 | | 59·5 | 19·0 | |
| 10·2 | 35 | 0·0 | 5·0 | |
| 10·2 | | 4·5 | 52·1 | |
| 10·2 | | 4·5 | 6·0 | |
| 9·8 | | 8·0 | 32·5 | 9·5 |
| 10·2 | | 12·0 | 9·9 | |
| 10·2 | | 21·0 | 35·1 | |
| 10·4 | | 26·0 | 31·0 | |
| 10·0 | | 26·5 | 45·7 | |
| 8·1 | | 30·0 | 57·3 | 9·0 |
| 10·4 | | 32·0 | 52·9 | |
| 10·4 | | 43·5 | 9·1 | |
| 10·4 | | 46·0 | 17·9 | |
| 10·4 | | 50·5 | 21·9 | |
| 8·9 | | 53·0 | 57·1 | 9·5 |
| 10·4 | | 59·0 | 39·3 | |
| 10·4 | 36 | 3·0 | 14·3 | |

### 2401—2460.

| mag. | 9h. m | s | −55° ′ | |
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| 8·0 | 36 | 3·5 | 8·7 | 8·0 |
| 9·4 | | 6·0 | 22·6 | |
| 10·2 | | 6·5 | 32·3 | |
| 10·4 | | 7·0 | 36·6 | |
| 10·4 | | 8·0 | 9·5 | |
| 9·4 | | 8·5 | 43·6 | |
| 10·2 | | 10·0 | 19·2 | |
| 10·0 | | 13·5 | 16·0 | |
| 10·4 | | 18·0 | 8·1 | |
| 10·2 | | 22·0 | 7·2 | |
| 10·2 | | 22·0 | 42·3 | |
| 10·4 | | 25·0 | 19·3 | |
| 10·4 | | 27·9 | 51·8 | |
| 9·8 | | 29·5 | 59·0 | |
| 10·0 | | 30·0 | 26·0 | |
| 9·8 | | 30·0 | 22·8 | |
| 9·6 | | 30·0 | 54·2 | |
| 10·2 | | 35·5 | 41·7 | |
| 10·4 | | 36·5 | 16·3 | |
| 10·4 | | 39·0 | 15·2 | |
| 8·9 | | 40·0 | 1·7 | 9·0 |
| 10·2 | | 41·0 | 39·9 | |
| 10·2 | | 47·0 | 59·9 | |
| 10·4 | | 50·5 | 18·9 | |
| 10·4 | | 54·5 | 41·2 | |
| 10·4 | | 56·0 | 11·0 | |
| 10·2 | 37 | 0·0 | 54·0 | |
| 9·4 | | 16·0 | 30·1 | 9·0 |
| 10·4 | | 17·0 | 5·9 | |
| 10·4 | | 20·0 | 26·8 | |
| 9·0 | | 21·0 | 8·3 | |
| 10·4 | | 23·0 | 0·4 | |
| 10·4 | | 28·5 | 39·2 | |
| 9·6 | | 32·0 | 50·5 | |
| 9·8 | | 32·0 | 20·9 | |
| 10·2 | | 42·0 | 12·5 | |
| 9·6 | | 44·5 | 52·0 | |
| 9·8 | | 46·5 | 14·4 | |
| 10·4 | | 50·0 | 0·9 | |
| 9·0 | | 52·5 | 22·3 | |
| 10·4 | | 54·0 | 40·4 | |
| 9·8 | | 55·5 | 5·6 | 9·0 |
| 10·0 | | 56·2 | 31·7 | |
| 9·6 | 38 | 0·0 | 37·4 | |
| 10·0 | | 2·0 | 29·6 | 9·2 |
| 10·0 | | 9·0 | 5·1 | |
| 10·0 | | 16·5 | 52·2 | |
| 10·2 | | 21·5 | 49·6 | |
| 10·4 | | 22·5 | 49·2 | |
| 9·8 | | 27·5 | 21·0 | |
| 10·2 | | 37·0 | 57·9 | |
| 7·9 | | 38·0 | 15·7 | 7·3 GSt |
| 10·2 | | 43·0 | 56·0 | |
| 10·4 | | 46·5 | 59·7 | |
| 9·4 | | 49·0 | 49·1 | |
| 9·6 | | 54·0 | 1·3 | |
| 9·0 | 39 | 0·5 | 44·7 | 9·5 |
| 10·0 | | 3·5 | 6·5 | |
| 10·2 | | 4·5 | 28·0 | |
| 10·0 | | 10·0 | 0·1 | |

### 2461—2520.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 39 | 10·0 | 36·4 | |
| 10·4 | | 10·5 | 9·6 | |
| 10·2 | | 12·0 | 30·5 | |
| 10·4 | | 30·5 | 48·2 | |
| 10·4 | | 31·0 | 0·3 | |
| 10·0 | | 36·0 | 24·0 | |
| 10·4 | | 36·5 | 6·5 | |
| 9·8 | | 41·5 | 35·1 | |
| 9·8 | | 43·0 | 46·0 | 9·2 |
| 10·4 | | 50·0 | 12·6 | |
| 10·0 | | 51·5 | 37·9 | |
| 9·8 | | 53·5 | 27·2 | |
| 10·2 | | 56·0 | 28·5 | |
| 10·4 | 40 | 1·5 | 54·7 | |
| 8·7 | | 15·5 | 3·4 | 8·5 |
| 10·4 | | 16·0 | 53·9 | |
| 10·4 | | 23·5 | 53·0 | |
| 10·2 | | 23·5 | 39·6 | |
| 9·4 | | 24·5 | 26·5 | 9·0 |
| 10·4 | | 30·5 | 28·1 | |
| 10·4 | | 32·0 | 3·9 | |
| 9·4 | | 38·7 | 2·6 | 8·2 |
| 9·0 | | 39·0 | 5·6 | 9·0 |
| 9·0 | | 47·0 | 14·8 | 9·5 |
| 7·9 | | 51·0 | 26·5 | 8·5 |
| 10·4 | | 51·2 | 27·4 | |
| 9·2 | | 53·0 | 52·8 | |
| 10·4 | | 53·5 | 23·9 | |
| 10·4 | 41 | 3·0 | 31·0 | |
| 10·4 | | 3·0 | 0·0 | |
| 10·2 | | 3·0 | 10·0 | |
| 10·2 | | 6·5 | 6·0 | |
| 10·4 | | 9·0 | 22·0 | |
| 10·0 | | 10·0 | 28·8 | |
| 10·4 | | 14·5 | 31·9 | |
| 10·4 | | 16·0 | 18·1 | |
| 9·8 | | 19·7 | 15·0 | |
| 10·2 | | 21·0 | 58·5 | |
| 9·8 | | 22·0 | 40·0 | |
| 8·7 | | 28·0 | 10·0 | 9·2 |
| 10·2 | | 35·0 | 28·4 | |
| 10·4 | | 40·0 | 58·6 | |
| 10·4 | | 48·5 | 6·8 | |
| 10·4 | | 49·5 | 32·3 | |
| 10·4 | | 49·5 | 49·1 | |
| 10·4 | | 52·0 | 36·3 | |
| 9·0 | | 59·0 | 13·0 | 8·5 |
| 10·4 | 42 | 2·0 | 49·3 | |
| 10·4 | | 9·5 | 57·4 | |
| 10·0 | | 10·0 | 52·7 | |
| 9·4 | | 28·0 | 9·5 | 9·5 |
| 10·4 | | 28·5 | 51·1 | |
| 10·4 | | 30·0 | 56·8 | |
| 10·4 | | 31·5 | 48·4 | |
| 10·4 | | 34·5 | 25·8 | |
| 10·2 | | 35·0 | 6·6 | |
| 10·0 | | 37·0 | 6·8 | |
| 10·2 | | 46·5 | 17·1 | |
| 10·2 | | 50·5 | 16·9 | |
| 9·8 | | 54·0 | 19·4 | |

### 2521—2580.

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 42 | 57·3 | 58·5 | |
| 10·4 | | 59·0 | 14·8 | |
| 10·4 | 43 | 1·9 | 17·0 | |
| 10·4 | | 2·0 | 18·9 | |
| 10·0 | | 3·5 | 15·8 | |
| 10·4 | | 5·0 | 59·4 | |
| 10·4 | | 6·5 | 32·4 | |
| 9·8 | | 17·5 | 25·6 | |
| 10·2 | | 20·5 | 54·1 | |
| 9·8 | | 26·5 | 38·9 | |
| 10·0 | | 28·0 | 35·0 | |
| 10·0 | | 29·0 | 30·4 | |
| 10·0 | | 30·5 | 46·0 | |
| 10·0 | | 31·0 | 22·7 | |
| 9·8 | | 31·7 | 0·7 | |
| 8·3 | | 37·0 | 51·8 | 7·0 |
| 9·5 | | 39·0 | 37·1 | |
| 10·4 | | 40·0 | 43·3 | |
| 9·0 | | 40·0 | 12·2 | 9·0 |
| 8·8 | | 44·5 | 22·5 | |
| 10·4 | | 48·5 | 45·3 | |
| 9·0 | | 52·0 | 23·0 | |
| 10·2 | | 58·0 | 48·4 | |
| 8·6 | 44 | 1·5 | 37·1 | 8·0 |
| 10·0 | | 10·5 | 52·4 | |
| 10·4 | | 23·5 | 50·6 | |
| 10·4 | | 30·5 | 30·9 | |
| 7·6 | | 33·0 | 49·8 | 6·5 GSct |
| 10·4 | | 33·0 | 51·4 | |
| 10·2 | | 34·5 | 52·8 | |
| 10·0 | | 39·0 | 52·2 | |
| 9·8 | | 41·5 | 19·5 | 9·0 |
| 10·4 | | 47·0 | 54·9 | |
| 9·2 | | 47·0 | 37·4 | 8·7 |
| 9·6 | | 51·5 | 33·0 | |
| 9·6 | | 56·5 | 13·9 | |
| 10·4 | 45 | 1·5 | 46·7 | |
| 9·0 | | 5·5 | 51·8 | 9·5 |
| 9·8 | | 5·8 | 59·2 | |
| 10·4 | | 8·5 | 27·5 | |
| 10·4 | | 12·0 | 25·4 | |
| 9·8 | | 18·0 | 46·0 | 9·5 |
| 9·6 | | 22·5 | 7·0 | |
| 9·0 | | 39·0 | 6·5 | |
| 10·0 | | 40·2 | 35·6 | |
| 10·4 | | 48·5 | 11·9 | |
| 10·2 | | 52·0 | 11·1 | |
| 10·4 | | 53·5 | 52·8 | |
| 10·2 | | 55·0 | 25·4 | |
| 10·4 | | 59·5 | 28·3 | |
| 10·2 | 46 | 2·0 | 30·6 | |
| 10·0 | | 14·5 | 25·9 | |
| 10·4 | | 16·0 | 3·5 | |
| 10·4 | | 18·5 | 50·7 | |
| 9·6 | | 21·0 | 47·8 | 9·5 |
| 9·6 | | 21·5 | 49·0 | |
| 10·0 | | 22·0 | 46·2 | |
| 9·8 | | 23·5 | 16·4 | |
| 9·0 | | 25·0 | 19·4 | |
| 9·5 | | 27·5 | 22·0 | |

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| 9 | 30 | 47 | 6·6 |
| | 40 | 49 | 6·8 |
| | 50 | 51 | 7·0 |



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25 pres.

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| 9 | 40 | 49 | 6·8 |
| | 50 | 51 | 7·0 |
| 10 | 0 | 52 | 7·2 |

**2581—2640.**

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 46 | 33·5 | 50·5 | |
| 10·4 | | 36·5 | 37·8 | |
| 10·0 | | 36·5 | 27·5 | |
| 9·8 | | 39·5 | 6·4 | |
| 9·6 | | 40·5 | 44·7 | |
| 9·8 | | 41·0 | 53·1 | |
| 9·6 | | 45·5 | 7·0 | |
| 9·2 | | 49·5 | 34·8 | |
| 10·2 | | 51·0 | 51·3 | |
| 10·4 | | 52·0 | 49·0 | |
| 9·8 | | 57·5 | 15·4 | |
| 9·2 | 47 | 1·0 | 6·3 | |
| 9·0 | | 8·0 | 40·9 | 9·0 |
| 10·4 | | 18·0 | 15·6 | |
| 9·5 | | 19·0 | 16·0 | |
| 10·0 | | 28·0 | 45·6 | 9·2 |
| 10·4 | | 32·0 | 34·3 | |
| 10·0 | | 36·0 | 37·8 | |
| 10·0 | | 36·5 | 15·7 | |
| 8·7 | | 38·0 | 54·8 | 9·1 |
| 10·2 | | 39·5 | 34·9 | |
| 9·8 | | 40·5 | 15·3 | |
| 10·2 | | 50·0 | 32·2 | |
| 10·4 | | 51·5 | 56·9 | |
| 9·8 | | 56·5 | 54·5 | |
| 10·4 | | 57·0 | 8·9 | |
| 10·4 | 48 | 0·0 | 23·8 | |
| 10·4 | | 1·5 | 25·0 | |
| 9·8 | | 1·5 | 13·9 | |
| 10·4 | | 2·5 | 21·5 | |
| 10·4 | | 6·0 | 19·9 | |
| 10·0 | | 10·5 | 25·2 | |
| 9·2 | | 12·0 | 9·4 | |
| 9·5 | | 18·0 | 7·2 | |
| 10·4 | | 18·5 | 38·7 | |
| 10·2 | | 19·5 | 53·9 | |
| 10·4 | | 21·0 | 5·2 | |
| 9·2 | | 22·5 | 37·8 | |
| 9·0 | | 25·0 | 27·8 | 9·5 |
| 9·5 | | 34·5 | 55·5 | |
| 10·0 | | 47·0 | 7·2 | |
| 10·2 | | 48·0 | 14·8 | |
| 10·4 | | 48·0 | 47·0 | |
| 10·4 | | 54·0 | 57·8 | |
| 10·4 | | 57·0 | 1·1 | |
| 9·4 | 49 | 2·5 | 48·6 | 9·0 |
| 10·4 | | 2·5 | 12·1 | |
| 10·0 | | 7·5 | 43·9 | |
| 9·6 | | 12·0 | 37·5 | |
| 9·6 | | 15·0 | 27·4 | |
| 10·2 | | 23·0 | 6·3 | |
| 10·2 | | 28·0 | 54·3 | |
| 10·4 | | 29·5 | 47·8 | |
| 9·0 | | 30·0 | 24·4 | |
| 10·0 | | 30·5 | 37·5 | |
| 10·4 | | 32·5 | 37·9 | |
| 10·4 | | 36·0 | 23·5 | |
| 10·0 | | 36·5 | 9·7 | |
| 9·2 | | 37·0 | 17·9 | |
| 10·0 | | 38·0 | 7·8 | |

**2641—2700.**

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 49 | 39·0 | 15·2 | |
| 10·2 | | 44·0 | 44·5 | |
| 10·0 | | 51·5 | 17·0 | |
| 10·4 | | 54·5 | 29·4 | |
| 10·2 | | 55·5 | 37·1 | |
| 10·0 | | 56·5 | 53·7 | |
| 9·0 | 50 | 4·5 | 46·7 | 9·5 |
| 8·9 | | 5·5 | 2·1 | |
| 10·4 | | 5·5 | 33·0 | |
| 10·4 | | 11·5 | 43·4 | |
| 10·4 | | 16·0 | 20·8 | |
| 10·4 | | 16·5 | 59·0 | |
| 10·4 | | 16·8 | 59·9 | |
| 9·8 | | 18·5 | 41·9 | |
| 10·0 | | 26·5 | 45·2 | |
| 10·0 | | 30·0 | 38·3 | |
| 10·4 | | 32·0 | 20·3 | |
| 10·0 | | 39·5 | 14·2 | |
| 10·0 | | 39·6 | 59·5 | |
| 9·2 | | 39·7 | 1·7 | |
| 10·0 | | 47·5 | 52·3 | |
| 9·8 | | 48·0 | 55·1 | |
| 10·4 | 51 | 0·0 | 19·0 | |
| 10·2 | | 1·5 | 11·8 | |
| 10·4 | | 8·5 | 47·9 | |
| 8·0 | | 10·0 | 42·3 | 8·5 |
| 10·4 | | 13·4 | 18·0 | |
| 9·8 | | 15·5 | 5·8 | |
| 9·8 | | 16·0 | 12·4 | |
| 10·4 | | 24·4 | 48·7 | |
| 9·8 | | 28·5 | 39·7 | |
| 9·5 | | 30·0 | 28·9 | |
| 9·8 | | 33·5 | 51·3 | |
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| 10·4 | | 36·3 | 31·8 | |
| 10·4 | | 36·3 | 44·6 | |
| 9·2 | | 37·4 | 17·9 | |
| 10·0 | | 42·5 | 53·3 | |
| 9·5 | | 50·4 | 6·5 | |
| 9·8 | | 54·0 | 56·3 | |
| 8·4 | | 56·9 | 18·8 | 9·0 |
| 9·4 | | 59·0 | 48·6 | |
| 10·4 | 52 | 0·0 | 5·9 | |
| 10·0 | | 0·0 | 25·2 | |
| 9·4 | | 3·1 | 25·6 | |
| 9·8 | | 4·0 | 41·6 | |
| 9·4 | | 11·1 | 21·0 | |
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| 10·2 | | 23·7 | 19·5 | |
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| 10·5 | | 34·4 | 24·9 | |
| 10·5 | | 37·7 | 27·9 | |
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| 9·9 | | 38·8 | 48·5 | |
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|---|---|---|---|---|
| 9·8 | 52 | 41·2 | 44·1 | 9·5 |
| 10·0 | | 42·7 | 20·9 | |
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| 8·3 | | 46·7 | 27·1 | 8·8 |
| 9·4 | | 49·2 | 28·5 | |
| 9·0 | | 50·2 | 44·5 | 9·0 |
| 10·5 | | 54·2 | 13·6 | |
| 10·2 | | 59·7 | 49·5 | |
| 10·0 | 53 | 1·2 | 7·9 | |
| 9·4 | | 3·2 | 27·6 | |
| 10·0 | | 10·2 | 27·9 | |
| 9·2 | | 11·2 | 8·1 | 9·0 |
| 10·5 | | 11·2 | 44·3 | |
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| 10·5 | | 19·2 | 41·7 | |
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| 10·4 | | 25·2 | 32·2 | |
| 9·2 | | 30·7 | 12·0 | 9·0 |
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| 8·0 | | 36·2 | 56·4 | 8·5 G |
| 10·4 | | 38·7 | 35·8 | |
| 8·3 | | 43·2 | 34·5 | 9·2 |
| 10·0 | | 45·2 | 35·5 | |
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| 10·4 | | 50·7 | 42·9 | |
| 9·0 | | 50·7 | 44·1 | 9·0 |
| 10·4 | | 52·0 | 57·0 | |
| 9·2 | | 53·2 | 33·2 | |
| 9·2 | | 57·7 | 26·9 | 9·2 |
| 10·4 | 54 | 3·2 | 50·5 | |
| 10·5 | | 11·2 | 12·8 | |
| 10·4 | | 11·2 | 47·9 | |
| 10·5 | | 14·7 | 32·0 | |
| 9·6 | | 16·2 | 17·7 | 9·5 |
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| 9·1 | | 26·2 | 45·7 | 9·0 |
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| 9·8 | | 42·7 | 46·9 | |
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| 8·6 | | 53·2 | 43·4 | 9·2 |
| 10·5 | | 55·7 | 4·1 | |
| 10·2 | 55 | 1·7 | 37·9 | |
| 10·0 | | 2·2 | 3·5 | |
| 10·0 | | 3·7 | 50·5 | |

**2761—2820.**

| mag. | 9h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 55 | 4·2 | 34·1 | |
| 10·4 | | 11·7 | 21·0 | |
| 10·0 | | 17·7 | 54·9 | |
| 10·0 | | 18·2 | 11·2 | |
| 10·4 | | 23·5 | 59·2 | |
| 9·9 | | 24·3 | 58·9 | |
| 10·5 | | 24·8 | 59·6 | |
| 10·2 | | 25·7 | 54·9 | |
| 10·5 | | 26·2 | 9·6 | |
| 9·4 | | 28·2 | 17·9 | |
| 10·2 | | 28·2 | 12·4 | |
| 9·7 | | 30·7 | 21·9 | |
| 10·5 | | 34·6 | 32·5 | |
| 10·5 | | 34·7 | 41·8 | |
| 10·4 | | 34·7 | 46·1 | |
| 10·0 | | 35·7 | 11·2 | |
| 10·4 | | 42·2 | 29·6 | |
| 10·4 | | 43·3 | 58·6 | |
| 10·4 | 56 | 3·2 | 29·8 | : |
| 10·4 | | 4·2 | 41·9 | |
| 10·0 | | 5·2 | 50·3 | |
| 9·4 | | 7·0 | 57·6 | |
| 10·0 | | 13·0 | 0·6 | |
| 10·4 | | 15·7 | 53·2 | |
| 10·2 | | 33·6 | 47·7 | |
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| 10·0 | | 35·7 | 46·4 | |
| 9·9 | | 35·7 | 45·3 | |
| 10·4 | | 36·2 | 20·9 | |
| 9·7 | | 38·2 | 58·1 | |
| 8·8 | | 43·7 | 53·3 | |
| 8·8 | | 45·7 | 41·2 | 9·0 |
| 8·6 | | 49·7 | 23·6 | 9·0 |
| 7·4 | | 52·7 | 29·7 | 7·0 GSgt |
| 9·7 | | 56·2 | 29·5 | |
| 10·5 | | 59·7 | 7·3 | |
| 10·5 | 57 | 1·7 | 53·2 | |
| 8·1 | | 3·2 | 52·2 | 9·0 |
| 10·2 | | 3·2 | 45·8 | |
| 10·2 | | 3·7 | 27·4 | |
| 10·5 | | 7·2 | 13·4 | |
| 10·5 | | 8·7 | 15·4 | |
| 9·0 | | 9·2 | 32·1 | 9·5 |
| 10·2 | | 10·2 | 55·0 | |
| 9·4 | | 13·2 | 5·0 | |
| 10·4 | | 15·5 | 0·8 | |
| 10·5 | | 20·7 | 57·4 | |
| 9·4 | | 21·2 | 43·9 | |
| 8·6 | | 26·2 | 25·6 | 9·0 |
| 10·2 | | 34·2 | 5·0 | |
| 10·4 | | 37·2 | 20·0 | |
| 10·0 | | 45·7 | 44·1 | |
| 10·0 | | 50·2 | 2·1 | |
| 10·0 | | 55·2 | 44·4 | |
| 10·5 | | 58·2 | 11·9 | |
| 10·2 | 58 | 2·2 | 37·4 | |
| 10·5 | | 2·3 | 58·1 | |
| 10·4 | | 4·7 | 8·4 | |
| 9·9 | | 7·7 | 23·3 | |
| 10·5 | | 9·7 | 36·8 | |



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## 2821—2880.

| mag. | 9h.–10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 58 | 10·7 | 54·8 | |
| 10·5 | | 10·7 | 5·2 | |
| 8·3 | | 10·7 | 36·2 | 8·8 |
| 10·5 | | 11·7 | 33·0 | |
| 9·2 | | 11·7 | 16·0 | 9·5 |
| 8·0 | | 14·7 | 39·2 | 8·0 GSt |
| 10·5 | | 20·2 | 37·4 | |
| 9·2 | | 22·2 | 37·0 | |
| 10·2 | | 25·7 | 11·8 | |
| 10·5 | | 34·7 | 47·8 | |
| 9·4 | | 36·2 | 10·4 | 9·5 |
| 8·8 | | 36·2 | 24·2 | 9·0 |
| 10·2 | | 38·2 | 12·1 | |
| 8·8 | | 38·2 | 6·8 | 8·8 |
| 10·0 | | 38·2 | 3·1 | |
| 10·5 | | 42·1 | 53·0 | |
| 10·5 | | 44·1 | 12·1 | |
| 10·5 | | 44·1 | 16·0 | |
| 10·2 | | 44·2 | 56·5 | |
| 10·4 | | 50·6 | 28·1 | |
| 10·4 | | 51·1 | 5·0 | |
| 10·5 | | 55·6 | 7·1 | |
| 9·8 | | 56·1 | 25·4 | 9·5 |
| 9·8 | | 58·1 | 55·6 | 9·5 |
| 10·2 | | 59·7 | 0·5 | |
| 10·5 | 59 | 0·1 | 21·6 | |
| 10·4 | | 1·6 | 48·2 | |
| 10·4 | | 1·6 | 59·6 | |
| 10·5 | | 2·7 | 56·1 | |
| 8·8 | | 3·6 | 56·5 | 9·5 |
| 10·2 | | 6·6 | 30·4 | |
| 10·4 | | 8·6 | 41·9 | |
| 8·4 | | 15·6 | 6·8 | 8·7 G |
| 10·2 | | 19·6 | 44·2 | |
| 10·5 | | 21·1 | 16·1 | |
| 10·4 | | 24·1 | 18·0 | |
| 10·0 | | 26·6 | 31·4 | |
| 10·2 | | 27·6 | 18·9 | |
| 10·0 | | 28·6 | 36·2 | |
| 8·6 | | 30·6 | 35·0 | 8·5 |
| 8·0 | | 37·6 | 18·1 | 8·5 Gg |
| 10·5 | | 38·6 | 29·3 | |
| 10·5 | | 38·6 | 13·6 | |
| 10·0 | | 43·6 | 46·1 | |
| 9·9 | | 49·1 | 53·1 | |
| 10·4 | | 49·9 | 57·6 | |
| 10·2 | | 52·1 | 27·6 | |
| 9·8 | | 57·1 | 17·6 | |
| 10·0 | 0 | 3·1 | 14·6 | |
| 10·4 | | 15·6 | 18·1 | |
| 10·4 | | 23·1 | 59·6 | |
| 10·5 | | 23·1 | 54·7 | |
| 9·8 | | 26·0 | 13·6 | |
| 8·3 | | 32·5 | 11·6 | 8·6 |
| 10·5 | | 33·0 | 19·2 | |
| 8·6 | | 39·5 | 9·6 | 8·1 Gg |
| 9·2 | | 44·5 | 4·8 | 9·5 |
| 10·4 | | 51·5 | 46·3 | |
| 10·2 | | 55·0 | 10·5 | |
| 9·4 | | 55·5 | 38·5 | |

## 2881—2940.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 1 | 6·5 | 10·1 | |
| 9·9 | | 8·5 | 3·6 | |
| 10·2 | | 10·5 | 48·7 | |
| 9·4 | | 11·5 | 33·0 | |
| 10·4 | | 13·5 | 52·5 | |
| 10·2 | | 15·5 | 36·4 | |
| 10·0 | | 17·5 | 16·5 | |
| 10·2 | | 19·0 | 31·8 | |
| 10·2 | | 22·0 | 57·4 | |
| 10·2 | | 28·0 | 44·6 | |
| 9·6 | | 32·5 | 5·5 | |
| 9·4 | | 35·5 | 10·8 | |
| 10·4 | | 45·0 | 51·3 | |
| 10·0 | | 45·3 | 2·9 | |
| 10·0 | | 48·5 | 46·3 | |
| 10·5 | | 50·0 | 39·8 | |
| 10·0 | | 54·0 | 40·0 | |
| 10·4 | | 54·5 | 23·0 | |
| 9·2 | 2 | 4·0 | 1·7 | |
| 10·5 | | 5·0 | 2·2 | |
| 10·0 | | 6·3 | 59·3 | |
| 10·4 | | 9·5 | 48·6 | |
| 10·2 | | 11·4 | 4·8 | |
| 9·8 | | 18·4 | 14·4 | |
| 9·0 | | 32·4 | 27·8 | 8·0 |
| 10·5 | | 33·9 | 26·9 | |
| 9·6 | | 34·4 | 46·2 | |
| 10·5 | | 35·9 | 56·2 | |
| 9·0 | | 39·4 | 19·9 | 9·5 |
| 10·5 | | 44·5 | 58·9 | |
| 10·2 | | 45·9 | 52·7 | 10·0 |
| 10·0 | | 46·4 | 14·0 | |
| 10·2 | | 47·9 | 11·4 | |
| 9·8 | | 51·4 | 24·5 | |
| 10·0 | | 58·4 | 9·3 | |
| 10·0 | 3 | 3·4 | 49·5 | |
| 10·0 | | 10·4 | 35·6 | |
| 10·0 | | 12·4 | 53·5 | |
| 10·5 | | 15·4 | 47·9 | |
| 10·0 | | 16·9 | 33·2 | |
| 10·5 | | 19·5 | 49·0 | |
| 9·9 | | 19·9 | 11·6 | |
| 10·4 | | 20·9 | 21·9 | |
| 10·0 | | 21·4 | 24·5 | |
| 10·2 | | 22·4 | 16·4 | |
| 10·5 | | 24·9 | 49·8 | |
| 9·7 | | 26·4 | 28·8 | |
| 9·0 | | 30·0 | 58·4 | 9·0 |
| 10·2 | | 31·9 | 29·6 | |
| 10·4 | | 31·9 | 45·6 | |
| 10·5 | | 32·4 | 34·3 | |
| 10·0 | | 33·9 | 5·1 | |
| 10·2 | | 37·4 | 25·2 | |
| 10·2 | | 37·4 | 21·1 | |
| 10·0 | | 41·4 | 42·0 | |
| 10·5 | | 43·5 | 16·0 | |
| 10·0 | | 43·9 | 2·2 | |
| 10·0 | | 44·2 | 59·5 | |
| 10·5 | | 45·4 | 30·5 | |
| 10·0 | | 45·4 | 19·5 | |

## 2941—3000.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·9 | 3 | 47·9 | 24·9 | |
| 10·2 | | 48·9 | 41·0 | |
| 10·0 | | 50·4 | 51·7 | |
| 10·2 | | 52·4 | 20·5 | |
| 10·5 | | 54·4 | 18·2 | |
| 10·0 | | 58·4 | 50·0 | |
| 10·0 | | 58·9 | 54·1 | |
| 9·2 | 4 | 0·8 | 25·8 | |
| 8·1 | | 1·8 | 49·4 | 7·5 GSg |
| 9·9 | | 2·3 | 48·0 | |
| 10·4 | | 7·3 | 49·1 | |
| 8·8 | | 11·8 | 9·2 | 9·0 |
| 8·3 | | 16·3 | 48·4 | 8·0 GSg |
| 10·2 | | 18·8 | 47·1 | |
| 10·5 | | 19·1 | 15·1 | |
| 10·4 | | 23·3 | 36·0 | |
| 9·9 | | 24·3 | 50·4 | |
| 10·4 | | 25·8 | 8·0 | |
| 10·4 | | 31·8 | 9·2 | |
| 10·4 | | 31·8 | 28·4 | |
| 9·7 | | 37·8 | 45·7 | 9·5 |
| 9·8 | | 37·8 | 8·7 | |
| 8·8 | | 40·3 | 18·2 | 9·5 |
| 9·6 | | 42·3 | 44·5 | |
| 9·2 | | 43·8 | 33·1 | |
| 10·0 | | 43·8 | 13·5 | |
| 9·4 | | 45·3 | 11·5 | |
| 10·5 | | 47·8 | 3·8 | |
| 8·6 | | 48·3 | 36·7 | 9·5 |
| 10·4 | 5 | 0·3 | 10·9 | |
| 10·0 | | 1·3 | 3·4 | |
| 10·0 | | 4·8 | 9·4 | |
| 9·2 | | 6·3 | 26·1 | 9·5 |
| 10·0 | | 13·8 | 34·0 | |
| 9·8 | | 26·3 | 32·5 | |
| 10·5 | | 33·8 | 53·8 | |
| 10·0 | | 36·3 | 26·1 | |
| 9·2 | | 36·8 | 9·3 | 9·0 G |
| 10·4 | | 38·3 | 14·8 | |
| 9·2 | | 38·3 | 48·9 | |
| 9·9 | | 40·3 | 34·5 | |
| 10·4 | | 40·3 | 32·7 | |
| 9·4 | | 44·1 | 0·4 | |
| 9·8 | | 47·1 | 46·6 | |
| 10·5 | | 49·1 | 2·2 | |
| 10·0 | | 49·6 | 41·2 | |
| 10·4 | | 51·6 | 34·8 | |
| 10·5 | | 53·6 | 52·0 | |
| 9·4 | | 56·6 | 24·8 | |
| 9·8 | 6 | 1·1 | 19·8 | |
| 9·6 | | 1·1 | 59·2 | |
| 9·9 | | 5·1 | 16·2 | |
| 10·4 | | 7·6 | 44·0 | |
| 10·2 | | 9·1 | 56·6 | |
| 10·4 | | 15·6 | 5·5 | |
| 10·4 | | 21·1 | 50·8 | |
| 9·9 | | 22·6 | 13·6 | |
| 10·5 | | 22·6 | 55·0 | |
| 9·9 | | 26·1 | 10·2 | |
| 9·2 | | 29·6 | 47·4 | |

## 3001—3060.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·5 | 6 | 35·1 | 48·7 | |
| 10·5 | | 37·6 | 32·0 | |
| 9·6 | | 41·1 | 36·9 | |
| 8·8 | | 41·6 | 29·4 | 8·5 |
| 9·4 | | 43·1 | 59·6 | |
| 10·0 | | 44·6 | 25·8 | |
| 10·0 | | 45·1 | 49·0 | |
| 9·0 | | 45·6 | 46·6 | |
| 9·8 | | 47·3 | 58·4 | |
| 9·9 | | 50·1 | 51·1 | |
| 9·8 | | 52·6 | 50·2 | |
| 9·8 | | 53·6 | 49·4 | |
| 9·8 | | 56·1 | 58·9 | |
| 10·0 | 7 | 1·1 | 42·0 | |
| 9·9 | | 4·6 | 50·6 | |
| 10·5 | | 5·1 | 7·9 | |
| 10·0 | | 5·1 | 29·2 | |
| 9·6 | | 10·1 | 7·6 | |
| 10·2 | | 10·1 | 51·0 | |
| 9·2 | | 13·6 | 13·9 | 9·5 |
| 8·0 | | 16·6 | 22·6 | 8·5 |
| 9·2 | | 17·6 | 12·6 | 10·0 |
| 9·8 | | 21·1 | 52·7 | |
| 10·0 | | 24·1 | 32·5 | |
| 10·2 | | 26·6 | 39·5 | |
| 10·2 | | 28·6 | 1·6 | |
| 10·0 | | 31·6 | 7·9 | |
| 10·2 | | 31·6 | 24·0 | |
| 9·8 | | 33·4 | 0·2 | |
| 9·2 | | 35·1 | 53·5 | |
| 9·8 | | 35·1 | 51·0 | |
| 10·5 | | 38·6 | 20·7 | |
| 10·4 | | 43·1 | 4·3 | |
| 10·2 | | 43·6 | 8·7 | |
| 9·9 | | 50·6 | 7·2 | |
| 10·5 | | 50·6 | 43·5 | |
| 10·5 | | 53·1 | 1·6 | |
| 9·9 | | 53·6 | 19·9 | |
| 9·6 | | 55·1 | 49·0 | |
| 10·4 | 8 | 3·6 | 34·8 | |
| 9·9 | | 3·6 | 5·4 | |
| 10·5 | | 3·6 | 4·6 | |
| 10·4 | | 5·6 | 17·0 | |
| 10·2 | | 6·6 | 27·1 | |
| 10·0 | | 6·6 | 31·5 | |
| 10·4 | | 8·1 | 45·8 | |
| 10·0 | | 10·6 | 41·4 | |
| 8·4 | | 11·6 | 9·9 | 9·0 |
| 9·9 | | 14·1 | 25·2 | |
| 10·0 | | 14·1 | 34·6 | |
| 10·2 | | 16·6 | 6·1 | |
| 10·4 | | 17·4 | 2·6 | |
| 8·2 | | 17·6 | 31·8 | 8·0 |
| 9·4 | | 18·8 | 1·6 | |
| 10·5 | | 21·6 | 8·9 | |
| 10·4 | | 22·1 | 3·1 | |
| 10·0 | | 23·6 | 37·1 | |
| 10·0 | | 25·6 | 24·8 | |
| 9·8 | | 31·6 | 20·9 | |
| 9·9 | | 37·6 | 29·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 50 | 51 | 7·0 |
| 10 | 0 | 52 | 7·2 |
| | 10 | 54 | 7·4 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 0 | 52 | 7·2 |
| | 10 | 54 | 7·4 |
| | 20 | 56 | 7·6 |

## 3061—3120.

| mag. | 10h. m s | −55° ′ | |
|---|---|---|---|
| 10·2 | 8 40·6 | 51·4 | |
| 9·4 | 45·0 | 19·4 | |
| 9·7 | 46·0 | 9·3 | |
| 10·0 | 48·0 | 33·0 | |
| 9·0 | 49·0 | 39·4 | 9·0 |
| 7·9 | 53·0 | 58·2 | 7·2 GSt |
| 10·2 | 55·5 | 45·4 | |
| 10·0 | 57·5 | 27·0 | |
| 10·5 | 59·0 | 26·8 | |
| 10·2 | 9 1·0 | 59·2 | |
| 10·4 | 2·0 | 8·6 | |
| 10·4 | 4·5 | 8·2 | |
| 9·0 | 5·0 | 10·0 | |
| 9·6 | 5·0 | 26·0 | |
| 9·2 | 10·5 | 5·4 | |
| 10·2 | 13·5 | 59·2 | |
| 10·2 | 13·5 | 18·9 | |
| 10·4 | 14·5 | 35·3 | |
| 10·5 | 15·0 | 17·2 | |
| 10·2 | 19·5 | 17·8 | |
| 10·2 | 20·0 | 33·6 | |
| 9·8 | 22·0 | 31·6 | |
| 10·4 | 24·0 | 42·6 | |
| 10·4 | 25·0 | 7·3 | |
| 10·5 | 25·5 | 33·4 | |
| 9·4 | 29·0 | 12·8 | |
| 10·0 | 31·0 | 25·0 | |
| 10·2 | 31·0 | 58·2 | |
| 10·5 | 33·5 | 24·2 | |
| 9·4 | 36·5 | 13·4 | |
| 9·4 | 38·5 | 21·7 | |
| 10·5 | 42·0 | 50·0 | |
| 10·0 | 44·0 | 21·8 | |
| 10·0 | 45·5 | 58·0 | |
| 9·8 | 49·5 | 30·2 | |
| 9·4 | 51·0 | 53·2 | |
| 10·4 | 57·0 | 12·5 | |
| 10·4 | 10 0·5 | 23·0 | |
| 10·0 | 3·0 | 42·5 | |
| 10·0 | 4·0 | 43·0 | |
| 9·6 | 8·3 | 25·0 | |
| 10·4 | 9·8 | 47·0 | |
| 10·4 | 12·3 | 26·4 | |
| 9·9 | 13·8 | 1·9 | |
| 10·2 | 13·8 | 53·1 | |
| 10·2 | 13·8 | 36·4 | |
| 8·5 | 14·8 | 37·6 | G |
| 10·0 | 15·3 | 18·4 | |
| 10·0 | 19·8 | 12·6 | |
| 10·4 | 19·8 | 57·3 | |
| 9·9 | 20·8 | 43·8 | |
| 8·3 | 21·8 | 51·8 | 8·0 |
| 10·5 | 21·8 | 6·0 | |
| 10·4 | 23·8 | 56·8 | |
| 10·4 | 25·3 | 57·0 | |
| 10·0 | 25·3 | 39·8 | |
| 10·4 | 30·8 | 49·7 | |
| 8·8 | 34·8 | 2·2 | 7·0 G |
| 10·5 | 35·8 | 24·1 | |
| 10·4 | 40·3 | 38·6 | |

## 3121—3180.

| mag. | 10h. m s | −55° ′ | |
|---|---|---|---|
| 10·5 | 10 40·8 | 17·0 | |
| 10·5 | 41·8 | 32·0 | |
| 7·8 | 43·3 | 4·2 | 7·5 Gg |
| 9·6 | 45·8 | 24·3 | |
| 10·5 | 48·8 | 12·6 | |
| 10·5 | 53·3 | 16·3 | |
| 9·9 | 57·3 | 19·0 | |
| 10·2 | 59·5 | 58·9 | |
| 8·6 | 59·8 | 29·2 | 8·0 G |
| 10·4 | 11 5·3 | 40·9 | |
| 10·0 | 9·8 | 50·6 | |
| 9·2 | 9·8 | 2·6 | 8·0 G |
| 9·6 | 14·0 | 2·6 | |
| 8·6 | 14·3 | 17·2 | 9·0 |
| 10·4 | 16·8 | 4·5 | |
| 10·4 | 17·8 | 47·8 | |
| 10·4 | 20·8 | 9·8 | |
| 9·2 | 21·8 | 24·8 | 8·5 |
| 10·2 | 22·3 | 50·0 | |
| 10·0 | 27·3 | 33·2 | |
| 10·4 | 30·3 | 20·6 | |
| 10·4 | 32·3 | 10·2 | |
| 10·5 | 33·8 | 56·3 | |
| 10·2 | 34·8 | 11·0 | |
| 8·8 | 36·8 | 17·0 | 9·5 |
| 10·0 | 47·3 | 14·2 | |
| 10·0 | 49·3 | 53·8 | |
| 10·4 | 51·8 | 27·5 | |
| 10·0 | 51·8 | 45·2 | |
| 10·4 | 54·8 | 6·9 | |
| 9·9 | 12 0·8 | 11·7 | |
| 10·2 | 1·8 | 1·0 | |
| 10·4 | 5·3 | 4·1 | |
| 9·2 | 5·3 | 30·4 | |
| 9·9 | 7·3 | 20·6 | |
| 10·2 | 8·3 | 15·0 | |
| 10·5 | 9·3 | 31·3 | |
| 9·8 | 10·3 | 24·6 | |
| 8·8 | 13·3 | 39·8 | |
| 10·0 | 18·8 | 23·8 | |
| 9·0 | 18·8 | 3·6 | 8·0 G |
| 10·4 | 21·3 | 9·4 | |
| 10·2 | 21·3 | 14·7 | |
| 10·5 | 21·3 | 59·2 | |
| 10·2 | 23·3 | 26·0 | |
| 9·0 | 23·3 | 12·0 | 8·8 |
| 10·4 | 27·3 | 9·9 | |
| 10·2 | 30·3 | 45·8 | |
| 10·4 | 33·3 | 25·9 | |
| 10·2 | 34·3 | 17·9 | 8·7 |
| 10·2 | 36·3 | 42·0 | |
| 10·4 | 40·3 | 1·1 | |
| 10·2 | 40·3 | 43·3 | |
| 10·5 | 40·8 | 32·1 | |
| 9·4 | 42·8 | 36·5 | |
| 8·8 | 45·8 | 22·0 | 9·0 |
| 9·2 | 47·2 | 7·5 | |
| 10·2 | 47·7 | 15·0 | |
| 10·4 | 49·2 | 10·2 | |
| 10·5 | 50·7 | 50·9 | |

## 3181—3240.

| mag. | 10h. m s | −55° ′ | |
|---|---|---|---|
| 10·4 | 12 52·2 | 31·8 | |
| 10·5 | 57·2 | 39·6 | |
| 9·2 | 59·7 | 11·9 | |
| 10·4 | 13 0·4 | 47·6 | |
| 10·0 | 4·7 | 41·4 | |
| 10·4 | 6·2 | 56·1 | |
| 10·4 | 6·2 | 52·0 | |
| 10·4 | 7·2 | 32·0 | |
| 9·8 | 8·2 | 49·0 | |
| 9·8 | 12·2 | 39·8 | |
| 10·2 | 15·7 | 38·7 | |
| 9·9 | 19·9 | 1·9 | |
| 9·8 | 22·2 | 15·8 | |
| 10·4 | 22·7 | 38·1 | |
| 9·9 | 23·7 | 23·4 | |
| 10·4 | 25·5 | 59·1 | |
| 10·4 | 27·2 | 33·4 | |
| 10·2 | 27·2 | 14·9 | |
| 10·5 | 27·4 | 16·7 | |
| 10·2 | 32·2 | 31·1 | |
| 10·5 | 32·7 | 33·6 | |
| 10·4 | 34·2 | 5·1 | |
| 10·4 | 38·7 | 18·0 | |
| 10·4 | 40·7 | 37·7 | |
| 10·2 | 41·2 | 6·9 | |
| 10·4 | 45·7 | 48·6 | |
| 10·5 | 45·7 | 21·1 | |
| 9·9 | 46·2 | 3·8 | |
| 10·4 | 47·2 | 51·8 | |
| 9·9 | 50·2 | 58·2 | |
| 8·3 | 53·2 | 35·0 | 9·0 |
| 8·2 | 54·2 | 56·1 | 8·5 G |
| 9·7 | 57·2 | 6·8 | |
| 9·8 | 57·2 | 19·2 | |
| 10·4 | 57·7 | 24·1 | |
| 10·5 | 14 1·2 | 13·3 | |
| 9·8 | 2·7 | 10·5 | |
| 10·2 | 3·2 | 47·2 | |
| 9·9 | 3·7 | 24·2 | |
| 7·4 | 4·7 | 29·3 | 6·5 GSt |
| 10·4 | 5·2 | 0·5 | |
| 8·4 | 11·2 | 24·3 | 8·0 GSt |
| 10·4 | 14·7 | 53·3 | |
| 9·6 | 15·2 | 1·6 | |
| 10·4 | 16·2 | 42·9 | |
| 10·4 | 19·1 | 1·3 | |
| 10·4 | 20·7 | 26·1 | |
| 10·4 | 21·2 | 45·1 | |
| 7·6 | 25·7 | 23·7 | 7·0 GSt |
| 10·5 | 27·7 | 19·6 | |
| 9·8 | 29·2 | 47·5 | |
| 10·5 | 32·7 | 37·2 | |
| 10·4 | 34·7 | 46·6 | |
| 10·4 | 36·2 | 30·5 | |
| 10·2 | 36·7 | 25·0 | |
| 9·8 | 38·2 | 36·3 | |
| 10·4 | 42·2 | 0·6 | |
| 10·5 | 43·7 | 44·6 | |
| 10·5 | 50·2 | 35·8 | |
| 9·4 | 54·7 | 12·5 | |

## 3241—3300.

| mag. | 10h. m s | −55° ′ | |
|---|---|---|---|
| 10·5 | 14 57·7 | 34·0 | |
| 10·5 | 15 0·2 | 50·1 | |
| 9·8 | 1·2 | 53·1 | |
| 10·5 | 6·7 | 39·9 | |
| 9·9 | 7·7 | 39·0 | |
| 9·2 | 8·2 | 20·1 | |
| 10·5 | 11·7 | 18·6 | |
| 10·2 | 11·7 | 19·5 | |
| 10·4 | 13·7 | 21·4 | |
| 9·4 | 14·2 | 1·1 | |
| 9·6 | 14·7 | 1·9 | |
| 9·2 | 21·2 | 49·0 | |
| 10·4 | 25·1 | 29·5 | |
| 10·0 | 26·1 | 35·1 | |
| 10·2 | 28·6 | 50·0 | |
| 9·8 | 28·6 | 3·2 | |
| 10·5 | 29·6 | 4·0 | |
| 10·5 | 32·1 | 44·0 | |
| 7·8 | 32·8 | 59·3 | 8·5 |
| 10·4 | 37·1 | 24·0 | |
| 10·5 | 43·6 | 20·2 | |
| 9·9 | 44·6 | 11·4 | |
| 10·5 | 45·6 | 20·3 | |
| 9·4 | 49·1 | 49·9 | |
| 9·6 | 50·6 | 24·0 | |
| 10·5 | 51·3 | 41·0 | |
| 10·4 | 52·1 | 23·1 | |
| 10·2 | 53·1 | 55·2 | |
| 10·2 | 55·1 | 9·9 | |
| 10·4 | 57·6 | 50·7 | |
| 9·8 | 16 1·6 | 23·4 | |
| 8·8 | 1·6 | 19·7 | |
| 10·4 | 1·6 | 31·8 | |
| 10·5 | 3·6 | 22·6 | |
| 10·4 | 5·6 | 45·5 | |
| 10·5 | 9·1 | 20·8 | |
| 8·0 | 10·6 | 52·0 | 8·0 G |
| 10·4 | 10·6 | 29·3 | |
| 10·5 | 11·6 | 57·1 | |
| 10·2 | 12·1 | 14·9 | |
| 10·5 | 13·1 | 57·5 | |
| 10·5 | 14·0 | 1·2 | |
| 10·4 | 14·3 | 19·9 | |
| 10·5 | 14·6 | 41·8 | |
| 9·8 | 16·6 | 27·2 | |
| 4·8 | 16·8 | 24·8 | 5·0 GScgt |
| 10·5 | 22·1 | 33·1 | |
| 10·0 | 23·6 | 33·5 | |
| 10·5 | 23·6 | 32·5 | |
| 10·4 | 25·1 | 8·0 | |
| 9·8 | 25·6 | 51·8 | |
| 9·9 | 26·1 | 44·2 | |
| 10·5 | 32·6 | 51·6 | |
| 10·5 | 33·1 | 46·8 | |
| 10·4 | 34·1 | 21·8 | |
| 9·4 | 34·1 | 16·8 | |
| 8·8 | 34·6 | 3·2 | 9·5 |
| 10·4 | 36·1 | 6·3 | |
| 9·8 | 36·1 | 17·7 | |
| 9·9 | 36·1 | 24·6 | |



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## 3301—3360.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.9 | 16 | 38.1 | 30.5 | |
| 10.0 | | 39.1 | 1.9 | |
| 10.0 | | 40.1 | 41.5 | |
| 9.4 | | 40.6 | 2.5 | |
| 8.6 | | 43.1 | 10.4 | 9.0 |
| 9.8 | | 43.1 | 54.6 | |
| 10.0 | | 43.1 | 51.3 | |
| 10.0 | | 43.6 | 12.2 | |
| 10.0 | | 43.6 | 39.7 | |
| 10.2 | | 44.1 | 51.1 | |
| 10.0 | | 44.6 | 39.1 | |
| 10.0 | | 47.1 | 12.4 | |
| 9.8 | | 47.1 | 27.7 | |
| 10.5 | | 49.6 | 37.8 | |
| 10.5 | | 50.1 | 46.0 | |
| 10.4 | | 51.6 | 44.4 | |
| 10.5 | | 52.1 | 15.2 | |
| 9.9 | | 54.6 | 42.0 | |
| 10.0 | | 56.1 | 8.2 | |
| 10.5 | | 57.1 | 52.1 | |
| 9.6 | 17 | 0.6 | 45.0 | |
| 10.5 | | 0.6 | 20.1 | |
| 10.2 | | 4.6 | 3.7 | |
| 10.2 | | 5.6 | 34.0 | |
| 9.0 | | 7.1 | 37.6 | |
| 10.0 | | 7.6 | 45.5 | |
| 10.5 | | 10.1 | 38.1 | |
| 10.0 | | 13.6 | 50.6 | |
| 9.9 | | 14.6 | 27.7 | |
| 10.0 | | 15.6 | 44.6 | |
| 9.6 | | 20.6 | 37.7 | |
| 10.2 | | 20.6 | 7.0 | |
| 10.0 | | 24.6 | 27.8 | |
| 10.0 | | 25.6 | 41.1 | |
| 10.0 | | 32.6 | 26.5 | |
| 10.5 | | 34.1 | 28.9 | |
| 10.4 | | 35.1 | 39.1 | |
| 10.4 | | 35.6 | 48.4 | |
| 10.2 | | 39.1 | 33.8 | |
| 10.0 | | 40.6 | 26.9 | |
| 10.2 | | 40.6 | 4.0 | |
| 9.8 | | 44.6 | 40.3 | |
| 9.4 | | 48.1 | 5.1 | |
| 10.5 | | 55.1 | 46.9 | |
| 10.5 | | 55.1 | 9.0 | |
| 8.8 | | 57.1 | 7.5 | |
| 10.2 | 18 | 0.6 | 24.9 | |
| 10.0 | | 4.1 | 21.0 | |
| 10.5 | | 4.6 | 38.1 | |
| 9.2 | | 4.6 | 51.5 | |
| 10.0 | | 13.1 | 57.1 | |
| 10.2 | | 13.1 | 28.2 | |
| 10.0 | | 18.1 | 52.1 | |
| 10.0 | | 23.1 | 23.6 | |
| 10.4 | | 23.4 | 0.8 | |
| 10.4 | | 24.1 | 38.3 | |
| 10.5 | | 26.1 | 52.1 | |
| 10.5 | | 26.1 | 22.0 | |
| 10.5 | | 27.6 | 31.6 | |
| 9.4 | | 32.6 | 9.7 | 9.2 |

## 3361—3420.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10.5 | 18 | 32.6 | 58.4 | |
| 10.4 | | 32.6 | 6.5 | |
| 10.5 | | 37.6 | 0.4 | |
| 10.0 | | 38.6 | 45.9 | |
| 9.8 | | 39.6 | 57.2 | 9.5 |
| 10.4 | | 42.6 | 40.2 | |
| 9.4 | | 44.6 | 54.2 | 10.0 |
| 10.5 | | 47.1 | 25.6 | |
| 10.2 | | 49.6 | 37.7 | |
| 10.4 | | 52.6 | 35.0 | |
| 9.0 | | 52.6 | 24.1 | |
| 9.9 | | 57.9 | 9.9 | |
| 10.4 | | 57.9 | 42.5 | |
| 10.4 | 19 | 1.4 | 28.4 | |
| 10.4 | | 7.4 | 28.5 | |
| 10.4 | | 8.4 | 10.3 | |
| 9.8 | | 16.4 | 21.2 | |
| 9.6 | | 20.4 | 53.8 | |
| 10.0 | | 24.9 | 44.1 | |
| 10.0 | | 24.9 | 32.9 | |
| 10.0 | | 26.9 | 26.5 | |
| 10.5 | | 27.0 | 58.9 | |
| 10.2 | | 28.9 | 19.4 | |
| 10.0 | | 29.9 | 10.1 | |
| 9.4 | | 30.9 | 32.0 | |
| 10.4 | | 31.9 | 36.6 | |
| 10.0 | | 34.4 | 39.5 | |
| 10.5 | | 34.4 | 14.1 | |
| 10.5 | | 38.9 | 13.8 | |
| 9.4 | | 43.4 | 22.0 | |
| 8.8 | | 44.4 | 37.7 | 9.5 |
| 10.0 | | 56.9 | 8.3 | |
| 9.8 | 20 | 0.4 | 55.1 | |
| 10.2 | | 3.4 | 59.6 | |
| 10.5 | | 7.9 | 45.7 | |
| 10.5 | | 15.4 | 49.5 | |
| 10.5 | | 17.9 | 55.5 | |
| 10.0 | | 22.4 | 50.6 | |
| 9.7 | | 24.4 | 41.4 | |
| 10.0 | | 24.4 | 4.0 | |
| 10.4 | | 24.4 | 17.8 | |
| 10.4 | | 26.4 | 32.9 | |
| 10.4 | | 30.9 | 10.0 | |
| 10.5 | | 38.4 | 1.1 | |
| 10.0 | | 38.7 | 0.4 | |
| 10.5 | | 39.2 | 57.5 | |
| 10.4 | | 45.9 | 28.9 | |
| 10.5 | | 46.4 | 53.0 | |
| 10.0 | | 46.9 | 42.8 | |
| 10.2 | | 48.4 | 27.7 | |
| 10.0 | | 50.9 | 42.1 | |
| 10.2 | | 54.4 | 53.1 | |
| 10.4 | | 55.4 | 33.6 | |
| 10.2 | | 55.9 | 43.9 | |
| 9.8 | | 57.2 | 23.9 | |
| 10.0 | | 58.2 | 5.7 | |
| 10.0 | 21 | 1.2 | 55.0 | |
| 9.9 | | 6.7 | 34.2 | |
| 8.0 | | 9.0 | 59.2 | 9.0 |
| 10.0 | | 9.7 | 55.5 | |

## 3421—3480.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10.2 | 21 | 10.7 | 59.9 | |
| 10.0 | | 11.7 | 35.7 | |
| 9.7 | | 12.2 | 8.0 | |
| 10.2 | | 13.7 | 25.1 | |
| 10.0 | | 19.2 | 10.4 | |
| 9.9 | | 19.2 | 10.6 | |
| 10.2 | | 20.2 | 24.4 | |
| 9.8 | | 22.7 | 46.1 | |
| 10.0 | | 27.2 | 7.6 | |
| 9.4 | | 33.7 | 7.1 | 9.2 |
| 10.0 | | 35.2 | 58.5 | |
| 9.9 | | 36.7 | 15.2 | |
| 9.9 | | 38.2 | 27.1 | |
| 9.9 | | 43.9 | 59.7 | |
| 10.4 | | 47.9 | 58.4 | |
| 9.4 | | 48.7 | 38.0 | |
| 10.4 | | 52.7 | 49.7 | |
| 10.0 | | 55.7 | 28.5 | |
| 9.7 | 22 | 1.7 | 16.9 | |
| 9.9 | | 3.7 | 1.1 | |
| 10.5 | | 4.2 | 20.5 | |
| 10.2 | | 6.7 | 15.1 | |
| 9.4 | | 10.7 | 5.5 | |
| 10.0 | | 11.2 | 47.3 | |
| 10.0 | | 16.7 | 48.3 | |
| 10.4 | | 17.2 | 2.1 | |
| 9.8 | | 19.7 | 21.1 | |
| 10.4 | | 21.2 | 1.2 | |
| 10.5 | | 22.2 | 9.8 | |
| 10.5 | | 22.7 | 9.3 | |
| 9.6 | | 26.7 | 23.1 | |
| 9.6 | | 28.2 | 19.3 | |
| 10.5 | | 29.7 | 59.9 | |
| 9.2 | | 30.2 | 24.6 | 9.5 |
| 10.4 | | 30.5 | 17.5 | |
| 9.9 | | 36.0 | 6.0 | |
| 9.2 | | 36.0 | 14.7 | |
| 10.5 | | 36.5 | 9.3 | |
| 10.4 | | 36.5 | 41.4 | |
| 9.7 | | 37.0 | 48.2 | |
| 10.0 | | 41.0 | 52.8 | |
| 10.0 | | 44.0 | 22.9 | |
| 10.4 | | 51.0 | 20.7 | |
| 10.4 | 23 | 1.0 | 22.1 | |
| 10.4 | | 1.5 | 38.9 | |
| 10.2 | | 4.5 | 40.5 | |
| 10.2 | | 5.5 | 24.9 | |
| 10.5 | | 5.5 | 40.9 | |
| 8.0 | | 8.0 | 34.1 | 8.5 |
| 9.4 | | 13.0 | 29.2 | |
| 10.0 | | 15.5 | 48.8 | |
| 10.4 | | 16.5 | 24.7 | |
| 10.5 | | 17.0 | 28.2 | |
| 8.8 | | 22.5 | 55.0 | |
| 9.2 | | 27.5 | 58.5 | |
| 9.9 | | 34.0 | 25.3 | |
| 10.4 | | 39.5 | 15.3 | |
| 10.2 | | 40.5 | 19.9 | |
| 9.4 | | 41.5 | 22.8 | 9.5 |
| 9.2 | | 43.5 | 9.7 | |

## 3481—3540.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10.5 | 23 | 44.0 | 59.0 | |
| 8.8 | | 44.0 | 20.9 | 9.5 |
| 10.5 | | 46.0 | 7.3 | |
| 10.5 | | 46.0 | 46.5 | |
| 10.5 | | 49.0 | 41.2 | |
| 10.0 | | 52.5 | 0.0 | |
| 10.4 | | 54.0 | 43.2 | |
| 9.4 | 24 | 1.5 | 42.5 | |
| 10.5 | | 1.6 | 18.0 | |
| 9.8 | | 2.5 | 26.4 | |
| 10.5 | | 7.9 | 29.9 | |
| 10.4 | | 11.4 | 9.3 | |
| 10.4 | | 11.9 | 41.0 | |
| 10.4 | | 14.4 | 56.4 | |
| 10.0 | | 14.4 | 38.9 | |
| 9.7 | | 15.9 | 24.3 | |
| 8.8 | | 18.9 | 57.4 | |
| 10.0 | | 19.4 | 21.7 | |
| 10.4 | | 19.9 | 29.5 | |
| 9.2 | | 27.1 | 27.2 | |
| 10.0 | | 29.1 | 10.2 | |
| 8.8 | | 33.6 | 53.1 | |
| 9.8 | | 34.1 | 5.8 | |
| 10.1 | | 35.1 | 32.8 | |
| 9.6 | | 42.1 | 23.0 | 9.5 |
| 9.0 | | 44.6 | 52.0 | |
| 9.4 | | 54.6 | 19.0 | |
| 9.6 | 25 | 2.1 | 58.5 | |
| 10.1 | | 5.6 | 31.6 | |
| 9.8 | | 9.1 | 7.3 | |
| 10.0 | | 10.9 | 25.3 | |
| 10.0 | | 15.0 | 58.0 | |
| 10.1 | | 21.6 | 6.0 | |
| 10.0 | | 21.9 | 40.3 | |
| 10.0 | | 24.6 | 25.0 | |
| 10.1 | | 39.1 | 49.0 | |
| 10.0 | | 42.6 | 16.2 | |
| 9.0 | | 47.6 | 17.9 | 8.2 |
| 9.6 | | 49.1 | 45.3 | |
| 10.1 | | 57.6 | 55.9 | |
| 8.8 | 26 | 5.1 | 4.0 | 9.5 |
| 9.8 | | 14.6 | 37.4 | |
| 10.1 | | 30.1 | 45.8 | |
| 9.6 | | 31.1 | 37.6 | |
| 10.1 | | 32.9 | 33.8 | |
| 9.6 | | 37.6 | 31.3 | |
| 10.1 | | 37.6 | 59.2 | |
| 9.8 | | 38.1 | 47.3 | |
| 10.1 | | 40.6 | 27.8 | |
| 10.1 | | 42.1 | 24.3 | |
| 10.1 | | 42.6 | 13.8 | |
| 9.4 | | 48.1 | 26.8 | 9.0 |
| 9.6 | | 49.1 | 53.8 | |
| 10.1 | | 54.9 | 22.8 | |
| 10.1 | 27 | 5.1 | 41.2 | |
| 9.8 | | 10.6 | 26.6 | 9.5 |
| 10.1 | | 16.6 | 52.8 | |
| 10.0 | | 18.1 | 14.7 | |
| 10.0 | | 19.6 | 22.8 | |
| 9.8 | | 21.2 | 36.3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 54 | 7.4 |
| | 20 | 56 | 7.6 |
| | 30 | 58 | 7.7 |



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| 25 | prec. | |
|---|---|---|
| | α | δ |
| | + | − |
| h m | s | ′ |
| 10 20 | 56 | 7·6 |
| 30 | 58 | 7·7 |
| 40 | 60 | 7·9 |

## 3541—3600.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 27 | 21·3 | 27·7 | |
| 9·5 | | 22·3 | 59·0 | |
| 9·0 | | 27·2 | 28·0 | 9·0 |
| 10·1 | | 27·7 | 37·3 | |
| 10·1 | | 34·7 | 39·4 | |
| 9·8 | | 44·2 | 28·4 | 9·5 |
| 9·6 | | 49·2 | 9·8 | |
| 9·6 | | 50·7 | 59·9 | |
| 9·0 | | 51·2 | 5·8 | 9·5 |
| 10·0 | | 58·3 | 58·3 | |
| 10·1 | 28 | 2·7 | 49·8 | |
| 10·1 | | 4·2 | 8·4 | |
| 10·1 | | 8·7 | 50·0 | |
| 10·0 | | 14·7 | 50·8 | |
| 8·8 | | 16·7 | 15·2 | 9·5 |
| 10·1 | | 19·2 | 11·8 | |
| 10·0 | | 21·2 | 4·6 | |
| 9·4 | | 30·2 | 32·6 | |
| 10·0 | | 32·2 | 54·8 | |
| 9·2 | | 37·2 | 10·1 | |
| 8·8 | | 39·2 | 7·4 | 9·5 |
| 9·4 | | 42·2 | 4·8 | 9·0 |
| 10·1 | | 43·7 | 8·0 | |
| 10·1 | | 49·7 | 49·8 | |
| 9·8 | | 50·7 | 30·1 | |
| 9·5 | | 51·2 | 46·2 | |
| 10·1 | | 51·7 | 7·4 | |
| 10·0 | | 52·2 | 32·0 | |
| 9·4 | | 58·0 | 58·0 | |
| 9·6 | 29 | 0·7 | 19·1 | |
| 9·2 | | 2·7 | 40·2 | |
| 9·6 | | 4·7 | 8·8 | |
| 10·1 | | 9·2 | 10·6 | |
| 10·1 | | 16·2 | 4·8 | |
| 10·1 | | 17·7 | 4·6 | |
| 10·1 | | 24·2 | 46·3 | |
| 10·1 | | 25·2 | 55·6 | |
| 8·5 | | 31·2 | 16·0 | 8·8 |
| 10·1 | | 32·2 | 51·0 | |
| 10·1 | | 34·7 | 33·2 | |
| 10·1 | | 37·2 | 41·0 | |
| 10·1 | | 39·2 | 41·8 | |
| 10·1 | | 39·3 | 2·6 | |
| 9·8 | | 40·2 | 54·4 | |
| 9·1 | | 41·2 | 54·2 | 9·5 |
| 10·1 | | 44·2 | 31·2 | |
| 10·0 | | 45·4 | 1·0 | |
| 9·8 | | 48·2 | 27·2 | |
| 9·6 | | 48·7 | 2·8 | |
| 10·0 | | 49·7 | 1·3 | |
| 10·1 | | 49·7 | 28·0 | |
| 9·5 | | 52·2 | 23·0 | |
| 9·2 | 30 | 1·7 | 55·8 | 9·0 |
| 9·8 | | 3·7 | 49·4 | |
| 9·8 | | 7·2 | 20·4 | |
| 10·1 | | 10·7 | 46·4 | |
| 9·2 | | 13·2 | 44·2 | |
| 10·1 | | 23·2 | 9·0 | |
| 9·6 | | 23·2 | 8·8 | |
| 10·1 | | 29·7 | 30·0 | |

## 3601—3660.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 30 | 31·2 | 26·0 | |
| 9·2 | | 31·7 | 27·6 | |
| 10·1 | | 37·2 | 36·8 | |
| 10·1 | | 45·7 | 48·6 | |
| 10·1 | | 46·9 | 20·8 | |
| 10·0 | | 47·2 | 32·0 | |
| 9·0 | | 49·2 | 11·6 | 9·5 |
| 9·6 | | 49·2 | 49·0 | |
| 10·1 | | 51·7 | 26·8 | |
| 9·8 | | 51·7 | 7·0 | |
| 9·5 | | 52·2 | 42·6 | |
| 10·1 | 31 | 2·7 | 17·0 | |
| 10·0 | | 5·7 | 47·8 | |
| 9·4 | | 6·2 | 20·1 | |
| 10·1 | | 14·9 | 23·7 | |
| 10·1 | | 15·7 | 34·0 | |
| 9·4 | | 24·7 | 17·0 | |
| 10·0 | | 27·2 | 9·8 | |
| 9·6 | | 32·7 | 18·6 | |
| 10·1 | | 33·7 | 8·8 | |
| 9·5 | | 36·2 | 40·8 | |
| 9·6 | | 36·2 | 38·0 | |
| 9·8 | | 39·2 | 54·6 | |
| 10·1 | | 41·2 | 21·8 | |
| 10·1 | | 41·7 | 0·0 | |
| 10·1 | | 47·2 | 44·1 | |
| 10·0 | | 50·7 | 35·0 | |
| 10·1 | | 53·7 | 2·0 | |
| 10·1 | 32 | 0·7 | 23·9 | |
| 9·0 | | 5·2 | 37·1 | |
| 10·1 | | 8·8 | 3·8 | |
| 9·8 | | 17·3 | 16·3 | |
| 9·2 | | 23·3 | 12·3 | 9·5 |
| 9·6 | | 25·3 | 55·3 | |
| 9·5 | | 27·8 | 36·0 | |
| 9·6 | | 27·8 | 32·0 | |
| 10·1 | | 31·8 | 2·8 | |
| 10·1 | | 32·8 | 12·4 | |
| 9·6 | | 32·8 | 58·6 | |
| 10·1 | | 33·2 | 4·8 | |
| 10·1 | | 36·2 | 28·7 | |
| 9·8 | | 37·8 | 3·8 | |
| 10·1 | | 42·8 | 29·8 | |
| 9·2 | | 43·3 | 27·6 | |
| 10·1 | | 51·8 | 41·6 | |
| 10·0 | | 51·8 | 41·9 | |
| 9·2 | | 58·8 | 17·7 | |
| 9·8 | 33 | 3·8 | 21·8 | |
| 10·0 | | 4·8 | 11·1 | |
| 10·0 | | 7·3 | 21·4 | |
| 9·8 | | 9·3 | 44·7 | |
| 9·6 | | 13·8 | 53·5 | |
| 9·5 | | 15·3 | 59·1 | |
| 9·4 | | 16·5 | 2·4 | |
| 9·1 | | 19·8 | 14·4 | |
| 10·0 | | 25·3 | 31·0 | |
| 9·5 | | 25·8 | 25·4 | |
| 9·5 | | 27·8 | 28·9 | |
| 10·1 | | 29·3 | 33·6 | |
| 9·6 | | 32·8 | 24·2 | |

## 3661—3720.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 33 | 36·3 | 22·8 | |
| 10·0 | | 39·8 | 53·3 | |
| 10·1 | | 40·8 | 32·1 | |
| 10·0 | | 41·3 | 8·3 | |
| 9·2 | | 41·3 | 5·0 | |
| 9·6 | | 51·3 | 58·8 | |
| 10·0 | | 59·8 | 23·6 | |
| 9·8 | 34 | 5·3 | 44·2 | |
| 9·6 | | 5·8 | 12·5 | |
| 9·5 | | 8·8 | 38·6 | |
| 10·0 | | 10·3 | 16·8 | |
| 10·1 | | 10·8 | 38·7 | |
| 10·1 | | 14·8 | 55·3 | |
| 10·0 | | 14·9 | 43·1 | |
| 10·1 | | 16·4 | 39·5 | |
| 10·1 | | 17·4 | 36·5 | |
| 9·0 | | 20·9 | 8·9 | |
| 9·2 | | 21·4 | 46·8 | |
| 10·1 | | 24·3 | 25·1 | |
| 10·1 | | 24·4 | 51·1 | |
| 9·8 | | 24·9 | 28·7 | |
| 7·3 | | 25·4 | 20·3 | GSg |
| 10·1 | | 29·4 | 51·3 | |
| 9·8 | | 31·9 | 35·1 | |
| 9·5 | | 32·4 | 30·0 | |
| 9·8 | | 33·9 | 42·0 | |
| 9·6 | | 37·9 | 42·9 | |
| 9·0 | | 41·4 | 51·5 | 9·5 |
| 9·5 | | 41·4 | 45·9 | |
| 9·4 | | 50·4 | 42·0 | |
| 10·1 | | 51·9 | 46·3 | |
| 9·6 | | 54·4 | 16·4 | |
| 9·2 | | 56·9 | 29·9 | |
| 10·0 | | 57·9 | 37·3 | |
| 8·4 | | 59·4 | 37·6 | 8·5 |
| 10·0 | 35 | 0·4 | 43·8 | |
| 10·0 | | 0·4 | 54·7 | |
| 9·8 | | 9·4 | 52·9 | |
| 10·0 | | 10·4 | 20·6 | |
| 10·1 | | 10·9 | 16·7 | |
| 8·6 | | 11·4 | 55·5 | 9·0 |
| 9·8 | | 18·4 | 49·5 | |
| 10·1 | | 19·4 | 7·1 | |
| 9·2 | | 24·9 | 35·2 | 9·5 |
| 10·1 | | 26·3 | 22·3 | |
| 10·1 | | 26·9 | 38·0 | |
| 9·5 | | 28·4 | 56·5 | 9·5 |
| 9·6 | | 32·4 | 42·1 | |
| 9·2 | | 36·9 | 39·2 | 9·0 |
| 9·6 | | 36·9 | 4·9 | |
| 9·6 | | 44·4 | 6·3 | |
| 9·6 | | 44·4 | 54·0 | |
| 9·4 | | 46·4 | 32·9 | |
| 10·1 | | 48·4 | 8·5 | |
| 10·1 | | 51·9 | 2·3 | |
| 10·1 | | 54·4 | 15·0 | |
| 10·1 | | 54·9 | 18·5 | |
| 10·0 | | 56·4 | 33·5 | |
| 9·6 | | 59·8 | 57·3 | |
| 9·4 | 36 | 0·5 | 32·1 | |

## 3721—3780.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 36 | 5·0 | 56·7 | |
| 9·5 | | 6·0 | 14·7 | |
| 8·8 | | 8·5 | 15·9 | 9·5 |
| 9·5 | | 9·0 | 26·8 | |
| 10·0 | | 9·9 | 58·6 | |
| 10·1 | | 11·3 | 32·2 | |
| 9·0 | | 11·5 | 17·2 | 9·5 |
| 10·1 | | 14·5 | 22·3 | |
| 7·7 | | 27·5 | 24·9 | 7·5 GSg |
| 9·8 | | 31·0 | 18·1 | |
| 8·2 | | 33·5 | 26·5 | 9·0 |
| 9·8 | | 36·5 | 33·9 | |
| 10·1 | | 40·0 | 42·5 | |
| 10·0 | | 41·5 | 11·5 | |
| 10·1 | | 42·5 | 24·1 | |
| 10·0 | | 44·5 | 44·7 | |
| 9·1 | | 45·0 | 41·3 | |
| 9·4 | | 45·0 | 5·9 | |
| 9·6 | | 46·0 | 36·5 | |
| 10·1 | | 51·5 | 55·7 | |
| 10·1 | 37 | 0·0 | 54·7 | |
| 9·8 | | 1·0 | 25·5 | |
| 10·0 | | 15·0 | 23·4 | |
| 10·1 | | 15·5 | 58·9 | |
| 10·0 | | 27·0 | 33·3 | |
| 9·8 | | 28·0 | 20·0 | |
| 10·1 | | 31·0 | 36·7 | |
| 9·4 | | 35·0 | 17·9 | |
| 9·2 | | 37·5 | 49·4 | 9·0 |
| 10·1 | | 40·0 | 43·7 | |
| 9·8 | | 41·0 | 50·3 | |
| 10·1 | | 49·0 | 42·7 | |
| 9·5 | | 49·5 | 52·8 | |
| 10·0 | | 50·0 | 20·7 | |
| 9·4 | | 53·5 | 54·1 | 8·8 |
| 9·6 | | 57·5 | 52·9 | |
| 10·0 | | 59·0 | 26·9 | |
| 9·6 | 38 | 1·0 | 32·1 | |
| 10·0 | | 2·0 | 20·7 | |
| 10·1 | | 9·0 | 21·3 | |
| 9·6 | | 11·0 | 19·1 | |
| 10·1 | | 13·1 | 37·2 | |
| 9·6 | | 16·5 | 8·3 | |
| 10·1 | | 23·0 | 23·7 | |
| 10·0 | | 25·0 | 25·1 | |
| 9·5 | | 29·0 | 58·9 | 10·0 |
| 9·8 | | 32·5 | 34·7 | |
| 9·1 | | 34·0 | 16·3 | |
| 10·1 | | 34·1 | 57·6 | |
| 9·5 | | 36·5 | 37·1 | |
| 10·1 | | 37·0 | 38·1 | |
| 9·5 | | 39·0 | 14·1 | |
| 10·1 | | 49·5 | 40·9 | |
| 10·0 | | 51·5 | 54·8 | |
| 10·1 | | 52·5 | 39·5 | |
| 10·0 | | 58·5 | 46·5 | |
| 10·0 | 39 | 1·0 | 33·1 | |
| 8·6 | | 6·5 | 7·9 | 8·0 GSt |
| 10·1 | | 7·0 | 44·9 | |
| 10·0 | | 9·5 | 6·0 | |



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## 3781—3840.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 39 | 11·1 | 17·3 | |
| 10·0 | | 13·5 | 37·5 | |
| 10·1 | | 15·0 | 26·3 | |
| 9·8 | | 21·0 | 50·7 | |
| 10·1 | | 21·5 | 55·5 | |
| 9·8 | | 23·9 | 59·3 | ? |
| 9·8 | | 25·0 | 54·9 | |
| 9·8 | | 29·5 | 12·7 | |
| 9·8 | | 31·5 | 53·1 | |
| 10·1 | | 35·0 | 12·9 | |
| 10·0 | | 37·1 | 57·1 | |
| 10·0 | | 37·5 | 48·9 | |
| 9·6 | | 39·0 | 49·7 | |
| 9·8 | | 39·5 | 6·8 | |
| 9·4 | | 41·0 | 4·0 | 9·0 G |
| 9·4 | | 41·0 | 55·0 | 9·2 G |
| 9·2 | | 41·5 | 5·3 | |
| 9·6 | | 45·0 | 6·1 | |
| 9·6 | | 51·5 | 54·8 | |
| 9·2 | | 54·5 | 37·9 | 9·0 |
| 10·0 | | 57·0 | 43·1 | |
| 9·8 | 40 | 6·5 | 35·1 | |
| 10·0 | | 10·7 | 37·1 | |
| 9·1 | | 12·2 | 18·9 | 9·5 |
| 10·1 | | 15·2 | 4·5 | |
| 10·0 | | 15·2 | 5·5 | |
| 9·1 | | 16·7 | 46·2 | 9·0 |
| 10·1 | | 17·7 | 55·5 | |
| 10·1 | | 18·2 | 18·5 | |
| 9·2 | | 18·7 | 53·9 | |
| 9·8 | | 22·7 | 4·0 | |
| 9·5 | | 23·7 | 7·9 | |
| 8·8 | | 25·7 | 8·1 | 7·5 GSt |
| 9·4 | | 29·2 | 7·8 | 10·0 |
| 10·0 | | 29·5 | 57·4 | |
| 9·6 | | 35·2 | 55·7 | |
| 10·0 | | 37·7 | 37·1 | |
| 10·1 | | 38·6 | 22·2 | |
| 9·8 | | 38·7 | 49·1 | |
| 10·1 | | 41·7 | 9·9 | |
| 9·4 | | 43·7 | 48·0 | |
| 9·0 | | 44·2 | 37·8 | 9·5 |
| 10·0 | | 46·2 | 18·5 | |
| 9·6 | | 47·7 | 35·4 | |
| 9·8 | | 51·2 | 18·0 | |
| 9·6 | 41 | 1·7 | 34·6 | |
| 9·8 | | 2·7 | 44·0 | |
| 9·5 | | 17·2 | 16·7 | |
| 9·6 | | 21·2 | 37·1 | |
| 9·8 | | 21·2 | 31·3 | |
| 10·1 | | 23·2 | 6·1 | |
| 10·1 | | 29·6 | 4·7 | |
| 9·5 | | 29·7 | 52·3 | |
| 10·0 | | 35·7 | 28·3 | |
| 9·8 | | 38·7 | 45·5 | |
| 10·1 | | 39·3 | 0·3 | |
| 9·0 | | 40·2 | 7·0 | |
| 10·1 | | 41·4 | 27·7 | |
| 9·6 | | 42·2 | 24·3 | |
| 10·1 | | 43·4 | 46·1 | |

## 3841—3900.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 41 | 51·2 | 17·1 | |
| 10·1 | | 52·7 | 45·7 | |
| 10·1 | 42 | 13·2 | 36·8 | |
| 9·4 | | 15·2 | 15·1 | 10·0 |
| 10·0 | | 19·2 | 13·3 | |
| 10·0 | | 22·2 | 27·4 | |
| 9·0 | | 23·2 | 7·7 | 9·5 |
| 9·8 | | 24·2 | 3·6 | |
| 9·4 | | 28·7 | 1·2 | |
| 10·1 | | 31·2 | 34·3 | |
| 10·1 | | 32·2 | 19·9 | |
| 10·0 | | 36·3 | 1·9 | |
| 10·1 | | 42·7 | 20·0 | |
| 10·0 | | 47·7 | 32·5 | |
| 10·0 | | 47·7 | 0·0 | |
| 8·8 | | 50·7 | 18·9 | |
| 9·1 | | 51·7 | 48·1 | |
| 10·0 | | 57·5 | 0·8 | |
| 10·1 | 43 | 0·7 | 57·8 | |
| 10·0 | | 2·7 | 15·1 | |
| 10·1 | | 3·3 | 3·2 | |
| 9·5 | | 5·7 | 38·7 | |
| 10·1 | | 6·2 | 23·8 | |
| 10·1 | | 6·7 | 23·6 | |
| 10·0 | | 10·8 | 0·0 | |
| 9·2 | | 16·2 | 15·1 | |
| 10·1 | | 16·7 | 56·1 | |
| 9·8 | | 19·7 | 56·2 | |
| 8·5 | | 24·5 | 57·7 | 9·0 |
| 9·8 | | 32·7 | 13·6 | |
| 9·2 | | 39·7 | 55·0 | 9·5 |
| 10·1 | | 40·7 | 28·1 | |
| 10·0 | | 40·7 | 33·5 | |
| 10·0 | | 49·2 | 23·7 | |
| 9·6 | | 54·2 | 40·9 | |
| 9·6 | | 55·2 | 56·6 | 9·0 |
| 9·8 | 44 | 1·7 | 36·8 | |
| 9·8 | | 5·7 | 19·9 | |
| 10·0 | | 5·7 | 55·9 | |
| 9·8 | | 7·7 | 10·5 | |
| 9·8 | | 18·7 | 47·3 | |
| 10·1 | | 18·7 | 43·7 | |
| 9·8 | | 23·1 | 14·2 | |
| 10·1 | | 23·1 | 57·7 | |
| 9·8 | | 23·2 | 19·1 | |
| 9·8 | | 26·1 | 3·0 | |
| 10·1 | | 35·1 | 56·9 | |
| 9·8 | | 35·6 | 55·5 | |
| 9·6 | | 36·1 | 25·3 | |
| 10·0 | | 39·6 | 50·4 | |
| 9·8 | | 45·1 | 17·9 | |
| 9·6 | | 48·6 | 58·9 | |
| 10·0 | | 51·1 | 16·3 | |
| 10·0 | | 52·1 | 29·3 | |
| 9·5 | | 55·6 | 2·1 | |
| 9·8 | | 56·6 | 52·3 | |
| 10·0 | 45 | 1·1 | 55·7 | |
| 8·8 | | 2·6 | 47·9 | 9·5 |
| 9·8 | | 7·1 | 51·3 | |
| 9·6 | | 13·1 | 48·8 | |

## 3901—3960.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 45 | 14·1 | 10·9 | 9·5 |
| 9·2 | | 14·6 | 58·0 | |
| 9·2 | | 15·6 | 41·9 | |
| 9·4 | | 18·1 | 54·4 | |
| 8·6 | | 19·6 | 40·8 | 9·0 |
| 10·0 | | 22·1 | 46·1 | |
| 8·6 | | 23·6 | 19·1 | 9·5 |
| 10·0 | | 28·5 | 40·7 | |
| 9·6 | | 31·1 | 55·5 | |
| 10·1 | | 34·1 | 46·1 | |
| 9·1 | | 37·6 | 15·9 | 9·5 |
| 9·8 | | 46·1 | 48·3 | |
| 10·0 | | 59·1 | 32·8 | |
| 9·6 | 46 | 0·6 | 2·2 | |
| 10·1 | | 1·1 | 56·5 | |
| 9·6 | | 2·1 | 48·9 | |
| 9·0 | | 9·6 | 44·8 | |
| 9·8 | | 10·6 | 39·1 | |
| 10·1 | | 25·1 | 3·5 | |
| 10·0 | | 26·6 | 42·8 | |
| 10·0 | | 26·6 | 30·2 | |
| 10·0 | | 28·6 | 33·8 | |
| 10·0 | | 35·1 | 25·0 | |
| 9·8 | | 38·2 | 31·7 | : |
| 9·5 | | 40·5 | 27·0 | |
| 8·6 | | 46·5 | 53·5 | 9·0 |
| 8·8 | | 55·5 | 53·4 | 9·0 |
| 9·0 | | 58·0 | 29·7 | |
| 9·6 | | 58·5 | 30·0 | |
| 9·8 | 47 | 0·5 | 33·0 | |
| 10·1 | | 2·4 | 53·1 | |
| 9·8 | | 3·0 | 10·1 | |
| 10·1 | | 8·0 | 59·6 | |
| 10·1 | | 12·0 | 24·8 | |
| 10·1 | | 25·5 | 39·5 | |
| 10·0 | | 28·5 | 50·4 | |
| 10·0 | | 35·5 | 32·3 | |
| 10·1 | | 36·4 | 16·4 | |
| 10·1 | | 36·5 | 55·5 | |
| 9·8 | | 43·5 | 13·9 | |
| 9·5 | | 49·5 | 30·9 | |
| 10·1 | | 57·5 | 17·0 | |
| 9·6 | | 58·5 | 0·1 | |
| 10·0 | | 59·5 | 39·9 | |
| 9·6 | 48 | 1·5 | 12·6 | |
| 10·1 | | 6·0 | 31·7 | |
| 10·0 | | 8·5 | 47·6 | |
| 10·1 | | 12·4 | 32·1 | |
| 9·0 | | 16·0 | 26·7 | 8·5 |
| 9·4 | | 18·5 | 16·4 | |
| 10·1 | | 20·0 | 49·8 | |
| 8·0 | | 22·5 | 45·2 | 7·5 GSg |
| 10·1 | | 23·5 | 53·2 | |
| 10·0 | | 30·1 | 57·6 | |
| 10·1 | | 50·0 | 42·1 | |
| 10·1 | | 55·5 | 16·0 | |
| 9·8 | 49 | 0·5 | 0·7 | |
| 10·1 | | 7·0 | 34·1 | |
| 9·8 | | 11·0 | 55·6 | |
| 10·1 | | 12·5 | 35·5 | |

## 3961—4020.

| mag. | 10h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 49 | 13·5 | 7·9 | |
| 10·1 | | 20·0 | 53·5 | |
| 9·5 | | 25·5 | 17·9 | 9·5 |
| 9·8 | | 26·0 | 33·8 | |
| 10·0 | | 31·4 | 22·6 | |
| 10·1 | | 31·9 | 54·6 | |
| 9·1 | | 38·4 | 29·5 | |
| 9·8 | | 40·9 | 43·0 | |
| 10·1 | | 44·9 | 41·5 | |
| 10·0 | | 46·4 | 59·8 | |
| 10·1 | | 55·3 | 58·9 | |
| 10·0 | 50 | 2·4 | 57·1 | |
| 10·1 | | 11·4 | 17·0 | |
| 9·8 | | 15·9 | 3·7 | |
| 9·6 | | 22·4 | 19·4 | |
| 10·1 | | 26·4 | 25·5 | |
| 10·0 | | 27·4 | 2·3 | |
| 9·6 | | 29·4 | 42·8 | |
| 10·0 | | 36·4 | 47·9 | |
| 10·0 | | 39·9 | 12·7 | |
| 9·4 | | 40·9 | 47·9 | |
| 9·8 | | 45·4 | 54·0 | |
| 9·5 | | 46·4 | 30·5 | |
| 9·8 | | 47·9 | 12·9 | |
| 9·5 | | 51·9 | 29·6 | |
| 9·0 | | 52·9 | 46·0 | 9·5 |
| 9·8 | | 56·4 | 17·5 | |
| 9·6 | 51 | 5·9 | 36·3 | |
| 9·2 | | 21·9 | 50·8 | |
| 9·5 | | 25·9 | 38·9 | |
| 9·8 | | 27·9 | 49·7 | |
| 9·2 | | 32·9 | 48·4 | |
| 9·4 | | 42·9 | 29·7 | |
| 10·1 | | 46·9 | 4·9 | |
| 10·0 | | 53·9 | 51·3 | |
| 9·6 | | 57·4 | 0·1 | |
| 9·6 | | 58·4 | 52·0 | |
| 9·6 | 52 | 0·4 | 40·8 | 9·5 |
| 8·8 | | 1·4 | 4·6 | 9·0 |
| 10·0 | | 1·9 | 16·6 | |
| 9·4 | | 6·4 | 41·9 | |
| 10·1 | | 8·7 | 35·4 | |
| 10·0 | | 11·2 | 24·8 | |
| 9·6 | | 16·2 | 42·4 | |
| 10·1 | | 19·1 | 0·3 | |
| 10·1 | | 20·1 | 28·3 | |
| 9·8 | | 20·2 | 23·5 | |
| 9·2 | | 21·2 | 38·2 | |
| 10·1 | | 23·1 | 29·2 | |
| 9·6 | | 23·7 | 45·3 | |
| 9·8 | | 31·7 | 16·1 | |
| 10·1 | | 33·1 | 59·3 | : |
| 9·2 | | 34·2 | 39·0 | |
| 9·6 | | 37·2 | 51·4 | |
| 10·0 | | 39·7 | 27·3 | |
| 10·1 | | 44·2 | 13·7 | |
| 9·0 | | 47·2 | 36·8 | 9·5 |
| 8·3 | | 48·2 | 6·9 | 8·0 GSt |
| 9·8 | | 49·2 | 3·7 | |
| 9·6 | | 54·7 | 18·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 58 | 7·7 |
| | 40 | 60 | 7·9 |
| | 50 | 62 | 8·0 |
| 11 | 0 | 64 | 8·1 |



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| 25 prec. | | a + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 50 | 62 | 8·0 |
| 11 | 0 | 64 | 8·1 |
| | 10 | 66 | 8·2 |
| | 20 | 68 | 8·2 |

**4021—4080.**

| mag. | $10^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 52 | 58·2 | 26·7 | |
| 9·2 | 53 | 2·7 | 23·5 | |
| 9·2 | | 9·4 | 58·9 | 9·5 |
| 10·0 | | 11·7 | 50·9 | |
| 9·4 | | 15·7 | 40·7 | |
| 9·6 | | 24·7 | 12·1 | |
| 10·1 | | 26·7 | 39·6 | |
| 10·1 | | 35·7 | 42·9 | |
| 10·1 | | 37·2 | 44·5 | |
| 9·2 | | 38·2 | 3·8 | |
| 9·6 | | 50·2 | 20·5 | |
| 9·5 | 54 | 15·2 | 20·4 | |
| 9·0 | | 15·7 | 57·0 | 9·0 |
| 9·4 | | 16·7 | 21·8 | |
| 9·6 | | 17·7 | 24·3 | |
| 9·2 | | 18·7 | 22·8 | |
| 9·5 | | 20·2 | 10·7 | |
| 7·6 | | 25·7 | 32·1 | |
| 9·6 | | 32·7 | 20·4 | |
| 9·2 | | 33·2 | 30·6 | |
| 9·5 | | 36·7 | 24·6 | |
| 9·4 | | 41·5 | 20·4 | |
| 9·6 | | 51·5 | 9·0 | |
| 9·8 | | 58·0 | 18·8 | |
| 9·8 | 55 | 1·0 | 3·6 | |
| 9·2 | | 1·0 | 10·5 | 8·5 G |
| 8·8 | | 2·0 | 59·0 | 9·5 |
| 9·2 | | 6·0 | 52·9 | |
| 9·6 | | 11·0 | 32·8 | |
| 10·1 | | 14·0 | 34·2 | |
| 9·6 | | 15·5 | 32·9 | |
| 9·8 | | 16·0 | 50·7 | |
| 10·1 | | 16·0 | 56·9 | |
| 9·8 | | 16·5 | 23·2 | |
| 9·2 | | 26·4 | 30·5 | |
| 9·6 | | 28·4 | 40·8 | |
| 10·0 | | 31·0 | 43·2 | |
| 10·1 | | 39·9 | 36·8 | |
| 10·0 | | 41·1 | 0·5 | |
| 10·0 | | 45·0 | 38·3 | |
| 10·0 | | 45·5 | 32·0 | |
| 10·1 | | 48·4 | 15·1 | |
| 9·3 | | 51·8 | 39·2 | 9·5 |
| 10·0 | | 59·6 | 5·4 | |
| 9·4 | 56 | 7·1 | 29·0 | |
| 8·8 | | 9·8 | 54·2 | 9·0 |
| 10·0 | | 18·9 | 50·5 | |
| 9·8 | | 29·3 | 50·0 | |
| 9·8 | | 29·8 | 51·1 | |
| 10·0 | | 32·3 | 43·9 | |
| 9·8 | | 34·6 | 33·6 | |
| 9·8 | | 41·6 | 46·8 | |
| 9·6 | | 42·6 | 18·2 | |
| 9·8 | | 45·6 | 44·8 | |
| 9·3 | | 50·6 | 14·4 | 8·5 G |
| 10·0 | | 51·3 | 13·8 | |
| 8·6 | | 51·3 | 44·0 | 9·0 |
| 9·6 | | 55·3 | 5·8 | |
| 9·2 | | 56·8 | 39·7 | 9·5 |
| 10·0 | 57 | 4·3 | 49·5 | |

**4081—4140.**

| mag. | $10^h$–$11^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 57 | 15·8 | 13·6 | |
| 9·6 | | 22·3 | 56·0 | |
| 10·0 | | 26·3 | 28·0 | |
| 9·4 | | 27·8 | 36·0 | 9·0 |
| 9·4 | | 29·3 | 10·0 | 9·5 |
| 9·4 | | 30·3 | 39·2 | 9·5 |
| 10·0 | | 35·8 | 8·9 | |
| 10·0 | | 42·3 | 25·4 | |
| 10·0 | | 44·8 | 48·0 | |
| 10·0 | | 51·3 | 9·7 | |
| 9·8 | | 51·8 | 19·2 | |
| 9·4 | | 58·3 | 44·0 | 9·5 |
| 9·4 | | 59·3 | 25·9 | |
| 9·8 | | 59·8 | 48·7 | |
| 9·6 | 58 | 1·3 | 46·1 | |
| 9·8 | | 12·8 | 43·8 | |
| 9·6 | | 21·3 | 22·7 | |
| 10·0 | | 23·8 | 26·8 | |
| 10·0 | | 25·8 | 38·1 | |
| 9·5 | | 28·3 | 32·9 | |
| 9·4 | | 36·8 | 40·8 | |
| 9·4 | | 42·8 | 5·9 | 9·5 |
| 10·0 | | 53·3 | 30·6 | |
| 9·8 | 59 | 1·3 | 41·0 | |
| 9·4 | | 1·3 | 6·2 | |
| 10·0 | | 4·8 | 24·9 | |
| 10·0 | | 17·3 | 39·8 | |
| 9·8 | | 21·3 | 32·0 | |
| 10·0 | | 24·8 | 28·4 | |
| 9·5 | | 26·3 | 30·6 | |
| 10·0 | | 30·8 | 29·8 | |
| 9·8 | | 32·8 | 4·2 | |
| 9·8 | | 39·3 | 34·4 | |
| 9·5 | | 39·8 | 25·2 | |
| 9·8 | | 41·8 | 11·2 | |
| 9·1 | | 41·8 | 13·2 | |
| 9·0 | | 42·3 | 43·7 | 9·5 |
| 9·5 | | 43·8 | 20·0 | |
| 9·8 | | 46·3 | 27·6 | |
| 9·8 | | 48·3 | 50·0 | |
| 10·0 | | 49·8 | 34·2 | |
| 10·0 | | 51·3 | 33·3 | |
| 9·6 | | 55·3 | 21·4 | |
| 9·8 | 0 | 3·3 | 39·6 | |
| 9·6 | | 19·8 | 27·8 | |
| 10·0 | | 19·8 | 36·4 | |
| 10·0 | | 24·3 | 13·8 | |
| 10·0 | | 27·3 | 47·5 | |
| 10·0 | | 29·3 | 17·8 | |
| 9·0 | | 42·8 | 5·0 | 9·5 |
| 10·0 | | 46·8 | 48·2 | |
| 9·0 | | 47·8 | 48·0 | 9·5 |
| 10·0 | | 47·8 | 12·0 | |
| 8·6 | | 52·8 | 14·3 | 9·0 |
| 10·0 | | 58·3 | 3·3 | |
| 9·6 | | 59·3 | 4·9 | |
| 9·5 | 1 | 3·8 | 34·2 | |
| 9·6 | | 5·3 | 5·8 | |
| 9·8 | | 11·6 | 29·5 | |
| 9·8 | | 27·5 | 2·0 | |

**4141—4200.**

| mag. | $11^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 1 | 27·8 | 39·6 | |
| 9·8 | | 32·3 | 36·9 | |
| 9·8 | | 59·8 | 38·4 | |
| 10·0 | 2 | 1·8 | 22·0 | |
| 10·0 | | 3·8 | 9·0 | |
| 9·8 | | 5·3 | 8·8 | |
| 10·0 | | 7·3 | 25·2 | |
| 8·5 | | 16·9 | 59·2 | 8·5 |
| 9·4 | | 23·8 | 7·8 | 9·5 |
| 10·0 | | 27·8 | 0·4 | |
| 10·0 | | 28·3 | 59·0 | |
| 9·6 | | 47·3 | 10·2 | |
| 10·0 | | 47·8 | 14·7 | |
| 9·8 | | 56·8 | 42·6 | |
| 10·0 | | 59·8 | 5·0 | |
| 8·9 | 3 | 2·8 | 48·4 | 9·0 |
| 9·8 | | 3·8 | 19·8 | |
| 10·0 | | 9·3 | 33·8 | |
| 9·8 | | 15·8 | 54·8 | |
| 9·6 | | 18·8 | 53·9 | |
| 9·5 | | 18·8 | 52·2 | |
| 10·0 | | 18·8 | 58·7 | |
| 9·8 | | 19·3 | 38·5 | |
| 10·0 | | 19·6 | 31·0 | |
| 10·0 | | 29·3 | 29·6 | |
| 10·0 | | 35·3 | 29·1 | |
| 9·4 | | 37·3 | 12·8 | 9·5 |
| 9·4 | | 40·3 | 45·4 | 9·5 |
| 9·6 | | 42·8 | 34·3 | |
| 10·0 | | 43·8 | 35·0 | |
| 10·0 | | 50·6 | 0·5 | |
| 10·0 | | 53·3 | 56·7 | |
| 10·0 | 4 | 1·3 | 27·8 | |
| 9·1 | | 2·8 | 28·8 | 9·0 |
| 9·4 | | 15·3 | 1·0 | |
| 10·0 | | 18·3 | 20·8 | |
| 9·8 | | 23·8 | 14·0 | |
| 9·8 | | 26·6 | 45·6 | |
| 10·0 | | 27·6 | 16·2 | |
| 9·4 | | 29·8 | 57·0 | 9·5 |
| 9·2 | | 31·6 | 17·9 | |
| 10·0 | | 32·8 | 13·2 | |
| 9·6 | | 33·3 | 46·3 | |
| 9·8 | | 45·3 | 34·1 | |
| 9·4 | | 47·3 | 45·1 | |
| 9·8 | | 49·3 | 53·1 | |
| 9·1 | | 50·8 | 50·5 | 9·0 |
| 10·0 | | 51·2 | 47·6 | |
| 9·8 | | 52·3 | 54·1 | |
| 10·0 | | 52·3 | 53·1 | |
| 9·8 | 5 | 2·3 | 26·1 | |
| 10·0 | | 8·8 | 39·2 | |
| 9·6 | | 11·3 | 14·7 | |
| 10·0 | | 11·3 | 33·3 | |
| 9·8 | | 25·8 | 48·6 | |
| 9·5 | | 30·8 | 11·0 | |
| 9·6 | | 32·3 | 55·9 | |
| 10·0 | | 37·8 | 45·7 | |
| 9·6 | | 40·8 | 38·8 | |
| 9·8 | | 49·8 | 56·3 | |

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|---|---|---|---|---|
| 9·6 | 5 | 59·3 | 34·6 | |
| 9·4 | 6 | 3·8 | 31·2 | |
| 9·8 | | 32·8 | 4·7 | |
| 9·6 | | 32·8 | 27·5 | |
| 10·0 | | 39·8 | 59·7 | |
| 9·8 | | 41·3 | 59·2 | |
| 9·6 | | 45·8 | 32·1 | 9·5 |
| 9·1 | | 59·3 | 33·9 | 9·0 |
| 9·0 | 7 | 1·3 | 50·2 | 9·5 |
| 9·8 | | 2·3 | 7·8 | |
| 10·0 | | 7·3 | 39·5 | |
| 10·0 | | 26·3 | 21·5 | |
| 9·8 | | 29·3 | 22·1 | |
| 9·8 | | 32·3 | 51·4 | |
| 9·8 | | 34·8 | 50·6 | |
| 9·0 | | 36·3 | 43·8 | 8·0 |
| 9·4 | | 40·1 | 25·4 | |
| 10·0 | | 46·1 | 18·8 | |
| 10·0 | | 53·1 | 12·9 | |
| 9·4 | | 57·1 | 51·0 | 9·5 |
| 10·0 | 8 | 5·1 | 28·6 | |
| 10·0 | | 20·6 | 18·4 | |
| 9·4 | | 27·3 | 59·7 | 9·5 |
| 9·6 | | 29·1 | 8·8 | |
| 9·0 | | 31·1 | 57·2 | 8·8 |
| 9·8 | | 34·6 | 49·1 | |
| 9·8 | | 40·6 | 48·1 | |
| 10·0 | | 44·1 | 41·1 | |
| 9·4 | | 46·6 | 26·5 | |
| 8·1 | | 47·1 | 21·9 | 8·0 |
| 9·5 | | 48·6 | 47·2 | |
| 8·2 | | 59·6 | 3·5 | 8·5 |
| 9·6 | 9 | 0·6 | 48·7 | |
| 10·0 | | 12·6 | 42·1 | |
| 9·8 | | 19·1 | 46·6 | |
| 9·3 | | 24·6 | 6·9 | 9·5 |
| 9·8 | | 32·1 | 9·3 | |
| 9·6 | | 33·6 | 33·1 | |
| 9·5 | | 34·1 | 7·8 | 9·5 |
| 10·0 | | 35·1 | 30·8 | |
| 10·0 | | 35·1 | 21·8 | |
| 9·4 | | 36·6 | 5·0 | 9·0 |
| 10·0 | | 40·1 | 31·0 | |
| 10·0 | | 44·6 | 4·4 | |
| 9·4 | | 49·1 | 7·5 | 9·0 |
| 9·8 | | 49·1 | 45·7 | |
| 9·8 | | 49·1 | 46·3 | |
| 9·8 | | 49·1 | 52·8 | |
| 8·8 | | 57·8 | 58·9 | 9·0 G |
| 9·4 | 10 | 18·6 | 23·0 | |
| 8·4 | | 19·1 | 19·8 | 8·0 |
| 9·8 | | 24·6 | 52·0 | |
| 9·8 | | 27·1 | 53·8 | |
| 9·8 | | 30·1 | 43·9 | |
| 9·8 | | 30·1 | 27·7 | |
| 9·4 | | 30·6 | 20·0 | 9·5 |
| 10·0 | | 32·1 | 24·7 | |
| 9·6 | | 39·1 | 38·1 | |
| 10·1 | | 47·6 | 31·9 | |
| 10·1 | | 58·6 | 4·1 | |



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| mag. | 11h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 11 | 4·1 | 46·1 | |
| 10·0 | | 4·2 | 37·6 | |
| 9·2 | | 5·6 | 5·6 | |
| 9·4 | | 7·6 | 34·7 | 9·0 |
| 9·5 | | 16·1 | 56·2 | |
| 10·1 | | 16·1 | 6·6 | |
| 9·2 | | 18·6 | 25·6 | 9·5 |
| 9·8 | | 26·1 | 28·5 | |
| 9·8 | | 29·1 | 30·9 | |
| 10·1 | | 35·6 | 27·6 | |
| 9·8 | | 40·1 | 27·1 | |
| 10·1 | | 59·1 | 43·7 | |
| 9·1 | 12 | 1·1 | 43·5 | |
| 9·8 | | 3·6 | 11·0 | |
| 9·8 | | 13·6 | 4·6 | |
| 9·5 | | 13·8 | 1·1 | 9·5 |
| 9·4 | | 14·1 | 33·3 | 9·5 |
| 9·6 | | 20·1 | 40·0 | |
| 9·6 | | 37·6 | 55·4 | |
| 9·6 | | 38·6 | 36·3 | |
| 9·8 | | 42·1 | 32·8 | |
| 9·6 | | 44·6 | 39·5 | |
| 9·3 | | 49·1 | 56·7 | 9·5 |
| 9·6 | 13 | 13·6 | 49·7 | |
| 8·4 | | 30·1 | 54·2 | 8·5 |
| 9·8 | | 31·1 | 22·4 | |
| 9·2 | 14 | 2·6 | 18·1 | |
| 9·6 | | 5·1 | 24·9 | |
| 9·4 | | 18·1 | 15·9 | |
| 10·0 | | 29·1 | 4·4 | |
| 10·0 | | 30·1 | 38·5 | |
| 9·5 | | 30·6 | 1·6 | |
| 8·9 | | 34·1 | 44·2 | 9·5 |
| 9·5 | | 35·1 | 28·7 | |
| 10·0 | | 42·6 | 41·6 | |
| 10·0 | | 45·1 | 22·1 | |
| 9·4 | | 51·1 | 7·1 | |
| 9·8 | | 53·1 | 27·3 | |
| 10·0 | | 56·1 | 37·9 | |
| 9·8 | | 56·1 | 40·7 | |
| 10·0 | 15 | 1·1 | 57·6 | |
| 9·8 | | 2·1 | 13·8 | |
| 9·6 | | 18·6 | 30·4 | |
| 9·8 | | 28·6 | 52·3 | |
| 9·5 | | 41·1 | 42·8 | |
| 9·6 | | 44·1 | 26·4 | |
| 9·8 | | 55·6 | 4·4 | |
| 9·4 | | 58·6 | 47·1 | |
| 9·5 | 16 | 2·1 | 31·6 | |
| 10·0 | | 4·9 | 1·3 | |
| 10·0 | | 6·6 | 35·7 | |
| 9·8 | | 9·1 | 45·1 | |
| 9·8 | | 18·1 | 7·9 | |
| 9·4 | | 21·1 | 20·2 | 9·5 |
| 10·0 | | 27·6 | 30·0 | |
| 9·6 | | 29·6 | 3·3 | |
| 9·6 | | 32·1 | 51·9 | |
| 8·8 | | 35·1 | 55·2 | 7·7 GS |
| 9·8 | | 39·1 | 39·1 | |
| 9·6 | | 42·1 | 23·8 | |

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| mag. | 11h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 16 | 47·6 | 12·6 | 9·0 |
| 9·5 | | 52·1 | 46·5 | |
| 9·5 | 17 | 1·0 | 10·1 | |
| 9·6 | | 2·0 | 3·6 | |
| 10·0 | | 3·5 | 51·1 | |
| 9·4 | | 5·0 | 4·0 | |
| 10·0 | | 13·5 | 23·6 | |
| 9·6 | | 15·0 | 52·8 | |
| 9·2 | | 28·7 | 2·6 | 9·5 |
| 9·4 | | 37·5 | 10·4 | |
| 10·0 | | 38·0 | 38·8 | |
| 9·8 | | 39·0 | 22·8 | |
| 10·0 | | 39·5 | 54·1 | |
| 9·6 | | 40·5 | 53·0 | |
| 10·0 | | 50·0 | 12·9 | |
| 9·6 | | 54·0 | 18·6 | |
| 9·6 | 18 | 0·5 | 3·7 | |
| 10·0 | | 2·0 | 53·6 | |
| 10·0 | | 13·5 | 58·8 | |
| 9·4 | | 25·0 | 55·9 | |
| 10·0 | | 31·5 | 18·8 | |
| 9·8 | | 32·5 | 13·2 | |
| 9·8 | | 34·0 | 44·7 | |
| 10·0 | | 38·5 | 15·6 | |
| 10·0 | | 43·0 | 20·1 | |
| 9·5 | | 50·0 | 59·4 | |
| 9·6 | | 51·0 | 31·0 | |
| 9·8 | | 51·0 | 22·6 | |
| 9·1 | | 59·5 | 12·3 | G |
| 10·0 | 19 | 1·0 | 27·7 | |
| 10·0 | | 6·5 | 37·3 | |
| 10·0 | | 7·5 | 8·2 | |
| 9·8 | | 10·0 | 11·9 | |
| 9·8 | | 12·5 | 55·7 | |
| 9·8 | | 16·5 | 24·1 | |
| 9·4 | | 27·5 | 30·1 | |
| 9·6 | | 38·5 | 29·1 | |
| 10·0 | | 42·0 | 31·0 | |
| 9·6 | | 43·5 | 55·0 | |
| 10·0 | | 51·5 | 17·4 | |
| 9·8 | | 53·0 | 41·0 | |
| 9·0 | | 55·0 | 40·8 | 9·0 |
| 9·6 | | 55·4 | 57·4 | |
| 9·8 | | 56·5 | 17·0 | |
| 9·8 | | 59·5 | 45·0 | |
| 9·0 | 20 | 4·0 | 45·4 | 8·5 |
| 10·0 | | 11·5 | 8·6 | |
| 10·0 | | 15·0 | 8·4 | |
| 9·6 | | 17·5 | 22·2 | |
| 10·0 | | 24·0 | 35·4 | |
| 9·4 | | 28·0 | 18·3 | |
| 9·5 | | 32·5 | 0·8 | |
| 9·6 | | 36·5 | 55·5 | |
| 9·0 | | 40·5 | 56·4 | 9·2 |
| 9·3 | | 43·0 | 49·9 | |
| 9·0 | | 45·0 | 35·4 | |
| 9·8 | 21 | 14·0 | 4·3 | |
| 8·1 | | 15·0 | 35·6 | 7·0 G |
| 9·0 | | 22·5 | 55·4 | 9·0 |
| 10·0 | | 36·0 | 23·6 | |

**4381—4440.**

| mag. | 11h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 21 | 45·0 | 11·2 | |
| 9·8 | | 47·3 | 1·2 | |
| 10·0 | | 49·4 | 58·3 | |
| 9·0 | | 51·0 | 13·0 | 9·0 G |
| 9·4 | | 54·0 | 34·2 | |
| 9·6 | | 58·0 | 37·9 | |
| 9·5 | 22 | 1·0 | 20·1 | |
| 9·1 | | 7·5 | 6·9 | 9·5 |
| 9·8 | | 23·5 | 29·5 | |
| 10·0 | | 36·5 | 51·0 | |
| 9·8 | | 39·0 | 55·8 | |
| 9·1 | | 41·5 | 12·0 | 9·2 |
| 10·0 | | 42·5 | 25·5 | |
| 9·6 | | 47·5 | 26·0 | |
| 10·0 | | 50·8 | 59·0 | |
| 9·6 | | 55·0 | 48·5 | |
| 9·8 | 23 | 9·0 | 15·8 | |
| 9·8 | | 14·5 | 11·7 | |
| 8·3 | | 18·5 | 57·4 | 8·5 |
| 9·5 | | 23·5 | 42·3 | |
| 9·6 | | 29·0 | 42·7 | |
| 9·0 | | 32·5 | 15·4 | 9·3 |
| 9·4 | | 35·0 | 15·5 | 9·7 |
| 9·6 | | 36·5 | 3·7 | |
| 10·0 | | 45·0 | 30·3 | |
| 9·0 | | 48·0 | 12·3 | 9·0 |
| 10·0 | | 49·0 | 22·3 | |
| 9·3 | | 56·5 | 11·4 | 9·5 |
| 9·8 | | 59·0 | 33·7 | |
| 9·5 | 24 | 19·5 | 46·7 | |
| 9·6 | | 21·0 | 19·6 | |
| 9·8 | | 23·0 | 1·9 | |
| 9·8 | | 26·5 | 43·1 | |
| 9·8 | | 42·5 | 39·1 | |
| 10·0 | | 46·0 | 14·9 | |
| 9·4 | 25 | 16·5 | 54·8 | |
| 10·0 | | 17·5 | 35·8 | |
| 9·8 | | 28·0 | 30·0 | |
| 9·6 | | 32·0 | 28·9 | |
| 9·4 | | 34·5 | 47·6 | |
| 9·5 | | 43·5 | 22·0 | 9·8 |
| 10·0 | | 46·5 | 17·1 | |
| 10·0 | | 46·5 | 57·4 | |
| 9·6 | | 53·0 | 22·3 | |
| 9·8 | | 54·5 | 56·9 | |
| 9·8 | 26 | 1·8 | 2·8 | 9·5 |
| 10·0 | | 4·5 | 36·3 | |
| 10·0 | | 10·5 | 22·0 | |
| 10·0 | | 16·5 | 24·6 | |
| 10·0 | | 19·5 | 53·8 | |
| 10·0 | | 19·9 | 58·2 | |
| 9·6 | | 26·0 | 24·3 | |
| 9·5 | | 30·0 | 30·0 | 9·0 |
| 10·0 | | 31·0 | 14·4 | |
| 9·8 | | 41·0 | 28·5 | 9·0 |
| 9·4 | | 50·0 | 31·1 | 9·5 |
| 9·6 | | 52·5 | 50·0 | |
| 10·0 | | 54·0 | 36·0 | |
| 9·8 | 27 | 9·0 | 25·9 | |
| 9·6 | | 11·0 | 33·0 | |

**4441—4500.**

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|---|---|---|---|---|
| 9·8 | 27 | 33·4 | 46·8 | |
| 10·0 | | 34·7 | 5·8 | |
| 10·0 | | 35·5 | 7·2 | |
| 9·4 | | 36·2 | 35·4 | |
| 9·6 | | 36·5 | 7·0 | |
| 9·8 | | 44·0 | 25·6 | |
| 9·6 | | 51·0 | 6·9 | |
| 10·0 | 28 | 1·0 | 36·1 | |
| 9·6 | | 10·0 | 6·3 | |
| 10·0 | | 10·3 | 35·5 | |
| 10·0 | | 22·2 | 38·7 | |
| 9·2 | | 27·2 | 0·8 | |
| 9·8 | | 32·9 | 24·5 | |
| 9·8 | | 34·0 | 29·8 | |
| 10·0 | | 35·0 | 55·5 | |
| 10·0 | | 40·5 | 33·9 | |
| 10·0 | | 41·4 | 47·4 | |
| 9·8 | | 45·2 | 11·6 | |
| 9·6 | | 46·5 | 43·3 | |
| 9·8 | | 46·7 | 17·5 | |
| 10·0 | | 47·0 | 38·7 | |
| 9·9 | | 47·0 | 57·6 | |
| 9·4 | | 52·2 | 12·3 | |
| 9·8 | | 54·4 | 41·0 | |
| 9·9 | | 54·8 | 58·7 | |
| 9·8 | | 58·9 | 44·9 | |
| 9·5 | 29 | 5·4 | 16·7 | |
| 8·2 | | 9·4 | 25·8 | 7·5 GSg |
| 9·9 | | 11·4 | 7·2 | |
| 8·8 | | 12·4 | 20·5 | 8·5 G |
| 9·4 | | 14·9 | 42·8 | |
| 9·9 | | 17·5 | 37·9 | |
| 9·2 | | 20·4 | 42·0 | |
| 9·9 | | 22·9 | 26·9 | |
| 9·2 | | 24·4 | 48·5 | |
| 9·9 | | 40·4 | 3·5 | |
| 9·3 | | 42·9 | 16·8 | |
| 9·9 | | 46·7 | 59·9 | |
| 9·4 | | 53·9 | 39·4 | |
| 9·9 | 30 | 7·5 | 4·6 | |
| 9·9 | | 8·4 | 53·9 | |
| 8·9 | | 12·4 | 8·8 | 9·5 |
| 9·4 | | 15·7 | 2·4 | |
| 9·9 | | 18·8 | 22·0 | |
| 9·4 | | 20·3 | 13·5 | |
| 9·8 | | 20·3 | 17·0 | |
| 9·6 | | 25·3 | 16·0 | |
| 8·6 | | 27·8 | 3·0 | 8·5 |
| 9·8 | | 31·8 | 6·0 | |
| 9·9 | | 36·8 | 9·7 | |
| 9·2 | | 44·3 | 26·9 | 9·0 |
| 9·5 | | 50·3 | 17·7 | |
| 9·9 | | 54·3 | 44·1 | |
| 9·5 | 31 | 5·3 | 44·0 | |
| 9·4 | | 8·8 | 1·1 | |
| 9·2 | | 19·3 | 10·1 | |
| 9·9 | | 19·8 | 48·5 | |
| 9·3 | | 20·8 | 47·8 | |
| 9·9 | | 30·3 | 24·5 | |
| 8·8 | | 39·8 | 49·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 66 | 8·2 |
| | 20 | 68 | 8·2 |
| | 30 | 70 | 8·3 |
| | 40 | 73 | 8·3 |



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25 prec.

| h | m | α + s | δ − ' |
|---|---|---|---|
| 11 | 30 | 70 | 8·3 |
| | 40 | 73 | 8·3 |
| | 50 | 75 | 8·3 |
| 12 | 0 | 77 | 8·4 |

## 4501—4560.

| mag. | 11h. m | s | −55° ' | |
|---|---|---|---|---|
| 9·8 | 31 | 44·3 | 46·0 | |
| 9·9 | | 45·8 | 5·2 | |
| 9·9 | | 47·8 | 35·2 | |
| 9·0 | | 50·8 | 45·5 | |
| 9·9 | 32 | 2·8 | 8·8 | |
| 9·6 | | 6·8 | 5·2 | |
| 9·4 | | 33·3 | 44·5 | |
| 9·9 | | 44·3 | 1·9 | |
| 9·8 | | 49·3 | 44·1 | |
| 9·9 | | 50·3 | 19·8 | |
| 9·8 | | 50·3 | 15·9 | |
| 9·8 | | 52·3 | 47·1 | |
| 9·6 | | 54·8 | 42·6 | |
| 9·9 | 33 | 16·8 | 40·5 | |
| 9·8 | | 18·3 | 15·0 | |
| 9·4 | | 20·8 | 4·5 | |
| 9·9 | | 33·3 | 38·0 | |
| 9·4 | | 42·3 | 49·2 | |
| 9·1 | | 43·8 | 47·1 | |
| 9·8 | | 48·3 | 52·3 | |
| 9·9 | | 49·3 | 6·5 | |
| 9·4 | | 50·3 | 36·6 | |
| 9·1 | | 50·8 | 1·8 | 9·5 |
| 9·8 | | 52·7 | 2·9 | |
| 9·5 | | 52·8 | 53·9 | |
| 9·9 | | 55·1 | 4·4 | |
| 9·8 | | 55·2 | 24·3 | |
| 9·8 | 34 | 0·2 | 26·0 | |
| 9·8 | | 5·2 | 50·9 | |
| 9·9 | | 10·2 | 26·1 | |
| 9·6 | | 11·7 | 9·7 | |
| 9·8 | | 16·2 | 42·1 | |
| 9·9 | | 19·2 | 27·8 | |
| 9·8 | | 22·7 | 26·3 | |
| 9·2 | | 31·7 | 26·2 | |
| 9·8 | | 31·7 | 33·9 | |
| 8·6 | | 33·2 | 37·6 | |
| 9·5 | | 39·2 | 11·8 | |
| 8·9 | | 40·2 | 11·0 | |
| 9·5 | | 40·2 | 39·4 | |
| 9·9 | | 41·2 | 35·0 | |
| 9·8 | | 50·2 | 21·8 | |
| 9·9 | | 54·2 | 53·9 | |
| 9·9 | | 55·7 | 2·1 | |
| 9·9 | 35 | 0·2 | 21·9 | |
| 9·6 | | 9·2 | 5·1 | |
| 9·9 | | 11·7 | 23·3 | |
| 9·9 | | 24·7 | 23·5 | |
| 9·9 | | 26·2 | 40·1 | |
| 9·9 | | 28·2 | 30·1 | |
| 9·2 | | 30·2 | 55·9 | |
| 9·4 | | 46·7 | 45·8 | |
| 9·4 | | 46·7 | 25·5 | |
| 9·9 | | 56·7 | 7·4 | |
| 9·8 | 36 | 0·2 | 56·3 | |
| 9·9 | | 1·2 | 21·9 | |
| 9·9 | | 2·2 | 4·9 | |
| 9·3 | | 2·7 | 33·5 | |
| 8·9 | | 5·7 | 22·8 | |
| 9·8 | | 6·5 | 59·4 | |

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| 9·9 | 36 | 15·2 | 0·6 | |
| 9·3 | | 15·2 | 19·8 | |
| 9·8 | | 18·2 | 46·9 | |
| 9·3 | | 22·7 | 32·1 | |
| 9·9 | | 24·0 | 59·1 | |
| 9·3 | | 31·7 | 26·1 | |
| 9·4 | | 32·7 | 34·5 | |
| 9·3 | | 36·7 | 38·5 | |
| 9·9 | | 40·2 | 50·3 | |
| 9·8 | | 57·7 | 42·9 | |
| 9·9 | 37 | 0·2 | 37·4 | |
| 9·6 | | 0·2 | 28·9 | |
| 9·9 | | 6·2 | 38·2 | |
| 9·3 | | 7·7 | 51·2 | |
| 8·9 | | 12·2 | 6·1 | |
| 8·4 | | 12·2 | 53·7 | |
| 9·5 | | 22·2 | 49·1 | |
| 9·9 | | 22·2 | 14·8 | |
| 9·8 | | 27·2 | 28·0 | |
| 9·4 | | 35·7 | 15·0 | |
| 9·2 | | 36·2 | 28·0 | |
| 9·8 | | 38·7 | 1·6 | |
| 9·8 | | 41·7 | 46·0 | |
| 9·8 | | 48·2 | 57·8 | |
| 9·9 | | 49·2 | 6·1 | |
| 9·8 | | 49·7 | 39·5 | |
| 9·2 | | 55·7 | 22·1 | |
| 9·9 | | 57·2 | 40·5 | |
| 9·4 | | 59·2 | 27·1 | |
| 9·6 | 38 | 19·2 | 11·6 | |
| 9·8 | | 20·2 | 20·7 | |
| 9·6 | | 22·2 | 17·8 | |
| 9·4 | | 24·7 | 30·0 | |
| 9·6 | | 30·2 | 51·8 | |
| 9·6 | | 30·2 | 54·4 | |
| 9·6 | | 30·7 | 37·8 | |
| 8·7 | | 40·7 | 7·5 | 7·5 G |
| 9·9 | | 41·2 | 33·0 | |
| 8·7 | | 46·2 | 17·6 | |
| 9·3 | | 47·2 | 53·7 | 8·5 |
| 9·8 | | 56·2 | 55·6 | 9·0 |
| 9·9 | | 57·2 | 40·1 | |
| 9·3 | | 58·7 | 18·9 | |
| 9·3 | 39 | 1·2 | 52·9 | |
| 9·9 | | 5·0 | 21·1 | |
| 9·9 | | 5·7 | 39·5 | |
| 9·9 | | 7·7 | 52·8 | |
| 9·2 | | 8·1 | 0·1 | |
| 9·9 | | 12·2 | 27·5 | |
| 9·2 | | 12·9 | 1·0 | |
| 9·6 | | 21·7 | 7·4 | |
| 9·5 | | 21·7 | 52·7 | |
| 9·8 | | 30·2 | 51·6 | |
| 9·9 | | 31·7 | 33·8 | |
| 9·9 | | 35·2 | 14·9 | |
| 8·7 | | 58·2 | 38·6 | |
| 9·6 | 40 | 1·7 | 16·8 | |
| 9·9 | | 9·7 | 39·6 | |
| 9·4 | | 11·2 | 9·8 | |
| 8·6 | | 17·2 | 41·1 | |

## 4621—4680.

| mag. | 11h. m | s | −55° ' | |
|---|---|---|---|---|
| 9·9 | 40 | 23·2 | 56·0 | |
| 9·9 | | 25·7 | 15·4 | |
| 9·9 | | 25·7 | 0·1 | |
| 9·9 | | 35·2 | 53·5 | |
| 9·6 | | 36·2 | 43·3 | |
| 9·2 | | 52·7 | 43·8 | |
| 9·6 | | 58·2 | 17·2 | |
| 9·9 | 41 | 5·7 | 40·0 | |
| 9·6 | | 15·2 | 20·6 | |
| 9·4 | | 23·2 | 18·6 | |
| 9·9 | | 26·7 | 27·8 | |
| 9·9 | | 43·2 | 5·5 | |
| 9·2 | | 45·2 | 35·5 | 9·5 |
| 9·8 | | 45·7 | 52·6 | |
| 9·9 | | 48·2 | 6·3 | |
| 9·5 | | 49·2 | 3·1 | |
| 9·3 | | 49·7 | 37·2 | |
| 9·3 | 42 | 0·2 | 42·2 | |
| 9·8 | | 1·7 | 38·8 | |
| 9·4 | | 11·7 | 45·1 | |
| 9·5 | | 15·7 | 53·9 | |
| 9·8 | | 18·2 | 10·0 | |
| 8·5 | | 20·2 | 30·7 | 9·0 |
| 8·4 | | 21·2 | 16·3 | 8·5 |
| 9·4 | | 22·2 | 33·8 | |
| 9·4 | | 27·2 | 43·5 | |
| 9·9 | | 38·7 | 3·1 | |
| 9·8 | | 40·2 | 25·4 | |
| 9·6 | | 40·2 | 56·6 | |
| 9·6 | | 43·7 | 56·6 | |
| 9·9 | | 46·2 | 39·2 | |
| 9·5 | | 49·7 | 26·6 | |
| 9·6 | | 57·2 | 59·0 | |
| 9·8 | | 57·2 | 13·7 | |
| 9·9 | 43 | 7·2 | 48·5 | |
| 9·4 | | 13·2 | 33·6 | |
| 9·3 | | 14·2 | 20·9 | |
| 9·9 | | 15·2 | 57·0 | |
| 9·9 | | 17·7 | 48·7 | |
| 9·5 | | 18·2 | 41·6 | |
| 9·6 | | 26·7 | 31·1 | |
| 9·5 | | 33·2 | 5·5 | |
| 9·6 | | 33·7 | 23·3 | |
| 9·8 | | 39·2 | 8·4 | |
| 8·7 | | 49·2 | 34·6 | 9·0 |
| 9·9 | | 49·2 | 9·3 | |
| 9·8 | | 54·7 | 49·2 | |
| 9·6 | | 57·2 | 40·5 | |
| 9·9 | 44 | 2·2 | 41·1 | |
| 9·9 | | 2·7 | 51·3 | |
| 9·8 | | 9·2 | 37·4 | |
| 9·8 | | 20·7 | 43·2 | |
| 8·8 | | 41·2 | 11·6 | 9·5 |
| 9·8 | | 50·7 | 44·0 | |
| 9·6 | 45 | 0·2 | 24·1 | |
| 9·3 | | 3·2 | 6·5 | |
| 9·5 | | 5·7 | 21·2 | |
| 9·3 | | 14·7 | 38·1 | |
| 9·4 | | 32·7 | 17·2 | |
| 9·9 | | 35·7 | 34·2 | |

## 4681—4740.

| mag. | 11h. m | s | −55° ' | |
|---|---|---|---|---|
| 9·9 | 45 | 39·7 | 7·3 | |
| 9·9 | | 45·7 | 11·4 | |
| 9·4 | | 53·7 | 53·4 | |
| 9·9 | | 56·5 | 1·8 | |
| 9·4 | 46 | 28·6 | 22·8 | |
| 9·9 | | 29·1 | 54·1 | |
| 9·9 | | 29·2 | 42·5 | |
| 9·8 | | 37·1 | 47·9 | |
| 9·8 | | 58·6 | 28·6 | |
| 9·9 | 47 | 2·1 | 18·3 | |
| 9·9 | | 4·1 | 8·3 | |
| 9·8 | | 5·1 | 51·8 | |
| 9·8 | | 11·6 | 23·3 | |
| 9·9 | | 21·6 | 28·9 | |
| 9·9 | | 23·1 | 45·1 | |
| 9·9 | | 28·6 | 27·1 | |
| 9·2 | | 28·6 | 12·5 | |
| 9·3 | | 43·1 | 27·1 | |
| 9·2 | | 44·1 | 54·9 | 9·5 |
| 9·6 | | 51·6 | 49·1 | |
| 9·9 | 48 | 2·6 | 23·7 | |
| 9·6 | | 5·6 | 37·2 | |
| 9·9 | | 6·1 | 25·7 | |
| 9·9 | | 6·6 | 40·7 | |
| 9·2 | | 18·6 | 42·3 | |
| 9·9 | | 21·1 | 38·7 | |
| 9·9 | | 30·1 | 42·2 | |
| 9·6 | | 30·6 | 38·0 | |
| 9·6 | | 35·6 | 46·9 | |
| 9·1 | | 42·6 | 33·9 | |
| 7·6 | | 42·6 | 23·6 | 7·0 GSt |
| 9·8 | | 43·6 | 20·6 | |
| 9·9 | | 50·2 | 6·1 | |
| 9·9 | | 52·1 | 5·2 | |
| 9·9 | | 54·6 | 50·4 | |
| 9·2 | 49 | 0·6 | 41·0 | |
| 9·5 | | 11·6 | 5·0 | |
| 9·2 | | 13·6 | 18·1 | 9·0 |
| 9·8 | | 16·1 | 1·4 | |
| 9·9 | | 19·1 | 26·0 | |
| 9·5 | | 25·0 | 6·4 | |
| 9·9 | | 25·6 | 36·4 | |
| 9·2 | | 39·0 | 52·7 | 9·0 G |
| 9·9 | | 39·5 | 14·9 | |
| 9·3 | | 40·0 | 38·6 | |
| 9·3 | | 48·5 | 40·9 | |
| 8·5 | | 51·5 | 44·8 | 9·0 |
| 9·0 | | 52·0 | 40·0 | 9·0 |
| 9·8 | 50 | 5·0 | 18·9 | |
| 9·5 | | 7·0 | 7·2 | |
| 9·8 | | 8·5 | 6·9 | |
| 9·8 | | 17·0 | 41·5 | 9·0 |
| 9·8 | | 24·5 | 34·0 | |
| 9·9 | | 33·0 | 4·1 | |
| 9·6 | | 42·0 | 31·3 | |
| 8·8 | | 45·5 | 13·3 | |
| 9·8 | 51 | 0·0 | 29·5 | |
| 9·8 | | 3·0 | 22·8 | |
| 8·8 | | 5·5 | 41·3 | 9·0 |
| 9·9 | | 10·0 | 9·9 | |



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**4741—4800.**

| mag. | 11h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·9 | 51 | 13·0 | 8·3 | |
| 9·9 | | 14·5 | 34·7 | |
| 9·5 | | 22·0 | 25·9 | |
| 9·6 | | 36·5 | 40·3 | |
| 9·4 | | 37·0 | 23·7 | |
| 8·8 | | 40·0 | 47·9 | 9·0 |
| 8·9 | | 48·0 | 1·0 | |
| 9·5 | | 51·0 | 1·6 | |
| 9·9 | | 52·5 | 31·0 | |
| 9·9 | | 53·5 | 13·9 | |
| 6·4 | | 57·0 | 37·3 | 6·0 GStr |
| 9·4 | 52 | 5·0 | 16·3 | |
| 9·8 | | 7·0 | 55·4 | |
| 9·9 | | 12·5 | 6·8 | |
| 9·9 | | 15·5 | 34·9 | |
| 9·4 | | 18·0 | 59·4 | |
| 9·8 | | 18·4 | 58·9 | |
| 9·8 | | 19·7 | 58·4 | |
| 9·5 | | 22·2 | 6·3 | |
| 9·8 | | 26·1 | 2·2 | |
| 8·7 | | 27·7 | 31·1 | 9·0 |
| 9·8 | | 31·2 | 43·0 | |
| 9·6 | | 35·2 | 24·1 | |
| 9·8 | | 38·7 | 51·0 | |
| 9·5 | | 41·2 | 23·4 | |
| 9·3 | | 52·7 | 16·0 | |
| 9·6 | 53 | 10·7 | 42·9 | |
| 9·8 | | 11·7 | 17·9 | |
| 8·6 | | 12·9 | 58·5 | |
| 9·8 | | 18·7 | 13·1 | |
| 8·5 | | 33·2 | 46·6 | |
| 7·7 | | 36·7 | 35·8 | GS |
| 9·6 | | 46·7 | 54·9 | |
| 9·4 | | 49·7 | 34·4 | |
| 9·2 | | 51·7 | 32·7 | |
| 9·6 | | 59·7 | 48·4 | |
| 9·8 | 54 | 4·7 | 45·0 | |
| 9·6 | | 11·2 | 15·6 | |
| 9·0 | | 11·7 | 35·9 | |
| 8·7 | | 12·2 | 40·8 | |
| 9·3 | | 15·7 | 23·9 | |
| 9·5 | | 19·2 | 47·6 | |
| 8·9 | | 19·7 | 8·8 | |
| 9·8 | | 26·2 | 8·8 | |
| 9·4 | | 34·2 | 23·8 | 8·5 |
| 9·8 | | 34·2 | 46·6 | |
| 9·8 | | 43·9 | 58·5 | |
| 9·1 | | 44·7 | 6·0 | |
| 9·1 | | 52·5 | 46·4 | |
| 8·9 | | 58·0 | 53·1 | |
| 9·4 | | 59·0 | 27·9 | |
| 9·9 | 55 | 4·5 | 4·8 | |
| 9·5 | | 5·0 | 46·2 | |
| 9·9 | | 5·5 | 26·6 | |
| 9·8 | | 8·0 | 55·4 | |
| 9·9 | | 12·6 | 59·8 | |
| 9·9 | | 12·7 | 19·9 | |
| 9·4 | | 13·0 | 42·8 | |
| 9·6 | | 14·0 | 49·3 | |
| 9·4 | | 16·7 | 37·7 | |

**4801—4860.**

| mag. | 11h.–12h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 55 | 19·5 | 41·4 | |
| 9·3 | | 21·5 | 56·2 | |
| 9·5 | | 24·3 | 0·0 | |
| 9·9 | | 37·0 | 31·0 | |
| 9·0 | | 56·0 | 43·4 | 9·0 |
| 9·9 | | 59·5 | 12·0 | |
| 9·9 | 56 | 4·2 | 0·1 | |
| 9·8 | | 5·0 | 25·1 | |
| 9·3 | | 6·0 | 21·6 | |
| 7·6 | | 8·0 | 51·9 | 8·5 GSt |
| 9·9 | | 20·0 | 11·0 | |
| 9·8 | | 25·5 | 38·8 | |
| 9·4 | | 29·5 | 43·1 | |
| 9·8 | | 29·5 | 45·1 | |
| 9·6 | | 38·5 | 49·2 | |
| 9·5 | | 39·5 | 11·0 | |
| 9·9 | | 42·0 | 27·4 | |
| 9·5 | | 45·8 | 0·8 | 9·0 |
| 9·9 | | 52·0 | 42·0 | |
| 8·3 | | 56·0 | 6·4 | 9·0 |
| 9·5 | 57 | 5·0 | 33·4 | |
| 9·2 | | 14·0 | 34·8 | |
| 9·9 | | 15·0 | 28·0 | |
| 9·9 | | 31·5 | 8·6 | |
| 9·6 | | 50·9 | 8·2 | |
| 9·4 | | 54·4 | 45·7 | |
| 9·9 | 58 | 9·4 | 16·0 | |
| 8·8 | | 12·9 | 55·3 | 9·5 |
| 9·9 | | 25·4 | 57·2 | |
| 9·8 | | 27·4 | 40·8 | |
| 9·9 | | 31·9 | 32·8 | |
| 9·2 | | 38·4 | 27·5 | |
| 9·9 | | 40·4 | 29·8 | |
| 9·9 | | 45·4 | 48·7 | |
| 9·4 | | 50·4 | 45·9 | |
| 9·0 | | 58·4 | 21·6 | |
| 9·9 | | 59·2 | 31·0 | |
| 9·4 | 59 | 4·2 | 6·5 | |
| 9·7 | | 20·7 | 37·2 | |
| 9·7 | | 26·2 | 25·3 | |
| 9·7 | | 26·7 | 47·7 | |
| 9·7 | | 44·5 | 2·7 | |
| 8·6 | | 45·2 | 27·7 | 8·5 |
| 9·4 | | 49·7 | 29·3 | |
| 9·9 | | 56·7 | 48·9 | |
| 9·4 | 0 | 5·7 | 28·8 | |
| 9·4 | | 7·8 | 3·4 | |
| 9·8 | | 9·0 | 56·3 | |
| 9·6 | | 11·7 | 27·2 | |
| 9·4 | | 19·8 | 49·7 | |
| 9·7 | | 30·7 | 9·1 | |
| 9·9 | | 32·2 | 43·5 | |
| 8·6 | | 35·7 | 49·4 | 9·0 |
| 9·4 | | 37·7 | 51·0 | 9·0 |
| 9·4 | | 39·2 | 22·6 | |
| 9·9 | | 42·4 | 24·0 | |
| 9·4 | | 51·7 | 3·9 | |
| 9·7 | 1 | 0·7 | 23·5 | |
| 9·2 | | 2·2 | 56·0 | 9·0 |
| 9·9 | | 3·4 | 59·5 | |

**4861—4920.**

| mag. | 12h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 1 | 7·2 | 55·1 | |
| 9·4 | | 10·2 | 1·5 | |
| 9·4 | | 15·7 | 47·5 | |
| 9·3 | | 29·7 | 19·0 | |
| 9·9 | | 30·7 | 22·4 | |
| 9·6 | | 31·7 | 37·6 | 9·0 |
| 9·6 | | 32·4 | 2·1 | |
| 9·9 | | 33·2 | 6·7 | |
| 9·1 | | 34·2 | 22·4 | |
| 9·9 | | 42·2 | 14·0 | |
| 8·2 | | 58·7 | 35·4 | 9·0 |
| 9·4 | 2 | 1·7 | 37·7 | |
| 9·4 | | 21·2 | 50·2 | |
| 8·8 | | 24·2 | 2·0 | 9·0 |
| 9·9 | | 25·2 | 48·9 | |
| 9·9 | | 30·2 | 57·0 | |
| 9·8 | | 32·7 | 42·6 | |
| 9·4 | | 36·7 | 6·6 | |
| 9·2 | | 37·7 | 28·1 | |
| 9·2 | | 41·7 | 14·7 | |
| 9·7 | | 45·2 | 22·1 | |
| 9·4 | | 51·7 | 42·0 | |
| 9·4 | 3 | 10·2 | 5·4 | |
| 9·9 | | 20·2 | 9·6 | |
| 9·9 | | 22·2 | 5·4 | |
| 9·9 | | 29·2 | 10·6 | |
| 9·6 | | 40·2 | 9·6 | |
| 9·3 | | 40·7 | 37·6 | |
| 9·9 | | 44·2 | 19·0 | |
| 9·1 | | 45·7 | 31·0 | |
| 9·9 | | 49·2 | 38·0 | |
| 9·2 | 4 | 8·9 | 2·2 | |
| 9·9 | | 10·2 | 16·4 | |
| 7·6 | | 10·7 | 44·8 | GS |
| 9·4 | | 12·2 | 33·7 | |
| 9·8 | | 12·2 | 15·4 | |
| 9·1 | | 15·5 | 2·7 | |
| 9·2 | | 16·7 | 33·0 | |
| 9·3 | | 16·7 | 45·4 | |
| 8·3 | | 22·2 | 43·8 | G |
| 9·6 | | 30·7 | 11·0 | |
| 9·1 | | 32·2 | 35·0 | |
| 7·8 | | 33·2 | 42·2 | GS |
| 9·8 | | 58·7 | 48·0 | |
| 9·8 | 5 | 2·7 | 16·1 | |
| 9·8 | | 10·7 | 22·2 | |
| 9·2 | | 21·2 | 3·0 | 9·5 |
| 9·8 | | 21·7 | 26·0 | |
| 9·9 | | 23·7 | 34·6 | |
| 9·1 | | 25·2 | 34·5 | |
| 9·6 | | 28·2 | 36·4 | |
| 9·6 | | 28·7 | 15·6 | |
| 8·8 | | 49·2 | 42·7 | 9·0 |
| 9·0 | | 52·2 | 3·7 | 9·0 |
| 9·4 | 6 | 0·7 | 19·2 | |
| 9·9 | | 13·2 | 2·7 | |
| 9·9 | | 17·7 | 15·3 | |
| 9·8 | | 17·7 | 9·1 | |
| 9·7 | | 20·2 | 52·2 | |
| 9·9 | | 26·7 | 16·7 | |

**4921—4980.**

| mag. | 12h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8·4 | 6 | 29·7 | 18·5 | 8·5 |
| 9·7 | | 30·2 | 42·7 | |
| 9·4 | | 30·5 | 56·7 | |
| 9·6 | | 31·7 | 52·2 | |
| 9·9 | | 38·7 | 54·1 | |
| 8·3 | | 40·2 | 22·1 | 8·0 G |
| 9·4 | | 46·7 | 9·0 | |
| 9·9 | | 46·9 | 18·3 | |
| 9·9 | 7 | 7·2 | 34·0 | |
| 9·9 | | 32·2 | 54·7 | |
| 9·8 | | 32·2 | 36·2 | |
| 9·4 | | 37·2 | 27·7 | 9·5 |
| 9·6 | | 44·2 | 21·1 | 9·5 |
| 9·2 | | 45·2 | 6·5 | |
| 9·9 | | 56·7 | 8·6 | |
| 8·6 | 8 | 14·7 | 5·7 | 8·5 |
| 9·4 | | 16·2 | 5·3 | 9·0 |
| 9·2 | | 18·2 | 3·6 | |
| 9·2 | | 22·2 | 22·7 | |
| 8·4 | | 23·2 | 24·4 | 7·5 G |
| 9·4 | | 23·2 | 54·1 | |
| 9·4 | | 29·2 | 54·6 | 9·5 |
| 9·3 | | 41·7 | 11·7 | |
| 9·8 | | 43·7 | 26·3 | |
| 9·8 | | 51·7 | 19·1 | |
| 9·6 | 9 | 0·7 | 51·0 | |
| 9·2 | | 1·2 | 41·5 | |
| 9·3 | | 3·2 | 22·0 | |
| 9·4 | | 4·7 | 24·8 | |
| 9·9 | | 5·2 | 50·3 | |
| 9·9 | | 10·2 | 42·1 | |
| 9·9 | | 13·2 | 21·0 | |
| 8·8 | | 19·7 | 0·9 | 7·5 G |
| 9·9 | | 22·7 | 23·0 | |
| 9·8 | | 23·2 | 3·0 | |
| 9·9 | | 27·2 | 2·7 | |
| 9·8 | | 33·0 | 54·5 | |
| 9·7 | | 42·0 | 29·1 | |
| 9·9 | | 54·5 | 16·0 | |
| 9·3 | | 56·0 | 42·6 | |
| 9·6 | 10 | 0·5 | 28·4 | |
| 9·7 | | 8·5 | 10·6 | |
| 9·7 | | 8·5 | 6·1 | |
| 8·8 | | 21·0 | 42·6 | |
| 9·6 | | 21·5 | 13·0 | |
| 9·7 | | 22·0 | 6·5 | |
| 9·4 | | 22·5 | 53·8 | |
| 9·4 | | 23·0 | 1·1 | |
| 9·9 | | 24·5 | 4·4 | |
| 9·6 | | 30·0 | 13·7 | |
| 9·4 | | 33·0 | 52·5 | |
| 9·9 | | 37·0 | 18·4 | |
| 9·4 | | 41·5 | 36·6 | |
| 9·6 | | 42·5 | 53·2 | |
| 9·4 | | 56·0 | 5·6 | |
| 9·9 | 11 | 2·0 | 52·0 | |
| 9·4 | | 3·0 | 55·5 | |
| 8·2 | | 14·5 | 16·8 | 8·0 |
| 9·1 | | 15·0 | 45·2 | |
| 9·4 | | 26·5 | 45·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 50 | 75 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |



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25 prec.

| h | m | α + (s) | δ − |
|---|---|---|---|
| 12 | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |
| | 30 | 83 | 8·3 |
| | 40 | 85 | 8·2 |

**4981—5040.**

| mag. | 12ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 11 | 29·5 | 8·2 | 9·0 |
| 9·4 | | 30·5 | 45·1 | |
| 9·8 | | 31·0 | 47·9 | |
| 9·9 | | 32·0 | 30·2 | |
| 9·7 | | 37·5 | 4·0 | |
| 9·0 | 12 | 7·5 | 4·7 | 8·5 |
| 8·8 | | 22·5 | 38·5 | 8·0 |
| 9·4 | | 30·5 | 14·4 | |
| 9·2 | | 35·0 | 26·7 | 9·5 |
| 9·1 | 13 | 5·0 | 17·5 | |
| 9·6 | | 14·0 | 42·4 | |
| 9·3 | | 18·5 | 33·4 | |
| 9·9 | | 22·0 | 9·0 | |
| 9·7 | | 24·5 | 52·1 | |
| 9·4 | | 27·0 | 35·6 | |
| 9·2 | | 32·0 | 34·0 | |
| 9·7 | | 37·5 | 25·3 | |
| 9·6 | | 46·0 | 7·0 | |
| 9·4 | | 47·0 | 9·3 | |
| 9·6 | | 49·0 | 3·5 | 9·5 |
| 9·9 | | 53·5 | 17·0 | |
| 9·6 | | 54·0 | 5·1 | |
| 9·3 | | 54·5 | 37·7 | |
| 9·4 | | 56·0 | 49·7 | |
| 9·6 | | 57·5 | 56·8 | |
| 9·4 | 14 | 6·0 | 17·9 | |
| 9·6 | | 9·5 | 6·5 | |
| 8·6 | | 10·5 | 21·2 | 9·0 |
| 9·7 | | 11·0 | 40·4 | |
| 9·0 | | 11·5 | 26·2 | |
| 9·4 | | 14·0 | 26·1 | |
| 9·4 | | 34·2 | 59·5 | 8·8 |
| 9·9 | | 37·0 | 47·2 | |
| 9·9 | | 40·5 | 39·6 | |
| 9·3 | | 51·0 | 38·5 | |
| 9·6 | | 52·5 | 24·3 | |
| 9·9 | | 58·0 | 33·1 | |
| 9·4 | 15 | 2·5 | 38·9 | |
| 7·9 | | 13·5 | 40·8 | 6·5 GS |
| 9·6 | | 16·0 | 13·2 | |
| 9·7 | | 18·0 | 22·2 | |
| 8·8 | | 19·0 | 24·0 | |
| 9·1 | | 29·5 | 21·7 | |
| 9·9 | 16 | 1·0 | 0·8 | |
| 9·6 | | 1·0 | 35·3 | |
| 9·9 | | 14·5 | 17·0 | |
| 9·9 | | 18·5 | 21·4 | |
| 9·9 | | 21·0 | 25·1 | |
| 9·2 | | 30·0 | 8·3 | |
| 9·9 | | 41·0 | 6·4 | |
| 9·4 | | 51·5 | 42·1 | |
| 9·3 | | 52·0 | 58·5 | |
| 9·8 | | 55·0 | 34·9 | |
| 9·6 | 17 | 8·0 | 14·7 | |
| 9·8 | | 15·5 | 3·6 | |
| 9·4 | | 22·5 | 55·9 | |
| 9·6 | | 27·2 | 2·6 | |
| 9·4 | | 28·5 | 39·0 | |
| 9·4 | | 30·5 | 31·1 | |
| 9·6 | | 32·0 | 53·1 | |

**5041—5100.**

| mag. | 12ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·7 | 17 | 32·0 | 22·5 | |
| 9·0 | | 38·0 | 11·2 | 9·0 |
| 9·4 | | 42·5 | 53·3 | 9·5 |
| 9·2 | | 47·0 | 17·2 | 9·0 |
| 9·0 | | 53·5 | 33·3 | |
| 9·4 | 18 | 5·5 | 42·1 | |
| 9·4 | | 6·5 | 10·9 | |
| 9·2 | | 7·9 | 57·5 | |
| 9·7 | | 9·0 | 9·5 | |
| 9·9 | | 17·5 | 58·7 | |
| 9·4 | | 18·5 | 32·1 | |
| 9·8 | | 45·5 | 33·9 | |
| 9·2 | 19 | 17·0 | 19·9 | |
| 9·1 | | 21·5 | 16·8 | 9·0 |
| 9·3 | | 22·0 | 32·8 | |
| 9·2 | | 29·0 | 15·1 | 9·5 |
| 9·3 | | 32·0 | 12·7 | |
| 9·4 | | 32·5 | 10·9 | 9·5 |
| 9·0 | | 40·5 | 43·0 | |
| 9·7 | 20 | 19·7 | 2·5 | |
| 9·4 | | 25·0 | 12·0 | |
| 9·8 | | 25·5 | 0·1 | |
| 7·4 | | 27·5 | 2·6 | 7·5 GSt |
| 9·0 | | 28·5 | 52·3 | |
| 9·9 | | 33·0 | 12·7 | |
| 9·9 | | 37·5 | 17·8 | |
| 8·4 | | 42·0 | 7·9 | 8·5 G |
| 9·4 | | 42·5 | 5·8 | 9·5 G |
| 8·8 | | 46·0 | 37·0 | |
| 9·4 | | 47·0 | 13·8 | |
| 9·2 | | 49·5 | 44·9 | |
| 9·6 | | 50·5 | 47·6 | |
| 9·9 | | 52·5 | 2·3 | |
| 9·8 | 21 | 2·5 | 23·5 | |
| 9·9 | | 5·0 | 21·1 | |
| 8·8 | | 12·0 | 47·9 | 8·5 |
| 9·8 | | 15·0 | 18·0 | |
| 9·8 | | 31·5 | 20·9 | |
| 9·9 | | 33·0 | 55·7 | |
| 9·4 | | 35·0 | 7·9 | |
| 9·9 | | 40·0 | 42·3 | |
| 8·0 | | 42·5 | 46·0 | 8·0 |
| 8·8 | | 44·0 | 37·2 | |
| 7·2 | | 45·5 | 42·5 | 6·2 GSt |
| 9·4 | | 54·0 | 15·3 | |
| 9·9 | | 58·5 | 54·3 | |
| 8·8 | 22 | 0·5 | 46·6 | 8·5 |
| 9·3 | | 5·5 | 48·2 | |
| 9·4 | | 10·5 | 19·3 | |
| 9·4 | | 10·5 | 24·8 | |
| 9·9 | | 14·0 | 42·3 | |
| 9·6 | | 17·0 | 47·8 | |
| 9·6 | | 25·5 | 47·8 | |
| 9·7 | | 35·0 | 54·6 | |
| 9·4 | | 40·5 | 46·1 | |
| 9·6 | | 47·0 | 9·9 | |
| 7·8 | 23 | 1·0 | 50·0 | 6·0 GSt |
| 9·0 | | 13·5 | 22·7 | S |
| 9·9 | | 21·5 | 52·1 | |
| 9·3 | | 23·5 | 13·8 | |

**5101—5160.**

| mag. | 12ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 23 | 30·5 | 18·1 | |
| 9·9 | | 38·5 | 0·6 | |
| 9·9 | | 41·5 | 15·4 | |
| 9·4 | 24 | 8·5 | 49·2 | |
| 9·2 | | 9·5 | 22·4 | GS |
| 8·8 | | 10·5 | 35·0 | 8·5 G |
| 9·9 | | 11·5 | 41·3 | |
| 9·9 | | 14·5 | 11·5 | |
| 9·9 | | 19·0 | 14·1 | |
| 9·6 | | 20·5 | 50·3 | |
| 9·4 | | 25·5 | 30·0 | |
| 9·9 | | 39·0 | 3·9 | |
| 9·4 | | 44·5 | 4·8 | |
| 9·6 | | 50·5 | 15·9 | |
| 8·6 | | 55·0 | 25·7 | 8·5 G |
| 9·2 | 25 | 6·0 | 49·1 | |
| 7·6 | | 7·0 | 35·9 | 7·5 Gg |
| 9·7 | | 10·0 | 24·1 | |
| 9·4 | | 13·0 | 47·4 | |
| 8·2 | | 14·0 | 26·3 | 7·0 GSgt |
| 9·9 | | 19·5 | 1·0 | |
| 8·2 | | 22·5 | 46·6 | 8·2 G |
| 9·9 | | 24·4 | 1·1 | |
| 9·7 | | 25·0 | 6·8 | |
| 9·9 | | 26·0 | 5·4 | |
| 9·9 | | 39·0 | 14·3 | |
| 9·9 | | 40·5 | 32·1 | |
| 8·8 | | 48·5 | 37·1 | 7·7 |
| 9·4 | | 50·5 | 43·2 | |
| 9·4 | 26 | 27·0 | 3·3 | |
| 9·9 | | 42·0 | 36·0 | |
| 9·4 | | 53·5 | 15·4 | |
| 7·6 | 27 | 2·0 | 53·0 | 7·8 GSg |
| 9·8 | | 3·0 | 6·0 | |
| 8·8 | | 4·0 | 26·2 | 8·0 GSt |
| 9·6 | | 6·0 | 17·0 | |
| 9·9 | | 6·5 | 3·9 | |
| 9·1 | | 9·0 | 46·7 | |
| 9·6 | | 11·5 | 56·2 | |
| 9·9 | | 22·5 | 49·1 | |
| 9·9 | | 22·5 | 14·3 | |
| 9·9 | | 38·0 | 46·9 | |
| 9·8 | 28 | 5·0 | 21·0 | |
| 9·7 | | 7·5 | 40·5 | |
| 8·5 | | 17·5 | 12·2 | 8·5 |
| 9·7 | | 30·5 | 43·0 | |
| 9·9 | | 40·0 | 50·3 | |
| 9·3 | | 42·5 | 29·2 | |
| 9·8 | | 59·5 | 19·3 | |
| 9·3 | 29 | 9·7 | 2·2 | |
| 9·4 | | 27·5 | 25·0 | |
| 9·9 | | 39·5 | 51·9 | |
| 9·7 | | 42·0 | 41·6 | |
| 9·3 | | 44·0 | 40·6 | |
| 9·3 | | 56·0 | 48·1 | |
| 9·9 | 30 | 22·0 | 30·2 | |
| 9·6 | | 29·5 | 54·8 | |
| 9·2 | | 34·5 | 37·4 | 8·0 G |
| 9·9 | | 49·5 | 50·0 | |
| 9·4 | | 52·0 | 5·7 | |

**5161—5220.**

| mag. | 12ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 7·2 | 31 | 7·1 | 14·5 | 7·5 GSct |
| 9·8 | | 38·3 | 28·8 | |
| 9·4 | | 39·6 | 55·0 | |
| 9·2 | 32 | 21·7 | 43·2 | 9·5 |
| 9·1 | | 21·7 | 44·9 | 9·5 |
| 9·7 | | 24·2 | 44·2 | |
| 9·2 | | 41·7 | 34·3 | |
| 9·7 | 33 | 3·2 | 46·1 | |
| 9·2 | | 14·2 | 53·8 | |
| 9·7 | | 18·2 | 57·0 | |
| 9·7 | | 21·7 | 17·0 | |
| 9·7 | | 31·7 | 35·0 | |
| 9·7 | | 34·8 | 24·0 | |
| 9·7 | | 39·2 | 14·6 | |
| 9·2 | | 40·7 | 42·3 | |
| 9·7 | | 43·2 | 36·8 | |
| 9·7 | | 46·2 | 13·1 | |
| 9·0 | | 46·7 | 10·1 | |
| 9·7 | | 50·7 | 30·4 | |
| 9·1 | 34 | 13·4 | 1·0 | |
| 9·0 | | 15·2 | 17·4 | 9·5 |
| 8·2 | | 24·2 | 37·1 | 8·0 G |
| 9·0 | | 31·2 | 56·7 | 9·0 |
| 9·2 | | 33·2 | 12·1 | |
| 9·4 | | 38·7 | 51·8 | |
| 9·2 | | 40·7 | 27·5 | |
| 8·6 | | 43·2 | 13·5 | 9·0 |
| 9·0 | | 53·2 | 51·6 | |
| 8·7 | 35 | 2·2 | 45·4 | 8·5 |
| 8·8 | | 19·2 | 27·5 | 8·5 |
| 9·7 | | 20·7 | 38·9 | |
| 9·7 | | 31·2 | 12·8 | |
| 9·4 | | 37·2 | 45·0 | |
| 6·8 | | 44·7 | 15·6 | 6·5 GSctr |
| 9·6 | | 58·7 | 41·0 | |
| 9·7 | 36 | 2·8 | 26·1 | |
| 6·6 | | 3·7 | 29·4 | 6·5 GSct |
| 9·1 | | 7·4 | 59·9 | |
| 9·4 | | 23·2 | 8·0 | |
| 9·2 | | 37·2 | 36·3 | |
| 8·4 | 37 | 5·7 | 32·8 | 8·2 |
| 9·3 | | 8·2 | 12·3 | 9·2 |
| 9·2 | | 9·7 | 12·4 | 8·8 |
| 9·2 | | 36·2 | 33·2 | |
| 9·7 | | 40·2 | 9·9 | |
| 9·1 | | 50·7 | 29·1 | |
| 9·7 | | 58·7 | 16·1 | |
| 8·6 | 38 | 2·2 | 38·7 | 8·5 |
| 9·0 | | 4·9 | 2·5 | |
| 9·3 | | 21·2 | 44·8 | |
| 9·1 | | 25·2 | 4·9 | |
| 9·4 | | 36·7 | 17·3 | |
| 9·6 | | 40·7 | 23·0 | |
| 8·7 | | 55·2 | 47·7 | 9·0 |
| 5·0 | 39 | 13·7 | 48·2 | 5·5 GSct |
| 8·6 | | 14·2 | 49·2 | 8·5 S |
| 9·6 | | 21·7 | 57·0 | |
| 9·7 | | 35·2 | 48·8 | |
| 9·6 | | 38·7 | 21·9 | |
| 9·6 | | 39·2 | 58·7 | |

## 5221—5280.

| mag. | $12^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 39 | 41·2 | 34·7 | |
| 9·4 | | 41·7 | 21·0 | |
| 9·3 | | 53·7 | 5·6 | |
| 9·7 | | 53·7 | 34·1 | |
| 9·0 | | 55·2 | 55·7 | |
| 9·7 | 40 | 9·7 | 23·8 | |
| 8·8 | | 20·2 | 16·6 | 9·0 |
| 9·3 | | 31·9 | 0·4 | |
| 9·7 | | 32·7 | 22·6 | |
| 9·2 | | 38·7 | 16·5 | 9·0 |
| 9·6 | | 51·7 | 6·9 | |
| 9·3 | | 54·2 | 45·2 | |
| 9·0 | | 56·2 | 31·0 | |
| 8·8 | 41 | 4·2 | 10·1 | 9·0 |
| 9·4 | | 26·2 | 23·9 | |
| 9·6 | | 32·2 | 50·0 | |
| 9·4 | | 35·2 | 54·8 | |
| 9·6 | | 35·7 | 5·3 | |
| 9·7 | | 40·7 | 25·5 | |
| 9·6 | | 53·2 | 48·0 | |
| 9·7 | | 59·7 | 21·0 | |
| 9·2 | 42 | 10·7 | 17·7 | 9·0 |
| 9·3 | | 13·2 | 21·6 | |
| 9·4 | | 38·2 | 34·0 | |
| 9·6 | | 43·2 | 33·5 | |
| 9·6 | | 51·7 | 6·6 | |
| 9·6 | 43 | 16·2 | 24·0 | |
| 9·7 | | 26·7 | 50·7 | |
| 9·6 | | 32·7 | 50·9 | |
| 9·3 | | 36·2 | 55·1 | |
| 9·4 | | 48·7 | 33·7 | |
| 9·6 | | 54·2 | 4·9 | |
| 9·4 | | 54·7 | 20·2 | |
| 9·7 | | 56·7 | 18·9 | |
| 9·6 | 44 | 16·2 | 15·1 | |
| 9·2 | | 31·2 | 4·7 | |
| 9·6 | | 39·2 | 38·1 | |
| 9·7 | | 47·2 | 56·6 | |
| 9·6 | 45 | 0·4 | 0·8 | |
| 9·4 | | 0·7 | 5·8 | |
| 9·3 | | 2·7 | 0·2 | |
| 8·6 | | 3·7 | 53·2 | 8·5 |
| 9·3 | | 5·7 | 8·3 | |
| 9·4 | | 41·7 | 59·5 | 9·0 |
| 9·6 | | 55·7 | 53·2 | |
| 8·6 | 46 | 0·2 | 30·8 | 8·0 |
| 9·7 | | 9·2 | 39·3 | |
| 9·1 | | 34·2 | 26·1 | 8·5 |
| 9·1 | | 53·7 | 16·9 | |
| 9·6 | | 53·7 | 19·0 | |
| 9·7 | | 55·2 | 20·2 | |
| 9·7 | 47 | 3·7 | 22·1 | |
| 9·7 | | 24·2 | 52·6 | |
| 9·7 | | 30·7 | 55·2 | |
| 8·6 | | 41·7 | 49·8 | 9·0 |
| 9·2 | | 42·7 | 11·1 | |
| 9·0 | | 54·7 | 15·2 | |
| 9·6 | | 59·2 | 35·2 | |
| 9·7 | 48 | 8·7 | 3·5 | |
| 9·0 | | 9·9 | 59·7 | |

## 5281—5340.

| mag. | $12^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 48 | 12·2 | 5·0 | |
| 9·7 | | 27·2 | 18·3 | |
| 9·7 | | 38·7 | 37·2 | |
| 9·7 | 49 | 2·7 | 56·3 | |
| 9·0 | | 3·7 | 0·3 | 8·5 |
| 9·6 | | 11·7 | 5·2 | |
| 9·0 | | 13·7 | 22·7 | |
| 8·2 | | 23·2 | 6·1 | 8·0 G |
| 9·0 | | 23·7 | 5·3 | |
| 9·3 | | 31·9 | 59·0 | |
| 9·7 | | 32·2 | 6·4 | |
| 9·6 | | 40·7 | 21·1 | |
| 9·7 | | 43·7 | 58·7 | |
| 9·7 | | 48·2 | 44·0 | |
| 9·6 | | 59·7 | 10·2 | |
| 8·5 | 50 | 2·7 | 37·8 | 7·5 G |
| 9·2 | | 8·7 | 39·5 | |
| 9·4 | | 10·7 | 38·9 | |
| 9·4 | | 19·2 | 36·1 | |
| 9·2 | | 35·7 | 20·8 | |
| 9·7 | | 35·7 | 24·0 | |
| 9·0 | | 50·7 | 28·2 | |
| 8·9 | | 55·7 | 57·1 | 9·0 |
| 8·9 | 51 | 0·7 | 53·2 | 9·5 |
| 9·7 | | 7·7 | 41·1 | |
| 9·7 | | 8·7 | 25·4 | |
| 9·7 | | 11·7 | 55·5 | |
| 9·6 | | 23·2 | 16·6 | |
| 9·7 | | 37·2 | 9·8 | |
| 9·3 | | 49·7 | 45·9 | |
| 8·6 | | 50·7 | 13·7 | G |
| 9·7 | | 52·7 | 5·3 | |
| 9·1 | 52 | 1·2 | 42·9 | |
| 8·6 | | 7·7 | 30·9 | 8·5 |
| 9·6 | | 20·7 | 44·0 | |
| 8·1 | | 25·7 | 14·2 | 8·2 GSt |
| 8·2 | | 27·2 | 14·3 | 8·8 GS |
| 9·6 | | 28·2 | 30·0 | |
| 9·7 | | 42·2 | 36·8 | |
| 9·4 | | 44·2 | 16·1 | |
| 9·7 | | 59·2 | 35·0 | |
| 9·4 | 53 | 10·7 | 24·3 | |
| 9·2 | | 14·2 | 49·6 | |
| 9·4 | | 17·2 | 58·6 | 9·5 |
| 9·2 | | 19·7 | 22·7 | |
| 9·3 | | 25·2 | 24·3 | |
| 9·3 | | 29·7 | 51·2 | |
| 8·7 | | 48·2 | 59·1 | 8·5 |
| 9·7 | | 49·2 | 5·5 | |
| 9·4 | | 54·2 | 9·0 | |
| 9·4 | 54 | 3·7 | 27·2 | |
| 9·2 | | 9·7 | 25·0 | |
| 9·6 | | 10·7 | 22·7 | |
| 9·6 | | 10·7 | 33·5 | |
| 9·6 | | 50·2 | 6·0 | |
| 9·2 | | 50·7 | 33·5 | |
| 8·5 | | 52·7 | 55·8 | 7·5 G |
| 9·1 | | 54·2 | 37·1 | |
| 9·7 | | 56·1 | 34·8 | |
| 9·0 | | 57·1 | 4·2 | |

## 5341—5400.

| mag. | $12^h$–$13^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 55 | 12·6 | 40·3 | |
| 9·7 | | 16·5 | 14·1 | |
| 8·9 | | 21·0 | 0·2 | |
| 9·2 | | 21·6 | 36·7 | |
| 9·4 | | 29·6 | 41·1 | |
| 9·1 | | 33·6 | 0·5 | |
| 9·7 | | 42·5 | 1·2 | |
| 8·1 | | 44·1 | 26·2 | 8·5 G |
| 9·7 | | 46·1 | 5·5 | |
| 9·4 | | 46·6 | 17·1 | |
| 9·1 | | 51·1 | 24·9 | 9·5 G |
| 9·4 | | 52·6 | 25·4 | |
| 9·0 | 56 | 0·6 | 6·6 | |
| 8·2 | | 8·8 | 58·4 | 7·5 GSt |
| 9·6 | | 9·1 | 9·4 | |
| 9·1 | | 11·6 | 54·6 | 9·5 |
| 9·4 | | 24·6 | 50·7 | 10·0 |
| 9·2 | | 24·6 | 9·6 | |
| 8·5 | | 49·6 | 30·2 | 9·0 |
| 9·7 | | 55·1 | 43·9 | |
| 9·7 | 57 | 7·1 | 2·9 | |
| 9·7 | | 10·1 | 0·5 | |
| 9·4 | | 14·6 | 28·8 | |
| 9·2 | | 28·1 | 16·3 | |
| 9·1 | | 38·1 | 46·5 | |
| 9·7 | 58 | 5·6 | 34·6 | |
| 9·4 | | 6·6 | 17·8 | |
| 9·6 | | 15·1 | 54·0 | |
| 9·2 | | 26·1 | 14·1 | |
| 9·1 | | 38·6 | 29·7 | |
| 9·4 | | 42·6 | 16·0 | |
| 9·7 | | 43·6 | 37·3 | |
| 9·7 | | 58·1 | 8·1 | |
| 9·3 | | 59·6 | 29·0 | |
| 9·6 | 59 | 3·1 | 6·0 | |
| 9·3 | | 11·1 | 10·8 | |
| 9·3 | | 16·6 | 13·6 | |
| 9·7 | | 16·6 | 18·0 | |
| 9·7 | | 24·1 | 14·9 | |
| 8·6 | | 28·6 | 58·1 | 8·8 |
| 8·9 | | 48·6 | 8·2 | |
| 9·3 | | 50·6 | 7·6 | |
| 9·2 | | 51·9 | 42·0 | |
| 9·1 | | 54·4 | 35·9 | 9·0 |
| 9·3 | | 56·4 | 29·8 | |
| 9·7 | 0 | 7·9 | 16·2 | |
| 9·7 | | 12·4 | 45·0 | |
| 9·0 | | 14·9 | 15·3 | |
| 7·5 | | 29·4 | 43·0 | 7·5 GStr |
| 9·4 | | 39·9 | 46·4 | |
| 8·7 | | 44·4 | 52·1 | 8·8 |
| 9·1 | 1 | 15·9 | 17·7 | |
| 9·6 | | 21·4 | 34·6 | |
| 9·3 | | 28·4 | 41·1 | |
| 9·7 | | 31·9 | 12·6 | |
| 9·2 | | 42·4 | 43·3 | |
| 9·4 | | 52·9 | 45·9 | 9·0 |
| 9·6 | | 57·9 | 17·4 | |
| 9·7 | 2 | 3·9 | 16·0 | |
| 9·3 | | 8·9 | 26·1 | 9·0 |

## 5401—5460.

| mag. | $13^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 2 | 21·4 | 33·9 | |
| 9·4 | | 25·4 | 23·9 | |
| 9·6 | | 27·4 | 8·8 | |
| 9·2 | | 33·9 | 33·5 | |
| 9·2 | | 34·9 | 13·8 | |
| 9·6 | | 39·4 | 22·1 | |
| 9·4 | | 56·4 | 35·8 | |
| 9·7 | | 56·4 | 51·9 | |
| 9·7 | | 58·4 | 7·2 | |
| 9·6 | 3 | 7·4 | 14·2 | |
| 9·7 | | 17·4 | 4·9 | |
| 9·1 | | 23·7 | 37·8 | |
| 9·3 | | 39·9 | 51·4 | |
| 9·2 | | 44·6 | 57·0 | |
| 9·4 | 4 | 6·7 | 54·9 | |
| 9·6 | | 11·9 | 17·9 | |
| 9·7 | | 14·7 | 18·3 | |
| 9·6 | | 15·5 | 14·8 | |
| 9·9 | | 19·6 | 19·4 | |
| 9·4 | | 22·1 | 10·0 | |
| 9·4 | | 31·6 | 35·9 | |
| 8·9 | | 32·1 | 15·8 | |
| 9·2 | | 39·6 | 21·6 | |
| 9·4 | | 46·6 | 49·0 | |
| 9·6 | | 48·3 | 1·6 | |
| 9·6 | | 51·1 | 19·8 | |
| 9·6 | | 54·6 | 48·4 | |
| 9·2 | 5 | 2·1 | 27·1 | |
| 9·6 | | 6·1 | 55·3 | |
| 9·2 | | 17·1 | 30·2 | |
| 9·8 | | 17·5 | 1·9 | |
| 9·6 | | 18·6 | 56·1 | |
| 9·6 | | 27·6 | 31·1 | |
| 9·8 | | 52·1 | 59·1 | |
| 9·2 | | 53·1 | 51·1 | |
| 9·8 | | 53·1 | 21·5 | |
| 9·7 | | 53·6 | 13·5 | |
| 9·4 | 6 | 2·1 | 17·4 | |
| 9·2 | | 4·1 | 35·9 | |
| 9·8 | | 5·1 | 54·8 | |
| 9·3 | | 6·6 | 34·4 | |
| 9·9 | | 13·8 | 0·7 | |
| 9·7 | | 20·6 | 48·2 | |
| 9·6 | | 23·1 | 7·0 | |
| 8·6 | | 29·6 | 17·0 | 9·0 |
| 9·9 | | 30·6 | 44·8 | |
| 9·4 | | 37·6 | 16·5 | |
| 9·9 | | 43·6 | 48·0 | |
| 9·7 | 7 | 5·1 | 44·9 | ? |
| 9·4 | | 15·6 | 6·2 | |
| 9·6 | | 29·6 | 32·3 | |
| 9·3 | | 39·1 | 28·7 | |
| 9·4 | 8 | 9·1 | 29·6 | |
| 9·2 | | 12·6 | 25·3 | |
| 8·8 | | 14·1 | 39·8 | 9·0 |
| 8·9 | | 18·1 | 41·6 | 8·5 |
| 9·4 | | 27·1 | 20·7 | |
| 9·6 | | 42·6 | 4·8 | |
| 9·9 | | 47·6 | 33·0 | |
| 9·9 | | 48·6 | 2·8 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 12 | 30 | 83 | 8·3 |
| | 40 | 85 | 8·2 |
| | 50 | 87 | 8·2 |
| 13 | 0 | 89 | 8·1 |
| | 10 | 91 | 8·0 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 13 | 0 | 89 | 8·1 |
| | 10 | 91 | 8·0 |
| | 20 | 93 | 7·9 |
| | 30 | 95 | 7·7 |
| | 40 | 97 | 7·6 |

## 5461—5520.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·9 | 8 | 50·1 | 55·5 | |
| 9·6 | | 55·6 | 59·5 | |
| 9·2 | | 57·1 | 33·2 | 8·5 |
| 9·3 | | 58·6 | 36·2 | |
| 9·8 | | 59·1 | 39·1 | |
| 9·9 | 9 | 16·1 | 18·1 | |
| 9·9 | | 28·6 | 1·6 | |
| 9·7 | | 34·1 | 8·2 | |
| 9·4 | | 42·1 | 11·2 | 9·0 |
| 9·6 | | 50·6 | 6·0 | |
| 9·2 | | 53·1 | 28·7 | 9·2 |
| 9·4 | | 58·6 | 41·1 | |
| 9·9 | 10 | 3·6 | 28·1 | |
| 9·2 | | 9·1 | 36·2 | 9·5 |
| 9·6 | | 11·1 | 3·1 | |
| 9·2 | | 16·6 | 32·3 | 9·5 |
| 9·4 | | 20·1 | 13·9 | |
| 9·8 | | 21·6 | 50·8 | |
| 9·6 | | 26·1 | 33·3 | |
| 9·8 | | 34·1 | 41·4 | |
| 9·4 | | 59·1 | 46·8 | |
| 9·7 | 11 | 1·1 | 52·5 | |
| 8·9 | | 1·1 | 55·9 | 9·2 |
| 9·9 | | 7·1 | 19·3 | |
| 9·4 | | 19·6 | 33·2 | |
| 8·5 | | 28·6 | 37·1 | 8·5 |
| 9·9 | | 32·6 | 37·1 | |
| 8·4 | | 39·8 | 1·6 | G |
| 9·9 | | 42·6 | 31·0 | |
| 9·1 | | 42·6 | 19·1 | |
| 9·7 | | 49·1 | 20·0 | |
| 9·8 | | 54·6 | 50·8 | |
| 9·9 | 12 | 5·6 | 27·1 | |
| 9·9 | | 6·1 | 57·9 | |
| 9·9 | | 9·1 | 4·2 | |
| 9·3 | | 14·6 | 2·1 | |
| 9·9 | | 30·1 | 28·6 | |
| 8·3 | | 30·6 | 6·4 | 8·5 G |
| 9·7 | | 37·1 | 22·0 | |
| 9·8 | | 37·6 | 37·3 | |
| 9·4 | | 38·1 | 26·4 | |
| 9·4 | | 43·1 | 19·1 | |
| 9·9 | 13 | 0·6 | 33·9 | |
| 6·8 | | 3·6 | 8·7 | 6·8 GSt |
| 9·7 | | 14·6 | 18·6 | |
| 9·4 | | 17·6 | 38·5 | |
| 9·4 | | 18·1 | 57·1 | |
| 9·8 | | 26·6 | 6·5 | |
| 9·7 | | 30·9 | 10·7 | |
| 9·8 | | 32·2 | 57·3 | |
| 9·8 | | 37·9 | 27·3 | |
| 9·9 | | 42·4 | 33·1 | |
| 9·6 | | 44·9 | 9·0 | |
| 9·6 | | 47·4 | 39·6 | |
| 9·6 | 14 | 0·4 | 57·5 | |
| 8·5 | | 22·9 | 14·5 | 8·8 |
| 8·8 | | 38·9 | 41·1 | 9·5 |
| 9·2 | | 43·9 | 10·2 | 8·5 |
| 9·9 | 15 | 7·9 | 27·7 | |
| 9·7 | | 9·4 | 35·3 | |

## 5521—5580.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 15 | 13·4 | 9·7 | |
| 9·8 | | 24·4 | 49·9 | |
| 9·8 | | 25·4 | 29·7 | |
| 9·4 | | 35·4 | 9·1 | |
| 9·4 | | 51·4 | 23·1 | |
| 9·2 | 16 | 5·9 | 21·4 | 9·0 |
| 9·7 | | 9·9 | 8·7 | |
| 9·9 | | 11·9 | 30·1 | |
| 9·9 | | 13·7 | 57·7 | |
| 9·9 | | 24·4 | 27·1 | |
| 8·9 | | 29·4 | 16·3 | 8·2 |
| 9·9 | | 30·4 | 15·2 | |
| 9·2 | | 33·4 | 28·1 | |
| 9·6 | | 33·9 | 33·0 | |
| 9·3 | | 34·4 | 58·7 | |
| 9·6 | | 36·4 | 16·5 | |
| 9·2 | | 46·9 | 18·1 | 9·0 |
| 9·9 | | 58·9 | 18·6 | |
| 9·9 | 17 | 4·4 | 27·3 | |
| 9·6 | | 16·4 | 6·5 | |
| 9·3 | | 19·4 | 17·1 | |
| 9·9 | | 24·9 | 4·9 | |
| 9·6 | | 30·9 | 19·1 | |
| 9·9 | | 34·4 | 17·1 | |
| 9·3 | | 43·2 | 58·1 | |
| 9·8 | | 45·9 | 47·1 | |
| 9·6 | | 48·9 | 19·4 | |
| 9·9 | 18 | 0·4 | 3·7 | |
| 9·6 | | 11·4 | 29·1 | |
| 9·9 | | 11·4 | 31·5 | |
| 9·9 | | 12·9 | 54·4 | |
| 9·6 | | 14·7 | 22·2 | |
| 9·9 | | 28·4 | 42·1 | |
| 9·2 | | 30·0 | 57·0 | |
| 9·4 | | 50·4 | 54·8 | |
| 9·0 | 19 | 6·4 | 40·6 | 8·5 |
| 9·9 | | 12·4 | 2·5 | |
| 9·4 | | 13·4 | 28·3 | 9·0 |
| 9·2 | | 15·9 | 35·1 | 9·0 |
| 9·4 | | 25·4 | 16·0 | |
| 9·9 | | 27·4 | 47·0 | |
| 9·9 | | 46·4 | 52·1 | |
| 9·9 | | 48·4 | 25·9 | |
| 9·9 | | 56·4 | 6·5 | |
| 9·6 | 20 | 2·9 | 32·1 | |
| 9·9 | | 12·9 | 20·0 | |
| 9·6 | | 18·4 | 43·1 | |
| 9·8 | | 21·9 | 18·3 | |
| 9·9 | | 29·4 | 4·3 | |
| 7·9 | | 31·4 | 7·8 | 7·5 GSt |
| 9·9 | | 41·9 | 49·3 | |
| 9·6 | | 47·7 | 47·0 | |
| 9·9 | | 50·4 | 49·1 | |
| 9·9 | | 51·4 | 45·1 | |
| 9·8 | | 56·0 | 57·8 | |
| 9·6 | 21 | 2·9 | 16·3 | |
| 9·6 | | 2·9 | 50·5 | |
| 9·9 | | 8·4 | 56·1 | |
| 9·8 | | 8·4 | 15·7 | |
| 9·2 | | 8·9 | 59·8 | 9·0 |

## 5581—5640.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 21 | 31·7 | 2·5 | |
| 9·9 | | 33·7 | 47·9 | |
| 8·4 | | 42·4 | 50·8 | 9·0 |
| 9·4 | | 46·4 | 42·3 | |
| 9·8 | | 53·4 | 5·3 | |
| 9·9 | | 54·9 | 22·3 | |
| 9·7 | | 54·9 | 37·6 | |
| 9·4 | | 56·9 | 28·0 | |
| 9·9 | 22 | 2·9 | 21·7 | |
| 9·9 | | 16·9 | 58·4 | |
| 9·0 | | 20·9 | 44·9 | 8·8 |
| 9·6 | | 23·9 | 24·8 | |
| 8·5 | | 31·4 | 33·8 | 8·2 |
| 9·4 | | 32·4 | 5·3 | |
| 9·9 | | 42·4 | 26·0 | |
| 9·6 | | 44·4 | 46·1 | |
| 9·4 | | 45·4 | 20·9 | |
| 8·9 | | 53·4 | 22·4 | |
| 9·1 | 23 | 6·4 | 0·5 | 8·5 |
| 8·8 | | 13·4 | 14·2 | 9·5 |
| 9·2 | | 20·4 | 8·2 | |
| 9·4 | | 20·9 | 42·0 | |
| 9·3 | | 24·4 | 12·8 | 9·0 |
| 9·7 | | 32·4 | 36·0 | |
| 9·4 | | 33·9 | 47·3 | |
| 9·6 | | 37·2 | 58·7 | |
| 9·9 | | 39·9 | 57·0 | |
| 9·4 | | 43·4 | 15·7 | |
| 9·7 | 24 | 9·9 | 9·2 | |
| 9·6 | | 11·4 | 30·3 | |
| 8·7 | | 13·9 | 23·7 | 9·0 |
| 9·6 | | 17·4 | 52·0 | |
| 8·7 | | 40·9 | 29·2 | 9·0 |
| 9·7 | | 46·4 | 8·2 | |
| 8·4 | | 47·9 | 10·9 | 8·5 G |
| 9·9 | 25 | 16·6 | 56·9 | |
| 9·9 | | 17·4 | 49·1 | |
| 8·6 | | 28·9 | 41·2 | 8·2 |
| 9·9 | | 31·4 | 23·9 | |
| 9·3 | | 48·9 | 2·4 | 9·0 |
| 9·9 | | 53·4 | 13·1 | |
| 9·9 | | 53·9 | 38·2 | |
| 9·8 | 26 | 12·4 | 5·2 | 9·5 |
| 9·4 | | 23·7 | 0·6 | |
| 9·7 | | 26·9 | 28·1 | |
| 9·4 | | 44·9 | 53·9 | |
| 9·8 | | 46·4 | 6·4 | |
| 9·9 | | 56·4 | 10·9 | |
| 9·9 | 27 | 0·4 | 54·1 | |
| 9·7 | | 13·4 | 24·3 | |
| 9·7 | | 13·9 | 13·2 | |
| 9·6 | | 18·7 | 2·6 | G |
| 9·9 | | 21·9 | 17·7 | |
| 8·8 | | 29·9 | 38·6 | 9·0 |
| 9·9 | | 32·4 | 13·4 | |
| 9·9 | | 43·9 | 13·8 | |
| 9·0 | | 46·4 | 50·0 | |
| 9·4 | | 56·4 | 27·2 | 9·0 |
| 9·4 | | 58·9 | 9·7 | |
| 9·8 | | 59·4 | 1·6 | |

## 5641—5700.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 28 | 3·2 | 2·0 | |
| 9·7 | | 9·9 | 23·2 | |
| 9·7 | | 16·4 | 18·1 | |
| 9·4 | | 23·9 | 13·5 | |
| 9·9 | | 31·4 | 25·8 | |
| 9·4 | | 32·9 | 35·9 | |
| 8·4 | | 54·9 | 30·9 | 8·0 |
| 9·9 | 29 | 13·4 | 52·6 | |
| 9·6 | | 33·4 | 41·1 | |
| 9·9 | | 33·4 | 50·3 | |
| 9·8 | | 39·9 | 29·6 | |
| 9·7 | | 43·4 | 58·3 | |
| 8·2 | | 46·4 | 20·8 | 8·5 |
| 8·3 | | 53·4 | 59·6 | 8·0 |
| 9·4 | | 54·4 | 12·0 | |
| 8·9 | 30 | 2·4 | 33·4 | 9·0 |
| 9·2 | | 3·9 | 33·0 | 9·0 |
| 8·0 | | 6·4 | 35·0 | 8·0 |
| 9·6 | | 9·9 | 15·6 | |
| 9·7 | | 11·9 | 28·9 | |
| 9·8 | | 20·9 | 53·3 | |
| 9·6 | | 28·9 | 5·6 | |
| 9·3 | | 54·9 | 21·0 | |
| 9·4 | | 58·4 | 5·0 | |
| 9·4 | 31 | 4·4 | 18·2 | |
| 9·2 | | 21·9 | 39·2 | 8·5 |
| 9·7 | | 23·9 | 13·5 | |
| 9·7 | | 24·4 | 11·0 | |
| 9·9 | | 29·2 | 57·9 | |
| 9·4 | | 37·9 | 5·5 | |
| 9·8 | | 44·9 | 16·8 | |
| 9·8 | | 51·9 | 37·4 | |
| 9·9 | | 53·4 | 34·4 | |
| 9·9 | | 56·4 | 53·4 | |
| 9·6 | 32 | 0·4 | 51·8 | |
| 9·0 | | 11·9 | 53·4 | 9·5 |
| 9·3 | | 22·9 | 44·7 | |
| 9·7 | | 39·9 | 22·4 | |
| 9·2 | | 47·9 | 2·0 | |
| 9·6 | | 49·4 | 24·0 | |
| 9·8 | | 51·9 | 23·0 | |
| 9·7 | | 56·9 | 6·8 | |
| 9·4 | 33 | 11·4 | 6·6 | |
| 9·9 | | 13·9 | 17·7 | |
| 8·5 | | 37·9 | 43·6 | 8·0 |
| 9·1 | | 47·9 | 9·2 | |
| 9·7 | | 50·4 | 12·4 | |
| 9·4 | 34 | 9·9 | 41·2 | |
| 9·7 | | 9·9 | 16·2 | |
| 9·8 | | 13·9 | 14·0 | |
| 9·9 | | 19·9 | 47·0 | |
| 9·9 | | 22·9 | 3·3 | |
| 9·1 | | 30·4 | 23·4 | |
| 9·9 | | 32·9 | 47·2 | |
| 9·9 | | 47·4 | 36·6 | |
| 9·9 | | 49·4 | 38·9 | |
| 9·4 | 35 | 2·4 | 39·2 | |
| 8·8 | | 8·9 | 24·2 | |
| 9·4 | | 9·4 | 31·4 | |
| 8·8 | | 18·4 | 7·1 | |



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### 5701—5760.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 35 | 19·2 | 55·0 | |
| 9·7 | | 20·2 | 46·5 | |
| 9·9 | | 20·2 | 44·7 | |
| 10·0 | | 26·1 | 50·0 | |
| 9·4 | | 29·6 | 7·4 | |
| 9·6 | | 29·6 | 17·4 | |
| 9·6 | | 32·6 | 14·7 | |
| 10·0 | | 44·6 | 9·7 | |
| 9·6 | | 53·6 | 9·1 | |
| 9·4 | 36 | 5·1 | 28·1 | |
| 9·4 | | 10·6 | 24·2 | |
| 10·0 | | 18·1 | 10·4 | |
| 10·0 | | 21·5 | 3·7 | |
| 10·0 | | 33·0 | 28·4 | |
| 10·0 | | 36·6 | 24·9 | |
| 10·0 | | 39·5 | 15·6 | |
| 10·0 | | 41·0 | 20·4 | |
| 9·6 | | 59·7 | 12·1 | |
| 8·8 | 37 | 1·6 | 15·6 | 9·0 |
| 8·8 | | 9·6 | 18·8 | 9·0 |
| 10·0 | | 9·9 | 58·1 | |
| 9·4 | | 13·1 | 21·8 | |
| 10·0 | | 23·6 | 41·2 | |
| 10·0 | | 35·0 | 55·7 | |
| 9·6 | | 48·1 | 25·1 | |
| 9·1 | | 51·1 | 6·1 | |
| 9·6 | 38 | 28·6 | 9·7 | |
| 9·6 | | 57·6 | 19·5 | |
| 9·4 | 39 | 9·6 | 20·2 | |
| 10·0 | | 17·1 | 14·4 | |
| 9·4 | | 28·1 | 23·7 | |
| 9·6 | | 35·1 | 19·0 | |
| 7·6 | | 47·1 | 20·0 | 7·0 G |
| 10·0 | 40 | 5·0 | 52·9 | |
| 9·6 | | 8·1 | 3·9 | |
| 9·7 | | 10·8 | 0·6 | |
| 9·8 | | 12·6 | 41·1 | |
| 9·6 | | 23·1 | 20·0 | |
| 9·7 | | 24·6 | 33·2 | |
| 9·7 | | 29·1 | 3·1 | |
| 10·0 | | 34·6 | 42·4 | |
| 8·8 | | 34·6 | 39·8 | |
| 9·7 | | 59·1 | 18·9 | |
| 10·0 | 41 | 10·0 | 22·1 | |
| 9·4 | | 10·6 | 27·0 | |
| 9·8 | | 23·1 | 43·6 | |
| 9·2 | | 28·1 | 53·4 | |
| 10·0 | | 37·6 | 53·9 | |
| 9·4 | | 38·6 | 22·7 | |
| 9·8 | | 44·6 | 3·4 | ? |
| 9·4 | 42 | 7·1 | 13·9 | 9·0 |
| 10·0 | | 33·0 | 35·4 | |
| 9·7 | | 52·7 | 58·2 | |
| 9·4 | 43 | 13·5 | 36·1 | 9·0 |
| 10·0 | | 29·5 | 42·1 | |
| 10·0 | | 33·6 | 49·9 | |
| 9·7 | | 37·0 | 43·9 | |
| 10·0 | | 37·0 | 37·8 | |
| 10·0 | | 46·0 | 47·3 | |
| 8·4 | 44 | 2·0 | 3·2 | |

### 5761—5820.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 44 | 5·0 | 55·1 | |
| 9·7 | | 7·5 | 2·8 | |
| 9·6 | | 10·5 | 22·0 | |
| 10·0 | | 13·5 | 49·0 | |
| 10·0 | | 23·0 | 12·1 | |
| 9·7 | | 25·5 | 46·5 | |
| 9·8 | | 26·0 | 6·0 | |
| 9·2 | | 37·0 | 33·6 | |
| 10·0 | | 43·0 | 35·9 | |
| 10·0 | 45 | 0·0 | 24·3 | |
| 10·0 | | 2·0 | 33·1 | |
| 10·0 | | 5·5 | 52·2 | |
| 9·4 | | 10·5 | 31·2 | |
| 9·8 | | 50·5 | 26·2 | |
| 10·0 | | 52·5 | 13·9 | |
| 9·4 | | 53·5 | 45·0 | |
| 10·0 | | 54·6 | 20·8 | |
| 10·0 | 46 | 5·0 | 21·8 | |
| 7·6 | | 22·0 | 7·2 | GS |
| 8·8 | | 57·5 | 52·2 | |
| 10·0 | 47 | 8·0 | 18·7 | |
| 10·0 | | 10·6 | 9·0 | |
| 9·8 | | 32·4 | 55·0 | |
| 9·6 | | 40·4 | 41·8 | |
| 9·7 | | 44·4 | 51·6 | |
| 7·8 | | 45·9 | 20·3 | 7·2 GS |
| 10·0 | | 51·4 | 52·6 | |
| 9·4 | | 57·9 | 17·4 | 9·0 |
| 9·4 | 48 | 2·9 | 53·5 | |
| 9·2 | | 6·9 | 44·9 | |
| 9·6 | | 14·9 | 31·0 | |
| 9·6 | | 32·9 | 21·5 | |
| 8·8 | 49 | 0·4 | 25·2 | G |
| 8·2 | | 0·4 | 25·5 | 7·0 GS |
| 10·0 | | 10·4 | 52·0 | |
| 9·4 | | 20·4 | 34·1 | |
| 10·0 | | 27·9 | 47·8 | |
| 9·1 | | 28·4 | 48·0 | |
| 10·0 | | 31·9 | 26·3 | |
| 8·4 | | 34·4 | 27·3 | 8·0 |
| 9·4 | | 52·9 | 14·8 | |
| 9·2 | | 54·9 | 44·5 | 7·5 G |
| 9·7 | 50 | 0·9 | 32·0 | |
| 10·0 | | 6·4 | 49·3 | |
| 10·0 | | 9·4 | 36·1 | |
| 10·0 | | 13·9 | 13·3 | |
| 10·0 | | 13·9 | 36·8 | |
| 10·0 | | 15·5 | 29·9 | |
| 9·7 | | 20·4 | 55·8 | |
| 9·7 | | 32·4 | 16·4 | |
| 8·7 | | 48·4 | 22·7 | |
| 10·0 | | 54·4 | 31·2 | |
| 9·4 | 51 | 4·4 | 41·2 | |
| 9·6 | | 8·4 | 54·1 | |
| 8·6 | | 16·4 | 7·9 | 9·0 |
| 10·0 | | 25·4 | 56·5 | |
| 10·0 | | 38·9 | 8·0 | |
| 9·8 | | 42·4 | 33·4 | |
| 9·4 | | 57·4 | 32·9 | |
| 9·4 | 52 | 15·9 | 31·0 | |

### 5821—5880.

| mag. | 13h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 52 | 18·9 | 48·2 | |
| 8·9 | | 21·4 | 33·8 | 9·5 |
| 10·0 | | 34·4 | 49·8 | |
| 9·8 | | 34·4 | 53·2 | |
| 9·4 | | 38·4 | 0·0 | |
| 9·6 | | 39·4 | 32·6 | |
| 10·0 | | 44·4 | 32·0 | |
| 9·8 | | 47·9 | 11·5 | |
| 8·0 | | 54·4 | 37·0 | G |
| 9·6 | 53 | 8·7 | 59·5 | |
| 9·2 | | 17·4 | 8·8 | |
| 9·7 | | 34·4 | 42·2 | |
| 10·0 | | 37·9 | 3·6 | |
| 9·2 | | 37·9 | 12·0 | 9·5 |
| 10·0 | | 43·9 | 0·6 | |
| 8·9 | | 45·4 | 32·2 | |
| 9·4 | | 56·9 | 52·0 | |
| 9·4 | 54 | 1·4 | 30·6 | |
| 9·6 | | 5·2 | 56·8 | |
| 9·8 | | 15·9 | 29·5 | |
| 8·7 | | 23·9 | 24·0 | 9·0 |
| 10·0 | | 25·4 | 13·4 | |
| 9·0 | | 34·9 | 42·6 | 8·5 |
| 10·0 | | 39·9 | 49·2 | |
| 9·4 | | 40·4 | 18·4 | 9·0 |
| 7·2 | 55 | 0·4 | 36·5 | 6·5 GSct |
| 10·0 | | 5·4 | 33·2 | |
| 9·8 | | 21·7 | 59·9 | |
| 9·6 | | 21·9 | 8·0 | |
| 9·2 | | 21·9 | 50·6 | |
| 9·8 | | 30·6 | 58·0 | |
| 9·7 | | 34·4 | 24·2 | |
| 9·7 | | 38·4 | 47·4 | |
| 9·8 | | 40·4 | 44·9 | |
| 9·8 | | 46·4 | 44·4 | |
| 10·0 | | 48·7 | 0·0 | |
| 9·2 | | 52·4 | 29·8 | |
| 9·8 | | 54·4 | 47·0 | |
| 10·0 | 56 | 0·4 | 49·0 | |
| 9·7 | | 0·9 | 17·8 | |
| 9·2 | | 3·9 | 29·5 | |
| 9·4 | | 19·4 | 25·8 | |
| 10·0 | | 29·7 | 1·7 | |
| 10·0 | | 31·4 | 52·2 | 9·5 |
| 8·7 | | 32·4 | 54·7 | 9·2 |
| 8·6 | | 35·9 | 32·1 | 8·5 |
| 9·2 | | 36·4 | 58·8 | |
| 9·6 | 57 | 15·4 | 28·4 | |
| 9·4 | | 38·4 | 44·4 | |
| 10·0 | | 44·9 | 54·5 | |
| 9·4 | | 45·4 | 0·5 | |
| 9·7 | | 54·4 | 18·4 | |
| 9·8 | | 59·4 | 21·9 | |
| 10·0 | 58 | 1·4 | 32·7 | |
| 10·0 | | 1·9 | 17·2 | |
| 9·2 | | 10·9 | 35·1 | |
| 10·0 | | 23·4 | 44·7 | |
| 8·4 | | 27·9 | 54·4 | 8·8 |
| 9·4 | | 43·4 | 0·4 | |
| 9·0 | | 45·4 | 50·7 | 9·5 |

### 5881—5940.

| mag. | 13h.—14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·7 | 58 | 45·9 | 7·3 | |
| 8·7 | 59 | 6·4 | 45·0 | 8·5 |
| 9·7 | | 6·4 | 48·6 | |
| 9·2 | | 14·4 | 54·6 | |
| 9·2 | | 20·4 | 56·9 | |
| 8·6 | | 33·4 | 1·9 | 9·0 |
| 9·6 | | 34·4 | 56·4 | |
| 9·6 | | 42·9 | 13·3 | |
| 10·0 | | 49·0 | 20·6 | |
| 10·0 | | 50·9 | 34·6 | |
| 10·0 | 0 | 0·4 | 41·0 | |
| 9·7 | | 0·9 | 22·6 | |
| 10·0 | | 7·4 | 41·3 | |
| 9·8 | | 14·4 | 43·6 | |
| 10·0 | | 20·4 | 21·5 | |
| 9·6 | | 23·4 | 38·4 | |
| 9·7 | | 58·4 | 26·0 | |
| 9·6 | 1 | 6·4 | 52·1 | |
| 9·6 | | 10·4 | 45·2 | 9·5 |
| 9·6 | | 31·9 | 55·6 | |
| 10·0 | | 32·2 | 55·1 | |
| 9·4 | | 39·7 | 38·1 | 9·0 |
| 10·0 | | 48·7 | 49·9 | |
| 9·2 | | 57·7 | 37·0 | |
| 10·0 | | 59·7 | 3·9 | |
| 9·6 | 2 | 3·2 | 17·6 | |
| 10·0 | | 9·2 | 14·1 | |
| 10·0 | | 32·7 | 13·4 | |
| 9·6 | | 34·2 | 27·7 | |
| 9·2 | | 37·2 | 32·2 | |
| 10·0 | | 42·4 | 26·5 | |
| 8·0 | | 49·2 | 47·3 | 7·5 GSt |
| 9·7 | | 50·2 | 37·3 | |
| 10·0 | 3 | 18·2 | 20·5 | |
| 9·2 | | 28·7 | 18·2 | |
| 10·0 | | 31·2 | 38·8 | |
| 9·6 | | 32·7 | 15·1 | |
| 9·2 | | 35·2 | 41·0 | 9·0 |
| 9·6 | | 40·7 | 38·0 | |
| 9·7 | | 49·2 | 18·2 | |
| 9·7 | 4 | 8·7 | 17·9 | |
| 10·0 | | 14·4 | 2·9 | |
| 9·2 | | 18·7 | 48·1 | |
| 9·1 | | 41·2 | 23·5 | G |
| 9·8 | | 43·4 | 0·7 | |
| 9·6 | | 47·2 | 19·3 | |
| 9·4 | | 49·7 | 47·7 | |
| 9·6 | | 50·7 | 32·4 | |
| 9·2 | | 52·7 | 15·3 | |
| 9·7 | 5 | 1·2 | 47·5 | |
| 10·0 | | 1·4 | 7·3 | |
| 9·8 | | 8·2 | 38·3 | |
| 9·8 | | 12·2 | 10·4 | |
| 10·0 | | 19·7 | 38·2 | |
| 7·6 | | 29·2 | 28·6 | 8·5 GS |
| 9·6 | | 32·2 | 36·4 | |
| 9·4 | | 33·2 | 40·2 | |
| 10·0 | | 34·7 | 27·7 | |
| 9·6 | | 36·2 | 44·3 | 9·0 |
| 9·8 | | 44·2 | 14·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 30 | 95 | 7·7 |
| | 40 | 97 | 7·6 |
| | 50 | 99 | 7·4 |
| | 0 | 101 | 7·2 |
| 14 | 10 | 103 | 7·0 |



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25 prec.

| | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 14 | 0 | 101 | 7·2 |
| | 10 | 103 | 7·0 |
| | 20 | 105 | 6·8 |
| | 30 | 106 | 6·6 |
| | 40 | 108 | 6·4 |

**5941—6000.**

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 6 | 0·2 | 55·3 | 9·0 |
| 9·6 | | 1·7 | 14·3 | |
| 10·0 | | 12·1 | 18·7 | |
| 8·0 | | 13·6 | 22·2 | 8·5 |
| 9·2 | | 29·1 | 6·2 | |
| 9·6 | | 32·1 | 39·7 | |
| 9·8 | | 50·1 | 36·7 | |
| 9·6 | | 59·1 | 20·4 | |
| 10·0 | | 59·1 | 1·6 | |
| 9·2 | 7 | 17·5 | 23·0 | |
| 10·0 | | 23·1 | 43·9 | |
| 9·2 | | 27·1 | 4·0 | |
| 9·4 | | 28·1 | 1·9 | |
| 9·8 | | 32·0 | 24·8 | |
| 10·0 | | 32·6 | 39·1 | |
| 9·4 | | 33·8 | 32·1 | |
| 9·4 | | 37·0 | 53·5 | |
| 9·7 | | 46·1 | 25·7 | |
| 9·0 | 8 | 17·6 | 30·4 | |
| 10·2 | | 22·1 | 9·2 | |
| 10·0 | | 26·0 | 57·1 | |
| 9·2 | | 39·0 | 37·1 | |
| 10·0 | | 43·2 | 58·5 | |
| 7·5 | | 49·0 | 11·1 | 7·0 GSt |
| 9·8 | | 49·0 | 57·1 | |
| 10·2 | | 57·5 | 7·5 | |
| 9·4 | | 57·5 | 15·2 | |
| 10·2 | 9 | 4·0 | 15·5 | |
| 9·6 | | 12·5 | 17·7 | |
| 9·0 | | 14·0 | 48·8 | |
| 9·6 | | 17·5 | 10·5 | |
| 10·0 | | 21·5 | 5·2 | |
| 9·4 | 10 | 0·0 | 13·6 | |
| 10·2 | | 6·0 | 32·8 | |
| 9·2 | | 30·0 | 37·9 | |
| 7·5 | | 30·5 | 18·1 | GSt |
| 9·8 | | 37·7 | 1·5 | |
| 9·2 | | 38·5 | 40·2 | |
| 9·5 | | 41·5 | 42·7 | |
| 10·2 | | 49·0 | 2·8 | |
| 10·2 | | 59·5 | 41·8 | |
| 9·8 | 11 | 11·5 | 22·5 | |
| 8·0 | | 35·0 | 12·9 | 7·5 GSt |
| 4·7 | | 38·5 | 48·6 | 5·0 GSctr |
| 9·6 | | 55·5 | 44·6 | |
| 9·8 | 12 | 0·0 | 0·5 | |
| 8·8 | | 6·5 | 18·1 | 9·0 |
| 10·0 | | 10·0 | 43·8 | |
| 10·2 | | 11·5 | 5·6 | |
| 9·4 | | 22·5 | 30·0 | |
| 9·5 | | 28·5 | 20·0 | |
| 10·2 | | 33·5 | 19·1 | |
| 10·2 | | 49·0 | 48·1 | |
| 9·8 | | 50·0 | 46·9 | |
| 8·9 | | 52·0 | 14·4 | 9·0 |
| 9·8 | 13 | 0·0 | 3·9 | |
| 10·0 | | 7·5 | 46·8 | |
| 9·4 | | 32·0 | 10·0 | |
| 10·2 | 14 | 0·0 | 32·6 | |
| 10·0 | | 9·5 | 26·6 | |

**6001—6060.**

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8·8 | 14 | 9·5 | 23·3 | 8 0 Gt |
| 9·4 | | 21·3 | 2·3 | 9·0 |
| 8·4 | | 42·4 | 57·8 | 8·5 Gt |
| 9·0 | | 44·3 | 45·1 | |
| 10·2 | | 59·3 | 10·7 | |
| 9·2 | 15 | 23·3 | 22·7 | 9·5 |
| 9·2 | | 27·8 | 33·3 | |
| 10·0 | | 34·3 | 50·7 | |
| 9·4 | | 36·8 | 13·1 | |
| 10·2 | | 39·3 | 23·1 | |
| 9·4 | 16 | 1·8 | 24·7 | |
| 10·2 | | 39·3 | 57·9 | |
| 10·2 | | 44·8 | 20·9 | |
| 9·4 | 17 | 21·8 | 26·7 | |
| 10·0 | | 26·3 | 48·3 | |
| 9·8 | | 38·8 | 4·7 | |
| 10·0 | 18 | 21·3 | 3·9 | |
| 9·6 | 19 | 37·8 | 7·1 | |
| 10·2 | | 42·8 | 48·9 | |
| 9·8 | | 47·8 | 53·7 | |
| 9·4 | | 48·1 | 58·1 | |
| 9·6 | | 54·8 | 53·0 | |
| 7·4 | 20 | 11·3 | 34·3 | GSt |
| 9·6 | | 53·8 | 28·3 | |
| 7·6 | 21 | 8·8 | 34·1 | 7·0 GSt |
| 10·0 | | 15·8 | 7·8 | |
| 8·4 | | 43·3 | 13·7 | 9·0 |
| 9·4 | | 54·8 | 22·3 | |
| 9·2 | 22 | 0·8 | 37·1 | |
| 10·0 | | 5·8 | 31·2 | 9·5 |
| 9·9 | | 18·3 | 43·1 | |
| 9·2 | | 48·3 | 46·6 | |
| 9·2 | | 50·8 | 30·1 | |
| 9·8 | | 51·8 | 30·9 | |
| 10·2 | 23 | 9·3 | 3·4 | |
| 9·5 | | 11·8 | 26·8 | |
| 9·9 | | 49·5 | 1·4 | |
| 10·0 | | 58·8 | 13·8 | |
| 9·8 | 24 | 0·1 | 59·1 | |
| 10·0 | | 5·3 | 48·7 | |
| 10·2 | | 6·8 | 11·4 | |
| 10·2 | | 9·3 | 55·4 | |
| 10·2 | | 10·9 | 1·1 | |
| 9·6 | | 11·8 | 25·9 | |
| 9·4 | | 20·8 | 0·1 | |
| 8·7 | | 25·3 | 39·7 | 9·5 G |
| 9·5 | | 29·3 | 17·8 | |
| 8·8 | | 50·3 | 24·3 | 8·0 G |
| 10·2 | | 51·8 | 15·8 | |
| 9·6 | 25 | 0·8 | 39·5 | |
| 9·2 | | 2·8 | 33·9 | 9·0 |
| 9·6 | | 3·8 | 37·4 | |
| 10·2 | | 6·8 | 27·1 | |
| 10·2 | | 8·8 | 9·0 | |
| 9·5 | | 37·3 | 25·2 | |
| 10·2 | | 44·8 | 26·8 | |
| 10·2 | | 50·8 | 57·8 | |
| 9·4 | | 57·3 | 52·8 | |
| 9·2 | | 58·8 | 25·3 | |
| 9·2 | 26 | 0·8 | 42·6 | |

**6061—6120.**

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 26 | 8·8 | 58·6 | |
| 10·2 | | 21·8 | 50·8 | |
| 10·2 | | 30·8 | 54·4 | |
| 8·8 | | 33·8 | 55·4 | 9·2 |
| 9·5 | | 55·3 | 24·7 | |
| 10·0 | 27 | 1·8 | 59·8 | |
| 8·5 | | 2·8 | 58·0 | 9·0 |
| 8·7 | | 4·3 | 54·6 | 9·2 |
| 9·4 | | 9·6 | 0·8 | |
| 10·0 | | 11·8 | 30·5 | |
| 9·6 | | 18·3 | 59·9 | |
| 10·2 | | 21·2 | 57·9 | |
| 10·0 | | 30·8 | 59·7 | |
| 9·8 | | 36·8 | 19·7 | |
| 9·6 | | 56·3 | 53·8 | |
| 9·4 | | 59·8 | 24·5 | |
| 8·5 | 28 | 19·3 | 3·4 | 9·0 |
| 9·8 | | 22·3 | 52·9 | |
| 10·2 | | 22·3 | 30·4 | |
| 9·8 | | 42·8 | 1·0 | |
| 9·6 | | 45·8 | 19·2 | |
| 10·0 | | 46·8 | 5·0 | |
| 10·2 | | 48·8 | 18·2 | |
| 10·2 | | 55·8 | 55·3 | |
| 9·8 | 29 | 0·8 | 42·2 | |
| 9·8 | | 1·3 | 11·4 | |
| 10·2 | | 12·8 | 58·9 | |
| 8·0 | | 37·0 | 0·3 | |
| 10·0 | | 40·8 | 48·3 | |
| 9·5 | | 57·8 | 37·2 | |
| 9·2 | 30 | 0·8 | 16·0 | |
| 7·6 | | 3·9 | 57·2 | 8·0 GS |
| 9·6 | | 10·8 | 45·9 | |
| 8·6 | | 15·3 | 9·5 | |
| 9·8 | | 19·8 | 14·1 | |
| 9·8 | | 21·3 | 42·9 | |
| 10·2 | | 22·8 | 11·5 | |
| 10·0 | | 28·3 | 57·4 | |
| 10·2 | | 32·8 | 18·3 | |
| 9·8 | | 36·8 | 55·1 | |
| 9·8 | | 42·8 | 30·5 | |
| 8·8 | | 52·3 | 34·6 | 9·5 |
| 10·2 | | 52·8 | 3·8 | |
| 10·2 | 31 | 4·0 | 58·1 | |
| 10·2 | | 22·8 | 10·1 | |
| 8·4 | | 25·3 | 16·5 | |
| 7·3 | | 31·8 | 54·0 | 6·8 GS |
| 10·2 | | 34·3 | 20·4 | |
| 9·8 | | 43·8 | 44·3 | |
| 9·8 | | 51·8 | 50·1 | |
| 9·8 | | 54·6 | 0·8 | |
| 9·6 | 32 | 7·3 | 32·8 | |
| 8·8 | | 22·0 | 59·3 | 9·5 |
| 9·2 | | 25·8 | 40·2 | 9·5 |
| 10·2 | | 29·3 | 23·1 | |
| 10·0 | | 44·8 | 38·8 | |
| 9·4 | | 48·3 | 33·9 | |
| 9·8 | | 49·8 | 28·2 | |
| 10·2 | | 50·8 | 5·1 | |
| 9·2 | 33 | 10·3 | 5·1 | |

**6121—6180.**

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 33 | 10·3 | 12·9 | |
| 9·6 | | 10·8 | 36·0 | |
| 9·6 | | 11·8 | 33·6 | |
| 10·2 | | 11·8 | 27·5 | |
| 10·2 | | 12·8 | 24·7 | |
| 8·8 | | 33·8 | 23·1 | |
| 9·2 | | 42·8 | 38·5 | |
| 10·2 | | 43·8 | 22·8 | |
| 9·5 | | 45·3 | 47·7 | |
| 9·8 | | 49·3 | 37·4 | |
| 8·4 | | 55·8 | 50·9 | |
| 10·2 | 34 | 17·8 | 16·1 | |
| 10·2 | | 29·8 | 57·0 | |
| 9·4 | | 36·8 | 49·5 | |
| 10·2 | | 41·8 | 13·4 | |
| 8·9 | | 50·8 | 49·3 | |
| 8·2 | 35 | 0·8 | 49·5 | 9·0 |
| 8·4 | | 10·3 | 16·2 | |
| 10·0 | | 14·3 | 25·0 | |
| 9·4 | | 25·3 | 34·6 | |
| 9·4 | | 25·8 | 24·0 | |
| 9·6 | | 35·3 | 20·9 | |
| 9·5 | | 38·3 | 1·5 | |
| 9·5 | | 38·8 | 55·9 | |
| 10·0 | | 39·8 | 52·5 | |
| 10·0 | | 52·3 | 8·7 | |
| 10·0 | | 55·8 | 22·8 | |
| 10·0 | | 58·3 | 19·5 | |
| 10·2 | 36 | 1·3 | 56·2 | |
| 6·8 | | 11·3 | 4·2 | 6·0 GSct |
| 9·6 | | 17·8 | 31·8 | |
| 8·3 | | 19·3 | 4·6 | 7·0 GSt |
| 10·2 | | 20·5 | 57·0 | |
| 10·2 | | 30·8 | 40·0 | |
| 9·4 | | 39·8 | 29·0 | |
| 10·2 | | 41·3 | 0·0 | |
| 8·2 | | 56·3 | 57·9 | 8·0 G |
| 10·2 | 37 | 1·3 | 2·9 | |
| 10·2 | | 10·8 | 17·0 | |
| 9·8 | | 27·3 | 21·9 | |
| 8·4 | | 28·3 | 39·1 | 8·5 |
| 8·2 | | 30·8 | 53·4 | 8·0 G |
| 10·2 | | 37·3 | 0·3 | |
| 9·5 | | 42·8 | 6·4 | |
| 9·8 | | 46·8 | 1·1 | |
| 10·0 | | 57·3 | 7·6 | |
| 10·2 | | 57·8 | 37·3 | |
| 10·2 | | 58·3 | 56·2 | |
| 10·2 | 38 | 6·8 | 12·9 | |
| 9·8 | | 26·8 | 40·6 | |
| 9·4 | | 45·3 | 6·9 | |
| 8·7 | | 49·8 | 30·9 | 8·5 |
| 10·0 | | 56·8 | 19·9 | |
| 10·2 | 39 | 5·3 | 11·1 | |
| 7·6 | | 8·3 | 28·8 | 8·0 |
| 9·0 | | 12·3 | 55·7 | 9·2 G |
| 10·0 | | 14·3 | 39·1 | |
| 8·2 | | 18·8 | 54·7 | 8·2 G |
| 9·2 | | 19·3 | 29·9 | 9·0 |
| 10·2 | | 22·8 | 44·9 | |



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### 6181—6240.

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8·8 | 39 | 25·5 | 45·6 | 9·0 |
| 9·8 | | 27·0 | 17·0 | |
| 10·2 | | 35·8 | 17·7 | |
| 9·5 | | 46·5 | 4·5 | |
| 9·6 | 40 | 2·8 | 39·3 | |
| 9·6 | | 4·3 | 37·6 | |
| 9·2 | | 7·2 | 29·0 | 9·5 |
| 9·7 | | 9·0 | 2·3 | |
| 10·1 | | 12·7 | 45·8 | |
| 9·2 | | 14·2 | 24·1 | 9·5 |
| 9·0 | | 25·5 | 54·2 | 9·5 |
| 10·1 | | 31·3 | 57·7 | |
| 10·1 | | 37·7 | 52·9 | |
| 10·0 | | 40·7 | 41·9 | |
| 10·1 | | 48·7 | 5·9 | |
| 9·7 | | 50·5 | 3·0 | |
| 10·0 | 41 | 11·7 | 42·2 | |
| 9·6 | | 28·7 | 3·1 | |
| 10·1 | | 34·7 | 12·0 | |
| 9·2 | | 54·0 | 55·5 | |
| 9·7 | | 56·0 | 2·5 | |
| 9·8 | | 57·0 | 59·4 | |
| 10·1 | | 58·5 | 26·6 | |
| 9·6 | | 59·5 | 23·8 | |
| 9·0 | 42 | 0·5 | 33·2 | |
| 9·4 | | 22·5 | 46·5 | |
| 9·4 | | 25·0 | 29·9 | |
| 9·4 | | 25·5 | 34·3 | |
| 10·0 | | 27·0 | 16·0 | |
| 9·7 | | 29·5 | 13·1 | |
| 9·7 | | 38·7 | 0·2 | |
| 10·1 | | 39·0 | 57·5 | |
| 9·4 | | 42·0 | 21·0 | |
| 10·1 | | 43·5 | 7·3 | |
| 10·1 | | 57·5 | 38·5 | |
| 9·7 | 43 | 2·2 | 11·8 | 9·0 |
| 9·4 | | 3·7 | 39·1 | |
| 9·7 | | 14·2 | 50·3 | |
| 9·2 | | 26·7 | 11·9 | 8·0 |
| 9·8 | | 34·7 | 28·3 | |
| 10·1 | | 49·7 | 25·7 | |
| 8·3 | | 54·2 | 46·9 | 9·0 |
| 9·4 | 44 | 0·7 | 23·9 | |
| 10·1 | | 1·2 | 31·1 | |
| 9·8 | | 15·2 | 10·9 | |
| 10·0 | | 23·7 | 6·8 | |
| 8·8 | | 29·2 | 41·1 | 9·0 |
| 10·1 | | 35·2 | 57·1 | |
| 10·1 | | 36·7 | 48·9 | |
| 9·2 | | 40·7 | 38·8 | |
| 8·4 | | 41·7 | 29·8 | |
| 10·1 | | 43·2 | 22·7 | |
| 8·8 | | 46·2 | 42·0 | 9·0 |
| 9·7 | 45 | 11·7 | 17·4 | |
| 9·2 | | 12·7 | 1·2 | |
| 9·8 | | 19·2 | 53·3 | |
| 9·7 | | 40·2 | 14·6 | |
| 9·4 | | 40·7 | 28·1 | |
| 10·0 | | 42·7 | 6·0 | |
| 9·7 | | 50·2 | 3·9 | |

### 6241—6300.

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 45 | 56·2 | 30·0 | |
| 8·9 | 46 | 0·2 | 13·1 | |
| 10·1 | | 5·2 | 4·3 | |
| 9·7 | | 22·2 | 46·4 | |
| 10·1 | | 43·7 | 34·9 | |
| 10·1 | | 50·2 | 29·3 | |
| 10·0 | | 50·7 | 52·5 | |
| 10·1 | | 57·7 | 8·1 | |
| 9·7 | 47 | 11·7 | 58·2 | |
| 10·1 | | 15·7 | 56·0 | |
| 9·7 | | 17·2 | 7·6 | |
| 9·7 | | 39·2 | 17·1 | |
| 9·4 | | 42·2 | 34·4 | |
| 10·1 | | 45·2 | 3·8 | |
| 9·6 | | 54·2 | 10·4 | |
| 8·0 | | 54·6 | 24·1 | 8·0 GSt |
| 9·6 | | 55·6 | 17·5 | 9·0 |
| 10·1 | | 59·1 | 12·0 | |
| 10·1 | | 59·6 | 11·1 | |
| 9·8 | 48 | 7·6 | 7·8 | |
| 10·0 | | 24·6 | 36·4 | |
| 9·8 | | 38·1 | 17·4 | |
| 10·1 | | 46·1 | 34·3 | |
| 10·1 | | 49·1 | 38·4 | |
| 10·1 | 49 | 14·1 | 55·5 | |
| 10·0 | | 17·1 | 19·3 | |
| 10·0 | | 24·6 | 34·1 | |
| 9·2 | | 37·1 | 11·6 | |
| 10·1 | | 38·1 | 49·3 | |
| 10·0 | | 48·1 | 15·0 | |
| 10·1 | | 49·6 | 3·7 | |
| 9·7 | | 59·6 | 13·2 | |
| 9·6 | 50 | 0·6 | 33·8 | |
| 9·4 | | 6·6 | 0·9 | 9·0 |
| 9·6 | | 12·6 | 42·1 | |
| 9·4 | | 20·6 | 31·1 | |
| 9·4 | | 25·1 | 51·9 | |
| 10·1 | | 28·6 | 11·9 | |
| 10·1 | | 33·6 | 53·2 | |
| 10·1 | | 34·6 | 24·7 | |
| 10·0 | | 35·1 | 5·2 | |
| 9·6 | | 40·6 | 39·4 | |
| 10·1 | | 53·6 | 23·0 | |
| 7·9 | | 54·6 | 0·3 | 7·5 G |
| 9·0 | | 56·1 | 38·4 | |
| 9·7 | | 59·1 | 34·1 | |
| 9·7 | 51 | 0·6 | 48·0 | |
| 10·0 | | 6·6 | 53·5 | |
| 10·1 | | 9·6 | 35·5 | |
| 10·0 | | 26·0 | 29·7 | |
| 10·1 | | 30·5 | 4·8 | |
| 9·4 | | 39·5 | 49·8 | 9·5 |
| 9·4 | | 46·5 | 32·4 | |
| 10·0 | | 50·5 | 18·0 | |
| 10·0 | 52 | 19·0 | 46·2 | |
| 7·6 | | 21·5 | 45·7 | 7·0 GSt |
| 10·1 | | 24·5 | 42·5 | |
| 9·8 | | 32·5 | 30·0 | |
| 9·7 | | 37·0 | 11·8 | |
| 9·2 | | 44·0 | 16·4 | |

### 6301—6360.

| mag. | 14h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 52 | 44·5 | 59·2 | |
| 9·2 | | 48·0 | 48·8 | 9·0 |
| 9·7 | | 50·5 | 39·6 | |
| 10·0 | | 52·5 | 38·1 | |
| 10·0 | | 53·0 | 53·7 | |
| 9·2 | | 59·0 | 44·6 | 9·5 |
| 9·8 | 53 | 5·0 | 6·4 | |
| 9·4 | | 10·0 | 23·1 | |
| 10·0 | | 14·0 | 27·1 | |
| 9·8 | | 23·0 | 51·5 | |
| 9·8 | | 23·5 | 32·8 | |
| 9·6 | | 26·5 | 2·9 | |
| 9·6 | | 29·0 | 44·2 | |
| 9·4 | | 30·5 | 57·1 | |
| 9·6 | 54 | 0·0 | 52·9 | 9·0 |
| 9·6 | | 3·0 | 37·5 | |
| 10·0 | | 14·5 | 40·8 | |
| 10·1 | | 16·0 | 43·4 | |
| 8·4 | | 22·5 | 39·2 | 8·5 G |
| 8·7 | | 25·0 | 4·6 | |
| 10·1 | | 41·5 | 29·0 | |
| 10·1 | | 42·5 | 39·1 | |
| 9·6 | | 50·5 | 14·2 | |
| 10·1 | | 59·3 | 58·9 | |
| 8·6 | 55 | 0·5 | 56·0 | 9·2 G |
| 10·1 | | 3·5 | 7·9 | |
| 10·1 | | 9·0 | 16·6 | |
| 10·1 | | 15·5 | 16·2 | |
| 10·0 | | 20·5 | 6·5 | |
| 10·0 | | 21·5 | 19·0 | |
| 8·3 | | 24·0 | 55·8 | 8·2 G |
| 9·4 | | 28·9 | 44·0 | |
| 9·0 | | 32·9 | 1·0 | |
| 9·8 | | 34·4 | 55·9 | |
| 9·6 | | 37·9 | 26·0 | |
| 9·6 | | 42·4 | 32·1 | |
| 9·8 | | 43·4 | 36·5 | |
| 10·1 | | 46·4 | 13·0 | |
| 10·0 | | 50·4 | 50·7 | |
| 9·8 | | 53·9 | 46·4 | |
| 10·1 | | 56·0 | 1·6 | |
| 9·2 | | 56·9 | 40·7 | |
| 9·4 | | 58·9 | 26·2 | |
| 8·8 | | 59·4 | 54·5 | 9·2 G |
| 10·0 | 56 | 0·4 | 11·2 | |
| 9·8 | | 9·4 | 25·9 | |
| 9·6 | | 16·9 | 11·8 | |
| 10·0 | | 22·4 | 45·2 | |
| 9·8 | | 24·4 | 11·1 | |
| 9·8 | | 29·4 | 10·5 | |
| 10·1 | | 29·4 | 6·5 | |
| 10·0 | | 35·4 | 6·3 | |
| 9·8 | | 53·9 | 35·5 | 9·0 |
| 10·1 | 57 | 2·9 | 27·0 | |
| 10·1 | | 3·4 | 52·2 | |
| 8·9 | | 4·9 | 20·0 | 8·2 |
| 9·4 | | 11·4 | 3·8 | |
| 10·0 | | 12·4 | 40·3 | |
| 8·4 | | 12·9 | 15·8 | 8·3 |
| 10·1 | | 47·9 | 44·7 | |

### 6361—6420.

| mag. | 14h.–15h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 58 | 0·9 | 51·5 | |
| 9·2 | | 1·4 | 3·3 | |
| 9·4 | | 13·4 | 34·7 | |
| 10·1 | | 22·4 | 44·1 | |
| 9·6 | | 30·9 | 20·1 | |
| 9·8 | | 32·9 | 3·7 | |
| 9·8 | | 34·9 | 49·6 | |
| 10·0 | | 36·4 | 32·5 | |
| 9·2 | | 39·7 | 14·6 | 8·2 G |
| 10·1 | | 41·3 | 59·4 | |
| 9·4 | | 47·7 | 44·8 | |
| 10·1 | | 48·5 | 59·8 | |
| 10·0 | | 58·2 | 8·7 | |
| 9·4 | | 59·7 | 27·7 | |
| 9·7 | 59 | 3·7 | 31·5 | |
| 9·4 | | 8·2 | 56·7 | |
| 9·7 | | 10·2 | 51·0 | |
| 8·2 | | 10·7 | 29·8 | 8·0 G |
| 10·0 | | 13·7 | 7·3 | |
| 8·2 | | 20·7 | 18·6 | 8·0 |
| 9·4 | | 24·2 | 21·3 | 9·0 |
| 9·4 | | 27·7 | 20·8 | |
| 9·4 | | 29·2 | 50·0 | |
| 9·8 | | 35·7 | 21·8 | |
| 10·0 | | 43·7 | 27·8 | |
| 10·1 | | 48·5 | 58·2 | |
| 9·2 | | 48·7 | 47·2 | 8·0 |
| 8·5 | | 59·2 | 21·8 | 8·5 |
| 10·1 | 0 | 15·2 | 2·3 | |
| 9·6 | | 16·7 | 29·8 | |
| 9·6 | | 33·7 | 47·0 | |
| 10·1 | | 39·7 | 3·7 | |
| 9·2 | | 41·7 | 38·8 | |
| 9·4 | | 47·7 | 47·6 | |
| 10·0 | | 55·7 | 47·5 | |
| 9·6 | | 57·7 | 37·5 | |
| 10·0 | | 58·7 | 15·5 | |
| 9·4 | 1 | 0·2 | 6·4 | 10·0 |
| 9·2 | | 2·2 | 57·9 | |
| 9·0 | | 4·7 | 3·7 | 9·0 |
| 9·6 | | 9·7 | 1·5 | |
| 10·0 | | 20·7 | 35·2 | |
| 10·0 | | 21·2 | 46·0 | |
| 9·8 | | 28·0 | 57·8 | |
| 9·4 | | 30·2 | 25·5 | |
| 10·0 | | 33·7 | 16·6 | |
| 8·4 | | 35·7 | 36·4 | 9·0 |
| 8·7 | | 44·5 | 6·0 | 9·2 |
| 9·4 | 2 | 0·0 | 41·0 | |
| 10·1 | | 9·0 | 31·6 | |
| 10·0 | | 14·0 | 7·4 | |
| 10·0 | | 21·5 | 5·3 | |
| 10·1 | | 33·0 | 49·2 | |
| 9·8 | | 34·5 | 3·1 | |
| 10·1 | | 43·0 | 22·9 | |
| 10·0 | | 46·5 | 28·6 | |
| 9·4 | | 52·0 | 28·1 | |
| 9·4 | | 54·0 | 9·6 | 9·5 |
| 8·7 | | 55·0 | 57·2 | 9·5 |
| 9·6 | | 56·0 | 41·3 | 9·5 |

| h | m | 25 prec. α + (s) | δ − (′) |
|---|---|---|---|
| 14 | 30 | 106 | 6·6 |
| | 40 | 108 | 6·4 |
| | 50 | 110 | 6·2 |
| 15 | 0 | 111 | 5·9 |
| | 10 | 113 | 5·6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 111 | 5.9 |
| | 10 | 113 | 5.6 |
| | 20 | 114 | 5.4 |
| | 30 | 115 | 5.1 |
| | 40 | 117 | 4.8 |

## 6421—6480.

| mag. | 15ʰ m | s | 55° ′ | |
|---|---|---|---|---|
| 9.6 | 3 | 20.5 | 53.1 | |
| 9.4 | | 31.0 | 49.5 | |
| 10.0 | | 38.0 | 28.9 | |
| 9.7 | | 48.0 | 47.8 | |
| 10.0 | | 49.5 | 22.9 | |
| 9.8 | | 53.0 | 17.0 | |
| 10.1 | | 59.0 | 48.0 | |
| 7.8 | 4 | 7.0 | 15.5 | 7.5 G |
| 10.1 | | 10.0 | 45.2 | |
| 9.7 | | 16.5 | 44.6 | |
| 9.7 | | 20.8 | 57.5 | |
| 10.1 | | 22.7 | 1.1 | |
| 9.8 | | 37.5 | 3.5 | |
| 9.8 | | 40.0 | 7.0 | |
| 10.1 | | 41.0 | 39.7 | |
| 9.6 | | 55.5 | 22.3 | |
| 9.6 | 5 | 0.5 | 48.7 | |
| 9.4 | | 6.0 | 38.1 | |
| 8.0 | | 6.0 | 35.8 | 8.5 G |
| 10.0 | | 7.0 | 3.8 | |
| 9.7 | | 22.0 | 49.8 | |
| 9.4 | | 23.5 | 30.9 | |
| 9.4 | | 25.7 | 1.1 | |
| 10.1 | | 44.0 | 24.0 | |
| 8.9 | | 46.5 | 20.0 | |
| 9.6 | | 52.0 | 0.1 | |
| 8.4 | | 55.7 | 48.7 | 9.0 |
| 9.7 | | 58.2 | 5.5 | |
| 8.7 | | 59.0 | 0.9 | |
| 9.7 | 6 | 2.7 | 15.3 | |
| 9.2 | | 2.7 | 15.5 | |
| 9.2 | | 20.7 | 10.2 | |
| 9.6 | | 20.7 | 59.3 | |
| 10.0 | | 24.2 | 0.0 | |
| 10.1 | | 26.2 | 38.3 | |
| 8.0 | | 28.7 | 48.9 | 8.5 |
| 10.1 | | 34.7 | 4.5 | |
| 9.7 | | 37.2 | 13.3 | |
| 8.9 | | 54.7 | 46.5 | |
| 10.1 | 7 | 7.2 | 1.0 | |
| 8.9 | | 7.2 | 8.7 | 8.5 |
| 9.8 | | 12.2 | 55.7 | |
| 9.8 | | 17.7 | 46.9 | |
| 9.6 | | 18.2 | 26.9 | |
| 9.8 | | 22.7 | 46.5 | |
| 9.8 | | 26.7 | 39.7 | |
| 9.7 | | 32.7 | 4.3 | |
| 10.1 | | 33.3 | 8.5 | |
| 8.0 | | 39.2 | 55.1 | 7.8 G |
| 9.8 | 8 | 2.7 | 17.2 | |
| 9.2 | | 7.2 | 10.7 | |
| 9.6 | | 8.2 | 36.2 | |
| 8.1 | | 9.7 | 9.3 | 9.0 |
| 10.0 | | 14.7 | 24.1 | |
| 10.0 | | 15.2 | 28.1 | |
| 9.7 | | 18.7 | 37.9 | |
| 10.0 | | 19.7 | 55.1 | |
| 9.6 | | 19.7 | 22.5 | |
| 9.6 | | 23.2 | 39.7 | |
| 10.0 | | 39.7 | 30.9 | |

## 6481—6540.

| mag. | 15ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 10.0 | 8 | 43.2 | 15.9 | |
| 10.0 | | 43.5 | 1.7 | |
| 9.7 | | 48.7 | 52.7 | |
| 10.0 | 9 | 0.7 | 12.3 | |
| 10.0 | | 12.0 | 58.7 | |
| 9.6 | | 17.2 | 49.0 | |
| 8.8 | | 24.7 | 34.1 | 9.5 |
| 10.0 | | 31.7 | 33.6 | |
| 9.6 | | 41.5 | 32.2 | |
| 8.1 | | 51.5 | 4.1 | |
| 9.8 | | 55.5 | 4.4 | |
| 9.6 | | 57.5 | 24.0 | |
| 10.1 | | 58.5 | 52.6 | |
| 9.6 | 10 | 3.5 | 12.9 | |
| 9.6 | | 8.0 | 7.9 | |
| 10.1 | | 8.0 | 20.6 | |
| 10.1 | | 14.0 | 5.4 | |
| 8.6 | | 23.0 | 0.0 | |
| 10.1 | | 25.0 | 31.3 | |
| 9.4 | | 43.0 | 19.9 | |
| 9.6 | | 43.0 | 11.2 | |
| 9.8 | | 43.9 | 0.8 | |
| 10.0 | | 50.0 | 43.5 | |
| 9.6 | | 50.5 | 41.5 | 9.5 |
| 10.1 | | 51.5 | 57.8 | |
| 9.8 | 11 | 1.0 | 17.5 | |
| 9.4 | | 10.5 | 1.9 | |
| 9.0 | | 11.5 | 56.9 | 9.0 |
| 7.4 | | 12.5 | 40.5 | 7.0 GSt |
| 9.0 | | 21.5 | 50.2 | 8.5 |
| 10.1 | | 22.3 | 18.8 | |
| 10.1 | | 24.0 | 16.8 | |
| 10.0 | | 25.0 | 14.1 | |
| 9.4 | | 30.0 | 10.9 | |
| 10.0 | | 51.8 | 16.1 | |
| 8.9 | | 55.5 | 44.8 | 9.5 |
| 9.2 | 12 | 0.6 | 15.1 | |
| 9.6 | | 10.6 | 51.0 | |
| 10.2 | | 12.6 | 28.7 | |
| 9.8 | | 14.1 | 49.0 | |
| 8.8 | | 21.6 | 13.8 | |
| 9.4 | | 41.6 | 49.4 | 9.5 |
| 9.8 | | 54.1 | 39.0 | |
| 9.2 | 13 | 9.1 | 52.7 | |
| 8.7 | | 14.6 | 36.0 | 9.0 |
| 9.9 | | 22.6 | 30.0 | |
| 10.1 | | 26.1 | 54.2 | |
| 9.8 | | 29.6 | 23.2 | |
| 9.8 | | 33.6 | 17.0 | |
| 10.2 | | 44.1 | 36.6 | |
| 10.1 | | 45.6 | 27.0 | |
| 9.8 | 14 | 15.1 | 49.1 | |
| 10.2 | | 55.6 | 41.0 | ? |
| 9.6 | 15 | 2.6 | 35.4 | |
| 9.7 | | 4.1 | 13.8 | |
| 9.3 | | 21.6 | 41.6 | |
| 9.6 | | 24.6 | 54.0 | |
| 9.9 | | 27.6 | 28.5 | |
| 10.0 | | 35.6 | 42.4 | |
| 9.4 | | 42.6 | 31.0 | |

## 6541—6600.

| mag. | 15ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 10.2 | 16 | 1.1 | 9.4 | |
| 9.4 | | 1.1 | 36.2 | |
| 9.8 | | 2.8 | 59.0 | |
| 9.9 | | 12.6 | 59.0 | |
| 8.9 | | 14.1 | 38.5 | |
| 10.2 | | 16.6 | 20.5 | |
| 9.8 | | 26.6 | 5.4 | 10.0 |
| 9.0 | | 31.9 | 0.1 | 9.5 |
| 9.2 | | 32.6 | 55.6 | |
| 8.6 | | 33.6 | 46.4 | |
| 10.2 | | 51.1 | 36.9 | |
| 10.2 | | 59.6 | 38.4 | |
| 10.0 | 17 | 2.6 | 29.5 | |
| 9.6 | | 7.1 | 55.0 | |
| 10.2 | | 13.1 | 14.5 | |
| 9.9 | | 15.6 | 32.0 | |
| 9.0 | | 23.6 | 5.2 | 8.5 |
| 10.0 | | 25.6 | 50.7 | |
| 9.8 | | 46.6 | 41.8 | |
| 9.7 | | 49.1 | 56.7 | |
| 9.9 | | 54.6 | 11.6 | |
| 9.6 | 18 | 8.6 | 28.8 | |
| 8.0 | | 9.1 | 21.3 | 8.5 G |
| 10.0 | | 13.1 | 52.7 | |
| 10.2 | | 32.6 | 32.1 | |
| 10.2 | | 35.1 | 40.2 | |
| 10.2 | | 50.1 | 5.9 | |
| 10.2 | | 56.6 | 25.6 | |
| 8.0 | 19 | 0.6 | 45.3 | 8.5 |
| 9.2 | | 13.1 | 54.7 | |
| 9.8 | | 15.6 | 33.4 | |
| 7.8 | | 27.1 | 11.3 | 8.0 G |
| 8.8 | | 32.1 | 4.7 | 10.0 |
| 9.8 | | 44.1 | 41.4 | |
| 10.0 | | 45.1 | 51.7 | |
| 9.7 | | 50.1 | 27.2 | |
| 9.7 | | 53.1 | 25.0 | |
| 10.2 | | 58.6 | 4.1 | |
| 8.9 | 20 | 0.6 | 34.5 | |
| 10.0 | | 16.6 | 47.0 | |
| 8.6 | | 16.6 | 56.4 | 8.5 |
| 10.2 | | 24.6 | 0.2 | |
| 9.7 | | 43.6 | 30.9 | |
| 10.1 | | 50.8 | 57.5 | |
| 10.0 | | 51.1 | 22.4 | |
| 9.7 | | 55.6 | 30.9 | |
| 9.7 | 21 | 0.1 | 56.2 | |
| 9.8 | | 11.6 | 45.3 | |
| 10.2 | | 29.6 | 56.0 | |
| 9.4 | | 33.4 | 56.8 | |
| 10.2 | | 33.6 | 28.2 | |
| 10.1 | | 34.6 | 55.4 | |
| 8.3 | | 50.1 | 30.6 | 8.5 |
| 9.6 | | 52.6 | 31.2 | |
| 9.3 | | 53.1 | 16.8 | |
| 9.6 | | 58.6 | 9.7 | |
| 10.2 | 22 | 9.1 | 35.7 | |
| 9.2 | | 14.1 | 44.8 | |
| 8.6 | | 16.6 | 33.8 | 9.0 |
| 9.1 | | 16.8 | 58.5 | 9.5 |

## 6601—6660.

| mag. | 15ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 10.2 | 22 | 19.1 | 28.4 | |
| 9.6 | | 26.6 | 5.1 | |
| 8.8 | | 48.1 | 23.0 | |
| 9.4 | | 54.1 | 4.0 | |
| 9.7 | 23 | 3.1 | 50.4 | |
| 8.7 | | 3.6 | 3.8 | |
| 10.1 | | 7.1 | 34.0 | |
| 9.9 | | 16.6 | 54.6 | |
| 10.0 | | 21.1 | 8.1 | |
| 10.2 | | 21.6 | 13.8 | |
| 10.1 | | 21.6 | 4.2 | |
| 10.2 | | 31.1 | 49.2 | |
| 8.9 | | 37.6 | 15.0 | 9.5 |
| 10.2 | 24 | 2.6 | 22.5 | |
| 8.9 | | 2.6 | 1.3 | |
| 9.0 | | 26.6 | 52.0 | |
| 9.7 | | 29.1 | 35.6 | |
| 9.7 | | 57.6 | 35.0 | |
| 9.3 | 25 | 1.6 | 59.3 | |
| 9.4 | | 16.8 | 5.2 | |
| 8.6 | | 17.8 | 18.1 | |
| 10.0 | | 36.3 | 28.4 | |
| 10.2 | | 46.8 | 56.0 | |
| 9.4 | | 53.8 | 15.2 | |
| 10.1 | 26 | 1.3 | 50.8 | |
| 9.2 | | 8.3 | 54.2 | |
| 9.0 | | 8.8 | 54.8 | 9.5 |
| 9.7 | | 14.3 | 17.4 | |
| 10.2 | | 20.3 | 17.1 | |
| 9.6 | | 25.3 | 26.7 | |
| 8.4 | | 27.8 | 26.2 | 9.0 |
| 9.2 | | 51.8 | 22.5 | |
| 10.0 | | 53.3 | 48.7 | |
| 9.8 | | 56.3 | 17.9 | |
| 9.8 | 27 | 7.3 | 16.6 | |
| 9.7 | | 12.3 | 16.2 | |
| 9.7 | | 25.8 | 47.3 | |
| 9.6 | | 37.3 | 54.3 | |
| 9.6 | | 38.3 | 48.8 | |
| 10.2 | 28 | 0.8 | 6.7 | |
| 9.9 | | 6.3 | 45.9 | |
| 9.8 | | 11.8 | 5.6 | |
| 9.7 | | 13.3 | 31.4 | |
| 9.9 | | 17.3 | 24.1 | |
| 9.9 | | 22.8 | 32.1 | |
| 10.0 | | 36.3 | 5.2 | |
| 10.2 | | 36.3 | 46.2 | |
| 10.2 | | 45.3 | 27.9 | |
| 8.8 | | 47.8 | 24.6 | |
| 10.0 | 29 | 5.6 | 0.5 | |
| 9.6 | | 9.8 | 47.2 | |
| 9.4 | | 35.8 | 39.0 | |
| 9.8 | | 40.3 | 2.9 | |
| 9.7 | | 50.3 | 40.8 | |
| 8.2 | | 56.8 | 0.9 | 7.5 GSt |
| 9.9 | | 58.3 | 37.1 | |
| 9.6 | 30 | 3.3 | 47.0 | |
| 9.8 | | 17.8 | 11.2 | |
| 9.6 | | 23.8 | 45.8 | |
| 10.1 | | 48.3 | 38.3 | |



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## 6661—6720.

$15^{h.}$  −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·2 | 30 | 58·3 | 37·2 | |
| 10·1 | 31 | 2·3 | 12·2 | |
| 9·4 | | 37·3 | 27·0 | |
| 9·6 | | 43·3 | 37·4 | |
| 10·1 | | 44·3 | 18·9 | |
| 9·9 | | 48·3 | 42·5 | |
| 9·6 | | 52·3 | 37·0 | |
| 8·4 | | 58·8 | 41·5 | 9·0 |
| 10·1 | 32 | 14·8 | 49·0 | |
| 9·6 | | 29·3 | 6·4 | |
| 10·2 | | 42·3 | 25·1 | |
| 9·7 | 33 | 3·8 | 57·9 | |
| 10·1 | | 7·3 | 33·5 | |
| 10·2 | | 8·8 | 46·5 | |
| 9·2 | | 17·3 | 26·3 | |
| 8·1 | | 46·3 | 45·5 | 7·5 GS |
| 9·4 | 34 | 3·3 | 13·0 | |
| 10·2 | | 6·3 | 4·4 | |
| 7·5 | | 30·2 | 45·7 | 7·0 GS |
| 9·4 | | 34·7 | 2·8 | 9·5 |
| 8·4 | 35 | 6·2 | 7·1 | 9·0 |
| 9·4 | | 13·2 | 11·1 | |
| 9·0 | | 18·7 | 22·5 | |
| 9·4 | | 20·7 | 40·9 | |
| 10·0 | | 32·7 | 27·1 | |
| 9·6 | | 34·2 | 19·2 | |
| 8·5 | | 48·7 | 36·5 | 8·5 |
| 10·0 | | 52·2 | 22·5 | |
| 7·9 | | 54·2 | 34·6 | 8·0 |
| 9·8 | 36 | 9·7 | 45·0 | |
| 9·6 | | 12·2 | 44·5 | |
| 9·8 | | 28·7 | 19·7 | |
| 10·0 | | 28·7 | 50·1 | |
| 10·2 | | 40·2 | 55·2 | |
| 9·7 | | 53·2 | 54·3 | |
| 10·0 | 37 | 5·7 | 12·8 | |
| 9·6 | | 8·7 | 59·2 | |
| 9·6 | | 9·7 | 54·4 | |
| 9·7 | | 10·0 | 0·9 | |
| 10·0 | | 31·7 | 48·6 | |
| 9·7 | | 32·7 | 54·5 | |
| 9·9 | | 46·2 | 59·9 | |
| 9·0 | | 52·2 | 40·8 | |
| 8·7 | | 55·7 | 29·4 | 8·5 |
| 9·6 | | 56·7 | 30·1 | 10·0 |
| 10·2 | 38 | 1·2 | 55·7 | |
| 9·8 | | 3·7 | 51·8 | |
| 10·2 | | 6·4 | 39·7 | |
| 9·8 | | 20·7 | 52·6 | |
| 10·2 | | 23·7 | 26·4 | |
| 10·2 | | 26·2 | 27·5 | |
| 10·2 | | 29·4 | 35·2 | |
| 9·9 | | 33·7 | 36·1 | |
| 9·4 | | 35·7 | 59·9 | |
| 9·7 | | 39·2 | 55·3 | |
| 9·4 | | 43·5 | 11·9 | |
| 10·2 | | 48·4 | 1·6 | |
| 9·3 | 39 | 11·0 | 44·4 | |
| 8·3 | | 39·5 | 11·7 | 9·0 |
| 9·8 | | 50·0 | 2·9 | |

## 6721—6780.

$15^{h.}$  −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·4 | 40 | 18·5 | 31·9 | |
| 9·2 | | 20·0 | 24·1 | |
| 10·2 | | 26·2 | 58·7 | |
| 9·6 | | 31·0 | 24·3 | |
| 10·1 | | 50·5 | 28·9 | |
| 9·4 | | 51·5 | 4·9 | |
| 9·7 | 41 | 3·9 | 56·9 | |
| 10·2 | | 32·0 | 50·3 | |
| 9·6 | | 32·5 | 52·5 | |
| 10·1 | | 41·0 | 28·7 | |
| 9·3 | | 50·5 | 16·3 | |
| 10·1 | | 55·5 | 41·9 | |
| 10·2 | 42 | 4·1 | 22·6 | |
| 10·2 | | 8·1 | 0·9 | |
| 8·6 | | 10·7 | 58·3 | 9·0 |
| 9·4 | | 11·5 | 17·9 | |
| 10·1 | | 16·0 | 37·3 | |
| 9·4 | | 21·0 | 11·8 | |
| 10·2 | | 31·0 | 23·5 | |
| 9·7 | | 40·0 | 19·1 | |
| 8·8 | | 49·0 | 10·5 | 8·5 |
| 10·1 | | 49·5 | 12·7 | |
| 10·1 | 43 | 4·5 | 25·9 | |
| 9·8 | | 6·5 | 14·5 | |
| 9·9 | | 13·5 | 18·5 | |
| 10·2 | | 17·5 | 3·5 | |
| 9·2 | | 22·5 | 11·3 | |
| 10·4 | | 31·7 | 17·3 | |
| 10·0 | | 31·7 | 28·0 | |
| 10·4 | | 32·2 | 53·0 | |
| 10·4 | | 37·7 | 57·2 | |
| 9·8 | | 44·6 | 5·3 | |
| 10·1 | | 46·2 | 6·2 | |
| 10·4 | | 56·7 | 8·4 | |
| 10·4 | | 58·2 | 42·2 | |
| 8·5 | 44 | 0·9 | 53·9 | 8·5 |
| 10·1 | | 7·2 | 15·0 | |
| 9·0 | | 7·7 | 30·7 | |
| 9·6 | | 10·2 | 43·7 | |
| 10·4 | | 12·2 | 43·9 | |
| 9·2 | | 16·7 | 34·9 | |
| 9·6 | | 17·7 | 22·0 | |
| 9·8 | | 31·7 | 15·0 | |
| 10·2 | | 32·7 | 23·2 | |
| 10·0 | | 33·2 | 44·0 | |
| 10·4 | | 38·2 | 42·7 | |
| 10·4 | | 38·2 | 22·8 | |
| 10·2 | | 39·2 | 23·8 | |
| 10·4 | | 42·7 | 42·0 | |
| 10·2 | | 44·2 | 52·3 | |
| 9·8 | | 45·2 | 13·1 | |
| 10·4 | | 48·2 | 2·8 | |
| 10·4 | | 48·7 | 37·1 | |
| 10·4 | | 48·7 | 36·7 | |
| 8·2 | | 49·7 | 54·3 | 9·0 |
| 10·1 | | 52·7 | 12·3 | |
| 10·0 | | 53·2 | 50·4 | |
| 9·6 | | 59·7 | 44·1 | |
| 10·0 | 45 | 0·2 | 31·9 | |
| 9·2 | | 1·7 | 12·7 | |

## 6781—6840.

$15^{h.}$  −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 8·7 | 39·2 | |
| 9·8 | | 9·2 | 5·8 | |
| 10·4 | | 9·2 | 34·7 | |
| 10·0 | | 12·2 | 59·3 | |
| 10·1 | | 13·4 | 57·9 | |
| 9·8 | | 14·7 | 30·0 | |
| 10·0 | | 18·2 | 6·9 | |
| 10·4 | | 21·7 | 32·2 | |
| 10·2 | | 22·2 | 27·4 | |
| 10·1 | | 25·0 | 2·7 | |
| 10·2 | | 27·7 | 32·8 | |
| 10·4 | | 28·2 | 26·2 | |
| 10·4 | | 29·2 | 28·1 | |
| 10·4 | | 29·7 | 26·5 | |
| 10·1 | | 34·2 | 16·5 | |
| 10·0 | | 36·2 | 51·6 | |
| 9·6 | | 39·7 | 47·1 | |
| 8·7 | | 43·2 | 23·1 | |
| 10·2 | | 49·2 | 37·1 | |
| 10·1 | | 50·7 | 18·8 | |
| 10·2 | | 51·7 | 11·0 | |
| 9·8 | | 53·2 | 55·9 | |
| 9·6 | | 55·3 | 1·1 | |
| 9·8 | | 55·7 | 30·1 | |
| 10·0 | 46 | 0·7 | 25·5 | |
| 10·4 | | 5·7 | 29·3 | |
| 9·8 | | 10·7 | 15·7 | |
| 10·0 | | 15·2 | 49·9 | |
| 9·8 | | 21·2 | 27·4 | |
| 10·0 | | 21·7 | 28·8 | |
| 10·4 | | 24·7 | 35·2 | |
| 9·2 | | 25·2 | 4·8 | |
| 9·8 | | 30·7 | 53·0 | |
| 10·4 | | 31·0 | 1·3 | |
| 9·8 | | 34·7 | 14·6 | |
| 10·0 | | 35·9 | 58·5 | |
| 9·8 | | 48·7 | 56·1 | |
| 10·4 | | 50·2 | 12·8 | |
| 9·8 | | 54·2 | 44·9 | |
| 9·6 | | 56·2 | 57·9 | |
| 10·2 | | 57·2 | 39·7 | |
| 10·4 | | 59·2 | 48·7 | |
| 8·2 | 47 | 3·2 | 38·0 | 8·5 |
| 10·1 | | 5·7 | 52·8 | |
| 10·0 | | 11·2 | 47·7 | |
| 10·2 | | 18·7 | 15·8 | |
| 10·4 | | 19·2 | 16·5 | |
| 10·4 | | 20·2 | 14·6 | |
| 10·2 | | 22·2 | 15·2 | |
| 10·4 | | 33·7 | 49·7 | |
| 10·1 | | 38·7 | 57·6 | |
| 10·4 | | 42·2 | 13·9 | |
| 10·4 | | 47·2 | 18·5 | |
| 10·4 | | 49·2 | 16·9 | |
| 10·4 | | 52·0 | 14·1 | |
| 10·4 | | 54·7 | 40·1 | |
| 9·6 | | 55·7 | 22·6 | |
| 8·5 | | 57·7 | 42·3 | 9·5 |
| 10·2 | | 59·7 | 11·5 | |
| 9·6 | 48 | 0·2 | 25·2 | |

## 6841—6900.

$15^{h.}$  −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·1 | 48 | 1·2 | 13·8 | |
| 9·8 | | 3·2 | 18·8 | |
| 10·2 | | 8·2 | 46·1 | |
| 10·2 | | 8·2 | 13·3 | |
| 8·6 | | 18·2 | 51·7 | 8·2 |
| 9·8 | | 28·7 | 10·7 | |
| 10·2 | | 34·7 | 11·9 | |
| 10·4 | | 35·7 | 11·2 | |
| 10·1 | | 36·7 | 7·0 | |
| 10·4 | | 41·0 | 27·5 | |
| 9·2 | | 42·7 | 31·0 | |
| 10·0 | | 43·2 | 33·1 | |
| 9·8 | | 43·2 | 20·4 | |
| 10·1 | | 44·7 | 10·2 | |
| 10·0 | | 44·7 | 37·6 | |
| 10·4 | | 46·2 | 48·9 | |
| 10·4 | | 47·7 | 29·3 | |
| 10·4 | | 49·2 | 14·5 | |
| 9·5 | | 53·2 | 31·4 | |
| 10·0 | | 53·2 | 16·2 | |
| 8·9 | | 55·2 | 59·3 | |
| 9·8 | | 55·7 | 22·1 | |
| 9·8 | | 59·7 | 25·6 | |
| 10·0 | | 59·7 | 38·5 | |
| 10·0 | 49 | 1·2 | 41·3 | |
| 10·4 | | 4·7 | 59·7 | |
| 9·0 | | 6·2 | 36·0 | |
| 10·4 | | 8·2 | 55·7 | |
| 9·2 | | 10·2 | 25·0 | |
| 10·2 | | 12·7 | 4·9 | |
| 10·4 | | 14·7 | 50·7 | |
| 10·4 | | 18·2 | 3·1 | |
| 10·4 | | 19·8 | 28·5 | |
| 9·6 | | 24·2 | 33·3 | |
| 10·4 | | 24·8 | 52·0 | |
| 10·0 | | 29·7 | 32·0 | |
| 9·0 | | 30·2 | 52·6 | |
| 10·2 | | 31·2 | 12·8 | |
| 10·2 | | 31·7 | 52·5 | |
| 10·4 | | 32·2 | 23·6 | |
| 10·0 | | 36·2 | 17·5 | |
| 10·4 | | 37·2 | 46·7 | |
| 10·0 | | 42·2 | 50·0 | |
| 10·2 | | 44·7 | 57·0 | |
| 9·8 | | 51·7 | 57·1 | |
| 9·8 | | 53·5 | 1·7 | |
| 10·0 | | 53·5 | 0·3 | |
| 10·0 | | 55·7 | 41·4 | |
| 10·0 | | 57·7 | 19·1 | |
| 9·8 | | 59·2 | 11·5 | |
| 10·0 | | 59·7 | 30·0 | |
| 10·0 | 50 | 5·7 | 25·9 | |
| 10·0 | | 7·7 | 37·2 | |
| 10·0 | | 12·2 | 10·9 | |
| 10·4 | | 17·7 | 39·2 | |
| 10·2 | | 19·7 | 27·0 | |
| 10·0 | | 20·7 | 3·3 | |
| 9·0 | | 25·7 | 12·0 | 9·5 |
| 9·8 | | 28·2 | 41·6 | |
| 10·2 | | 28·7 | 23·8 | |

25 prec.

| h | m | α + (s) | δ − |
|---|---|---|---|
| 15 | 30 | 115 | 5·1 |
| | 40 | 117 | 4·8 |
| | 50 | 118 | 4·5 |
| 16 | 0 | 119 | 4·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 50 | 118 | 4·5 |
| 16 | 0 | 119 | 4·2 |
| | 10 | 120 | 3·9 |

## 6901—6960.

| mag. | $15^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 50 | 28·7 | 55·1 | |
| 9·8 | | 32·2 | 9·3 | |
| 10·4 | | 32·4 | 58·3 | |
| 9·6 | | 38·2 | 12·0 | |
| 9·8 | | 38·7 | 41·2 | |
| 9·8 | | 39·5 | 3·0 | |
| 10·4 | | 40·7 | 21·0 | |
| 10·2 | | 45·2 | 25·9 | |
| 9·5 | | 45·7 | 11·0 | |
| 9·8 | | 47·7 | 26·9 | |
| 10·2 | | 59·9 | 58·3 | |
| 10·4 | 51 | 1·2 | 50·3 | |
| 10·1 | | 10·2 | 28·6 | |
| 10·0 | | 10·2 | 23·9 | |
| 10·4 | | 11·6 | 15·2 | |
| 8·5 | | 11·7 | 16·3 | 8·0 G |
| 10·0 | | 12·7 | 12·5 | |
| 9·8 | | 12·7 | 13·8 | |
| 10·1 | | 15·2 | 34·8 | |
| 10·1 | | 17·2 | 32·0 | |
| 10·4 | | 20·6 | 17·0 | |
| 10·1 | | 22·2 | 30·7 | |
| 10·4 | | 23·2 | 3·3 | |
| 10·4 | | 25·7 | 9·4 | |
| 10·1 | | 29·7 | 34·9 | |
| 10·0 | | 34·7 | 16·6 | |
| 10·0 | | 37·7 | 33·9 | |
| 9·6 | | 39·7 | 55·9 | |
| 10·0 | | 44·7 | 54·2 | |
| 9·6 | | 46·2 | 9·5 | |
| 10·4 | | 49·2 | 39·9 | |
| 8·4 | | 50·2 | 39·1 | 9·0 |
| 9·8 | | 51·7 | 2·3 | |
| 10·0 | | 52·2 | 42·0 | |
| 10·0 | | 53·2 | 19·4 | |
| 10·4 | | 54·7 | 35·6 | |
| 10·4 | | 56·7 | 17·9 | |
| 10·4 | | 57·7 | 23·7 | |
| 10·2 | | 57·7 | 38·3 | |
| 10·1 | | 58·2 | 27·8 | |
| 9·8 | 52 | 3·2 | 16·3 | |
| 10·2 | | 3·2 | 49·0 | |
| 10·1 | | 5·2 | 36·6 | |
| 10·4 | | 6·9 | 27·1 | |
| 10·0 | | 8·2 | 49·6 | |
| 10·4 | | 10·2 | 9·1 | |
| 10·1 | | 11·7 | 34·3 | |
| 10·1 | | 11·7 | 33·4 | |
| 10·0 | | 19·7 | 5·3 | |
| 9·8 | | 22·2 | 21·5 | |
| 10·1 | | 23·7 | 8·2 | |
| 9·8 | | 33·2 | 21·4 | |
| 9·8 | | 33·7 | 52·4 | |
| 9·8 | | 48·2 | 3·1 | |
| 10·4 | | 48·2 | 51·6 | |
| 10·4 | | 54·2 | 5·8 | |
| 10·2 | | 59·7 | 30·0 | |
| 10·0 | 53 | 5·2 | 42·0 | |
| 10·4 | | 7·2 | 52·4 | |
| 10·4 | | 8·2 | 42·5 | |

## 6961—7020.

| mag. | $15^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 53 | 8·7 | 9·9 | |
| 9·8 | | 11·7 | 33·9 | |
| 10·0 | | 13·7 | 47·2 | |
| 10·4 | | 14·4 | 58·7 | |
| 10·2 | | 16·2 | 10·7 | |
| 10·1 | | 17·2 | 27·9 | |
| 10·2 | | 17·2 | 34·0 | |
| 10·0 | | 34·2 | 23·8 | |
| 10·4 | | 37·2 | 12·6 | |
| 10·0 | | 37·2 | 41·9 | |
| 9·8 | | 40·2 | 25·7 | |
| 10·4 | | 41·0 | 15·9 | |
| 10·4 | | 42·0 | 33·8 | |
| 10·4 | | 43·2 | 10·8 | |
| 10·1 | | 44·2 | 14·3 | |
| 9·2 | | 45·2 | 34·9 | |
| 10·1 | | 48·7 | 39·5 | |
| 10·2 | | 49·2 | 21·4 | |
| 10·4 | | 51·0 | 5·7 | |
| 10·2 | | 51·2 | 9·0 | |
| 10·4 | | 53·2 | 8·7 | |
| 10·4 | | 53·2 | 30·4 | |
| 10·4 | | 57·7 | 30·0 | |
| 10·4 | | 58·2 | 53·8 | |
| 9·6 | | 59·7 | 40·4 | |
| 10·4 | 54 | 4·2 | 13·1 | |
| 9·8 | | 11·2 | 58·9 | |
| 10·0 | | 11·7 | 14·1 | |
| 10·4 | | 12·2 | 56·9 | |
| 10·1 | | 13·7 | 5·7 | |
| 9·8 | | 14·7 | 45·7 | |
| 9·6 | | 17·2 | 45·7 | |
| 10·4 | | 17·7 | 15·7 | |
| 9·6 | | 18·7 | 50·0 | |
| 10·1 | | 19·7 | 20·8 | |
| 10·4 | | 20·7 | 20·9 | |
| 10·1 | | 21·7 | 43·5 | |
| 10·4 | | 24·2 | 58·4 | |
| 10·0 | | 26·7 | 23·8 | |
| 9·8 | | 27·2 | 40·1 | |
| 9·6 | | 29·2 | 51·5 | |
| 9·8 | | 32·2 | 28·9 | |
| 9·6 | | 32·7 | 3·0 | |
| 10·0 | | 37·9 | 59·8 | |
| 10·0 | | 39·7 | 18·3 | |
| 10·1 | | 40·7 | 14·0 | |
| 10·4 | | 48·7 | 53·0 | |
| 9·2 | | 50·0 | 0·3 | 9·0 |
| 9·0 | | 52·2 | 4·6 | 9·5 |
| 10·4 | | 54·2 | 14·1 | |
| 9·8 | 55 | 0·2 | 26·0 | |
| 10·4 | | 0·7 | 45·5 | |
| 9·8 | | 3·2 | 17·9 | |
| 10·4 | | 3·7 | 32·7 | |
| 9·8 | | 4·2 | 26·6 | |
| 10·4 | | 11·7 | 38·9 | |
| 10·0 | | 14·7 | 14·0 | |
| 8·2 | | 15·4 | 59·7 | GSt |
| 9·8 | | 15·7 | 4·2 | |
| 9·8 | | 15·7 | 30·6 | |

## 7021—7080.

| mag. | $15^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 55 | 16·7 | 36·2 | |
| 9·6 | | 17·2 | 54·1 | |
| 10·2 | | 19·7 | 47·2 | |
| 10·2 | | 20·7 | 44·2 | |
| 8·2 | | 22·2 | 27·8 | 8·0 |
| 10·4 | | 25·7 | 48·0 | |
| 10·2 | | 29·7 | 21·9 | |
| 10·2 | | 31·7 | 19·0 | |
| 10·4 | | 32·2 | 29·5 | |
| 10·4 | | 35·0 | 41·7 | |
| 10·2 | | 35·0 | 2·0 | |
| 10·4 | | 37·0 | 4·8 | |
| 10·4 | | 38·5 | 36·2 | |
| 9·8 | | 40·0 | 15·7 | |
| 10·4 | | 42·0 | 7·8 | |
| 10·4 | | 43·0 | 54·2 | |
| 10·0 | | 43·5 | 16·6 | |
| 10·0 | | 48·5 | 59·0 | |
| 10·0 | | 52·0 | 16·1 | |
| 9·8 | | 53·0 | 0·8 | |
| 10·1 | | 54·0 | 31·4 | |
| 8·2 | | 56·5 | 30·3 | 9·0 |
| 9·8 | | 58·0 | 52·4 | |
| 9·8 | | 59·0 | 10·5 | |
| 10·2 | 56 | 2·5 | 7·6 | |
| 10·4 | | 7·5 | 40·9 | |
| 9·4 | | 8·0 | 45·3 | |
| 10·0 | | 11·0 | 15·3 | |
| 10·0 | | 11·5 | 29·2 | |
| 10·4 | | 17·0 | 40·3 | |
| 8·6 | | 17·5 | 25·8 | 8·0 |
| 10·1 | | 19·0 | 19·8 | |
| 9·6 | | 19·5 | 54·5 | |
| 10·4 | | 23·5 | 45·1 | |
| 10·0 | | 25·5 | 53·4 | |
| 9·8 | | 29·0 | 53·0 | |
| 10·0 | | 31·0 | 56·4 | |
| 10·4 | | 35·5 | 49·6 | |
| 9·0 | | 40·0 | 29·8 | |
| 10·0 | | 43·0 | 43·2 | |
| 10·2 | | 43·5 | 51·2 | |
| 10·0 | | 47·0 | 34·0 | |
| 10·1 | | 48·5 | 59·6 | |
| 10·1 | | 48·5 | 32·5 | |
| 10·0 | | 53·5 | 31·6 | |
| 10·4 | | 58·5 | 46·2 | |
| 10·4 | | 59·0 | 45·8 | |
| 8·7 | 57 | 1·0 | 44·3 | 9·0 |
| 9·8 | | 1·5 | 39·2 | |
| 10·0 | | 3·0 | 34·9 | |
| 10·4 | | 3·5 | 36·0 | |
| 10·4 | | 3·5 | 49·9 | |
| 9·0 | | 7·0 | 55·8 | |
| 9·8 | | 10·0 | 43·5 | |
| 10·4 | | 10·0 | 21·4 | |
| 9·0 | | 11·0 | 25·4 | |
| 10·4 | | 20·0 | 42·0 | |
| 9·6 | | 23·0 | 11·0 | |
| 7·5 | | 24·0 | 50·9 | 6·5 GSct |
| 10·0 | | 25·5 | 6·7 | |

## 7081—7140.

| mag. | $15^h$–$16^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 57 | 27·0 | 50·2 | |
| 10·4 | | 27·5 | 2·9 | |
| 10·4 | | 31·5 | 4·3 | |
| 10·2 | | 32·0 | 7·2 | |
| 9·2 | | 35·5 | 20·5 | |
| 10·0 | | 38·0 | 55·5 | |
| 9·8 | | 38·8 | 59·7 | |
| 10·4 | | 41·8 | 5·9 | |
| 10·4 | | 45·5 | 28·2 | |
| 10·4 | | 45·5 | 27·9 | |
| 10·0 | | 47·0 | 17·9 | |
| 10·2 | | 53·0 | 40·5 | |
| 10·4 | | 58·0 | 13·7 | |
| 10·4 | 58 | 0·5 | 14·3 | |
| 9·5 | | 1·5 | 55·1 | |
| 10·4 | | 7·0 | 34·1 | |
| 8·9 | | 8·0 | 38·8 | 8·5 |
| 9·6 | | 11·0 | 21·2 | |
| 9·5 | | 14·0 | 22·7 | |
| 9·2 | | 15·5 | 40·9 | 9·0 |
| 10·2 | | 21·5 | 32·4 | |
| 10·4 | | 24·5 | 2·6 | |
| 9·5 | | 25·5 | 17·7 | |
| 10·4 | | 30·0 | 1·4 | |
| 10·4 | | 31·0 | 4·6 | |
| 9·8 | | 32·3 | 2·1 | |
| 10·0 | | 33·5 | 10·7 | |
| 10·4 | | 43·0 | 18·1 | |
| 10·4 | | 54·5 | 23·6 | |
| 9·3 | | 56·5 | 11·9 | |
| 10·2 | | 56·5 | 53·8 | |
| 10·4 | 59 | 0·0 | 19·8 | |
| 10·2 | | 5·5 | 48·8 | |
| 7·8 | | 9·5 | 43·3 | 6·5 GSt |
| 10·4 | | 10·0 | 33·3 | |
| 9·6 | | 10·0 | 16·6 | |
| 10·4 | | 12·0 | 46·8 | |
| 10·0 | | 12·0 | 44·2 | |
| 10·2 | | 13·7 | 0·9 | |
| 10·4 | | 14·0 | 41·2 | |
| 9·0 | | 15·5 | 42·4 | 9·5 |
| 10·4 | | 20·0 | 48·4 | |
| 10·0 | | 23·0 | 34·7 | |
| 7·8 | | 23·0 | 37·1 | 8·0 |
| 10·4 | | 25·5 | 10·9 | |
| 10·4 | | 26·5 | 55·4 | |
| 9·3 | | 28·5 | 23·0 | |
| 10·0 | | 30·0 | 49·2 | |
| 10·1 | | 32·0 | 51·8 | |
| 9·6 | | 38·0 | 29·5 | |
| 10·4 | | 42·0 | 10·8 | |
| 9·0 | | 42·0 | 33·5 | |
| 9·8 | | 43·5 | 33·9 | |
| 10·4 | | 44·0 | 52·0 | |
| 10·0 | | 46·0 | 18·1 | |
| 10·1 | | 52·0 | 23·4 | |
| 10·0 | | 55·0 | 50·1 | |
| 10·0 | | 55·5 | 42·1 | |
| 10·2 | 0 | 0·0 | 24·8 | |
| 10·0 | | 0·0 | 25·8 | |



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**7141—7200.**

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 0 | 2·0 | 25·4 | |
| 10·2 | | 5·5 | 13·7 | |
| 10·4 | | 6·8 | 3·0 | |
| 10·4 | | 7·0 | 31·9 | |
| 10·4 | | 7·5 | 43·2 | |
| 10·2 | | 8·0 | 38·6 | |
| 10·0 | | 9·0 | 38·1 | |
| 10·0 | | 13·0 | 38·9 | |
| 9·6 | | 13·5 | 15·3 | |
| 10·4 | | 16·5 | 23·5 | |
| 9·6 | | 21·0 | 16·2 | |
| 9·8 | | 23·5 | 55·8 | |
| 9·8 | | 29·8 | 58·8 | |
| 9·8 | | 30·3 | 59·4 | |
| 10·4 | | 31·0 | 32·0 | |
| 10·4 | | 32·0 | 33·4 | |
| 9·8 | | 36·0 | 31·5 | |
| 10·4 | | 36·5 | 48·1 | |
| 7·9 | | 36·5 | 0·8 | 7·5 GS |
| 9·8 | | 39·5 | 25·4 | |
| 9·8 | | 41·5 | 12·9 | |
| 7·6 | | 46·5 | 44·3 | 7·5 GSt |
| 9·6 | | 47·5 | 49·9 | |
| 10·4 | | 53·5 | 10·2 | |
| 10·4 | | 55·5 | 1·0 | |
| 10·4 | | 56·0 | 41·8 | |
| 10·4 | | 59·0 | 9·5 | |
| 10·2 | 1 | 1·0 | 2·0 | |
| 10·2 | | 9·0 | 3·7 | |
| 10·4 | | 9·5 | 16·0 | |
| 8·5 | | 10·5 | 18·8 | |
| 10·4 | | 11·5 | 58·8 | |
| 10·2 | | 14·5 | 18·7 | |
| 10·4 | | 15·5 | 51·0 | |
| 8·1 | | 18·0 | 55·2 | 8·4 G |
| 10·4 | | 18·5 | 28·4 | |
| 10·4 | | 21·0 | 36·9 | |
| 9·6 | | 22·5 | 0·2 | |
| 10·0 | | 23·5 | 47·0 | |
| 10·4 | | 27·4 | 2·6 | |
| 9·6 | | 30·0 | 23·2 | |
| 9·8 | | 33·5 | 42·0 | |
| 10·4 | | 36·5 | 5·8 | |
| 9·3 | | 36·5 | 48·8 | |
| 9·8 | | 40·0 | 33·6 | |
| 10·4 | | 40·0 | 6·3 | |
| 10·1 | | 41·5 | 20·4 | |
| 10·1 | | 42·5 | 45·8 | |
| 10·0 | | 45·0 | 10·7 | |
| 10·4 | | 46·1 | 58·8 | |
| 10·4 | | 46·5 | 11·8 | |
| 10·0 | | 46·5 | 39·4 | |
| 10·4 | | 52·5 | 12·3 | |
| 9·8 | | 57·0 | 37·0 | |
| 9·6 | 2 | 1·5 | 40·9 | |
| 10·4 | | 2·0 | 23·5 | |
| 9·0 | | 3·5 | 30·1 | 8·2 |
| 10·4 | | 6·0 | 0·6 | |
| 9·3 | | 8·5 | 39·6 | |
| 9·8 | | 9·5 | 26·0 | |

**7201—7260.**

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 2 | 10·2 | 1·0 | |
| 9·6 | | 11·5 | 32·9 | |
| 10·4 | | 15·0 | 49·0 | |
| 10·1 | | 15·5 | 7·4 | |
| 10·2 | | 23·5 | 17·6 | |
| 10·2 | | 36·5 | 45·1 | |
| 9·0 | | 38·5 | 18·2 | |
| 10·0 | | 39·0 | 44·7 | |
| 10·0 | | 42·0 | 21·0 | |
| 10·4 | | 43·0 | 45·4 | |
| 10·4 | | 48·5 | 49·4 | |
| 10·2 | | 52·0 | 31·1 | |
| 10·4 | | 53·0 | 47·5 | |
| 10·4 | | 55·0 | 43·7 | |
| 10·4 | | 57·5 | 18·0 | |
| 9·8 | | 58·0 | 43·4 | |
| 10·4 | 3 | 3·5 | 49·4 | |
| 9·6 | | 5·5 | 47·2 | |
| 9·6 | | 6·0 | 1·7 | |
| 10·0 | | 8·5 | 28·4 | |
| 10·2 | | 10·0 | 20·9 | |
| 10·2 | | 10·0 | 7·2 | |
| 10·1 | | 10·5 | 15·6 | |
| 10·4 | | 11·0 | 20·6 | |
| 10·4 | | 13·0 | 0·9 | |
| 9·4 | | 13·0 | 16·2 | |
| 10·4 | | 15·0 | 25·0 | |
| 10·1 | | 17·0 | 4·2 | |
| 7·0 | | 26·0 | 12·8 | 6·5 GSc |
| 10·4 | | 28·5 | 28·0 | |
| 9·8 | | 36·0 | 47·9 | |
| 9·6 | | 37·5 | 42·2 | |
| 10·1 | | 45·0 | 56·0 | |
| 10·4 | | 47·5 | 56·0 | |
| 10·4 | | 51·0 | 17·9 | |
| 10·1 | | 52·0 | 44·9 | |
| 10·0 | | 55·0 | 26·8 | |
| 10·0 | 4 | 0·0 | 20·9 | |
| 10·4 | | 0·0 | 46·4 | |
| 8·2 | | 2·5 | 25·2 | 8·5 |
| 9·8 | | 10·0 | 6·8 | |
| 10·0 | | 11·0 | 18·3 | |
| 9·8 | | 11·7 | 0·8 | |
| 8·8 | | 16·0 | 1·3 | |
| 8·6 | | 18·5 | 57·7 | 9·0 |
| 10·4 | | 22·0 | 0·2 | |
| 10·2 | | 24·5 | 47·0 | |
| 10·4 | | 25·0 | 22·0 | |
| 10·0 | | 26·5 | 52·1 | |
| 10·2 | | 26·5 | 42·9 | |
| 9·8 | | 28·0 | 26·0 | |
| 10·0 | | 31·0 | 43·4 | |
| 10·2 | | 31·0 | 36·8 | |
| 10·1 | | 34·2 | 2·3 | |
| 10·4 | | 35·5 | 45·6 | |
| 9·6 | | 36·0 | 29·0 | |
| 8·7 | | 38·0 | 6·6 | |
| 10·4 | | 40·0 | 30·0 | |
| 10·0 | | 40·0 | 13·6 | |
| 10·2 | | 41·5 | 47·7 | |

**7261—7320.**

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·4 | 4 | 43·0 | 40·1 | |
| 10·4 | | 45·0 | 37·8 | |
| 9·4 | | 46·0 | 46·0 | |
| 10·4 | | 47·0 | 31·8 | |
| 10·2 | | 47·0 | 7·4 | |
| 9·4 | | 53·0 | 6·2 | |
| 9·8 | | 54·5 | 38·0 | |
| 10·2 | | 55·0 | 1·4 | |
| 9·6 | | 55·5 | 28·2 | |
| 9·8 | | 56·0 | 9·6 | |
| 10·4 | | 56·5 | 23·7 | |
| 8·6 | 5 | 2·0 | 21·3 | 8·5 G |
| 10·0 | | 3·5 | 28·0 | |
| 10·4 | | 4·0 | 37·0 | |
| 10·0 | | 5·0 | 50·9 | |
| 8·3 | | 5·0 | 37·4 | 8·5 |
| 10·4 | | 10·0 | 2·9 | |
| 10·4 | | 10·5 | 48·7 | |
| 10·4 | | 16·0 | 43·8 | |
| 10·4 | | 16·5 | 43·0 | |
| 10·4 | | 22·0 | 32·0 | |
| 10·4 | | 23·5 | 0·2 | |
| 9·6 | | 24·5 | 33·2 | |
| 10·4 | | 24·5 | 45·8 | |
| 9·6 | | 25·0 | 24·2 | |
| 10·0 | | 30·5 | 45·9 | |
| 10·0 | | 35·0 | 16·5 | |
| 10·4 | | 35·5 | 55·9 | |
| 10·1 | | 37·0 | 31·1 | |
| 10·4 | | 41·0 | 29·5 | |
| 10·4 | | 41·0 | 56·0 | |
| 10·4 | | 41·5 | 53·6 | |
| 10·0 | | 43·5 | 46·1 | |
| 9·8 | | 45·0 | 2·9 | |
| 9·6 | | 47·0 | 27·9 | |
| 9·2 | | 54·5 | 44·6 | |
| 10·1 | | 55·0 | 10·9 | |
| 10·0 | 6 | 3·2 | 59·3 | |
| 9·5 | | 3·5 | 6·3 | |
| 10·0 | | 6·0 | 42·6 | |
| 9·6 | | 7·5 | 8·1 | |
| 9·8 | | 8·8 | 1·1 | |
| 10·2 | | 13·0 | 37·7 | |
| 10·2 | | 19·5 | 15·6 | |
| 10·4 | | 23·3 | 15·6 | |
| 9·4 | | 23·5 | 6·2 | |
| 9·0 | | 27·5 | 58·0 | 9·5 |
| 10·4 | | 28·3 | 46·1 | |
| 10·0 | | 29·5 | 15·0 | |
| 8·7 | | 33·5 | 58·0 | 9·5 |
| 10·4 | | 34·0 | 22·7 | |
| 10·4 | | 35·0 | 26·5 | |
| 10·4 | | 36·0 | 20·5 | |
| 10·2 | | 36·3 | 58·2 | |
| 10·2 | | 37·5 | 23·0 | |
| 10·0 | | 38·5 | 54·1 | |
| 10·4 | | 41·5 | 43·8 | |
| 10·4 | | 43·5 | 3·9 | |
| 10·4 | | 49·0 | 38·9 | |
| 10·4 | | 52·5 | 48·2 | |

**7321—7380.**

| mag. | 16h. m | s | −55° ′ |
|---|---|---|---|
| 10·4 | 6 | 55·0 | 57·9 |
| 10·1 | | 58·5 | 25·1 |
| 10·4 | | 59·4 | 50·0 |
| 10·4 | 7 | 0·9 | 4·9 |
| 10·4 | | 3·4 | 48·1 |
| 10·4 | | 3·9 | 9·7 |
| 9·6 | | 5·9 | 42·6 |
| 9·2 | | 11·9 | 24·1 |
| 9·8 | | 11·9 | 43·0 |
| 10·2 | | 12·4 | 3·6 |
| 10·2 | | 15·9 | 30·3 |
| 9·6 | | 21·4 | 7·4 |
| 10·1 | | 27·4 | 50·1 |
| 10·0 | | 32·4 | 4·5 |
| 10·0 | | 34·4 | 6·9 |
| 10·0 | | 34·9 | 24·0 |
| 9·8 | | 36·9 | 53·2 |
| 10·0 | | 38·9 | 56·7 |
| 10·1 | | 41·9 | 42·8 |
| 10·4 | | 43·4 | 59·4 |
| 10·4 | | 51·9 | 3·5 |
| 10·4 | | 53·4 | 6·7 |
| 10·0 | | 54·9 | 6·9 |
| 10·4 | | 57·0 | 15·5 |
| 9·5 | | 58·9 | 15·3 |
| 10·2 | 8 | 1·4 | 3·3 |
| 10·0 | | 5·9 | 5·3 |
| 8·9 | | 6·9 | 12·3 |
| 10·4 | | 6·9 | 36·7 |
| 10·4 | | 7·4 | 54·0 |
| 10·4 | | 7·9 | 18·3 |
| 10·4 | | 11·9 | 33·3 |
| 8·7 | | 13·4 | 47·6 |
| 9·6 | | 13·9 | 48·1 |
| 10·1 | | 17·9 | 49·3 |
| 8·9 | | 17·9 | 11·5 |
| 10·4 | | 23·2 | 4·3 |
| 10·4 | | 23·7 | 5·0 |
| 10·0 | | 23·9 | 1·6 |
| 10·1 | | 24·7 | 53·9 |
| 10·4 | | 24·8 | 58·4 |
| 10·4 | | 26·8 | 10·6 |
| 10·1 | | 29·7 | 36·6 |
| 10·0 | | 33·2 | 30·1 |
| 10·4 | | 34·7 | 32·9 |
| 9·8 | | 36·7 | 13·9 |
| 10·2 | | 38·7 | 19·4 |
| 10·2 | | 39·7 | 49·1 |
| 9·6 | | 40·7 | 5·6 |
| 10·4 | | 41·2 | 4·7 |
| 10·4 | | 41·2 | 4·9 |
| 9·8 | | 41·7 | 27·3 |
| 9·8 | | 41·7 | 11·0 |
| 9·6 | | 51·7 | 0·0 |
| 9·2 | | 52·2 | 38·2 |
| 9·8 | | 53·2 | 47·7 |
| 9·6 | | 56·0 | 57·9 |
| 10·4 | 9 | 0·2 | 38·5 |
| 10·4 | | 3·2 | 9·3 |
| 10·2 | | 5·7 | 19·7 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 119 | 4·2 |
| | 10 | 120 | 3·9 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 119 | 4·2 |
| | 10 | 120 | 3·9 |
| | 20 | 121 | 3·5 |
| | 30 | 122 | 3·2 |

## 7381—7440.

| mag. | 16h. m | s | −55° ′ |
|---|---|---|---|
| 10·4 | 9 | 11·7 | 24·3 |
| 10·4 | | 14·2 | 36·6 |
| 10·4 | | 14·2 | 28·6 |
| 9·6 | | 14·7 | 27·9 |
| 9·0 | | 15·7 | 11·7 |
| 10·4 | | 16·2 | 14·1 |
| 10·4 | | 18·2 | 10·1 |
| 8·8 | | 23·2 | 34·3 |
| 10·2 | | 30·7 | 1·1 |
| 9·6 | | 31·2 | 34·7 |
| 10·0 | | 32·7 | 19·1 |
| 8·8 | | 33·4 | 0·7 |
| 9·6 | | 39·2 | 14·5 |
| 9·8 | | 40·7 | 15·2 |
| 9·6 | | 42·7 | 17·3 |
| 10·0 | | 43·7 | 45·1 |
| 10·4 | | 46·2 | 11·9 |
| 10·0 | | 49·2 | 27·9 |
| 10·4 | | 49·8 | 52·6 |
| 9·6 | | 50·7 | 57·3 |
| 10·4 | | 51·8 | 43·0 |
| 9·8 | | 53·2 | 19·7 |
| 10·1 | | 54·7 | 38·7 |
| 10·2 | | 55·7 | 5·5 |
| 10·2 | | 56·7 | 49·2 |
| 10·4 | | 56·7 | 41·5 |
| 9·8 | | 58·2 | 3·4 |
| 10·4 | | 58·7 | 18·7 |
| 10·4 | 10 | 0·7 | 24·5 |
| 10·4 | | 1·6 | 57·2 |
| 10·4 | | 3·7 | 48·1 |
| 10·2 | | 5·2 | 1·4 |
| 10·2 | | 5·7 | 29·0 |
| 10·4 | | 8·2 | 32·1 |
| 9·2 | | 12·7 | 38·5 |
| 10·4 | | 12·7 | 32·3 |
| 10·4 | | 16·2 | 13·0 |
| 9·6 | | 19·2 | 46·1 |
| 10·2 | | 19·2 | 18·1 |
| 9·6 | | 22·7 | 40·5 |
| 10·4 | | 23·2 | 16·1 |
| 9·8 | | 25·7 | 4·5 |
| 9·8 | | 25·7 | 7·0 |
| 10·0 | | 30·7 | 36·4 |
| 9·0 | | 33·2 | 43·7 |
| 10·4 | | 33·2 | 1·7 |
| 9·6 | | 34·7 | 7·8 |
| 9·8 | | 36·7 | 13·8 |
| 10·0 | | 41·7 | 50·1 |
| 10·4 | | 46·7 | 35·9 |
| 10·4 | | 46·7 | 16·1 |
| 10·4 | | 50·2 | 15·0 |
| 9·8 | | 53·2 | 18·9 |
| 10·4 | | 53·2 | 58·7 |
| 10·0 | | 56·7 | 26·9 |
| 10·0 | | 57·7 | 41·3 |
| 10·4 | | 57·9 | 0·3 |
| 10·4 | | 58·2 | 49·9 |
| 9·2 | | 58·2 | 28·7 |
| 10·2 | 11 | 1·1 | 1·2 |

## 7441—7500.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 3·1 | 14·3 | |
| 10·4 | | 3·6 | 40·9 | ? |
| 10·1 | | 4·1 | 54·4 | |
| 10·2 | | 4·3 | 2·2 | |
| 10·0 | | 10·6 | 14·8 | |
| 9·2 | | 13·1 | 44·0 | |
| 10·1 | | 13·1 | 49·5 | |
| 10·0 | | 17·1 | 48·9 | |
| 10·2 | | 18·1 | 31·9 | |
| 10·0 | | 20·1 | 40·5 | |
| 9·2 | | 25·1 | 30·9 | |
| 10·4 | | 27·6 | 15·7 | |
| 10·2 | | 27·6 | 29·9 | |
| 10·4 | | 29·6 | 3·9 | |
| 9·8 | | 32·1 | 29·9 | : |
| 10·4 | | 37·6 | 2·7 | |
| 10·2 | | 38·1 | 47·5 | |
| 9·8 | | 40·1 | 2·8 | |
| 10·4 | | 43·6 | 4·9 | |
| 10·2 | | 46·6 | 32·9 | |
| 9·8 | | 47·6 | 52·9 | |
| 7·6 | | 52·1 | 14·8 | 8·0 GSt |
| 10·0 | | 57·6 | 10·1 | |
| 10·0 | | 59·6 | 9·5 | |
| 10·1 | 12 | 5·6 | 14·9 | |
| 10·4 | | 13·6 | 53·1 | |
| 9·6 | | 14·8 | 28·8 | |
| 10·4 | | 19·6 | 47·9 | |
| 10·0 | | 22·1 | 32·3 | |
| 8·0 | | 22·1 | 55·3 | 8·5 |
| 10·4 | | 25·1 | 20·9 | |
| 10·2 | | 28·1 | 10·3 | |
| 9·6 | | 31·1 | 44·1 | |
| 10·4 | | 33·1 | 20·0 | |
| 10·4 | | 33·1 | 19·1 | |
| 10·4 | | 33·2 | 1·8 | |
| 10·4 | | 38·1 | 13·6 | |
| 10·4 | | 42·9 | 1·5 | |
| 9·6 | | 50·6 | 54·9 | |
| 10·0 | | 51·6 | 6·9 | |
| 10·4 | | 51·6 | 0·8 | |
| 9·5 | | 52·1 | 49·7 | |
| 9·8 | | 52·6 | 15·1 | |
| 10·0 | | 55·1 | 36·4 | |
| 10·4 | 13 | 2·0 | 55·1 | |
| 10·0 | | 3·0 | 27·1 | |
| 10·0 | | 3·0 | 14·7 | |
| 10·1 | | 5·5 | 15·1 | |
| 10·2 | | 9·4 | 51·0 | |
| 10·4 | | 16·0 | 34·5 | |
| 10·0 | | 21·5 | 42·5 | |
| 10·0 | | 26·0 | 44·1 | |
| 10·0 | | 26·5 | 41·7 | |
| 9·8 | | 29·5 | 8·2 | |
| 10·4 | | 36·0 | 50·1 | |
| 10·1 | | 49·0 | 24·2 | |
| 10·4 | | 53·5 | 5·3 | |
| 7·4 | | 59·5 | 9·4 | 8·0 G |
| 10·4 | | 59·5 | 37·3 | |
| 9·8 | 14 | 5·0 | 4·9 | |

## 7501—7560.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 14 | 7·0 | 31·9 | |
| 7·7 | | 10·0 | 45·6 | G |
| 10·2 | | 13·5 | 56·2 | |
| 10·0 | | 14·5 | 32·5 | |
| 9·8 | | 15·0 | 11·8 | |
| 9·8 | | 18·5 | 42·1 | |
| 10·4 | | 19·0 | 4·3 | |
| 10·0 | | 19·5 | 3·9 | |
| 10·4 | | 21·0 | 25·9 | |
| 10·4 | | 21·5 | 27·7 | |
| 10·0 | | 23·0 | 26·4 | |
| 10·0 | | 26·0 | 6·7 | |
| 9·8 | | 34·5 | 56·5 | |
| 10·0 | | 37·4 | 26·8 | |
| 10·1 | | 39·0 | 43·9 | |
| 10·2 | | 39·5 | 22·8 | |
| 10·1 | | 41·5 | 26·0 | |
| 10·4 | | 42·5 | 9·1 | |
| 9·8 | | 43·0 | 17·9 | |
| 9·6 | | 50·4 | 19·7 | |
| 10·2 | | 50·4 | 11·8 | |
| 9·2 | | 53·9 | 48·0 | |
| 9·6 | | 54·4 | 16·9 | |
| 10·1 | | 55·4 | 42·1 | |
| 9·6 | | 56·4 | 19·9 | |
| 10·0 | 15 | 0·4 | 30·9 | |
| 10·1 | | 4·4 | 41·9 | |
| 9·6 | | 4·9 | 46·7 | |
| 10·0 | | 5·4 | 45·9 | |
| 10·4 | | 6·4 | 35·0 | |
| 10·1 | | 18·4 | 20·5 | |
| 10·0 | | 29·4 | 36·5 | |
| 10·0 | | 45·9 | 9·1 | |
| 10·2 | | 51·4 | 48·7 | |
| 10·0 | | 52·4 | 8·5 | |
| 8·7 | | 56·9 | 18·9 | 9·0 |
| 10·0 | 16 | 2·4 | 28·9 | |
| 9·3 | | 3·9 | 22·5 | |
| 10·1 | | 7·4 | 8·7 | : |
| 7·8 | | 10·4 | 31·8 | 8·5 G |
| 10·2 | | 11·4 | 28·7 | |
| 10·0 | | 12·9 | 23·9 | |
| 10·2 | | 25·9 | 18·7 | |
| 9·6 | | 29·0 | 43·0 | |
| 9·8 | | 33·8 | 57·8 | |
| 9·8 | | 43·5 | 4·3 | |
| 9·4 | 17 | 1·5 | 36·0 | |
| 9·8 | | 10·0 | 52·7 | |
| 9·8 | | 16·0 | 7·1 | |
| 8·8 | | 17·5 | 58·9 | |
| 9·7 | | 41·0 | 20·9 | |
| 9·8 | | 49·5 | 57·1 | |
| 9·1 | | 49·5 | 12·9 | |
| 8·6 | | 55·5 | 52·0 | 9·0 |
| 9·1 | 18 | 1·5 | 53·6 | |
| 9·8 | | 10·0 | 8·0 | |
| 9·8 | | 15·5 | 9·3 | |
| 8·5 | | 21·5 | 37·6 | 9·5 |
| 9·2 | | 41·0 | 3·5 | |
| 9·5 | | 45·5 | 21·0 | 9·5 |

## 7561—7620.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·5 | 18 | 58·0 | 33·8 | |
| 8·6 | 19 | 2·0 | 13·4 | 9·0 |
| 9·2 | | 45·5 | 18·4 | |
| 9·2 | 20 | 0·0 | 13·9 | 9·0 |
| 9·8 | | 23·5 | 25·1 | |
| 9·8 | | 31·0 | 6·9 | |
| 9·8 | 21 | 1·5 | 52·8 | |
| 9·8 | | 3·0 | 53·2 | |
| 8·0 | | 14·0 | 39·7 | 8·3 |
| 9·8 | | 23·0 | 56·0 | |
| 9·5 | | 23·5 | 9·5 | |
| 9·4 | | 25·5 | 0·9 | |
| 8·8 | | 37·5 | 23·1 | 8·8 |
| 9·6 | | 43·0 | 14·8 | |
| 9·8 | 22 | 7·0 | 51·5 | |
| 9·3 | | 7·0 | 8·9 | |
| 9·8 | | 9·5 | 51·1 | |
| 9·8 | | 15·0 | 16·5 | |
| 9·8 | | 28·0 | 12·1 | |
| 9·2 | | 29·7 | 0·0 | |
| 9·6 | | 33·5 | 33·5 | |
| 9·3 | | 56·5 | 39·7 | 8·8 |
| 9·8 | 23 | 10·6 | 29·3 | |
| 9·6 | | 12·5 | 3·4 | |
| 9·8 | | 40·0 | 39·8 | |
| 9·8 | | 44·3 | 57·9 | |
| 9·6 | 24 | 4·0 | 27·1 | |
| 9·6 | | 12·0 | 15·3 | |
| 9·5 | | 22·0 | 34·3 | |
| 9·8 | | 22·5 | 50·1 | |
| 9·8 | | 38·0 | 17·5 | |
| 9·3 | | 40·5 | 20·0 | |
| 9·5 | | 41·0 | 24·1 | |
| 9·3 | | 52·8 | 58·2 | |
| 8·6 | | 53·0 | 30·7 | 8·5 |
| 8·6 | 25 | 22·0 | 17·9 | 8·8 |
| 9·8 | | 40·0 | 56·1 | |
| 8·2 | | 40·5 | 51·7 | 8·0 |
| 9·6 | | 48·0 | 31·4 | |
| 9·8 | | 56·0 | 7·5 | |
| 9·6 | | 58·0 | 50·5 | |
| 9·0 | 26 | 9·0 | 17·6 | 9·0 |
| 9·8 | | 13·0 | 12·9 | |
| 9·8 | | 23·0 | 14·1 | |
| 9·2 | | 25·5 | 42·1 | |
| 9·8 | | 28·0 | 32·3 | |
| 8·9 | | 40·0 | 40·1 | 8·5 |
| 9·2 | | 47·5 | 50·2 | |
| 9·8 | | 50·0 | 46·9 | |
| 9·5 | 27 | 2·5 | 17·4 | |
| 9·6 | | 11·5 | 22·9 | |
| 9·4 | | 15·5 | 17·6 | |
| 9·6 | | 17·5 | 35·0 | |
| 9·5 | | 20·5 | 56·3 | |
| 9·4 | | 22·0 | 32·0 | |
| 9·4 | | 32·0 | 11·8 | 8·5 |
| 9·4 | | 32·4 | 1·2 | |
| 9·5 | | 36·5 | 37·0 | |
| 9·6 | | 42·5 | 3·8 | |
| 9·8 | | 48·5 | 11·4 | |



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## 7621—7680.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8.9 | 27 | 50.5 | 51.4 | |
| 9.3 | 28 | 6.0 | 31.5 | |
| 9.6 | | 6.5 | 44.6 | |
| 9.6 | | 27.0 | 38.1 | |
| 9.8 | | 37.5 | 0.1 | |
| 9.4 | | 50.0 | 17.6 | |
| 9.8 | | 51.5 | 59.9 | |
| 9.8 | | 52.5 | 40.9 | |
| 8.3 | | 55.1 | 58.2 | 8.7 |
| 9.8 | 29 | 6.5 | 29.1 | |
| 9.6 | | 7.0 | 13.6 | |
| 9.4 | | 15.5 | 40.4 | |
| 9.6 | | 25.5 | 11.5 | |
| 9.6 | | 41.5 | 16.4 | |
| 9.6 | | 50.0 | 47.8 | |
| 9.6 | 30 | 1.5 | 8.8 | |
| 9.7 | | 27.5 | 30.0 | |
| 7.9 | | 30.5 | 59.5 | 8.5 G |
| 8.8 | | 30.5 | 28.2 | |
| 9.8 | | 41.0 | 16.8 | |
| 9.8 | 31 | 6.5 | 38.5 | |
| 9.5 | | 7.5 | 39.2 | |
| 9.0 | | 11.5 | 3.0 | 8.5 |
| 9.7 | | 25.5 | 7.8 | |
| 9.4 | | 28.0 | 1.6 | |
| 9.8 | | 31.5 | 0.1 | |
| 9.1 | | 35.5 | 14.3 | |
| 9.6 | | 48.0 | 11.2 | 9.0 |
| 9.8 | | 50.0 | 24.7 | |
| 9.0 | 32 | 2.5 | 18.6 | |
| 9.3 | | 10.5 | 8.1 | 8.5 |
| 9.8 | | 11.0 | 59.7 | |
| 8.1 | | 17.5 | 35.9 | 9.0 GS |
| 9.5 | | 21.5 | 29.3 | |
| 9.7 | | 23.5 | 28.9 | |
| 9.6 | | 26.0 | 20.1 | |
| 9.5 | | 28.5 | 44.8 | |
| 9.6 | | 36.0 | 25.1 | |
| 9.0 | | 44.0 | 56.1 | 9.5 |
| 9.4 | 33 | 5.0 | 49.1 | 9.0 |
| 9.8 | | 9.0 | 50.8 | |
| 9.8 | | 21.5 | 38.2 | |
| 9.4 | | 28.5 | 0.5 | |
| 9.2 | | 29.5 | 12.9 | 9.0 |
| 9.5 | | 35.5 | 29.1 | |
| 9.5 | | 36.0 | 6.3 | |
| 9.8 | | 42.5 | 56.9 | |
| 9.8 | | 50.2 | 50.4 | 9.5 |
| 9.5 | | 55.5 | 44.4 | |
| 9.3 | | 58.0 | 13.6 | |
| 9.4 | 34 | 6.0 | 36.0 | |
| 9.8 | | 7.5 | 30.1 | |
| 9.1 | | 26.5 | 57.0 | 9.0 |
| 9.8 | | 32.0 | 1.3 | |
| 9.4 | | 46.5 | 18.4 | |
| 8.1 | | 49.5 | 28.8 | 8.5 |
| 8.7 | | 53.0 | 0.4 | 9.0 |
| 9.6 | 35 | 6.5 | 32.8 | |
| 9.4 | | 27.0 | 44.5 | |
| 9.0 | | 39.5 | 52.8 | |

## 7681—7740.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.8 | 35 | 43.0 | 4.9 | |
| 9.6 | | 49.5 | 37.2 | 9.0 |
| 9.8 | 36 | 15.5 | 20.3 | |
| 9.6 | | 55.5 | 57.8 | |
| 9.8 | | 56.0 | 17.6 | |
| 9.4 | 37 | 11.5 | 3.6 | 9.0 |
| 9.4 | | 18.0 | 19.7 | 9.0 |
| 9.8 | | 20.5 | 34.9 | |
| 9.7 | | 28.0 | 14.0 | |
| 9.8 | 38 | 0.5 | 4.0 | |
| 9.5 | | 26.9 | 3.9 | |
| 9.5 | | 28.9 | 53.4 | |
| 8.5 | | 29.9 | 11.0 | 9.0 |
| 8.9 | | 29.9 | 12.3 | 8.5 |
| 8.7 | 39 | 0.4 | 17.5 | 9.0 |
| 9.8 | | 3.9 | 25.8 | |
| 9.8 | | 12.9 | 5.7 | |
| 9.7 | | 16.4 | 9.3 | |
| 9.5 | | 29.9 | 56.2 | |
| 9.8 | | 31.4 | 21.8 | |
| 9.8 | | 37.7 | 46.3 | |
| 9.5 | | 38.9 | 17.8 | 9.0 |
| 9.4 | | 39.4 | 59.9 | |
| 8.6 | 40 | 15.4 | 38.6 | 7.0 G |
| 9.4 | | 16.4 | 20.0 | |
| 9.6 | | 16.4 | 22.4 | |
| 9.0 | | 21.4 | 34.1 | |
| 8.8 | | 23.4 | 18.4 | 8.5 |
| 9.5 | | 29.4 | 13.6 | |
| 9.5 | | 31.4 | 42.5 | |
| 8.5 | | 32.9 | 23.8 | 9.0 |
| 9.8 | | 51.9 | 7.1 | |
| 9.0 | 41 | 20.9 | 4.9 | |
| 9.1 | | 30.4 | 50.0 | |
| 9.4 | | 30.4 | 20.3 | 9.0 |
| 9.8 | | 43.4 | 56.7 | |
| 9.3 | | 51.4 | 30.4 | |
| 9.7 | | 58.9 | 59.9 | |
| 9.8 | 42 | 0.4 | 16.5 | 9.0 |
| 9.7 | | 1.4 | 57.7 | |
| 8.3 | | 11.4 | 24.2 | 8.8 G |
| 9.0 | | 20.4 | 8.5 | |
| 9.8 | | 32.9 | 41.5 | |
| 9.0 | | 47.9 | 36.5 | |
| 9.8 | | 55.8 | 14.9 | |
| 9.5 | 43 | 4.4 | 51.9 | G |
| 9.0 | | 6.9 | 16.2 | |
| 8.9 | | 8.4 | 27.4 | |
| 9.4 | | 25.4 | 36.7 | |
| 9.4 | | 25.4 | 9.5 | |
| 9.8 | 44 | 0.4 | 43.6 | |
| 9.3 | | 6.9 | 28.9 | 9.0 |
| 9.4 | | 23.4 | 22.3 | |
| 9.2 | | 26.4 | 2.1 | |
| 9.8 | | 26.4 | 24.3 | |
| 8.3 | | 41.9 | 50.1 | 7.8 GSct |
| 9.4 | | 44.4 | 42.2 | |
| 9.1 | | 50.4 | 28.9 | 9.0 |
| 9.8 | 45 | 19.1 | 36.8 | |
| 9.8 | | 20.4 | 41.5 | |

## 7741—7800.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.0 | 45 | 31.4 | 8.5 | |
| 9.4 | | 31.4 | 55.9 | 9.5 |
| 9.4 | | 39.9 | 31.1 | |
| 9.8 | | 45.9 | 11.1 | |
| 9.4 | 46 | 22.4 | 18.9 | |
| 9.8 | | 22.9 | 33.9 | |
| 9.6 | | 23.4 | 6.2 | |
| 9.2 | | 36.9 | 3.7 | 9.0 |
| 9.8 | | 46.4 | 7.9 | |
| 9.8 | | 53.9 | 28.8 | |
| 8.2 | 47 | 15.4 | 38.9 | 9.0 |
| 9.8 | | 16.2 | 33.9 | |
| 9.2 | | 17.9 | 15.3 | |
| 9.8 | | 19.8 | 6.2 | |
| 9.8 | | 28.9 | 6.2 | |
| 9.7 | | 35.4 | 29.9 | |
| 10.1 | | 37.5 | 6.9 | |
| 9.8 | | 39.0 | 14.8 | |
| 10.0 | | 39.5 | 33.1 | |
| 10.0 | | 44.5 | 9.1 | |
| 10.1 | | 45.0 | 55.0 | |
| 10.1 | | 52.6 | 0.8 | |
| 10.1 | 48 | 0.0 | 14.0 | |
| 8.5 | | 12.7 | 50.1 | 8.8 |
| 10.1 | | 15.0 | 21.0 | |
| 6.4 | | 17.2 | 47.4 | 3.0 GSctλ |
| 9.5 | | 18.0 | 26.0 | |
| 9.6 | | 19.5 | 54.2 | |
| 9.3 | | 28.5 | 10.5 | |
| 9.6 | | 29.0 | 28.2 | |
| 10.0 | | 39.5 | 51.6 | |
| 9.3 | | 41.0 | 2.6 | |
| 10.1 | | 50.5 | 50.0 | |
| 10.0 | | 54.0 | 33.3 | |
| 9.6 | | 55.2 | 45.4 | |
| 10.1 | | 55.5 | 24.0 | |
| 10.1 | 49 | 0.5 | 50.4 | |
| 10.1 | | 0.5 | 12.0 | |
| 9.5 | | 2.2 | 56.6 | |
| 9.3 | | 13.5 | 23.6 | |
| 10.1 | | 26.5 | 24.7 | |
| 8.8 | | 30.5 | 32.7 | 9.0 |
| 10.0 | | 37.1 | 57.4 | |
| 8.8 | | 53.0 | 5.9 | 9.0 |
| 10.0 | | 53.5 | 22.8 | |
| 9.8 | 50 | 2.0 | 13.8 | |
| 10.1 | | 3.0 | 57.1 | |
| 10.1 | | 16.5 | 26.6 | |
| 10.1 | | 17.0 | 43.6 | |
| 10.1 | | 23.0 | 27.8 | |
| 10.1 | | 30.5 | 57.2 | |
| 9.6 | | 51.5 | 32.6 | |
| 10.1 | | 54.5 | 15.1 | |
| 10.1 | 51 | 3.0 | 32.6 | |
| 9.6 | | 8.0 | 46.0 | |
| 9.3 | | 9.0 | 55.0 | |
| 9.6 | | 9.0 | 41.9 | |
| 9.6 | | 9.5 | 41.4 | |
| 10.1 | | 13.5 | 17.9 | |
| 9.8 | | 24.5 | 46.2 | |

## 7801—7860.

| mag. | 16h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9.6 | 51 | 29.5 | 54.0 | |
| 9.4 | | 33.0 | 16.1 | |
| 10.1 | | 34.0 | 19.8 | |
| 10.0 | | 41.0 | 47.5 | |
| 9.6 | | 43.0 | 29.4 | |
| 9.8 | | 47.5 | 35.8 | |
| 9.0 | | 58.5 | 44.1 | |
| 10.1 | 52 | 1.5 | 44.7 | |
| 9.8 | | 2.0 | 55.0 | |
| 10.0 | | 4.0 | 39.2 | |
| 10.1 | | 10.0 | 51.0 | |
| 9.8 | | 17.0 | 37.3 | |
| 10.1 | | 25.2 | 15.2 | |
| 10.1 | | 30.6 | 59.6 | |
| 9.6 | | 31.5 | 35.8 | |
| 9.5 | | 35.5 | 20.8 | |
| 10.0 | | 42.0 | 28.9 | |
| 9.4 | | 42.0 | 43.7 | |
| 10.0 | | 53.5 | 6.3 | |
| 10.0 | | 55.5 | 32.4 | |
| 9.3 | 53 | 3.0 | 38.0 | |
| 10.1 | | 4.2 | 20.1 | |
| 9.0 | | 4.5 | 3.2 | 9.5 |
| 10.1 | | 9.0 | 54.8 | |
| 10.1 | | 10.5 | 31.5 | |
| 10.1 | | 11.0 | 6.8 | |
| 10.1 | | 16.5 | 37.9 | |
| 10.0 | | 23.5 | 51.5 | |
| 10.1 | | 23.9 | 0.6 | |
| 10.1 | | 33.0 | 8.0 | |
| 9.8 | | 33.0 | 41.8 | |
| 9.8 | | 37.5 | 47.8 | |
| 9.5 | | 38.0 | 45.2 | |
| 10.0 | | 47.5 | 12.0 | |
| 9.4 | | 52.0 | 34.2 | |
| 10.0 | | 53.5 | 38.3 | |
| 10.1 | | 56.0 | 20.1 | |
| 10.1 | | 58.5 | 6.6 | |
| 10.1 | 54 | 0.0 | 35.2 | |
| 10.1 | | 1.5 | 45.9 | |
| 7.8 | | 2.2 | 23.5 | 8.5 |
| 9.5 | | 2.5 | 29.3 | 9.5 |
| 10.1 | | 4.0 | 39.8 | |
| 10.0 | | 11.0 | 13.9 | |
| 10.1 | | 12.5 | 39.5 | |
| 10.1 | | 13.0 | 40.6 | |
| 9.6 | | 15.5 | 8.9 | |
| 9.6 | | 22.5 | 13.7 | |
| 10.1 | | 33.5 | 42.9 | |
| 9.6 | | 36.0 | 14.1 | |
| 9.0 | | 54.5 | 57.6 | 8.5 GSc |
| 9.4 | | 54.5 | 10.2 | |
| 10.1 | 55 | 0.0 | 43.9 | |
| 10.1 | | 7.5 | 33.6 | |
| 9.8 | | 7.5 | 11.3 | |
| 10.0 | | 7.5 | 55.1 | |
| 9.0 | | 13.0 | 5.9 | 9.0 |
| 10.1 | | 14.5 | 53.3 | |
| 9.2 | | 31.0 | 43.9 | 8.5 |
| 10.1 | | 33.0 | 53.9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 20 | 121 | 3.5 |
| | 30 | 122 | 3.2 |
| | 40 | 123 | 2.9 |
| | 50 | 123 | 2.5 |
| 17 | 0 | 124 | 2.2 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 16 | 50 | 123 | 2·5 |
| 17 | 0 | 124 | 2·2 |
| | 10 | 124 | 1·8 |
| | 20 | 125 | 1·5 |

## 7861—7920.

16h.–17h. | −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·6 | 55 | 48·5 | 34·7 | 9·5 |
| 10·1 | | 54·0 | 6·2 | |
| 9·8 | 56 | 3·5 | 9·3 | |
| 10·1 | | 13·0 | 6·1 | |
| 8·1 | | 16·5 | 30·3 | 8·5 G |
| 10·0 | | 23·5 | 34·0 | |
| 9·2 | | 28·0 | 33·1 | 9·0 |
| 7·9 | | 37·0 | 51·9 | 7·9 GS |
| 9·6 | | 37·0 | 58·1 | |
| 10·1 | | 38·5 | 8·5 | |
| 10·0 | | 39·5 | 55·6 | |
| 9·8 | | 58·5 | 37·1 | |
| 9·8 | 57 | 1·5 | 0·9 | |
| 9·0 | | 5·0 | 32·4 | 8·5 G |
| 9·8 | | 12·0 | 41·9 | |
| 9·8 | | 13·5 | 49·3 | |
| 10·1 | | 26·5 | 29·5 | |
| 9·8 | | 27·5 | 28·6 | |
| 10·1 | | 29·0 | 34·5 | |
| 9·0 | | 34·0 | 29·8 | 9·0 |
| 10·0 | | 43·5 | 13·9 | |
| 10·0 | | 43·5 | 45·3 | |
| 10·1 | | 46·5 | 14·7 | |
| 10·1 | | 49·5 | 39·3 | |
| 10·0 | | 52·5 | 37·1 | |
| 10·1 | | 57·0 | 2·9 | |
| 9·3 | | 59·5 | 55·9 | 9·5 |
| 9·6 | 58 | 0·5 | 7·0 | |
| 10·1 | | 3·5 | 42·2 | |
| 9·8 | | 13·0 | 44·4 | |
| 9·3 | | 14·0 | 13·5 | 9·5 |
| 10·0 | | 16·0 | 6·8 | |
| 9·4 | | 21·5 | 19·8 | 9·5 |
| 10·0 | | 28·5 | 10·0 | |
| 9·1 | | 28·5 | 19·1 | 9·0 |
| 10·1 | | 36·5 | 31·4 | |
| 10·1 | | 42·0 | 3·0 | |
| 10·1 | | 53·0 | 52·8 | |
| 9·6 | | 53·5 | 36·7 | |
| 9·6 | | 56·0 | 40·8 | |
| 9·5 | 59 | 4·5 | 45·9 | |
| 9·6 | | 4·5 | 29·4 | |
| 10·1 | | 6·5 | 13·9 | |
| 10·0 | | 6·5 | 15·1 | |
| 9·8 | | 7·5 | 47·9 | |
| 9·3 | | 17·0 | 36·0 | |
| 9·3 | | 19·0 | 34·1 | |
| 9·2 | | 24·5 | 29·1 | 9·5 |
| 10·0 | | 27·0 | 52·7 | |
| 9·6 | | 27·5 | 6·8 | |
| 9·6 | | 28·0 | 46·3 | |
| 9·8 | | 30·0 | 32·1 | |
| 10·0 | | 31·0 | 7·2 | |
| 10·1 | | 37·0 | 53·8 | |
| 10·1 | | 39·5 | 30·6 | |
| 9·3 | | 39·5 | 12·2 | |
| 9·8 | | 50·5 | 59·0 | |
| 10·0 | | 52·0 | 34·0 | |
| 9·4 | 0 | 13·0 | 56·2 | 8·8 |
| 9·6 | | 14·5 | 33·9 | |

124

## 7921—7980.

17h. | −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·1 | 0 | 23·2 | 2·3 | |
| 10·0 | | 23·5 | 29·8 | |
| 10·1 | | 53·3 | 59·9 | |
| 10·1 | | 53·5 | 32·7 | |
| 10·1 | | 54·5 | 31·2 | |
| 9·6 | | 56·5 | 45·8 | |
| 10·1 | | 57·5 | 36·8 | |
| 9·8 | 1 | 9·5 | 38·3 | |
| 10·0 | | 16·0 | 41·4 | |
| 9·6 | | 20·5 | 13·2 | |
| 8·2 | | 30·5 | 28·0 | 8·2 |
| 10·1 | | 30·5 | 6·1 | |
| 10·0 | | 35·5 | 3·1 | |
| 9·6 | | 44·8 | 59·2 | |
| 10·0 | | 45·0 | 3·1 | |
| 10·0 | | 50·5 | 57·7 | |
| 10·1 | | 55·5 | 16·4 | |
| 9·0 | | 57·5 | 3·8 | 9·5 |
| 8·6 | 2 | 1·0 | 13·8 | 9·0 |
| 10·1 | | 9·5 | 50·2 | |
| 10·1 | | 17·5 | 35·4 | |
| 10·0 | | 22·0 | 35·1 | |
| 10·0 | | 23·5 | 6·3 | |
| 9·0 | | 34·0 | 33·2 | |
| 10·0 | | 40·5 | 18·7 | |
| 9·6 | | 47·0 | 52·9 | |
| 9·0 | | 49·5 | 27·3 | 9·5 |
| 8·8 | | 52·0 | 14·1 | 8·5 |
| 9·5 | | 53·0 | 49·2 | 9·0 |
| 9·5 | | 53·0 | 22·5 | |
| 10·0 | | 58·5 | 45·0 | |
| 8·8 | 3 | 5·5 | 11·4 | 8·8 |
| 10·1 | | 7·0 | 53·0 | |
| 10·0 | | 9·5 | 42·8 | |
| 10·1 | | 11·0 | 40·0 | |
| 10·1 | | 21·5 | 38·7 | |
| 10·1 | | 23·5 | 9·1 | |
| 10·0 | | 24·2 | 50·1 | |
| 9·5 | | 30·0 | 47·5 | 9·5 |
| 10·1 | | 33·0 | 24·4 | |
| 9·6 | | 34·0 | 48·6 | 9·5 |
| 10·0 | | 36·0 | 42·4 | |
| 9·8 | | 41·3 | 58·0 | |
| 10·0 | 4 | 6·0 | 1·6 | |
| 7·6 | | 6·5 | 51·3 | 8·0 GS |
| 9·8 | | 12·0 | 50·7 | |
| 10·1 | | 13·0 | 49·9 | |
| 9·5 | | 14·0 | 2·0 | |
| 10·1 | | 14·5 | 34·2 | |
| 10·1 | | 28·5 | 21·1 | |
| 10·1 | | 31·0 | 11·7 | |
| 10·1 | | 34·0 | 49·5 | |
| 9·0 | | 38·5 | 14·0 | 9·5 |
| 10·1 | | 44·5 | 31·0 | |
| 10·1 | | 55·0 | 2·7 | |
| 10·0 | 5 | 4·5 | 7·5 | |
| 10·1 | | 4·5 | 17·2 | |
| 10·1 | | 13·7 | 0·4 | |
| 10·1 | | 19·5 | 32·1 | |
| 10·0 | | 31·5 | 41·3 | |

## 7981—8040.

17h. | −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·0 | 5 | 36·1 | 58·0 | 9·5 |
| 10·1 | | 36·5 | 53·0 | |
| 9·8 | | 38·5 | 54·0 | |
| 10·0 | | 44·5 | 48·7 | |
| 9·8 | | 56·5 | 28·1 | |
| 9·6 | | 58·0 | 1·7 | |
| 9·8 | | 59·0 | 45·1 | |
| 9·8 | 6 | 4·5 | 45·0 | |
| 10·0 | | 7·5 | 25·5 | |
| 9·6 | | 9·5 | 51·2 | |
| 10·1 | | 11·5 | 24·4 | |
| 8·8 | | 11·5 | 21·2 | 9·0 |
| 9·1 | | 14·0 | 54·9 | 9·3 |
| 8·6 | | 15·0 | 9·9 | 8·5 |
| 10·1 | | 31·5 | 40·1 | |
| 10·1 | | 34·5 | 31·6 | |
| 10·1 | | 39·0 | 53·0 | |
| 10·1 | | 48·5 | 5·0 | |
| 10·0 | | 50·5 | 17·7 | |
| 10·1 | | 51·5 | 27·6 | |
| 9·3 | | 57·0 | 56·1 | |
| 9·8 | 7 | 0·5 | 54·7 | |
| 10·0 | | 21·0 | 28·2 | |
| 9·4 | | 32·0 | 12·8 | |
| 10·1 | | 37·5 | 58·8 | |
| 9·8 | | 41·0 | 30·9 | |
| 10·1 | | 41·0 | 17·2 | |
| 10·0 | | 49·0 | 51·0 | |
| 10·1 | | 54·5 | 39·1 | |
| 9·2 | 8 | 1·0 | 40·7 | |
| 10·0 | | 3·5 | 48·5 | |
| 10·1 | | 5·0 | 33·0 | |
| 10·1 | | 8·5 | 11·7 | |
| 10·0 | | 11·0 | 13·6 | |
| 10·1 | | 16·0 | 42·6 | |
| 10·1 | | 16·5 | 29·0 | |
| 10·1 | | 19·0 | 43·9 | |
| 10·0 | | 23·6 | 4·3 | |
| 9·0 | | 25·5 | 30·2 | 9·5 |
| 9·6 | | 34·5 | 29·9 | |
| 10·1 | | 36·0 | 17·5 | |
| 9·8 | | 38·5 | 45·6 | |
| 10·1 | | 39·5 | 42·9 | |
| 10·1 | | 42·0 | 59·3 | |
| 8·8 | | 45·2 | 1·4 | 9·0 |
| 9·6 | | 47·0 | 37·7 | |
| 10·1 | | 50·5 | 18·2 | |
| 9·6 | | 51·0 | 30·0 | |
| 10·1 | | 59·5 | 35·1 | |
| 9·4 | 9 | 4·5 | 33·3 | |
| 9·3 | | 9·5 | 56·0 | |
| 8·1 | | 10·5 | 45·4 | 8·5 |
| 9·8 | | 10·5 | 20·0 | |
| 9·6 | | 28·6 | 59·1 | |
| 10·1 | | 35·0 | 8·2 | |
| 9·8 | | 59·0 | 41·9 | |
| 10·1 | 10 | 8·0 | 0·6 | |
| 9·8 | | 10·2 | 2·8 | |
| 10·0 | | 13·0 | 36·2 | |
| 10·0 | | 18·5 | 52·2 | |

## 8041—8100.

17h. | −55°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·1 | 10 | 23·8 | 59·1 | |
| 10·1 | | 27·5 | 59·1 | |
| 10·0 | | 32·5 | 2·8 | |
| 10·1 | | 34·5 | 33·7 | |
| 8·4 | | 36·1 | 57·8 | 8·8 |
| 10·0 | | 48·0 | 13·6 | |
| 10·1 | | 57·0 | 28·9 | |
| 10·1 | 11 | 8·5 | 25·8 | |
| 10·1 | | 9·2 | 2·8 | |
| 9·0 | | 11·0 | 37·6 | 9·5 |
| 9·8 | | 16·0 | 28·2 | |
| 9·2 | | 18·5 | 1·8 | 9·0 |
| 10·1 | | 25·0 | 28·2 | |
| 10·0 | | 40·5 | 21·5 | |
| 8·8 | 12 | 6·2 | 2·2 | 9·0 |
| 9·6 | | 6·5 | 34·4 | |
| 9·4 | | 7·8 | 59·4 | |
| 9·8 | | 10·5 | 9·3 | |
| 10·1 | | 14·8 | 57·9 | |
| 10·0 | | 22·5 | 58·4 | |
| 9·5 | | 26·5 | 46·1 | |
| 10·0 | | 27·5 | 3·6 | |
| 10·1 | | 32·5 | 30·5 | |
| 10·1 | | 37·0 | 23·1 | |
| 8·6 | | 39·5 | 30·5 | |
| 10·0 | | 54·5 | 13·9 | |
| 10·0 | | 57·0 | 32·1 | |
| 10·1 | | 59·5 | 55·4 | |
| 10·1 | 13 | 0·0 | 57·0 | |
| 9·8 | | 2·5 | 45·5 | |
| 10·1 | | 3·1 | 59·5 | |
| 10·0 | | 5·0 | 31·2 | |
| 9·4 | | 9·5 | 36·2 | |
| 10·1 | | 14·0 | 12·9 | |
| 10·1 | | 17·0 | 12·8 | |
| 10·0 | | 19·5 | 42·0 | |
| 10·1 | | 23·0 | 2·8 | |
| 9·3 | | 23·9 | 0·1 | 9·0 |
| 9·8 | | 24·5 | 11·3 | |
| 8·8 | | 36·0 | 26·7 | 8·5 |
| 9·5 | | 44·0 | 13·4 | |
| 9·8 | | 44·0 | 55·9 | |
| 9·6 | | 49·5 | 10·5 | |
| 10·1 | | 52·5 | 45·8 | |
| 9·6 | | 56·0 | 12·8 | |
| 9·5 | 14 | 0·0 | 12·5 | |
| 10·1 | | 14·5 | 35·9 | |
| 9·8 | | 17·0 | 20·4 | |
| 9·6 | | 22·0 | 10·6 | |
| 9·8 | | 22·5 | 46·1 | |
| 10·1 | | 30·5 | 13·4 | |
| 9·6 | | 31·5 | 11·6 | |
| 9·8 | | 32·5 | 36·3 | |
| 9·6 | | 34·0 | 40·8 | |
| 9·0 | | 39·5 | 37·9 | 9·5 |
| 9·4 | | 40·5 | 47·4 | |
| 10·1 | | 44·5 | 44·6 | |
| 10·1 | | 50·5 | 17·2 | |
| 9·1 | | 51·5 | 52·3 | 9·0 G |
| 6·2 | | 54·5 | 24·5 | 3·0 GStrλ |

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## 8101—8160.

| mag. | 17h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 14 | 56·0 | 51·1 | |
| 10·1 | | 59·5 | 38·1 | |
| 9·1 | 15 | 0·0 | 57·1 | 9·0 |
| 10·0 | | 3·0 | 23·1 | |
| 10·1 | | 14·5 | 55·5 | |
| 10·1 | | 21·0 | 36·5 | |
| 10·0 | | 29·5 | 10·5 | |
| 10·1 | | 31·0 | 13·0 | |
| 9·4 | | 34·5 | 55·0 | |
| 10·1 | | 40·0 | 21·0 | |
| 10·0 | | 47·0 | 10·2 | |
| 9·8 | | 58·0 | 7·0 | |
| 10·0 | 16 | 2·0 | 1·1 | |
| 9·8 | | 14·5 | 28·9 | |
| 10·1 | | 15·5 | 8·4 | |
| 10·1 | | 18·0 | 59·5 | |
| 10·1 | | 20·0 | 40·2 | |
| 9·3 | | 22·5 | 35·3 | |
| 10·0 | | 24·0 | 27·3 | |
| 8·6 | | 25·5 | 13·9 | 9·0 |
| 9·6 | | 28·3 | 1·6 | |
| 10·0 | | 29·5 | 41·0 | |
| 9·6 | | 30·0 | 49·5 | |
| 9·6 | | 31·0 | 50·9 | |
| 10·0 | | 34·5 | 14·3 | |
| 10·0 | | 37·5 | 8·7 | |
| 9·6 | | 47·0 | 24·4 | |
| 10·1 | | 52·5 | 9·1 | |
| 9·6 | | 57·0 | 44·9 | |
| 9·6 | | 58·5 | 36·8 | |
| 9·6 | 17 | 15·5 | 39·9 | |
| 9·6 | | 20·5 | 41·6 | |
| 9·6 | | 21·5 | 4·1 | |
| 10·0 | | 35·0 | 48·5 | |
| 10·1 | | 38·5 | 13·0 | |
| 9·3 | | 40·5 | 45·8 | |
| 9·3 | | 54·5 | 51·0 | |
| 10·1 | | 54·5 | 10·9 | |
| 10·0 | | 59·5 | 43·9 | |
| 10·1 | 18 | 4·5 | 39·0 | |
| 9·6 | | 14·0 | 13·8 | |
| 9·5 | | 15·8 | 57·0 | |
| 10·1 | | 17·5 | 48·5 | |
| 7·4 | | 19·0 | 3·6 | 6·5 GSg |
| 10·1 | | 23·5 | 50·6 | |
| 8·6 | | 31·0 | 43·5 | |
| 9·8 | | 33·0 | 45·7 | |
| 10·0 | | 33·0 | 7·2 | |
| 10·1 | | 33·5 | 40·1 | |
| 10·0 | | 35·0 | 39·7 | |
| 10·0 | | 43·0 | 14·4 | |
| 9·6 | | 55·5 | 19·8 | |
| 10·1 | | 58·5 | 2·9 | |
| 9·4 | 19 | 7·3 | 58·9 | |
| 8·5 | | 9·5 | 55·9 | 9·5 |
| 10·1 | | 9·5 | 5·2 | |
| 9·8 | | 15·5 | 12·7 | |
| 9·6 | | 26·6 | 12·8 | |
| 10·0 | | 30·0 | 36·3 | |
| 10·1 | | 37·0 | 8·2 | |

## 8161—8220.

| mag. | 17h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 19 | 44·0 | 53·5 | |
| 10·0 | | 45·5 | 3·0 | |
| 9·8 | | 46·5 | 11·0 | |
| 10·1 | | 49·5 | 22·3 | |
| 10·1 | | 51·9 | 8·8 | |
| 9·3 | | 52·1 | 48·7 | |
| 10·0 | | 53·4 | 0·5 | |
| 10·1 | | 54·0 | 25·1 | |
| 9·6 | | 54·3 | 55·1 | |
| 9·8 | | 58·9 | 36·0 | |
| 10·1 | 20 | 5·0 | 45·4 | |
| 9·3 | | 8·6 | 33·3 | 9·5 |
| 10·1 | | 10·0 | 47·8 | |
| 9·4 | | 12·6 | 37·7 | 9·5 |
| 10·1 | | 16·0 | 13·8 | |
| 9·6 | | 21·9 | 4·7 | |
| 10·1 | | 22·8 | 59·8 | |
| 10·1 | | 27·5 | 40·9 | |
| 9·8 | | 30·9 | 21·5 | |
| 10·0 | | 32·6 | 0·0 | |
| 10·1 | | 33·0 | 20·2 | |
| 10·0 | | 35·9 | 30·8 | |
| 10·0 | | 39·0 | 23·0 | |
| 8·2 | | 43·0 | 38·2 | 9·0 |
| 10·0 | | 45·5 | 47·9 | |
| 10·1 | | 52·2 | 31·4 | |
| 10·0 | 21 | 2·2 | 18·2 | |
| 8·8 | | 27·7 | 20·8 | |
| 9·8 | | 39·7 | 3·0 | |
| 10·1 | | 53·7 | 42·9 | |
| 10·1 | | 54·2 | 1·2 | |
| 9·4 | | 57·2 | 31·0 | 9·0 G |
| 10·1 | 22 | 12·7 | 25·4 | |
| 10·0 | | 16·2 | 39·9 | |
| 9·0 | | 29·7 | 30·2 | 9·5 |
| 9·8 | | 45·2 | 12·6 | 9·5 |
| 9·4 | | 45·9 | 0·4 | |
| 10·1 | 23 | 0·2 | 8·2 | |
| 10·1 | | 8·9 | 1·2 | |
| 8·8 | | 12·7 | 22·6 | 9·0 |
| 9·2 | | 22·2 | 52·8 | |
| 9·0 | | 28·2 | 16·7 | |
| 9·2 | | 29·2 | 28·0 | |
| 10·0 | | 39·7 | 20·6 | |
| 9·0 | | 42·2 | 5·4 | |
| 9·8 | | 57·2 | 40·2 | |
| 10·0 | 24 | 3·2 | 41·0 | |
| 8·4 | | 10·2 | 5·2 | 8·0 |
| 9·6 | | 13·2 | 54·4 | |
| 9·1 | | 16·7 | 45·8 | 9·0 |
| 10·0 | | 18·7 | 20·1 | |
| 9·6 | | 22·7 | 45·9 | |
| 10·0 | | 34·2 | 15·4 | |
| 10·0 | | 52·2 | 36·1 | |
| 9·8 | | 53·2 | 29·5 | |
| 8·4 | 25 | 2·2 | 40·4 | 8·5 G |
| 10·1 | | 19·7 | 12·2 | |
| 9·8 | | 27·2 | 55·8 | |
| 10·0 | | 33·2 | 21·8 | |
| 9·6 | | 40·2 | 58·6 | |

## 8221—8280.

| mag. | 17h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 25 | 42·7 | 32·3 | 9·0 |
| 9·2 | | 45·2 | 32·5 | 9·0 |
| 9·5 | | 53·7 | 19·0 | |
| 10·0 | 26 | 4·2 | 52·8 | |
| 10·1 | | 5·2 | 47·6 | |
| 9·4 | | 17·2 | 19·3 | |
| 9·4 | | 27·2 | 45·1 | |
| 9·6 | | 33·7 | 47·1 | |
| 8·0 | | 34·7 | 3·2 | 8·0 |
| 10·1 | | 37·7 | 9·0 | |
| 9·5 | | 42·2 | 16·9 | |
| 10·0 | | 43·2 | 49·5 | |
| 10·0 | 27 | 0·7 | 44·1 | |
| 9·6 | | 12·2 | 37·9 | |
| 9·5 | | 19·2 | 36·7 | |
| 10·0 | | 39·7 | 52·5 | |
| 9·6 | | 42·2 | 12·0 | |
| 9·4 | | 44·7 | 46·3 | |
| 10·1 | | 54·7 | 37·1 | |
| 10·0 | 28 | 18·7 | 52·9 | |
| 10·0 | | 23·7 | 15·7 | |
| 10·0 | | 26·2 | 9·3 | |
| 8·6 | | 37·2 | 30·0 | 9·0 |
| 10·1 | | 42·5 | 59·5 | |
| 9·8 | 29 | 9·2 | 18·3 | |
| 9·4 | | 19·2 | 1·8 | 9·0 |
| 10·1 | | 25·7 | 4·6 | |
| 9·8 | | 29·7 | 38·2 | |
| 10·0 | | 30·2 | 23·1 | |
| 9·2 | | 32·2 | 23·8 | |
| 10·0 | | 33·7 | 40·4 | |
| 9·8 | | 45·2 | 24·1 | |
| 10·0 | | 46·2 | 28·5 | |
| 10·1 | | 51·7 | 43·1 | |
| 10·0 | | 53·2 | 29·0 | |
| 10·0 | | 53·2 | 30·7 | |
| 10·0 | 30 | 20·7 | 21·6 | |
| 9·8 | | 23·7 | 54·1 | |
| 9·2 | | 38·7 | 1·9 | |
| 10·0 | | 55·2 | 18·2 | |
| 9·8 | 31 | 9·7 | 51·1 | |
| 9·8 | | 11·7 | 10·1 | |
| 9·6 | | 40·2 | 37·2 | 9·5 |
| 8·8 | | 42·2 | 52·1 | 8·7 |
| 10·0 | 32 | 0·7 | 12·2 | |
| 9·8 | | 18·2 | 4·5 | |
| 8·8 | | 21·2 | 22·2 | 9·0 |
| 7·8 | | 26·7 | 33·5 | 8·0 GS |
| 9·4 | | 37·2 | 19·1 | |
| 9·4 | | 46·2 | 37·1 | |
| 10·0 | | 47·2 | 33·9 | |
| 10·1 | | 52·7 | 47·8 | |
| 8·8 | 33 | 5·2 | 33·4 | 9·0 |
| 9·4 | | 29·2 | 23·0 | |
| 9·8 | | 31·2 | 22·8 | |
| 8·0 | | 36·2 | 24·5 | 8·5 |
| 10·1 | | 41·2 | 5·4 | |
| 9·2 | | 50·5 | 1·0 | |
| 9·4 | 34 | 12·2 | 18·2 | |
| 9·1 | | 17·2 | 37·3 | 9·0 |

## 8281—8340.

| mag. | 17h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·1 | 34 | 23·7 | 8·0 | |
| 9·0 | | 32·2 | 25·5 | 9·0 |
| 10·1 | | 39·7 | 40·8 | |
| 9·6 | | 58·2 | 56·0 | |
| 9·8 | 35 | 5·2 | 33·4 | |
| 10·1 | | 6·7 | 13·0 | |
| 9·1 | | 13·5 | 1·8 | |
| 10·0 | | 16·7 | 15·5 | |
| 9·8 | | 19·0 | 59·1 | |
| 10·1 | | 33·2 | 3·3 | |
| 7·6 | 36 | 0·2 | 45·5 | 8·5 |
| 10·1 | | 14·5 | 1·4 | |
| 10·1 | | 18·2 | 10·1 | |
| 10·0 | | 19·2 | 4·1 | |
| 8·8 | | 21·0 | 58·0 | 9·5 |
| 10·1 | | 24·2 | 14·9 | |
| 9·6 | | 25·7 | 35·0 | |
| 9·6 | | 26·7 | 33·0 | |
| 9·8 | | 36·2 | 32·2 | |
| 10·1 | | 38·7 | 2·3 | |
| 10·0 | | 53·0 | 58·1 | |
| 9·1 | | 56·7 | 23·0 | |
| 9·5 | 37 | 2·7 | 22·9 | |
| 8·8 | | 11·2 | 44·0 | 9·0 |
| 9·4 | | 13·7 | 58·2 | |
| 10·0 | | 37·2 | 22·9 | |
| 10·0 | | 37·7 | 38·2 | |
| 10·0 | | 38·7 | 13·2 | |
| 9·4 | | 42·7 | 8·5 | |
| 8·4 | | 55·7 | 44·3 | 8·5 GS |
| 8·4 | 38 | 9·7 | 18·1 | 8·0 G |
| 7·1 | | 13·7 | 21·1 | 6·5 GSct |
| 9·4 | | 14·7 | 22·5 | |
| 9·4 | | 17·2 | 34·1 | |
| 10·0 | | 20·8 | 59·5 | |
| 9·8 | | 21·7 | 4·1 | |
| 10·1 | | 38·2 | 4·4 | |
| 10·0 | | 39·7 | 5·3 | |
| 10·1 | | 40·2 | 33·9 | |
| 10·0 | | 52·4 | 1·5 | |
| 8·8 | 39 | 5·2 | 34·5 | 9·2 |
| 10·1 | | 11·7 | 35·3 | |
| 10·1 | | 17·7 | 18·7 | |
| 9·6 | | 22·2 | 27·3 | |
| 10·1 | | 30·7 | 8·1 | |
| 9·6 | | 42·2 | 42·7 | |
| 10·1 | | 50·2 | 45·9 | |
| 9·1 | | 58·7 | 47·9 | |
| 9·8 | 40 | 2·2 | 28·3 | |
| 10·1 | | 16·7 | 0·2 | |
| 9·1 | | 25·7 | 34·9 | |
| 8·8 | | 28·7 | 8·1 | |
| 9·8 | | 45·7 | 33·5 | |
| 10·0 | | 48·2 | 3·7 | |
| 9·8 | | 50·2 | 20·1 | |
| 10·1 | | 55·2 | 59·3 | |
| 10·0 | 41 | 10·0 | 18·1 | |
| 10·0 | | 11·0 | 24·6 | |
| 10·1 | | 23·0 | 33·6 | |
| 9·6 | | 42·0 | 37·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 10 | 124 | 1·8 |
| | 20 | 125 | 1·5 |
| | 30 | 125 | 1·1 |
| | 40 | 125 | 0·7 |
| | 50 | 125 | 0·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 17 | 40 | 125 | 0·7 |
| | 50 | 125 | 0·4 |
| 18 | 0 | 125 | 0·0 |
| | | | + |
| | 10 | 125 | 0·4 |

## 8341—8400.

| mag. | 17ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 41 | 44·5 | 28·7 | |
| 10·1 | 42 | 1·5 | 31·3 | |
| 10·1 | | 3·0 | 52·8 | |
| 10·0 | | 17·5 | 34·1 | |
| 9·6 | | 38·5 | 34·6 | |
| 9·4 | | 43·0 | 17·7 | |
| 9·4 | 43 | 4·5 | 6·7 | |
| 10·0 | | 6·5 | 18·0 | |
| 9·0 | | 22·5 | 16·0 | |
| 9·5 | | 26·0 | 59·9 | |
| 9·8 | | 33·5 | 40·1 | |
| 10·1 | | 41·0 | 49·5 | |
| 9·6 | | 41·0 | 22·8 | |
| 10·0 | | 47·5 | 16·7 | |
| 9·5 | 44 | 0·0 | 36·5 | 9·5 |
| 8·8 | | 4·5 | 23·5 | |
| 7·4 | | 13·5 | 52·0 | 7·5 GS |
| 9·1 | | 21·5 | 14·7 | 9·2 |
| 10·1 | | 24·5 | 2·8 | |
| 9·8 | | 42·0 | 6·6 | |
| 9·5 | | 42·0 | 6·7 | 9·5 |
| 9·2 | | 59·5 | 39·2 | 9·0 |
| 10·0 | 45 | 4·0 | 0·7 | |
| 9·0 | | 13·0 | 41·1 | 9·2 |
| 10·0 | | 22·5 | 58·0 | |
| 9·8 | | 37·5 | 56·9 | |
| 9·8 | | 38·0 | 4·7 | |
| 9·6 | | 44·5 | 50·9 | |
| 9·2 | | 46·0 | 10·3 | |
| 9·5 | | 50·0 | 34·4 | |
| 9·6 | 46 | 5·5 | 8·1 | |
| 10·1 | | 30·0 | 55·7 | |
| 9·5 | | 37·5 | 10·4 | |
| 10·1 | | 40·0 | 45·0 | |
| 7·3 | | 48·0 | 21·3 | 7·0 GS |
| 9·8 | 47 | 2·5 | 49·7 | |
| 10·1 | | 6·0 | 47·2 | |
| 9·8 | | 8·0 | 25·3 | |
| 10·0 | | 8·5 | 33·2 | |
| 9·6 | | 12·0 | 23·1 | |
| 9·8 | | 24·5 | 1·6 | |
| 10·1 | | 30·5 | 37·4 | |
| 8·8 | | 32·0 | 26·6 | 9·2 |
| 9·1 | | 32·5 | 52·2 | 9·3 |
| 10·1 | | 46·5 | 48·2 | |
| 9·8 | | 49·5 | 2·3 | |
| 10·1 | | 59·5 | 47·3 | |
| 8·2 | 48 | 1·0 | 8·5 | |
| 10·0 | | 6·0 | 5·5 | |
| 10·1 | | 6·8 | 0·6 | |
| 10·1 | | 13·5 | 43·7 | |
| 10·1 | | 14·5 | 13·5 | |
| 9·5 | | 15·5 | 25·3 | |
| 10·1 | | 20·5 | 15·1 | |
| 9·2 | | 28·5 | 23·4 | |
| 10·1 | | 29·0 | 10·3 | |
| 8·4 | | 44·5 | 28·6 | 9·0 |
| 10·0 | | 44·5 | 31·0 | |
| 9·6 | | 54·0 | 54·8 | |
| 10·1 | 49 | 13·5 | 55·1 | |

## 8401—8460.

| mag. | 17ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 49 | 14·5 | 41·1 | |
| 9·6 | | 31·0 | 46·0 | |
| 10·1 | | 32·0 | 54·4 | |
| 9·4 | | 38·0 | 37·0 | |
| 9·6 | | 39·0 | 23·4 | |
| 9·2 | | 49·0 | 53·4 | |
| 9·8 | 50 | 17·0 | 24·2 | |
| 8·8 | | 18·4 | 2·0 | |
| 9·5 | | 19·5 | 48·6 | |
| 10·0 | | 23·5 | 8·0 | |
| 9·5 | | 25·5 | 39·1 | |
| 9·4 | | 27·0 | 37·7 | |
| 10·1 | | 28·0 | 19·6 | |
| 10·1 | | 30·5 | 8·0 | |
| 9·8 | | 39·5 | 50·2 | |
| 10·1 | | 41·5 | 49·2 | |
| 10·1 | | 43·5 | 58·3 | |
| 9·6 | | 54·0 | 41·6 | |
| 8·1 | | 55·5 | 57·8 | 8·0 GS |
| 10·1 | | 56·5 | 0·8 | |
| 9·8 | | 57·5 | 19·6 | |
| 10·1 | 51 | 1·0 | 53·4 | |
| 10·1 | | 4·5 | 38·4 | |
| 10·1 | | 15·2 | 32·6 | |
| 10·1 | | 17·0 | 45·0 | |
| 10·1 | | 31·4 | 45·5 | |
| 10·1 | | 43·9 | 13·9 | |
| 10·0 | | 45·2 | 19·0 | |
| 9·8 | | 45·9 | 59·7 | |
| 9·8 | | 56·9 | 37·3 | |
| 9·8 | 52 | 1·9 | 24·9 | |
| 9·8 | | 10·9 | 7·7 | |
| 9·4 | | 13·2 | 11·0 | |
| 9·8 | | 14·9 | 31·4 | |
| 9·4 | | 19·9 | 35·8 | |
| 9·5 | | 24·4 | 50·1 | |
| 9·3 | | 33·7 | 39·4 | |
| 8·9 | | 43·4 | 49·0 | 9·5 G |
| 9·0 | | 45·4 | 41·3 | |
| 9·8 | | 52·4 | 40·7 | |
| 9·8 | 53 | 3·9 | 41·2 | |
| 9·4 | | 11·9 | 33·8 | |
| 9·4 | | 12·2 | 58·4 | |
| 9·5 | | 22·4 | 52·0 | |
| 8·9 | | 26·9 | 7·6 | 9·5 |
| 9·8 | | 32·9 | 56·9 | |
| 9·8 | | 33·9 | 39·0 | |
| 9·6 | | 37·9 | 38·7 | |
| 9·1 | | 53·9 | 43·0 | |
| 9·8 | | 54·4 | 8·6 | |
| 9·6 | 54 | 2·9 | 40·8 | |
| 9·8 | | 2·9 | 19·8 | |
| 9·7 | | 3·9 | 42·5 | |
| 8·0 | | 7·4 | 34·0 | 9·0 G |
| 9·6 | | 13·9 | 50·2 | |
| 9·8 | | 13·9 | 14·0 | |
| 9·5 | | 19·4 | 0·4 | |
| 9·8 | | 22·9 | 0·7 | |
| 9·4 | | 27·4 | 34·7 | |
| 8·0 | | 28·9 | 52·2 | 8·8 G |

## 8461—8520.

| mag. | 17ʰ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·2 | 54 | 36·4 | 29·6 | |
| 9·8 | | 40·4 | 48·4 | |
| 9·7 | | 43·4 | 11·2 | |
| 9·8 | | 44·9 | 9·0 | |
| 9·8 | | 46·7 | 4·5 | |
| 9·6 | | 52·4 | 27·8 | |
| 9·4 | | 52·4 | 23·5 | |
| 9·8 | | 52·4 | 11·5 | |
| 9·4 | | 52·9 | 12·8 | |
| 9·8 | | 53·9 | 13·2 | |
| 9·8 | | 58·9 | 40·0 | |
| 9·0 | | 58·9 | 21·3 | |
| 9·8 | 55 | 2·9 | 18·6 | |
| 9·7 | | 16·4 | 9·6 | |
| 9·7 | | 18·4 | 51·8 | |
| 9·8 | | 34·9 | 8·2 | |
| 8·4 | | 35·9 | 27·7 | 8·5 G |
| 9·7 | | 39·9 | 29·5 | |
| 9·8 | | 40·4 | 17·0 | |
| 9·8 | | 59·4 | 40·6 | |
| 9·8 | 56 | 3·9 | 33·9 | |
| 9·8 | | 12·4 | 11·7 | |
| 9·6 | | 14·4 | 41·2 | |
| 9·8 | | 18·4 | 30·8 | |
| 9·4 | | 24·4 | 32·4 | |
| 9·2 | | 24·9 | 25·9 | |
| 9·4 | | 28·9 | 41·5 | |
| 9·8 | | 37·4 | 11·9 | |
| 9·0 | | 38·9 | 28·9 | |
| 9·5 | | 51·4 | 3·0 | |
| 9·4 | 57 | 2·4 | 17·8 | |
| 9·8 | | 8·4 | 33·7 | |
| 9·8 | | 11·4 | 27·3 | |
| 9·7 | | 15·4 | 23·6 | |
| 9·4 | | 16·4 | 33·9 | |
| 9·8 | | 19·9 | 50·1 | |
| 9·2 | | 22·4 | 45·3 | |
| 9·8 | | 28·9 | 22·1 | |
| 9·8 | | 28·9 | 17·1 | |
| 9·4 | | 30·9 | 49·3 | |
| 9·7 | | 34·9 | 36·9 | |
| 9·6 | | 37·9 | 27·0 | |
| 8·1 | | 47·4 | 42·1 | 8·0 GS |
| 9·4 | | 57·9 | 14·9 | |
| 9·8 | 58 | 6·4 | 40·8 | |
| 9·8 | | 8·1 | 58·9 | |
| 9·8 | | 8·9 | 37·5 | |
| 9·8 | | 11·4 | 21·5 | |
| 9·8 | | 14·9 | 5·9 | |
| 9·8 | | 20·2 | 2·0 | |
| 9·3 | | 23·4 | 2·8 | |
| 9·4 | | 43·9 | 14·3 | |
| 9·3 | | 45·4 | 24·4 | |
| 9·8 | | 49·9 | 36·3 | |
| 9·8 | | 52·4 | 7·3 | |
| 9·8 | | 53·9 | 55·7 | |
| 9·4 | 59 | 2·4 | 21·4 | |
| 9·4 | | 3·9 | 28·5 | |
| 9·8 | | 3·9 | 30·9 | |
| 9·6 | | 5·4 | 54·0 | |

## 8521—8580.

| mag. | 17ʰ·–18ʰ· m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 59 | 9·8 | 2·9 | |
| 9·5 | | 10·4 | 16·5 | |
| 9·8 | | 12·4 | 26·5 | |
| 9·8 | | 22·4 | 13·5 | |
| 9·8 | | 23·9 | 16·9 | |
| 9·8 | | 24·4 | 3·3 | |
| 9·3 | | 36·4 | 10·2 | |
| 9·8 | | 53·9 | 51·3 | |
| 9·8 | 0 | 1·4 | 3·3 | |
| 9·8 | | 8·9 | 48·7 | |
| 9·1 | | 17·4 | 44·9 | |
| 9·6 | | 42·4 | 5·9 | |
| 9·8 | | 42·4 | 36·7 | |
| 9·8 | 1 | 0·4 | 37·8 | |
| 9·8 | | 6·6 | 1·2 | |
| 8·1 | | 17·4 | 22·8 | 7·2 GS |
| 9·8 | | 30·4 | 4·9 | |
| 8·5 | | 52·9 | 41·7 | 9·0 |
| 8·5 | | 53·9 | 30·8 | 8·8 |
| 9·8 | 2 | 17·7 | 49·8 | |
| 9·7 | | 19·4 | 40·2 | |
| 9·6 | | 23·9 | 47·1 | |
| 8·5 | | 33·4 | 12·5 | |
| 9·8 | | 36·9 | 15·6 | |
| 8·2 | | 38·4 | 38·1 | 8·3 G |
| 9·1 | | 43·6 | 0·5 | 8·0 |
| 9·5 | | 45·4 | 4·3 | |
| 9·4 | | 54·9 | 7·1 | |
| 9·5 | 3 | 0·4 | 20·6 | |
| 9·8 | | 20·4 | 5·9 | |
| 9·8 | | 23·9 | 10·7 | |
| 9·7 | | 33·9 | 25·4 | |
| 9·4 | | 38·4 | 40·5 | 8·5 |
| 9·7 | | 43·4 | 32·0 | |
| 9·8 | | 51·4 | 33·9 | |
| 9·6 | | 51·9 | 39·3 | |
| 8·8 | | 55·4 | 34·1 | 8·0 G |
| 9·8 | 4 | 5·9 | 19·1 | |
| 9·8 | | 11·9 | 21·2 | |
| 9·6 | | 17·4 | 29·2 | |
| 9·7 | | 31·9 | 24·3 | |
| 9·8 | | 32·9 | 55·9 | |
| 9·0 | | 32·9 | 59·1 | 8·4 |
| 9·2 | | 33·9 | 7·0 | |
| 9·6 | | 38·9 | 18·1 | |
| 9·8 | | 40·9 | 16·9 | |
| 9·8 | | 45·9 | 5·9 | |
| 9·2 | | 50·4 | 7·9 | 8·0 |
| 9·8 | | 50·9 | 58·7 | |
| 9·4 | 5 | 12·9 | 53·2 | |
| 9·5 | | 13·4 | 9·0 | |
| 8·0 | | 22·9 | 23·2 | 8·0 GS |
| 9·8 | | 33·9 | 52·9 | |
| 9·8 | | 43·3 | 22·9 | |
| 9·2 | | 43·9 | 13·6 | |
| 9·8 | | 44·9 | 33·9 | |
| 9·8 | | 50·4 | 2·4 | |
| 9·7 | | 56·9 | 45·1 | |
| 9·8 | 6 | 0·9 | 50·5 | |
| 9·8 | | 1·9 | 57·0 | |



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## 8581—8640.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·7 | 6 | 3·4 | 29·1 | |
| 9·7 | | 3·9 | 1·2 | |
| 9·7 | | 21·9 | 28·2 | |
| 9·4 | | 31·4 | 29·2 | |
| 9·4 | | 32·1 | 58·2 | |
| 9·8 | | 45·4 | 45·4 | |
| 9·6 | | 55·9 | 59·1 | |
| 9·8 | | 57·4 | 41·7 | |
| 9·8 | 7 | 7·4 | 4·0 | |
| 9·3 | | 9·4 | 12·8 | |
| 9·8 | | 12·7 | 37·9 | |
| 9·3 | | 37·4 | 54·7 | |
| 9·7 | | 44·4 | 25·1 | |
| 9·4 | | 44·6 | 0·6 | |
| 9·8 | | 51·9 | 36·1 | |
| 9·8 | | 53·9 | 54·6 | |
| 9·6 | | 55·4 | 23·1 | |
| 9·4 | | 57·9 | 53·8 | |
| 9·8 | 8 | 3·9 | 39·1 | |
| 9·4 | | 12·9 | 15·2 | |
| 9·8 | | 29·4 | 42·9 | |
| 9·8 | | 34·4 | 33·4 | |
| 9·8 | | 45·4 | 26·9 | |
| 9·8 | | 56·4 | 11·9 | |
| 9·4 | 9 | 6·4 | 38·5 | |
| 9·4 | | 11·4 | 15·1 | |
| 9·8 | | 18·4 | 51·0 | |
| 9·6 | | 19·4 | 8·2 | |
| 9·7 | | 21·4 | 58·1 | |
| 9·8 | | 24·8 | 57·9 | |
| 9·6 | | 28·9 | 18·8 | |
| 9·8 | | 42·9 | 57·4 | |
| 9·1 | | 44·4 | 45·9 | |
| 9·4 | | 48·9 | 18·0 | |
| 9·7 | 10 | 2·4 | 34·7 | |
| 9·8 | | 17·4 | 7·8 | |
| 9·6 | | 20·9 | 54·5 | |
| 9·5 | | 28·9 | 7·9 | |
| 9·6 | | 48·9 | 37·6 | |
| 9·6 | | 50·4 | 15·3 | |
| 9·8 | 11 | 2·9 | 39·7 | |
| 9·7 | | 6·9 | 8·1 | |
| 9·8 | | 9·4 | 14·2 | |
| 9·6 | | 9·4 | 49·8 | |
| 9·8 | | 12·4 | 52·2 | |
| 9·3 | | 20·4 | 28·9 | 9·0 |
| 9·7 | | 36·9 | 54·1 | |
| 9·6 | | 37·9 | 34·1 | |
| 8·0 | | 40·9 | 36·9 | 8·0 GSg |
| 8·2 | | 41·4 | 37·5 | 8·5 GSg |
| 9·8 | | 44·4 | 17·3 | |
| 9·7 | | 46·4 | 43·1 | |
| 9·8 | | 52·9 | 26·5 | |
| 9·7 | 12 | 8·4 | 38·9 | |
| 9·8 | | 10·9 | 34·2 | |
| 9·8 | | 14·4 | 41·4 | |
| 9·0 | | 51·4 | 57·0 | |
| 9·7 | | 51·4 | 46·7 | |
| 9·4 | | 52·9 | 28·1 | |
| 9·8 | 13 | 3·9 | 41·5 | |

## 8641—8700.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 13 | 7·4 | 34·2 | |
| 9·8 | | 8·9 | 22·6 | |
| 9·6 | | 15·9 | 45·3 | |
| 9·8 | | 21·4 | 17·3 | |
| 9·8 | | 23·9 | 43·7 | |
| 9·8 | | 48·9 | 53·5 | |
| 8·5 | | 53·4 | 6·4 | 9·0 |
| 9·8 | | 56·4 | 33·4 | |
| 9·3 | | 56·4 | 16·7 | |
| 9·4 | | 58·9 | 28·9 | |
| 9·8 | | 59·4 | 38·6 | |
| 9·0 | 14 | 0·4 | 39·0 | 8·0 |
| 9·8 | | 1·4 | 18·0 | |
| 9·8 | | 4·9 | 48·3 | |
| 9·8 | | 6·9 | 48·7 | |
| 9·7 | | 11·4 | 19·8 | |
| 9·8 | | 16·4 | 36·0 | |
| 8·5 | | 17·4 | 1·0 | 7·5 Gt |
| 9·8 | | 23·9 | 49·0 | |
| 8·5 | | 23·9 | 9·2 | 8·5 |
| 9·2 | 15 | 3·4 | 18·3 | |
| 9·8 | | 22·9 | 25·1 | |
| 9·8 | | 25·4 | 19·1 | |
| 9·5 | | 30·4 | 8·1 | |
| 9·7 | | 32·4 | 50·0 | |
| 9·4 | | 32·9 | 9·7 | |
| 9·4 | | 34·4 | 34·4 | |
| 9·7 | | 53·9 | 33·9 | |
| 9·7 | 16 | 0·9 | 57·6 | |
| 9·8 | | 1·4 | 24·9 | |
| 9·8 | | 4·3 | 1·2 | |
| 9·8 | | 17·1 | 0·2 | |
| 9·3 | | 28·9 | 36·8 | |
| 9·4 | | 42·4 | 16·0 | |
| 9·8 | | 42·4 | 56·2 | |
| 9·8 | | 45·0 | 38·1 | |
| 9·4 | | 46·4 | 13·3 | |
| 9·2 | | 57·9 | 14·5 | |
| 9·5 | 17 | 2·4 | 29·4 | |
| 9·3 | | 7·9 | 48·3 | |
| 9·8 | | 18·9 | 58·5 | |
| 9·8 | | 28·4 | 18·1 | |
| 9·8 | | 35·9 | 49·7 | |
| 9·5 | | 41·9 | 18·3 | |
| 9·8 | | 48·9 | 1·0 | |
| 8·9 | | 56·4 | 20·7 | 9·5 |
| 9·8 | 18 | 8·4 | 25·4 | |
| 9·8 | | 12·8 | 58·2 | |
| 9·8 | | 23·4 | 8·2 | |
| 9·8 | | 36·4 | 12·0 | |
| 9·8 | | 42·4 | 53·0 | |
| 9·0 | | 53·4 | 0·1 | |
| 9·0 | | 57·9 | 5·9 | |
| 9·4 | | 57·9 | 5·1 | |
| 9·7 | | 58·9 | 48·1 | |
| 9·5 | 19 | 15·9 | 25·2 | |
| 9·8 | | 20·4 | 58·1 | |
| 9·8 | | 34·4 | 44·1 | |
| 9·4 | | 43·9 | 43·0 | |
| 9·4 | | 47·9 | 18·0 | |

## 8701—8760.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 19 | 53·9 | 54·6 | |
| 9·4 | 20 | 6·1 | 59·5 | |
| 9·4 | | 18·9 | 47·2 | |
| 9·0 | | 33·4 | 37·6 | |
| 9·8 | | 33·9 | 5·0 | |
| 9·8 | | 35·9 | 32·1 | |
| 9·8 | | 37·9 | 0·4 | |
| 9·8 | | 52·9 | 23·0 | |
| 9·4 | | 54·9 | 36·3 | |
| 9·4 | | 55·4 | 36·5 | |
| 9·4 | 21 | 2·4 | 17·8 | |
| 9·5 | | 17·9 | 34·1 | |
| 9·6 | | 19·9 | 30·8 | |
| 9·8 | | 23·9 | 18·5 | |
| 9·2 | | 24·4 | 19·0 | |
| 9·8 | | 47·4 | 19·4 | |
| 9·4 | 22 | 0·9 | 16·8 | |
| 9·8 | | 6·0 | 13·9 | |
| 9·2 | | 28·9 | 49·0 | |
| 9·2 | | 29·9 | 11·9 | |
| 9·4 | | 40·9 | 36·6 | |
| 9·7 | | 46·4 | 37·0 | |
| 9·8 | 23 | 6·4 | 23·6 | |
| 9·7 | | 30·4 | 43·7 | |
| 9·8 | | 53·4 | 50·0 | |
| 9·6 | 24 | 3·4 | 33·3 | |
| 9·4 | | 6·9 | 15·2 | |
| 9·6 | | 9·9 | 30·7 | |
| 9·6 | | 21·4 | 4·8 | |
| 9·4 | | 21·9 | 30·7 | |
| 9·6 | | 24·9 | 24·6 | |
| 10·0 | | 38·4 | 55·4 | |
| 10·0 | | 42·9 | 8·8 | |
| 8·2 | | 43·4 | 40·3 | 7·5 GS |
| 9·4 | | 48·1 | 58·7 | |
| 10·0 | | 48·4 | 14·7 | |
| 10·0 | | 50·9 | 25·2 | |
| 8·9 | | 51·9 | 14·2 | |
| 8·9 | | 53·4 | 18·8 | |
| 9·9 | 25 | 2·4 | 46·1 | |
| 9·4 | | 10·9 | 26·9 | |
| 9·6 | | 23·9 | 8·5 | |
| 9·4 | | 44·4 | 45·9 | |
| 9·5 | | 50·4 | 24·7 | |
| 9·6 | | 58·2 | 22·0 | |
| 10·0 | 26 | 4·9 | 15·0 | |
| 9·0 | | 6·3 | 44·0 | |
| 9·9 | | 6·3 | 2·5 | |
| 10·0 | | 10·8 | 22·6 | |
| 9·8 | | 40·8 | 7·0 | |
| 9·6 | | 43·3 | 31·3 | |
| 10·0 | | 45·8 | 51·7 | |
| 9·4 | | 50·3 | 17·4 | |
| 9·9 | | 53·8 | 41·0 | |
| 9·6 | | 59·3 | 50·5 | |
| 9·5 | 27 | 3·8 | 20·2 | |
| 9·6 | | 10·8 | 21·6 | |
| 9·6 | | 21·8 | 25·2 | |
| 9·6 | | 23·0 | 1·1 | |
| 9·6 | | 25·3 | 26·1 | |

## 8761—8820.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 27 | 26·8 | 29·5 | |
| 9·6 | | 27·8 | 8·9 | |
| 8·8 | | 28·0 | 59·5 | |
| 9·6 | | 35·3 | 10·6 | |
| 9·2 | | 44·8 | 14·9 | |
| 9·9 | | 53·3 | 5·2 | |
| 9·8 | | 56·8 | 6·9 | |
| 10·0 | 28 | 2·8 | 37·5 | |
| 9·6 | | 13·3 | 3·0 | |
| 9·6 | | 27·8 | 53·6 | |
| 9·4 | | 45·0 | 59·0 | |
| 9·2 | | 45·3 | 17·9 | |
| 10·0 | 29 | 1·8 | 38·3 | |
| 9·2 | | 3·3 | 31·4 | |
| 8·7 | | 8·8 | 24·5 | |
| 10·0 | | 13·8 | 0·2 | |
| 10·0 | | 29·3 | 29·0 | |
| 9·1 | | 30·8 | 24·1 | |
| 8·6 | | 38·0 | 42·0 | |
| 9·1 | | 38·5 | 46·9 | |
| 10·0 | | 45·0 | 9·1 | |
| 9·6 | 30 | 35·9 | 1·7 | |
| 9·8 | | 42·0 | 46·0 | |
| 9·8 | | 54·0 | 44·1 | |
| 9·6 | 31 | 21·0 | 35·2 | |
| 9·9 | | 21·0 | 20·2 | |
| 9·1 | | 24·0 | 21·7 | |
| 9·4 | | 29·0 | 39·1 | |
| 8·8 | | 30·0 | 24·7 | |
| 9·4 | | 32·5 | 21·1 | |
| 9·4 | | 45·5 | 40·8 | |
| 9·6 | | 46·0 | 35·6 | |
| 9·4 | | 46·0 | 2·0 | |
| 10·0 | | 46·5 | 48·9 | |
| 9·4 | | 59·0 | 44·8 | |
| 9·6 | | 59·5 | 19·4 | |
| 9·4 | | 59·5 | 47·5 | |
| 9·2 | 32 | 1·0 | 56·1 | |
| 9·9 | | 6·0 | 19·0 | |
| 9·5 | | 13·7 | 57·6 | |
| 8·4 | | 21·0 | 3·7 | 8·5 |
| 10·0 | | 30·0 | 32·9 | |
| 9·9 | | 43·0 | 13·0 | |
| 10·0 | | 50·0 | 0·4 | |
| 8·3 | | 50·0 | 7·6 | |
| 9·4 | | 58·0 | 53·3 | |
| 8·1 | 33 | 0·0 | 52·8 | 7·5 GS |
| 9·4 | | 11·5 | 38·7 | |
| 10·0 | | 14·5 | 5·4 | |
| 9·8 | | 18·0 | 54·1 | |
| 8·5 | | 24·0 | 21·9 | |
| 9·9 | | 29·0 | 33·6 | |
| 9·4 | | 44·5 | 9·3 | |
| 9·4 | | 46·0 | 7·3 | |
| 9·4 | | 52·5 | 38·9 | |
| 10·0 | | 59·0 | 16·4 | |
| 9·4 | 34 | 3·5 | 9·8 | |
| 9·4 | | 13·0 | 27·1 | |
| 9·5 | | 17·0 | 42·3 | |
| 9·8 | | 19·0 | 13·9 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 0 | 125 | 0·0 |
| | 10 | 125 | 0·4 |
| | 20 | 125 | 0·7 |
| | 30 | 125 | 1·1 |
| | 40 | 125 | 1·5 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 30 | 125 | 1·1 |
| | 40 | 125 | 1·5 |
| | 50 | 124 | 1·8 |
| 19 | 0 | 124 | 2·2 |
| | 10 | 123 | 2·5 |
| | 20 | 123 | 2·9 |

## 8821—8880.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8·9 | 34 | 25·5 | 34·0 | |
| 10·0 | | 26·0 | 18·0 | |
| 10·0 | | 28·5 | 32·3 | |
| 10·0 | | 29·5 | 14·5 | |
| 9·2 | | 37·0 | 59·7 | |
| 9·6 | | 48·5 | 35·9 | |
| 10·0 | | 49·4 | 59·5 | |
| 9·6 | 35 | 0·0 | 33·4 | |
| 9·9 | | 1·5 | 40·1 | |
| 9·1 | | 11·5 | 20·6 | 9·0 |
| 9·4 | | 17·0 | 26·3 | |
| 10·0 | | 22·0 | 53·1 | |
| 9·8 | | 28·5 | 17·0 | |
| 9·4 | | 33·0 | 34·9 | |
| 10·0 | | 51·5 | 53·3 | |
| 8·8 | | 53·0 | 7·2 | |
| 10·0 | | 59·5 | 29·1 | |
| 9·9 | 36 | 2·0 | 43·2 | |
| 9·1 | | 9·5 | 18·2 | 9·5 |
| 8·8 | | 10·0 | 17·7 | 9·5 |
| 9·9 | | 13·0 | 37·1 | |
| 10·0 | | 13·5 | 35·5 | |
| 10·0 | | 17·0 | 28·7 | |
| 9·2 | | 34·0 | 10·6 | |
| 10·0 | | 36·0 | 53·2 | |
| 10·0 | | 50·0 | 55·0 | |
| 9·8 | | 52·0 | 15·7 | |
| 9·4 | 37 | 0·5 | 35·2 | |
| 9·4 | | 3·5 | 1·1 | |
| 10·0 | | 8·5 | 25·1 | |
| 8·8 | | 20·0 | 12·2 | |
| 8·8 | | 30·0 | 44·4 | |
| 10·0 | | 31·0 | 18·0 | |
| 9·6 | | 36·0 | 36·9 | |
| 10·0 | | 38·5 | 29·9 | |
| 9·6 | | 40·0 | 50·3 | |
| 9·8 | | 43·5 | 38·6 | |
| 9·6 | | 50·5 | 42·6 | |
| 9·4 | 38 | 4·5 | 31·7 | |
| 10·0 | | 25·0 | 55·5 | |
| 9·6 | | 25·5 | 30·3 | |
| 9·9 | | 28·5 | 31·7 | |
| 9·8 | | 30·0 | 11·3 | |
| 9·5 | | 47·0 | 16·2 | |
| 10·0 | | 55·0 | 18·9 | |
| 9·6 | 39 | 12·0 | 18·4 | |
| 9·4 | | 16·0 | 39·1 | |
| 10·0 | | 22·5 | 20·7 | |
| 9·6 | | 35·5 | 54·4 | |
| 9·8 | | 48·5 | 41·5 | |
| 9·8 | 40 | 5·0 | 6·9 | |
| 10·0 | | 15·8 | 1·0 | |
| 10·0 | | 17·5 | 42·1 | |
| 9·6 | | 31·0 | 17·0 | |
| 10·0 | | 49·0 | 56·0 | |
| 9·2 | | 49·5 | 38·2 | |
| 10·0 | | 51·3 | 22·3 | |
| 9·9 | | 56·0 | 55·1 | |
| 9·5 | 41 | 12·0 | 42·1 | |
| 9·6 | | 12·0 | 55·0 | |

## 8881—8940.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·9 | 41 | 18·0 | 22·4 | |
| 8·3 | | 22·5 | 17·1 | 8·0 G |
| 9·5 | | 40·0 | 31·2 | |
| 10·0 | | 43·0 | 4·2 | |
| 10·0 | 42 | 2·5 | 32·7 | |
| 9·2 | | 5·0 | 18·2 | |
| 8·6 | | 16·5 | 2·1 | |
| 9·4 | | 17·2 | 58·1 | |
| 9·4 | | 21·0 | 42·2 | |
| 9·4 | | 27·0 | 37·5 | |
| 9·4 | | 54·5 | 3·3 | |
| 8·5 | 43 | 12·5 | 50·7 | |
| 9·4 | | 16·0 | 25·9 | |
| 9·6 | | 19·0 | 32·9 | |
| 10·0 | | 37·0 | 25·8 | |
| 8·6 | | 39·3 | 2·9 | 8·5 |
| 9·9 | 44 | 4·0 | 32·5 | |
| 9·6 | | 5·5 | 36·1 | |
| 9·6 | | 10·0 | 58·5 | |
| 9·2 | | 27·5 | 2·9 | |
| 9·9 | | 28·5 | 24·0 | |
| 10·0 | | 30·5 | 43·3 | |
| 10·0 | | 32·5 | 40·7 | |
| 10·0 | | 40·5 | 36·8 | |
| 10·0 | | 52·0 | 23·1 | |
| 9·6 | | 53·0 | 22·3 | |
| 9·9 | | 55·5 | 13·8 | |
| 9·4 | 45 | 1·5 | 21·9 | |
| 9·0 | | 20·8 | 1·2 | |
| 9·9 | | 22·5 | 52·9 | |
| 9·2 | | 32·0 | 28·9 | |
| 9·6 | | 35·0 | 12·7 | |
| 10·0 | | 36·5 | 28·4 | |
| 9·9 | | 46·0 | 50·9 | |
| 8·8 | | 50·0 | 54·9 | 8·5 |
| 9·4 | 46 | 13·5 | 24·6 | |
| 10·0 | | 13·5 | 47·0 | |
| 9·9 | | 17·5 | 56·1 | |
| 9·5 | | 27·5 | 36·2 | |
| 7·7 | | 53·0 | 59·4 | 8·0 G |
| 9·9 | | 53·3 | 0·9 | |
| 8·8 | 47 | 7·0 | 30·3 | 9·5 |
| 9·6 | | 15·0 | 54·7 | |
| 8·0 | | 22·0 | 38·3 | 8·0 |
| 10·0 | | 22·0 | 10·7 | |
| 9·6 | | 23·0 | 41·5 | |
| 10·0 | | 31·0 | 15·2 | |
| 9·6 | | 32·5 | 5·9 | |
| 9·8 | | 48·0 | 13·3 | |
| 10·0 | | 56·0 | 10·7 | |
| 9·9 | | 59·0 | 9·1 | |
| 9·0 | 48 | 8·0 | 35·3 | |
| 9·4 | | 11·5 | 19·8 | |
| 9·4 | | 18·5 | 18·9 | |
| 8·7 | | 33·0 | 3·2 | |
| 10·0 | | 59·0 | 26·1 | |
| 10·0 | 49 | 3·0 | 48·0 | |
| 10·0 | | 6·0 | 32·1 | |
| 10·0 | | 15·5 | 37·2 | |
| 8·9 | | 33·5 | 35·4 | 9·0 |

## 8941—9000.

| mag. | 18h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·1 | 49 | 44·5 | 5·1 | |
| 9·2 | | 46·0 | 17·7 | |
| 10·0 | | 51·5 | 51·2 | |
| 7·9 | 50 | 1·5 | 10·9 | 7·5 GSt |
| 9·6 | | 2·0 | 54·1 | |
| 9·9 | | 6·0 | 23·5 | |
| 10·0 | | 15·5 | 11·7 | |
| 8·6 | | 29·0 | 41·8 | 9·0 |
| 9·9 | | 33·5 | 49·9 | |
| 9·5 | | 37·0 | 1·6 | |
| 10·0 | | 40·0 | 7·6 | |
| 8·4 | 51 | 7·5 | 16·0 | 9·0 |
| 8·4 | | 21·0 | 48·6 | |
| 9·9 | | 22·5 | 26·3 | |
| 9·6 | | 24·0 | 54·5 | |
| 9·8 | | 44·5 | 5·8 | |
| 10·0 | | 45·5 | 41·1 | |
| 9·6 | 52 | 2·0 | 51·8 | |
| 9·2 | | 7·0 | 43·9 | |
| 9·9 | | 16·5 | 11·8 | |
| 10·0 | | 24·5 | 16·9 | |
| 10·0 | | 33·5 | 11·6 | |
| 10·0 | | 36·0 | 56·0 | |
| 9·4 | | 40·0 | 33·9 | |
| 8·4 | 53 | 12·0 | 56·6 | 9·0 |
| 9·6 | | 42·5 | 32·6 | |
| 10·0 | | 47·5 | 52·7 | |
| 9·4 | | 50·0 | 14·1 | |
| 10·0 | 54 | 8·3 | 28·8 | |
| 9·4 | | 9·5 | 24·7 | |
| 9·5 | | 12·0 | 47·1 | |
| 9·9 | | 16·0 | 31·5 | |
| 8·7 | | 22·0 | 21·5 | 9·0 |
| 9·9 | | 26·0 | 25·6 | |
| 9·4 | | 31·0 | 8·3 | |
| 9·6 | | 32·0 | 47·6 | |
| 9·4 | | 36·0 | 58·3 | |
| 8·8 | | 45·7 | 17·3 | 9·0 |
| 10·0 | 55 | 10·5 | 51·5 | |
| 9·8 | | 34·7 | 1·9 | |
| 10·0 | 56 | 6·0 | 52·6 | |
| 9·8 | | 18·0 | 23·6 | |
| 9·9 | | 22·0 | 55·9 | |
| 9·2 | | 26·5 | 54·7 | 9·0 |
| 9·6 | | 27·0 | 21·3 | |
| 10·0 | | 33·3 | 7·8 | |
| 10·0 | | 38·5 | 24·8 | |
| 9·4 | | 43·9 | 59·9 | |
| 10·3 | | 58·4 | 56·0 | |
| 9·2 | 57 | 5·9 | 7·7 | |
| 9·2 | | 7·4 | 56·0 | 8·5 |
| 10·2 | | 13·4 | 37·7 | |
| 9·4 | | 25·9 | 25·9 | G |
| 10·3 | | 52·9 | 39·3 | |
| 10·0 | | 56·9 | 45·2 | |
| 9·8 | 58 | 7·4 | 59·0 | |
| 9·2 | | 7·4 | 18·9 | |
| 9·2 | | 12·9 | 52·7 | 9·5 |
| 9·2 | | 12·9 | 12·9 | |
| 10·0 | | 29·9 | 30·8 | |

## 9001—9060.

| mag. | 18h.–19h. m | s | −55° ′ | |
|---|---|---|---|---|
| 7·2 | 58 | 30·9 | 54·5 | 6·5 GSt |
| 9·6 | 59 | 7·1 | 1·9 | |
| 10·3 | | 10·9 | 21·7 | |
| 9·8 | | 12·9 | 43·1 | |
| 10·3 | | 20·4 | 19·2 | |
| 9·6 | | 20·4 | 40·0 | |
| 9·8 | | 36·4 | 16·9 | 10·0 |
| 9·6 | | 49·9 | 36·0 | |
| 9·4 | 0 | 15·9 | 20·0 | 9·0 |
| 9·6 | | 17·9 | 50·2 | |
| 10·3 | | 27·9 | 13·0 | |
| 9·8 | | 27·9 | 19·2 | |
| 9·8 | | 52·9 | 5·0 | |
| 10·3 | | 55·9 | 11·1 | |
| 8·4 | 1 | 13·9 | 7·5 | 9·0 |
| 10·3 | | 18·4 | 46·1 | |
| 10·3 | 2 | 27·4 | 46·1 | |
| 8·0 | | 38·9 | 53·1 | 8·5 G |
| 9·8 | 3 | 7·4 | 44·3 | |
| 10·2 | | 13·4 | 25·6 | |
| 10·3 | 4 | 2·4 | 6·0 | |
| 9·6 | | 19·4 | 46·7 | |
| 9·6 | | 29·9 | 50·1 | |
| 9·0 | | 37·4 | 33·9 | 9·5 |
| 9·2 | | 55·9 | 6·0 | 9·0 |
| 9·8 | 5 | 0·4 | 14·0 | |
| 10·3 | | 24·9 | 17·1 | |
| 10·3 | | 36·9 | 9·7 | |
| 8·0 | 6 | 17·9 | 11·7 | 8·0 G |
| 9·4 | | 18·9 | 32·1 | |
| 10·3 | | 22·4 | 57·7 | |
| 9·8 | | 30·4 | 56·2 | |
| 9·6 | | 42·9 | 39·9 | |
| 9·6 | | 57·9 | 29·2 | |
| 10·2 | 7 | 2·9 | 37·0 | |
| 10·0 | | 3·4 | 8·3 | |
| 9·8 | | 25·4 | 10·3 | |
| 10·3 | | 35·9 | 59·0 | |
| 9·2 | | 42·9 | 40·8 | 8·5 G |
| 10·3 | | 44·9 | 12·1 | |
| 9·8 | 8 | 2·4 | 49·5 | |
| 8·8 | | 2·9 | 39·7 | 8·0 G |
| 10·3 | | 23·4 | 20·9 | |
| 9·8 | | 28·4 | 10·6 | |
| 9·6 | | 53·4 | 38·1 | |
| 9·4 | 9 | 8·9 | 34·6 | |
| 9·4 | | 10·0 | 24·6 | |
| 9·2 | | 24·0 | 32·9 | 8·5 |
| 10·3 | | 38·2 | 1·2 | |
| 9·6 | | 48·0 | 0·9 | |
| 10·3 | 10 | 2·0 | 27·9 | |
| 9·8 | | 2·5 | 16·9 | |
| 10·0 | | 3·0 | 36·5 | |
| 9·4 | | 12·5 | 54·1 | |
| 9·8 | | 14·5 | 0·4 | |
| 10·3 | | 23·0 | 52·3 | |
| 9·4 | | 38·5 | 57·7 | |
| 10·3 | | 52·5 | 33·9 | |
| 9·8 | 11 | 1·5 | 17·8 | |
| 8·0 | | 21·0 | 36·2 | |



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## 9061—9120.

| mag. | 19h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·3 | 11 | 36·0 | 19·9 | |
| 8·4 | | 55·0 | 53·7 | |
| 10·3 | | 57·0 | 16·1 | |
| 10·3 | 12 | 13·5 | 39·9 | |
| 9·8 | | 20·5 | 34·1 | |
| 10·2 | | 35·5 | 18·9 | |
| 10·3 | 13 | 27·0 | 55·8 | |
| 10·3 | | 32·0 | 6·7 | |
| 10·3 | | 35·5 | 56·0 | |
| 9·6 | | 55·5 | 1·2 | |
| 9·4 | | 55·5 | 46·0 | |
| 10·3 | 14 | 20·0 | 51·4 | |
| 7·4 | | 49·0 | 20·6 | 8·0 GS |
| 9·4 | | 53·0 | 45·7 | |
| 10·2 | 15 | 27·0 | 12·0 | |
| 10·0 | | 33·0 | 6·4 | |
| 10·3 | | 52·5 | 42·1 | |
| 9·2 | | 57·0 | 24·2 | |
| 8·1 | 16 | 6·0 | 37·0 | 7·0 GS |
| 8·1 | | 13·5 | 6·2 | |
| 9·6 | | 44·5 | 52·5 | |
| 10·2 | 17 | 2·5 | 8·9 | |
| 7·6 | | 20·5 | 12·6 | 8·0 G |
| 10·2 | | 24·0 | 16·3 | |
| 10·0 | | 33·5 | 2·9 | |
| 9·6 | | 47·5 | 59·2 | |
| 9·2 | | 52·0 | 19·7 | 8·5 G |
| 10·3 | 18 | 1·0 | 25·1 | |
| 9·6 | | 22·0 | 5·8 | |
| 10·3 | | 43·5 | 6·0 | |
| 10·0 | | 48·0 | 5·3 | |
| 10·3 | | 58·4 | 59·9 | |
| 8·6 | 19 | 30·0 | 2·1 | 8·2 G |
| 9·2 | | 30·5 | 44·2 | 9·5 |
| 10·3 | | 38·6 | 0·9 | |
| 6·6 | | 41·0 | 41·5 | 6·5 GSg |
| 10·2 | | 58·5 | 42·3 | |
| 10·0 | 20 | 0·0 | 35·0 | |
| 10·3 | | 19·5 | 55·4 | |
| 6·8 | | 26·0 | 21·7 | GScgt |
| 10·2 | | 34·0 | 23·8 | |
| 10·3 | | 40·0 | 10·2 | |
| 9·8 | | 47·5 | 12·2 | |
| 10·2 | | 48·5 | 19·9 | |
| 9·2 | | 51·5 | 11·1 | 9·0 |
| 9·4 | 21 | 26·0 | 51·9 | 9·5 |
| 9·4 | | 30·0 | 14·1 | 9·0 |
| 10·3 | | 44·0 | 46·9 | |
| 9·8 | | 46·0 | 12·7 | |
| 10·3 | | 52·5 | 3·9 | |
| 9·4 | | 54·5 | 34·0 | |
| 9·6 | | 58·0 | 58·9 | |
| 10·3 | 22 | 5·5 | 3·2 | |
| 10·2 | | 43·5 | 14·8 | |
| 9·6 | | 54·7 | 59·9 | |
| 10·2 | | 56·5 | 15·0 | |
| 10·3 | | 57·6 | 1·5 | |
| 10·3 | 23 | 13·5 | 17·6 | |
| 10·3 | | 37·0 | 59·7 | |
| 9·4 | | 45·0 | 57·0 | |

## 9121—9180.

| mag. | 19h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·4 | 24 | 3·0 | 17·8 | |
| 10·2 | | 12·5 | 30·4 | |
| 10·0 | | 43·0 | 52·3 | |
| 9·4 | | 57·7 | 57·1 | |
| 10·0 | 25 | 2·0 | 10·4 | |
| 10·3 | | 38·0 | 3·1 | |
| 10·0 | 26 | 16·0 | 11·9 | |
| 10·3 | | 44·0 | 31·7 | |
| 8·6 | | 53·0 | 21·0 | 9·0 |
| 10·3 | | 53·0 | 34·2 | |
| 9·8 | 27 | 2·0 | 37·9 | |
| 8·8 | | 2·0 | 0·9 | 8·0 G |
| 10·3 | | 21·0 | 17·5 | |
| 9·4 | | 31·5 | 22·4 | |
| 10·3 | | 37·0 | 2·8 | |
| 10·3 | | 44·0 | 10·5 | |
| 10·3 | 28 | 14·3 | 36·2 | |
| 9·0 | | 23·6 | 4·2 | 9·8 |
| 9·8 | | 50·6 | 15·1 | |
| 10·4 | | 50·6 | 47·9 | |
| 10·4 | 29 | 0·1 | 17·2 | |
| 10·4 | | 7·6 | 28·1 | |
| 9·8 | | 13·6 | 26·1 | |
| 10·4 | | 32·6 | 45·6 | |
| 9·2 | | 42·1 | 53·9 | |
| 10·4 | 30 | 10·6 | 56·3 | |
| 9·6 | | 14·1 | 51·3 | |
| 10·4 | | 18·6 | 26·8 | |
| 9·8 | | 45·1 | 45·0 | |
| 9·4 | 31 | 5·6 | 31·2 | |
| 10·4 | | 22·1 | 46·4 | |
| 10·4 | | 25·9 | 57·0 | |
| 10·4 | | 29·6 | 0·1 | |
| 8·2 | | 32·6 | 32·9 | GS |
| 9·8 | | 47·6 | 42·4 | |
| 10·2 | | 48·6 | 54·0 | |
| 10·4 | | 58·6 | 26·6 | |
| 10·0 | 32 | 5·6 | 26·3 | |
| 10·2 | | 17·6 | 47·7 | |
| 10·4 | | 33·1 | 18·0 | |
| 8·0 | | 42·1 | 46·4 | G |
| 9·8 | | 50·6 | 39·3 | |
| 10·0 | 33 | 30·9 | 8·8 | |
| 10·4 | | 31·1 | 24·8 | |
| 10·4 | | 43·4 | 22·1 | |
| 10·4 | 34 | 7·4 | 1·7 | |
| 10·4 | | 17·6 | 57·5 | |
| 9·8 | | 22·4 | 48·3 | |
| 10·4 | | 37·9 | 26·7 | |
| 9·8 | | 59·9 | 46·1 | |
| 9·8 | 35 | 1·9 | 44·9 | |
| 9·8 | | 2·9 | 32·9 | |
| 10·0 | | 5·4 | 36·8 | |
| 10·0 | | 6·9 | 45·2 | |
| 9·8 | | 23·4 | 54·0 | |
| 10·4 | | 30·3 | 35·3 | |
| 9·6 | | 32·9 | 34·7 | |
| 9·8 | 36 | 27·9 | 5·1 | |
| 10·4 | | 28·9 | 37·0 | |
| 10·4 | | 31·9 | 34·9 | |

## 9181—9240.

| mag. | 19h. m | s | −55° ′ | |
|---|---|---|---|---|
| 8·3 | 37 | 8·4 | 31·2 | |
| 9·4 | | 10·9 | 56·6 | |
| 8·2 | | 21·9 | 13·0 | |
| 10·4 | | 33·9 | 10·3 | |
| 10·2 | | 47·9 | 19·3 | |
| 9·8 | | 56·4 | 46·7 | |
| 10·4 | | 58·4 | 51·1 | |
| 8·6 | 38 | 1·4 | 55·2 | 9·0 G |
| 9·8 | | 19·4 | 36·8 | |
| 10·0 | | 33·4 | 36·5 | |
| 10·4 | | 36·3 | 22·7 | |
| 10·2 | | 37·4 | 5·3 | |
| 9·8 | | 42·4 | 18·8 | |
| 9·0 | | 42·9 | 57·0 | 9·5 |
| 9·1 | 39 | 2·4 | 23·4 | |
| 10·4 | | 6·9 | 4·4 | |
| 10·4 | | 12·9 | 46·0 | |
| 10·4 | | 14·3 | 1·0 | |
| 8·6 | | 14·9 | 11·6 | 9·0 |
| 10·4 | | 19·4 | 34·7 | |
| 9·8 | | 27·2 | 30·6 | |
| 10·0 | | 27·2 | 42·6 | |
| 8·6 | | 33·2 | 43·8 | 9·0 |
| 9·8 | | 35·7 | 36·6 | |
| 10·4 | 40 | 14·7 | 42·3 | |
| 10·4 | | 32·7 | 37·2 | |
| 10·4 | | 43·7 | 22·1 | |
| 9·4 | 41 | 0·7 | 45·5 | |
| 10·2 | | 16·2 | 35·4 | |
| 10·4 | | 20·2 | 31·1 | |
| 10·4 | | 29·2 | 51·2 | |
| 10·4 | | 38·7 | 15·7 | |
| 8·8 | | 46·7 | 44·0 | |
| 9·8 | 42 | 7·2 | 25·5 | |
| 10·4 | | 8·7 | 17·2 | |
| 10·4 | | 18·5 | 58·8 | |
| 10·2 | | 25·7 | 55·1 | |
| 9·4 | | 28·2 | 7·0 | |
| 9·0 | | 33·2 | 28·5 | |
| 9·4 | | 38·2 | 14·5 | |
| 7·3 | | 39·7 | 17·0 | 7·0 GSct |
| 7·3 | | 41·7 | 17·4 | 7·5 GSc |
| 9·6 | | 44·7 | 26·9 | |
| 10·4 | | 47·2 | 2·5 | |
| 10·4 | | 53·2 | 32·4 | |
| 10·2 | | 54·2 | 3·4 | |
| 10·0 | 43 | 7·2 | 37·7 | |
| 10·4 | | 23·7 | 30·7 | |
| 9·0 | | 25·2 | 42·3 | |
| 10·2 | | 39·2 | 40·4 | |
| 9·2 | | 50·7 | 3·4 | |
| 10·4 | | 55·2 | 27·2 | |
| 10·0 | | 57·2 | 51·0 | |
| 9·8 | 44 | 0·7 | 19·0 | |
| 10·2 | | 0·7 | 54·2 | |
| 10·4 | | 10·2 | 3·5 | |
| 10·4 | | 39·2 | 8·3 | |
| 10·4 | | 43·2 | 12·3 | |
| 10·4 | | 45·7 | 27·3 | |
| 9·6 | | 47·2 | 39·3 | |

## 9241—9300.

| mag. | 19h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 44 | 50·7 | 36·7 | |
| 9·8 | 45 | 0·7 | 4·5 | |
| 10·4 | | 11·7 | 58·9 | |
| 9·8 | | 15·7 | 53·2 | |
| 10·2 | | 26·6 | 58·6 | |
| 10·0 | | 50·5 | 42·0 | |
| 10·4 | | 54·5 | 5·4 | |
| 9·8 | | 57·5 | 40·5 | |
| 10·4 | 46 | 8·0 | 10·5 | |
| 8·4 | | 16·5 | 28·0 | 8·5 |
| 9·2 | | 24·5 | 25·8 | |
| 10·4 | | 28·0 | 44·9 | |
| 10·4 | | 53·0 | 49·6 | |
| 10·2 | 47 | 15·5 | 8·4 | |
| 9·8 | | 16·0 | 46·4 | |
| 10·4 | | 20·0 | 0·9 | |
| 9·6 | | 25·5 | 55·8 | |
| 10·4 | | 31·5 | 20·9 | |
| 9·8 | | 34·5 | 13·9 | G |
| 10·4 | | 38·0 | 8·7 | |
| 10·4 | | 38·5 | 10·1 | |
| 10·0 | | 44·0 | 7·5 | |
| 10·4 | | 44·7 | 19·7 | |
| 10·4 | 48 | 1·5 | 18·5 | |
| 10·4 | | 20·5 | 29·2 | |
| 10·4 | | 36·5 | 53·8 | |
| 8·8 | | 36·5 | 15·9 | 8·0 G |
| 8·8 | 49 | 8·0 | 45·2 | 9·0 |
| 10·4 | | 23·5 | 47·2 | |
| 7·8 | | 29·5 | 22·5 | 8·0 GS |
| 9·6 | | 47·5 | 36·0 | |
| 10·2 | | 50·0 | 27·4 | |
| 10·4 | 50 | 3·5 | 40·3 | |
| 9·0 | | 11·0 | 28·2 | 9·0 |
| 8·9 | | 17·5 | 42·6 | 9·0 |
| 9·0 | | 27·0 | 55·1 | 8·5 |
| 10·4 | | 31·5 | 25·8 | |
| 10·0 | | 46·0 | 56·1 | |
| 9·8 | | 55·0 | 9·8 | |
| 9·6 | 51 | 11·0 | 38·9 | |
| 10·0 | | 16·5 | 8·9 | |
| 10·0 | | 41·5 | 21·4 | |
| 9·0 | | 46·5 | 51·7 | 9·0 |
| 9·2 | | 51·8 | 59·9 | |
| 10·4 | 52 | 12·8 | 10·9 | |
| 10·4 | | 17·8 | 33·7 | |
| 9·1 | | 31·3 | 59·6 | 9·0 |
| 10·4 | | 34·8 | 5·9 | |
| 9·8 | | 50·3 | 3·9 | |
| 10·4 | | 55·4 | 59·4 | |
| 8·5 | | 56·3 | 35·2 | |
| 10·4 | | 59·8 | 50·6 | |
| 10·4 | 53 | 10·3 | 41·2 | |
| 9·8 | | 12·8 | 59·6 | |
| 9·8 | | 48·8 | 35·9 | |
| 10·4 | | 52·3 | 31·4 | |
| 10·0 | | 54·8 | 52·2 | |
| 10·4 | 54 | 1·3 | 31·9 | |
| 10·2 | | 2·8 | 3·9 | |
| 10·4 | | 2·8 | 25·0 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 10 | 123 | 2·5 |
| | 20 | 123 | 2·9 |
| | 30 | 122 | 3·2 |
| | 40 | 121 | 3·5 |
| | 50 | 120 | 3·9 |
| 20 | 0 | 119 | 4·2 |



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| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 50 | 120 | 3.9 |
| 20 | 0 | 119 | 4.2 |
| | 10 | 118 | 4.5 |
| | 20 | 117 | 4.8 |
| | 30 | 115 | 5.1 |
| | 40 | 114 | 5.4 |
| | 50 | 113 | 5.6 |
| 21 | 0 | 111 | 5.9 |
| | 10 | 110 | 6.2 |

25 prec.

## 9301—9360.

| mag. | $19^{h.}$–$20^{h.}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9.6 | 54 | 6.8 | 46.0 | |
| 10.4 | | 17.8 | 34.2 | |
| 10.4 | | 18.8 | 50.4 | |
| 9.1 | | 42.3 | 23.0 | 9.5 |
| 8.5 | | 43.3 | 28.2 | 9.0 G |
| 8.6 | 55 | 23.8 | 4.4 | 9.0 |
| 9.8 | | 26.3 | 5.6 | |
| 9.4 | | 35.3 | 42.5 | |
| 9.8 | | 40.3 | 28.9 | |
| 8.2 | | 47.8 | 10.3 | 8.5 |
| 10.4 | | 56.3 | 12.7 | |
| 10.4 | | 59.8 | 29.8 | |
| 9.0* | 56 | 25.3 | 54.2 | |
| 10.4 | | 52.8 | 37.9 | |
| 10.4 | 57 | 5.3 | 28.1 | |
| 10.4 | | 26.8 | 57.0 | |
| 7.2 | | 43.8 | 22.3 | 6.5 GScgt |
| 10.2 | | 49.8 | 16.0 | |
| 10.4 | | 51.3 | 31.5 | |
| 10.4 | 58 | 11.3 | 43.0 | |
| 10.4 | | 11.8 | 16.9 | |
| 10.0 | | 14.8 | 55.9 | |
| 10.4 | | 18.3 | 11.0 | |
| 8.6 | | 24.9 | 2.5 | 8.0 |
| 9.6 | | 57.6 | 53.0 | |
| 9.8 | 59 | 4.7 | 29.5 | |
| 9.8 | | 6.1 | 57.1 | |
| 10.4 | | 13.1 | 53.4 | |
| 9.4 | | 21.1 | 59.4 | |
| 10.4 | | 26.6 | 17.9 | |
| 9.0 | | 29.6 | 47.9 | |
| 9.8 | | 32.1 | 3.8 | |
| 10.4 | 0 | 18.1 | 57.9 | |
| 10.4 | | 23.6 | 26.9 | |
| 9.8 | | 24.1 | 53.9 | |
| 10.4 | | 29.6 | 43.1 | |
| 9.0 | | 51.7 | 31.7 | |
| 9.4 | 1 | 6.7 | 7.9 | |
| 9.4 | | 24.7 | 6.0 | |
| 9.7 | | 32.7 | 20.5 | |
| 9.4 | | 40.7 | 18.9 | |
| 9.7 | | 52.2 | 25.0 | |
| 9.4 | 2 | 1.5 | 2.2 | |
| 9.2 | | 26.7 | 21.2 | |
| 9.4 | | 41.7 | 49.0 | |
| 9.7 | | 52.2 | 49.0 | |
| 9.6 | | 54.7 | 29.2 | |
| 9.4 | 3 | 47.7 | 7.8 | |
| 8.4 | 4 | 0.2 | 32.5 | |
| 9.4 | | 9.7 | 13.7 | |
| 9.6 | | 32.7 | 51.2 | |
| 9.6 | 5 | 7.2 | 40.2 | |
| 9.3 | | 20.7 | 44.0 | |
| 9.2 | | 39.2 | 36.9 | |
| 9.7 | | 47.2 | 50.8 | |
| 9.6 | | 58.2 | 6.2 | |
| 9.6 | 6 | 24.7 | 37.9 | |
| 9.7 | | 30.2 | 16.2 | |
| 9.0 | | 50.7 | 42.0 | |
| 9.6 | 7 | 22.2 | 31.2 | |

## 9361—9420.

| mag. | $20^{h.}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9.0 | 8 | 20.7 | 36.6 | 9.0 G |
| 8.6 | 9 | 3.2 | 27.0 | 9.0 G |
| 9.7 | | 34.3 | 5.1 | |
| 8.2 | 10 | 39.7 | 22.8 | 8.5 S |
| 7.9 | | 48.2 | 26.2 | 6.5 GSct |
| 9.0 | 11 | 1.7 | 54.9 | |
| 9.7 | | 16.2 | 27.7 | |
| 9.7 | | 24.2 | 53.1 | |
| 9.4 | | 42.7 | 37.2 | |
| 8.6 | | 59.7 | 12.0 | 8.5 GS |
| 9.3 | 12 | 25.7 | 20.4 | |
| 9.7 | | 39.7 | 30.4 | |
| 9.7 | | 44.2 | 27.1 | |
| 9.4 | 13 | 4.0 | 57.0 | |
| 9.4 | | 25.0 | 59.8 | |
| 9.7 | 14 | 1.5 | 48.7 | |
| 9.7 | | 8.0 | 11.8 | |
| 9.7 | | 26.0 | 24.6 | |
| 9.7 | | 29.5 | 1.3 | |
| 9.4 | | 29.5 | 0.7 | |
| 9.6 | | 32.5 | 20.6 | |
| 9.2 | | 52.0 | 41.9 | |
| 9.7 | 16 | 0.5 | 10.0 | |
| 9.7 | | 27.0 | 26.2 | |
| 9.4 | | 36.6 | 36.7 | |
| 9.3 | | 45.5 | 29.8 | |
| 9.6 | 17 | 13.5 | 57.2 | |
| 9.4 | | 35.0 | 11.6 | |
| 9.4 | | 36.0 | 36.6 | |
| 9.4 | 18 | 14.5 | 20.2 | |
| 9.7 | | 23.0 | 0.0 | |
| 8.6 | | 45.5 | 35.1 | 8.0 G |
| 9.0 | | 51.5 | 0.4 | |
| 9.2 | | 54.5 | 44.9 | |
| 9.7 | 19 | 4.0 | 2.8 | |
| 8.9 | | 15.0 | 5.2 | |
| 9.0 | 20 | 1.0 | 31.9 | G |
| 9.6 | | 1.5 | 7.0 | |
| 9.0 | | 6.5 | 29.9 | Gk |
| 9.3 | | 46.5 | 7.0 | |
| 9.0 | | 54.0 | 24.0 | |
| 9.6 | 21 | 4.5 | 9.9 | |
| 9.7 | | 7.5 | 27.6 | |
| 9.7 | 22 | 0.0 | 17.1 | |
| 9.7 | | 1.6 | 6.1 | |
| 9.7 | | 1.6 | 42.0 | |
| 9.7 | | 16.5 | 14.2 | |
| 9.0 | | 17.5 | 23.6 | |
| 9.2 | | 30.5 | 2.1 | |
| 9.4 | | 33.0 | 37.4 | |
| 9.2 | | 56.0 | 45.6 | |
| 9.7 | 23 | 31.5 | 55.0 | |
| 9.7 | 24 | 9.5 | 16.2 | |
| 9.4 | | 15.5 | 53.8 | |
| 9.6 | | 29.5 | 49.2 | |
| 9.3 | | 37.0 | 14.4 | |
| 8.6 | | 53.0 | 57.9 | 8.5 |
| 9.0 | 25 | 3.0 | 55.2 | 9.0 |
| 8.9 | | 35.5 | 22.6 | 9.5 |
| 9.2 | | 57.9 | 58.7 | |

## 9421—9480.

| mag. | $20^{h.}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9.6 | 26 | 17.0 | 8.2 | |
| 9.4 | | 17.0 | 52.9 | |
| 9.4 | | 27.0 | 47.0 | |
| 9.6 | | 27.5 | 37.9 | |
| 8.6 | | 28.5 | 21.9 | 9.0 |
| 9.4 | | 40.4 | 0.2 | G |
| 9.7 | | 50.5 | 58.8 | |
| 9.7 | 27 | 3.5 | 8.9 | |
| 9.7 | | 11.0 | 43.1 | |
| 9.7 | | 16.0 | 30.7 | |
| 9.0 | | 27.5 | 55.0 | 9.5 |
| 8.8 | | 34.5 | 54.5 | 9.0 |
| 9.7 | | 37.5 | 14.3 | |
| 9.4 | | 41.5 | 51.3 | |
| 9.2 | 28 | 21.0 | 15.2 | Gk |
| 9.4 | | 28.0 | 21.2 | Gk |
| 9.7 | | 29.5 | 49.9 | |
| 9.0 | | 39.5 | 33.9 | 9.0 G |
| 9.4 | | 56.4 | 57.2 | |
| 9.7 | 29 | 10.5 | 55.8 | |
| 8.4 | | 23.5 | 33.5 | 8.5 Gk |
| 8.7 | | 29.5 | 6.9 | |
| 9.7 | | 31.0 | 53.8 | |
| 9.7 | | 40.5 | 46.7 | |
| 9.7 | | 53.0 | 18.8 | |
| 9.0 | | 57.5 | 10.8 | |
| 9.4 | 30 | 9.5 | 46.3 | |
| 9.3 | | 17.6 | 57.1 | |
| 9.7 | | 19.5 | 4.0 | |
| 9.7 | | 53.0 | 22.7 | |
| 9.4 | | 54.7 | 56.4 | |
| 9.2 | 32 | 16.0 | 57.1 | |
| 9.0 | | 24.1 | 0.0 | 8.0 G |
| 9.7 | | 37.0 | 19.5 | |
| 9.3 | | 38.5 | 33.1 | Gk |
| 10.0 | 33 | 41.1 | 6.4 | |
| 9.3 | 34 | 2.1 | 6.4 | 9.5 |
| 9.6 | | 54.6 | 32.8 | G |
| 9.8 | | 58.1 | 49.5 | |
| 10.0 | 35 | 48.6 | 38.5 | G |
| 8.0 | | 54.6 | 13.4 | 8.8 |
| 10.0 | 36 | 0.4 | 0.1 | |
| 10.0 | 37 | 56.4 | 20.9 | |
| 9.4 | 39 | 34.9 | 40.0 | Gk |
| 9.2 | | 43.4 | 13.6 | 9.0 G |
| 10.0 | 40 | 20.9 | 38.0 | |
| 9.8 | 41 | 6.4 | 44.6 | |
| 9.8 | | 12.4 | 49.9 | Gk |
| 10.0 | | 31.6 | 46.6 | |
| 10.0 | 42 | 24.9 | 3.9 | |
| 10.0 | | 43.4 | 17.7 | |
| 10.0 | | 44.4 | 37.9 | |
| 10.0 | | 44.9 | 55.9 | |
| 10.0 | 43 | 22.4 | 26.9 | |
| 9.4 | | 22.9 | 43.9 | |
| 9.3 | | 32.2 | 54.7 | |
| 9.0 | | 33.1 | 1.8 | 9.0 G |
| 10.0 | | 38.7 | 51.1 | |
| 9.4 | | 58.7 | 44.7 | |
| 10.0 | 44 | 42.2 | 13.5 | |

## 9481—9540.

| mag. | $20^{h.}$–$21^{h.}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9.2 | 45 | 42.7 | 56.0 | 9.5 G |
| 10.0 | | 49.7 | 12.2 | |
| 10.0 | | 49.7 | 10.3 | G |
| 8.2 | 46 | 47.7 | 41.7 | 8.0 GSk |
| 9.2 | 47 | 35.2 | 6.9 | |
| 9.4 | 48 | 16.2 | 54.8 | |
| 10.0 | | 57.0 | 57.3 | |
| 9.8 | 50 | 11.2 | 39.4 | |
| 9.4 | | 12.7 | 0.9 | |
| 10.0 | | 30.2 | 5.6 | |
| 10.0 | | 32.2 | 27.6 | |
| 10.0 | | 37.2 | 32.5 | |
| 10.0 | | 49.6 | 14.1 | |
| 10.0 | | 52.6 | 8.6 | |
| 9.3 | 51 | 15.6 | 24.1 | 9.0 |
| 10.0 | | 15.6 | 58.3 | |
| 10.0 | | 22.6 | 51.7 | |
| 8.8 | | 28.1 | 6.0 | 9.0 |
| 9.8 | | 38.1 | 53.8 | |
| 10.0 | | 46.1 | 0.8 | |
| 10.0 | 52 | 26.6 | 44.8 | |
| 10.0 | 53 | 3.6 | 24.3 | |
| 9.3 | | 9.6 | 54.3 | |
| 10.0 | | 46.6 | 34.4 | |
| 9.0 | 54 | 54.6 | 49.5 | |
| 8.9 | | 54.6 | 49.2 | 8.5 |
| 10.0 | 55 | 1.6 | 1.0 | |
| 8.9 | | 29.6 | 49.7 | 9.0 |
| 6.5 | 56 | 1.6 | 13.1 | GSct |
| 10.0 | | 39.9 | 58.6 | |
| 10.0 | | 45.6 | 55.5 | |
| 9.2 | 57 | 2.1 | 43.7 | 9.5 |
| 7.4 | | 17.6 | 27.1 | 8.0 GS |
| 10.0 | | 38.6 | 3.0 | |
| 9.8 | | 39.9 | 58.9 | |
| 9.4 | 58 | 20.9 | 7.8 | |
| 8.4 | | 41.9 | 37.2 | |
| 9.6 | | 42.9 | 48.5 | |
| 8.7 | | 46.9 | 55.5 | 9.0 G |
| 9.0 | | 48.9 | 14.4 | 9.0 G |
| 10.0 | | 53.9 | 49.5 | |
| 10.0 | 59 | 4.4 | 28.1 | |
| 9.8 | | 30.4 | 45.9 | |
| 8.0 | | 51.4 | 47.7 | 8.5 GS |
| 10.0 | 0 | 16.4 | 36.5 | |
| 10.0 | | 19.9 | 0.3 | |
| 10.0 | | 38.5 | 33.8 | |
| 9.0 | | 55.4 | 15.1 | 8.5 G |
| 10.0 | 1 | 0.4 | 43.9 | |
| 7.2 | | 16.4 | 4.8 | 7.5 GSt |
| 10.0 | | 31.9 | 18.8 | |
| 10.0 | | 32.9 | 42.8 | |
| 10.0 | 2 | 8.9 | 12.6 | |
| 10.2 | 3 | 24.9 | 27.4 | |
| 8.6 | | 42.9 | 4.2 | |
| 10.0 | | 56.4 | 45.2 | |
| 9.8 | | 56.9 | 33.7 | |
| 10.2 | | 57.9 | 36.0 | |
| 9.6 | 4 | 9.4 | 21.1 | |
| 7.7 | | 24.9 | 30.0 | 7.5 GSr |

* This star is contained neither on measuring nor on check plate, but is conspicuous on both the rejected plates Nos. 776 and 780. Variable.



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## 9541—9600.

| mag. | $21^{h}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 5 | 9·4 | 17·0 | |
| 9·8 | | 19·4 | 45·6 | |
| 10·2 | | 19·9 | 15·0 | |
| 9·8 | | 45·4 | 14·1 | |
| 9·8 | 6 | 9·1 | 59·6 | |
| 10·2 | | 20·9 | 34·0 | |
| 10·2 | | 21·4 | 42·0 | |
| 9·2 | | 36·4 | 26·8 | |
| 7·5 | 7 | 20·4 | 22·4 | 7·5 GS |
| 9·0 | | 23·4 | 44·3 | |
| 10·2 | | 29·4 | 47·6 | |
| 9·4 | | 36·9 | 14·8 | |
| 9·4 | 8 | 31·4 | 18·0 | 9·0 |
| 10·0 | | 41·4 | 14·4 | |
| 10·0 | | 57·9 | 39·4 | |
| 8·3 | 9 | 12·9 | 39·0 | |
| 10·2 | | 21·4 | 9·3 | |
| 10·2 | | 47·9 | 37·8 | |
| 7·7 | 10 | 35·9 | 5·0 | 8·0 GS |
| 10·0 | | 55·9 | 4·5 | |
| 10·2 | | 59·4 | 12·0 | |
| 10·0 | 11 | 43·9 | 9·5 | |
| 9·6 | | 56·9 | 30·8 | |
| 8·0 | 12 | 20·9 | 16·4 | 8·5 GS |
| 10·2 | | 30·9 | 4·0 | |
| 10·2 | | 57·9 | 31·7 | |
| 10·2 | 13 | 12·4 | 9·4 | |
| 9·2 | | 20·4 | 23·8 | 9·5 |
| 9·2 | | 58·1 | 58·4 | |
| 10·0 | 14 | 0·4 | 8·6 | |
| 10·2 | | 7·4 | 48·6 | |
| 9·2 | | 12·9 | 31·1 | |
| 10·0 | | 13·9 | 24·0 | |
| 9·2 | | 21·9 | 1·1 | |
| 10·2 | | 45·4 | 41·7 | |
| 10·2 | | 50·9 | 7·8 | |
| 10·2 | | 51·4 | 15·0 | |
| 10·2 | | 52·4 | 50·8 | |
| 9·0 | | 59·4 | 18·2 | |
| 10·2 | 15 | 23·4 | 29·0 | |
| 8·6 | | 26·9 | 6·4 | 8·5 |
| 9·8 | | 34·9 | 49·7 | |
| 9·6 | | 41·4 | 23·0 | |
| 9·2 | 16 | 9·4 | 58·0 | 9·0 |
| 9·2 | | 30·9 | 3·5 | |
| 6·6 | 17 | 19·9 | 11·8 | 6·5 GSct |
| 10·2 | | 43·4 | 0·6 | |
| 9·0 | | 51·7 | 8·0 | |
| 10·2 | 18 | 10·2 | 40·2 | |
| 10·2 | | 46·7 | 31·1 | |
| 9·2 | | 58·7 | 12·6 | |
| 8·8 | 19 | 15·7 | 42·4 | 9·5 |
| 9·4 | | 19·2 | 42·6 | |
| 10·0 | | 57·2 | 5·9 | |
| 10·2 | 20 | 9·2 | 17·8 | |
| 9·0 | | 11·2 | 42·5 | |
| 9·6 | | 30·7 | 33·7 | |
| 8·2 | 21 | 0·7 | 19·1 | |
| 10·2 | | 9·7 | 40·9 | |
| 9·2 | | 18·7 | 3·8 | |

## 9601—9660.

| mag. | $21^{h}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 21 | 19·2 | 40·6 | |
| 10·2 | | 26·0 | 57·2 | |
| 10·2 | | 47·7 | 22·0 | |
| 10·2 | 22 | 5·2 | 49·0 | |
| 8·2 | | 14·7 | 49·4 | 8·5 |
| 10·2 | | 15·2 | 24·6 | |
| 10·2 | | 39·7 | 29·4 | |
| 10·2 | | 49·2 | 44·1 | |
| 10·2 | | 58·2 | 48·9 | |
| 10·2 | 23 | 20·7 | 16·2 | |
| 10·2 | | 31·2 | 2·2 | |
| 10·2 | | 39·7 | 33·8 | |
| 9·4 | | 51·2 | 56·9 | |
| 10·2 | | 54·0 | 50·3 | |
| 9·4 | 24 | 3·7 | 56·0 | |
| 10·0 | | 7·2 | 49·1 | |
| 10·2 | | 14·2 | 23·3 | |
| 10·2 | 25 | 2·2 | 3·1 | |
| 9·4 | | 26·2 | 6·5 | |
| 10·2 | | 37·7 | 34·1 | |
| 10·0 | 26 | 1·7 | 41·1 | |
| 8·3 | | 17·2 | 8·2 | 8·5 |
| 10·2 | | 35·2 | 18·2 | |
| 10·2 | | 35·7 | 38·2 | |
| 9·0 | 27 | 0·2 | 8·5 | |
| 9·8 | | 1·0 | 1·4 | |
| 9·4 | | 1·5 | 42·6 | |
| 9·3 | | 12·0 | 49·4 | |
| 9·6 | | 18·0 | 40·8 | |
| 9·8 | | 19·0 | 21·4 | |
| 10·2 | | 36·0 | 17·6 | |
| 10·2 | | 49·2 | 58·0 | |
| 10·0 | | 53·0 | 24·0 | |
| 10·2 | 28 | 1·5 | 17·6 | |
| 10·2 | | 13·5 | 7·2 | |
| 9·0 | | 16·5 | 2·0 | 9·0 |
| 9·8 | | 21·5 | 9·4 | |
| 9·2 | | 24·4 | 2·0 | 9·5 |
| 9·6 | | 50·5 | 33·2 | G |
| 9·4 | | 57·0 | 40·6 | |
| 9·4 | 29 | 14·0 | 36·2 | |
| 9·4 | | 25·0 | 40·2 | G |
| 10·2 | | 41·5 | 37·4 | |
| 9·8 | | 46·0 | 14·2 | |
| 8·6 | 30 | 12·5 | 25·4 | 8·5 |
| 10·0 | | 18·5 | 21·7 | |
| 10·2 | | 34·5 | 12·0 | |
| 9·8 | | 38·7 | 59·4 | |
| 10·2 | | 38·9 | 1·9 | |
| 9·6 | 31 | 5·0 | 37·5 | |
| 9·6 | | 5·5 | 16·4 | |
| 9·6 | | 39·0 | 2·8 | |
| 10·2 | | 39·5 | 47·7 | |
| 9·0 | | 58·5 | 54·2 | 8·5 |
| 9·2 | 32 | 5·5 | 8·6 | |
| 10·2 | | 8·0 | 50·2 | |
| 10·0 | | 11·0 | 26·8 | |
| 9·6 | | 32·0 | 40·0 | |
| 10·2 | 33 | 1·5 | 21·2 | |
| 9·3 | | 3·5 | 9·0 | |

## 9661—9720.

| mag. | $21^{h}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 33 | 9·5 | 29·6 | |
| 10·2 | | 19·0 | 14·3 | |
| 10·0 | | 53·0 | 10·8 | |
| 10·2 | 34 | 7·5 | 19·2 | |
| 10·2 | | 24·5 | 59·3 | |
| 10·2 | | 27·3 | 0·9 | |
| 10·2 | | 31·3 | 58·2 | |
| 9·2 | | 49·8 | 40·5 | |
| 9·6 | 35 | 12·3 | 17·7 | |
| 7·8 | | 14·8 | 4·1 | 7·0 GSct |
| 8·0 | | 18·3 | 37·5 | 7·5 GSt |
| 10·0 | | 36·8 | 17·3 | |
| 10·0 | | 47·3 | 17·9 | |
| 10·2 | 36 | 1·3 | 15·9 | |
| 9·0 | | 47·7 | 51·0 | |
| 9·3 | 37 | 2·7 | 8·5 | |
| 9·4 | | 29·7 | 21·8 | |
| 9·6 | | 39·2 | 27·8 | |
| 9·3 | | 42·4 | 1·7 | |
| 9·8 | 38 | 0·7 | 32·6 | |
| 9·3 | | 2·2 | 46·0 | |
| 9·8 | | 3·2 | 47·1 | |
| 9·2 | | 15·2 | 45·2 | |
| 9·8 | | 17·4 | 2·2 | |
| 9·8 | | 26·7 | 33·4 | |
| 9·4 | | 31·2 | 46·8 | |
| 9·8 | 39 | 7·3 | 35·2 | |
| 9·8 | | 11·8 | 44·2 | |
| 9·8 | | 12·8 | 50·7 | |
| 9·4 | | 44·8 | 20·3 | |
| 9·6 | | 46·8 | 21·4 | |
| 9·8 | | 51·8 | 46·5 | |
| 9·8 | | 53·8 | 55·6 | |
| 9·4 | 40 | 6·3 | 22·4 | |
| 9·6 | | 18·8 | 38·3 | |
| 9·0 | | 40·3 | 26·1 | 9·0 G |
| 9·6 | | 45·3 | 58·6 | |
| 9·2 | | 51·3 | 48·1 | |
| 9·8 | 41 | 19·8 | 12·9 | |
| 9·8 | | 21·8 | 47·9 | |
| 9·3 | | 52·8 | 53·3 | |
| 8·2 | 42 | 1·3 | 44·7 | 7·5 GS |
| 9·5 | | 21·3 | 12·2 | |
| 7·5 | 43 | 19·3 | 14·0 | 7·0 GSct |
| 9·2 | | 24·3 | 48·8 | |
| 9·5 | | 24·8 | 25·2 | |
| 9·6 | | 28·8 | 35·6 | |
| 9·2 | | 37·3 | 39·9 | |
| 8·8 | 44 | 18·9 | 18·9 | |
| 9·8 | | 32·9 | 40·8 | |
| 9·6 | | 38·4 | 27·0 | |
| 9·4 | | 46·4 | 23·6 | |
| 9·8 | 45 | 0·4 | 12·1 | |
| 9·4 | | 2·4 | 11·6 | |
| 8·6 | | 20·9 | 8·6 | 9·0 G |
| 9·2 | | 56·9 | 46·2 | |
| 9·8 | 46 | 9·4 | 41·0 | |
| 9·8 | | 17·4 | 57·5 | |
| 9·4 | | 20·4 | 20·0 | |
| 9·3 | | 44·9 | 40·2 | |

## 9721—9780.

| mag. | $21^{h}$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·8 | 46 | 48·9 | 4·9 | |
| 9·2 | | 57·4 | 54·7 | |
| 9·5 | 47 | 49·9 | 51·0 | |
| 9·0 | | 54·4 | 41·8 | |
| 9·8 | 48 | 0·4 | 35·0 | |
| 9·6 | | 1·4 | 52·0 | |
| 9·2 | | 4·4 | 49·8 | |
| 9·8 | | 7·4 | 7·1 | |
| 9·6 | | 39·5 | 39·2 | |
| 9·5 | | 43·5 | 31·2 | |
| 9·2 | 49 | 7·5 | 13·3 | |
| 9·4 | | 23·0 | 23·1 | |
| 4·3 | | 23·5 | 35·1 | GSctr |
| 9·8 | 50 | 3·0 | 21·2 | |
| 9·3 | | 6·0 | 13·9 | |
| 9·8 | | 11·0 | 0·0 | |
| 9·6 | | 52·5 | 38·0 | |
| 9·8 | 51 | 0·5 | 36·9 | |
| 9·8 | | 13·5 | 18·3 | |
| 9·8 | | 21·5 | 54·4 | |
| 9·0 | | 30·0 | 14·8 | |
| 9·4 | | 32·0 | 32·2 | |
| 9·8 | | 45·5 | 38·5 | |
| 9·6 | | 52·0 | 47·2 | |
| 9·8 | 52 | 1·0 | 56·6 | |
| 9·4 | | 4·0 | 4·2 | |
| 9·4 | | 9·5 | 4·5 | |
| 9·8 | | 45·3 | 40·0 | |
| 9·8 | | 48·0 | 54·7 | |
| 9·8 | | 48·3 | 52·1 | |
| 9·8 | | 52·5 | 17·3 | |
| 9·6 | 53 | 9·5 | 39·0 | |
| 9·0 | | 12·0 | 1·6 | |
| 9·8 | | 13·5 | 17·4 | |
| 9·8 | | 29·5 | 28·2 | |
| 8·8 | | 49·5 | 5·4 | 9·0 |
| 8·3 | | 49·5 | 21·7 | |
| 9·8 | 54 | 0·0 | 23·9 | |
| 9·8 | | 15·0 | 49·8 | |
| 9·8 | | 22·5 | 7·9 | |
| 9·8 | | 24·5 | 34·8 | |
| 9·2 | | 48·5 | 29·5 | |
| 9·8 | | 55·3 | 38·1 | |
| 9·6 | 55 | 46·0 | 9·1 | |
| 9·6 | | 47·5 | 9·6 | |
| 9·8 | 56 | 6·0 | 56·1 | |
| 9·6 | | 27·5 | 17·9 | |
| 9·8 | 57 | 11·5 | 10·0 | |
| 9·2 | | 12·0 | 33·4 | |
| 9·2 | | 19·0 | 12·7 | |
| 9·6 | | 32·5 | 39·0 | |
| 9·8 | | 33·5 | 15·5 | |
| 9·3 | | 35·5 | 23·7 | |
| 9·8 | | 42·0 | 24·6 | |
| 9·4 | 58 | 7·5 | 35·8 | |
| 9·8 | | 26·5 | 37·9 | |
| 9·3 | | 38·5 | 0·2 | |
| 9·8 | | 39·0 | 21·4 | |
| 9·3 | | 40·0 | 24·6 | |
| 9·8 | | 40·0 | 56·1 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 0 | 111 | 5·9 |
| | 10 | 110 | 6·2 |
| | 20 | 108 | 6·4 |
| | 30 | 106 | 6·6 |
| | 40 | 105 | 6·8 |
| | 50 | 103 | 7·0 |
| 22 | 0 | 101 | 7·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | + |
| 21 | 50 | 103 | 7·0 |
| 22 | 0 | 101 | 7·2 |
| | 10 | 99 | 7·4 |
| | 20 | 97 | 7·6 |
| | 30 | 95 | 7·7 |
| | 40 | 93 | 7·9 |
| | 50 | 91 | 8·0 |
| 23 | 0 | 89 | 8·1 |
| | 10 | 87 | 8·2 |
| | 20 | 85 | 8·2 |

## 9781—9840.

| mag. | $21^h$–$22^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 9·3 | 58 | 50·5 | 9·1 | |
| 9·8 | | 56·0 | 16·2 | |
| 9·8 | 59 | 25·0 | 12·4 | |
| 9·5 | | 45·5 | 43·0 | |
| 9·8 | 0 | 1·5 | 28·2 | |
| 9·6 | | 20·5 | 14·4 | |
| 9·4 | | 47·5 | 47·0 | |
| 9·6 | | 48·5 | 45·0 | |
| 9·5 | | 59·5 | 21·3 | |
| 9·3 | 1 | 0·5 | 24·9 | |
| 8·8 | | 9·5 | 38·9 | |
| 9·8 | | 38·5 | 23·8 | |
| 9·8 | 2 | 14·5 | 14·1 | |
| 9·3 | | 29·0 | 59·3 | |
| 9·6 | | 35·9 | 1·6 | |
| 9·6 | | 52·0 | 56·7 | |
| 9·8 | 3 | 2·0 | 51·9 | |
| 9·0 | | 21·3 | 57·8 | |
| 9·8 | | 34·0 | 49·1 | |
| 9·0 | | 58·5 | 35·4 | |
| 9·0 | 4 | 0·0 | 16·2 | |
| 9·6 | | 1·5 | 2·0 | |
| 8·7 | | 2·0 | 48·2 | 9·5 |
| 9·5 | | 30·0 | 42·0 | |
| 9·4 | | 45·5 | 52·2 | |
| 9·6 | | 50·5 | 19·8 | |
| 9·8 | 5 | 26·0 | 1·4 | |
| 7·5 | | 45·5 | 55·0 | 8·5 GS |
| 8·7 | | 48·5 | 52·0 | 9·0 G |
| 8·9 | | 51·7 | 13·2 | |
| 9·8 | 6 | 13·7 | 49·6 | |
| 9·3 | | 19·2 | 32·9 | |
| 9·8 | | 19·2 | 24·6 | |
| 9·8 | | 35·5 | 59·3 | |
| 9·8 | | 38·7 | 39·0 | |
| 9·6 | | 54·7 | 33·8 | |
| 9·6 | 7 | 25·3 | 58·0 | |
| 9·8 | | 38·2 | 21·2 | |
| 9·8 | | 59·7 | 32·7 | |
| 9·8 | 8 | 50·2 | 29·7 | |
| 9·4 | 9 | 14·0 | 34·4 | |
| 9·2 | 10 | 2·0 | 3·0 | |
| 9·6 | | 49·5 | 22·0 | |
| 9·2 | 11 | 46·0 | 35·0 | |
| 10·4 | 12 | 50·5 | 52·6 | |
| 9·6 | 13 | 10·0 | 37·8 | |
| 10·4 | | 41·0 | 12·1 | |
| 9·8 | | 48·5 | 46·2 | |
| 8·4 | | 49·0 | 38·8 | 8·5 |
| 9·4 | 14 | 1·5 | 21·8 | |
| 9·2 | | 12·0 | 11·8 | |
| 9·2 | | 29·0 | 48·6 | |
| 9·4 | 15 | 27·0 | 54·0 | |
| 10·4 | | 33·5 | 12·6 | |
| 9·4 | | 53·0 | 34·6 | |
| 9·6 | | 57·7 | 1·5 | |
| 9·4 | 16 | 11·0 | 38·9 | |
| 10·0 | 17 | 8·5 | 44·0 | |
| 10·4 | | 13·0 | 6·9 | |
| 10·4 | | 28·5 | 43·1 | |

## 9841—9900.

| mag. | $22^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 17 | 50·5 | 14·7 | |
| 10·4 | 18 | 45·0 | 8·2 | |
| 8·6 | | 46·5 | 15·7 | |
| 10·2 | | 47·5 | 23·0 | |
| 9·6 | 20 | 17·5 | 50·8 | |
| 10·4 | | 26·5 | 9·6 | |
| 9·2 | 22 | 19·0 | 32·4 | |
| 10·4 | | 58·0 | 51·1 | |
| 9·6 | 23 | 47·0 | 13·3 | |
| 10·4 | | 58·5 | 42·4 | |
| 9·2 | 24 | 13·0 | 45·8 | 9·5 G |
| 10·4 | | 24·0 | 26·8 | |
| 10·2 | | 28·0 | 41·8 | |
| 9·6 | | 42·0 | 8·1 | |
| 10·0 | 26 | 0·0 | 9·8 | |
| 10·4 | | 13·0 | 11·4 | |
| 8·6 | | 27·5 | 58·0 | 8·0 G |
| 10·4 | | 30·5 | 57·4 | |
| 9·2 | | 37·0 | 53·9 | 8·5 G |
| 10·4 | 27 | 22·5 | 3·8 | |
| 10·2 | | 27·0 | 4·9 | |
| 7·7 | | 30·5 | 49·7 | 8·0 GS |
| 10·4 | | 31·7 | 24·7 | |
| 9·4 | | 34·7 | 31·5 | |
| 8·4 | | 54·7 | 41·8 | 8·0 GS |
| 7·6 | 28 | 10·2 | 14·8 | GS |
| 7·8 | | 12·2 | 50·2 | 7·5 GS |
| 10·4 | | 27·7 | 54·1 | |
| 10·4 | 29 | 25·7 | 4·1 | |
| 9·8 | | 40·7 | 46·8 | |
| 10·4 | 30 | 24·2 | 48·1 | |
| 10·4 | | 30·2 | 21·6 | |
| 9·2 | | 41·2 | 33·7 | |
| 8·6 | 31 | 31·7 | 48·1 | |
| 9·0 | | 35·2 | 20·4 | 9·5 |
| 8·2 | | 36·7 | 52·0 | |
| 9·2 | | 39·7 | 21·0 | |
| 8·9 | 32 | 25·7 | 58·3 | |
| 9·4 | | 50·2 | 29·1 | |
| 10·4 | 33 | 8·4 | 58·1 | |
| 9·4 | | 29·2 | 49·6 | |
| 10·0 | | 48·2 | 38·1 | |
| 10·2 | | 55·2 | 20·5 | |
| 10·4 | 34 | 53·7 | 23·2 | |
| 10·4 | 35 | 41·7 | 54·8 | |
| 10·4 | 36 | 10·7 | 15·1 | |
| 9·8 | | 23·7 | 16·6 | |
| 10·4 | 37 | 7·2 | 47·1 | |
| 10·0 | | 18·2 | 40·2 | |
| 9·6 | | 55·3 | 52·5 | |
| 7·2 | 38 | 20·3 | 43·1 | 6·5 GS |
| 10·2 | | 35·3 | 4·6 | |
| 10·4 | | 37·3 | 33·8 | |
| 8·9 | | 49·2 | 1·5 | 9·2 GS |
| 10·0 | 39 | 0·8 | 12·1 | |
| 7·8 | | 21·3 | 4·3 | 8·2 GS |
| 8·9 | | 37·2 | 4·2 | 8·7 S |
| 10·4 | | 42·2 | 13·9 | |
| 7·9 | 40 | 2·2 | 9·3 | 8·2 GS |
| 9·6 | | 13·1 | 8·7 | |

## 9901—9960.

| mag. | $22^h$–$23^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 10·0 | 40 | 32·6 | 41·2 | |
| 10·4 | | 37·1 | 26·2 | |
| 10·4 | | 45·2 | 37·1 | |
| 9·4 | 41 | 3·3 | 1·1 | 9·0 G |
| 9·8 | | 48·1 | 26·7 | 9·5 |
| 8·6 | | 50·1 | 27·0 | 9·5 |
| 7·8 | 42 | 20·1 | 53·7 | 7·0 GS |
| 7·4 | | 53·1 | 52·8 | 8·0 GS |
| 10·4 | 43 | 0·6 | 10·0 | |
| 10·2 | 44 | 48·6 | 39·7 | |
| 9·4 | 45 | 12·1 | 51·7 | |
| 9·6 | | 24·1 | 29·5 | 8·8 |
| 10·2 | 46 | 3·1 | 42·1 | |
| 8·0 | | 24·1 | 23·4 | 8·5 G |
| 8·6 | 47 | 3·1 | 22·6 | 8·5 G |
| 10·2 | | 7·6 | 55·1 | |
| 10·4 | 48 | 24·1 | 12·0 | |
| 9·8 | 49 | 16·6 | 54·1 | |
| 8·6 | | 49·1 | 36·4 | |
| 10·2 | 50 | 22·1 | 32·9 | |
| 9·4 | | 41·1 | 30·2 | |
| 10·4 | 51 | 13·6 | 25·0 | |
| 9·8 | | 40·6 | 33·1 | |
| 9·6 | | 47·6 | 9·5 | |
| 9·4 | | 52·3 | 1·3 | |
| 9·8 | 52 | 10·1 | 23·7 | |
| 9·4 | | 18·1 | 7·2 | |
| 10·2 | | 40·8 | 0·0 | |
| 10·2 | | 48·6 | 31·0 | |
| 10·4 | | 49·6 | 8·2 | |
| 10·4 | 53 | 8·6 | 37·0 | |
| 9·4 | | 13·1 | 12·3 | |
| 10·4 | | 19·1 | 20·8 | |
| 10·4 | | 50·1 | 2·3 | |
| 9·2 | | 51·6 | 31·1 | |
| 10·4 | 54 | 18·1 | 42·9 | |
| 8·6 | | 30·6 | 56·2 | 9·0 |
| 10·2 | | 51·1 | 29·3 | |
| 9·4 | 55 | 19·6 | 42·4 | |
| 7·4 | | 46·1 | 50·3 | 8·0 GS |
| 9·8 | 56 | 14·1 | 18·7 | |
| 10·4 | | 30·8 | 59·9 | |
| 8·0 | | 45·6 | 42·0 | 8·0 GS |
| 10·4 | 57 | 7·1 | 36·5 | |
| 10·2 | | 9·6 | 50·1 | |
| 9·6 | | 20·1 | 43·7 | |
| 9·4 | 58 | 6·6 | 11·5 | |
| 10·4 | | 14·6 | 12·5 | |
| 10·4 | | 15·1 | 32·5 | |
| 9·8 | 59 | 16·1 | 20·2 | |
| 9·8 | | 20·3 | 57·6 | |
| 10·0 | | 45·6 | 11·7 | |
| 9·8 | | 57·6 | 54·7 | |
| 10·4 | 0 | 5·1 | 30·4 | |
| 9·2 | | 48·1 | 37·7 | |
| 10·4 | 1 | 19·1 | 45·7 | |
| 9·8 | 2 | 11·1 | 9·3 | |
| 9·8 | | 14·3 | 1·3 | |
| 9·8 | | 20·1 | 57·3 | |
| 8·6 | | 23·1 | 19·6 | 9·0 |

## 9961—10020.

| mag. | $23^h$ m | s | −55° ′ | |
|---|---|---|---|---|
| 8·6 | 2 | 36·6 | 18·0 | 9·5 |
| 10·4 | | 54·8 | 59·9 | |
| 9·4 | 3 | 18·1 | 52·3 | |
| 8·8 | | 40·6 | 13·1 | 9·0 G |
| 9·4 | | 41·6 | 54·3 | |
| 10·4 | 4 | 0·6 | 5·0 | |
| 9·4 | | 57·1 | 32·1 | |
| 7·6 | 5 | 49·1 | 47·2 | 8·0 GS |
| 9·8 | 6 | 1·6 | 13·8 | |
| 10·4 | | 49·6 | 14·4 | |
| 10·4 | | 55·1 | 17·6 | |
| 9·2 | 7 | 2·1 | 13·4 | |
| 10·4 | | 2·6 | 12·3 | |
| 9·4 | | 20·6 | 35·6 | |
| 9·2 | | 30·1 | 11·4 | 9·2 |
| 10·4 | | 48·1 | 51·9 | |
| 9·8 | | 50·1 | 50·6 | |
| 9·4 | 8 | 4·1 | 42·7 | |
| 9·6 | | 7·1 | 54·4 | |
| 10·4 | | 12·1 | 39·2 | |
| 9·6 | | 25·6 | 21·1 | |
| 10·4 | 9 | 10·6 | 7·1 | |
| 9·4 | | 13·6 | 14·8 | |
| 10·4 | | 20·6 | 18·1 | |
| 9·8 | | 26·6 | 14·1 | |
| 9·4 | | 38·1 | 23·4 | |
| 8·2 | 10 | 4·6 | 36·9 | 8·5 GS |
| 10·0 | | 38·4 | 6·3 | |
| 8·6 | | 43·9 | 9·9 | |
| 9·6 | | 55·5 | 59·6 | |
| 8·6 | 11 | 16·4 | 19·8 | 8·0 GS |
| 9·4 | | 23·4 | 42·8 | |
| 9·2 | | 29·9 | 51·0 | 9·5 |
| 9·8 | | 46·9 | 8·0 | |
| 10·4 | 12 | 8·4 | 34·8 | |
| 10·4 | | 16·9 | 26·1 | |
| 9·8 | | 19·4 | 3·5 | |
| 10·4 | | 21·9 | 15·1 | |
| 9·8 | | 24·9 | 45·0 | |
| 8·6 | | 40·4 | 23·7 | 8·5 GS |
| 9·0 | 13 | 4·9 | 9·4 | 9·5 |
| 10·2 | | 4·9 | 49·4 | |
| 10·2 | | 17·9 | 35·8 | |
| 9·4 | | 30·9 | 25·3 | |
| 9·6 | | 33·4 | 0·9 | |
| 10·2 | 14 | 17·4 | 33·6 | |
| 9·4 | | 19·4 | 37·0 | |
| 9·8 | | 19·4 | 9·0 | |
| 10·0 | | 26·4 | 7·0 | |
| 9·2 | 15 | 38·0 | 26·7 | |
| 10·2 | | 48·5 | 17·6 | |
| 9·2 | 16 | 1·0 | 39·9 | |
| 10·2 | | 8·0 | 22·2 | |
| 10·2 | | 31·0 | 34·7 | |
| 9·6 | 17 | 0·0 | 39·7 | |
| 10·0 | | 22·0 | 39·7 | |
| 10·2 | | 57·4 | 0·6 | |
| 10·2 | 18 | 7·5 | 38·0 | |
| 8·5 | | 8·0 | 17·9 | 8·5 G |
| 8·8 | | 9·5 | 28·7 | |



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### 10021—10056.

| mag. | 23h. m | s | −55° ′ | |
|---|---|---|---|---|
| 9·6 | 18 | 19·0 | 39·5 | |
| 9·0 | | 48·5 | 46·1 | |
| 9·1 | 19 | 7·0 | 45·3 | |
| 10·2 | | 10·5 | 26·8 | |
| 9·2 | | 20·0 | 39·6 | |
| 10·2 | | 41·0 | 45·8 | |
| 10·0 | 20 | 6·5 | 42·9 | |
| 10·2 | | 11·0 | 35·2 | |
| 9·4 | 21 | 57·5 | 9·6 | 9·5 |
| 9·4 | 22 | 1·3 | 1·8 | |
| 7·2 | | 17·5 | 11·3 | 6·8 GSct |
| 9·8 | | 25·3 | 58·9 | |
| 9·4 | 23 | 2·0 | 0·3 | |
| 9·8 | | 3·0 | 0·2 | |
| 9·8 | | 36·0 | 28·1 | |
| 9·8 | 25 | 22·0 | 30·1 | |
| 10·0 | | 25·3 | 53·3 | |
| 9·1 | | 42·3 | 40·1 | |
| 10·2 | | 47·3 | 6·9 | |
| 9·2 | | 49·3 | 41·1 | |
| 10·2 | 26 | 7·3 | 43·1 | |
| 9·6 | | 24·3 | 41·4 | |
| 10·0 | | 49·3 | 9·2 | |
| 9·8 | 27 | 27·8 | 5·4 | |
| 10·2 | | 39·8 | 33·2 | |
| 9·1 | | 57·8 | 52·0 | |
| 10·2 | 28 | 29·8 | 44·4 | |
| 10·2 | | 30·3 | 48·3 | |
| 9·0 | | 38·8 | 56·8 | |
| 9·8 | | 55·3 | 32·9 | |
| 9·6 | 29 | 8·8 | 20·0 | |
| 10·2 | | 52·8 | 47·5 | |
| 10·2 | 30 | 2·5 | 20·3 | |
| 10·2 | | 17·8 | 12·7 | |
| 9·8 | | 25·3 | 17·0 | |
| 9·8 | | 32·3 | 27·7 | |

### 10057—10091.

| mag. | 23h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 30 | 38·8 | 18·5 | |
| 10·2 | | 41·8 | 55·1 | |
| 9·4 | | 54·8 | 19·1 | |
| 10·2 | | 58·3 | 18·0 | |
| 10·2 | | 59·3 | 58·1 | |
| 9·8 | 31 | 21·3 | 50·0 | |
| 10·2 | 32 | 1·3 | 52·4 | |
| 9·4 | | 8·3 | 27·6 | |
| 9·4 | | 28·3 | 10·7 | |
| 10·2 | 33 | 14·3 | 53·0 | |
| 9·2 | 34 | 0·3 | 2·6 | |
| 9·2 | | 10·3 | 52·3 | 9·0 |
| 9·8 | | 12·3 | 13·6 | |
| 9·0 | | 54·8 | 56·5 | 8·5 |
| 9·4 | | 58·3 | 23·5 | |
| 9·6 | 36 | 32·3 | 49·5 | |
| 9·6 | | 38·8 | 44·4 | |
| 10·2 | 37 | 0·3 | 30·5 | |
| 8·8 | | 2·3 | 31·2 | |
| 9·8 | | 4·8 | 38·4 | |
| 9·1 | | 17·8 | 53·3 | |
| 8·2 | | 27·3 | 22·9 | 9·0 |
| 10·2 | | 31·3 | 18·5 | |
| 8·1 | | 35·1 | 7·7 | 7·5 GS |
| 9·4 | | 46·6 | 29·7 | |
| 10·2 | | 47·1 | 38·0 | |
| 9·4 | 38 | 1·1 | 33·3 | |
| 10·2 | | 7·1 | 45·2 | |
| 10·2 | | 7·6 | 1·8 | |
| 10·2 | | 12·6 | 49·5 | |
| 9·8 | | 39·6 | 14·4 | |
| 9·8 | | 48·6 | 22·3 | |
| 10·2 | 39 | 16·6 | 53·5 | |
| 9·0 | | 30·1 | 41·7 | 9·0 |
| 9·1 | | 40·1 | 20·1 | |

### 10092—10126.

| mag. | 23h. m | s | −55° ′ | |
|---|---|---|---|---|
| 10·2 | 39 | 42·6 | 46·9 | |
| 10·2 | | 53·6 | 53·7 | |
| 9·8 | 40 | 1·1 | 17·8 | |
| 9·4 | | 6·1 | 55·9 | |
| 10·2 | | 27·1 | 3·5 | |
| 10·2 | | 55·6 | 52·7 | |
| 9·0 | 41 | 10·6 | 58·6 | |
| 10·2 | | 37·6 | 18·3 | |
| 10·2 | | 53·6 | 40·7 | |
| 10·2 | 42 | 32·9 | 14·8 | |
| 9·2 | 43 | 44·4 | 12·7 | |
| 11·0 | | 58·9 | 44·2 | |
| 11·0 | 44 | 0·4 | 34·4 | |
| 10·6 | | 10·2 | 5·0 | |
| 11·0 | | 37·2 | 46·9 | |
| 9·6 | | 54·7 | 10·9 | |
| 9·0 | | 58·9 | 55·7 | G |
| 9·0 | 45 | 14·2 | 11·4 | |
| 11·0 | | 50·7 | 34·9 | |
| 11·0 | 46 | 1·7 | 9·7 | |
| 8·3 | | 33·2 | 3·7 | 7·8 GSt |
| 11·0 | 47 | 41·0 | 7·3 | |
| 9·4 | 48 | 16·2 | 33·1 | |
| 9·8 | 49 | 5·2 | 36·1 | |
| 11·0 | | 10·2 | 16·3 | |
| 9·8 | 50 | 5·7 | 4·8 | |
| 10·4 | | 9·2 | 7·1 | |
| 11·0 | | 12·7 | 12·4 | |
| 10·0 | 51 | 8·2 | 27·6 | |
| 9·8 | | 10·2 | 54·6 | |
| 10·6 | | 20·2 | 34·8 | |
| 11·0 | | 21·7 | 9·3 | |
| 11·0 | | 47·2 | 34·0 | |
| 11·0 | | 48·7 | 41·9 | |
| 9·4 | 52 | 34·2 | 20·5 | 9·0 |

### 10127—10161.

| mag. | 23h. m | s | −55° ′ |
|---|---|---|---|
| 9·6 | 52 | 40·2 | 43·6 |
| 11·0 | | 42·7 | 51·6 |
| 10·0 | | 50·7 | 3·5 |
| 11·0 | | 56·2 | 43·1 |
| 10·6 | 53 | 42·2 | 36·4 |
| 9·8 | 54 | 10·7 | 33·3 |
| 11·0 | | 21·0 | 58·1 |
| 10·6 | | 21·2 | 31·3 |
| 11·0 | | 25·7 | 43·0 |
| 9·4 | | 30·7 | 27·0 |
| 9·6 | | 32·0 | 58·9 |
| 11·0 | | 39·7 | 41·2 |
| 9·6 | 55 | 10·7 | 4·2 |
| 10·6 | | 12·2 | 1·4 |
| 11·0 | | 29·2 | 25·2 |
| 11·0 | | 48·7 | 47·7 |
| 11·0 | | 58·2 | 9·2 |
| 10·6 | 56 | 6·2 | 7·2 |
| 10·6 | | 15·4 | 39·1 |
| 11·0 | | 38·2 | 13·2 |
| 9·8 | | 57·2 | 24·2 |
| 9·8 | 57 | 9·2 | 24·6 |
| 11·0 | | 9·7 | 44·3 |
| 10·0 | | 12·7 | 10·2 |
| 8·6 | | 23·2 | 41·4 |
| 10·4 | 58 | 22·7 | 4·2 |
| 10·3 | | 36·7 | 5·9 |
| 10·2 | | 46·7 | 48·8 |
| 10·3 | | 57·7 | 48·3 |
| 10·6 | | 59·3 | 58·6 |
| 9·8 | 59 | 10·2 | 22·5 |
| 11·0 | | 26·7 | 9·2 |
| 11·0 | | 30·2 | 19·0 |
| 9·4 | | 37·7 | 20·0 |
| 10·6 | | 38·7 | 4·8 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 10 | 87 | 8·2 |
| | 20 | 85 | 8·2 |
| | 30 | 83 | 8·3 |
| | 40 | 81 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 75 | 8·3 |
| | 20 | 72 | 8·3 |
| | 30 | 70 | 8·3 |
| | 40 | 68 | 8·2 |
| | 50 | 66 | 8·2 |
| 1 | 0 | 64 | 8·1 |

# ZONE—56°.

## 1—45.

| mag. | 0h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 0 | 0·9 | 24·8 | |
| 11·0 | | 3·4 | 48·3 | |
| 11·0 | | 16·9 | 18·5 | |
| 9·4 | | 19·9 | 35·5 | |
| 11·0 | | 23·9 | 54·9 | |
| 11·0 | | 39·9 | 15·8 | |
| 10·4 | | 57·4 | 7·0 | |
| 11·0 | | 58·4 | 10·0 | |
| 11·0 | 1 | 3·4 | 43·7 | |
| 7·2 | | 7·9 | 42·4 | 7·5 GSt |
| 10·6 | | 15·4 | 18·4 | |
| 9·6 | | 16·4 | 16·9 | |
| 9·4 | | 21·4 | 56·8 | 9·0 G |
| 11·0 | | 36·9 | 3·6 | |
| 11·0 | | 43·4 | 58·4 | |
| 11·0 | | 49·9 | 26·0 | |
| 9·4 | | 54·9 | 18·8 | |
| 11·0 | 2 | 26·4 | 17·3 | |
| 11·0 | 3 | 1·9 | 11·4 | |
| 8·1 | | 21·4 | 53·2 | 8·0 GS |
| 10·4 | | 34·8 | 1·9 | |
| 11·0 | | 50·9 | 27·9 | |
| 11·0 | 4 | 2·9 | 53·3 | |
| 9·0 | | 19·9 | 24·1 | |
| 11·0 | | 25·4 | 2·0 | |
| 11·0 | | 31·4 | 4·7 | |
| 11·0 | | 35·9 | 40·8 | |
| 11·0 | | 43·4 | 11·4 | |
| 8·1 | 5 | 15·9 | 26·6 | 8·5 GS |
| 9·0 | | 38·9 | 53·9 | |
| 10·6 | | 42·9 | 30·7 | |
| 11·0 | | 53·4 | 24·4 | |
| 10·0 | 6 | 5·4 | 1·2 | |
| 11·0 | | 11·4 | 25·5 | |
| 10·4 | | 13·9 | 39·9 | |
| 9·6 | | 16·6 | 49·8 | |
| 10·6 | | 43·6 | 4·3 | |
| 10·2 | 7 | 38·4 | 0·4 | |
| 9·4 | | 41·6 | 3·0 | |
| 10·6 | | 41·6 | 17·9 | |
| 10·4 | 8 | 0·1 | 32·4 | |
| 9·2 | | 15·6 | 23·5 | |
| 10·6 | | 15·6 | 4·9 | |
| 10·4 | | 49·6 | 20·3 | |
| 10·2 | | 58·1 | 19·2 | |

## 46—90.

| mag. | 0h. m | s | −56° ′ | |
|---|---|---|---|---|
| 11·0 | 9 | 1·1 | 9·1 | |
| 11·0 | | 33·6 | 22·5 | |
| 11·0 | | 38·1 | 54·0 | |
| 10·6 | 10 | 1·6 | 11·9 | |
| 10·4 | | 8·6 | 34·7 | |
| 8·3 | | 22·1 | 55·1 | 8·5 |
| 8·0 | | 22·1 | 9·8 | 7·5 GS |
| 10·2 | | 23·6 | 21·1 | |
| 9·8 | | 54·6 | 32·4 | |
| 11·0 | 11 | 14·1 | 29·6 | |
| 11·0 | | 29·1 | 31·7 | |
| 11·0 | | 46·6 | 27·9 | |
| 11·0 | | 59·1 | 53·0 | |
| 9·0 | 12 | 19·6 | 7·3 | G |
| 9·2 | | 21·1 | 56·6 | |
| 9·6 | | 37·6 | 12·4 | |
| 11·0 | | 51·4 | 19·2 | |
| 10·4 | 13 | 58·6 | 51·7 | |
| 9·2 | 14 | 6·1 | 41·3 | |
| 9·8 | | 48·5 | 16·1 | |
| 10·4 | | 52·1 | 27·3 | |
| 11·0 | 15 | 2·1 | 14·2 | |
| 11·0 | | 9·8 | 13·1 | |
| 11·0 | | 25·8 | 30·0 | |
| 9·8 | | 30·6 | 7·3 | |
| 11·0 | | 33·6 | 5·2 | |
| 11·0 | | 46·6 | 13·7 | |
| 11·0 | 16 | 11·6 | 45·0 | |
| 9·7 | | 15·5 | 8·0 | |
| 9·4 | 17 | 4·5 | 32·9 | |
| 10·2 | | 55·5 | 41·1 | |
| 9·8 | 18 | 49·5 | 36·9 | |
| 9·9 | 19 | 59·0 | 46·4 | |
| 8·8 | 20 | 3·5 | 57·0 | G |
| 9·4 | | 58·0 | 35·6 | |
| 9·8 | 21 | 39·5 | 49·3 | |
| 8·6 | 22 | 44·0 | 25·8 | |
| 8·6 | 23 | 11·5 | 19·8 | G |
| 9·6 | | 31·0 | 13·6 | |
| 10·0 | | 49·0 | 38·8 | |
| 9·9 | 24 | 2·0 | 29·0 | |
| 10·2 | | 18·0 | 24·5 | |
| 10·2 | | 39·0 | 29·0 | |
| 9·4 | | 39·0 | 47·6 | |
| 9·2 | | 51·0 | 18·4 | |

## 91—135.

| mag. | 0h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 25 | 11·0 | 38·6 | |
| 8·2 | | 28·5 | 55·9 | GS |
| 9·2 | | 32·5 | 53·6 | |
| 10·2 | | 39·7 | 59·8 | |
| 10·0 | | 48·5 | 37·6 | |
| 9·6 | 26 | 19·3 | 2·1 | |
| 9·9 | | 52·0 | 44·0 | |
| 10·0 | | 57·0 | 30·0 | |
| 9·2 | | 59·0 | 36·5 | |
| 10·2 | 27 | 9·0 | 47·1 | |
| 9·9 | | 21·3 | 47·2 | |
| 9·8 | | 31·3 | 36·2 | |
| 7·2 | | 38·5 | 1·2 | GSt |
| 10·0 | | 49·3 | 18·3 | |
| 9·8 | 28 | 27·3 | 55·2 | |
| 10·0 | | 56·8 | 55·3 | |
| 10·2 | 29 | 8·3 | 58·3 | |
| 10·2 | | 13·3 | 25·7 | |
| 7·9 | | 14·3 | 53·3 | G |
| 10·0 | | 34·3 | 55·7 | |
| 9·9 | | 52·3 | 50·7 | |
| 9·8 | 30 | 17·3 | 50·8 | |
| 9·8 | | 19·8 | 20·7 | |
| 9·7 | | 29·3 | 6·0 | |
| 9·9 | | 47·3 | 55·3 | |
| 9·9 | | 51·3 | 39·1 | |
| 10·2 | 31 | 26·8 | 48·8 | |
| 8·8 | | 40·8 | 20·1 | |
| 9·9 | | 44·3 | 12·3 | |
| 10·2 | | 49·3 | 40·9 | |
| 8·8 | | 49·3 | 20·9 | G |
| 9·0 | 32 | 49·5 | 2·2 | |
| 9·6 | 33 | 20·8 | 58·1 | |
| 8·8 | | 59·3 | 38·9 | |
| 9·4 | 34 | 10·3 | 36·7 | |
| 8·8 | | 26·3 | 52·9 | |
| 10·2 | | 36·8 | 52·2 | |
| 9·0 | | 42·8 | 56·8 | |
| 7·9 | | 45·3 | 11·9 | GS |
| 9·8 | | 52·8 | 14·8 | |
| 10·2 | 35 | 14·8 | 38·6 | |
| 7·5 | 36 | 19·3 | 28·0 | GS |
| 8·6 | 37 | 0·8 | 31·7 | G |
| 10·2 | | 12·8 | 6·1 | |
| 9·2 | | 48·3 | 47·7 | |

## 136—180.

| mag. | 0h. m | s | −56° ′ |
|---|---|---|---|
| 10·2 | 37 | 59·5 | 17·6 |
| 9·9 | 38 | 0·3 | 23·8 |
| 9·2 | | 20·9 | 50·1 |
| 9·4 | 39 | 4·4 | 5·3 |
| 9·8 | | 27·4 | 6·8 |
| 9·9 | | 35·4 | 47·0 |
| 9·4 | | 39·4 | 42·2 |
| 10·2 | | 44·4 | 35·0 |
| 9·8 | | 44·4 | 16·1 |
| 9·2 | | 52·4 | 1·5 |
| 9·9 | 40 | 59·4 | 46·2 |
| 8·4 | 41 | 9·4 | 18·1 |
| 9·9 | | 36·9 | 39·6 |
| 9·6 | | 50·9 | 1·8 |
| 9·4 | 42 | 1·4 | 39·9 |
| 9·0 | | 12·9 | 58·6 |
| 10·2 | | 52·4 | 55·0 |
| 9·0 | 43 | 10·9 | 46·2 |
| 8·8 | | 28·4 | 46·7 |
| 10·2 | | 30·9 | 25·0 |
| 10·2 | | 35·4 | 25·0 |
| 9·4 | | 55·4 | 26·7 |
| 9·9 | | 58·9 | 56·4 |
| 9·8 | 44 | 46·9 | 48·5 |
| 9·8 | | 54·9 | 38·4 |
| 9·4 | 46 | 0·9 | 27·9 |
| 9·7 | | 14·4 | 28·6 |
| 9·4 | | 51·9 | 59·8 |
| 9·9 | 47 | 3·5 | 31·0 |
| 10·2 | | 6·4 | 49·9 |
| 10·2 | | 6·5 | 37·6 |
| 10·0 | | 9·1 | 58·4 |
| 10·4 | | 20·6 | 1·1 |
| 10·4 | | 30·1 | 22·0 |
| 9·4 | | 45·3 | 20·0 |
| 10·4 | | 58·0 | 50·2 |
| 10·4 | 48 | 39·7 | 7·9 |
| 10·4 | 49 | 3·5 | 8·8 |
| 10·0 | | 23·6 | 16·2 |
| 10·4 | | 33·6 | 8·9 |
| 10·2 | | 51·1 | 46·3 |
| 10·4 | 50 | 11·1 | 5·3 |
| 9·4 | | 16·6 | 38·5 |
| 10·2 | 51 | 3·6 | 51·5 |
| 9·5 | | 4·1 | 23·9 |



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## 181—240.

| mag. | $0^h$–$1^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 51 | 7·1 | 30·9 | |
| 10·4 | | 13·6 | 28·5 | |
| 10·4 | 52 | 24·6 | 54·9 | |
| 10·4 | | 27·1 | 42·5 | |
| 10·4 | | 31·1 | 49·7 | |
| 10·4 | | 32·6 | 7·8 | |
| 8·8 | | 39·4 | 28·3 | |
| 10·4 | | 47·9 | 30·5 | |
| 10·4 | | 50·4 | 41·7 | |
| 10·4 | 53 | 25·4 | 11·0 | |
| 9·2 | | 45·4 | 13·7 | |
| 9·8 | | 50·4 | 45·5 | |
| 9·0 | 54 | 19·4 | 3·6 | |
| 10·4 | | 46·9 | 10·5 | |
| 9·4 | | 50·9 | 21·1 | |
| 9·2 | | 59·4 | 1·4 | |
| 9·5 | 55 | 13·9 | 42·7 | |
| 8·5 | | 51·9 | 49·9 | |
| 9·8 | | 53·9 | 50·3 | |
| 9·5 | 56 | 8·4 | 24·2 | |
| 10·4 | | 18·4 | 22·7 | |
| 10·4 | | 22·9 | 29·2 | |
| 9·4 | | 28·4 | 51·0 | |
| 10·0 | | 31·1 | 57·6 | |
| 8·2 | 57 | 1·4 | 55·4 | |
| 9·4 | | 1·9 | 8·7 | |
| 9·3 | | 20·4 | 15·7 | |
| 8·2 | | 32·4 | 43·6 | G |
| 10·4 | | 33·9 | 26·0 | |
| 10·4 | | 35·4 | 52·9 | |
| 10·4 | | 37·4 | 6·9 | |
| 9·4 | | 54·4 | 34·6 | |
| 10·2 | 58 | 44·4 | 50·9 | |
| 8·8 | 59 | 24·4 | 7·4 | 8·5 G |
| 10·4 | | 34·9 | 9·9 | |
| 9·3 | | 58·4 | 59·2 | |
| 9·5 | | 59·4 | 36·2 | |
| 8·8 | 0 | 3·9 | 2·5 | 9·5 G |
| 9·1 | | 10·9 | 44·2 | |
| 10·2 | | 59·4 | 4·9 | |
| 10·4 | 1 | 3·6 | 36·2 | |
| 9·2 | | 11·6 | 49·8 | |
| 8·6 | | 16·6 | 46·1 | 9·0 G |
| 9·5 | | 55·6 | 11·8 | |
| 8·0 | 2 | 0·1 | 46·3 | 8·0 G |
| 9·2 | | 18·1 | 32·4 | |
| 7·9 | | 34·6 | 38·2 | 7·5 G |
| 9·4 | | 34·6 | 40·9 | |
| 9·6 | 3 | 38·6 | 10·4 | |
| 9·1 | | 49·1 | 15·4 | |
| 9·3 | | 50·1 | 49·0 | |
| 9·4 | 4 | 2·0 | 30·7 | |
| 9·6 | | 2·0 | 19·0 | |
| 8·8 | | 29·1 | 36·8 | 8·0 G |
| 9·4 | | 35·1 | 21·0 | |
| 9·5 | | 38·1 | 43·9 | |
| 10·4 | | 53·1 | 45·1 | |
| 9·4 | | 53·6 | 33·3 | |
| 9·3 | 5 | 0·1 | 30·5 | |
| 9·6 | | 1·1 | 31·0 | |

## 241—300.

| mag. | $1^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·3 | 5 | 38·6 | 37·9 | |
| 9·0 | | 55·6 | 51·2 | 8·5 G |
| 10·4 | 6 | 38·1 | 17·4 | |
| 9·2 | 7 | 15·1 | 45·4 | |
| 9·1 | | 22·3 | 1·4 | G |
| 9·4 | | 25·6 | 26·7 | |
| 10·4 | | 39·1 | 5·6 | |
| 10·4 | | 59·6 | 52·5 | |
| 10·4 | 8 | 19·6 | 36·3 | |
| 9·1 | | 48·1 | 31·2 | |
| 10·2 | 9 | 10·6 | 2·2 | |
| 10·0 | | 23·1 | 39·1 | |
| 9·8 | | 33·6 | 43·0 | |
| 10·4 | | 41·9 | 29·4 | |
| 8·4 | | 47·8 | 2·1 | 7·5 G |
| 8·0 | | 52·9 | 17·6 | 7·0 GScr |
| 9·5 | 10 | 13·4 | 13·4 | |
| 8·5 | | 23·9 | 14·2 | 8·0 G |
| 10·2 | | 47·4 | 15·3 | |
| 10·0 | 11 | 1·9 | 36·0 | |
| 10·2 | | 3·9 | 18·3 | |
| 9·6 | | 14·9 | 14·2 | |
| 10·2 | | 25·1 | 1·2 | |
| 9·0 | | 29·9 | 48·2 | |
| 9·8 | | 34·9 | 57·2 | |
| 10·2 | | 39·4 | 44·4 | |
| 9·4 | | 42·9 | 18·9 | |
| 9·8 | 12 | 14·9 | 53·8 | |
| 10·4 | | 40·4 | 27·7 | |
| 10·4 | | 51·9 | 9·0 | |
| 10·4 | 13 | 39·4 | 45·5 | |
| 10·4 | 14 | 5·9 | 27·8 | |
| 10·0 | | 9·9 | 14·2 | |
| 9·4 | | 13·1 | 0·7 | |
| 9·8 | | 39·9 | 51·9 | |
| 9·2 | | 49·9 | 19·4 | |
| 9·5 | | 50·9 | 34·5 | |
| 10·4 | | 59·9 | 22·5 | |
| 10·4 | 15 | 14·9 | 29·1 | |
| 10·4 | | 16·9 | 38·9 | |
| 9·4 | | 21·9 | 44·1 | |
| 9·3 | | 38·9 | 16·0 | |
| 9·6 | | 49·9 | 45·5 | |
| 9·5 | | 49·9 | 21·1 | |
| 9·0 | 16 | 5·4 | 41·9 | |
| 10·4 | | 9·9 | 43·0 | |
| 8·8 | | 31·4 | 47·4 | |
| 10·4 | | 43·9 | 41·0 | |
| 9·1 | | 51·9 | 27·6 | |
| 10·4 | 17 | 4·6 | 40·8 | |
| 9·3 | | 14·6 | 4·2 | |
| 8·8 | | 24·6 | 26·9 | |
| 9·2 | | 55·6 | 42·0 | |
| 10·2 | 18 | 32·6 | 37·6 | |
| 10·0 | | 47·6 | 54·8 | |
| 10·4 | 19 | 3·1 | 41·7 | |
| 9·5 | | 25·6 | 45·9 | |
| 9·5 | | 25·6 | 27·5 | |
| 10·4 | | 28·6 | 16·7 | |
| 9·3 | | 29·3 | 29·8 | |

## 301—360.

| mag. | $1^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 20 | 2·1 | 20·6 | |
| 9·5 | | 47·1 | 58·0 | |
| 10·2 | 21 | 44·6 | 5·3 | |
| 10·0 | | 56·1 | 20·3 | |
| 9·1 | 22 | 10·6 | 20·1 | 8·5 G |
| 9·4 | 23 | 10·1 | 9·8 | |
| 9·2 | | 43·6 | 29·0 | |
| 9·0 | 24 | 7·6 | 15·9 | |
| 9·2 | | 31·1 | 14·0 | 8·5 |
| 9·8 | 25 | 2·6 | 28·5 | |
| 9·2 | | 5·1 | 50·4 | |
| 9·8 | | 50·6 | 10·1 | |
| 8·0 | 26 | 36·0 | 36·7 | 7·5 G |
| 9·4 | 27 | 10·5 | 7·2 | |
| 9·4 | | 20·0 | 51·5 | |
| 9·2 | | 32·5 | 41·3 | 9·5 G |
| 9·6 | 28 | 7·0 | 19·5 | |
| 9·4 | 29 | 8·5 | 9·5 | |
| 9·6 | | 22·0 | 39·4 | |
| 10·0 | | 24·5 | 28·0 | |
| 9·8 | 31 | 10·0 | 29·8 | |
| 8·9 | 32 | 12·5 | 42·4 | 9·5 |
| 9·0 | | 28·5 | 54·5 | 9·0 |
| 10·0 | | 38·0 | 28·9 | |
| 9·4 | 33 | 38·5 | 29·8 | |
| 9·8 | | 40·5 | 24·4 | |
| 9·6 | | 45·5 | 4·1 | |
| 10·0 | 34 | 6·0 | 36·2 | |
| 6·5 | 35 | 3·5 | 49·7 | 5·7 GSct |
| 10·0 | | 16·5 | 43·8 | |
| 10·0 | | 30·0 | 44·9 | |
| 9·2 | | 34·5 | 40·6 | |
| 10·0 | 36 | 30·5 | 7·5 | |
| 9·4 | | 41·0 | 54·0 | |
| 9·6 | 37 | 15·0 | 47·5 | |
| 10·0 | | 26·0 | 7·1 | |
| 8·4 | | 28·0 | 29·8 | 7·5 GScr |
| 9·8 | 38 | 20·5 | 49·0 | |
| 8·3 | | 51·0 | 51·8 | 7·5 GS |
| 8·9 | 40 | 45·0 | 44·0 | 9·5 |
| 8·8 | 41 | 15·0 | 55·2 | 9·0 |
| 10·0 | | 30·3 | 2·1 | |
| 8·6 | | 38·8 | 48·3 | 9·5 G |
| 10·0 | 42 | 28·8 | 51·9 | |
| 9·4 | | 54·3 | 14·5 | |
| 9·6 | 44 | 41·0 | 1·8 | |
| 9·2 | 47 | 0·3 | 18·2 | |
| 7·8 | | 36·8 | 22·7 | 7·5 G |
| 9·8 | | 50·3 | 43·8 | 9·5 |
| 9·2 | | 53·8 | 25·7 | |
| 10·0 | 48 | 20·8 | 33·9 | |
| 8·3 | | 22·1 | 59·3 | 8·0 G |
| 10·0 | | 55·6 | 22·7 | |
| 9·1 | 49 | 43·6 | 38·6 | |
| 9·8 | 50 | 11·8 | 33·8 | |
| 10·0 | 51 | 30·6 | 51·0 | |
| 10·0 | 52 | 10·6 | 18·9 | |
| 9·8 | | 45·1 | 6·9 | |
| 9·4 | 53 | 50·4 | 58·1 | |
| 8·6 | 54 | 0·1 | 2·4 | 8·5 G |

## 361—420.

| mag. | $1^h$–$2^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·9 | 54 | 24·8 | 35·1 | |
| 10·0 | | 41·8 | 15·1 | |
| 10·0 | 57 | 28·8 | 5·5 | |
| 10·0 | | 59·8 | 11·9 | |
| 8·3 | 58 | 1·8 | 50·9 | 8·0 G |
| 9·5 | | 25·8 | 13·6 | |
| 9·9 | | 30·8 | 14·7 | |
| 9·6 | | 45·3 | 13·4 | |
| 9·2 | | 48·3 | 20·3 | |
| 9·6 | | 59·8 | 37·2 | |
| 7·8 | 59 | 34·3 | 15·7 | 8·0 GS |
| 9·6 | | 44·8 | 18·5 | |
| 9·8 | 0 | 8·8 | 18·9 | |
| 9·4 | | 21·3 | 35·1 | |
| 8·7 | | 37·8 | 45·9 | 9·5 |
| 9·8 | | 54·8 | 12·7 | |
| 9·9 | 1 | 6·8 | 50·3 | |
| 9·8 | | 35·3 | 24·9 | |
| 9·8 | 3 | 17·8 | 52·1 | |
| 9·9 | | 48·3 | 59·9 | |
| 8·0 | | 58·8 | 7·1 | 7·5 GS |
| 10·0 | 4 | 30·8 | 38·1 | |
| 9·2 | 5 | 3·8 | 11·7 | |
| 9·9 | | 44·1 | 58·1 | |
| 8·8 | | 58·3 | 45·7 | |
| 8·6 | 6 | 8·8 | 28·6 | |
| 9·1 | | 29·8 | 18·1 | |
| 9·2 | | 37·8 | 51·0 | |
| 9·2 | | 38·3 | 48·9 | |
| 8·1 | 7 | 58·3 | 3·6 | 8·0 Gt |
| 10·0 | 8 | 24·3 | 55·2 | |
| 9·8 | | 30·3 | 13·0 | |
| 9·5 | | 47·8 | 46·8 | |
| 9·8 | | 48·8 | 50·0 | |
| 9·9 | | 54·8 | 52·1 | |
| 9·4 | 9 | 12·8 | 50·8 | |
| 10·0 | | 21·8 | 47·7 | |
| 10·0 | | 35·8 | 3·9 | |
| 8·6 | | 44·3 | 16·3 | 9·5 |
| 9·2 | | 49·3 | 46·3 | |
| 10·0 | 10 | 10·8 | 10·4 | |
| 10·0 | | 42·6 | 14·9 | |
| 9·0 | | 54·6 | 24·6 | |
| 9·4 | 11 | 18·6 | 22·2 | |
| 10·0 | | 48·6 | 46·0 | |
| 9·6 | | 52·6 | 4·4 | |
| 9·8 | 12 | 1·6 | 42·0 | |
| 8·6 | | 4·1 | 4·5 | 9·5 |
| 7·9 | 13 | 37·1 | 49·5 | 8·0 G |
| 8·7 | 15 | 30·6 | 14·2 | 9·5 |
| 9·1 | | 41·1 | 4·6 | |
| 8·0 | | 43·1 | 41·4 | 8·0 Gt |
| 7·2 | | 50·6 | 31·2 | 6·0 GSct |
| 10·0 | | 56·1 | 26·9 | |
| 8·0 | 16 | 13·1 | 40·2 | 7·0 Gt |
| 9·5 | | 19·6 | 3·9 | |
| 9·4 | | 53·5 | 0·0 | |
| 10·0 | | 54·6 | 53·7 | |
| 9·6 | 17 | 5·6 | 29·6 | |
| 9·9 | | 11·1 | 25·1 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 50 | 66 | 8·2 |
| 1 | 0 | 64 | 8·1 |
| | 10 | 62 | 8·0 |
| | 20 | 60 | 7·9 |
| | 30 | 57 | 7·7 |
| | 40 | 55 | 7·6 |
| | 50 | 53 | 7·4 |
| 2 | 0 | 52 | 7·2 |
| | 10 | 50 | 7·0 |
| | 20 | 48 | 6·8 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 2 | 10 | 50 | 7·0 |
| | 20 | 48 | 6·8 |
| | 30 | 46 | 6·6 |
| | 40 | 44 | 6·4 |
| | 50 | 43 | 6·2 |
| 3 | 0 | 41 | 5·9 |
| | 10 | 40 | 5·6 |
| | 20 | 38 | 5·4 |
| | 30 | 37 | 5·1 |
| | 40 | 35 | 4·8 |
| | 50 | 34 | 4·5 |
| 4 | 0 | 33 | 4·2 |
| | 10 | 32 | 3·9 |
| | 20 | 31 | 3·5 |

**421—480.**

| mag. | $2^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 17 | 20·1 | 50·1 | |
| 9·1 | | 43·6 | 22·4 | |
| 9·8 | 18 | 10·6 | 51·2 | |
| 8·8 | | 53·1 | 19·0 | |
| 9·5 | 19 | 0·1 | 58·6 | |
| 7·2 | | 34·1 | 11·1 | 7·0 GS |
| 9·2 | | 41·1 | 4·5 | |
| 8·8 | 20 | 0·1 | 41·2 | |
| 8·8 | | 31·6 | 29·6 | |
| 9·6 | 21 | 6·1 | 13·9 | |
| 9·1 | | 40·1 | 46·2 | |
| 9·4 | | 58·6 | 0·8 | |
| 10·0 | 22 | 41·6 | 49·9 | |
| 9·4 | 23 | 26·6 | 41·9 | |
| 9·1 | 24 | 43·1 | 10·2 | 9·0 G |
| 8·2 | | 49·3 | 59·8 | 8·0 G |
| 10·0 | | 54·6 | 56·7 | |
| 9·8 | 25 | 9·6 | 0·1 | |
| 9·8 | | 45·0 | 38·5 | |
| 10·2 | 26 | 0·2 | 0·6 | |
| 10·0 | 27 | 36·5 | 44·6 | |
| 10·3 | 28 | 18·5 | 55·0 | |
| 8·9 | 29 | 26·5 | 52·1 | K |
| 9·4 | | 57·5 | 40·7 | |
| 10·2 | 30 | 4·4 | 21·8 | G |
| 9·0 | | 45·5 | 5·5 | |
| 10·0 | 31 | 0·0 | 48·0 | |
| 8·4 | 32 | 22·0 | 3·6 | 9·0 GS |
| 8·9 | 33 | 29·4 | 1·8 | 9·2 |
| 10·3 | 34 | 0·0 | 39·1 | |
| 10·3 | | 51·0 | 22·2 | |
| 8·4 | 37 | 38·0 | 30·5 | 9·2 |
| 8·0 | | 53·5 | 49·8 | 7·5 GSt |
| 9·6 | 38 | 42·5 | 39·1 | |
| 9·2 | 41 | 31·0 | 23·2 | |
| 10·0 | | 49·5 | 10·6 | |
| 9·2 | | 50·0 | 4·2 | 9·5 |
| 8·4 | 42 | 7·0 | 47·4 | 8·8 GS |
| 10·3 | | 10·0 | 0·4 | |
| 9·8 | 44 | 0·0 | 8·4 | |
| 10·3 | | 24·0 | 46·5 | |
| 10·2 | | 34·3 | 2·0 | |
| 9·6 | 45 | 45·0 | 42·6 | |
| 10·3 | 46 | 48·0 | 43·9 | |
| 10·3 | | 49·6 | 16·5 | |
| 10·3 | 47 | 14·6 | 12·7 | |
| 10·3 | | 29·6 | 24·9 | |
| 9·4 | | 35·1 | 15·2 | |
| 9·6 | 48 | 9·6 | 52·1 | |
| 9·4 | | 18·6 | 44·1 | |
| 9·2 | 49 | 15·3 | 41·7 | |
| 9·6 | | 41·3 | 16·0 | |
| 10·3 | | 47·3 | 49·5 | |
| 7·2 | 50 | 44·8 | 23·2 | 6·8 GS |
| 10·3 | 51 | 0·8 | 15·4 | |
| 9·8 | 52 | 54·3 | 55·1 | |
| 8·8 | 53 | 33·8 | 41·8 | 9·5 G |
| 9·6 | | 33·8 | 43·1 | 9·5 |
| 10·0 | | 46·8 | 42·9 | |
| 7·6 | 55 | 36·3 | 3·8 | 7·0 GS |

**481—540.**

| mag. | $2^h$–$3^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 55 | 43·3 | 40·1 | 8·5 |
| 8·5 | 56 | 28·3 | 28·3 | 9·2 |
| 10·8 | | 38·9 | 25·5 | |
| 11·0 | | 43·9 | 15·5 | |
| 10·2 | | 48·0 | 25·2 | |
| 11·0 | 59 | 4·0 | 12·9 | |
| 10·6 | | 14·0 | 50·2 | |
| 9·0 | | 55·8 | 34·1 | 9·0 |
| 9·6 | 0 | 23·8 | 50·9 | |
| 10·6 | 1 | 2·0 | 0·7 | |
| 10·0 | | 54·3 | 13·2 | |
| 10·8 | 2 | 16·3 | 42·2 | |
| 10·6 | | 53·8 | 45·7 | |
| 11·0 | 3 | 29·8 | 38·3 | |
| 10·6 | | 38·8 | 37·0 | |
| 10·6 | 4 | 49·8 | 6·7 | |
| 10·6 | 5 | 6·4 | 57·4 | |
| 10·0 | 6 | 1·8 | 51·1 | |
| 11·0 | | 18·8 | 11·5 | |
| 9·4 | 7 | 3·3 | 39·6 | |
| 9·8 | | 34·8 | 29·9 | |
| 10·8 | | 44·3 | 29·6 | |
| 11·0 | 8 | 5·3 | 4·8 | |
| 8·0 | | 44·3 | 52·4 | 7·5 GS |
| 9·0 | | 47·3 | 47·8 | 9·0 G |
| 8·0 | 10 | 23·8 | 31·8 | 8·5 GS |
| 10·3 | | 34·4 | 59·7 | |
| 10·2 | | 40·8 | 14·8 | |
| 9·4 | | 44·8 | 11·1 | |
| 9·4 | | 45·8 | 25·5 | |
| 11·0 | 11 | 9·3 | 34·8 | |
| 10·8 | | 11·3 | 21·3 | |
| 10·8 | | 13·4 | 57·6 | |
| 10·4 | | 14·3 | 5·3 | |
| 10·4 | 12 | 27·3 | 43·1 | |
| 9·2 | | 34·3 | 49·9 | |
| 10·2 | | 38·8 | 40·2 | |
| 10·3 | 13 | 4·3 | 25·5 | |
| 9·4 | | 9·3 | 39·3 | |
| 7·7 | 15 | 8·5 | 16·6 | 8·5 GS |
| 10·0 | | 49·5 | 50·6 | |
| 11·0 | | 50·0 | 46·2 | |
| 8·7 | 16 | 14·0 | 58·1 | 8·8 G |
| 11·0 | | 48·0 | 22·9 | |
| 9·8 | 17 | 30·0 | 4·4 | |
| 9·2 | 18 | 18·5 | 23·1 | 9·5 G |
| 10·6 | 19 | 18·0 | 58·4 | |
| 9·2 | | 23·0 | 43·6 | 9·5 |
| 9·4 | 20 | 4·0 | 23·5 | 9·5 |
| 9·2 | | 38·5 | 29·1 | 9·5 |
| 9·6 | 21 | 0·5 | 7·7 | |
| 11·0 | | 10·0 | 15·8 | |
| 11·0 | | 44·5 | 49·0 | |
| 10·2 | | 49·0 | 7·0 | |
| 9·6 | 22 | 39·0 | 33·0 | |
| 9·4 | 24 | 0·5 | 51·8 | |
| 10·0 | | 27·5 | 15·7 | |
| 10·6 | | 29·5 | 49·5 | |
| 11·0 | | 34·5 | 45·9 | |
| 10·6 | | 44·0 | 36·0 | |

**541—600.**

| mag. | $3^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 25 | 39·5 | 51·1 | |
| 8·7 | 26 | 47·9 | 19·8 | 9·2 |
| 10·4 | 27 | 44·9 | 42·4 | |
| 11·0 | 28 | 29·5 | 46·1 | |
| 10·2 | 29 | 12·7 | 53·9 | |
| 10·0 | | 29·1 | 17·9 | |
| 9·4 | | 29·9 | 38·9 | |
| 10·0 | | 49·7 | 1·3 | |
| 9·9 | | 58·2 | 48·3 | |
| 9·1 | 30 | 50·2 | 40·6 | |
| 10·2 | | 58·7 | 0·5 | |
| 9·0 | 31 | 27·7 | 55·0 | |
| 9·8 | 32 | 3·7 | 23·1 | |
| 8·8 | | 55·2 | 27·9 | 9·5 G |
| 9·8 | 33 | 8·7 | 43·0 | |
| 9·4 | 34 | 28·7 | 41·2 | |
| 9·0 | | 50·2 | 20·5 | |
| 10·2 | | 55·7 | 43·7 | |
| 7·8 | 35 | 30·7 | 33·0 | 7·8 GS |
| 9·0 | | 42·2 | 33·0 | 9·5 G |
| 9·6 | | 49·2 | 17·8 | |
| 9·6 | | 50·7 | 7·5 | |
| 7·4 | 36 | 40·2 | 38·3 | 7·0 GS |
| 8·4 | | 40·7 | 33·1 | 8·0 GS |
| 9·6 | 37 | 11·7 | 30·3 | |
| 8·4 | | 30·2 | 57·4 | 8·0 GS |
| 9·4 | | 35·2 | 34·8 | 9·0 |
| 9·7 | | 44·2 | 25·4 | |
| 8·6 | | 55·2 | 29·0 | 8·5 GS |
| 8·6 | 38 | 33·7 | 4·5 | 8·5 |
| 9·9 | 39 | 3·2 | 42·5 | |
| 9·4 | 40 | 27·7 | 51·5 | |
| 9·4 | 41 | 42·7 | 7·0 | |
| 8·3 | | 55·2 | 43·4 | 7·5 GS |
| 10·2 | | 55·4 | 33·0 | |
| 9·4 | 43 | 20·2 | 25·2 | |
| 9·4 | | 31·1 | 1·9 | |
| 8·6 | 44 | 5·7 | 25·6 | 9·0 |
| 9·6 | | 16·2 | 17·7 | |
| 9·8 | | 57·2 | 1·3 | |
| 9·1 | 45 | 13·9 | 57·7 | |
| 8·5 | | 16·2 | 50·8 | 8·0 G |
| 10·0 | 46 | 8·2 | 15·1 | |
| 8·6 | | 48·2 | 31·5 | 8·5 |
| 10·2 | 48 | 0·7 | 6·9 | |
| 8·8 | | 11·6 | 53·0 | |
| 7·8 | | 40·6 | 40·1 | 7·5 GS |
| 9·2 | | 53·1 | 48·5 | 9·5 |
| 9·4 | 50 | 28·1 | 33·6 | |
| 10·2 | | 31·6 | 32·4 | |
| 8·0 | | 45·6 | 46·9 | 7·5 GS |
| 9·6 | 51 | 1·1 | 25·1 | |
| 9·2 | | 54·6 | 38·9 | |
| 9·6 | 52 | 1·6 | 31·5 | |
| 8·5 | | 16·1 | 39·5 | |
| 9·4 | 53 | 30·1 | 41·4 | |
| 8·2 | | 47·1 | 41·1 | 8·5 |
| 9·8 | 54 | 47·1 | 20·0 | |
| 7·8 | | 58·1 | 36·5 | 8·0 G |
| 9·8 | 55 | 22·6 | 44·7 | |

**601—660.**

| mag. | $3^h$–$4^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 55 | 30·1 | 32·3 | |
| 10·0 | | 30·1 | 13·9 | |
| 10·2 | | 49·6 | 36·5 | |
| 9·7 | | 49·6 | 14·3 | |
| 10·0 | 56 | 31·6 | 45·9 | |
| 10·2 | | 36·6 | 8·8 | • |
| 6·8 | | 51·6 | 49·6 | 7·0 GSct |
| 9·4 | 57 | 5·1 | 37·9 | |
| 8·6 | | 21·1 | 24·8 | |
| 9·4 | | 25·6 | 2·2 | |
| 9·8 | | 44·6 | 30·5 | |
| 9·4 | | 49·1 | 31·5 | |
| 8·6 | 58 | 4·6 | 43·7 | 9·5 |
| 10·2 | | 18·1 | 45·6 | |
| 8·1 | | 30·1 | 40·5 | |
| 9·0 | 59 | 0·6 | 19·0 | |
| 9·7 | | 1·1 | 23·8 | |
| 10·2 | | 43·4 | 9·9 | |
| 9·6 | 0 | 49·7 | 31·8 | |
| 9·2 | | 51·6 | 32·4 | |
| 8·6 | | 59·7 | 21·5 | |
| 9·9 | 1 | 20·7 | 22·3 | |
| 9·4 | | 29·7 | 57·3 | |
| 8·6 | | 39·7 | 8·2 | 9·0 |
| 8·6 | | 45·2 | 29·4 | 9·0 |
| 9·0 | 2 | 59·7 | 24·1 | 9·0 |
| 9·2 | 3 | 10·2 | 46·0 | |
| 8·3 | | 57·2 | 54·7 | 9·0 |
| 9·9 | 4 | 5·0 | 15·3 | |
| 9·9 | | 39·7 | 38·4 | |
| 9·2 | | 47·1 | 0·3 | |
| 9·9 | | 47·2 | 6·0 | |
| 9·7 | 5 | 21·1 | 2·3 | |
| 8·6 | 6 | 5·2 | 53·1 | 9·0 |
| 9·4 | | 29·2 | 58·0 | |
| 9·4 | | 30·7 | 21·4 | 9·5 |
| 9·9 | | 39·2 | 4·1 | |
| 9·6 | | 58·1 | 2·4 | |
| 9·6 | 7 | 25·1 | 1·6 | |
| 9·4 | | 43·6 | 59·1 | |
| 9·4 | 8 | 40·2 | 47·6 | |
| 9·9 | 9 | 13·2 | 35·7 | |
| 9·4 | | 24·7 | 49·0 | |
| 9·4 | 10 | 27·7 | 37·2 | |
| 9·7 | | 59·7 | 8·8 | |
| 9·9 | 11 | 19·2 | 49·2 | |
| 7·4 | | 30·2 | 29·6 | 8·0 GS |
| 9·9 | | 42·2 | 22·8 | |
| 9·8 | 12 | 2·7 | 26·4 | |
| 9·9 | | 38·7 | 34·0 | |
| 8·5 | 13 | 4·7 | 49·8 | |
| 9·2 | | 40·7 | 49·3 | |
| 9·2 | 14 | 23·7 | 43·7 | |
| 9·9 | 15 | 6·2 | 42·0 | |
| 9·4 | | 10·2 | 48·7 | |
| 8·6 | | 20·2 | 29·3 | 8·0 GS |
| 9·4 | | 40·2 | 29·1 | |
| 9·7 | 16 | 21·7 | 1·5 | |
| 9·2 | | 26·2 | 51·2 | |
| 9·4 | 17 | 18·2 | 40·1 | |



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### 661—720.

| mag. | 4h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·7 | 17 | 35·7 | 22·2 | |
| 9·0 | 19 | 5·7 | 8·8 | |
| 9·6 | | 15·2 | 37·4 | |
| 9·4 | | 52·7 | 54·8 | |
| 9·4 | 20 | 17·2 | 48·0 | |
| 9·2 | 21 | 39·1 | 1·2 | |
| 8·4 | | 40·7 | 7·2 | 7·5 GS |
| 9·9 | | 58·2 | 41·4 | |
| 9·7 | 23 | 3·7 | 29·9 | |
| 8·9 | | 11·7 | 38·8 | |
| 9·9 | | 14·7 | 33·0 | |
| 8·6 | | 29·7 | 48·4 | |
| 9·9 | | 38·2 | 37·2 | |
| 8·6 | 24 | 0·7 | 43·6 | 9·0 |
| 9·2 | | 10·2 | 46·0 | |
| 8·8 | | 30·2 | 21·1 | |
| 9·0 | | 40·7 | 26·0 | |
| 9·4 | | 42·7 | 41·3 | |
| 8·6 | | 54·2 | 11·0 | 9·5 |
| 9·7 | 25 | 32·7 | 23·0 | |
| 9·2 | | 41·7 | 17·6 | |
| 9·8 | | 53·2 | 53·7 | |
| 9·9 | 26 | 29·7 | 22·3 | |
| 9·7 | | 30·7 | 44·8 | |
| 8·8 | 28 | 35·7 | 10·8 | 9·2 |
| 9·2 | | 57·2 | 46·1 | |
| 9·8 | 29 | 17·2 | 41·7 | |
| 9·9 | | 37·7 | 37·0 | |
| 8·6 | | 55·7 | 14·0 | 9·0 |
| 9·9 | | 57·0 | 0·8 | |
| 8·2 | | 59·2 | 29·4 | 8·5 G |
| 9·4 | 30 | 40·2 | 10·5 | |
| 8·9 | 31 | 58·2 | 6·6 | 9·0 |
| 9·4 | 32 | 1·0 | 49·9 | |
| 9·1 | | 18·8 | 49·2 | |
| 8·7 | | 20·5 | 50·9 | |
| 9·1 | | 39·2 | 59·0 | |
| 8·9 | | 42·8 | 34·5 | |
| 9·2 | 33 | 2·8 | 23·5 | |
| 9·1 | | 18·8 | 3·7 | |
| 9·6 | | 58·3 | 26·4 | |
| 8·6 | 34 | 28·2 | 53·4 | |
| 9·7 | 36 | 9·2 | 38·9 | |
| 8·7 | | 33·2 | 24·5 | |
| 9·6 | 37 | 11·7 | 51·3 | |
| 8·7 | | 49·2 | 26·0 | 9·5 |
| 7·5 | 38 | 18·7 | 16·3 | 8·0 GS |
| 9·2 | | 44·8 | 0·8 | |
| 9·7 | | 48·0 | 42·9 | |
| 9·3 | | 58·2 | 46·6 | |
| 9·2 | 39 | 0·2 | 38·7 | |
| 9·2 | | 28·7 | 21·7 | |
| 8·0 | | 41·2 | 21·3 | 7·5 GS |
| 8·9 | 40 | 0·2 | 40·4 | |
| 8·8 | | 13·7 | 55·8 | |
| 8·9 | | 14·4 | 56·5 | |
| 9·7 | | 50·4 | 33·8 | |
| 8·8 | 41 | 9·4 | 36·3 | 8·0 G |
| 9·0 | 42 | 4·4 | 31·0 | |
| 9·6 | | 8·4 | 49·2 | |

### 721—780.

| mag. | 4h.–5h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·3 | 42 | 27·9 | 43·1 | |
| 9·4 | | 31·4 | 55·2 | |
| 8·2 | | 32·4 | 31·2 | 7·5 GS |
| 9·1 | | 48·9 | 10·3 | |
| 9·6 | | 56·9 | 43·2 | |
| 9·4 | 43 | 43·4 | 57·8 | |
| 9·6 | | 53·9 | 45·3 | |
| 9·7 | 44 | 22·4 | 6·3 | |
| 8·4 | | 27·1 | 0·2 | 8·0 GS |
| 9·7 | | 34·9 | 31·4 | |
| 9·2 | | 57·4 | 14·7 | |
| 8·4 | 45 | 29·4 | 13·7 | |
| 9·2 | 46 | 6·9 | 30·0 | |
| 7·8 | | 42·9 | 53·1 | 7·0 GS |
| 9·6 | 47 | 27·3 | 53·0 | |
| 9·6 | | 57·8 | 42·7 | |
| 9·3 | 48 | 26·8 | 27·4 | |
| 8·9 | | 51·3 | 28·0 | 9·0 |
| 9·6 | 49 | 8·3 | 44·0 | |
| 9·7 | | 13·8 | 51·0 | |
| 9·1 | | 14·8 | 33·6 | |
| 9·7 | | 31·8 | 38·0 | |
| 9·3 | | 42·8 | 51·0 | |
| 9·6 | 50 | 30·3 | 39·1 | |
| 9·7 | 51 | 53·8 | 46·7 | |
| 9·6 | 52 | 1·8 | 55·3 | |
| 9·4 | | 19·8 | 12·6 | |
| 9·3 | | 21·3 | 45·6 | |
| 9·2 | | 56·8 | 58·5 | |
| 9·6 | 53 | 26·8 | 46·9 | |
| 9·7 | | 29·4 | 21·4 | |
| 9·6 | | 48·4 | 48·9 | |
| 8·0 | | 55·9 | 37·3 | 7·5 GS |
| 9·2 | 54 | 22·4 | 15·5 | |
| 8·2 | | 30·4 | 34·9 | 8·0 GS |
| 9·0 | | 40·9 | 34·1 | |
| 9·4 | | 55·4 | 41·0 | |
| 9·6 | | 55·9 | 43·6 | |
| 8·6 | 56 | 30·4 | 3·7 | 9·0 |
| 9·0 | | 45·3 | 22·4 | |
| 9·7 | 57 | 46·8 | 33·6 | |
| 8·6 | 58 | 19·3 | 34·8 | 9·0 |
| 8·9 | | 39·3 | 51·4 | |
| 9·0 | | 57·3 | 14·9 | |
| 9·1 | 59 | 23·3 | 59·1 | |
| 9·2 | | 40·3 | 10·1 | |
| 7·6 | | 55·8 | 16·7 | 7·5 GS |
| 9·7 | 0 | 0·3 | 17·8 | |
| 9·0 | | 8·3 | 50·4 | |
| 9·6 | | 30·4 | 17·9 | |
| 8·3 | 1 | 8·9 | 20·5 | 8·5 |
| 9·4 | | 16·9 | 2·8 | |
| 7·8 | | 27·9 | 28·6 | 8·0 GS |
| 9·4 | | 29·4 | 46·6 | |
| 9·6 | 2 | 42·4 | 4·9 | |
| 9·7 | | 46·9 | 52·7 | |
| 9·7 | | 49·4 | 52·7 | |
| 7·8 | 3 | 3·5 | 57·1 | 8·0 GS |
| 9·1 | | 8·5 | 28·2 | |
| 9·7 | | 36·5 | 31·3 | |

### 781—840.

| mag. | 5h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·7 | 3 | 54·3 | 56·1 | |
| 8·8 | 4 | 4·4 | 23·8 | 8·5 |
| 9·7 | | 22·8 | 11·9 | |
| 9·0 | | 38·7 | 35·9 | |
| 9·8 | | 59·8 | 57·9 | |
| 8·6 | 5 | 4·2 | 22·7 | 9·0 |
| 9·2 | | 43·7 | 2·7 | |
| 9·4 | | 50·7 | 57·2 | |
| 10·0 | 6 | 17·2 | 8·5 | |
| 9·8 | | 17·2 | 14·1 | |
| 10·0 | | 19·2 | 8·9 | |
| 9·6 | | 25·2 | 27·6 | |
| 9·4 | | 44·2 | 19·9 | |
| 8·8 | 7 | 3·7 | 12·3 | |
| 9·6 | | 18·2 | 27·8 | |
| 9·8 | | 56·5 | 59·8 | |
| 10·0 | 8 | 7·7 | 21·6 | |
| 10·0 | | 30·2 | 54·4 | |
| 9·4 | | 44·2 | 10·6 | |
| 9·2 | | 53·7 | 12·8 | |
| 9·6 | 9 | 36·7 | 27·2 | |
| 9·8 | | 37·2 | 20·5 | |
| 9·4 | | 44·7 | 45·6 | |
| 9·7 | 10 | 5·2 | 15·6 | |
| 8·9 | | 16·2 | 52·0 | 9·5 |
| 9·4 | | 25·7 | 6·3 | |
| 9·4 | | 49·7 | 45·0 | |
| 9·6 | 11 | 1·3 | 58·0 | |
| 10·0 | | 25·2 | 42·4 | |
| 9·0 | | 25·2 | 35·1 | |
| 9·4 | | 39·7 | 56·3 | |
| 10·0 | 12 | 1·2 | 10·3 | |
| 9·3 | | 32·7 | 50·0 | |
| 9·2 | | 33·7 | 54·0 | |
| 10·0 | | 50·7 | 16·8 | |
| 10·0 | | 53·7 | 38·2 | |
| 8·7 | 13 | 8·2 | 18·2 | 8·8 |
| 10·0 | | 19·2 | 18·7 | |
| 9·4 | | 39·2 | 35·2 | 9·5 |
| 9·6 | | 58·7 | 49·1 | |
| 9·8 | 14 | 1·1 | 12·2 | |
| 9·3 | | 25·6 | 35·7 | |
| 8·8 | | 32·1 | 16·7 | 9·5 |
| 9·6 | | 33·1 | 15·9 | |
| 9·3 | | 39·6 | 3·5 | |
| 9·2 | 15 | 9·1 | 41·2 | |
| 9·4 | | 26·6 | 41·9 | |
| 10·0 | | 34·1 | 36·6 | |
| 9·4 | 16 | 28·1 | 51·2 | |
| 10·0 | | 38·1 | 26·0 | |
| 9·7 | | 49·6 | 19·3 | |
| 10·0 | 17 | 19·6 | 18·7 | |
| 10·0 | | 44·6 | 32·7 | |
| 9·6 | 18 | 24·6 | 26·4 | |
| 10·0 | | 49·1 | 54·9 | |
| 8·6 | | 57·6 | 38·3 | 8·5 GS |
| 8·3 | | 59·6 | 22·0 | 9·0 GSt |
| 9·4 | 19 | 9·1 | 4·7 | |
| 10·0 | | 45·1 | 17·5 | |
| 6·3 | 20 | 4·1 | 15·1 | 6·5 GSc |

### 841—900.

| mag. | 5h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 20 | 11·6 | 9·4 | |
| 8·6 | | 42·1 | 56·0 | 8·0 GS |
| 9·6 | | 59·1 | 26·1 | |
| 9·7 | 21 | 0·1 | 42·8 | |
| 10·0 | | 49·6 | 36·8 | |
| 10·0 | 22 | 49·1 | 6·9 | |
| 9·4 | 23 | 8·1 | 49·3 | |
| 10·0 | | 37·6 | 30·8 | |
| 8·4 | | 40·6 | 42·6 | 8·5 GS |
| 10·0 | | 50·1 | 40·1 | |
| 10·0 | | 59·6 | 30·0 | |
| 8·8 | 24 | 1·1 | 45·1 | 10·0 |
| 9·2 | | 18·1 | 44·7 | |
| 10·0 | | 30·6 | 30·1 | |
| 9·8 | | 51·1 | 16·2 | |
| 10·0 | 25 | 28·1 | 53·1 | |
| 10·0 | | 28·6 | 52·2 | |
| 9·4 | | 48·6 | 31·0 | |
| 9·8 | 26 | 9·6 | 22·0 | |
| 9·4 | | 18·6 | 47·0 | |
| 9·4 | | 33·0 | 58·0 | |
| 10·0 | | 47·6 | 54·0 | |
| 9·4 | | 58·6 | 50·0 | |
| 9·0 | 27 | 31·1 | 19·0 | |
| 10·0 | | 43·6 | 43·8 | |
| 9·8 | | 44·6 | 50·8 | |
| 9·0 | | 59·1 | 42·0 | |
| 10·0 | 28 | 10·6 | 20·5 | |
| 9·6 | | 58·6 | 42·4 | |
| 9·8 | 29 | 20·1 | 41·0 | |
| 9·8 | | 43·6 | 19·3 | |
| 10·0 | 30 | 22·1 | 4·9 | |
| 9·4 | | 53·6 | 34·2 | |
| 8·5 | 31 | 14·6 | 39·4 | GS |
| 10·0 | | 22·1 | 21·1 | |
| 9·2 | | 37·1 | 52·8 | 9·5 |
| 9·8 | 32 | 31·1 | 27·7 | |
| 8·8 | | 39·1 | 4·8 | |
| 10·0 | | 49·1 | 59·9 | |
| 9·3 | | 52·6 | 21·8 | |
| 9·8 | 33 | 27·6 | 35·0 | |
| 10·0 | | 29·1 | 28·8 | |
| 10·0 | | 39·6 | 48·8 | |
| 9·2 | | 49·1 | 47·7 | |
| 9·8 | 34 | 31·1 | 31·1 | |
| 8·7 | | 39·1 | 15·8 | 9·0 GS |
| 10·0 | | 39·4 | 2·1 | |
| 9·6 | | 55·0 | 34·0 | |
| 9·6 | | 56·6 | 23·9 | |
| 10·0 | 35 | 6·1 | 34·4 | |
| 9·6 | | 14·5 | 15·2 | |
| 10·0 | | 19·6 | 3·8 | |
| 10·0 | | 38·1 | 26·0 | |
| 9·8 | | 51·9 | 6·4 | |
| 8·8 | | 58·9 | 47·0 | |
| 10·4 | 37 | 21·4 | 26·8 | |
| 9·8 | | 29·4 | 23·4 | |
| 10·4 | | 52·9 | 3·5 | |
| 9·0 | | 54·1 | 58·0 | |
| 9·8 | | 59·9 | 18·4 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 10 | 32 | 3·9 |
| | 20 | 31 | 3·5 |
| | 30 | 30 | 3·2 |
| | 40 | 29 | 2·9 |
| | 50 | 29 | 2·5 |
| 5 | 0 | 28 | 2·2 |
| | 10 | 28 | 1·8 |
| | 20 | 27 | 1·5 |
| | 30 | 27 | 1·1 |
| | 40 | 27 | 0·7 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 5 | 30 | 27 | 1·1 |
| | 40 | 27 | 0·7 |
| | 50 | 26 | 0·4 |
| 6 | 0 | 26 | 0·0 |
| | | | − |
| | 10 | 26 | 0·4 |
| | 20 | 27 | 0·7 |
| | 30 | 27 | 1·1 |
| | 40 | 27 | 1·5 |

**901—960.**

| mag. | 5h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 38 | 0·9 | 34·2 | 9·0 |
| 10·4 | | 5·4 | 52·8 | |
| 9·6 | | 14·9 | 16·8 | S |
| 10·2 | | 24·9 | 3·7 | |
| 10·2 | | 30·9 | 25·9 | |
| 10·2 | | 40·9 | 53·2 | |
| 10·2 | 39 | 20·9 | 57·8 | |
| 10·4 | | 24·9 | 9·0 | |
| 8·1 | | 25·9 | 29·8 | 8·0 GS |
| 10·0 | | 27·9 | 26·8 | |
| 10·2 | | 30·9 | 32·4 | |
| 10·2 | | 45·9 | 48·0 | |
| 10·4 | | 46·4 | 48·4 | |
| 9·8 | | 50·9 | 47·2 | |
| 10·4 | | 51·0 | 30·2 | |
| 9·8 | | 59·0 | 11·5 | |
| 10·4 | 40 | 12·0 | 15·9 | |
| 10·0 | | 21·0 | 29·4 | |
| 10·0 | | 25·5 | 40·4 | |
| 9·4 | | 42·5 | 18·7 | S |
| 10·2 | 41 | 3·0 | 49·6 | |
| 10·0 | | 10·0 | 16·4 | |
| 9·2 | | 30·0 | 30·9 | |
| 9·1 | | 36·0 | 40·4 | |
| 10·2 | | 50·0 | 8·8 | |
| 9·4 | | 50·5 | 10·8 | |
| 10·0 | | 56·0 | 26·4 | |
| 7·2 | 42 | 12·0 | 58·2 | 8·0 GS |
| 10·4 | | 15·0 | 55·6 | |
| 10·2 | | 27·0 | 7·0 | |
| 10·2 | | 29·5 | 20·9 | |
| 8·6 | | 34·5 | 45·9 | 9·5 G |
| 9·8 | | 36·0 | 48·8 | |
| 10·2 | 43 | 6·5 | 7·0 | |
| 9·9 | | 12·5 | 4·4 | |
| 8·4 | | 45·0 | 29·9 | |
| 10·0 | 44 | 32·7 | 58·9 | |
| 10·2 | | 51·0 | 27·2 | |
| 8·8 | 45 | 29·5 | 51·6 | 9·0 |
| 9·8 | | 48·0 | 43·0 | |
| 9·2 | 46 | 11·0 | 2·6 | |
| 10·4 | | 23·0 | 3·1 | |
| 10·2 | | 24·0 | 20·4 | |
| 9·6 | | 25·0 | 21·3 | |
| 10·2 | | 39·5 | 56·4 | |
| 6·5 | 47 | 33·0 | 11·8 | 5·0 GSct |
| 10·4 | | 40·0 | 25·2 | |
| 10·2 | | 42·5 | 38·0 | |
| 8·4 | 48 | 1·0 | 50·4 | |
| 9·8 | | 29·0 | 17·7 | |
| 9·8 | | 31·5 | 21·5 | |
| 8·6 | | 35·0 | 56·2 | 9·5 |
| 10·4 | 49 | 14·5 | 2·5 | |
| 9·4 | | 24·5 | 9·2 | |
| 10·2 | | 43·2 | 44·1 | |
| 7·8 | 50 | 5·2 | 29·3 | 7·5 GSt |
| 10·2 | | 9·2 | 49·3 | |
| 8·2 | | 13·2 | 13·6 | |
| 10·2 | | 38·2 | 15·5 | |
| 9·6 | | 40·9 | 2·2 | |

**961—1020.**

| mag. | 5h.–6h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·1 | 50 | 43·7 | 32·4 | 9·0 |
| 9·6 | | 55·2 | 8·4 | |
| 9·4 | 51 | 20·2 | 13·1 | |
| 8·1 | | 25·7 | 41·5 | 8·5 G |
| 9·9 | | 31·2 | 41·9 | |
| 10·2 | | 50·2 | 34·5 | |
| 8·4 | | 56·2 | 11·9 | 9·0 |
| 10·4 | 52 | 51·2 | 50·2 | |
| 8·7 | 53 | 13·2 | 0·1 | 9·5 |
| 8·2 | | 39·2 | 32·5 | 8·2 GSt |
| 8·0 | | 43·2 | 34·2 | 7·5 GSt |
| 8·8 | | 44·4 | 0·1 | 9·5 |
| 9·4 | | 53·7 | 20·4 | |
| 10·4 | 54 | 11·2 | 0·5 | |
| 10·4 | | 25·7 | 45·7 | |
| 9·2 | | 29·2 | 8·0 | 9·0 |
| 8·8 | | 51·2 | 37·2 | |
| 9·8 | 55 | 52·7 | 17·1 | |
| 9·9 | 56 | 1·7 | 57·9 | |
| 10·2 | | 16·2 | 30·7 | |
| 10·4 | | 52·5 | 2·6 | |
| 8·8 | 57 | 19·5 | 38·2 | |
| 8·6 | 58 | 15·7 | 9·9 | 9·0 |
| 10·2 | | 20·2 | 40·8 | |
| 9·6 | | 31·7 | 20·9 | |
| 9·6 | | 38·7 | 38·6 | |
| 9·3 | | 52·2 | 4·9 | 9·0 |
| 9·8 | 59 | 3·2 | 41·6 | |
| 7·8 | | 34·6 | 59·1 | 7·8 GSg |
| 9·0 | | 39·2 | 8·1 | |
| 10·2 | | 53·7 | 8·8 | |
| 10·4 | | 57·2 | 28·1 | |
| 10·2 | 0 | 4·2 | 30·4 | |
| 9·0 | | 27·2 | 48·9 | 9·3 |
| 10·2 | | 31·2 | 57·4 | |
| 8·6 | | 35·2 | 56·3 | 7·8 GSg |
| 9·1 | | 36·7 | 0·7 | |
| 10·4 | | 42·2 | 26·6 | |
| 10·4 | | 47·2 | 39·0 | |
| 9·8 | 1 | 2·7 | 11·5 | |
| 9·8 | | 55·2 | 50·8 | |
| 9·4 | 2 | 15·0 | 57·2 | |
| 10·4 | | 15·7 | 48·9 | |
| 10·4 | | 17·7 | 26·0 | |
| 9·6 | | 30·2 | 20·6 | |
| 9·8 | | 32·7 | 31·9 | |
| 9·8 | | 43·7 | 53·9 | |
| 9·6 | | 51·2 | 49·4 | |
| 7·4 | | 52·2 | 13·1 | GSg |
| 8·8 | 4 | 20·2 | 3·6 | 8·5 G |
| 8·7 | | 23·2 | 5·0 | 8.0 G |
| 9·9 | | 52·2 | 50·0 | |
| 10·0 | 5 | 1·2 | 14·9 | |
| 9·9 | | 10·7 | 52·4 | |
| 9·2 | | 14·2 | 11·7 | 9·0 |
| 10·4 | 6 | 0·7 | 35·9 | |
| 10·0 | | 6·7 | 5·3 | |
| 9·8 | | 11·2 | 13·4 | |
| 9·6 | | 31·2 | 27·3 | |
| 9·4 | | 38·8 | 24·8 | |

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| mag. | 6h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 6 | 40·7 | 43·8 | |
| 10·4 | 7 | 2·5 | 40·4 | |
| 10·4 | | 40·7 | 1·3 | |
| 9·6 | | 55·2 | 18·6 | |
| 9·4 | 8 | 11·2 | 20·9 | |
| 8·1 | | 21·2 | 3·7 | 8·2 Gg |
| 10·2 | | 27·1 | 2·7 | |
| 9·3 | | 51·8 | 8·4 | |
| 8·9 | 10 | 4·8 | 38·7 | |
| 9·4 | | 16·3 | 53·0 | |
| 9·0 | | 16·3 | 49·0 | |
| 9·4 | | 20·8 | 27·9 | |
| 9·3 | | 30·8 | 34·6 | |
| 9·0 | | 50·3 | 19·1 | 8·8 |
| 9·8 | | 52·3 | 25·5 | |
| 9·4 | | 52·3 | 18·1 | 9·5 |
| 9·0 | 11 | 14·3 | 2·2 | 9·2 |
| 7·6 | | 32·3 | 52·8 | 7·0 GSct |
| 9·6 | 12 | 1·3 | 42·9 | |
| 8·8 | | 10·8 | 54·0 | 8·5 G |
| 9·3 | | 37·8 | 11·3 | |
| 8·2 | | 41·3 | 9·6 | 8·5 |
| 8·9 | 13 | 10·3 | 6·8 | 9·5 |
| 9·8 | | 10·8 | 46·0 | |
| 9·0 | | 15·3 | 17·0 | |
| 10·0 | | 54·8 | 40·8 | |
| 9·8 | 15 | 1·8 | 10·0 | |
| 9·8 | | 16·8 | 31·9 | |
| 8·8 | | 50·8 | 49·3 | 8·5 |
| 7·9 | | 52·9 | 23·6 | 8·0 G |
| 9·8 | 16 | 14·9 | 50·6 | |
| 8·8 | | 18·4 | 0·6 | |
| 8·7 | | 20·8 | 57·8 | 9·0 |
| 7·5 | | 20·8 | 56·9 | 8·0 S |
| 10·0 | | 25·2 | 1·0 | |
| 9·3 | | 56·9 | 37·6 | 9·0 |
| 9·8 | | 58·4 | 55·5 | |
| 10·0 | | 58·9 | 14·1 | |
| 9·1 | 17 | 10·8 | 30·8 | 9·5 |
| 9·0 | | 26·4 | 43·2 | |
| 9·4 | 18 | 20·7 | 2·0 | |
| 10·0 | | 41·6 | 58·4 | |
| 9·3 | | 58·4 | 35·8 | 9·5 |
| 9·2 | 19 | 6·4 | 27·9 | |
| 9·4 | | 12·9 | 53·9 | |
| 7·9 | | 26·4 | 17·9 | 7·5 GSg |
| 9·4 | | 40·4 | 55·6 | |
| 9·6 | | 50·4 | 25·1 | |
| 9·8 | | 50·9 | 16·8 | |
| 9·3 | 20 | 14·4 | 31·9 | |
| 9·6 | | 37·9 | 36·3 | |
| 6·4 | | 41·9 | 18·2 | 6·0 GSg |
| 8·4 | 21 | 21·7 | 2·5 | 8·2 |
| 9·6 | | 22·7 | 0·0 | |
| 9·0 | | 25·9 | 44·3 | |
| 9·4 | | 29·9 | 44·0 | |
| 9·8 | | 43·4 | 8·4 | |
| 9·4 | 22 | 14·4 | 34·0 | |
| 8·6 | | 50·9 | 6·0 | 8·2 |
| 8·4 | 23 | 9·9 | 8·3 | 8·0 |

**1081—1140.**

| mag. | 6h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8·8 | 23 | 15·9 | 46·0 | 9·0 |
| 9·4 | | 22·9 | 21·8 | |
| 9·0 | | 38·4 | 16·6 | |
| 10·0 | | 41·4 | 39·0 | |
| 9·2 | | 53·4 | 26·8 | |
| 10·0 | 24 | 6·4 | 34·7 | |
| 9·4 | 25 | 0·9 | 34·3 | |
| 9·1 | | 18·4 | 10·4 | |
| 10·0 | | 45·9 | 22·0 | |
| 9·3 | 26 | 20·9 | 33·8 | |
| 9·3 | | 30·9 | 29·9 | |
| 9·8 | | 42·4 | 15·9 | |
| 9·1 | | 50·9 | 56·0 | |
| 9·4 | 27 | 18·9 | 33·4 | |
| 7·1 | | 18·9 | 46·0 | 6·0 GScgt |
| 10·0 | | 22·9 | 2·9 | |
| 9·6 | | 48·9 | 27·6 | |
| 9·0 | | 52·9 | 39·8 | 9·5 |
| 10·0 | 28 | 25·4 | 16·3 | |
| 9·8 | | 53·4 | 41·7 | |
| 9·1 | | 54·4 | 33·7 | |
| 8·4 | | 55·9 | 50·8 | 9·0 |
| 10·0 | 29 | 23·9 | 27·9 | |
| 9·4 | | 43·9 | 56·9 | |
| 9·8 | | 46·4 | 10·9 | |
| 9·3 | 30 | 30·9 | 46·9 | 10·0 |
| 9·8 | 31 | 10·9 | 15·8 | |
| 9·6 | | 34·9 | 14·5 | |
| 10·0 | | 35·9 | 21·9 | |
| 8·9 | | 45·9 | 38·7 | |
| 8·8 | | 57·0 | 59·2 | 9·0 |
| 10·0 | | 57·9 | 39·6 | |
| 9·8 | 32 | 9·4 | 32·4 | |
| 9·8 | | 21·9 | 11·8 | |
| 9·3 | | 30·9 | 51·8 | |
| 8·7 | | 51·9 | 42·9 | 9·0 |
| 9·4 | | 59·9 | 11·9 | |
| 9·4 | 33 | 20·9 | 3·1 | 9·5 |
| 8·0 | | 35·4 | 7·5 | 7·8 GSt |
| 9·6 | 34 | 1·4 | 35·4 | |
| 10·0 | | 7·3 | 4·4 | |
| 10·0 | | 29·4 | 2·9 | |
| 8·8 | | 41·9 | 9·0 | 9·2 |
| 9·4 | | 45·9 | 54·4 | |
| 9·2 | 35 | 27·4 | 43·9 | |
| 9·8 | | 51·9 | 35·2 | |
| 9·2 | 36 | 5·9 | 12·2 | |
| 8·8 | | 21·9 | 43·7 | 9·5 |
| 9·6 | | 34·7 | 0·3 | |
| 9·4 | 37 | 28·4 | 36·4 | |
| 10·0 | | 45·4 | 56·8 | |
| 9·2 | | 53·4 | 23·4 | 9·0 |
| 10·0 | | 55·9 | 32·5 | |
| 9·6 | | 55·9 | 57·7 | |
| 9·1 | | 57·9 | 6·6 | |
| 9·0 | 38 | 0·9 | 6·3 | |
| 10·0 | | 26·4 | 9·4 | |
| 9·1 | | 30·4 | 52·0 | |
| 9·8 | | 42·4 | 34·0 | |
| 9·8 | 39 | 0·4 | 35·8 | |



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## 1141—1200.

| mag. | 6h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 39 | 7·5 | 3·1 | |
| 10·0 | | 36·2 | 7·8 | |
| 9·0 | | 45·9 | 56·7 | |
| 9·3 | | 50·5 | 20·4 | |
| 10·3 | 40 | 12·4 | 33·1 | |
| 9·0 | | 15·2 | 19·3 | |
| 9·6 | | 22·5 | 25·0 | |
| 10·1 | | 27·9 | 28·4 | |
| 9·4 | | 51·4 | 34·8 | |
| 9·2 | 41 | 1·0 | 28·1 | |
| 9·8 | | 17·5 | 22·7 | |
| 10·0 | | 21·5 | 28·3 | |
| 8·8 | | 40·0 | 17·1 | |
| 9·8 | | 43·5 | 32·9 | |
| 9·5 | | 55·5 | 4·3 | |
| 10·3 | 42 | 19·5 | 12·5 | |
| 10·3 | | 43·0 | 23·7 | |
| 10·1 | 43 | 6·0 | 36·8 | |
| 10·1 | | 27·0 | 15·6 | |
| 9·5 | | 35·0 | 15·9 | |
| 10·2 | | 53·0 | 37·3 | |
| 9·8 | 44 | 11·5 | 43·9 | |
| 9·0 | | 58·5 | 18·7 | |
| 10·1 | 45 | 14·5 | 24·5 | |
| 8·8 | 46 | 0·5 | 10·5 | 8·0 |
| 9·5 | | 5·0 | 54·5 | |
| 10·0 | | 6·0 | 36·1 | |
| 10·0 | | 9·5 | 46·1 | |
| 10·3 | | 15·0 | 54·5 | |
| 9·4 | | 38·5 | 26·1 | |
| 9·4 | 47 | 40·0 | 27·7 | |
| 10·3 | | 44·0 | 37·1 | |
| 10·1 | | 44·5 | 1·9 | |
| 10·2 | | 50·4 | 3·7 | |
| 10·3 | | 53·0 | 59·2 | |
| 10·3 | | 59·5 | 9·7 | |
| 9·4 | 48 | 5·5 | 5·5 | |
| 10·3 | | 28·5 | 53·8 | |
| 9·0 | | 33·5 | 48·1 | 8·5 |
| 9·0 | | 38·0 | 5·3 | |
| 8·6 | | 40·0 | 5·5 | |
| 10·1 | | 47·0 | 6·7 | |
| 9·4 | 49 | 3·5 | 43·8 | 9·5 |
| 9·6 | | 46·0 | 31·5 | |
| 8·8 | | 52·5 | 21·7 | 8·5 GSg |
| 8·5 | | 54·5 | 21·2 | 8·0 GSg |
| 9·8 | 50 | 11·5 | 42·3 | |
| 9·6 | | 21·5 | 34·1 | G |
| 10·3 | | 21·5 | 21·1 | |
| 9·6 | | 34·5 | 35·8 | |
| 9·4 | | 40·5 | 52·4 | |
| 9·3 | | 54·5 | 13·2 | 9·2 |
| 10·2 | 51 | 6·0 | 42·1 | |
| 9·5 | | 31·0 | 16·3 | 8·8 |
| 8·8 | 52 | 42·0 | 29·4 | 9·2 |
| 9·0 | | 54·0 | 27·4 | 9·5 |
| 10·1 | 53 | 21·0 | 31·5 | |
| 9·5 | | 30·5 | 21·7 | 9·0 |
| 7·9 | | 39·0 | 47·8 | 8·0 GSt |
| 10·2 | | 59·0 | 51·8 | |

## 1201—1260.

| mag. | 6h.—7h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 54 | 5·5 | 24·0 | |
| 9·5 | | 20·0 | 47·8 | |
| 9·3 | | 39·5 | 43·9 | |
| 10·0 | | 46·5 | 19·7 | |
| 9·6 | 55 | 4·5 | 10·4 | |
| 9·6 | | 8·5 | 1·0 | |
| 10·3 | | 24·5 | 54·8 | |
| 9·6 | | 29·0 | 0·6 | |
| 9·6 | | 31·5 | 0·8 | |
| 8·6 | 56 | 7·0 | 36·4 | |
| 7·2 | | 15·5 | 13·3 | 6·5 GSgt |
| 10·3 | | 30·0 | 32·2 | |
| 9·0 | | 32·0 | 17·8 | 9·0 |
| 10·2 | 57 | 34·9 | 1·3 | |
| 10·3 | | 43·8 | 0·9 | |
| 10·3 | | 48·5 | 50·8 | |
| 8·8 | | 51·5 | 54·6 | 9·0 |
| 7·7 | | 54·0 | 43·8 | 7·5 GSg |
| 10·0 | | 59·5 | 49·0 | |
| 10·3 | 58 | 32·0 | 15·2 | |
| 9·4 | | 55·9 | 38·8 | G |
| 10·3 | | 57·4 | 20·1 | |
| 10·0 | 59 | 24·4 | 19·0 | |
| 8·0 | | 27·4 | 26·3 | 8·0 GSg |
| 9·5 | | 40·9 | 42·5 | |
| 10·3 | | 59·9 | 27·9 | |
| 10·0 | 0 | 13·9 | 26·5 | |
| 10·3 | | 25·9 | 56·3 | |
| 10·2 | | 36·9 | 1·4 | |
| 9·2 | | 38·9 | 35·7 | |
| 9·0 | | 45·4 | 50·1 | |
| 5·7 | 1 | 59·9 | 33·6 | 5·5 GSgt |
| 8·6 | 2 | 0·4 | 40·3 | 8·8 |
| 10·1 | | 5·4 | 37·9 | |
| 10·3 | | 5·4 | 55·3 | |
| 10·3 | | 8·9 | 7·6 | |
| 10·2 | | 23·9 | 19·6 | |
| 9·5 | | 28·9 | 43·0 | |
| 9·1 | | 34·9 | 21·4 | |
| 10·3 | | 49·9 | 8·6 | |
| 9·5 | | 51·4 | 40·9 | 9·0 |
| 10·0 | | 51·4 | 54·9 | |
| 10·0 | 3 | 6·4 | 54·4 | |
| 8·8 | | 20·9 | 1·9 | 8·5 |
| 10·0 | | 25·4 | 33·0 | |
| 9·8 | | 39·9 | 55·0 | |
| 10·1 | | 50·4 | 32·0 | |
| 10·0 | 4 | 7·4 | 1·4 | |
| 8·6 | | 8·4 | 26·9 | |
| 10·1 | | 58·9 | 8·2 | |
| 8·8 | 5 | 5·9 | 8·2 | |
| 9·4 | | 12·4 | 49·8 | |
| 9·6 | | 25·6 | 41·6 | |
| 9·6 | | 29·6 | 39·3 | |
| 10·1 | | 30·6 | 50·9 | |
| 9·0 | | 34·6 | 27·9 | 8·8 |
| 9·0 | | 44·6 | 45·1 | 9·0 |
| 9·4 | 6 | 25·1 | 30·9 | 9·5 |
| 9·5 | | 34·6 | 26·0 | 9·5 |
| 8·5 | | 41·4 | 52·3 | |

## 1261—1320.

| mag. | 7h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8·2 | 6 | 49·6 | 9·4 | 8·0 GSt |
| 8·3 | | 51·6 | 9·9 | 8·5 GSt |
| 9·6 | | 57·6 | 30·9 | |
| 9·2 | 7 | 3·1 | 25·1 | 9·5 |
| 8·2 | | 24·6 | 10·0 | 8·5 GSt |
| 10·3 | | 32·6 | 21·6 | |
| 9·8 | | 41·6 | 4·3 | |
| 9·6 | | 59·6 | 6·4 | |
| 10·0 | 8 | 12·1 | 50·6 | |
| 8·6 | | 22·6 | 32·8 | 9·0 |
| 9·0 | | 31·6 | 29·4 | 9·8 |
| 9·4 | | 31·8 | 2·9 | |
| 10·0 | | 42·1 | 47·9 | |
| 9·6 | 9 | 12·9 | 22·3 | |
| 10·2 | | 13·9 | 45·1 | |
| 10·0 | | 30·4 | 58·9 | |
| 9·6 | | 38·4 | 41·8 | |
| 10·3 | 10 | 14·4 | 27·9 | |
| 9·6 | | 20·4 | 27·0 | |
| 10·1 | | 20·4 | 47·2 | |
| 9·4 | | 22·4 | 41·0 | |
| 9·4 | | 29·4 | 8·8 | |
| 10·1 | | 29·4 | 44·5 | |
| 10·0 | | 33·9 | 15·7 | |
| 9·6 | | 33·9 | 5·5 | |
| 9·4 | 11 | 9·1 | 30·6 | 9·0 |
| 9·8 | | 22·3 | 38·0 | |
| 10·3 | | 44·4 | 35·8 | |
| 10·3 | | 54·9 | 6·1 | |
| 9·5 | | 58·4 | 4·5 | |
| 10·0 | 12 | 13·4 | 49·9 | |
| 9·4 | | 25·6 | 5·0 | |
| 10·3 | | 35·9 | 21·7 | |
| 10·3 | | 45·4 | 36·0 | |
| 9·0 | | 52·3 | 5·3 | |
| 9·6 | 14 | 18·3 | 14·3 | |
| 8·5 | | 28·3 | 12·1 | 9·0 |
| 9·7 | | 32·3 | 7·1 | |
| 9·4 | | 37·8 | 38·7 | |
| 9·7 | | 40·3 | 18·9 | |
| 9·7 | | 57·3 | 28·5 | |
| 9·6 | 15 | 15·8 | 47·5 | |
| 9·6 | 16 | 16·5 | 19·5 | |
| 9·6 | | 19·3 | 7·1 | |
| 8·8 | | 23·3 | 25·0 | |
| 9·6 | | 28·3 | 11·5 | |
| 9·0 | | 44·3 | 15·3 | |
| 9·2 | | 49·3 | 26·9 | |
| 9·2 | | 54·8 | 36·9 | |
| 9·0 | 17 | 20·3 | 12·6 | |
| 9·7 | | 26·8 | 17·2 | |
| 9·7 | | 49·8 | 9·5 | |
| 7·2 | | 53·8 | 3·7 | 7·0 GSct |
| 9·2 | 18 | 25·3 | 21·8 | |
| 7·5 | | 30·3 | 32·7 | 8·2 G |
| 9·2 | | 40·3 | 59·7 | |
| 9·4 | | 54·3 | 48·1 | |
| 9·3 | 19 | 0·3 | 24·3 | |
| 9·7 | | 7·3 | 38·0 | |
| 8·6 | | 15·3 | 1·0 | 7·8 G |

## 1321—1380.

| mag. | 7h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 19 | 22·8 | 29·1 | |
| 9·4 | | 37·8 | 4·2 | |
| 9·6 | | 44·8 | 30·0 | |
| 8·4 | 20 | 19·8 | 26·2 | 8·0 G |
| 9·0 | | 33·2 | 59·9 | |
| 8·8 | | 50·3 | 35·8 | |
| 9·0 | | 50·3 | 15·9 | |
| 9·7 | | 59·3 | 21·3 | |
| 9·7 | 21 | 9·8 | 31·8 | |
| 9·7 | | 20·3 | 21·7 | |
| 8·7 | 22 | 0·3 | 21·0 | |
| 9·7 | | 27·3 | 34·3 | |
| 8·7 | | 40·3 | 40·3 | |
| 9·2 | | 44·3 | 18·7 | |
| 9·6 | | 50·3 | 52·2 | |
| 9·4 | 23 | 5·3 | 40·1 | |
| 9·6 | | 7·3 | 43·1 | |
| 8·6 | | 32·3 | 26·2 | |
| 9·3 | | 35·3 | 17·2 | |
| 8·2 | | 40·3 | 42·4 | 8·7 |
| 8·2 | | 53·8 | 13·7 | |
| 9·4 | 24 | 34·3 | 16·1 | |
| 9·4 | | 40·6 | 2·2 | |
| 9·4 | | 48·8 | 24·8 | |
| 9·6 | | 58·8 | 1·4 | |
| 9·2 | 25 | 11·3 | 22·5 | 9·0 |
| 9·2 | | 20·3 | 42·9 | |
| 9·6 | | 20·3 | 0·5 | |
| 9·6 | 26 | 9·8 | 28·3 | |
| 9·4 | | 15·3 | 9·0 | |
| 9·7 | | 30·3 | 33·8 | |
| 9·7 | | 36·3 | 14·0 | |
| 9·3 | 27 | 21·3 | 46·4 | |
| 8·2 | | 23·3 | 27·8 | 8·8 |
| 9·7 | | 24·8 | 30·3 | |
| 9·2 | | 30·3 | 42·8 | |
| 9·4 | | 30·3 | 56·9 | |
| 8·4 | | 34·3 | 3·4 | 8·5 GSg |
| 9·2 | | 42·8 | 40·9 | |
| 8·6 | | 47·3 | 41·6 | |
| 8·0 | | 52·3 | 57·0 | 7·0 GSg |
| 9·2 | 28 | 7·8 | 30·9 | |
| 8·3 | | 30·8 | 35·1 | 9·0 |
| 8·2 | | 40·3 | 21·4 | 8·0 GSg |
| 9·2 | | 41·3 | 36·1 | |
| 9·2 | 29 | 0·3 | 14·9 | |
| 9·2 | | 8·3 | 50·6 | |
| 9·0 | | 16·3 | 50·4 | |
| 9·3 | | 35·8 | 3·6 | |
| 9·6 | | 45·8 | 9·0 | |
| 9·7 | 30 | 0·3 | 10·7 | |
| 9·6 | | 1·8 | 21·9 | |
| 9·2 | | 9·3 | 53·6 | |
| 9·4 | | 26·8 | 7·1 | |
| 9·2 | | 39·3 | 11·2 | |
| 9·2 | | 50·3 | 22·2 | |
| 9·4 | | 52·3 | 53·4 | |
| 9·0 | 31 | 48·8 | 53·1 | |
| 9·0 | 32 | 0·3 | 3·7 | |
| 8·7 | | 10·3 | 29·0 | 9·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 6 | 30 | 27 | 1·1 |
| | 40 | 27 | 1·5 |
| | 50 | 28 | 1·8 |
| 7 | 0 | 28 | 2·2 |
| | 10 | 29 | 2·5 |
| | 20 | 29 | 2·9 |
| | 30 | 30 | 3·2 |
| | 40 | 31 | 3·5 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 30 | 30 | 3·2 |
| | 40 | 31 | 3·5 |
| | 50 | 32 | 3·9 |
| 8 | 0 | 33 | 4·2 |
| | 10 | 34 | 4·5 |
| | 20 | 35 | 4·8 |
| | 30 | 37 | 5·1 |

## 1381—1440.

| mag. | 7h. m | s | − 56° ′ | |
|---|---|---|---|---|
| 9·6 | 32 | 51·3 | 42·7 | |
| 9·7 | 33 | 3·3 | 58·6 | |
| 9·3 | | 10·3 | 47·3 | |
| 9·0 | | 10·8 | 46·8 | |
| 8·6 | | 25·3 | 25·0 | |
| 9·7 | | 31·3 | 10·9 | |
| 9·6 | | 45·8 | 17·5 | |
| 9·6 | | 52·3 | 38·1 | |
| 8·8 | 34 | 28·3 | 38·9 | |
| 9·6 | | 58·3 | 26·8 | |
| 9·6 | 35 | 0·8 | 39·3 | |
| 9·2 | | 1·3 | 12·7 | |
| 7·9 | | 5·3 | 56·1 | 8·0 Gt |
| 9·4 | | 34·0 | 46·0 | |
| 9·0 | 36 | 5·8 | 58·6 | 9·5 |
| 9·3 | | 11·0 | 47·0 | |
| 9·6 | | 27·5 | 50·8 | |
| 9·7 | | 37·0 | 39·2 | |
| 9·0 | | 53·3 | 58·2 | 8·8 |
| 9·2 | 37 | 26·0 | 52·6 | 9·0 |
| 9·2 | | 30·0 | 0·1 | 9·0 |
| 9·4 | 38 | 19·0 | 31·4 | |
| 9·2 | | 26·0 | 37·0 | |
| 7·0 | 39 | 10·0 | 1·2 | 7·0 GSct |
| 9·2 | | 10·0 | 33·9 | 9·0 |
| 9·0 | | 10·5 | 6·4 | 9·3 |
| 9·3 | | 20·0 | 33·5 | |
| 9·3 | | 41·0 | 17·7 | |
| 9·0 | | 44·0 | 10·4 | |
| 9·6 | | 46·5 | 51·8 | |
| 9·7 | | 50·0 | 20·2 | |
| 9·7 | 40 | 10·0 | 21·4 | |
| 9·3 | | 59·0 | 5·9 | |
| 9·0 | 41 | 1·0 | 33·8 | |
| 9·4 | | 22·0 | 15·6 | |
| 9·2 | | 31·5 | 26·7 | 9·0 |
| 9·2 | | 58·0 | 55·4 | |
| 7·6 | 42 | 2·0 | 24·2 | 8·5 GSt |
| 9·7 | | 51·0 | 13·6 | |
| 7·0 | | 59·7 | 25·0 | 6·5 GSt |
| 9·2 | | 59·7 | 9·2 | 9·0 |
| 9·7 | 43 | 6·0 | 42·4 | |
| 9·7 | | 11·5 | 1·8 | |
| 9·6 | | 19·7 | 39·3 | |
| 9·6 | | 20·0 | 14·0 | |
| 8·6 | | 30·3 | 56·0 | 8·0 |
| 9·8 | | 38·3 | 45·5 | |
| 8·6 | | 45·4 | 2·9 | 9·0 |
| 9·2 | | 49·3 | 57·0 | 8·5 |
| 9·5 | 44 | 9·8 | 6·6 | |
| 9·8 | | 17·1 | 22·6 | |
| 9·8 | | 44·3 | 57·0 | 9·5 |
| 9·0 | | 44·4 | 57·5 | 9·5 |
| 9·8 | 45 | 19·3 | 18·6 | |
| 9·4 | | 25·3 | 43·6 | |
| 10·2 | | 38·8 | 23·3 | |
| 7·4 | | 39·3 | 9·4 | 7·0 GSct |
| 10·0 | | 47·3 | 55·4 | |
| 9·8 | | 48·7 | 59·0 | |
| 9·6 | | 49·3 | 26·7 | |

## 1441—1500.

| mag. | 7h. m | s | − 56° ′ | |
|---|---|---|---|---|
| 10·0 | 46 | 17·8 | 14·8 | |
| 6·8 | | 25·8 | 5·6 | 6·0 GSct |
| 9·5 | | 28·3 | 6·7 | |
| 10·0 | | 48·8 | 50·3 | |
| 10·2 | 47 | 31·2 | 15·2 | |
| 9·0 | | 32·2 | 21·1 | |
| 8·4 | | 40·9 | 0·5 | 8·0 |
| 10·0 | 48 | 1·7 | 23·9 | |
| 10·2 | | 59·2 | 8·6 | |
| 10·0 | 49 | 6·7 | 2·8 | |
| 10·2 | | 20·7 | 3·0 | |
| 9·2 | | 25·7 | 49·4 | 9·5 |
| 10·0 | | 40·2 | 15·6 | |
| 9·5 | 50 | 23·7 | 49·7 | 9·0 |
| 10·2 | | 36·7 | 32·7 | |
| 10·2 | | 47·3 | 36·1 | |
| 10·0 | | 49·2 | 33·5 | |
| 9·2 | | 49·2 | 53·3 | |
| 9·8 | 51 | 8·2 | 55·9 | |
| 9·4 | | 19·9 | 1·3 | |
| 9·4 | | 29·7 | 12·7 | |
| 10·2 | | 39·2 | 51·6 | |
| 10·2 | | 40·2 | 24·7 | |
| 9·8 | | 40·7 | 51·5 | |
| 9·2 | 52 | 0·7 | 8·6 | |
| 10·0 | | 5·7 | 11·3 | |
| 10·0 | | 9·7 | 31·9 | |
| 7·2 | | 18·2 | 58·3 | 6·0 GScg |
| 10·0 | | 19·7 | 10·3 | |
| 9·2 | | 49·2 | 55·8 | |
| 9·0 | 53 | 3·2 | 19·2 | |
| 8·6 | 54 | 7·2 | 8·7 | 8·0 |
| 9·0 | | 19·7 | 31·5 | 9·0 |
| 9·6 | 55 | 30·7 | 34·1 | |
| 9·6 | | 39·7 | 49·7 | |
| 9·8 | | 49·7 | 47·3 | |
| 9·0 | | 51·2 | 32·3 | |
| 9·6 | 56 | 1·7 | 10·9 | |
| 10·0 | | 10·7 | 7·3 | |
| 9·4 | | 14·7 | 35·9 | |
| 9·5 | | 30·2 | 54·0 | 9·5 |
| 9·4 | | 35·7 | 54·1 | 9·5 |
| 10·0 | | 41·6 | 0·2 | |
| 9·6 | | 59·2 | 46·7 | |
| 9·8 | 57 | 0·2 | 44·8 | |
| 9·2 | | 2·2 | 13·9 | |
| 9·0 | | 28·2 | 35·1 | 8·5 |
| 9·2 | | 32·2 | 47·9 | 9·0 |
| 10·0 | | 36·7 | 29·9 | |
| 10·2 | | 43·2 | 41·6 | |
| 9·4 | | 52·2 | 21·3 | |
| 9·6 | 58 | 1·7 | 36·6 | 9·0 |
| 9·4 | | 12·2 | 9·7 | |
| 8·4 | | 15·7 | 20·2 | |
| 9·4 | | 17·2 | 35·9 | 10·0 |
| 9·6 | | 40·2 | 17·9 | |
| 10·0 | | 40·6 | 0·9 | |
| 8·0 | | 42·2 | 36·1 | 8·5 |
| 9·6 | | 44·2 | 21·1 | |
| 9·6 | | 45·7 | 4·0 | |

## 1501—1560.

| mag. | 7h.–8h. m | s | − 56° ′ | |
|---|---|---|---|---|
| 10·2 | 59 | 0·2 | 38·9 | |
| 10·2 | | 29·7 | 16·7 | |
| 10·0 | 0 | 15·2 | 46·6 | |
| 9·8 | | 16·7 | 54·0 | |
| 8·6 | | 17·2 | 15·3 | 9·0 |
| 9·8 | | 24·7 | 23·5 | |
| 10·2 | | 32·2 | 15·5 | |
| 9·6 | 1 | 6·2 | 46·1 | |
| 9·2 | | 11·7 | 11·9 | |
| 9·4 | | 16·2 | 15·5 | 9·5 |
| 9·6 | | 33·7 | 44·3 | |
| 9·6 | | 51·7 | 30·0 | |
| 8·8 | 2 | 0·2 | 19·9 | 9·5 |
| 10·0 | | 11·7 | 23·9 | |
| 9·0 | | 26·8 | 18·3 | 9·0 |
| 9·8 | | 36·8 | 43·4 | |
| 9·8 | | 40·3 | 26·4 | |
| 9·8 | | 43·3 | 48·4 | |
| 8·8 | 3 | 5·3 | 21·6 | 9·0 |
| 9·6 | | 27·3 | 43·2 | |
| 10·2 | | 53·8 | 22·5 | |
| 9·5 | | 55·3 | 39·4 | |
| 10·0 | 4 | 14·3 | 12·8 | |
| 9·8 | | 15·3 | 20·6 | 9·5 |
| 9·4 | | 20·3 | 20·9 | 9·5 |
| 8·4 | | 29·8 | 17·1 | 8·0 G |
| 9·0 | | 32·3 | 51·8 | |
| 9·4 | | 36·3 | 25·7 | |
| 10·0 | | 40·3 | 40·0 | |
| 9·4 | | 54·8 | 29·0 | |
| 9·6 | 5 | 2·8 | 2·4 | |
| 9·0 | | 5·8 | 27·1 | |
| 8·0 | | 10·3 | 15·0 | 8·0 G |
| 9·5 | | 20·3 | 45·2 | |
| 9·8 | | 28·8 | 49·2 | |
| 10·2 | | 29·7 | 59·7 | |
| 9·4 | | 29·8 | 8·4 | |
| 9·4 | 6 | 39·8 | 22·0 | |
| 10·2 | | 47·8 | 23·0 | |
| 9·4 | | 51·3 | 8·1 | 9·0 |
| 9·8 | | 53·8 | 30·1 | |
| 10·0 | 7 | 17·8 | 54·0 | |
| 10·0 | | 54·3 | 59·4 | 9·5 |
| 9·8 | | 55·3 | 54·0 | |
| 10·0 | 8 | 0·3 | 46·9 | |
| 9·6 | | 13·3 | 43·4 | |
| 9·8 | | 42·3 | 23·9 | |
| 8·6 | 9 | 1·8 | 3·2 | 9·0 G |
| 10·2 | | 7·3 | 22·0 | |
| 9·8 | | 24·2 | 9·4 | |
| 10·2 | | 25·4 | 59·1 | |
| 10·0 | | 31·2 | 34·0 | |
| 10·0 | | 40·2 | 18·4 | |
| 9·8 | 10 | 32·2 | 55·0 | |
| 9·8 | 11 | 0·2 | 39·6 | |
| 10·2 | | 2·2 | 35·0 | G |
| 9·4 | | 2·2 | 21·6 | |
| 9·0 | | 12·2 | 51·7 | |
| 7·5 | | 35·7 | 22·4 | 8·0 GSg |
| 9·6 | 12 | 3·2 | 18·7 | |

## 1561—1620.

| mag. | 8h. m | s | − 56° ′ | |
|---|---|---|---|---|
| 9·4 | 12 | 9·7 | 24·1 | 9·0 |
| 10·2 | | 13·2 | 39·5 | |
| 9·8 | | 25·7 | 14·4 | |
| 10·2 | | 39·2 | 41·1 | |
| 10·2 | | 49·7 | 34·4 | |
| 9·4 | | 51·4 | 2·0 | |
| 9·4 | | 51·7 | 20·1 | 8·5 |
| 9·4 | 13 | 15·2 | 26·6 | |
| 7·8 | | 17·2 | 53·1 | 8·0 GSgt |
| 8·8 | | 18·7 | 44·5 | 9·5 S |
| 10·2 | | 39·2 | 18·1 | |
| 9·8 | | 51·7 | 40·5 | |
| 10·0 | 14 | 15·7 | 8·6 | |
| 10·0 | | 24·2 | 45·9 | |
| 9·0 | | 27·2 | 36·9 | |
| 10·0 | | 40·2 | 6·7 | |
| 9·4 | | 45·2 | 7·6 | |
| 9·6 | | 50·7 | 58·4 | |
| 9·8 | 15 | 5·7 | 10·7 | |
| 10·2 | | 10·2 | 36·7 | |
| 10·1 | | 10·4 | 41·2 | |
| 10·1 | | 20·9 | 52·6 | |
| 9·1 | | 47·9 | 34·1 | |
| 9·4 | | 50·6 | 0·1 | |
| 9·4 | | 52·4 | 52·8 | |
| 9·0 | | 59·4 | 50·2 | 9·0 |
| 10·0 | 16 | 8·4 | 46·6 | |
| 8·7 | | 8·5 | 45·6 | 8·5 |
| 9·8 | | 8·9 | 54·0 | |
| 9·0 | | 20·5 | 23·0 | |
| 10·1 | | 23·4 | 58·0 | |
| 9·7 | | 34·9 | 9·8 | |
| 10·0 | | 44·7 | 26·8 | |
| 10·1 | | 44·9 | 44·3 | |
| 8·0 | 17 | 6·5 | 27·7 | 8·0 GSg |
| 9·2 | | 13·4 | 17·9 | 9·5 |
| 9·7 | | 14·9 | 17·3 | |
| 9·2 | | 15·4 | 17·9 | 9·5 |
| 9·4 | | 22·4 | 22·0 | |
| 9·6 | | 30·9 | 50·9 | |
| 9·8 | | 38·4 | 12·9 | |
| 9·8 | | 51·4 | 32·1 | |
| 9·6 | | 59·9 | 32·3 | |
| 8·9 | 18 | 0·9 | 57·4 | |
| 9·3 | | 1·4 | 48·0 | |
| 10·0 | | 10·4 | 35·9 | |
| 9·7 | | 20·9 | 12·4 | |
| 9·4 | | 30·9 | 2·5 | |
| 9·0 | | 31·2 | 2·2 | 9·0 |
| 9·6 | | 40·4 | 16·8 | |
| 9·6 | 19 | 13·9 | 11·0 | |
| 9·4 | | 23·4 | 43·6 | 9·5 |
| 9·3 | | 23·9 | 36·9 | |
| 10·0 | 20 | 0·4 | 48·7 | |
| 9·8 | | 0·4 | 48·2 | |
| 9·6 | | 0·9 | 13·6 | 9·5 |
| 8·4 | | 4·9 | 44·0 | 8·0 |
| 9·6 | | 10·4 | 10·8 | |
| 9·4 | | 12·9 | 24·6 | |
| 9·8 | | 23·9 | 29·0 | |



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### 1621—1680.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 20 | 33·4 | 12·4 | 9·0 |
| 10·0 | | 43·4 | 59·9 | |
| 10·1 | | 59·9 | 55·5 | |
| 10·1 | 21 | 0·9 | 57·2 | |
| 10·1 | | 18·9 | 27·0 | |
| 9·6 | | 19·9 | 4·4 | |
| 8·9 | | 50·4 | 34·7 | 9·5 |
| 8·8 | | 55·4 | 30·4 | 9·5 |
| 9·8 | 22 | 2·4 | 6·4 | |
| 10·0 | | 9·9 | 10·9 | |
| 10·1 | | 26·4 | 49·6 | |
| 8·6 | | 28·4 | 21·2 | 9·0 |
| 10·1 | | 29·4 | 40·7 | |
| 9·4 | | 36·4 | 59·6 | |
| 9·2 | | 43·9 | 24·0 | |
| 9·1 | | 46·4 | 23·8 | |
| 10·1 | 23 | 0·4 | 8·8 | |
| 9·6 | | 6·4 | 32·0 | |
| 9·6 | | 9·4 | 0·3 | |
| 9·6 | | 12·4 | 5·4 | |
| 10·0 | | 14·4 | 16·5 | |
| 9·6 | | 31·9 | 30·0 | |
| 8·3 | | 37·9 | 53·5 | 8·5 |
| 10·0 | | 49·4 | 5·3 | |
| 9·6 | | 51·9 | 26·2 | |
| 9·6 | | 59·4 | 7·3 | |
| 9·8 | | 59·9 | 24·1 | |
| 9·4 | 24 | 0·9 | 38·9 | |
| 10·0 | | 3·9 | 21·5 | |
| 10·0 | | 10·9 | 29·8 | |
| 9·8 | | 13·9 | 30·5 | |
| 9·4 | | 13·9 | 23·1 | |
| 9·7 | | 26·9 | 59·2 | |
| 9·4 | | 30·9 | 48·4 | |
| 9·6 | | 31·1 | 58·4 | |
| 10·0 | | 34·4 | 39·7 | |
| 9·7 | | 39·9 | 24·1 | |
| 9·7 | 25 | 18·4 | 41·4 | |
| 9·6 | | 26·4 | 7·4 | |
| 9·4 | | 30·9 | 10·3 | |
| 10·0 | | 37·4 | 45·7 | |
| 9·1 | | 42·4 | 37·1 | |
| 9·8 | | 47·4 | 33·8 | |
| 9·8 | | 54·9 | 29·2 | |
| 10·1 | 26 | 4·9 | 55·3 | |
| 9·8 | | 9·9 | 46·5 | |
| 9·0 | | 29·9 | 25·5 | 9·5 |
| 9·1 | | 30·9 | 1·5 | |
| 10·0 | | 31·9 | 27·8 | |
| 10·0 | | 34·9 | 21·0 | |
| 9·7 | | 37·9 | 39·1 | |
| 10·0 | | 48·9 | 40·8 | |
| 9·4 | | 50·9 | 18·1 | |
| 8·7 | | 51·4 | 51·9 | |
| 8·4 | | 52·4 | 30·5 | 8·5 |
| 9·6 | 27 | 8·9 | 15·1 | |
| 9·4 | | 12·4 | 10·7 | |
| 8·9 | | 22·4 | 19·8 | 9·5 |
| 10·1 | | 25·4 | 19·0 | |
| 9·6 | | 29·4 | 49·0 | |

### 1681—1740.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 28 | 1·4 | 21·7 | |
| 9·6 | | 8·9 | 27·0 | |
| 10·0 | | 11·4 | 29·0 | |
| 9·4 | | 18·9 | 52·2 | |
| 9·6 | | 24·4 | 1·4 | |
| 10·1 | | 30·4 | 38·5 | |
| 9·6 | | 32·4 | 44·1 | |
| 9·6 | | 33·9 | 7·1 | |
| 9·2 | | 35·9 | 38·5 | |
| 9·6 | | 46·1 | 58·7 | |
| 10·1 | | 46·4 | 28·6 | |
| 10·0 | | 54·9 | 30·5 | |
| 9·6 | 29 | 0·4 | 13·6 | |
| 10·1 | | 1·4 | 11·3 | |
| 9·3 | | 3·9 | 34·6 | |
| 8·6 | | 6·4 | 12·5 | 8·0 GSg |
| 9·6 | | 15·4 | 12·7 | |
| 9·6 | | 16·4 | 7·5 | |
| 10·1 | | 20·9 | 44·6 | |
| 9·4 | | 21·9 | 7·5 | |
| 9·6 | | 24·8 | 59·1 | |
| 9·0 | | 27·9 | 58·0 | |
| 9·6 | | 35·4 | 32·4 | |
| 9·6 | | 41·4 | 21·0 | |
| 10·0 | 30 | 0·4 | 55·8 | |
| 10·1 | | 0·9 | 41·9 | |
| 9·4 | | 11·4 | 48·5 | |
| 9·4 | | 13·9 | 28·4 | |
| 9·6 | | 19·7 | 0·2 | 9·5 |
| 8·5 | | 19·9 | 56·1 | 9·0 |
| 9·7 | | 26·9 | 48·0 | |
| 9·7 | | 29·4 | 24·6 | |
| 10·0 | | 49·9 | 17·0 | |
| 8·4 | | 56·4 | 41·6 | 9·5 |
| 9·8 | | 57·4 | 23·9 | |
| 9·4 | | 58·9 | 16·6 | |
| 9·8 | 31 | 8·9 | 55·5 | |
| 9·4 | | 13·4 | 36·1 | |
| 9·1 | | 30·9 | 9·5 | |
| 9·8 | | 31·4 | 3·2 | |
| 9·4 | | 32·4 | 40·0 | 9·0 |
| 10·0 | | 35·4 | 53·8 | |
| 10·0 | | 50·9 | 54·1 | |
| 10·0 | 32 | 1·4 | 38·5 | |
| 9·6 | | 1·9 | 4·0 | |
| 10·1 | | 3·2 | 10·5 | |
| 9·7 | | 8·4 | 22·5 | |
| 10·1 | | 11·4 | 12·5 | |
| 10·0 | | 20·4 | 25·6 | |
| 10·1 | | 22·4 | 53·5 | |
| 8·5 | | 25·9 | 52·6 | |
| 9·6 | | 28·4 | 37·9 | |
| 10·1 | | 58·9 | 15·6 | |
| 10·1 | 33 | 1·4 | 59·8 | |
| 7·5 | | 2·9 | 16·5 | 8·0 GSg |
| 10·1 | | 11·4 | 40·1 | |
| 9·6 | | 13·9 | 38·1 | |
| 8·0 | | 16·4 | 26·1 | 9·0 GSg |
| 9·6 | | 16·4 | 17·7 | |
| 8·6 | | 20·9 | 26·6 | GSg |

### 1741—1800.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 33 | 22·4 | 29·6 | |
| 10·0 | | 43·9 | 19·1 | |
| 9·4 | | 44·9 | 10·8 | |
| 9·2 | | 45·7 | 1·2 | |
| 9·7 | | 50·9 | 53·6 | |
| 10·0 | | 54·4 | 49·6 | |
| 9·6 | | 58·9 | 38·0 | |
| 9·4 | 34 | 0·5 | 2·2 | |
| 10·0 | | 12·9 | 52·0 | |
| 9·6 | | 16·9 | 32·8 | |
| 9·8 | | 20·9 | 23·0 | |
| 9·2 | | 20·9 | 3·1 | |
| 10·0 | | 24·9 | 28·1 | |
| 10·0 | | 25·4 | 56·2 | |
| 9·8 | | 27·4 | 41·0 | |
| 9·8 | | 27·9 | 8·0 | |
| 9·4 | | 35·9 | 41·7 | |
| 9·6 | | 49·9 | 39·7 | |
| 10·1 | | 51·4 | 12·2 | |
| 9·2 | | 52·9 | 20·7 | |
| 9·6 | | 54·4 | 22·0 | |
| 10·1 | 35 | 0·9 | 32·9 | |
| 9·4 | | 2·9 | 54·2 | |
| 9·8 | | 3·4 | 14·8 | |
| 9·7 | | 3·7 | 0·8 | |
| 10·1 | | 9·4 | 46·7 | |
| 10·1 | | 21·9 | 16·5 | |
| 9·7 | | 40·4 | 32·2 | |
| 9·8 | | 43·4 | 4·2 | |
| 10·1 | | 55·4 | 28·1 | |
| 9·6 | | 57·4 | 49·3 | |
| 9·8 | | 57·4 | 8·8 | |
| 9·7 | | 58·7 | 0·2 | |
| 10·0 | 36 | 0·9 | 56·2 | |
| 10·1 | | 6·9 | 52·8 | |
| 9·8 | | 20·4 | 18·1 | |
| 10·0 | | 23·9 | 41·2 | |
| 9·6 | | 40·9 | 48·9 | |
| 9·7 | | 46·5 | 22·8 | |
| 9·7 | 37 | 4·5 | 29·6 | |
| 8·9 | | 9·0 | 19·9 | 9·0 |
| 9·6 | | 11·0 | 11·9 | |
| 10·1 | | 19·0 | 17·9 | |
| 10·1 | | 26·5 | 30·9 | |
| 9·6 | | 30·5 | 57·5 | |
| 9·8 | | 30·5 | 42·2 | |
| 9·4 | | 30·5 | 40·8 | |
| 9·8 | | 32·5 | 18·2 | |
| 10·1 | | 36·5 | 23·1 | |
| 9·8 | | 50·5 | 33·6 | |
| 10·0 | 38 | 0·5 | 14·2 | |
| 10·1 | | 1·3 | 58·7 | |
| 9·3 | | 6·5 | 49·0 | |
| 9·2 | | 8·0 | 4·8 | |
| 9·8 | | 11·0 | 21·9 | |
| 9·8 | | 15·5 | 47·3 | |
| 10·1 | | 28·5 | 41·9 | |
| 10·1 | | 31·5 | 33·0 | |
| 9·6 | | 33·5 | 36·2 | |
| 9·1 | | 38·0 | 43·3 | |

### 1801—1860.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 38 | 45·0 | 32·3 | |
| 10·1 | | 45·0 | 44·7 | |
| 10·1 | | 47·5 | 51·6 | |
| 9·6 | | 52·0 | 13·9 | |
| 9·8 | | 55·0 | 42·6 | |
| 10·1 | 39 | 6·0 | 19·1 | |
| 10·0 | | 9·8 | 57·9 | |
| 10·1 | | 14·0 | 38·4 | |
| 10·1 | | 17·5 | 23·4 | |
| 9·8 | | 19·5 | 44·1 | |
| 9·6 | | 20·5 | 49·0 | |
| 9·6 | | 24·0 | 8·6 | |
| 10·1 | | 28·0 | 17·1 | |
| 9·8 | | 30·5 | 16·2 | |
| 10·1 | | 35·5 | 19·1 | |
| 8·6 | | 37·5 | 45·1 | |
| 10·1 | | 41·0 | 19·2 | |
| 9·4 | | 46·3 | 46·3 | |
| 9·8 | | 54·8 | 43·7 | |
| 9·7 | 40 | 0·3 | 18·6 | |
| 10·1 | | 2·8 | 16·5 | |
| 10·1 | | 9·3 | 34·8 | |
| 9·2 | | 10·3 | 34·2 | |
| 9·6 | | 14·8 | 37·1 | |
| 9·6 | | 25·5 | 2·7 | |
| 10·1 | | 38·8 | 4·5 | |
| 10·1 | | 44·3 | 2·3 | |
| 10·1 | | 48·3 | 34·8 | |
| 8·4 | | 49·8 | 11·3 | 8·8 |
| 10·0 | | 49·8 | 41·8 | |
| 10·1 | | 56·8 | 46·7 | |
| 10·1 | 41 | 5·3 | 48·2 | |
| 10·0 | | 5·8 | 57·6 | |
| 9·6 | | 10·8 | 52·9 | |
| 9·4 | | 15·8 | 10·2 | |
| 10·0 | | 18·3 | 47·0 | |
| 10·0 | | 20·3 | 21·7 | |
| 9·7 | | 25·8 | 21·7 | |
| 9·6 | | 26·0 | 59·7 | |
| 10·0 | | 37·8 | 0·7 | |
| 10·1 | | 41·3 | 33·2 | |
| 10·1 | | 44·8 | 58·7 | |
| 9·4 | | 48·3 | 12·8 | |
| 9·6 | | 50·3 | 28·7 | |
| 9·2 | 42 | 5·3 | 3·8 | |
| 9·6 | | 9·8 | 41·2 | |
| 9·8 | | 18·3 | 25·7 | |
| 9·8 | | 19·8 | 31·0 | |
| 9·6 | | 21·3 | 35·3 | |
| 10·0 | | 21·3 | 50·6 | |
| 10·0 | | 25·8 | 35·3 | |
| 10·1 | | 29·8 | 50·1 | |
| 10·1 | | 32·4 | 39·1 | |
| 9·7 | | 38·4 | 8·7 | |
| 10·1 | | 41·4 | 11·2 | |
| 9·3 | | 42·4 | 52·9 | |
| 10·0 | | 50·4 | 56·1 | |
| 9·6 | | 58·2 | 0·4 | |
| 10·0 | 43 | 4·9 | 26·1 | |
| 9·6 | | 10·4 | 18·6 | |

25 prec.

| h | m | α + | δ − |
|---|---|---|---|
| 8 | 20 | 35 | 4·8 |
| | 30 | 37 | 5·1 |
| | 40 | 38 | 5·4 |
| | 50 | 40 | 5·6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 40 | 38 | 5·4 |
| | 50 | 40 | 5·6 |
| 9 | 0 | 41 | 5·9 |
| | 10 | 43 | 6·2 |
| | 20 | 44 | 6·4 |

## 1861—1920.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 43 | 17·9 | 25·2 | |
| 9·6 | | 18·9 | 20·8 | |
| 10·1 | | 19·8 | 34·2 | |
| 9·4 | | 22·4 | 45·0 | |
| 4·7 | | 28·9 | 18·5 | 5·0 GSctr |
| 9·6 | | 30·4 | 23·8 | |
| 9·6 | | 41·4 | 21·5 | |
| 9·6 | | 53·4 | 20·3 | |
| 9·1 | | 53·4 | 8·8 | |
| 9·8 | | 57·4 | 36·2 | |
| 10·0 | | 58·4 | 41·0 | |
| 9·1 | 44 | 0·4 | 55·1 | |
| 10·1 | | 0·4 | 27·2 | |
| 9·6 | | 10·4 | 38·7 | |
| 10·1 | | 20·4 | 37·0 | |
| 9·8 | | 43·9 | 10·4 | |
| 8·7 | | 49·9 | 13·8 | |
| 9·2 | | 54·9 | 2·6 | |
| 9·8 | | 59·9 | 28·9 | |
| 9·8 | 45 | 0·4 | 21·1 | |
| 9·6 | | 1·4 | 54·8 | |
| 10·0 | | 9·9 | 51·1 | |
| 10·0 | | 9·9 | 42·9 | |
| 9·4 | | 9·9 | 36·1 | |
| 9·6 | | 15·9 | 50·0 | |
| 10·1 | | 24·4 | 52·7 | |
| 9·6 | | 30·4 | 35·0 | |
| 9·6 | | 32·4 | 42·4 | |
| 10·1 | | 39·1 | 12·9 | |
| 9·8 | | 39·4 | 5·2 | |
| 9·6 | | 39·6 | 10·9 | |
| 8·9 | | 50·1 | 46·1 | |
| 10·0 | | 54·1 | 14·9 | |
| 9·8 | | 55·6 | 34·4 | |
| 9·6 | | 56·1 | 14·8 | |
| 9·8 | | 59·1 | 41·2 | |
| 10·1 | 46 | 5·1 | 33·0 | |
| 9·6 | | 26·0 | 38·0 | |
| 10·1 | | 39·6 | 30·2 | |
| 9·8 | | 40·8 | 58·7 | |
| 10·0 | | 44·6 | 29·8 | |
| 10·0 | | 50·1 | 6·6 | |
| 10·0 | 47 | 6·1 | 13·4 | |
| 10·0 | | 24·6 | 45·2 | |
| 9·8 | | 28·1 | 30·0 | |
| 10·1 | | 34·6 | 18·3 | |
| 10·0 | | 42·6 | 34·9 | |
| 9·6 | | 49·1 | 7·3 | |
| 8·5 | | 53·6 | 36·4 | 9·0 |
| 10·1 | | 57·1 | 19·9 | |
| 10·0 | 48 | 14·1 | 27·3 | |
| 10·1 | | 17·6 | 16·0 | |
| 9·6 | | 17·6 | 47·7 | |
| 9·4 | | 17·8 | 3·0 | 8·5 |
| 7·9 | | 38·5 | 49·4 | 8·2 |
| 9·6 | | 40·5 | 12·2 | |
| 9·4 | | 56·5 | 48·4 | |
| 6·8 | 49 | 44·0 | 10·6 | 6·8 GSctr |
| 8·7 | | 50·5 | 13·8 | 9·0 G |
| 8·8 | | 57·5 | 2·8 | 9·5 |

## 1921—1980.

| mag. | 8h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·1 | 49 | 59·0 | 1·0 | |
| 7·8 | 50 | 7·6 | 2·8 | 8·0 GSg |
| 9·6 | | 13·5 | 58·8 | |
| 9·6 | | 27·0 | 40·0 | |
| 9·2 | | 37·5 | 32·9 | |
| 9·2 | | 54·5 | 26·4 | |
| 9·4 | 51 | 6·5 | 14·8 | |
| 9·2 | | 9·0 | 56·1 | |
| 9·4 | | 10·0 | 7·5 | |
| 9·6 | | 12·6 | 19·0 | |
| 9·6 | | 13·0 | 40·4 | |
| 9·4 | | 16·5 | 11·7 | |
| 9·6 | | 17·0 | 21·4 | |
| 9·2 | | 20·0 | 32·8 | |
| 9·0 | | 34·0 | 17·9 | |
| 9·6 | | 48·8 | 50·5 | |
| 9·6 | | 53·5 | 43·4 | |
| 9·6 | | 53·6 | 51·3 | |
| 9·6 | 52 | 0·6 | 45·8 | |
| 9·2 | | 23·0 | 25·1 | |
| 9·4 | 53 | 28·5 | 59·5 | |
| 8·4 | | 53·0 | 16·5 | 9·0 |
| 8·6 | | 58·5 | 21·0 | 8·8 |
| 9·6 | 54 | 14·0 | 37·2 | |
| 9·4 | | 42·5 | 45·9 | |
| 8·6 | | 44·5 | 50·0 | 9·2 |
| 9·3 | | 44·5 | 3·5 | |
| 8·2 | | 50·5 | 51·1 | 8·6 |
| 8·6 | 55 | 27·5 | 59·2 | 8·0 G |
| 9·4 | | 29·5 | 2·9 | |
| 9·4 | | 34·5 | 11·5 | |
| 9·6 | | 52·0 | 23·5 | |
| 9·4 | 56 | 14·5 | 55·7 | |
| 9·4 | | 18·5 | 28·9 | |
| 9·3 | | 35·0 | 3·8 | |
| 9·0 | | 37·5 | 53·6 | 9·0 |
| 9·4 | | 38·5 | 0·3 | |
| 9·4 | | 48·5 | 49·3 | |
| 9·0 | | 50·0 | 7·9 | |
| 9·3 | | 50·2 | 59·8 | |
| 9·6 | | 54·0 | 10·3 | |
| 8·4 | | 54·5 | 48·6 | 8·0 Gg |
| 8·8 | | 57·7 | 58·4 | 8·0 Gg |
| 9·6 | 57 | 3·0 | 3·3 | |
| 9·4 | | 9·5 | 4·5 | |
| 9·2 | | 10·5 | 29·8 | 9·0 |
| 9·6 | | 10·5 | 24·2 | |
| 8·2 | | 12·5 | 37·1 | 8·5 |
| 9·3 | 58 | 7·5 | 41·3 | |
| 8·8 | | 7·5 | 27·0 | 8·5 |
| 9·2 | | 18·5 | 33·9 | |
| 8·6 | | 24·0 | 52·2 | |
| 9·0 | | 28·0 | 20·9 | 8·5 |
| 9·2 | | 36·0 | 27·1 | 8·5 |
| 9·3 | | 47·5 | 8·0 | |
| 9·2 | | 59·0 | 19·3 | |
| 8·9 | 59 | 0·0 | 36·8 | 9·5 |
| 9·4 | | 1·0 | 43·0 | |
| 9·2 | | 6·0 | 23·7 | |
| 9·6 | | 8·5 | 13·3 | |

## 1981—2040.

| mag. | 8h.—9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 59 | 9·5 | 20·9 | |
| 9·2 | | 10·0 | 9·7 | |
| 9·4 | | 18·0 | 48·5 | |
| 9·6 | | 18·5 | 14·3 | |
| 9·0 | | 21·0 | 41·0 | 9·5 |
| 9·1 | | 38·5 | 12·9 | |
| 8·8 | 0 | 2·5 | 7·9 | 9·5 |
| 9·4 | | 3·0 | 56·3 | |
| 9·4 | | 34·0 | 21·1 | |
| 9·2 | | 36·5 | 24·2 | |
| 9·6 | | 37·3 | 1·3 | |
| 8·8 | | 49·0 | 18·0 | 9·5 |
| 9·6 | 1 | 0·0 | 5·5 | |
| 9·6 | | 13·5 | 33·4 | |
| 9·2 | | 17·5 | 56·1 | |
| 9·6 | | 20·0 | 7·8 | |
| 8·6 | | 25·5 | 13·8 | 8·5 |
| 9·2 | | 41·0 | 36·1 | |
| 9·6 | | 43·0 | 22·0 | |
| 9·3 | | 58·5 | 35·0 | |
| 9·4 | 2 | 15·0 | 29·9 | |
| 9·6 | | 17·0 | 33·3 | |
| 9·4 | | 26·0 | 3·4 | |
| 9·6 | | 28·2 | 44·8 | |
| 9·6 | | 34·0 | 50·3 | |
| 9·1 | | 39·2 | 0·4 | 9·5 |
| 9·2 | 3 | 4·5 | 51·0 | |
| 9·6 | | 38·0 | 46·0 | |
| 9·6 | | 40·2 | 8·0 | 10·0 |
| 7·7 | | 54·0 | 57·7 | 7·0 GSt |
| 9·4 | 4 | 0·5 | 24·4 | |
| 9·6 | | 2·0 | 27·2 | |
| 9·1 | | 12·5 | 4·0 | 9·0 |
| 9·1 | | 16·0 | 14·5 | 9·0 |
| 9·0 | | 16·5 | 12·6 | 9·0 |
| 9·0 | | 30·1 | 57·4 | 9·0 |
| 8·4 | | 37·0 | 53·2 | 9·0 |
| 9·2 | | 38·0 | 20·4 | |
| 9·0 | | 39·0 | 19·1 | 8·5 |
| 8·9 | | 41·5 | 55·4 | 8·5 |
| 8·8 | | 45·5 | 45·1 | 9·0 |
| 9·4 | | 59·5 | 14·2 | |
| 9·3 | 5 | 19·0 | 56·2 | |
| 9·2 | | 40·3 | 57·9 | |
| 9·6 | | 43·8 | 58·4 | |
| 9·0 | | 45·5 | 23·1 | |
| 9·4 | | 48·5 | 12·8 | |
| 8·4 | | 49·5 | 41·2 | 8·5 |
| 9·0 | 6 | 19·5 | 24·8 | |
| 9·3 | | 37·5 | 18·8 | |
| 9·4 | | 44·0 | 54·5 | |
| 9·4 | | 58·3 | 59·8 | |
| 9·2 | 7 | 4·0 | 30·0 | |
| 9·6 | | 27·5 | 50·0 | |
| 9·6 | | 31·0 | 8·0 | |
| 8·2 | | 35·0 | 38·3 | 8·5 |
| 9·2 | | 49·0 | 32·3 | |
| 9·0 | | 56·5 | 14·1 | |
| 9·0 | 8 | 2·5 | 30·0 | |
| 9·3 | | 5·5 | 8·5 | |

## 2041—2100.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 8 | 9·5 | 9·1 | |
| 9·2 | | 21·0 | 28·6 | |
| 9·6 | | 24·1 | 30·5 | |
| 9·4 | | 25·1 | 45·5 | |
| 9·1 | | 29·0 | 45·1 | |
| 9·0 | | 44·0 | 1·0 | 9·5 |
| 9·4 | | 58·5 | 1·1 | |
| 9·4 | 9 | 12·0 | 1·3 | |
| 8·6 | | 31·0 | 55·9 | 9·0 |
| 9·2 | | 40·0 | 9·9 | |
| 9·2 | | 50·0 | 43·2 | |
| 9·0 | | 51·0 | 9·2 | |
| 9·1 | 10 | 1·0 | 33·0 | |
| 9·6 | | 31·0 | 0·3 | |
| 9·4 | | 39·0 | 37·1 | |
| 9·6 | | 52·5 | 11·0 | |
| 9·2 | | 55·5 | 25·2 | |
| 8·4 | | 58·0 | 43·2 | 8·5 |
| 9·6 | 11 | 6·0 | 51·8 | |
| 8·8 | | 16·5 | 42·2 | 9·0 |
| 9·0 | | 18·0 | 6·3 | 8·8 |
| 8·8 | | 26·0 | 33·6 | 9·0 |
| 9·3 | | 34·0 | 29·3 | |
| 9·6 | | 37·5 | 50·1 | |
| 9·2 | | 49·0 | 5·0 | 9·2 |
| 9·0 | | 54·5 | 28·0 | 9·5 |
| 9·6 | | 58·0 | 35·6 | |
| 9·4 | 12 | 4·5 | 13·6 | |
| 8·6 | | 27·0 | 30·2 | 8·5 |
| 9·0 | | 39·0 | 10·1 | 10·0 |
| 9·6 | | 40·0 | 19·7 | |
| 9·6 | | 41·3 | 57·7 | |
| 8·7 | | 53·3 | 58·5 | 9·5 |
| 9·4 | 13 | 0·0 | 6·8 | |
| 9·4 | | 2·5 | 6·0 | |
| 9·6 | | 2·5 | 44·2 | |
| 9·2 | | 5·5 | 9·8 | |
| 8·0 | | 6·5 | 13·6 | 8·5 GSg |
| 9·4 | | 10·5 | 3·7 | |
| 9·4 | | 16·5 | 22·4 | |
| 9·1 | | 18·5 | 40·3 | |
| 9·4 | | 37·0 | 50·6 | |
| 9·0 | | 38·0 | 41·1 | |
| 9·4 | | 39·5 | 32·8 | 9·5 |
| 9·3 | | 40·0 | 44·6 | |
| 9·6 | | 49·5 | 45·4 | |
| 9·6 | | 50·0 | 12·2 | |
| 9·6 | 14 | 2·0 | 56·9 | |
| 9·6 | | 8·0 | 56·3 | |
| 9·6 | | 13·0 | 23·2 | |
| 8·7 | | 14·5 | 37·6 | |
| 9·6 | | 21·0 | 39·4 | |
| 9·2 | | 29·0 | 1·0 | |
| 9·2 | | 36·5 | 27·8 | |
| 8·0 | | 49·5 | 44·8 | 7·5 GSg |
| 8·7 | | 50·5 | 38·4 | 9·2 |
| 8·9 | | 55·0 | 1·3 | 9·0 |
| 9·6 | 15 | 18·0 | 8·5 | |
| 9·1 | | 20·0 | 29·4 | |
| 8·9 | | 32·0 | 29·0 | |



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## 2101—2160.

| mag. | $9^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 15 | 38.5 | 21.9 | |
| 9.4 | | 48.0 | 14.9 | |
| 9.6 | | 55.5 | 11.5 | |
| 9.1 | 16 | 15.0 | 10.9 | 9.0 |
| 8.2 | | 21.0 | 38.2 | 8.5 |
| 9.3 | | 48.0 | 13.6 | |
| 9.6 | | 49.0 | 12.7 | |
| 9.3 | | 49.8 | 1.0 | |
| 8.9 | 17 | 10.0 | 43.8 | 9.0 |
| 9.4 | | 18.0 | 3.3 | |
| 9.0 | | 30.0 | 55.3 | |
| 8.8 | | 31.0 | 44.4 | 8.5 G |
| 9.6 | | 47.0 | 47.2 | |
| 9.2 | | 48.5 | 27.2 | |
| 7.9 | | 59.0 | 22.2 | 7.8 GSg |
| 9.4 | 18 | 11.5 | 10.1 | |
| 9.2 | | 16.0 | 47.8 | 9.5 |
| 9.2 | | 17.0 | 57.0 | |
| 9.4 | | 20.5 | 19.4 | |
| 9.6 | | 27.0 | 20.2 | |
| 9.6 | | 44.5 | 50.0 | |
| 9.0 | | 54.0 | 3.4 | 9.5 |
| 9.6 | | 55.0 | 21.4 | |
| 9.3 | | 58.0 | 19.9 | |
| 9.4 | 19 | 14.0 | 47.3 | |
| 9.2 | | 22.7 | 12.0 | |
| 9.8 | | 32.9 | 36.4 | |
| 10.0 | | 39.9 | 48.2 | |
| 10.4 | | 49.4 | 57.9 | |
| 10.2 | | 55.7 | 0.1 | |
| 9.2 | | 59.9 | 6.7 | |
| 8.6 | 20 | 0.4 | 41.5 | 9.0 |
| 10.4 | | 5.0 | 52.1 | |
| 9.6 | | 10.2 | 30.0 | |
| 10.4 | | 16.4 | 38.9 | |
| 9.4 | | 18.7 | 47.5 | 9.2 |
| 10.4 | | 27.2 | 4.1 | |
| 8.9 | | 37.4 | 29.4 | 9.5 |
| 9.2 | | 43.9 | 30.9 | 9.0 |
| 10.0 | | 44.9 | 27.9 | |
| 10.4 | | 47.9 | 53.5 | |
| 9.8 | | 56.4 | 34.4 | |
| 10.4 | 21 | 6.4 | 39.7 | |
| 10.4 | | 8.4 | 16.1 | |
| 10.0 | | 10.4 | 14.4 | |
| 10.2 | | 16.9 | 29.1 | |
| 9.0 | | 25.4 | 6.7 | |
| 10.0 | | 27.9 | 43.2 | |
| 10.2 | | 27.9 | 47.9 | |
| 10.4 | | 39.9 | 17.1 | |
| 10.4 | | 39.9 | 55.2 | |
| 9.6 | | 40.4 | 46.3 | |
| 10.4 | | 41.4 | 13.1 | |
| 7.6 | | 46.9 | 49.3 | 8.5 |
| 10.2 | | 53.4 | 47.9 | |
| 10.4 | | 59.4 | 22.4 | |
| 10.2 | 22 | 2.4 | 14.2 | |
| 10.0 | | 16.9 | 34.9 | |
| 10.0 | | 16.9 | 37.3 | |
| 9.0 | | 18.4 | 43.0 | 8.5 |

## 2161—2220.

| mag. | $9^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10.4 | 22 | 18.9 | 27.8 | |
| 9.5 | | 25.9 | 30.5 | |
| 9.2 | | 31.9 | 7.4 | 9.5 |
| 10.4 | | 33.9 | 26.8 | |
| 10.4 | | 34.9 | 11.1 | |
| 10.4 | | 34.9 | 24.9 | |
| 10.4 | | 41.9 | 21.9 | |
| 10.4 | | 43.9 | 3.1 | |
| 9.0 | | 46.4 | 28.0 | |
| 9.5 | | 47.9 | 52.1 | |
| 10.0 | | 49.9 | 21.9 | |
| 10.0 | | 51.9 | 9.7 | |
| 9.5 | | 52.4 | 20.3 | |
| 9.6 | | 59.4 | 16.9 | 9.2 |
| 10.4 | 23 | 2.4 | 41.5 | |
| 10.4 | | 3.9 | 27.1 | |
| 10.2 | | 4.4 | 25.1 | |
| 10.4 | | 5.9 | 28.7 | |
| 10.4 | | 7.9 | 24.7 | |
| 10.4 | | 8.4 | 25.5 | |
| 10.4 | | 13.4 | 26.1 | |
| 9.8 | | 14.9 | 29.5 | |
| 9.8 | | 19.9 | 56.8 | |
| 8.8 | | 22.9 | 23.9 | 9.2 |
| 10.0 | | 25.9 | 9.4 | |
| 8.7 | | 28.9 | 20.7 | 9.5 |
| 10.2 | | 28.9 | 10.0 | |
| 10.0 | | 32.4 | 52.3 | |
| 10.0 | | 32.9 | 24.8 | |
| 10.0 | | 41.4 | 29.5 | |
| 10.0 | | 42.4 | 23.0 | |
| 10.4 | | 42.9 | 22.6 | |
| 9.5 | | 45.4 | 30.9 | |
| 10.0 | | 46.4 | 55.9 | |
| 10.4 | | 48.4 | 48.2 | |
| 10.4 | | 48.9 | 48.4 | |
| 9.8 | | 48.9 | 16.8 | |
| 10.4 | | 49.9 | 59.0 | |
| 10.2 | | 49.9 | 28.6 | |
| 9.8 | | 50.4 | 27.1 | |
| 9.8 | | 51.4 | 29.1 | |
| 8.4 | | 52.4 | 27.7 | 9.0 GS |
| 9.8 | | 52.9 | 25.4 | |
| 9.6 | | 54.9 | 26.7 | 9.2 G |
| 10.2 | | 55.9 | 11.3 | |
| 10.4 | | 56.4 | 12.7 | |
| 9.8 | | 56.4 | 40.1 | |
| 9.5 | | 57.9 | 26.3 | |
| 10.0 | 24 | 5.9 | 31.3 | |
| 9.8 | | 6.4 | 30.8 | |
| 10.4 | | 9.9 | 29.7 | |
| 8.6 | | 11.9 | 47.1 | 8.0 Gg |
| 9.0 | | 13.9 | 27.4 | 9.5 G |
| 10.4 | | 14.4 | 32.7 | |
| 9.6 | | 14.9 | 28.2 | 9.0 G |
| 10.2 | | 16.4 | 46.1 | |
| 10.4 | | 17.4 | 31.6 | |
| 10.4 | | 22.4 | 19.3 | |
| 10.4 | | 23.9 | 23.3 | |
| 10.4 | | 26.9 | 26.3 | |

## 2221—2280.

| mag. | $9^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10.4 | 24 | 27.4 | 23.5 | |
| 9.2 | | 29.9 | 52.9 | |
| 9.0 | | 31.9 | 15.2 | 9.5 |
| 10.4 | | 33.9 | 18.2 | |
| 9.8 | | 34.9 | 24.1 | 9.5 |
| 10.2 | | 34.9 | 34.3 | |
| 10.2 | | 37.4 | 34.4 | |
| 10.4 | | 38.4 | 46.0 | |
| 10.4 | | 44.9 | 19.6 | |
| 9.5 | | 45.9 | 9.1 | |
| 9.6 | | 51.9 | 37.3 | |
| 10.4 | | 55.9 | 26.0 | |
| 10.2 | | 56.9 | 27.0 | |
| 10.4 | 25 | 10.4 | 3.1 | |
| 10.4 | | 15.9 | 3.0 | |
| 10.4 | | 19.9 | 45.2 | |
| 10.4 | | 22.9 | 21.9 | |
| 10.4 | | 23.4 | 47.5 | |
| 10.4 | | 23.9 | 23.9 | |
| 10.4 | | 25.9 | 20.0 | |
| 9.8 | | 34.9 | 52.5 | 9.0 |
| 10.4 | | 43.4 | 21.0 | 9.5 |
| 9.6 | | 44.4 | 20.4 | 9.0 |
| 10.4 | | 45.4 | 3.1 | |
| 9.2 | | 59.9 | 10.1 | |
| 10.0 | 26 | 6.9 | 56.0 | |
| 9.8 | | 14.2 | 0.5 | |
| 10.4 | | 15.9 | 49.6 | |
| 9.5 | | 16.4 | 41.1 | 9.5 |
| 10.0 | | 16.9 | 53.9 | |
| 7.7 | | 17.6 | 57.7 | 8.0 |
| 9.2 | | 18.4 | 44.9 | 9.0 G |
| 10.4 | | 20.2 | 1.1 | |
| 10.4 | | 31.4 | 13.6 | |
| 8.6 | | 35.9 | 10.7 | 9.0 |
| 9.8 | | 37.9 | 50.7 | 9.0 |
| 10.4 | | 41.9 | 14.8 | |
| 9.0 | | 43.4 | 34.9 | |
| 10.0 | | 47.4 | 18.8 | |
| 10.4 | | 49.9 | 44.2 | |
| 9.0 | | 53.4 | 40.0 | 9.0 |
| 8.8 | | 58.9 | 48.2 | |
| 10.4 | | 59.9 | 24.6 | |
| 9.8 | 27 | 0.9 | 11.2 | |
| 9.6 | | 1.4 | 52.5 | |
| 9.2 | | 7.4 | 25.9 | 9.2 |
| 9.4 | | 11.9 | 31.8 | |
| 10.2 | | 16.4 | 21.8 | |
| 10.0 | | 18.9 | 11.6 | |
| 5.9 | | 25.4 | 28.9 | 3.2 GScgt |
| 9.6 | | 28.4 | 7.4 | |
| 10.4 | | 28.4 | 32.9 | |
| 9.2 | | 39.4 | 51.0 | |
| 10.4 | | 41.4 | 6.5 | |
| 10.4 | | 42.9 | 44.8 | |
| 9.0 | | 44.9 | 25.8 | |
| 10.0 | | 55.9 | 14.9 | |
| 10.4 | | 56.4 | 4.2 | |
| 10.4 | | 57.9 | 53.2 | |
| 10.4 | | 58.4 | 18.0 | |

## 2281—2340.

| mag. | $9^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10.0 | 28 | 1.9 | 33.5 | |
| 7.4 | | 4.9 | 26.2 | 7.8 GSgt |
| 10.2 | | 6.9 | 3.9 | |
| 10.4 | | 9.4 | 24.1 | |
| 10.4 | | 12.4 | 32.2 | |
| 10.4 | | 16.4 | 21.6 | |
| 9.6 | | 22.9 | 35.8 | |
| 10.4 | | 23.9 | 6.8 | |
| 9.8 | | 24.9 | 25.3 | |
| 9.8 | | 26.4 | 30.9 | |
| 10.2 | | 26.9 | 51.0 | |
| 10.4 | | 29.9 | 28.9 | |
| 8.9 | | 36.3 | 34.8 | 8.2 G |
| 10.2 | | 39.8 | 51.1 | |
| 9.8 | | 45.8 | 5.3 | |
| 7.5 | | 47.8 | 58.2 | 7.5 G |
| 10.4 | | 49.3 | 1.9 | |
| 9.4 | | 53.8 | 12.0 | |
| 9.6 | | 54.8 | 14.8 | |
| 7.4 | | 58.3 | 32.3 | 7.8 GSgt |
| 9.5 | 29 | 7.8 | 1.9 | |
| 10.4 | | 11.8 | 32.3 | |
| 9.0 | | 16.8 | 30.1 | 9.0 |
| 9.6 | | 18.8 | 35.7 | 9.5 |
| 10.2 | | 19.8 | 46.2 | |
| 9.8 | | 22.8 | 23.8 | |
| 10.0 | | 24.8 | 23.8 | |
| 9.8 | | 26.3 | 43.2 | |
| 10.4 | | 26.3 | 42.6 | |
| 10.4 | | 29.3 | 47.9 | |
| 10.4 | | 33.3 | 28.1 | |
| 10.0 | | 37.3 | 0.5 | |
| 9.0 | | 39.3 | 54.9 | |
| 10.0 | | 43.3 | 42.8 | |
| 9.6 | | 44.3 | 51.9 | |
| 10.4 | | 48.3 | 7.8 | |
| 10.4 | | 49.3 | 18.3 | |
| 9.8 | | 50.8 | 3.9 | |
| 8.6 | | 51.8 | 36.4 | 9.0 |
| 9.6 | | 55.3 | 46.3 | |
| 10.4 | | 56.3 | 34.2 | |
| 10.4 | | 58.3 | 46.0 | |
| 9.0 | 30 | 4.8 | 18.0 | |
| 10.4 | | 7.3 | 33.1 | |
| 9.4 | | 9.8 | 42.4 | |
| 10.4 | | 13.3 | 8.3 | |
| 10.4 | | 18.3 | 15.9 | |
| 10.4 | | 27.3 | 19.0 | |
| 9.6 | | 31.3 | 19.6 | |
| 8.6 | | 31.3 | 17.1 | 8.5 |
| 10.2 | | 37.3 | 31.4 | |
| 9.8 | | 41.3 | 5.1 | 9.5 |
| 10.4 | | 43.3 | 0.4 | |
| 10.4 | | 44.3 | 3.7 | |
| 10.4 | | 48.8 | 33.1 | |
| 10.4 | | 50.8 | 0.0 | |
| 10.4 | | 54.3 | 58.9 | |
| 9.6 | 31 | 1.3 | 31.2 | |
| 10.2 | | 12.8 | 41.9 | |
| 9.6 | | 18.3 | 25.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 10 | 43 | 6.2 |
| | 20 | 44 | 6.4 |
| | 30 | 46 | 6.6 |
| | 40 | 48 | 6.8 |



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| 25 prec. | α + | δ − |
|---|---|---|
| h m | s | ′ |
| 9 30 | 46 | 6·6 |
| 40 | 48 | 6·8 |
| 50 | 50 | 7·0 |

## 2341—2400.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 31 | 22·3 | 44·1 | |
| 10·4 | | 32·3 | 29·6 | |
| 10·2 | | 37·8 | 45·3 | |
| 10·4 | | 46·8 | 9·9 | |
| 10·4 | | 48·8 | 12·4 | |
| 10·4 | | 51·8 | 49·7 | |
| 9·4 | | 56·8 | 43·2 | 10·0 |
| 9·8 | | 56·8 | 12·7 | |
| 10·4 | | 58·3 | 55·0 | |
| 10·0 | 32 | 2·3 | 32·4 | |
| 10·2 | | 4·8 | 54·7 | |
| 10·4 | | 12·7 | 9·2 | |
| 9·6 | | 19·8 | 9·3 | 9·5 |
| 9·2 | | 23·1 | 2·0 | |
| 10·0 | | 31·3 | 48·2 | |
| 9·4 | | 33·8 | 40·2 | |
| 10·4 | | 39·8 | 30·9 | |
| 9·8 | | 39·8 | 26·8 | |
| 10·4 | | 41·3 | 56·1 | |
| 9·8 | | 41·8 | 8·9 | 9·5 |
| 10·4 | | 48·3 | 27·6 | |
| 10·4 | | 48·8 | 50·1 | |
| 10·4 | | 49·3 | 9·7 | |
| 10·4 | | 51·8 | 30·4 | |
| 8·9 | | 51·8 | 34·3 | 8·5 |
| 10·4 | | 53·3 | 30·8 | |
| 10·4 | | 59·8 | 21·8 | |
| 9·6 | 33 | 2·8 | 31·1 | |
| 10·4 | | 3·3 | 46·9 | |
| 10·2 | | 4·5 | 57·9 | |
| 10·2 | | 8·3 | 3·9 | |
| 9·8 | | 10·8 | 51·1 | 9·2 |
| 9·5 | | 19·8 | 30·8 | |
| 10·4 | | 24·3 | 28·8 | |
| 10·4 | | 27·3 | 0·7 | |
| 10·4 | | 30·3 | 10·0 | |
| 9·6 | | 39·8 | 10·4 | |
| 10·4 | | 45·3 | 8·7 | |
| 10·4 | | 56·8 | 5·0 | |
| 10·2 | 34 | 2·8 | 40·6 | |
| 10·4 | | 7·8 | 19·0 | |
| 9·0 | | 8·3 | 18·1 | 7·7 Gg |
| 8·6 | | 10·8 | 23·8 | 8·8 Gg |
| 9·6 | | 11·3 | 30·1 | |
| 9·6 | | 12·8 | 1·6 | |
| 10·4 | | 14·3 | 23·2 | |
| 10·4 | | 14·3 | 55·3 | |
| 9·2 | | 17·3 | 37·6 | 8·8 G |
| 10·0 | | 23·2 | 2·8 | |
| 10·2 | | 29·3 | 15·9 | |
| 10·2 | | 31·3 | 33·2 | |
| 10·4 | | 32·3 | 58·9 | |
| 7·6 | | 33·7 | 58·0 | 7·6 G |
| 10·4 | | 35·3 | 43·2 | |
| 9·8 | | 36·3 | 8·8 | |
| 10·4 | | 39·8 | 32·3 | |
| 10·4 | | 39·8 | 27·5 | |
| 8·7 | | 47·8 | 14·5 | 9·0 |
| 9·2 | | 51·8 | 18·5 | 9·2 |
| 9·4 | | 58·8 | 17·8 | |

## 2401—2460.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 35 | 4·8 | 21·6 | 9·5 |
| 10·4 | | 12·8 | 23·1 | |
| 9·6 | | 18·8 | 40·1 | |
| 10·2 | | 18·8 | 3·0 | |
| 10·0 | | 19·8 | 55·0 | |
| 10·2 | | 25·3 | 18·4 | |
| 9·0 | | 31·0 | 57·4 | 8·5 |
| 10·4 | | 32·8 | 47·6 | |
| 10·4 | | 41·2 | 1·5 | |
| 9·6 | | 43·0 | 59·0 | |
| 10·0 | | 43·8 | 42·4 | |
| 9·8 | | 46·8 | 28·7 | |
| 10·4 | | 48·8 | 29·0 | |
| 10·4 | | 50·8 | 9·4 | |
| 8·4 | | 51·8 | 44·2 | 9·0 |
| 9·0 | | 58·3 | 42·2 | 9·5 |
| 10·4 | | 59·3 | 5·3 | |
| 10·4 | 36 | 0·8 | 6·0 | |
| 10·4 | | 3·0 | 33·3 | |
| 10·0 | | 15·3 | 37·6 | |
| 9·6 | | 22·3 | 18·2 | |
| 9·0 | | 27·8 | 12·0 | 9·5 |
| 10·0 | | 29·8 | 49·4 | |
| 10·4 | | 30·3 | 38·2 | |
| 9·8 | | 31·3 | 26·0 | |
| 9·6 | | 38·3 | 10·2 | 9·0 |
| 10·4 | | 42·8 | 0·9 | |
| 10·2 | | 47·8 | 56·0 | |
| 9·4 | | 48·8 | 16·8 | |
| 9·4 | | 50·3 | 33·2 | 8·5 |
| 10·0 | | 59·8 | 39·0 | |
| 10·4 | 37 | 1·3 | 30·6 | |
| 10·4 | | 2·8 | 19·8 | |
| 9·2 | | 3·8 | 26·7 | |
| 7·5 | | 5·8 | 41·4 | 6·5 GSg |
| 10·4 | | 17·8 | 39·6 | |
| 10·2 | | 22·8 | 47·0 | |
| 10·4 | | 24·3 | 0·7 | |
| 10·2 | | 28·8 | 22·4 | |
| 9·4 | | 29·8 | 41·2 | 9·5 |
| 9·0 | | 32·8 | 57·2 | |
| 10·4 | | 32·8 | 46·4 | |
| 9·8 | | 33·8 | 28·0 | 9·0 |
| 10·2 | | 40·3 | 41·4 | |
| 10·0 | | 41·3 | 45·4 | |
| 10·4 | | 49·3 | 18·2 | |
| 10·4 | | 50·8 | 45·2 | |
| 10·2 | | 53·3 | 57·0 | |
| 10·0 | | 58·3 | 33·5 | |
| 9·8 | | 59·5 | 57·3 | |
| 10·4 | 38 | 0·8 | 8·8 | |
| 9·5 | | 1·3 | 48·4 | 8·6 |
| 10·2 | | 11·3 | 36·6 | |
| 10·4 | | 12·4 | 1·2 | |
| 10·0 | | 16·3 | 17·0 | |
| 10·2 | | 23·3 | 41·1 | |
| 10·4 | | 28·3 | 24·1 | |
| 10·4 | | 28·8 | 18·4 | |
| 10·4 | | 29·8 | 28·5 | |
| 10·4 | | 38·3 | 11·7 | |

## 2461—2520.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·2 | 38 | 53·3 | 2·2 | 10·0 |
| 10·0 | 39 | 2·3 | 43·4 | |
| 8·6 | | 8·0 | 59·8 | 8·5 |
| 10·0 | | 8·3 | 46·0 | |
| 9·5 | | 18·8 | 15·3 | 9·2 |
| 10·4 | | 28·3 | 42·6 | |
| 9·0 | | 29·8 | 53·3 | 9·5 |
| 9·6 | | 29·8 | 20·0 | |
| 10·2 | | 31·3 | 40·6 | |
| 7·8 | | 32·8 | 22·8 | 8·0 GS |
| 10·0 | | 43·3 | 9·4 | |
| 10·4 | | 55·3 | 47·9 | |
| 10·4 | | 58·8 | 37·6 | |
| 9·4 | 40 | 1·8 | 16·4 | 8·5 |
| 10·4 | | 7·8 | 7·2 | |
| 10·4 | | 13·3 | 58·6 | |
| 9·8 | | 14·3 | 48·0 | |
| 10·4 | | 17·8 | 56·2 | |
| 9·5 | | 20·8 | 53·0 | 8·8 |
| 10·0 | | 20·8 | 6·0 | |
| 10·4 | | 21·8 | 40·7 | |
| 9·6 | | 26·3 | 21·0 | |
| 10·4 | | 29·7 | 52·9 | |
| 10·4 | | 38·2 | 10·5 | |
| 10·0 | | 40·7 | 54·6 | |
| 10·2 | | 43·2 | 0·0 | |
| 10·4 | | 43·9 | 2·1 | |
| 10·2 | | 46·7 | 32·3 | |
| 10·4 | | 53·7 | 41·5 | |
| 10·4 | | 54·7 | 22·9 | |
| 7·9 | | 55·7 | 59·7 | 7·5 GSt |
| 10·2 | | 56·7 | 56·1 | |
| 10·0 | 41 | 4·2 | 18·7 | |
| 9·6 | | 6·7 | 38·9 | |
| 10·4 | | 26·2 | 41·4 | |
| 9·8 | | 31·7 | 11·1 | |
| 10·4 | | 32·7 | 52·6 | |
| 8·5 | | 38·2 | 9·6 | |
| 6·9 | | 40·2 | 36·6 | 7·0 GSr |
| 10·0 | | 42·7 | 18·1 | |
| 10·0 | | 42·7 | 47·8 | |
| 8·6 | | 44·2 | 25·5 | 8·5 G |
| 9·6 | | 44·7 | 38·8 | |
| 10·2 | | 50·7 | 23·5 | |
| 10·2 | | 57·7 | 46·4 | |
| 9·8 | | 59·2 | 14·3 | |
| 9·2 | | 59·7 | 23·0 | 9·0 |
| 10·0 | 42 | 0·7 | 15·8 | |
| 9·4 | | 1·7 | 36·1 | 8·8 |
| 9·8 | | 4·7 | 28·8 | |
| 9·6 | | 16·2 | 45·9 | 9·5 |
| 9·6 | | 18·2 | 11·9 | |
| 10·4 | | 23·7 | 34·8 | |
| 8·4 | | 28·1 | 0·1 | 8·5 G |
| 10·4 | | 32·7 | 8·6 | |
| 10·4 | | 37·2 | 55·0 | |
| 10·2 | | 38·2 | 55·7 | |
| 10·4 | | 39·2 | 55·1 | |
| 10·4 | | 39·2 | 19·1 | |
| 9·4 | | 39·7 | 57·9 | |

## 2521—2580.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 39·7 | 44·3 | |
| 10·2 | | 46·7 | 1·7 | |
| 10·4 | | 52·1 | 1·9 | |
| 10·4 | | 53·7 | 25·3 | |
| 10·4 | | 55·2 | 46·5 | |
| 10·0 | | 57·7 | 41·7 | |
| 10·4 | | 57·7 | 12·5 | |
| 10·0 | 43 | 1·7 | 40·6 | |
| 10·4 | | 6·7 | 31·1 | |
| 10·2 | | 9·4 | 8·8 | |
| 9·2 | | 9·7 | 45·9 | 8·3 G |
| 10·0 | | 17·2 | 58·9 | |
| 7·9 | | 20·2 | 10·9 | 8·0 GS |
| 10·4 | | 23·7 | 37·3 | |
| 10·4 | | 25·7 | 8·7 | |
| 10·0 | | 34·7 | 31·7 | |
| 10·2 | | 42·2 | 49·3 | |
| 10·0 | | 46·7 | 14·6 | |
| 9·8 | | 49·7 | 24·5 | |
| 9·2 | | 59·7 | 52·5 | 9·5 |
| 10·2 | 44 | 6·2 | 19·7 | |
| 10·4 | | 8·2 | 22·1 | |
| 10·4 | | 9·7 | 24·8 | |
| 10·2 | | 11·2 | 22·5 | |
| 10·4 | | 19·7 | 30·3 | |
| 10·4 | | 21·2 | 40·3 | |
| 10·2 | | 22·2 | 14·1 | |
| 10·2 | | 29·7 | 50·6 | |
| 8·6 | | 37·7 | 29·8 | 8·2 |
| 10·0 | | 45·7 | 14·4 | 9·5 |
| 10·2 | | 46·2 | 6·8 | |
| 10·4 | | 52·7 | 37·9 | |
| 10·4 | | 56·2 | 36·9 | |
| 9·5 | 45 | 3·2 | 23·5 | |
| 9·6 | | 15·2 | 15·5 | |
| 10·2 | | 15·7 | 47·2 | |
| 9·2 | | 20·7 | 59·9 | 9·5 |
| 9·8 | | 26·2 | 58·7 | |
| 10·4 | | 30·2 | 5·8 | |
| 10·4 | | 30·9 | 57·9 | |
| 10·4 | | 35·7 | 18·5 | |
| 9·5 | | 36·4 | 57·9 | |
| 10·4 | | 47·7 | 50·1 | |
| 10·2 | | 55·7 | 52·6 | |
| 9·5 | | 56·2 | 25·3 | 8·5 |
| 9·8 | | 56·7 | 8·7 | |
| 10·4 | 46 | 1·2 | 14·8 | |
| 10·2 | | 2·7 | 41·3 | |
| 8·6 | | 11·7 | 57·9 | 9·0 |
| 10·4 | | 19·4 | 59·9 | |
| 10·2 | | 24·7 | 50·1 | |
| 9·8 | | 26·7 | 5·8 | |
| 10·4 | | 26·7 | 4·7 | |
| 10·4 | | 28·7 | 45·5 | |
| 10·2 | | 32·7 | 58·3 | |
| 10·4 | | 42·7 | 35·1 | |
| 10·2 | | 48·7 | 53·5 | |
| 10·2 | | 50·2 | 37·6 | |
| 10·2 | | 51·7 | 19·9 | |
| 10·4 | | 59·7 | 41·7 | |



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## 2581—2640.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 47 | 3·2 | 31·1 | |
| 10·0 | | 4·7 | 40·5 | |
| 10·4 | | 12·7 | 49·3 | |
| 9·6 | | 13·7 | 50·4 | |
| 10·0 | | 18·7 | 48·7 | |
| 10·4 | | 21·7 | 15·7 | |
| 10·4 | | 23·7 | 14·5 | |
| 10·4 | | 26·7 | 10·7 | |
| 10·4 | | 29·6 | 57·7 | |
| 10·2 | | 29·7 | 4·7 | |
| 10·2 | | 33·7 | 48·3 | |
| 9·2 | | 35·7 | 27·3 | 9·5 |
| 10·2 | | 35·7 | 13·9 | |
| 8·7 | | 40·7 | 32·1 | 9·0 |
| 9·6 | | 46·2 | 16·1 | |
| 9·8 | | 51·2 | 47·9 | |
| 9·8 | | 53·7 | 11·9 | 8·8 |
| 10·4 | | 54·2 | 26·9 | |
| 9·0 | 48 | 6·7 | 24·3 | 9·5 |
| 9·6 | | 9·7 | 3·8 | 9·0 |
| 10·4 | | 10·7 | 6·3 | |
| 9·8 | | 11·2 | 52·2 | |
| 10·0 | | 20·7 | 46·5 | |
| 9·8 | | 23·2 | 0·9 | |
| 10·4 | | 40·7 | 51·2 | |
| 9·8 | | 57·7 | 1·3 | |
| 9·2 | 49 | 1·7 | 51·1 | 9·5 |
| 9·0 | | 3·2 | 35·3 | 9·0 |
| 10·4 | | 5·7 | 37·5 | |
| 10·4 | | 9·2 | 10·1 | |
| 10·4 | | 10·7 | 53·7 | |
| 10·4 | | 12·3 | 47·7 | |
| 10·0 | | 12·7 | 23·1 | |
| 10·4 | | 12·7 | 20·7 | |
| 10·0 | | 15·2 | 3·1 | |
| 10·4 | | 15·7 | 9·8 | |
| 10·4 | | 20·7 | 14·1 | |
| 9·8 | | 21·2 | 13·9 | |
| 10·4 | | 27·2 | 53·1 | |
| 10·4 | | 28·2 | 31·8 | |
| 10·4 | | 29·7 | 32·0 | |
| 9·6 | | 32·7 | 15·1 | |
| 10·4 | | 32·7 | 55·8 | |
| 10·4 | | 39·7 | 11·5 | |
| 10·2 | | 41·7 | 34·0 | |
| 10·0 | | 46·7 | 28·9 | |
| 10·0 | | 57·7 | 26·9 | |
| 10·2 | 50 | 1·2 | 14·5 | |
| 9·8 | | 9·7 | 29·1 | |
| 10·4 | | 9·7 | 54·3 | |
| 10·4 | | 11·7 | 55·3 | |
| 10·0 | | 21·7 | 9·9 | |
| 10·4 | | 26·7 | 48·1 | |
| 9·2 | | 29·7 | 0·9 | |
| 8·9 | | 30·2 | 34·8 | 9·0 |
| 9·5 | | 31·7 | 0·6 | |
| 10·2 | | 31·7 | 39·7 | |
| 10·4 | | 35·7 | 7·3 | |
| 10·4 | | 35·7 | 26·2 | |
| 10·2 | | 38·2 | 55·7 | |

## 2641—2700.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 50 | 39·8 | 10·3 | |
| 10·2 | | 43·2 | 56·7 | |
| 9·5 | | 43·2 | 39·0 | |
| 9·4 | | 47·2 | 30·0 | 8·5 G |
| 9·4 | | 58·2 | 22·3 | |
| 6·9 | | 58·7 | 47·5 | 7·0 G |
| 9·8 | | 59·7 | 13·8 | |
| 9·6 | 51 | 3·2 | 27·0 | |
| 10·4 | | 5·2 | 9·6 | |
| 10·4 | | 9·2 | 42·3 | |
| 9·6 | | 12·7 | 5·8 | |
| 10·0 | | 14·2 | 29·0 | |
| 10·0 | | 17·7 | 47·4 | |
| 9·8 | | 19·7 | 9·9 | |
| 10·4 | | 20·1 | 0·1 | |
| 9·2 | | 20·7 | 50·2 | 8·5 G |
| 10·0 | | 21·7 | 30·1 | |
| 9·0 | | 22·0 | 20·6 | 8·5 G |
| 10·4 | | 29·7 | 8·2 | |
| 10·4 | | 31·7 | 10·6 | |
| 9·8 | | 37·3 | 9·3 | |
| 10·4 | | 39·2 | 42·3 | |
| 9·6 | | 41·5 | 6·9 | |
| 10·4 | | 41·7 | 16·0 | |
| 10·2 | | 43·2 | 1·5 | |
| 10·4 | | 48·7 | 40·4 | |
| 10·4 | | 50·7 | 27·0 | |
| 9·6 | | 53·0 | 56·5 | 8·5 |
| 9·2 | | 55·3 | 30·4 | |
| 10·0 | | 56·2 | 7·9 | |
| 10·4 | 52 | 1·2 | 40·8 | |
| 9·6 | | 1·7 | 52·9 | |
| 8·7 | | 2·0 | 54·0 | 9·0 |
| 10·2 | | 11·0 | 13·1 | |
| 10·4 | | 19·7 | 1·4 | |
| 10·2 | | 24·7 | 58·1 | |
| 10·0 | | 25·8 | 25·8 | |
| 10·4 | | 29·3 | 40·7 | |
| 10·4 | | 39·0 | 59·4 | |
| 10·5 | | 39·5 | 33·6 | |
| 10·0 | | 39·8 | 36·5 | |
| 10·5 | | 39·8 | 18·5 | |
| 10·2 | | 49·8 | 30·5 | |
| 10·2 | | 58·8 | 42·6 | |
| 10·2 | | 59·3 | 11·7 | |
| 10·4 | 53 | 2·8 | 11·9 | |
| 9·2 | | 3·3 | 58·9 | 9·0 |
| 10·2 | | 5·5 | 1·8 | |
| 10·2 | | 6·3 | 16·3 | |
| 10·4 | | 7·0 | 0·5 | |
| 10·0 | | 7·3 | 18·7 | |
| 10·5 | | 10·8 | 12·3 | |
| 10·5 | | 23·7 | 28·5 | |
| 8·2 | | 23·8 | 16·1 | 8·0 GSt |
| 10·5 | | 23·8 | 15·0 | |
| 10·0 | | 24·3 | 30·6 | |
| 10·4 | | 24·3 | 59·6 | |
| 9·6 | | 33·8 | 42·9 | |
| 9·4 | | 35·3 | 26·3 | |
| 10·2 | | 35·3 | 14·1 | |

## 2701—2760.

| mag. | 9h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·9 | 53 | 37·3 | 14·9 | |
| 10·0 | | 37·3 | 50·6 | |
| 8·5 | | 39·8 | 48·6 | 8·5 |
| 10·4 | | 43·8 | 49·4 | |
| 10·5 | | 48·3 | 13·0 | |
| 10·0 | | 48·3 | 57·7 | |
| 9·7 | | 51·8 | 18·6 | |
| 10·0 | | 53·8 | 31·2 | |
| 10·4 | | 55·8 | 14·6 | |
| 10·2 | | 59·3 | 34·6 | |
| 10·0 | 54 | 1·8 | 9·6 | |
| 9·4 | | 7·3 | 54·1 | |
| 10·2 | | 13·3 | 49·2 | |
| 10·5 | | 17·3 | 30·7 | |
| 10·5 | | 19·1 | 57·5 | |
| 9·6 | | 29·8 | 26·0 | 9·0 |
| 9·2 | | 30·3 | 4·7 | 8·5 |
| 10·0 | | 31·3 | 41·0 | |
| 9·6 | | 31·5 | 58·9 | |
| 10·2 | | 43·3 | 12·9 | |
| 10·4 | | 52·8 | 1·9 | |
| 10·5 | | 54·3 | 32·0 | |
| 9·8 | 55 | 3·8 | 51·1 | 9·0 |
| 10·5 | | 5·8 | 40·2 | |
| 10·5 | | 9·3 | 50·5 | |
| 9·7 | | 13·8 | 20·3 | |
| 10·4 | | 14·8 | 10·9 | |
| 10·4 | | 16·8 | 20·9 | |
| 9·2 | | 17·3 | 33·2 | |
| 9·0 | | 18·8 | 29·2 | 9·0 |
| 9·7 | | 20·3 | 13·3 | 9·5 |
| 10·5 | | 23·3 | 45·5 | |
| 10·0 | | 24·8 | 33·4 | |
| 9·4 | | 31·3 | 55·0 | |
| 10·2 | | 32·3 | 43·8 | |
| 9·8 | | 46·8 | 22·0 | |
| 9·6 | | 53·3 | 32·6 | |
| 10·2 | | 53·8 | 12·0 | |
| 9·9 | | 57·8 | 59·1 | |
| 9·2 | 56 | 1·8 | 38·9 | 9·0 |
| 10·4 | | 4·3 | 59·4 | |
| 9·9 | | 12·8 | 52·9 | |
| 9·9 | | 13·3 | 13·9 | |
| 10·2 | | 13·3 | 42·9 | |
| 10·0 | | 14·8 | 51·0 | |
| 7·8 | | 19·8 | 20·7 | 7·0 GSt |
| 9·4 | | 19·8 | 6·8 | 9·5 |
| 9·8 | | 22·3 | 32·1 | |
| 10·4 | | 22·8 | 46·8 | |
| 9·9 | | 23·8 | 3·0 | |
| 10·5 | | 27·3 | 27·4 | |
| 10·2 | | 39·3 | 9·2 | |
| 9·4 | | 48·3 | 29·8 | |
| 10·4 | | 48·4 | 19·9 | |
| 10·5 | | 49·3 | 27·9 | |
| 9·2 | | 54·8 | 20·6 | |
| 10·4 | | 55·8 | 33·9 | |
| 8·6 | | 56·8 | 4·0 | 8·0 |
| 10·4 | 57 | 2·3 | 56·4 | |
| 10·4 | | 1·8 | 20·0 | |

## 2761—2820.

| mag. | 9h.—10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 57 | 3·3 | 39·4 | |
| 10·0 | | 3·3 | 37·7 | |
| 10·0 | | 7·3 | 55·4 | |
| 9·0 | | 11·3 | 34·3 | 9·0 |
| 9·9 | | 12·8 | 6·7 | |
| 10·0 | | 13·8 | 33·1 | |
| 10·0 | | 15·3 | 16·3 | |
| 9·9 | | 31·3 | 18·1 | |
| 9·9 | | 40·8 | 31·1 | |
| 7·8 | | 43·8 | 44·8 | 6·8 GSct |
| 10·0 | | 48·3 | 14·0 | |
| 10·5 | | 48·8 | 17·7 | |
| 9·4 | | 58·8 | 17·1 | |
| 10·5 | | 59·8 | 35·3 | |
| 10·0 | 58 | 1·8 | 5·9 | |
| 10·0 | | 8·3 | 29·0 | |
| 10·4 | | 11·8 | 47·3 | |
| 10·4 | | 12·3 | 18·4 | |
| 10·4 | | 12·3 | 19·0 | |
| 10·5 | | 18·3 | 53·2 | |
| 10·2 | | 18·3 | 4·4 | |
| 10·4 | | 20·3 | 28·6 | |
| 9·4 | | 23·3 | 55·7 | |
| 10·4 | | 25·8 | 3·9 | |
| 10·0 | | 26·3 | 14·6 | |
| 10·0 | | 39·3 | 27·0 | |
| 9·9 | | 51·3 | 36·6 | |
| 9·9 | | 53·8 | 38·4 | |
| 9·0 | | 54·3 | 15·6 | 9·0 |
| 9·9 | | 55·3 | 46·8 | |
| 10·0 | 59 | 1·8 | 14·0 | |
| 9·4 | | 4·3 | 35·9 | 9·0 |
| 10·5 | | 11·3 | 37·0 | |
| 9·6 | | 13·3 | 3·5 | |
| 10·4 | | 13·8 | 11·9 | |
| 10·2 | | 16·3 | 32·7 | |
| 10·4 | | 18·3 | 45·2 | |
| 8·8 | | 18·8 | 57·9 | 9·0 |
| 10·5 | | 24·8 | 9·8 | |
| 10·0 | | 34·3 | 4·7 | |
| 10·0 | | 34·8 | 6·8 | |
| 9·9 | | 41·2 | 19·0 | |
| 10·0 | | 43·7 | 29·0 | |
| 10·5 | | 45·7 | 30·0 | |
| 10·5 | | 47·7 | 31·0 | |
| 10·5 | | 49·4 | 27·1 | |
| 10·0 | | 50·4 | 21·1 | |
| 10·2 | | 53·2 | 44·6 | |
| 9·2 | | 53·2 | 44·0 | 8·5 |
| 10·0 | | 53·7 | 26·9 | |
| 10·4 | | 55·7 | 31·2 | |
| 10·2 | 0 | 1·7 | 3·0 | |
| 10·0 | | 1·7 | 17·0 | |
| 10·0 | | 3·7 | 24·2 | |
| 10·0 | | 16·0 | 56·8 | |
| 10·2 | | 17·2 | 55·5 | |
| 10·4 | | 18·7 | 0·0 | |
| 10·5 | | 20·4 | 42·7 | |
| 10·5 | | 21·7 | 26·6 | |
| 10·5 | | 22·7 | 35·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 40 | 48 | 6·8 |
| | 50 | 50 | 7·0 |
| 10 | 0 | 52 | 7·2 |
| | 10 | 53 | 7·4 |

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25 prec.

| h | m | α (s) | δ (') |
|---|---|---|---|
| | | + | − |
| 10 | 0 | 52 | 7·2 |
| | 10 | 53 | 7·4 |
| | 20 | 55 | 7·6 |

## 2821—2880.

| mag. | 10ʰ m s | −56° ' | |
|---|---|---|---|
| 10·5 | 0 23·2 | 35·4 | |
| 10·4 | 24·7 | 25·8 | |
| 10·5 | 29·2 | 9·6 | |
| 10·0 | 32·2 | 47·2 | |
| 7·6 | 41·7 | 17·4 | 7·0 GSt |
| 10·5 | 46·6 | 2·2 | |
| 10·0 | 53·2 | 22·7 | |
| 10·0 | 58·2 | 20·0 | |
| 9·9 | 59·7 | 51·0 | |
| 9·7 | 1 0·7 | 7·1 | |
| 10·0 | 1·7 | 23·7 | |
| 9·9 | 4·2 | 50·0 | |
| 9·6 | 10·7 | 34·4 | |
| 10·4 | 12·7 | 57·2 | |
| 9·8 | 13·7 | 16·4 | |
| 10·0 | 17·2 | 5·9 | |
| 10·0 | 28·7 | 18·4 | |
| 9·9 | 29·2 | 32·0 | |
| 8·8 | 33·1 | 4·3 | 9·0 |
| 10·5 | 38·6 | 16·6 | |
| 10·2 | 42·6 | 54·0 | |
| 10·4 | 42·6 | 59·0 | |
| 9·8 | 47·1 | 17·0 | 9·0 |
| 9·6 | 47·1 | 26·8 | |
| 10·2 | 48·6 | 41·6 | |
| 9·4 | 51·6 | 41·0 | |
| 10·0 | 2 0·6 | 51·0 | |
| 10·0 | 2·1 | 24·1 | |
| 10·4 | 3·6 | 44·6 | |
| 10·2 | 12·6 | 20·0 | |
| 10·5 | 17·6 | 48·8 | |
| 10·5 | 19·1 | 16·4 | |
| 10·0 | 20·6 | 49·0 | |
| 10·2 | 24·5 | 27·0 | |
| 10·0 | 24·6 | 2·5 | |
| 10·2 | 24·6 | 35·2 | |
| 9·2 | 26·1 | 47·1 | 8·8 |
| 9·9 | 27·1 | 3·1 | |
| 10·2 | 28·1 | 5·5 | |
| 9·2 | 31·6 | 23·4 | 9·0 |
| 9·8 | 31·6 | 50·4 | |
| 10·5 | 33·1 | 0·2 | |
| 10·4 | 34·6 | 31·0 | |
| 10·4 | 34·6 | 32·6 | |
| 9·6 | 43·1 | 36·2 | 9·0 |
| 9·9 | 43·6 | 10·4 | |
| 10·4 | 51·1 | 41·4 | |
| 9·8 | 52·1 | 30·2 | |
| 8·8 | 53·6 | 27·2 | 9·0 |
| 10·0 | 59·6 | 25·3 | |
| 9·2 | 3 0·1 | 58·2 | |
| 10·2 | 2·1 | 7·6 | |
| 9·6 | 4·0 | 10·5 | |
| 9·9 | 6·0 | 25·2 | |
| 8·2 | 11·5 | 56·4 | |
| 10·2 | 15·0 | 36·3 | |
| 10·4 | 16·5 | 32·5 | |
| 9·9 | 18·0 | 29·4 | |
| 10·5 | 25·1 | 58·2 | |
| 10·0 | 31·0 | 24·1 | |

## 2881—2940.

| mag. | 10ʰ m s | −56° ' | |
|---|---|---|---|
| 10·5 | 3 33·0 | 51·0 | |
| 10·5 | 34·5 | 51·0 | |
| 10·0 | 37·0 | 12·8 | |
| 10·5 | 42·0 | 18·6 | |
| 9·7 | 43·0 | 18·6 | |
| 9·6 | 45·5 | 24·1 | |
| 9·9 | 48·5 | 51·0 | |
| 10·5 | 50·0 | 2·8 | |
| 10·4 | 51·0 | 29·1 | |
| 10·5 | 54·5 | 3·2 | |
| 10·2 | 58·0 | 44·0 | |
| 8·2 | 58·5 | 40·8 | 8·8 |
| 9·8 | 4 1·5 | 44·4 | |
| 10·2 | 4·5 | 50·4 | |
| 10·2 | 11·0 | 59·9 | |
| 10·0 | 13·0 | 42·2 | |
| 9·8 | 13·0 | 22·5 | |
| 10·2 | 19·5 | 45·2 | |
| 10·0 | 22·0 | 43·4 | |
| 10·4 | 24·5 | 26·0 | |
| 10·0 | 27·0 | 38·3 | |
| 9·6 | 27·5 | 1·2 | |
| 10·4 | 27·6 | 0·2 | |
| 9·9 | 31·0 | 30·4 | |
| 10·5 | 34·5 | 56·0 | |
| 9·8 | 38·5 | 46·6 | |
| 9·9 | 39·0 | 26·6 | |
| 9·8 | 44·5 | 22·8 | |
| 10·0 | 57·0 | 11·0 | |
| 10·0 | 58·5 | 10·9 | |
| 9·6 | 5 0·0 | 29·2 | |
| 8·8 | 3·5 | 54·0 | 8·5 G |
| 10·5 | 3·8 | 35·4 | |
| 9·8 | 4·0 | 2·9 | |
| 10·2 | 6·5 | 29·6 | |
| 9·6 | 12·0 | 46·0 | |
| 9·2 | 14·0 | 2·5 | 8·5 G |
| 8·3 | 24·0 | 3·4 | 8·0 G |
| 8·3 | 24·0 | 8·1 | 8·0 G |
| 10·5 | 27·0 | 46·4 | |
| 10·2 | 31·5 | 28·4 | |
| 10·0 | 32·0 | 31·0 | |
| 10·4 | 33·0 | 9·2 | |
| 10·0 | 38·0 | 21·3 | |
| 9·9 | 38·5 | 41·0 | |
| 10·0 | 44·0 | 42·6 | |
| 9·6 | 46·5 | 22·0 | 9·0 |
| 10·0 | 48·0 | 39·5 | |
| 9·2 | 51·0 | 41·4 | |
| 9·2 | 57·5 | 8·2 | |
| 10·4 | 6 1·5 | 50·0 | |
| 9·2 | 3·0 | 56·7 | 8·5 |
| 10·2 | 3·0 | 5·0 | |
| 10·0 | 3·0 | 37·2 | |
| 9·7 | 4·5 | 39·6 | |
| 8·8 | 11·5 | 39·8 | 8·5 |
| 9·9 | 13·5 | 30·7 | |
| 10·0 | 13·5 | 49·7 | |
| 8·8 | 15·0 | 19·2 | 9·0 |
| 10·4 | 15·5 | 42·6 | |

## 2941—3000.

| mag. | 10ʰ m s | −56° ' | |
|---|---|---|---|
| 10·0 | 6 17·0 | 1·1 | |
| 9·2 | 18·0 | 12·2 | 8·5 |
| 10·0 | 19·9 | 54·7 | |
| 10·0 | 22·4 | 15·4 | |
| 9·2 | 22·9 | 54·3 | |
| 9·8 | 24·4 | 49·1 | |
| 9·2 | 26·9 | 49·8 | 9·0 |
| 9·9 | 28·9 | 11·7 | |
| 9·7 | 34·4 | 32·4 | |
| 10·0 | 36·9 | 25·1 | |
| 10·4 | 38·4 | 48·6 | |
| 10·2 | 38·7 | 1·7 | |
| 10·2 | 41·4 | 51·9 | |
| 10·2 | 41·9 | 45·4 | |
| 10·4 | 42·0 | 22·8 | |
| 10·4 | 43·9 | 40·6 | |
| 9·6 | 44·4 | 47·6 | |
| 9·4 | 46·9 | 17·2 | |
| 10·4 | 47·4 | 39·7 | |
| 9·9 | 48·4 | 22·8 | |
| 10·5 | 51·9 | 16·0 | |
| 10·4 | 53·9 | 22·2 | |
| 10·4 | 57·9 | 45·0 | |
| 10·2 | 7 0·4 | 34·0 | |
| 9·7 | 3·9 | 17·4 | |
| 10·4 | 8·9 | 42·9 | |
| 10·2 | 16·9 | 31·5 | |
| 10·2 | 17·4 | 6·8 | |
| 10·0 | 18·4 | 14·2 | |
| 9·8 | 24·4 | 36·2 | |
| 10·0 | 25·4 | 16·6 | |
| 10·2 | 25·9 | 21·4 | |
| 10·4 | 30·9 | 34·6 | |
| 10·2 | 35·9 | 6·7 | |
| 10·5 | 38·9 | 38·0 | |
| 9·8 | 39·9 | 18·5 | 9·5 |
| 9·8 | 50·4 | 26·0 | |
| 10·2 | 51·4 | 6·6 | |
| 10·2 | 56·9 | 20·0 | |
| 10·4 | 8 2·9 | 31·1 | |
| 9·4 | 4·4 | 40·8 | |
| 10·5 | 4·8 | 58·7 | |
| 9·6 | 11·9 | 58·8 | |
| 10·4 | 12·1 | 57·8 | |
| 10·0 | 24·4 | 47·0 | |
| 10·0 | 26·4 | 38·7 | |
| 10·0 | 29·9 | 40·2 | |
| 10·0 | 34·9 | 6·4 | |
| 9·7 | 37·9 | 50·0 | |
| 10·0 | 39·9 | 19·9 | |
| 10·2 | 40·4 | 19·0 | |
| 10·0 | 40·9 | 3·0 | |
| 10·2 | 41·4 | 41·0 | |
| 10·2 | 42·4 | 19·0 | |
| 10·4 | 45·6 | 58·1 | |
| 10·0 | 50·9 | 40·0 | |
| 8·5 | 51·9 | 51·4 | 9·0 |
| 9·9 | 54·4 | 34·7 | |
| 10·0 | 55·4 | 5·6 | |
| 10·5 | 56·8 | 28·1 | |

## 3001—3060.

| mag. | 10ʰ m s | −56° ' | |
|---|---|---|---|
| 10·2 | 8 57·4 | 49·9 | |
| 10·4 | 9 2·4 | 8·2 | |
| 10·4 | 2·9 | 42·6 | |
| 10·5 | 5·4 | 21·7 | |
| 10·0 | 8·9 | 21·2 | |
| 10·2 | 13·4 | 56·6 | |
| 10·0 | 14·4 | 53·6 | |
| 10·2 | 17·4 | 59·5 | |
| 10·2 | 17·8 | 49·2 | |
| 10·0 | 21·8 | 56·2 | |
| 10·0 | 21·8 | 22·8 | |
| 10·0 | 22·8 | 42·0 | |
| 10·4 | 25·8 | 22·0 | |
| 10·2 | 30·3 | 26·6 | |
| 10·2 | 30·8 | 37·3 | |
| 9·7 | 32·8 | 28·8 | |
| 10·2 | 37·3 | 26·2 | |
| 10·4 | 38·8 | 14·6 | |
| 9·6 | 47·8 | 34·4 | |
| 9·8 | 49·3 | 15·2 | |
| 9·9 | 52·8 | 34·2 | |
| 9·7 | 55·3 | 14·9 | |
| 10·0 | 58·7 | 58·6 | |
| 9·4 | 10 0·3 | 29·7 | 9·0 |
| 10·4 | 2·8 | 0·0 | |
| 10·4 | 5·8 | 41·6 | |
| 10·5 | 9·3 | 5·0 | |
| 9·2 | 16·8 | 20·2 | 9·0 |
| 10·0 | 17·3 | 19·8 | |
| 9·9 | 18·8 | 26·6 | |
| 9·7 | 22·8 | 11·2 | |
| 10·2 | 26·8 | 4·6 | |
| 9·4 | 30·8 | 3·0 | 9·5 |
| 9·8 | 33·3 | 50·2 | |
| 9·8 | 33·8 | 22·7 | |
| 9·9 | 39·3 | 39·2 | |
| 10·0 | 45·1 | 1·2 | |
| 10·5 | 45·8 | 5·5 | |
| 10·5 | 47·8 | 31·0 | |
| 10·0 | 52·8 | 45·2 | |
| 9·6 | 52·8 | 37·8 | |
| 8·6 | 56·8 | 46·0 | 9·0 |
| 8·8 | 59·3 | 30·2 | 9·0 |
| 9·8 | 11 1·8 | 51·0 | |
| 10·5 | 1·8 | 8·0 | |
| 10·5 | 1·8 | 40·8 | |
| 10·4 | 4·3 | 51·2 | |
| 10·4 | 7·8 | 7·4 | |
| 10·5 | 9·1 | 59·1 | |
| 10·4 | 11·3 | 41·0 | |
| 10·2 | 12·3 | 34·0 | |
| 9·8 | 15·1 | 1·4 | |
| 10·4 | 18·8 | 45·4 | |
| 10·4 | 22·3 | 13·7 | |
| 8·5 | 23·8 | 45·2 | 8·5 G |
| 9·9 | 27·3 | 28·0 | |
| 10·0 | 28·3 | 14·0 | |
| 9·8 | 29·8 | 58·8 | |
| 9·9 | 32·8 | 48·2 | 9·5 |
| 10·5 | 36·3 | 47·3 | |



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### 3061—3120.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.4 | 11 | 36.8 | 47.8 | |
| 10.2 | | 45.8 | 19.0 | |
| 9.6 | | 49.3 | 19.2 | |
| 10.4 | | 54.3 | 50.2 | |
| 10.5 | 12 | 0.7 | 35.4 | |
| 10.4 | | 0.7 | 19.1 | |
| 9.7 | | 1.2 | 18.4 | |
| 10.0 | | 3.7 | 53.0 | |
| 10.5 | | 4.2 | 33.8 | |
| 10.0 | | 6.7 | 36.4 | |
| 10.4 | | 6.7 | 17.6 | |
| 10.0 | | 8.2 | 15.3 | |
| 10.4 | | 9.7 | 31.6 | |
| 10.4 | | 12.2 | 10.8 | |
| 9.7 | | 16.2 | 36.2 | |
| 10.0 | | 18.2 | 49.1 | |
| 10.2 | | 20.7 | 48.2 | |
| 9.8 | | 20.7 | 7.9 | |
| 9.4 | | 22.7 | 34.8 | |
| 10.2 | | 39.2 | 45.0 | |
| 10.2 | | 42.7 | 18.0 | |
| 10.4 | | 45.2 | 46.0 | |
| 10.4 | | 45.2 | 29.0 | |
| 10.2 | | 53.2 | 47.9 | |
| 10.0 | | 53.7 | 26.6 | 9.5 |
| 10.2 | 13 | 4.2 | 18.6 | |
| 10.4 | | 9.7 | 3.4 | |
| 10.2 | | 12.5 | 57.7 | |
| 10.4 | | 12.7 | 7.0 | |
| 10.2 | | 19.7 | 13.4 | |
| 10.2 | | 20.2 | 25.0 | |
| 10.4 | | 21.0 | 57.6 | |
| 10.2 | | 24.2 | 35.6 | |
| 10.0 | | 24.2 | 30.2 | |
| 10.0 | | 30.7 | 34.0 | |
| 10.2 | | 30.7 | 40.6 | |
| 10.5 | | 31.7 | 18.0 | |
| 10.2 | | 37.7 | 41.8 | |
| 9.4 | | 38.1 | 27.2 | |
| 10.5 | | 38.7 | 53.1 | |
| 9.4 | | 40.6 | 16.9 | |
| 9.4 | | 41.9 | 0.5 | 9.5 |
| 9.9 | | 43.6 | 55.6 | |
| 8.6 | | 47.1 | 49.1 | 8.8 G |
| 10.2 | | 49.6 | 46.1 | |
| 9.4 | | 52.4 | 3.0 | 9.5 |
| 10.4 | | 54.4 | 2.2 | |
| 10.0 | | 56.6 | 50.7 | |
| 9.4 | | 57.1 | 25.5 | |
| 10.5 | 14 | 3.1 | 5.6 | |
| 9.9 | | 7.1 | 35.0 | |
| 9.9 | | 7.6 | 18.9 | |
| 10.2 | | 13.1 | 45.1 | |
| 10.4 | | 15.1 | 47.2 | |
| 10.4 | | 16.6 | 17.1 | |
| 10.2 | | 21.6 | 48.2 | |
| 10.2 | | 22.6 | 7.5 | |
| 10.5 | | 26.6 | 7.5 | |
| 9.4 | | 28.1 | 33.1 | |
| 10.2 | | 31.6 | 44.7 | |

### 3121—3180.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.0 | 14 | 33.1 | 0.9 | 9.0 |
| 10.4 | | 34.6 | 52.1 | |
| 10.2 | | 38.6 | 44.4 | |
| 10.5 | | 39.4 | 58.0 | |
| 9.8 | | 44.6 | 23.2 | |
| 10.0 | | 49.6 | 55.2 | |
| 9.4 | | 50.6 | 33.6 | |
| 10.0 | | 57.1 | 54.1 | |
| 10.4 | 15 | 2.1 | 47.0 | |
| 10.0 | | 2.5 | 47.2 | |
| 8.8 | | 3.5 | 46.6 | 9.0 |
| 10.5 | | 3.5 | 1.9 | |
| 9.7 | | 3.5 | 7.8 | |
| 9.8 | | 3.5 | 17.3 | |
| 9.2 | | 3.5 | 29.9 | |
| 10.2 | | 4.5 | 45.2 | |
| 10.2 | | 12.5 | 20.9 | |
| 10.4 | | 12.5 | 36.5 | |
| 10.3 | | 19.0 | 9.1 | |
| 8.6 | | 19.5 | 25.3 | 9.0 |
| 8.2 | | 21.0 | 52.8 | 8.0 GSt |
| 9.7 | | 23.5 | 6.0 | |
| 10.2 | | 30.5 | 59.0 | |
| 9.7 | | 31.0 | 11.1 | |
| 10.2 | | 33.0 | 59.9 | |
| 10.5 | | 33.0 | 39.8 | |
| 9.6 | | 36.5 | 23.6 | |
| 10.0 | | 39.0 | 57.9 | |
| 10.0 | | 41.0 | 23.0 | |
| 9.6 | | 46.5 | 44.7 | |
| 10.0 | | 49.0 | 44.6 | |
| 10.0 | | 52.5 | 18.2 | |
| 10.0 | | 53.5 | 35.9 | |
| 10.2 | | 55.0 | 14.3 | |
| 10.5 | | 55.3 | 1.8 | |
| 7.8 | | 58.0 | 7.5 | |
| 10.4 | | 58.0 | 17.6 | |
| 10.4 | 16 | 0.0 | 22.2 | |
| 7.8 | | 3.0 | 32.4 | 8.5 GSt |
| 10.2 | | 10.5 | 17.3 | |
| 10.0 | | 16.0 | 5.6 | |
| 10.4 | | 16.0 | 51.3 | |
| 10.0 | | 17.4 | 56.1 | |
| 10.2 | | 17.5 | 38.0 | |
| 10.4 | | 19.9 | 54.6 | |
| 10.0 | | 20.4 | 59.2 | |
| 10.0 | | 21.9 | 47.6 | |
| 10.5 | | 24.9 | 6.3 | |
| 10.4 | | 24.9 | 3.3 | |
| 9.6 | | 24.9 | 1.6 | |
| 10.2 | | 28.4 | 30.6 | |
| 10.4 | | 32.4 | 19.8 | |
| 10.2 | | 34.4 | 22.0 | |
| 10.0 | | 35.4 | 20.0 | |
| 10.4 | | 35.4 | 18.9 | |
| 10.4 | | 36.4 | 6.7 | |
| 8.8 | | 41.9 | 26.2 | 9.2 |
| 10.4 | | 41.9 | 8.8 | |
| 10.5 | | 43.4 | 46.8 | |
| 10.0 | | 44.9 | 18.6 | |

### 3181—3240.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.2 | 16 | 53.4 | 4.3 | |
| 10.2 | | 54.4 | 15.5 | |
| 10.5 | | 58.9 | 28.3 | |
| 10.2 | 17 | 0.4 | 29.7 | |
| 9.8 | | 5.9 | 50.0 | |
| 10.5 | | 11.4 | 16.7 | |
| 10.5 | | 12.4 | 10.5 | |
| 10.0 | | 12.4 | 30.2 | |
| 10.2 | | 13.4 | 44.1 | |
| 10.5 | | 16.4 | 18.0 | |
| 9.2 | | 17.9 | 52.2 | |
| 10.2 | | 18.5 | 2.4 | |
| 9.8 | | 20.4 | 14.6 | |
| 10.0 | | 20.4 | 14.0 | |
| 9.7 | | 20.9 | 44.2 | |
| 10.4 | | 21.1 | 57.8 | |
| 9.9 | | 21.4 | 26.4 | |
| 10.0 | | 21.9 | 36.9 | |
| 10.2 | | 22.9 | 45.1 | |
| 10.5 | | 24.6 | 57.9 | |
| 10.0 | | 26.9 | 14.0 | |
| 10.2 | | 28.9 | 34.3 | |
| 9.8 | | 32.4 | 12.6 | |
| 10.5 | | 36.4 | 9.1 | |
| 9.4 | | 37.9 | 53.8 | |
| 9.4 | | 37.9 | 53.1 | |
| 10.0 | | 37.9 | 46.1 | |
| 10.4 | | 39.9 | 10.3 | |
| 9.2 | | 43.4 | 44.0 | 9.0 |
| 9.4 | | 44.4 | 47.7 | |
| 10.2 | | 47.4 | 58.1 | |
| 9.9 | | 48.9 | 56.1 | |
| 10.4 | | 50.4 | 34.2 | |
| 10.0 | | 52.4 | 22.3 | |
| 10.0 | | 53.9 | 12.0 | |
| 10.0 | | 55.9 | 32.8 | |
| 10.2 | | 58.4 | 35.0 | |
| 10.0 | | 58.9 | 18.9 | |
| 10.2 | 18 | 0.4 | 56.1 | |
| 10.5 | | 0.9 | 55.6 | |
| 9.6 | | 2.4 | 49.3 | |
| 10.2 | | 4.4 | 59.6 | |
| 10.0 | | 5.4 | 21.5 | |
| 10.5 | | 12.9 | 9.0 | |
| 9.6 | | 16.4 | 25.0 | |
| 10.4 | | 17.4 | 34.1 | |
| 10.2 | | 19.4 | 5.0 | |
| 10.5 | | 24.9 | 53.8 | |
| 10.0 | | 26.9 | 45.3 | |
| 9.8 | | 29.9 | 12.3 | |
| 9.4 | | 30.9 | 10.6 | 9.0 |
| 10.2 | | 31.9 | 13.6 | |
| 10.4 | | 31.9 | 0.1 | |
| 9.6 | | 32.4 | 8.1 | 9.5 |
| 10.4 | | 32.4 | 10.1 | |
| 9.6 | | 32.9 | 55.6 | |
| 10.4 | | 42.9 | 39.0 | |
| 10.2 | | 44.9 | 57.7 | |
| 10.5 | | 50.9 | 56.3 | |
| 10.4 | | 51.9 | 58.6 | |

### 3241—3300.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.2 | 19 | 0.9 | 5.2 | |
| 10.4 | | 0.9 | 26.8 | |
| 10.0 | | 1.4 | 18.7 | |
| 9.4 | | 4.4 | 25.4 | |
| 9.8 | | 6.4 | 51.0 | |
| 9.4 | | 10.4 | 11.8 | 9.0 |
| 10.5 | | 15.7 | 5.4 | |
| 10.2 | | 17.9 | 12.6 | |
| 9.9 | | 19.1 | 58.0 | |
| 8.2 | | 20.4 | 49.9 | 8.5 |
| 9.9 | | 21.9 | 55.3 | |
| 9.4 | | 22.4 | 26.9 | 9.0 |
| 10.2 | | 25.4 | 5.6 | |
| 10.0 | | 29.4 | 6.7 | |
| 10.2 | | 37.4 | 7.6 | |
| 9.9 | | 37.4 | 12.5 | |
| 10.2 | | 37.9 | 36.3 | |
| 10.4 | | 37.9 | 32.3 | |
| 10.5 | | 39.4 | 13.4 | |
| 9.4 | | 40.9 | 56.1 | |
| 10.4 | | 44.7 | 12.6 | |
| 10.4 | | 46.4 | 32.5 | |
| 9.2 | | 47.9 | 12.0 | |
| 9.4 | | 48.9 | 41.0 | |
| 10.5 | | 50.4 | 58.0 | |
| 10.0 | | 51.4 | 7.4 | |
| 10.4 | | 52.4 | 35.9 | |
| 9.6 | | 53.9 | 18.4 | |
| 9.8 | | 55.4 | 55.9 | |
| 10.0 | | 56.4 | 20.4 | |
| 9.8 | | 59.4 | 22.1 | |
| 10.5 | 20 | 0.7 | 38.3 | |
| 9.4 | | 0.7 | 6.1 | |
| 10.2 | | 2.4 | 31.3 | |
| 9.4 | | 7.7 | 3.1 | 10.0 |
| 10.4 | | 8.7 | 28.5 | |
| 10.2 | | 9.7 | 37.7 | |
| 10.4 | | 10.7 | 22.4 | |
| 10.4 | | 10.7 | 54.3 | |
| 10.2 | | 12.7 | 41.4 | |
| 9.6 | | 13.7 | 13.3 | |
| 10.2 | | 14.2 | 36.0 | |
| 9.9 | | 18.7 | 35.8 | |
| 10.0 | | 19.7 | 18.6 | |
| 9.8 | | 22.2 | 5.0 | |
| 8.2 | | 22.2 | 27.1 | 8.5 |
| 10.2 | | 24.2 | 37.6 | |
| 9.0 | | 28.2 | 42.3 | 9.0 |
| 10.0 | | 31.2 | 13.9 | |
| 8.6 | | 31.2 | 25.8 | 8.5 |
| 10.4 | | 33.7 | 29.0 | |
| 10.5 | | 34.7 | 27.0 | |
| 8.8 | | 37.2 | 15.1 | 9.0 |
| 10.4 | | 37.2 | 5.7 | |
| 10.4 | | 37.2 | 54.5 | |
| 10.4 | | 37.7 | 19.8 | |
| 10.4 | | 41.2 | 24.5 | |
| 10.2 | | 42.2 | 4.5 | |
| 10.2 | | 42.2 | 11.0 | |
| 9.0 | | 45.2 | 56.0 | |

25 prec.

| h. | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 53 | 7.4 |
| | 20 | 55 | 7.6 |
| | 30 | 57 | 7.7 |



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| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 10 | 20 | 55 | 7·6 |
| | 30 | 57 | 7·7 |
| | 40 | 60 | 7·9 |

**3301—3360.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·9 | 20 | 48·4 | 49·1 | |
| 10·2 | | 51·2 | 15·9 | |
| 9·9 | | 51·2 | 50·9 | |
| 10·4 | | 58·2 | 42·5 | |
| 10·5 | | 58·4 | 38·9 | |
| 10·0 | 21 | 10·4 | 30·3 | |
| 9·2 | | 16·0 | 42·6 | |
| 10·0 | | 17·5 | 23·1 | |
| 10·2 | | 22·5 | 56·9 | |
| 10·2 | | 24·0 | 56·0 | |
| 10·5 | | 25·5 | 32·0 | |
| 10·2 | | 26·0 | 41·8 | |
| 10·2 | | 26·5 | 38·0 | |
| 9·9 | | 27·5 | 38·7 | |
| 9·4 | | 28·5 | 4·2 | 10·0 |
| 10·4 | | 29·5 | 32·3 | |
| 9·7 | | 30·0 | 34·0 | |
| 9·4 | | 31·5 | 10·1 | |
| 10·2 | | 32·5 | 53·7 | |
| 10·2 | | 36·5 | 30·5 | |
| 10·4 | | 38·0 | 57·9 | |
| 8·6 | | 42·0 | 40·9 | 8·5 |
| 10·4 | | 44·5 | 25·2 | |
| 9·0 | | 45·0 | 28·7 | |
| 10·0 | | 47·0 | 50·0 | |
| 10·4 | | 48·5 | 30·1 | |
| 10·4 | | 51·3 | 1·6 | |
| 9·4 | | 52·4 | 7·1 | |
| 10·0 | | 52·5 | 52·2 | |
| 10·5 | | 55·0 | 9·0 | |
| 10·5 | | 56·4 | 29·5 | |
| 10·2 | | 59·5 | 9·6 | |
| 10·0 | 22 | 0·5 | 41·0 | |
| 9·4 | | 4·5 | 15·0 | |
| 10·4 | | 6·0 | 46·6 | |
| 10·0 | | 6·5 | 34·4 | |
| 10·5 | | 7·6 | 57·6 | |
| 10·5 | | 9·5 | 48·9 | |
| 10·5 | | 10·5 | 28·4 | |
| 9·8 | | 12·0 | 10·6 | |
| 10·0 | | 14·0 | 0·7 | |
| 10·5 | | 16·3 | 21·9 | |
| 7·8 | | 17·0 | 58·3 | 7·5 Gt |
| 10·4 | | 18·3 | 37·8 | |
| 10·5 | | 20·8 | 38·4 | |
| 10·2 | | 23·8 | 25·0 | |
| 9·7 | | 25·3 | 51·6 | |
| 10·5 | | 25·7 | 59·7 | |
| 10·2 | | 26·8 | 58·2 | |
| 10·2 | | 27·3 | 46·9 | |
| 8·6 | | 29·3 | 32·9 | 9·0 |
| 9·2 | | 30·3 | 23·3 | |
| 10·4 | | 36·3 | 36·1 | |
| 8·8 | | 37·3 | 28·1 | |
| 9·6 | | 40·3 | 13·7 | |
| 10·4 | | 42·2 | 59·4 | |
| 10·4 | | 42·8 | 51·9 | |
| 9·7 | | 43·3 | 48·1 | |
| 10·4 | | 43·8 | 5·6 | |
| 9·8 | | 48·8 | 32·7 | 9·0 |

**3361—3420.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 22 | 52·3 | 9·6 | |
| 10·2 | | 52·8 | 27·0 | |
| 10·0 | | 52·8 | 57·7 | |
| 9·4 | | 55·2 | 58·5 | |
| 10·4 | | 56·3 | 57·4 | |
| 10·2 | | 57·3 | 57·0 | |
| 10·2 | | 58·8 | 12·8 | |
| 9·2 | 23 | 0·3 | 48·8 | |
| 10·4 | | 3·2 | 59·1 | |
| 10·4 | | 3·8 | 55·1 | |
| 10·5 | | 3·8 | 54·0 | |
| 10·4 | | 9·3 | 2·9 | |
| 10·4 | | 10·3 | 16·5 | |
| 10·4 | | 10·3 | 16·3 | |
| 10·4 | | 10·3 | 27·3 | |
| 9·2 | | 10·8 | 41·9 | 9·0 |
| 10·4 | | 11·3 | 55·4 | |
| 9·9 | | 12·5 | 57·1 | |
| 9·2 | | 13·8 | 54·8 | |
| 8·8 | | 13·8 | 45·2 | 8·5 |
| 9·9 | | 13·8 | 39·2 | |
| 9·2 | | 14·3 | 58·6 | 9·0 |
| 10·5 | | 16·0 | 59·2 | |
| 9·2 | | 18·3 | 8·1 | |
| 9·2 | | 20·3 | 30·1 | |
| 7·3 | | 21·5 | 33·6 | 7·5 GSgr |
| 9·6 | | 23·8 | 23·5 | |
| 9·9 | | 23·8 | 27·1 | |
| 10·2 | | 25·2 | 42·5 | |
| 9·9 | | 32·3 | 18·0 | |
| 9·9 | | 35·0 | 15·0 | |
| 10·2 | | 35·3 | 29·7 | |
| 10·0 | | 43·0 | 34·7 | |
| 10·4 | | 43·0 | 58·9 | |
| 10·0 | | 43·0 | 48·8 | |
| 9·9 | | 43·0 | 32·0 | |
| 10·0 | | 45·0 | 27·3 | |
| 9·4 | | 47·5 | 32·3 | |
| 10·5 | | 49·8 | 59·2 | |
| 10·2 | | 53·8 | 40·9 | |
| 9·4 | | 56·8 | 37·6 | |
| 9·7 | | 57·8 | 52·1 | |
| 10·4 | | 58·3 | 27·9 | |
| 8·8 | | 59·0 | 15·5 | |
| 10·4 | 24 | 0·3 | 49·6 | |
| 10·5 | | 0·8 | 13·5 | |
| 10·2 | | 1·3 | 57·5 | |
| 10·5 | | 1·5 | 56·4 | |
| 10·4 | | 1·8 | 56·6 | |
| 10·4 | | 1·8 | 50·6 | |
| 10·4 | | 2·3 | 59·8 | |
| 10·2 | | 2·5 | 51·8 | |
| 7·7 | | 6·3 | 35·7 | 7·0 GSgtr |
| 8·8 | | 6·7 | 6·0 | |
| 10·4 | | 7·2 | 17·1 | |
| 10·0 | | 12·2 | 34·8 | |
| 9·6 | | 15·2 | 32·4 | |
| 10·4 | | 15·2 | 19·2 | |
| 10·4 | | 19·7 | 19·3 | |
| 9·6 | | 20·7 | 57·5 | |

**3421—3480.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 24 | 21·5 | 19·2 | |
| 9·4 | | 22·3 | 18·0 | |
| 10·0 | | 24·3 | 7·7 | |
| 10·1 | | 27·3 | 52·7 | |
| 8·4 | | 30·3 | 58·6 | 8·5 |
| 10·1 | | 30·3 | 54·0 | |
| 9·6 | | 31·8 | 33·1 | |
| 8·8 | | 35·8 | 10·1 | |
| 9·1 | | 41·1 | 58·7 | 9·0 |
| 9·0 | | 43·8 | 32·9 | |
| 10·0 | | 44·8 | 52·5 | |
| 9·5 | | 50·3 | 41·4 | |
| 8·2 | | 53·8 | 51·4 | 9·0 |
| 9·8 | | 58·8 | 45·7 | |
| 10·0 | | 59·3 | 27·3 | |
| 9·2 | 25 | 3·3 | 33·3 | |
| 10·0 | | 4·3 | 32·0 | |
| 9·8 | | 10·3 | 26·5 | |
| 9·8 | | 10·3 | 52·0 | |
| 9·8 | | 10·9 | 57·3 | |
| 8·8 | | 11·7 | 2·1 | 9·5 |
| 10·1 | | 14·8 | 23·1 | |
| 10·1 | | 20·8 | 55·8 | |
| 9·5 | | 21·3 | 40·9 | |
| 10·0 | | 22·1 | 57·5 | |
| 10·1 | | 34·8 | 9·5 | |
| 9·6 | | 36·8 | 16·9 | |
| 7·4 | | 38·3 | 26·1 | 6·5 GSg |
| 9·5 | | 42·3 | 31·5 | |
| 8·6 | | 43·8 | 54·0 | 8·0 |
| 10·0 | | 44·3 | 23·9 | |
| 10·0 | | 44·8 | 22·1 | |
| 9·5 | | 45·8 | 46·7 | |
| 9·6 | | 52·8 | 7·1 | |
| 9·8 | | 55·3 | 47·9 | |
| 8·0 | 26 | 4·1 | 57·5 | 8·0 Gg |
| 10·0 | | 4·8 | 45·8 | |
| 10·1 | | 5·8 | 40·3 | |
| 10·0 | | 5·8 | 40·7 | |
| 10·0 | | 16·8 | 56·0 | |
| 10·0 | | 17·3 | 24·0 | |
| 10·0 | | 20·8 | 48·5 | |
| 9·4 | | 24·3 | 25·3 | |
| 9·4 | | 26·8 | 47·4 | 8·2 |
| 10·0 | | 30·8 | 26·6 | |
| 10·1 | | 32·3 | 28·6 | |
| 9·2 | | 34·8 | 19·0 | |
| 10·1 | | 42·3 | 49·1 | |
| 8·6 | | 55·3 | 40·1 | 9·0 |
| 10·1 | | 55·8 | 16·1 | |
| 9·6 | | 57·3 | 55·6 | |
| 10·0 | 27 | 1·8 | 32·3 | |
| 9·5 | | 3·3 | 35·9 | |
| 9·8 | | 5·3 | 43·6 | |
| 9·8 | | 7·3 | 17·9 | |
| 10·1 | | 9·8 | 55·2 | |
| 9·8 | | 12·8 | 57·2 | |
| 10·1 | | 18·8 | 39·7 | |
| 10·0 | | 21·8 | 19·5 | |
| 9·1 | | 24·8 | 4·6 | 9·5 |

**3481—3540.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 27 | 25·1 | 59·4 | |
| 10·0 | | 31·8 | 34·9 | |
| 9·2 | | 32·8 | 1·3 | |
| 9·6 | | 36·3 | 34·2 | |
| 9·1 | | 36·3 | 5·9 | 9·0 |
| 9·6 | | 40·3 | 12·9 | |
| 9·5 | | 44·0 | 56·6 | |
| 9·6 | | 46·8 | 38·2 | |
| 9·4 | | 47·3 | 39·0 | |
| 10·0 | | 53·3 | 27·4 | |
| 9·2 | | 53·8 | 59·0 | |
| 9·8 | | 54·3 | 6·8 | |
| 10·1 | 28 | 1·8 | 50·1 | |
| 9·4 | | 4·8 | 52·0 | 9·0 |
| 9·8 | | 13·3 | 3·6 | |
| 9·8 | | 14·8 | 8·2 | |
| 10·0 | | 17·8 | 54·5 | |
| 9·0 | | 23·8 | 55·4 | |
| 10·0 | | 24·3 | 15·7 | |
| 10·0 | | 25·8 | 18·8 | |
| 9·4 | | 29·3 | 50·0 | |
| 10·0 | | 32·3 | 51·1 | |
| 9·5 | | 33·8 | 21·8 | |
| 9·6 | | 38·3 | 46·7 | |
| 9·2 | | 38·8 | 18·2 | |
| 10·1 | | 45·8 | 28·1 | |
| 10·1 | | 48·8 | 43·2 | |
| 10·0 | | 52·4 | 57·9 | |
| 10·0 | | 55·8 | 42·6 | |
| 10·1 | 29 | 3·8 | 58·6 | |
| 9·4 | | 5·3 | 24·7 | |
| 9·8 | | 6·8 | 53·1 | |
| 10·0 | | 8·3 | 59·0 | |
| 9·8 | | 10·8 | 17·6 | |
| 10·1 | | 19·8 | 35·0 | |
| 10·1 | | 20·3 | 42·2 | |
| 10·0 | | 20·8 | 42·0 | |
| 8·8 | | 27·3 | 20·0 | 8·5 |
| 9·6 | | 38·3 | 42·5 | |
| 9·4 | | 38·8 | 11·0 | 9·0 |
| 8·8 | | 40·8 | 42·1 | 9·0 |
| 10·0 | | 41·3 | 20·0 | |
| 9·5 | | 42·3 | 13·8 | |
| 10·0 | | 42·8 | 39·1 | |
| 10·0 | | 44·3 | 48·4 | |
| 10·1 | | 47·3 | 9·5 | |
| 9·5 | | 50·8 | 17·9 | |
| 10·1 | | 50·8 | 8·5 | |
| 10·0 | | 54·3 | 39·9 | |
| 10·1 | | 58·9 | 31·5 | |
| 9·8 | 30 | 3·9 | 37·6 | |
| 9·5 | | 7·9 | 37·2 | |
| 10·0 | | 12·4 | 47·9 | |
| 10·0 | | 13·9 | 13·5 | |
| 9·5 | | 25·4 | 31·6 | |
| 10·0 | | 29·4 | 37·0 | |
| 9·8 | | 30·4 | 34·9 | |
| 10·0 | | 37·4 | 54·8 | |
| 10·0 | | 37·4 | 25·3 | |
| 10·0 | | 37·9 | 35·4 | |



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## 3541—3600.

| mag. | 10ʰ m s | −56° ′ | |
|---|---|---|---|
| 10·0 | 30 39·4 | 36·1 | |
| 9·6 | 41·9 | 42·9 | |
| 9·2 | 41·9 | 3·9 | |
| 7·2 | 47·9 | 54·7 | 5·0 GSgt |
| 9·5 | 47·9 | 26·4 | |
| 10·1 | 48·4 | 37·4 | |
| 10·1 | 50·9 | 21·2 | |
| 9·4 | 52·4 | 59·2 | |
| 9·6 | 54·9 | 12·3 | |
| 9·1 | 55·4 | 35·2 | |
| 10·1 | 31 0·9 | 52·8 | |
| 10·1 | 0·9 | 42·2 | |
| 9·8 | 8·9 | 55·6 | |
| 9·6 | 9·9 | 54·2 | |
| 10·1 | 12·4 | 45·4 | |
| 9·1 | 14·9 | 5·1 | 9·5 |
| 10·0 | 18·9 | 58·9 | |
| 9·8 | 20·9 | 5·3 | |
| 9·6 | 23·9 | 59·9 | |
| 10·1 | 25·4 | 58·4 | |
| 10·0 | 26·9 | 15·0 | |
| 10·0 | 27·9 | 49·5 | |
| 9·5 | 28·9 | 38·0 | |
| 10·1 | 30·6 | 57·4 | |
| 10·1 | 38·4 | 57·7 | |
| 10·1 | 38·9 | 14·0 | |
| 10·1 | 39·4 | 28·3 | |
| 10·0 | 52·4 | 33·8 | |
| 9·5 | 55·9 | 5·9 | |
| 9·5 | 56·9 | 1·6 | |
| 9·8 | 32 0·4 | 9·5 | |
| 10·1 | 7·1 | 5·8 | |
| 9·5 | 9·1 | 12·9 | 9·0 |
| 10·1 | 12·6 | 9·3 | |
| 10·1 | 12·6 | 20·2 | |
| 10·1 | 15·6 | 14·0 | |
| 9·5 | 19·6 | 55·3 | |
| 9·8 | 32·1 | 19·0 | |
| 9·8 | 37·6 | 49·6 | |
| 9·2 | 41·7 | 57·0 | |
| 10·0 | 54·1 | 52·0 | |
| 10·0 | 54·6 | 12·6 | |
| 10·1 | 59·1 | 56·8 | |
| 10·0 | 33 2·6 | 56·0 | |
| 10·0 | 8·3 | 59·0 | |
| 9·2 | 10·1 | 10·0 | 8·8 |
| 10·0 | 11·0 | 3·4 | |
| 6·3 | 11·1 | 36·4 | 6·5 GSt |
| 9·5 | 16·6 | 54·6 | 9·0 |
| 9·6 | 18·1 | 21·4 | |
| 9·5 | 18·1 | 53·9 | |
| 9·5 | 18·9 | 2·4 | 9·5 |
| 9·2 | 22·6 | 19·6 | 9·0 |
| 9·5 | 23·1 | 49·4 | |
| 10·0 | 25·1 | 4·8 | |
| 9·1 | 28·1 | 15·8 | 9·0 |
| 9·6 | 30·1 | 46·5 | |
| 8·6 | 35·6 | 7·4 | 8·5 |
| 9·8 | 35·6 | 41·9 | |
| 10·1 | 36·0 | 0·4 | |

## 3601—3660.

| mag. | 10ʰ m s | −56° ′ | |
|---|---|---|---|
| 9·5 | 33 42·1 | 32·8 | |
| 9·8 | 42·1 | 35·1 | |
| 10·0 | 42·1 | 45·6 | |
| 9·2 | 43·1 | 54·8 | 8·5 |
| 9·0 | 45·6 | 58·2 | 8·5 |
| 9·2 | 54·1 | 25·4 | |
| 10·0 | 57·1 | 47·8 | |
| 9·8 | 58·6 | 16·2 | |
| 9·5 | 34 1·6 | 10·8 | |
| 9·6 | 5·1 | 12·8 | |
| 9·2 | 6·8 | 56·4 | 8·5 |
| 10·0 | 9·1 | 20·1 | |
| 10·1 | 9·6 | 45·2 | |
| 10·1 | 15·0 | 20·5 | |
| 10·1 | 18·1 | 44·2 | |
| 10·1 | 19·3 | 18·4 | |
| 10·1 | 29·3 | 30·2 | |
| 9·2 | 30·3 | 40·1 | 8·8 |
| 10·0 | 35·8 | 14·0 | |
| 10·1 | 42·3 | 10·6 | |
| 10·1 | 42·8 | 11·0 | |
| 8·2 | 44·3 | 48·7 | 8·5 |
| 10·1 | 48·3 | 35·0 | |
| 10·1 | 51·3 | 29·3 | |
| 9·6 | 51·3 | 16·8 | |
| 10·1 | 52·3 | 47·0 | |
| 10·0 | 53·8 | 33·0 | |
| 10·1 | 55·3 | 17·1 | |
| 10·1 | 59·3 | 1·5 | |
| 10·1 | 35 0·8 | 31·0 | |
| 9·5 | 1·3 | 37·1 | |
| 9·2 | 8·3 | 54·0 | |
| 10·1 | 9·3 | 3·2 | |
| 9·5 | 9·8 | 28·8 | |
| 8·6 | 10·3 | 15·3 | |
| 9·8 | 14·3 | 15·8 | |
| 10·1 | 22·8 | 25·1 | |
| 10·1 | 29·3 | 15·9 | |
| 10·1 | 30·7 | 59·4 | |
| 9·8 | 31·8 | 12·0 | |
| 10·1 | 31·8 | 10·0 | |
| 9·6 | 32·3 | 49·3 | |
| 8·8 | 33·8 | 3·0 | 9·0 |
| 9·6 | 34·8 | 58·8 | |
| 10·0 | 35·3 | 36·3 | |
| 9·1 | 35·8 | 21·4 | |
| 8·6 | 39·3 | 31·6 | 8·0 G |
| 10·0 | 42·8 | 36·2 | |
| 10·0 | 46·3 | 24·9 | |
| 10·0 | 53·8 | 54·4 | |
| 10·0 | 56·3 | 54·8 | |
| 10·0 | 59·3 | 57·0 | |
| 8·4 | 36 6·6 | 57·0 | 8·5 |
| 10·0 | 7·8 | 14·7 | |
| 10·1 | 9·3 | 27·5 | |
| 8·6 | 9·8 | 40·8 | 8·5 G |
| 7·8 | 10·3 | 36·2 | 8·0 G |
| 9·5 | 14·3 | 7·4 | |
| 10·1 | 17·2 | 58·4 | |
| 9·5 | 17·3 | 23·4 | |

## 3661—3720.

| mag. | 10ʰ m s | −56° ′ | |
|---|---|---|---|
| 10·1 | 36 20·9 | 41·3 | |
| 9·4 | 24·9 | 19·7 | |
| 9·0 | 27·4 | 52·4 | 9·0 |
| 9·6 | 34·9 | 40·2 | |
| 9·0 | 36·4 | 51·8 | 9·0 |
| 10·0 | 39·2 | 1·8 | |
| 10·1 | 42·2 | 15·1 | |
| 9·8 | 42·4 | 51·2 | |
| 9·8 | 44·4 | 3·2 | |
| 9·6 | 49·4 | 25·2 | |
| 10·0 | 51·4 | 26·2 | |
| 10·0 | 51·9 | 25·4 | |
| 10·0 | 53·9 | 30·0 | |
| 9·0 | 58·4 | 3·7 | |
| 10·1 | 37 0·4 | 32·8 | |
| 8·2 | 4·4 | 21·2 | 8·5 |
| 10·0 | 4·9 | 13·2 | |
| 9·2 | 6·9 | 48·2 | |
| 10·0 | 7·9 | 33·2 | |
| 10·0 | 9·4 | 46·0 | |
| 9·8 | 10·4 | 8·2 | |
| 10·0 | 14·4 | 12·0 | |
| 10·1 | 14·9 | 55·6 | |
| 9·4 | 15·9 | 55·2 | |
| 9·6 | 15·9 | 38·6 | |
| 10·0 | 18·4 | 39·1 | |
| 9·2 | 23·4 | 27·7 | |
| 10·1 | 27·2 | 12·5 | |
| 10·0 | 27·4 | 10·9 | |
| 9·6 | 28·4 | 33·1 | |
| 10·1 | 28·9 | 53·0 | |
| 9·6 | 30·9 | 11·4 | |
| 9·8 | 31·4 | 4·9 | |
| 10·0 | 33·9 | 42·2 | |
| 9·8 | 39·9 | 34·0 | |
| 7·4 | 43·9 | 13·3 | 7·5 GSt |
| 9·8 | 45·4 | 14·2 | |
| 10·0 | 59·4 | 1·4 | |
| 10·1 | 38 2·4 | 50·6 | |
| 10·1 | 5·9 | 2·2 | |
| 10·0 | 16·9 | 43·6 | |
| 10·0 | 19·4 | 17·9 | |
| 9·1 | 23·4 | 12·6 | 9·5 |
| 9·0 | 24·9 | 51·4 | 9·0 |
| 9·8 | 25·4 | 55·8 | |
| 9·4 | 25·4 | 14·0 | |
| 10·0 | 29·9 | 11·0 | |
| 10·1 | 31·4 | 57·8 | |
| 10·1 | 33·4 | 5·8 | |
| 8·8 | 33·9 | 35·9 | |
| 10·1 | 45·4 | 46·1 | |
| 9·8 | 46·4 | 22·9 | |
| 9·8 | 48·4 | 12·2 | |
| 8·6 | 51·4 | 3·8 | 9·0 |
| 10·1 | 55·4 | 30·6 | |
| 9·6 | 57·4 | 34·9 | |
| 10·0 | 58·9 | 34·3 | |
| 9·8 | 59·4 | 47·0 | |
| 10·1 | 39 0·9 | 44·8 | |
| 9·6 | 1·4 | 24·8 | |

## 3721—3780.

| mag. | 10ʰ m s | −56° ′ | |
|---|---|---|---|
| 10·1 | 39 2·4 | 54·5 | |
| 10·1 | 6·9 | 45·8 | |
| 9·8 | 7·9 | 26·6 | |
| 9·5 | 11·4 | 43·2 | |
| 9·6 | 12·9 | 43·0 | |
| 10·0 | 12·9 | 40·6 | |
| 10·1 | 13·9 | 40·2 | |
| 8·8 | 16·9 | 57·0 | 9·0 |
| 10·1 | 21·4 | 52·9 | |
| 10·1 | 25·4 | 25·2 | |
| 9·5 | 28·4 | 23·9 | |
| 10·1 | 28·4 | 43·0 | |
| 9·8 | 29·4 | 14·0 | |
| 9·4 | 30·4 | 12·0 | |
| 9·8 | 30·9 | 2·0 | |
| 9·6 | 32·4 | 27·6 | |
| 8·2 | 35·9 | 54·7 | 7·8 G |
| 10·0 | 39·9 | 9·0 | |
| 9·6 | 40·4 | 36·2 | |
| 9·6 | 40·4 | 13·2 | |
| 10·0 | 41·4 | 40·2 | |
| 10·1 | 44·4 | 58·9 | |
| 8·8 | 49·4 | 52·2 | 9·0 |
| 8·8 | 54·9 | 26·6 | |
| 9·5 | 56·4 | 40·2 | |
| 10·1 | 58·4 | 25·1 | |
| 9·8 | 58·9 | 31·6 | |
| 10·0 | 40 0·9 | 21·2 | |
| 9·0 | 0·9 | 38·3 | |
| 10·1 | 4·4 | 20·0 | |
| 9·6 | 5·9 | 6·1 | |
| 10·1 | 9·4 | 29·8 | |
| 9·5 | 9·4 | 20·2 | |
| 9·5 | 9·9 | 55·8 | |
| 9·4 | 15·9 | 21·3 | |
| 9·8 | 19·4 | 53·7 | |
| 9·6 | 19·4 | 33·6 | |
| 9·6 | 19·4 | 48·3 | |
| 9·0 | 23·9 | 19·9 | |
| 9·6 | 41·4 | 58·2 | |
| 8·8 | 46·4 | 39·6 | |
| 10·1 | 47·4 | 28·1 | |
| 9·6 | 48·9 | 7·1 | |
| 9·6 | 50·9 | 53·3 | 9·0 |
| 9·5 | 51·4 | 29·2 | |
| 10·1 | 51·9 | 27·8 | |
| 10·1 | 52·4 | 11·3 | |
| 9·8 | 54·9 | 14·2 | |
| 10·1 | 41 1·4 | 28·1 | |
| 9·0 | 1·4 | 12·8 | |
| 9·8 | 1·4 | 20·6 | |
| 8·6 | 3·4 | 18·4 | 9·0 |
| 8·8 | 4·4 | 6·0 | 9·0 |
| 10·0 | 4·9 | 49·6 | |
| 9·8 | 5·9 | 16·8 | |
| 10·0 | 6·9 | 16·9 | |
| 9·4 | 7·4 | 53·4 | 9·0 |
| 10·1 | 10·3 | 45·7 | |
| 10·0 | 10·9 | 12·3 | |
| 10·1 | 11·4 | 11·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 57 | 7·7 |
| | 40 | 60 | 7·9 |
| | 50 | 62 | 8·0 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 40 | 60 | 7·9 |
| | 50 | 62 | 8·0 |
| 11 | 0 | 64 | 8·1 |

**3781—3840.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 41 | 12·4 | 7·4 | |
| 9·8 | | 12·9 | 21·4 | |
| 8·8 | | 16·9 | 10·3 | 9·2 |
| 9·6 | | 21·4 | 6·4 | |
| 10·0 | | 22·4 | 58·1 | |
| 9·8 | | 24·2 | 28·9 | |
| 9·2 | | 24·4 | 10·4 | |
| 10·1 | | 24·7 | 33·7 | |
| 9·6 | | 25·2 | 52·2 | |
| 9·2 | | 25·7 | 29·7 | |
| 10·0 | | 32·2 | 55·4 | |
| 10·0 | | 37·2 | 27·8 | |
| 10·0 | | 38·7 | 23·9 | |
| 9·5 | | 39·2 | 49·7 | |
| 9·5 | | 39·2 | 0·5 | |
| 9·4 | | 44·2 | 21·0 | |
| 9·2 | | 51·7 | 26·6 | |
| 9·8 | | 53·2 | 52·9 | |
| 9·8 | | 54·2 | 49·4 | |
| 5·3 | | 55·2 | 5·9 | 6·0 GSctr |
| 10·0 | | 55·7 | 36·0 | |
| 10·1 | 42 | 0·7 | 50·1 | |
| 10·1 | | 1·7 | 53·6 | |
| 9·6 | | 2·7 | 43·6 | |
| 8·6 | | 3·7 | 53·3 | 8·8 |
| 10·1 | | 6·2 | 53·0 | |
| 10·1 | | 7·2 | 45·7 | |
| 9·1 | | 7·7 | 44·4 | |
| 9·6 | | 10·2 | 43·6 | |
| 7·6 | | 17·7 | 39·9 | 7·5 GSt |
| 10·1 | | 18·7 | 13·6 | |
| 8·8 | | 20·7 | 30·4 | |
| 9·6 | | 22·7 | 51·5 | |
| 9·6 | | 25·7 | 46·0 | |
| 10·0 | | 29·2 | 42·8 | |
| 10·1 | | 31·7 | 53·0 | |
| 9·2 | | 32·7 | 14·9 | |
| 9·5 | | 33·2 | 51·3 | |
| 9·6 | | 33·2 | 48·9 | G |
| 10·1 | | 33·7 | 48·1 | |
| 8·0 | | 37·7 | 48·4 | 7·0 GSt |
| 9·2 | | 39·2 | 50·4 | |
| 9·5 | | 39·7 | 16·7 | |
| 9·8 | | 40·2 | 30·3 | |
| 9·8 | | 40·7 | 46·9 | |
| 9·6 | | 43·7 | 50·8 | |
| 10·1 | | 46·7 | 45·7 | |
| 9·6 | | 47·2 | 9·5 | |
| 9·4 | | 48·2 | 50·1 | 8·5 G |
| 10·1 | | 49·2 | 1·5 | |
| 10·1 | | 50·7 | 30·9 | |
| 10·1 | | 53·2 | 52·4 | |
| 9·5 | | 53·7 | 52·9 | |
| 9·2 | | 56·2 | 52·5 | |
| 10·1 | | 57·2 | 42·9 | |
| 9·6 | | 59·2 | 55·4 | |
| 9·8 | 43 | 0·7 | 22·2 | |
| 9·6 | | 1·2 | 28·4 | |
| 9·8 | | 1·7 | 46·4 | |
| 9·8 | | 5·2 | 31·1 | |

**3841—3900.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 43 | 7·2 | 58·6 | |
| 9·4 | | 7·7 | 47·6 | |
| 9·0 | | 11·2 | 47·2 | 9·0 |
| 9·5 | | 12·2 | 36·2 | |
| 10·1 | | 14·2 | 45·7 | |
| 10·1 | | 14·2 | 45·1 | |
| 9·8 | | 15·2 | 21·1 | |
| 10·0 | | 17·5 | 59·2 | |
| 9·4 | | 19·7 | 5·3 | |
| 9·5 | | 21·2 | 49·9 | |
| 10·1 | | 21·7 | 20·8 | |
| 10·0 | | 21·7 | 9·3 | |
| 10·1 | | 21·7 | 15·1 | |
| 10·1 | | 22·2 | 49·7 | |
| 9·5 | | 23·7 | 9·6 | |
| 10·0 | | 25·7 | 46·0 | |
| 10·1 | | 28·2 | 24·3 | |
| 10·1 | | 28·2 | 23·1 | |
| 10·0 | | 29·2 | 38·9 | |
| 9·0 | | 30·7 | 20·2 | |
| 10·1 | | 31·7 | 34·1 | |
| 10·1 | | 31·7 | 26·0 | |
| 9·5 | | 32·7 | 20·5 | |
| 10·1 | | 32·7 | 55·2 | |
| 10·1 | | 32·7 | 54·4 | |
| 9·8 | | 33·2 | 5·1 | |
| 10·0 | | 43·2 | 23·9 | |
| 10·1 | | 45·7 | 6·9 | |
| 9·6 | | 45·7 | 36·4 | |
| 9·4 | | 50·7 | 12·6 | |
| 8·6 | | 53·7 | 36·2 | 9·5 |
| 9·5 | 44 | 0·2 | 56·0 | |
| 10·1 | | 2·7 | 42·9 | |
| 10·1 | | 8·2 | 24·6 | |
| 9·6 | | 18·7 | 39·5 | |
| 10·0 | | 28·7 | 5·6 | |
| 9·4 | | 29·7 | 22·1 | |
| 10·1 | | 31·7 | 33·7 | |
| 10·0 | | 32·2 | 9·0 | |
| 9·8 | | 33·7 | 45·2 | |
| 10·1 | | 35·2 | 13·3 | |
| 9·8 | | 37·7 | 24·5 | |
| 9·8 | | 38·7 | 40·9 | |
| 10·1 | | 39·6 | 37·8 | |
| 9·6 | | 41·7 | 20·5 | |
| 9·4 | | 42·7 | 41·0 | |
| 9·6 | | 45·7 | 49·2 | |
| 10·1 | | 45·7 | 26·2 | |
| 9·6 | | 48·2 | 35·2 | |
| 9·5 | | 50·2 | 25·4 | |
| 10·0 | 45 | 1·7 | 46·3 | |
| 9·4 | | 2·7 | 15·4 | 9·0 |
| 10·0 | | 7·7 | 19·8 | |
| 9·4 | | 14·2 | 48·1 | |
| 10·1 | | 21·6 | 3·0 | |
| 9·5 | | 22·7 | 53·1 | |
| 10·1 | | 27·6 | 3·1 | |
| 10·0 | | 28·7 | 47·4 | |
| 10·1 | | 29·7 | 38·7 | |
| 9·8 | | 30·2 | 54·2 | |

**3901—3960.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 30·7 | 26·8 | |
| 9·6 | | 30·7 | 19·6 | |
| 9·6 | | 33·2 | 43·0 | |
| 10·0 | | 39·7 | 28·9 | |
| 10·1 | | 39·7 | 56·3 | |
| 10·0 | | 41·7 | 45·8 | |
| 10·0 | | 42·7 | 5·8 | |
| 10·1 | | 43·7 | 6·1 | |
| 9·8 | | 48·7 | 41·1 | |
| 9·8 | | 50·2 | 11·6 | |
| 10·0 | | 50·7 | 28·1 | |
| 9·8 | | 57·9 | 56·7 | |
| 9·6 | | 58·7 | 52·0 | |
| 9·8 | | 59·7 | 56·4 | |
| 9·5 | 46 | 1·2 | 4·0 | 9·0 |
| 10·0 | | 1·2 | 42·1 | |
| 10·0 | | 1·7 | 53·8 | |
| 9·6 | | 2·7 | 44·7 | |
| 10·0 | | 5·7 | 55·0 | |
| 10·1 | | 6·7 | 38·6 | |
| 10·0 | | 11·7 | 57·3 | |
| 10·1 | | 12·7 | 4·8 | |
| 10·0 | | 14·7 | 50·5 | |
| 8·3 | | 23·7 | 36·8 | |
| 10·1 | | 39·7 | 16·1 | |
| 9·8 | | 40·7 | 4·7 | |
| 7·0 | | 41·2 | 36·5 | 7·0 GStr |
| 8·8 | | 42·2 | 34·9 | |
| 9·8 | | 42·2 | 14·1 | |
| 10·1 | | 48·2 | 48·2 | |
| 10·0 | | 51·7 | 47·8 | |
| 9·8 | | 54·7 | 19·5 | |
| 9·8 | | 57·2 | 43·5 | |
| 9·8 | | 58·7 | 13·0 | |
| 9·6 | 47 | 1·7 | 15·6 | 9·0 |
| 8·6 | | 3·2 | 13·1 | 9·0 |
| 10·0 | | 3·7 | 45·8 | |
| 9·0 | | 5·2 | 43·0 | |
| 9·6 | | 8·7 | 43·3 | |
| 9·5 | | 9·2 | 35·5 | |
| 10·0 | | 17·2 | 34·1 | |
| 10·1 | | 17·2 | 17·9 | |
| 10·1 | | 18·7 | 18·8 | |
| 10·0 | | 18·7 | 10·9 | |
| 10·1 | | 22·5 | 58·1 | |
| 9·6 | | 23·2 | 53·9 | |
| 6·3 | | 23·7 | 34·5 | 6·0 GSt |
| 9·8 | | 27·7 | 54·4 | |
| 10·0 | | 32·7 | 35·3 | |
| 10·0 | | 32·7 | 20·2 | |
| 10·0 | | 33·2 | 26·1 | |
| 9·5 | | 35·2 | 26·0 | 9·0 |
| 8·2 | | 37·7 | 27·9 | 8·5 |
| 10·1 | | 39·2 | 23·9 | |
| 9·8 | | 41·7 | 29·4 | |
| 9·5 | | 43·2 | 20·7 | |
| 10·0 | | 45·2 | 47·2 | |
| 9·5 | | 49·7 | 8·2 | |
| 10·1 | | 51·2 | 52·3 | |
| 10·1 | 48 | 1·2 | 42·1 | |

**3961—4020.**

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 48 | 9·7 | 2·2 | |
| 9·8 | | 11·2 | 16·6 | |
| 10·1 | | 11·5 | 31·3 | |
| 9·6 | | 13·7 | 38·2 | |
| 10·1 | | 15·5 | 1·0 | |
| 9·6 | | 17·7 | 57·2 | |
| 9·6 | | 21·7 | 26·0 | |
| 10·0 | | 26·2 | 37·3 | |
| 10·1 | | 29·2 | 39·0 | |
| 9·6 | | 31·7 | 3·0 | |
| 10·1 | | 32·2 | 30·5 | |
| 10·0 | | 40·2 | 2·0 | |
| 9·8 | | 44·2 | 46·1 | |
| 10·1 | | 45·7 | 30·2 | |
| 10·1 | | 51·2 | 46·1 | |
| 9·6 | | 51·2 | 55·4 | |
| 9·8 | | 59·2 | 49·5 | |
| 10·0 | | 59·7 | 52·9 | |
| 10·1 | 49 | 0·5 | 54·9 | |
| 9·4 | | 2·2 | 30·4 | |
| 9·2 | | 6·2 | 10·8 | |
| 9·8 | | 6·7 | 12·0 | |
| 10·0 | | 8·7 | 15·0 | |
| 9·6 | | 10·2 | 13·5 | |
| 9·1 | | 14·4 | 59·0 | 9·0 |
| 9·6 | | 15·2 | 23·6 | |
| 9·2 | | 16·2 | 26·9 | 9·0 |
| 10·0 | | 19·7 | 32·9 | |
| 10·1 | | 21·2 | 27·9 | |
| 10·0 | | 35·2 | 51·0 | |
| 9·5 | | 37·2 | 37·1 | |
| 10·0 | | 39·7 | 58·1 | |
| 9·6 | | 48·7 | 42·2 | |
| 10·0 | | 51·2 | 53·7 | |
| 10·1 | | 53·5 | 36·3 | |
| 9·8 | | 55·7 | 9·2 | |
| 9·8 | | 57·7 | 42·8 | |
| 9·6 | | 59·7 | 11·4 | |
| 9·8 | 50 | 0·2 | 27·3 | |
| 9·6 | | 1·2 | 35·0 | |
| 9·5 | | 9·7 | 55·2 | |
| 9·6 | | 10·7 | 23·8 | |
| 9·6 | | 19·2 | 11·1 | |
| 10·1 | | 23·7 | 15·0 | |
| 9·0 | | 25·2 | 9·1 | |
| 9·4 | | 27·7 | 36·8 | 9·0 |
| 9·0 | | 29·7 | 31·8 | 9·0 |
| 10·1 | | 33·2 | 55·9 | |
| 9·5 | | 38·7 | 24·5 | |
| 9·0 | | 40·7 | 14·0 | 8·5 |
| 9·6 | | 49·7 | 16·4 | |
| 10·1 | | 52·2 | 54·1 | |
| 10·0 | 51 | 1·7 | 39·1 | |
| 9·5 | | 8·7 | 27·2 | |
| 9·0 | | 12·2 | 10·6 | 8·5 |
| 7·8 | | 14·2 | 53·1 | 7·3 G |
| 10·0 | | 15·2 | 53·5 | G |
| 10·1 | | 17·7 | 14·8 | |
| 9·8 | | 25·7 | 7·8 | |
| 9·8 | | 33·7 | 26·9 | |



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## 4021—4080.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 51 | 35·2 | 45·2 | |
| 8·6 | | 35·7 | 14·5 | 9·0 |
| 9·1 | | 41·7 | 11·9 | 8·5 |
| 10·0 | | 42·7 | 39·0 | |
| 8·8 | | 45·2 | 54·7 | 9·0 |
| 9·6 | | 45·7 | 13·4 | |
| 9·6 | | 52·7 | 7·9 | |
| 9·5 | | 56·2 | 1·8 | |
| 9·8 | | 57·7 | 7·7 | |
| 10·0 | | 57·7 | 33·1 | |
| 10·0 | | 58·2 | 38·2 | |
| 10·1 | 52 | 1·7 | 17·8 | |
| 9·5 | | 1·7 | 58·8 | |
| 10·0 | | 2·2 | 33·5 | |
| 10·0 | | 4·2 | 41·5 | |
| 9·2 | | 8·7 | 50·2 | 9·5 |
| 10·0 | | 11·2 | 23·0 | |
| 9·0 | | 16·7 | 20·3 | |
| 10·0 | | 25·2 | 5·7 | |
| 9·6 | | 26·2 | 14·0 | |
| 10·1 | | 28·7 | 7·6 | |
| 9·6 | | 29·7 | 38·5 | |
| 9·8 | | 32·7 | 52·8 | |
| 9·0 | | 41·7 | 18·1 | |
| 9·8 | | 45·7 | 24·9 | |
| 10·1 | | 48·7 | 6·1 | |
| 10·0 | | 50·2 | 19·9 | |
| 9·5 | | 51·7 | 8·1 | |
| 10·1 | 53 | 6·7 | 11·0 | |
| 10·1 | | 7·7 | 3·5 | |
| 10·1 | | 9·2 | 10·3 | |
| 8·6 | | 9·7 | 42·2 | 9·0 |
| 9·8 | | 11·2 | 18·0 | |
| 9·8 | | 12·7 | 41·2 | |
| 8·8 | | 24·7 | 48·9 | 9·0 |
| 10·1 | | 30·7 | 35·4 | |
| 9·6 | | 33·7 | 43·0 | |
| 10·0 | | 36·2 | 11·5 | |
| 10·0 | | 40·7 | 17·3 | |
| 10·1 | | 41·2 | 33·5 | |
| 9·8 | | 41·2 | 18·1 | |
| 9·2 | | 45·2 | 35·1 | 9·5 |
| 10·0 | | 48·2 | 38·0 | |
| 10·1 | | 51·7 | 13·3 | |
| 8·8 | | 54·7 | 13·1 | |
| 9·8 | | 56·2 | 6·0 | |
| 9·6 | | 57·7 | 41·7 | |
| 10·1 | 54 | 10·7 | 47·9 | |
| 9·4 | | 11·2 | 5·3 | 9·5 |
| 9·6 | | 13·2 | 25·2 | |
| 10·1 | | 15·2 | 57·1 | |
| 9·6 | | 16·7 | 3·8 | |
| 10·0 | | 16·8 | 41·0 | |
| 9·8 | | 20·2 | 47·5 | |
| 10·1 | | 21·2 | 32·9 | |
| 9·4 | | 22·8 | 17·6 | |
| 10·1 | | 24·7 | 17·0 | |
| 9·4 | | 25·2 | 49·4 | 9·0 |
| 10·1 | | 25·7 | 7·2 | |
| 10·1 | | 26·2 | 1·6 | |

## 4081—4140.

| mag. | 10h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 54 | 37·2 | 8·4 | |
| 10·0 | | 40·2 | 4·9 | |
| 10·0 | | 40·7 | 24·1 | |
| 9·4 | | 41·2 | 50·8 | |
| 10·1 | | 41·3 | 9·1 | |
| 10·1 | | 46·3 | 17·8 | |
| 10·0 | | 47·2 | 58·5 | |
| 10·1 | | 47·2 | 37·4 | |
| 9·5 | | 47·2 | 7·2 | |
| 9·5 | | 49·3 | 55·1 | |
| 9·5 | | 51·7 | 9·8 | |
| 9·6 | 55 | 0·2 | 33·9 | |
| 9·6 | | 1·7 | 29·1 | |
| 8·2 | | 2·2 | 53·4 | 7·8 |
| 8·0 | | 5·7 | 2·0 | 9·0 |
| 10·0 | | 5·7 | 2·2 | |
| 9·5 | | 7·7 | 59·9 | |
| 10·0 | | 12·2 | 29·5 | |
| 10·1 | | 21·2 | 47·0 | |
| 9·8 | | 22·2 | 23·1 | |
| 10·0 | | 23·2 | 20·1 | |
| 9·6 | | 31·4 | 37·0 | |
| 9·2 | | 31·4 | 2·6 | |
| 10·1 | | 34·4 | 2·0 | |
| 10·0 | | 37·9 | 25·8 | |
| 9·2 | | 40·7 | 58·8 | |
| 10·0 | | 48·6 | 51·9 | |
| 9·6 | | 51·9 | 21·8 | |
| 9·6 | | 56·6 | 43·6 | |
| 9·5 | | 57·6 | 9·4 | |
| 8·4 | 56 | 2·1 | 5·8 | 8·5 Gt |
| 10·0 | | 5·1 | 52·9 | |
| 9·4 | | 9·4 | 4·3 | |
| 10·0 | | 13·1 | 37·5 | |
| 9·8 | | 15·4 | 14·2 | |
| 9·8 | | 24·6 | 14·3 | |
| 8·4 | | 25·6 | 35·5 | |
| 9·4 | | 28·1 | 43·0 | |
| 9·6 | | 29·1 | 57·7 | |
| 9·8 | | 29·6 | 54·1 | |
| 10·0 | | 37·6 | 33·8 | |
| 10·0 | | 39·1 | 1·3 | |
| 10·0 | | 43·3 | 11·5 | |
| 10·0 | | 44·6 | 45·1 | |
| 9·6 | | 48·6 | 45·2 | |
| 10·0 | | 49·3 | 42·4 | |
| 9·0 | | 52·1 | 54·8 | |
| 9·6 | | 59·1 | 42·7 | |
| 9·6 | 57 | 2·1 | 9·8 | |
| 9·8 | | 6·1 | 22·5 | |
| 9·4 | | 11·1 | 19·1 | |
| 8·9 | | 20·6 | 6·3 | 9·0 |
| 9·8 | | 21·1 | 59·4 | |
| 10·0 | | 25·2 | 24·3 | |
| 9·4 | | 27·1 | 13·5 | |
| 10·0 | | 27·4 | 59·5 | |
| 9·6 | | 30·6 | 52·4 | |
| 9·4 | | 30·6 | 31·1 | |
| 10·0 | | 35·1 | 8·9 | |
| 9·6 | | 37·1 | 8·9 | |

## 4141—4200.

| mag. | 10h.—11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 57 | 38·8 | 2·1 | |
| 10·0 | | 41·6 | 17·9 | |
| 9·4 | | 44·6 | 50·9 | |
| 10·0 | | 45·6 | 44·2 | |
| 10·0 | | 49·1 | 49·0 | |
| 9·4 | | 52·6 | 17·5 | 9·0 |
| 10·0 | | 57·2 | 9·0 | |
| 10·0 | | 58·6 | 22·9 | |
| 10·0 | 58 | 2·1 | 21·4 | |
| 9·5 | | 6·6 | 3·9 | |
| 10·0 | | 7·6 | 36·7 | |
| 9·8 | | 10·6 | 15·2 | |
| 9·8 | | 10·6 | 44·1 | |
| 9·8 | | 11·1 | 49·7 | |
| 9·0 | | 15·1 | 52·0 | 9·0 |
| 9·6 | | 16·1 | 48·1 | |
| 9·8 | | 19·1 | 48·6 | |
| 9·6 | | 19·1 | 19·7 | |
| 10·0 | | 30·1 | 39·9 | |
| 9·8 | | 33·6 | 27·1 | |
| 9·8 | | 43·6 | 7·9 | |
| 9·6 | | 45·6 | 30·9 | |
| 10·0 | | 47·1 | 47·7 | |
| 10·0 | | 47·6 | 11·2 | |
| 9·8 | | 51·2 | 24·6 | |
| 10·0 | | 53·1 | 45·9 | |
| 9·8 | | 55·1 | 14·4 | |
| 10·0 | | 58·1 | 37·9 | |
| 9·6 | | 59·1 | 48·0 | |
| 9·6 | 59 | 4·1 | 6·5 | |
| 9·6 | | 6·1 | 0·4 | |
| 9·4 | | 8·1 | 21·9 | |
| 9·8 | | 19·6 | 6·6 | |
| 9·8 | | 21·1 | 49·1 | |
| 9·8 | | 31·6 | 22·8 | |
| 9·8 | | 39·1 | 25·8 | |
| 10·0 | | 39·6 | 31·0 | |
| 9·8 | | 41·1 | 25·0 | |
| 10·0 | | 41·6 | 20·0 | |
| 10·0 | | 42·1 | 15·2 | |
| 10·0 | | 43·6 | 13·4 | |
| 9·6 | | 45·1 | 34·5 | |
| 9·8 | | 47·6 | 50·2 | |
| 9·8 | | 52·1 | 37·2 | |
| 9·8 | | 53·1 | 33·7 | |
| 10·0 | | 53·6 | 16·6 | |
| 10·0 | | 57·6 | 23·8 | |
| 10·0 | | 59·1 | 54·5 | |
| 9·4 | | 59·1 | 38·9 | |
| 9·4 | 0 | 4·6 | 22·1 | |
| 9·4 | | 11·6 | 3·2 | |
| 10·0 | | 15·6 | 33·2 | |
| 8·7 | | 19·1 | 11·4 | 9·0 |
| 10·0 | | 21·1 | 36·1 | |
| 9·4 | | 21·1 | 14·7 | 9·0 |
| 9·5 | | 24·6 | 20·1 | |
| 9·4 | | 32·2 | 58·8 | |
| 9·5 | | 34·1 | 15·1 | |
| 9·6 | | 38·6 | 4·2 | |
| 10·0 | | 40·1 | 13·4 | |

## 4201—4260.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 0 | 45·6 | 33·6 | |
| 9·8 | | 47·6 | 41·4 | |
| 9·6 | | 50·1 | 6·3 | |
| 9·8 | | 54·1 | 25·7 | |
| 9·4 | 1 | 1·6 | 32·4 | |
| 9·8 | | 6·1 | 20·2 | |
| 10·0 | | 9·1 | 15·5 | |
| 9·8 | | 11·1 | 23·0 | |
| 9·5 | | 14·6 | 33·1 | |
| 9·6 | | 17·6 | 44·5 | |
| 9·8 | | 18·6 | 57·5 | |
| 9·2 | | 19·1 | 19·0 | |
| 9·2 | | 19·6 | 5·7 | 9·5 |
| 9·8 | | 20·3 | 58·5 | |
| 9·4 | | 21·1 | 29·6 | 9·5 |
| 9·8 | | 22·5 | 28·3 | |
| 10·0 | | 29·5 | 33·5 | |
| 10·0 | | 29·5 | 24·6 | |
| 9·1 | | 31·0 | 17·0 | |
| 9·8 | | 34·0 | 1·5 | |
| 9·0 | | 53·5 | 34·8 | 9·0 |
| 9·8 | | 56·0 | 7·4 | |
| 9·8 | 2 | 0·0 | 50·6 | |
| 9·8 | | 12·5 | 34·0 | |
| 10·0 | | 15·5 | 34·8 | |
| 10·0 | | 19·3 | 38·6 | |
| 9·8 | | 30·0 | 35·5 | |
| 9·8 | | 31·3 | 20·3 | |
| 9·8 | | 31·5 | 30·2 | |
| 9·3 | | 36·5 | 6·7 | |
| 10·0 | | 41·5 | 40·6 | |
| 9·0 | | 47·0 | 51·4 | 9·0 |
| 9·8 | | 50·0 | 19·5 | |
| 10·0 | | 58·0 | 15·2 | |
| 10·0 | 3 | 0·5 | 49·0 | |
| 9·6 | | 9·0 | 44·2 | |
| 9·6 | | 9·5 | 47·3 | 9·0 |
| 7·8 | | 18·5 | 23·3 | 7·0 GSt |
| 9·5 | | 19·0 | 35·2 | |
| 10·0 | | 22·3 | 30·8 | |
| 10·0 | | 22·3 | 38·6 | |
| 10·0 | | 27·0 | 58·3 | |
| 9·8 | | 32·0 | 10·8 | |
| 9·4 | | 33·0 | 31·0 | |
| 9·4 | | 33·0 | 0·3 | |
| 9·4 | | 34·0 | 31·7 | |
| 8·2 | | 35·5 | 44·5 | 8·0 G |
| 9·4 | | 36·5 | 39·6 | |
| 10·0 | | 43·0 | 34·1 | |
| 10·0 | | 49·5 | 11·4 | |
| 9·1 | | 53·5 | 10·5 | |
| 10·0 | 4 | 11·0 | 36·2 | |
| 10·0 | | 12·5 | 16·2 | |
| 9·8 | | 18·5 | 46·4 | |
| 9·8 | | 20·0 | 3·2 | |
| 9·8 | | 21·0 | 17·8 | |
| 9·8 | | 27·5 | 9·3 | |
| 9·1 | | 28·0 | 32·2 | |
| 9·0 | | 28·2 | 0·1 | 9·0 |
| 9·8 | | 32·0 | 35·2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 50 | 62 | 8·0 |
| 11 | 0 | 64 | 8·1 |
| | 10 | 66 | 8·2 |

25 prec.

| | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | |
| 11 | 0 | 64 | 8·1 |
| | 10 | 66 | 8·2 |
| | 20 | 68 | 8·2 |
| | 30 | 70 | 8·3 |

## 4261—4320.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 4 | 32·0 | 39·0 | |
| 9·3 | | 36·0 | 56·2 | |
| 10·0 | | 38·5 | 50·9 | |
| 9·6 | | 49·5 | 27·8 | |
| 10·0 | | 52·0 | 15·2 | |
| 9·2 | 5 | 11·0 | 30·7 | 9·0 |
| 10·0 | | 11·0 | 17·4 | |
| 10·0 | | 21·0 | 15·1 | |
| 10·0 | | 22·1 | 58·7 | |
| 10·0 | | 23·0 | 35·1 | |
| 10·0 | | 25·0 | 15·3 | |
| 9·6 | | 26·5 | 38·0 | |
| 9·6 | | 27·0 | 32·0 | |
| 9·4 | | 28·5 | 18·6 | |
| 9·6 | | 29·0 | 40·6 | |
| 9·8 | | 31·0 | 6·1 | |
| 10·0 | | 37·5 | 31·9 | |
| 9·8 | | 42·0 | 6·5 | |
| 9·8 | | 42·5 | 36·0 | |
| 10·0 | | 46·2 | 59·7 | |
| 9·8 | | 48·0 | 52·3 | |
| 9·8 | | 51·0 | 57·8 | |
| 9·4 | | 54·5 | 43·5 | |
| 9·8 | | 56·5 | 38·1 | |
| 9·8 | | 59·0 | 12·9 | |
| 9·5 | 6 | 4·0 | 52·3 | |
| 9·5 | | 5·0 | 6·2 | 9·5 |
| 10·0 | | 5·5 | 39·7 | |
| 9·8 | | 16·0 | 44·6 | |
| 9·8 | | 21·0 | 35·2 | |
| 10·0 | | 32·5 | 20·7 | |
| 8·8 | | 36·5 | 29·2 | 8·8 |
| 9·8 | | 40·0 | 55·3 | |
| 9·5 | | 41·5 | 27·2 | |
| 9·6 | | 41·5 | 4·5 | |
| 9·8 | | 42·5 | 4·0 | |
| 10·0 | | 48·0 | 18·4 | |
| 9·8 | 7 | 1·0 | 3·2 | |
| 9·4 | | 2·5 | 25·4 | |
| 9·5 | | 10·0 | 39·0 | |
| 9·8 | | 12·5 | 4·3 | |
| 10·0 | | 14·5 | 11·1 | |
| 10·0 | | 15·3 | 58·0 | |
| 8·2 | | 15·5 | 15·4 | 8·0 |
| 10·0 | | 21·0 | 51·2 | |
| 9·4 | | 25·5 | 45·2 | |
| 8·8 | | 31·0 | 21·3 | 9·0 |
| 9·5 | | 36·2 | 2·6 | |
| 9·8 | | 41·2 | 10·1 | |
| 9·8 | | 45·5 | 4·7 | |
| 9·4 | | 46·0 | 20·0 | 9·0 |
| 10·0 | | 46·5 | 19·2 | |
| 9·4 | | 47·5 | 5·2 | |
| 9·8 | | 51·5 | 23·6 | |
| 9·8 | | 54·0 | 20·6 | |
| 9·8 | | 55·0 | 33·2 | |
| 8·3 | 8 | 1·0 | 22·3 | 8·0 GS |
| 10·0 | | 3·5 | 23·7 | |
| 10·0 | | 3·5 | 47·0 | |
| 9·0 | | 4·2 | 36·3 | 8·8 |

## 4321—4380.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·2 | 8 | 6·0 | 35·1 | 9·5 |
| 9·5 | | 6·5 | 4·9 | |
| 10·0 | | 10·0 | 32·4 | |
| 9·6 | | 11·0 | 50·5 | |
| 9·6 | | 12·0 | 46·0 | |
| 9·4 | | 14·0 | 23·3 | 9·0 |
| 9·6 | | 15·0 | 48·4 | |
| 9·6 | | 16·5 | 24·1 | |
| 9·6 | | 20·0 | 34·4 | 9·5 |
| 9·6 | | 21·0 | 7·3 | |
| 10·0 | | 23·5 | 47·4 | |
| 9·8 | | 28·5 | 42·0 | |
| 10·0 | | 29·0 | 4·4 | |
| 9·6 | | 50·5 | 53·7 | |
| 10·0 | | 57·0 | 8·2 | |
| 10·0 | 9 | 3·5 | 34·0 | |
| 9·0 | | 13·0 | 30·6 | 9·5 |
| 9·8 | | 18·5 | 41·0 | |
| 9·5 | | 19·5 | 55·9 | |
| 9·3 | | 21·5 | 49·9 | |
| 10·0 | | 24·0 | 12·7 | |
| 10·0 | | 25·5 | 5·6 | |
| 9·8 | | 28·5 | 6·2 | |
| 9·6 | | 39·0 | 25·3 | |
| 9·8 | | 39·0 | 37·9 | 9·5 |
| 10·0 | | 42·1 | 10·9 | |
| 10·0 | | 45·5 | 43·1 | |
| 10·0 | | 52·0 | 11·6 | |
| 9·8 | 10 | 2·0 | 56·8 | |
| 9·4 | | 3·0 | 50·3 | |
| 8·8 | | 5·0 | 58·2 | 8·5 |
| 7·7 | | 11·0 | 40·4 | 7·0 GSt |
| 9·8 | | 13·0 | 27·7 | |
| 9·5 | | 15·5 | 5·2 | |
| 9·8 | | 29·0 | 29·1 | |
| 10·0 | | 30·0 | 32·9 | |
| 9·6 | | 36·0 | 34·9 | 9·5 |
| 10·0 | | 38·0 | 23·1 | |
| 9·4 | | 41·0 | 22·0 | |
| 9·8 | | 46·5 | 36·5 | |
| 10·0 | | 49·0 | 36·0 | |
| 10·0 | | 49·5 | 55·0 | |
| 9·6 | 11 | 6·5 | 41·6 | |
| 9·2 | | 10·0 | 55·1 | 9·0 |
| 9·3 | | 10·3 | 0·6 | |
| 9·8 | | 14·0 | 47·3 | |
| 9·8 | | 17·0 | 28·3 | |
| 10·0 | | 18·0 | 8·3 | |
| 9·1 | | 31·0 | 47·3 | 8·8 |
| 9·6 | | 31·0 | 11·9 | |
| 9·8 | | 36·5 | 14·5 | |
| 9·2 | | 39·0 | 53·6 | |
| 9·8 | | 41·0 | 12·0 | |
| 9·8 | | 45·5 | 14·2 | |
| 9·8 | | 50·0 | 45·8 | |
| 9·4 | | 53·5 | 19·8 | |
| 9·4 | 12 | 0·5 | 17·7 | |
| 9·8 | | 1·0 | 32·3 | |
| 9·8 | | 2·5 | 8·0 | |
| 9·8 | | 3·0 | 41·1 | |

## 4381—4440.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 12 | 18·8 | 57·1 | |
| 9·6 | | 19·0 | 12·9 | |
| 10·0 | | 22·0 | 44·0 | |
| 9·6 | | 25·3 | 0·4 | |
| 9·8 | | 32·0 | 16·0 | |
| 9·6 | | 32·0 | 26·4 | |
| 9·6 | | 35·5 | 31·3 | |
| 9·4 | | 39·0 | 28·9 | |
| 9·8 | | 42·0 | 29·7 | |
| 9·4 | | 44·0 | 1·5 | |
| 9·8 | | 44·0 | 58·9 | |
| 10·0 | | 46·5 | 59·1 | |
| 10·0 | | 58·0 | 33·9 | |
| 10·0 | 13 | 1·0 | 16·0 | |
| 10·0 | | 5·0 | 15·0 | |
| 10·0 | | 19·0 | 44·5 | |
| 9·8 | | 20·0 | 51·5 | |
| 10·0 | | 24·0 | 27·6 | |
| 9·6 | | 28·5 | 27·2 | |
| 9·8 | | 30·5 | 14·8 | |
| 9·8 | | 37·0 | 22·0 | |
| 10·0 | | 38·5 | 43·0 | |
| 10·0 | | 39·5 | 11·4 | |
| 9·4 | | 42·0 | 28·2 | |
| 10·0 | | 44·5 | 32·0 | |
| 8·8 | | 48·0 | 17·1 | 8·5 |
| 9·1 | | 51·0 | 31·8 | 9·0 |
| 10·0 | | 54·0 | 58·9 | |
| 9·4 | 14 | 6·5 | 28·1 | 9·5 |
| 9·8 | | 13·0 | 45·2 | |
| 10·0 | | 19·4 | 59·0 | |
| 10·0 | | 28·8 | 32·7 | |
| 9·8 | | 36·3 | 1·0 | |
| 9·8 | | 42·3 | 4·1 | |
| 9·4 | | 48·3 | 8·3 | 9·0 |
| 9·0 | | 49·3 | 16·1 | 8·0 G |
| 9·8 | | 49·3 | 14·9 | |
| 9·4 | | 59·8 | 19·5 | |
| 9·8 | 15 | 0·3 | 4·7 | |
| 9·6 | | 0·3 | 10·2 | |
| 9·4 | | 8·8 | 20·0 | |
| 9·5 | | 13·8 | 50·8 | |
| 9·6 | | 14·8 | 28·2 | |
| 9·0 | | 18·3 | 17·7 | 9·0 |
| 9·4 | | 25·3 | 29·2 | |
| 9·8 | | 30·8 | 34·4 | |
| 10·0 | | 36·3 | 27·2 | |
| 10·0 | | 41·3 | 55·3 | |
| 9·8 | | 59·8 | 10·7 | |
| 9·0 | 16 | 2·3 | 42·9 | 9·0 |
| 9·8 | | 7·3 | 36·5 | |
| 9·8 | | 14·3 | 39·7 | |
| 9·8 | | 17·3 | 27·7 | |
| 9·8 | | 18·3 | 18·3 | |
| 9·5 | | 21·3 | 55·0 | |
| 9·8 | | 21·3 | 34·5 | |
| 10·0 | | 25·8 | 36·0 | |
| 10·0 | | 28·8 | 53·3 | |
| 10·0 | | 36·8 | 24·8 | |
| 9·6 | | 50·8 | 40·2 | |

## 4441—4500.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8·9 | 16 | 51·3 | 5·8 | 8·2 GS |
| 10·0 | | 57·3 | 20·0 | |
| 9·6 | | 59·7 | 1·0 | |
| 8·1 | 17 | 12·3 | 57·1 | |
| 9·6 | | 12·8 | 11·0 | |
| 9·1 | | 13·8 | 50·1 | 9·5 |
| 10·0 | | 22·8 | 36·2 | |
| 9·6 | | 25·3 | 26·7 | |
| 7·2 | | 27·8 | 5·7 | 6·5 GSctr |
| 9·6 | | 28·3 | 4·7 | |
| 9·8 | | 47·3 | 52·7 | |
| 9·6 | | 48·8 | 43·7 | |
| 9·6 | | 52·3 | 6·9 | |
| 9·6 | | 53·5 | 59·7 | |
| 9·8 | | 56·3 | 14·8 | |
| 8·9 | 18 | 5·8 | 0·3 | 8·5 |
| 9·6 | | 14·8 | 40·6 | |
| 9·4 | | 17·3 | 9·2 | |
| 9·6 | | 17·8 | 55·6 | |
| 8·8 | | 18·5 | 58·3 | 8·2 |
| 10·0 | | 20·8 | 10·3 | |
| 9·6 | | 24·3 | 5·6 | 9·5 |
| 9·0 | | 26·3 | 22·7 | 8·8 |
| 10·0 | | 31·3 | 35·7 | |
| 10·0 | | 32·3 | 29·1 | |
| 10·0 | | 41·3 | 15·1 | |
| 9·6 | | 42·3 | 12·3 | |
| 9·8 | | 43·3 | 32·2 | |
| 9·8 | | 44·3 | 26·4 | |
| 9·0 | 19 | 1·8 | 8·5 | 9·0 |
| 10·0 | | 2·3 | 51·6 | |
| 9·8 | | 7·3 | 27·1 | |
| 9·8 | | 8·3 | 38·4 | |
| 10·0 | | 11·8 | 19·0 | |
| 8·4 | | 20·3 | 6·8 | 8·2 G |
| 9·8 | | 22·8 | 17·9 | |
| 10·0 | | 23·3 | 54·0 | |
| 9·6 | | 24·3 | 9·9 | |
| 10·0 | | 28·8 | 52·1 | |
| 9·8 | | 29·5 | 58·9 | |
| 10·0 | | 30·8 | 54·1 | |
| 9·6 | | 31·3 | 8·2 | 9·0 G |
| 9·6 | | 35·3 | 8·7 | |
| 10·0 | | 38·8 | 55·3 | |
| 9·1 | | 38·8 | 43·3 | |
| 9·4 | | 39·8 | 52·6 | |
| 10·0 | | 39·8 | 13·0 | |
| 9·8 | | 44·8 | 22·4 | |
| 10·0 | | 51·8 | 53·4 | |
| 9·4 | | 54·8 | 36·0 | |
| 9·8 | | 57·0 | 58·1 | |
| 10·0 | | 58·8 | 56·1 | |
| 9·8 | 20 | 0·3 | 24·9 | |
| 10·0 | | 2·8 | 21·9 | |
| 10·0 | | 14·8 | 39·5 | |
| 9·6 | | 20·8 | 33·0 | |
| 9·6 | | 27·3 | 5·4 | |
| 10·0 | | 34·8 | 16·5 | |
| 9·6 | | 37·3 | 16·5 | |
| 9·8 | | 38·3 | 17·1 | |



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## 4501—4560.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 20 | 38·8 | 44·4 | |
| 9·8 | | 41·1 | 0·0 | |
| 10·0 | | 41·8 | 28·0 | |
| 10·0 | | 42·8 | 48·3 | |
| 9·8 | | 43·3 | 50·0 | |
| 9·4 | | 52·3 | 28·7 | |
| 10·0 | | 54·8 | 34·1 | |
| 9·6 | 21 | 4·8 | 41·7 | |
| 9·0 | | 14·8 | 21·1 | |
| 9·4 | | 15·8 | 29·9 | |
| 10·0 | | 25·3 | 11·8 | |
| 9·5 | | 30·8 | 20·9 | |
| 9·8 | | 30·8 | 38·4 | |
| 10·0 | | 46·8 | 24·1 | |
| 9·8 | 22 | 0·8 | 31·8 | |
| 9·4 | | 3·8 | 26·3 | |
| 9·8 | | 5·3 | 37·7 | |
| 9·0 | | 26·3 | 49·0 | 8·5 |
| 9·5 | | 26·8 | 5·8 | |
| 10·0 | | 28·8 | 27·4 | |
| 10·0 | | 39·3 | 42·2 | |
| 9·8 | | 41·3 | 31·1 | |
| 9·6 | | 43·8 | 1·0 | |
| 9·6 | 23 | 3·8 | 33·7 | |
| 9·6 | | 4·8 | 25·2 | |
| 9·2 | | 15·8 | 53·5 | |
| 9·6 | | 18·8 | 5·1 | |
| 9·6 | | 20·3 | 41·0 | |
| 9·4 | | 20·8 | 9·0 | 9·0 |
| 9·8 | | 20·8 | 48·4 | |
| 9·8 | | 27·5 | 59·9 | |
| 10·0 | | 27·8 | 43·2 | |
| 10·0 | | 33·8 | 10·9 | |
| 9·8 | | 37·3 | 22·6 | |
| 9·6 | | 38·8 | 28·0 | |
| 9·8 | | 40·8 | 12·4 | |
| 9·8 | | 43·3 | 8·1 | 9·5 |
| 9·5 | | 51·8 | 4·1 | |
| 8·4 | | 54·3 | 10·6 | 9·0 |
| 10·0 | | 58·8 | 17·6 | |
| 10·0 | 24 | 3·8 | 40·3 | |
| 9·8 | | 8·8 | 13·1 | |
| 9·6 | | 9·8 | 27·0 | |
| 10·0 | | 11·8 | 53·3 | |
| 9·8 | | 12·8 | 30·1 | |
| 9·6 | | 15·3 | 4·4 | |
| 10·0 | | 34·8 | 58·6 | |
| 10·0 | | 47·8 | 2·1 | |
| 9·6 | | 50·8 | 17·8 | |
| 9·8 | | 51·8 | 33·9 | |
| 9·4 | | 52·3 | 25·1 | |
| 9·4 | | 52·8 | 23·1 | |
| 10·0 | | 53·2 | 53·8 | 9·5 |
| 9·0 | | 54·8 | 26·8 | |
| 9·4 | | 57·3 | 56·1 | |
| 9·2 | | 57·5 | 57·4 | 9·5 |
| 10·0 | 25 | 1·8 | 41·9 | |
| 8·7 | | 6·3 | 12·6 | |
| 9·5 | | 6·3 | 32·9 | |
| 9·6 | | 15·3 | 16·4 | |

## 4561—4620.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 25 | 15·8 | 7·0 | |
| 10·0 | | 18·8 | 14·2 | |
| 9·8 | | 18·8 | 28·3 | |
| 8·8 | | 20·3 | 33·5 | |
| 9·4 | | 31·3 | 54·4 | |
| 10·0 | | 45·3 | 37·0 | |
| 9·8 | | 50·8 | 48·9 | |
| 9·8 | | 53·8 | 55·1 | |
| 9·6 | | 57·8 | 27·4 | |
| 10·0 | 26 | 4·3 | 47·4 | |
| 9·8 | | 8·3 | 6·9 | |
| 9·8 | | 9·8 | 22·4 | |
| 9·5 | | 9·8 | 47·9 | |
| 10·0 | | 10·3 | 42·9 | |
| 10·0 | | 14·8 | 0·2 | |
| 9·8 | | 29·8 | 0·3 | |
| 9·1 | | 30·8 | 44·9 | 9·0 |
| 10·0 | | 38·3 | 12·9 | |
| 9·4 | | 50·8 | 49·2 | 7·0 G |
| 9·6 | | 55·3 | 33·2 | |
| 10·0 | | 57·8 | 44·6 | |
| 9·6 | | 59·8 | 45·6 | |
| 9·0 | 27 | 0·0 | 59·3 | 9·0 |
| 9·4 | | 3·8 | 3·3 | 9·5 |
| 9·4 | | 7·3 | 6·2 | |
| 10·0 | | 11·8 | 49·9 | |
| 10·0 | | 20·8 | 41·3 | |
| 9·6 | | 22·8 | 35·8 | |
| 10·0 | | 24·3 | 50·9 | |
| 9·4 | | 24·6 | 6·9 | 9·5 |
| 9·2 | | 25·3 | 50·2 | 9·0 |
| 9·9 | | 34·3 | 38·9 | |
| 9·8 | | 41·3 | 25·5 | |
| 9·2 | | 42·8 | 34·8 | |
| 9·6 | | 45·3 | 11·8 | |
| 7·8 | | 49·0 | 57·3 | 8·5 GSt |
| 9·4 | | 50·8 | 13·2 | |
| 9·6 | | 54·8 | 55·3 | |
| 9·9 | 28 | 11·3 | 52·8 | |
| 8·9 | | 22·8 | 50·2 | |
| 9·8 | | 23·0 | 59·4 | 9·5 |
| 9·2 | | 29·3 | 47·0 | |
| 8·5 | | 29·3 | 56·2 | 8·0 GSt |
| 8·6 | | 45·3 | 27·6 | 8·0 |
| 8·8 | | 47·3 | 45·0 | |
| 9·8 | | 51·3 | 53·5 | |
| 9·2 | | 51·8 | 43·3 | |
| 9·8 | 29 | 1·3 | 18·8 | |
| 9·3 | | 3·8 | 54·8 | |
| 9·5 | | 5·3 | 45·2 | |
| 9·9 | | 5·3 | 24·2 | |
| 9·8 | | 9·8 | 8·2 | |
| 9·5 | | 11·3 | 51·3 | |
| 9·2 | | 11·3 | 43·5 | |
| 9·9 | | 23·8 | 24·4 | |
| 9·9 | | 27·8 | 20·9 | |
| 9·6 | | 32·3 | 56·3 | |
| 9·4 | | 41·4 | 6·4 | |
| 9·8 | | 46·4 | 19·9 | |
| 9·9 | | 49·4 | 33·9 | |

## 4621—4680.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·9 | 29 | 52·9 | 18·8 | |
| 9·3 | | 59·4 | 34·8 | |
| 9·9 | 30 | 5·9 | 24·5 | |
| 9·8 | | 7·4 | 8·9 | |
| 9·6 | | 19·4 | 4·5 | |
| 9·2 | | 20·9 | 47·9 | |
| 9·3 | | 22·9 | 47·6 | |
| 9·9 | | 27·4 | 27·9 | |
| 9·9 | | 28·9 | 40·9 | |
| 9·9 | | 34·9 | 55·6 | |
| 9·8 | | 41·9 | 19·4 | |
| 9·6 | | 52·1 | 59·3 | |
| 9·8 | | 53·9 | 45·0 | |
| 9·9 | | 54·4 | 45·6 | |
| 9·6 | | 54·6 | 59·6 | 9·0 |
| 9·8 | | 54·9 | 4·5 | |
| 9·8 | | 59·4 | 59·3 | |
| 9·9 | | 59·9 | 37·3 | |
| 9·9 | 31 | 10·4 | 19·5 | |
| 9·6 | | 10·4 | 55·7 | |
| 9·6 | | 10·9 | 20·0 | |
| 9·6 | | 15·4 | 46·6 | |
| 8·9 | | 17·4 | 5·2 | |
| 9·4 | | 27·9 | 54·8 | |
| 9·9 | | 29·8 | 57·0 | |
| 9·4 | | 31·4 | 13·9 | |
| 9·9 | | 33·9 | 39·4 | |
| 9·5 | | 49·4 | 45·1 | |
| 9·4 | | 56·9 | 16·6 | |
| 9·6 | | 58·9 | 26·0 | |
| 9·9 | 32 | 0·4 | 12·2 | |
| 9·2 | | 3·6 | 59·2 | |
| 8·8 | | 8·4 | 28·1 | 9·0 |
| 9·2 | | 17·0 | 22·5 | 8·5 |
| 9·4 | | 17·5 | 38·0 | |
| 9·6 | | 34·6 | 0·6 | |
| 9·8 | | 35·0 | 40·9 | |
| 9·5 | | 40·0 | 46·4 | |
| 9·4 | | 44·5 | 36·3 | |
| 9·0 | | 49·5 | 48·0 | |
| 8·9 | | 51·5 | 21·9 | 9·0 |
| 9·9 | | 58·0 | 7·8 | |
| 8·6 | 33 | 8·0 | 21·3 | 9·0 |
| 9·1 | | 19·5 | 30·9 | |
| 9·1 | | 31·5 | 40·5 | |
| 9·9 | | 34·0 | 25·4 | |
| 9·8 | | 36·4 | 2·6 | |
| 9·0 | | 37·5 | 34·1 | |
| 9·8 | | 39·5 | 35·6 | |
| 9·8 | | 41·5 | 46·1 | |
| 9·4 | | 42·0 | 17·3 | |
| 9·9 | | 55·0 | 16·7 | |
| 9·4 | | 55·0 | 35·6 | |
| 9·4 | | 55·5 | 31·9 | |
| 9·6 | | 59·5 | 42·9 | |
| 9·8 | 34 | 4·5 | 23·8 | |
| 9·8 | | 9·0 | 28·4 | |
| 9·5 | | 9·5 | 23·3 | |
| 9·8 | | 20·5 | 45·5 | |
| 9·6 | | 26·0 | 10·3 | |

## 4681—4740.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·9 | 34 | 28·0 | 2·2 | |
| 9·8 | | 34·0 | 0·2 | |
| 8·8 | | 40·0 | 59·5 | 8·5 |
| 9·6 | | 49·5 | 35·9 | |
| 9·3 | | 53·0 | 57·3 | |
| 9·6 | 35 | 0·5 | 3·2 | |
| 9·5 | | 1·0 | 37·9 | |
| 9·8 | | 4·5 | 8·5 | |
| 9·1 | | 9·5 | 54·7 | 8·5 G |
| 9·9 | | 9·5 | 30·6 | |
| 9·5 | | 13·2 | 27·8 | |
| 9·9 | | 14·5 | 58·0 | |
| 9·8 | | 20·2 | 16·1 | |
| 9·8 | | 21·9 | 8·7 | |
| 9·8 | | 22·2 | 3·6 | |
| 9·0 | | 24·9 | 1·8 | 9·5 |
| 9·9 | | 40·2 | 40·4 | |
| 9·4 | | 41·7 | 8·1 | |
| 8·9 | | 48·2 | 52·4 | 8·5 |
| 8·7 | | 52·0 | 57·8 | 9·0 |
| 9·8 | 36 | 0·2 | 35·6 | |
| 9·8 | | 6·2 | 43·3 | |
| 9·4 | | 9·2 | 40·4 | |
| 9·5 | | 9·7 | 10·6 | |
| 9·5 | | 16·2 | 17·1 | |
| 7·5 | | 16·7 | 52·3 | 7·5 GSt |
| 9·9 | | 16·9 | 4·9 | |
| 9·6 | | 22·9 | 39·7 | |
| 9·9 | | 26·7 | 3·3 | |
| 9·0 | | 36·2 | 53·9 | |
| 9·3 | | 37·7 | 31·1 | |
| 9·4 | | 45·2 | 5·5 | |
| 9·2 | | 46·2 | 40·9 | |
| 9·4 | | 48·2 | 35·9 | |
| 9·6 | | 49·2 | 53·7 | |
| 9·9 | | 55·2 | 7·2 | |
| 9·3 | 37 | 13·0 | 57·5 | 9·2 |
| 9·6 | | 16·2 | 24·9 | |
| 9·1 | | 24·7 | 29·5 | |
| 8·4 | | 33·7 | 4·7 | |
| 9·3 | | 34·7 | 58·2 | |
| 9·9 | | 41·7 | 42·4 | |
| 9·9 | | 43·2 | 42·0 | |
| 9·8 | | 49·7 | 13·7 | |
| 9·9 | | 51·7 | 18·4 | |
| 9·2 | | 54·2 | 27·1 | |
| 9·8 | | 54·7 | 57·0 | |
| 9·9 | | 55·2 | 17·7 | |
| 9·5 | | 59·2 | 45·4 | |
| 9·5 | 38 | 2·2 | 36·2 | |
| 9·9 | | 17·0 | 58·0 | |
| 9·8 | | 22·7 | 13·4 | |
| 9·9 | | 24·7 | 59·7 | |
| 9·4 | | 27·2 | 32·7 | |
| 9·9 | | 30·7 | 8·9 | |
| 9·9 | | 31·2 | 9·7 | |
| 9·8 | | 34·7 | 20·8 | |
| 9·8 | | 37·7 | 24·0 | |
| 9·4 | | 38·2 | 31·5 | |
| 9·9 | | 54·2 | 16·2 | |

25 prec.

| h m | a + s | δ − ′ |
|---|---|---|
| 11 20 | 68 | 8·2 |
| 30 | 70 | 8·3 |
| 40 | 72 | 8·3 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 11 | 30 | 70 | 8.3 |
| | 40 | 72 | 8.3 |
| | 50 | 75 | 8.3 |
| 12 | 0 | 77 | 8.4 |

## 4741—4800.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.5 | 38 | 55.7 | 30.6 | |
| 9.9 | 39 | 2.7 | 17.7 | |
| 9.4 | | 3.2 | 27.2 | |
| 9.8 | | 6.5 | 59.7 | |
| 9.9 | | 9.7 | 44.1 | |
| 9.8 | | 10.2 | 7.7 | |
| 9.6 | | 11.7 | 3.4 | |
| 9.9 | | 12.7 | 40.6 | |
| 9.9 | | 15.2 | 44.6 | |
| 9.2 | | 16.2 | 52.9 | |
| 9.4 | | 19.2 | 6.3 | |
| 9.4 | | 31.7 | 9.6 | |
| 9.9 | | 35.2 | 21.6 | |
| 9.8 | | 38.2 | 53.7 | |
| 9.5 | | 44.7 | 19.2 | |
| 9.4 | | 55.2 | 42.5 | |
| 9.9 | | 58.2 | 24.9 | |
| 8.6 | | 59.2 | 39.9 | |
| 9.8 | 40 | 0.2 | 24.9 | |
| 9.0 | | 2.2 | 44.7 | |
| 9.9 | | 5.7 | 25.8 | |
| 9.9 | | 13.2 | 8.5 | |
| 9.8 | | 14.2 | 32.1 | |
| 9.8 | | 17.2 | 15.1 | |
| 9.4 | | 25.2 | 45.8 | |
| 9.6 | | 28.2 | 34.6 | |
| 9.6 | | 33.2 | 47.3 | |
| 9.8 | | 35.2 | 54.9 | |
| 9.9 | | 39.7 | 10.1 | |
| 9.4 | | 39.7 | 6.1 | |
| 9.9 | | 41.5 | 20.3 | |
| 9.8 | | 46.7 | 31.2 | |
| 9.9 | | 53.2 | 38.1 | |
| 9.4 | | 56.2 | 54.1 | |
| 9.2 | | 56.5 | 57.0 | |
| 9.8 | 41 | 6.2 | 41.8 | |
| 9.6 | | 10.9 | 1.8 | |
| 9.9 | | 21.0 | 1.9 | |
| 9.9 | | 28.0 | 32.9 | |
| 9.5 | | 28.2 | 43.6 | |
| 9.6 | | 31.7 | 53.3 | |
| 9.3 | | 32.7 | 49.0 | |
| 9.9 | | 37.2 | 47.5 | |
| 9.8 | | 38.4 | 0.2 | |
| 9.9 | | 41.7 | 24.3 | |
| 9.6 | | 51.7 | 54.6 | |
| 9.8 | | 53.2 | 14.3 | |
| 9.9 | | 57.7 | 0.2 | |
| 8.6 | | 58.7 | 44.3 | |
| 9.9 | 42 | 1.2 | 16.9 | |
| 9.9 | | 16.2 | 13.5 | |
| 9.9 | | 17.7 | 24.7 | |
| 9.2 | | 23.2 | 17.7 | |
| 9.9 | | 30.2 | 49.6 | |
| 8.8 | | 33.7 | 48.5 | 9.0 |
| 9.5 | | 45.7 | 34.5 | |
| 9.9 | | 56.2 | 30.5 | |
| 9.9 | 43 | 2.2 | 2.1 | |
| 7.8 | | 4.5 | 59.8 | 7.0 GSt |
| 9.0 | | 7.7 | 8.9 | 9.0 |

## 4801—4860.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.9 | 43 | 9.2 | 43.5 | |
| 9.9 | | 11.0 | 25.7 | |
| 9.4 | | 11.7 | 26.9 | |
| 9.4 | | 17.7 | 10.0 | |
| 9.1 | | 24.2 | 8.4 | 9.5 |
| 9.6 | | 28.2 | 34.1 | |
| 9.0 | | 31.7 | 48.6 | 9.5 |
| 9.8 | | 38.2 | 59.5 | |
| 9.5 | | 40.2 | 49.1 | |
| 9.2 | | 50.2 | 50.6 | 9.0 |
| 9.9 | | 50.7 | 4.2 | |
| 9.0 | | 54.2 | 21.0 | 8.0 G |
| 9.5 | | 55.7 | 46.6 | |
| 9.2 | | 56.7 | 8.6 | 9.0 |
| 8.9 | | 58.7 | 37.4 | |
| 9.6 | | 59.7 | 44.8 | |
| 9.8 | | 59.7 | 55.8 | |
| 9.2 | 44 | 8.2 | 29.2 | 8.5 G |
| 9.4 | | 31.7 | 33.4 | |
| 9.3 | | 34.7 | 41.2 | |
| 9.6 | | 39.7 | 28.9 | |
| 9.9 | | 43.2 | 51.7 | |
| 9.8 | | 46.7 | 12.0 | |
| 9.3 | | 56.7 | 38.5 | 9.5 |
| 9.3 | | 58.7 | 33.9 | 8.5 |
| 9.9 | 45 | 9.7 | 19.2 | |
| 9.6 | | 16.7 | 53.4 | |
| 9.5 | | 16.7 | 21.0 | |
| 9.9 | | 32.2 | 57.2 | |
| 9.0 | | 32.7 | 55.3 | |
| 9.8 | | 36.7 | 35.1 | |
| 9.2 | | 40.7 | 47.6 | |
| 9.8 | | 41.2 | 42.2 | |
| 9.4 | | 42.7 | 21.1 | |
| 9.3 | | 58.2 | 25.2 | |
| 7.0 | | 59.7 | 17.6 | 6.0 GScgt |
| 9.6 | 46 | 3.8 | 18.0 | |
| 9.5 | | 5.7 | 42.7 | |
| 9.8 | | 10.7 | 8.9 | |
| 9.9 | | 11.7 | 9.2 | |
| 8.6 | | 14.7 | 32.2 | 9.0 |
| 9.9 | | 26.7 | 18.8 | |
| 9.8 | | 28.7 | 51.4 | |
| 9.6 | | 30.2 | 50.1 | |
| 9.5 | | 38.2 | 8.1 | |
| 9.6 | | 43.4 | 1.2 | |
| 9.5 | | 44.7 | 12.5 | |
| 9.2 | | 47.7 | 20.8 | 9.0 |
| 8.6 | | 55.4 | 2.0 | 8.5 |
| 9.8 | | 55.7 | 38.0 | |
| 9.9 | | 59.2 | 54.8 | |
| 8.9 | 47 | 0.5 | 57.2 | |
| 9.9 | | 4.7 | 22.6 | |
| 9.8 | | 12.9 | 1.2 | |
| 9.9 | | 25.7 | 33.2 | |
| 9.3 | | 30.7 | 32.2 | |
| 9.8 | | 36.7 | 54.6 | |
| 9.2 | | 38.2 | 26.6 | |
| 8.8 | | 44.2 | 9.9 | 9.0 |
| 9.3 | | 53.2 | 21.9 | |

## 4861—4920.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 7.5 | 47 | 58.2 | 42.8 | GStr |
| 9.6 | 48 | 5.7 | 26.3 | |
| 8.5 | | 12.2 | 16.4 | 7.5 GSg |
| 9.6 | | 13.2 | 45.9 | |
| 9.8 | | 22.2 | 7.5 | |
| 9.9 | | 31.7 | 45.2 | |
| 9.4 | | 38.7 | 10.7 | 9.5 |
| 9.5 | | 39.7 | 42.6 | |
| 9.9 | | 44.2 | 41.2 | |
| 9.9 | | 47.7 | 51.2 | |
| 9.8 | | 51.7 | 31.8 | |
| 9.8 | | 58.2 | 18.1 | |
| 9.9 | | 58.7 | 35.9 | |
| 9.4 | 49 | 3.7 | 13.1 | 9.5 |
| 8.8 | | 7.7 | 38.7 | |
| 9.6 | | 8.2 | 5.9 | |
| 9.9 | | 10.7 | 2.6 | |
| 8.8 | | 13.7 | 54.2 | |
| 9.8 | | 15.2 | 50.0 | |
| 9.9 | | 24.6 | 5.9 | |
| 9.2 | | 24.7 | 52.2 | |
| 9.5 | | 25.2 | 2.6 | |
| 9.5 | | 25.7 | 24.5 | |
| 9.9 | | 28.2 | 27.1 | |
| 9.6 | | 33.0 | 58.3 | |
| 8.8 | | 33.7 | 31.6 | |
| 8.9 | | 39.7 | 3.6 | 9.5 |
| 9.8 | | 41.7 | 9.5 | |
| 9.3 | | 44.2 | 41.2 | |
| 9.8 | 50 | 5.7 | 13.7 | |
| 9.3 | | 9.7 | 25.4 | |
| 9.4 | | 13.7 | 24.6 | |
| 9.8 | | 18.2 | 29.0 | |
| 9.4 | | 21.2 | 40.0 | |
| 8.9 | | 22.2 | 13.7 | |
| 9.9 | | 32.7 | 19.7 | |
| 9.9 | | 41.2 | 9.9 | |
| 9.6 | | 42.7 | 54.3 | |
| 9.5 | | 43.2 | 48.2 | |
| 9.3 | | 48.7 | 3.8 | |
| 9.9 | | 50.2 | 6.2 | |
| 9.9 | | 58.2 | 46.5 | |
| 9.4 | | 59.7 | 47.3 | |
| 9.9 | 51 | 0.7 | 26.5 | |
| 9.5 | | 2.2 | 40.2 | |
| 9.2 | | 11.2 | 40.9 | |
| 9.8 | | 11.9 | 2.8 | |
| 9.8 | | 15.7 | 50.9 | |
| 9.9 | | 20.2 | 40.0 | |
| 9.8 | | 20.7 | 33.1 | |
| 9.9 | | 22.2 | 16.0 | |
| 9.8 | | 32.2 | 20.1 | |
| 9.9 | | 37.4 | 59.7 | |
| 8.5 | | 41.7 | 10.1 | GSt |
| 9.4 | | 47.7 | 56.1 | |
| 9.9 | | 56.2 | 27.4 | |
| 9.3 | 52 | 5.2 | 8.7 | |
| 9.5 | | 11.2 | 47.4 | |
| 9.8 | | 12.2 | 53.9 | |
| 9.3 | | 18.7 | 35.2 | |

## 4921—4980.

| mag. | 11h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.3 | 52 | 20.7 | 31.5 | |
| 9.8 | | 24.7 | 7.3 | |
| 9.2 | | 39.7 | 53.4 | |
| 9.9 | | 39.7 | 31.7 | |
| 9.9 | | 41.7 | 13.0 | |
| 7.6 | 53 | 3.7 | 28.2 | GStr |
| 9.2 | | 10.7 | 24.3 | |
| 9.8 | | 10.7 | 0.9 | |
| 9.3 | | 13.7 | 5.5 | |
| 9.9 | | 18.7 | 59.8 | |
| 9.6 | | 25.7 | 55.1 | |
| 9.6 | | 30.7 | 52.2 | |
| 9.9 | | 41.2 | 16.5 | |
| 9.9 | | 43.7 | 57.4 | |
| 9.4 | | 45.7 | 47.6 | |
| 9.9 | | 45.7 | 3.5 | |
| 9.3 | | 48.2 | 6.7 | |
| 8.7 | | 49.7 | 25.1 | |
| 9.9 | | 51.7 | 22.5 | |
| 9.3 | | 52.7 | 59.6 | |
| 8.9 | | 54.2 | 45.8 | 9.0 |
| 9.8 | 54 | 0.2 | 46.9 | |
| 9.0 | | 13.2 | 13.4 | |
| 9.1 | | 18.2 | 55.4 | 8.5 G |
| 9.8 | | 21.2 | 52.7 | |
| 9.3 | | 23.2 | 2.3 | |
| 9.3 | | 24.2 | 16.0 | |
| 9.6 | | 26.7 | 17.6 | |
| 9.8 | | 28.7 | 40.7 | |
| 9.9 | | 29.7 | 27.0 | |
| 9.6 | | 37.2 | 52.7 | |
| 9.9 | | 44.2 | 35.1 | |
| 9.5 | | 44.2 | 10.1 | |
| 7.0 | 55 | 8.2 | 48.5 | 6.5 GSt |
| 9.6 | | 10.7 | 14.5 | |
| 9.5 | | 11.2 | 53.8 | |
| 9.3 | | 17.7 | 49.4 | 9.5 |
| 9.4 | | 25.7 | 24.1 | |
| 9.6 | | 31.7 | 0.1 | |
| 9.9 | | 35.2 | 37.2 | |
| 9.9 | | 38.2 | 37.2 | |
| 9.3 | | 43.7 | 11.8 | |
| 9.9 | | 51.2 | 36.2 | |
| 9.2 | 56 | 3.7 | 29.8 | |
| 9.4 | | 11.2 | 54.5 | |
| 9.9 | | 30.7 | 25.5 | |
| 9.6 | | 36.7 | 31.1 | |
| 8.1 | | 37.1 | 33.7 | GSt |
| 9.9 | | 39.1 | 5.9 | |
| 9.9 | | 46.6 | 47.4 | |
| 9.9 | | 55.1 | 12.1 | |
| 9.9 | | 58.6 | 40.0 | |
| 9.9 | 57 | 1.1 | 59.9 | |
| 9.9 | | 4.6 | 36.3 | |
| 9.6 | | 7.1 | 22.7 | |
| 8.0 | | 14.1 | 53.8 | 8.5 |
| 9.9 | | 17.6 | 33.6 | |
| 9.1 | | 21.6 | 45.1 | |
| 9.6 | | 27.1 | 23.5 | |
| 9.8 | | 29.1 | 33.3 | |



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## 4981—5040.

| mag. | 11h.–12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.9 | 57 | 29.6 | 32.5 | |
| 9.9 | | 33.1 | 4.7 | |
| 9.4 | | 35.6 | 44.3 | |
| 7.7 | | 50.1 | 40.1 | 8.0 GSt |
| 9.4 | | 52.1 | 20.0 | |
| 9.4 | | 55.6 | 16.3 | |
| 9.4 | | 57.6 | 27.9 | |
| 9.4 | 58 | 4.1 | 7.5 | |
| 9.8 | | 5.0 | 30.2 | |
| 8.4 | | 10.9 | 58.1 | 9.0 |
| 9.6 | | 12.1 | 20.5 | |
| 9.8 | | 12.1 | 23.4 | |
| 9.9 | | 17.1 | 35.5 | |
| 8.4 | | 18.1 | 30.1 | 9.0 |
| 9.8 | | 22.6 | 38.9 | |
| 9.8 | | 33.6 | 51.5 | |
| 9.8 | | 35.6 | 49.0 | |
| 9.9 | | 38.6 | 29.7 | |
| 9.9 | | 57.1 | 12.8 | |
| 9.8 | 59 | 0.6 | 43.9 | |
| 9.8 | | 9.0 | 10.0 | |
| 8.9 | | 10.6 | 26.7 | 9.5 |
| 9.8 | | 12.3 | 17.5 | |
| 9.9 | | 33.3 | 54.6 | |
| 9.8 | | 41.9 | 58.1 | |
| 9.6 | | 42.1 | 44.9 | |
| 9.6 | | 44.6 | 42.3 | |
| 9.6 | | 46.6 | 20.5 | |
| 9.9 | | 50.5 | 11.4 | |
| 9.3 | | 50.5 | 13.3 | |
| 9.9 | | 53.5 | 26.7 | |
| 9.9 | | 59.5 | 19.9 | |
| 9.2 | 0 | 12.5 | 51.0 | |
| 9.9 | | 14.5 | 26.2 | |
| 8.8 | | 23.3 | 12.0 | |
| 9.2 | | 26.8 | 36.5 | |
| 9.9 | | 37.5 | 29.4 | |
| 9.4 | | 39.1 | 45.5 | |
| 9.9* | | 39.6 | 27.9 | |
| 9.2 | | 40.1 | 16.3 | |
| 9.4 | | 45.1 | 3.7 | |
| 8.8 | | 50.8 | 52.0 | 8.5 |
| 9.9 | | 59.6 | 35.0 | |
| 9.8 | 1 | 5.6 | 17.6 | |
| 9.9 | | 13.1 | 44.6 | |
| 9.9 | | 16.6 | 46.5 | |
| 9.3 | | 19.6 | 25.0 | 9.5 |
| 9.7 | | 21.1 | 14.6 | |
| 9.9 | | 45.6 | 17.2 | |
| 8.8 | | 56.1 | 32.8 | 9.0 |
| 9.9 | | 56.8 | 8.8 | |
| 9.9 | 2 | 2.8 | 59.4 | |
| 9.2 | | 20.6 | 42.8 | |
| 9.7 | | 25.1 | 13.5 | |
| 9.8 | | 25.6 | 52.2 | |
| 9.9 | | 27.8 | 11.3 | |
| 9.9 | | 33.8 | 58.6 | |
| 9.6 | | 37.1 | 28.0 | |
| 9.2 | | 49.6 | 54.7 | 9.5 |
| 9.6 | | 53.1 | 12.0 | |

## 5041—5100.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.9 | 2 | 53.1 | 8.3 | |
| 9.9 | | 54.6 | 3.4 | |
| 9.6 | | 54.6 | 51.0 | |
| 9.6 | 3 | 1.6 | 49.2 | |
| 9.8 | | 2.8 | 4.7 | |
| 9.7 | | 3.1 | 27.1 | |
| 9.7 | | 5.1 | 36.2 | |
| 9.8 | | 13.1 | 51.0 | |
| 9.9 | | 18.1 | 34.8 | |
| 9.1 | | 26.1 | 19.2 | |
| 9.2 | | 26.1 | 27.6 | |
| 9.8 | | 28.6 | 36.2 | |
| 9.0 | | 31.1 | 13.0 | |
| 9.9 | | 33.1 | 30.8 | |
| 9.0 | | 38.1 | 17.6 | |
| 9.8 | | 40.8 | 16.4 | |
| 9.9 | | 45.1 | 56.6 | |
| 9.6 | | 47.6 | 16.9 | |
| 8.8 | | 50.6 | 15.6 | |
| 9.7 | | 53.1 | 57.8 | |
| 9.3 | | 55.6 | 18.1 | |
| 9.9 | 4 | 1.6 | 27.0 | |
| 9.9 | | 4.1 | 20.7 | |
| 8.4 | | 12.6 | 0.7 | 8.2 |
| 9.2 | | 22.6 | 38.4 | |
| 8.6 | | 24.9 | 0.0 | 8.2 |
| 9.8 | | 28.1 | 0.4 | 10.0 |
| 9.1 | | 30.7 | 13.7 | |
| 9.8 | | 31.2 | 45.9 | |
| 9.6 | | 41.7 | 11.9 | |
| 9.7 | | 45.7 | 40.3 | |
| 9.9 | | 47.8 | 25.8 | |
| 9.9 | | 50.2 | 38.1 | |
| 9.4 | | 52.2 | 34.3 | |
| 9.9 | | 53.7 | 53.9 | |
| 9.9 | | 55.3 | 58.0 | |
| 9.0 | | 56.2 | 5.5 | 8.5 |
| 9.4 | 5 | 0.5 | 57.5 | 9.5 |
| 9.8 | | 12.2 | 45.1 | |
| 9.0 | | 14.7 | 15.6 | |
| 9.9 | | 18.7 | 33.0 | |
| 9.4 | | 21.7 | 21.5 | |
| 9.4 | | 23.7 | 17.8 | |
| 9.8 | | 27.8 | 35.8 | |
| 9.6 | | 31.4 | 2.0 | |
| 9.9 | | 31.7 | 37.2 | |
| 9.9 | | 40.7 | 9.5 | |
| 9.8 | | 46.2 | 27.6 | |
| 9.4 | | 50.7 | 51.8 | |
| 9.4 | | 51.7 | 41.4 | |
| 9.9 | 6 | 1.2 | 11.7 | |
| 9.9 | | 13.7 | 18.0 | |
| 9.8 | | 14.2 | 5.5 | |
| 9.4 | | 17.2 | 7.5 | |
| 9.3 | | 29.7 | 29.5 | |
| 9.4 | | 30.7 | 17.8 | |
| 9.6 | | 38.7 | 39.2 | |
| 9.9 | | 44.8 | 6.9 | |
| 8.6 | | 47.7 | 11.8 | 9.0 |
| 9.0 | | 52.2 | 38.9 | |

## 5101—5160.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 6 | 59.7 | 4.8 | 9.2 |
| 9.9 | 7 | 3.2 | 9.3 | |
| 9.9 | | 5.7 | 11.8 | |
| 9.4 | | 8.2 | 53.2 | |
| 9.6 | | 16.7 | 19.9 | |
| 9.6 | | 17.7 | 29.6 | |
| 9.9 | | 29.7 | 44.2 | |
| 9.3 | | 44.7 | 3.8 | |
| 9.0 | | 46.7 | 10.9 | 9.0 |
| 9.9 | | 52.7 | 21.7 | |
| 9.2 | | 53.2 | 29.3 | |
| 9.7 | 8 | 3.3 | 31.7 | |
| 8.4 | | 9.8 | 5.0 | 8.0 G |
| 9.8 | | 12.3 | 3.9 | |
| 9.6 | | 13.3 | 9.4 | |
| 9.8 | | 16.6 | 2.4 | |
| 9.9 | | 24.8 | 25.2 | |
| 9.9 | | 39.3 | 18.6 | |
| 9.4 | | 44.3 | 20.3 | |
| 9.9 | | 51.8 | 35.9 | |
| 9.9 | | 56.8 | 9.9 | |
| 9.9 | 9 | 4.8 | 46.2 | |
| 9.8 | | 9.8 | 35.2 | |
| 9.9 | | 11.8 | 37.1 | |
| 9.9 | | 12.8 | 10.8 | |
| 9.6 | | 13.3 | 23.9 | |
| 9.8 | | 19.3 | 37.8 | |
| 9.3 | | 23.8 | 33.5 | |
| 9.6 | | 25.3 | 46.3 | |
| 9.7 | | 25.3 | 50.6 | |
| 9.4 | | 31.8 | 13.1 | |
| 9.6 | | 37.8 | 18.5 | |
| 9.6 | | 48.8 | 43.3 | |
| 9.7 | | 48.8 | 19.0 | |
| 9.9 | | 59.8 | 54.3 | |
| 9.4 | 10 | 9.3 | 34.4 | |
| 9.1 | | 21.8 | 8.0 | |
| 9.8 | | 22.3 | 10.0 | |
| 9.8 | | 23.3 | 12.5 | ? |
| 9.4 | | 32.3 | 47.7 | |
| 9.2 | | 38.8 | 47.7 | |
| 9.7 | | 39.3 | 15.5 | |
| 8.8 | | 40.3 | 26.5 | |
| 9.8 | | 52.3 | 50.9 | |
| 9.6 | | 53.8 | 0.0 | |
| 9.4 | | 56.3 | 39.0 | |
| 9.9 | 11 | 11.3 | 41.1 | |
| 9.4 | | 11.8 | 37.7 | |
| 8.8 | | 32.3 | 31.9 | 9.0 G |
| 9.9 | | 40.6 | 59.3 | |
| 9.6 | | 45.8 | 13.7 | |
| 9.6 | | 49.3 | 30.7 | |
| 9.6 | | 53.3 | 51.4 | |
| 9.4 | | 56.8 | 49.9 | |
| 9.7 | 12 | 0.3 | 6.9 | |
| 9.4 | | 2.8 | 52.9 | |
| 9.7 | | 10.8 | 4.9 | |
| 9.3 | | 16.8 | 55.7 | |
| 9.2 | | 16.8 | 46.2 | |
| 9.4 | | 28.3 | 37.7 | |

## 5161—5220.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.7 | 12 | 30.3 | 16.5 | |
| 8.8 | | 35.8 | 17.0 | 9.0 |
| 9.7 | | 39.3 | 32.9 | |
| 9.4 | | 50.8 | 57.1 | |
| 9.4 | 13 | 1.0 | 57.7 | |
| 9.7 | | 2.3 | 21.9 | |
| 9.8 | | 16.3 | 48.2 | |
| 9.6 | | 22.8 | 35.5 | |
| 7.9 | | 23.8 | 1.5 | 8.5 G |
| 9.9 | | 30.3 | 10.5 | |
| 9.4 | | 39.8 | 4.5 | |
| 9.7 | | 41.8 | 6.9 | |
| 8.6 | | 50.3 | 0.9 | 8.2 |
| 9.7 | | 53.8 | 24.1 | |
| 9.8 | | 57.3 | 8.5 | |
| 9.1 | 14 | 3.8 | 10.7 | |
| 8.8 | | 5.3 | 16.1 | |
| 9.9 | | 9.4 | 30.2 | |
| 9.9 | | 10.3 | 9.3 | |
| 9.9 | | 12.3 | 43.7 | |
| 9.8 | | 16.8 | 1.1 | |
| 9.6 | | 23.8 | 22.3 | |
| 9.4 | | 26.1 | 58.5 | |
| 8.0 | | 28.3 | 4.9 | 8.2 G |
| 9.6 | | 28.4 | 33.2 | |
| 8.3 | | 28.8 | 36.5 | |
| 9.7 | | 38.8 | 45.9 | |
| 9.6 | | 39.8 | 18.5 | |
| 8.5 | | 40.8 | 51.5 | |
| 9.7 | | 42.1 | 58.3 | |
| 9.1 | | 42.3 | 6.7 | 9.2 |
| 9.8 | | 51.3 | 27.9 | |
| 8.8 | 15 | 9.3 | 36.9 | |
| 8.4 | | 12.3 | 21.2 | 8.5 GS |
| 9.2 | | 20.8 | 33.3 | |
| 9.2 | | 28.8 | 11.3 | 9.0 |
| 9.4 | | 32.3 | 21.6 | |
| 9.7 | | 41.8 | 28.9 | |
| 9.8 | | 53.4 | 59.6 | |
| 9.9 | | 54.3 | 48.0 | |
| 9.2 | | 55.8 | 13.8 | 9.0 |
| 5.5 | 16 | 3.1 | 59.0 | 6.5 GSct |
| 9.7 | | 5.3 | 6.4 | |
| 9.8 | | 12.8 | 17.2 | |
| 9.1 | | 16.3 | 15.1 | 9.5 |
| 9.8 | | 37.8 | 43.8 | |
| 8.8 | | 41.8 | 5.0 | 9.0 |
| 9.9 | | 43.3 | 50.1 | |
| 9.1 | | 55.8 | 43.8 | |
| 9.9 | | 56.3 | 43.9 | |
| 9.8 | 17 | 0.3 | 26.8 | |
| 9.4 | | 6.8 | 50.8 | |
| 9.6 | | 17.8 | 44.9 | |
| 9.3 | | 21.3 | 37.3 | |
| 9.7 | | 26.7 | 45.0 | |
| 9.6 | | 28.3 | 48.1 | |
| 9.9 | | 49.8 | 9.3 | |
| 9.4 | | 53.8 | 31.1 | |
| 9.9 | | 58.3 | 22.3 | |
| 9.8 | 18 | 2.8 | 9.3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 50 | 75 | 8.3 |
| 12 | 0 | 77 | 8.4 |
| | 10 | 79 | 8.3 |
| | 20 | 81 | 8.3 |



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| 25 prec. | | a + | δ − |
|---|---|---|---|
| h | m | s | |
| 12 | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |
| | 30 | 83 | 8·3 |
| | 40 | 86 | 8·2 |
| | 50 | 88 | 8·2 |

## 5221—5280.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 18 | 26·1 | 57·4 | S |
| 9·9 | | 32·8 | 24·6 | |
| 9·9 | | 36·3 | 27·5 | |
| 9·9 | | 42·8 | 17·6 | |
| 8·2 | | 50·3 | 38·4 | 8·0 |
| 9·6 | | 53·3 | 32·8 | |
| 9·7 | | 59·8 | 12·7 | |
| 9·2 | 19 | 0·3 | 30·2 | 9·0 |
| 9·4 | | 12·3 | 4·6 | |
| 9·7 | | 16·8 | 3·0 | |
| 9·3 | | 23·8 | 51·6 | |
| 9·9 | | 28·8 | 17·2 | |
| 9·4 | | 29·3 | 36·6 | |
| 9·9 | | 33·3 | 22·3 | |
| 9·9 | | 34·3 | 3·8 | |
| 9·9 | | 37·3 | 22·0 | |
| 9·4 | | 38·8 | 43·8 | |
| 9·9 | | 40·3 | 8·0 | |
| 9·4 | | 43·8 | 45·8 | |
| 9·3 | | 43·8 | 36·6 | |
| 9·4 | 20 | 1·3 | 46·8 | |
| 8·8 | | 3·3 | 54·6 | |
| 9·6 | | 12·8 | 49·3 | |
| 9·3 | | 24·8 | 55·9 | |
| 9·7 | | 24·8 | 58·6 | |
| 9·7 | | 25·8 | 33·2 | |
| 9·8 | | 47·8 | 49·4 | |
| 9·8 | 21 | 13·8 | 8·0 | |
| 8·8 | | 41·8 | 20·2 | 9·0 |
| 9·9 | | 48·8 | 43·0 | |
| 9·4 | | 50·8 | 45·2 | |
| 9·6 | 22 | 7·4 | 2·0 | |
| 9·9 | | 18·8 | 41·2 | |
| 9·9 | | 22·3 | 34·0 | |
| 8·2 | | 24·8 | 19·2 | 9·0 |
| 9·9 | | 39·3 | 41·6 | |
| 9·4 | | 40·8 | 53·0 | |
| 9·3 | | 44·3 | 43·2 | |
| 9·7 | 23 | 16·8 | 42·4 | |
| 8·8 | | 43·3 | 21·4 | 9·0 |
| 9·0 | | 43·8 | 54·4 | |
| 9·4 | | 46·8 | 51·0 | |
| 9·1 | | 50·3 | 43·2 | |
| 9·4 | | 51·8 | 11·0 | |
| 9·8 | | 56·3 | 27·0 | |
| 9·6 | 24 | 3·3 | 15·4 | |
| 9·7 | | 3·5 | 58·6 | |
| 9·7 | | 11·3 | 47·7 | |
| 9·6 | | 11·6 | 1·0 | |
| 9·7 | | 13·3 | 56·7 | |
| 9·7 | | 13·8 | 29·0 | |
| 4·8 | | 13·8 | 24·8 | 2·5 GStrλ |
| 9·8 | | 21·3 | 32·0 | |
| 7·3 | | 21·8 | 23·4 | 7·5 GS |
| 8·8 | | 28·8 | 17·2 | 8·5 G |
| 9·0 | | 32·3 | 24·4 | 9·0 |
| 9·8 | | 40·8 | 18·3 | |
| 9·8 | | 42·8 | 13·4 | |
| 9·9 | | 48·3 | 25·8 | |
| 9·9 | | 51·3 | 43·0 | |

## 5281—5340.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·2 | 24 | 54·3 | 56·8 | |
| 9·8 | 25 | 0·3 | 21·8 | |
| 9·9 | | 0·3 | 29·8 | |
| 9·9 | | 6·3 | 59·0 | |
| 8·4 | | 11·8 | 39·0 | |
| 9·7 | | 15·8 | 5·4 | |
| 9·6 | | 19·6 | 57·0 | |
| 9·2 | | 23·8 | 59·7 | |
| 9·9 | | 30·8 | 58·0 | |
| 9·1 | | 33·4 | 39·0 | 8·5 |
| 9·4 | | 33·8 | 28·9 | |
| 9·2 | | 46·3 | 5·0 | 9·0 |
| 9·9 | | 53·5 | 57·8 | |
| 9·9 | | 55·8 | 39·1 | |
| 9·9 | 26 | 0·3 | 22·0 | |
| 8·3 | | 3·8 | 33·4 | 8·2 |
| 9·6 | | 4·8 | 15·7 | |
| 9·4 | | 9·3 | 19·0 | |
| 9·8 | | 10·3 | 17·6 | |
| 9·9 | | 13·3 | 35·1 | |
| 9·4 | | 17·8 | 4·0 | |
| 9·4 | | 18·8 | 30·4 | |
| 9·4 | | 21·3 | 27·2 | 8·8 |
| 9·9 | | 29·8 | 18·8 | |
| 9·8 | | 32·8 | 8·9 | |
| 9·2 | | 33·8 | 38·9 | |
| 9·9 | | 36·6 | 32·7 | |
| 9·9 | | 51·8 | 15·6 | |
| 9·2 | | 53·8 | 59·2 | 8·8 |
| 9·9 | 27 | 0·6 | 38·1 | |
| 8·6 | | 3·8 | 50·5 | 8·8 |
| 9·9 | | 13·8 | 55·0 | |
| 9·3 | | 16·3 | 16·1 | |
| 9·9 | | 22·6 | 40·8 | |
| 9·9 | | 26·3 | 16·0 | |
| 9·9 | | 27·8 | 46·7 | |
| 9·4 | | 53·3 | 16·9 | |
| 9·6 | | 53·8 | 37·8 | |
| 9·4 | | 57·1 | 2·4 | 9·0 |
| 9·4 | | 58·3 | 21·4 | |
| 9·6 | 28 | 0·3 | 37·9 | |
| 9·6 | | 3·8 | 57·3 | |
| 9·6 | | 8·8 | 21·9 | |
| 9·9 | | 12·6 | 53·1 | |
| 9·9 | | 15·0 | 58·9 | |
| 9·9 | | 26·8 | 19·1 | |
| 9·7 | | 30·3 | 55·2 | |
| 9·4 | | 31·8 | 9·4 | |
| 9·9 | | 36·8 | 56·1 | |
| 9·9 | | 37·8 | 18·9 | |
| 9·9 | | 56·3 | 45·0 | |
| 9·4 | 29 | 0·3 | 7·6 | |
| 9·4 | | 2·3 | 41·6 | |
| 8·8 | | 3·3 | 46·1 | |
| 9·7 | | 13·3 | 46·8 | |
| 9·6 | | 13·6 | 28·0 | |
| 9·1 | | 13·8 | 10·9 | |
| 9·8 | | 17·8 | 39·7 | |
| 9·4 | | 21·8 | 38·8 | |
| 9·3 | | 26·8 | 16·5 | |

## 5341—5400.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·2 | 29 | 31·8 | 50·6 | |
| 9·4 | | 32·8 | 54·1 | |
| 9·2 | | 43·3 | 43·6 | |
| 9·6 | | 58·3 | 44·9 | |
| 9·2 | 30 | 12·3 | 53·0 | |
| 8·2 | | 15·8 | 6·1 | 8·5 G |
| 9·3 | | 17·8 | 33·9 | 9·0 |
| 9·7 | | 20·8 | 48·3 | |
| 9·9 | | 26·8 | 46·1 | |
| 9·1 | | 36·8 | 27·1 | |
| 9·2 | | 44·3 | 11·9 | |
| 8·8 | | 48·8 | 39·7 | 8·0 G |
| 9·9 | | 56·8 | 53·3 | |
| 9·8 | 31 | 8·8 | 4·9 | |
| 9·4 | | 9·3 | 4·0 | |
| 9·8 | | 11·3 | 0·9 | |
| 9·1 | | 15·8 | 29·2 | |
| 9·6 | | 18·8 | 49·0 | |
| 9·3 | | 20·3 | 49·7 | |
| 9·8 | | 24·3 | 23·5 | |
| 9·7 | | 31·5 | 3·1 | |
| 9·6 | | 33·8 | 21·8 | |
| 9·3 | | 42·3 | 30·5 | |
| 9·6 | | 45·0 | 59·0 | |
| 9·8 | | 47·3 | 40·6 | |
| 9·4 | | 59·3 | 38·2 | |
| 9·2 | 32 | 0·0 | 13·3 | |
| 9·7 | | 7·8 | 22·7 | |
| 9·9 | | 9·4 | 30·6 | |
| 8·8 | | 12·0 | 38·1 | 9·0 |
| 9·6 | | 12·6 | 42·6 | |
| 9·3 | | 21·1 | 28·6 | |
| 9·4 | | 24·1 | 43·5 | |
| 9·2 | | 27·6 | 9·8 | |
| 9·7 | | 30·1 | 10·7 | |
| 9·4 | | 34·1 | 50·5 | |
| 9·7 | | 49·7 | 50·0 | |
| 9·0 | | 57·5 | 16·1 | |
| 9·6 | 33 | 1·6 | 49·5 | |
| 9·7 | | 3·1 | 11·0 | |
| 9·7 | | 20·9 | 1·5 | |
| 9·0 | | 25·6 | 10·0 | 9·5 |
| 9·7 | | 36·1 | 1·1 | |
| 8·6 | | 41·6 | 56·7 | 8·2 G |
| 9·7 | | 43·6 | 3·5 | |
| 9·7 | | 46·6 | 42·1 | |
| 9·3 | 34 | 34·1 | 0·2 | |
| 9·1 | | 34·1 | 45·7 | |
| 9·7 | | 37·9 | 53·9 | |
| 9·7 | | 39·1 | 4·1 | |
| 9·3 | | 47·6 | 33·0 | |
| 9·4 | 35 | 3·6 | 44·2 | |
| 9·6 | | 7·4 | 1·9 | |
| 9·4 | | 23·1 | 13·2 | |
| 9·3 | | 28·1 | 37·4 | |
| 9·7 | | 29·6 | 12·5 | |
| 8·8 | | 33·6 | 11·2 | |
| 9·6 | | 36·6 | 52·6 | |
| 9·6 | | 49·6 | 54·3 | |
| 9·3 | | 52·6 | 10·9 | |

## 5401—5460.

| mag. | 12h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·7 | 36 | 7·1 | 9·3 | |
| 9·7 | | 19·1 | 19·2 | |
| 9·6 | | 20·1 | 28·2 | |
| 9·2 | | 21·6 | 48·9 | |
| 9·6 | | 38·6 | 25·4 | |
| 9·4 | | 39·1 | 4·6 | |
| 9·2 | | 46·6 | 23·5 | 9·0 |
| 9·6 | | 46·6 | 46·2 | |
| 8·9 | 37 | 13·1 | 50·1 | |
| 7·5 | | 26·1 | 36·1 | 7·0 GSt |
| 9·7 | | 28·1 | 44·3 | |
| 9·4 | | 28·6 | 13·7 | |
| 8·7 | | 59·1 | 8·3 | 9·0 |
| 9·7 | 38 | 6·1 | 53·1 | |
| 8·5 | | 7·1 | 40·2 | 8·5 G |
| 9·7 | | 21·1 | 37·4 | |
| 9·3 | | 22·6 | 11·4 | |
| 9·2 | | 24·6 | 11·5 | |
| 9·6 | | 33·6 | 3·4 | |
| 9·7 | | 40·6 | 41·3 | |
| 8·8 | | 45·6 | 36·1 | 8·8 |
| 9·4 | | 50·6 | 8·7 | |
| 9·0 | | 53·6 | 31·9 | 8·5 |
| 9·7 | | 54·1 | 16·0 | |
| 9·7 | 39 | 3·6 | 29·0 | |
| 9·3 | | 8·1 | 43·0 | |
| 9·2 | | 8·1 | 26·0 | |
| 9·0 | | 9·6 | 3·2 | |
| 9·4 | | 16·6 | 32·7 | |
| 9·3 | | 22·6 | 29·5 | |
| 9·7 | | 53·6 | 12·8 | |
| 9·6 | 40 | 14·6 | 44·5 | |
| 9·7 | | 16·6 | 29·6 | |
| 8·9 | | 17·6 | 45·5 | 8·8 |
| 9·6 | | 23·1 | 4·0 | |
| 9·6 | | 25·6 | 41·1 | |
| 9·0 | | 33·6 | 21·6 | 8·2 G |
| 9·6 | | 41·6 | 35·6 | |
| 9·2 | | 48·1 | 32·0 | 9·2 |
| 9·0 | | 50·1 | 27·0 | 9·5 |
| 9·2 | | 52·1 | 14·5 | |
| 9·7 | 41 | 9·1 | 47·7 | |
| 9·3 | | 20·6 | 44·6 | |
| 9·4 | | 22·6 | 27·0 | |
| 9·4 | | 35·1 | 25·8 | |
| 9·4 | | 35·1 | 55·1 | |
| 9·6 | | 39·1 | 20·1 | |
| 8·6 | | 39·6 | 10·3 | 8·8 |
| 9·7 | | 58·6 | 54·9 | |
| 9·4 | 42 | 0·1 | 12·0 | |
| 8·8 | | 0·6 | 23·9 | 9·2 |
| 9·7 | | 10·1 | 5·9 | |
| 9·4 | | 11·6 | 15·7 | 9·5 |
| 9·3 | | 12·1 | 28·7 | |
| 9·4 | | 27·6 | 37·3 | |
| 9·7 | 43 | 8·6 | 55·4 | |
| 9·4 | | 12·1 | 36·5 | |
| 9·0 | | 27·6 | 37·0 | |
| 9·4 | | 33·6 | 20·8 | |
| 9·7 | | 53·1 | 1·2 | |



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## 5461—5520.

| mag. | 12h. m | s | –56° ′ | |
|---|---|---|---|---|
| 9.7 | 43 | 53.6 | 38.0 | |
| 9.4 | | 58.6 | 33.0 | |
| 9.4 | 44 | 27.6 | 48.7 | |
| 9.6 | | 34.1 | 19.9 | |
| 9.7 | | 48.6 | 42.1 | |
| 9.7 | | 49.6 | 39.0 | |
| 9.7 | | 50.6 | 43.8 | |
| 8.6 | | 59.6 | 1.6 | 9.0 |
| 9.1 | | 59.6 | 9.3 | 9.0 |
| 8.9 | | 59.7 | 57.9 | |
| 9.3 | 45 | 7.1 | 15.8 | |
| 9.4 | | 13.7 | 58.6 | 9.0 |
| 9.6 | | 25.1 | 36.1 | |
| 9.3 | | 28.1 | 26.5 | |
| 9.6 | | 37.1 | 25.1 | |
| 8.6 | | 46.6 | 7.3 | 9.0 |
| 9.6 | | 49.6 | 25.6 | |
| 9.4 | | 52.6 | 1.4 | |
| 9.7 | 46 | 2.1 | 11.3 | |
| 9.3 | | 11.6 | 3.2 | |
| 9.7 | | 13.6 | 25.9 | |
| 8.4 | | 22.2 | 58.8 | 8.2 |
| 9.4 | | 28.9 | 1.2 | |
| 8.6 | | 44.1 | 30.8 | 8.8 |
| 8.6 | | 53.1 | 17.0 | |
| 8.7 | 47 | 0.1 | 4.1 | 9.0 |
| 4.1 | | 16.3 | 29.7 | 3.9 GSct : |
| 9.2 | | 19.1 | 33.9 | |
| 9.6 | | 50.1 | 19.0 | |
| 9.7 | | 57.6 | 55.8 | |
| 9.1 | | 59.6 | 2.1 | |
| 9.3 | 48 | 2.6 | 8.7 | |
| 9.3 | | 7.1 | 39.1 | |
| 9.7 | | 18.1 | 13.4 | |
| 9.7 | | 20.1 | 41.8 | |
| 9.7 | | 23.6 | 30.1 | |
| 9.2 | | 32.6 | 20.9 | 8.8 |
| 6.0 | | 36.1 | 9.5 | 6.0 GSctr |
| 9.2 | | 36.1 | 12.4 | 9.2 |
| 9.2 | | 45.1 | 21.0 | |
| 9.1 | | 51.1 | 47.6 | |
| 9.7 | | 53.1 | 13.0 | |
| 9.2 | 49 | 7.1 | 28.6 | |
| 9.7 | | 26.6 | 13.0 | |
| 9.2 | | 29.1 | 26.3 | |
| 8.9 | | 41.6 | 27.9 | |
| 9.2 | | 43.1 | 51.8 | |
| 9.3 | | 59.1 | 9.5 | |
| 9.7 | 50 | 4.1 | 31.3 | |
| 8.2 | | 9.1 | 46.3 | 9.0 |
| 9.6 | | 13.7 | 58.7 | |
| 9.0 | | 18.6 | 13.9 | |
| 9.6 | | 20.1 | 44.4 | |
| 9.6 | | 22.1 | 30.7 | |
| 9.7 | | 49.1 | 37.6 | |
| 9.3 | | 56.4 | 2.4 | |
| 9.7 | 51 | 23.6 | 3.1 | |
| 9.6 | | 34.6 | 39.8 | |
| 9.0 | | 35.9 | 2.1 | 9.0 |
| 9.7 | | 38.6 | 34.5 | |

## 5521—5580.

| mag. | 12h. m | s | –56° ′ | |
|---|---|---|---|---|
| 9.7 | 51 | 44.1 | 9.8 | |
| 9.0 | 52 | 0.6 | 51.3 | 9.0 |
| 9.7 | | 1.6 | 59.3 | |
| 9.7 | | 3.1 | 7.4 | |
| 9.3 | | 12.6 | 9.1 | 9.0 |
| 9.7 | | 14.6 | 37.9 | |
| 8.4 | | 24.1 | 44.1 | 7.5 G |
| 9.6 | | 26.1 | 42.5 | 10.0 |
| 9.0 | | 32.1 | 50.7 | 8.5 |
| 9.4 | | 32.6 | 27.2 | |
| 9.7 | | 44.1 | 42.0 | |
| 9.2 | | 49.1 | 38.9 | |
| 9.7 | 53 | 11.1 | 24.8 | |
| 9.3 | | 14.1 | 36.9 | |
| 9.6 | | 23.1 | 17.4 | |
| 9.7 | | 24.1 | 5.6 | |
| 9.0 | | 29.6 | 49.8 | 9.5 |
| 8.7 | 54 | 14.1 | 30.5 | |
| 9.1 | | 25.6 | 55.7 | |
| 9.2 | | 40.6 | 37.3 | |
| 8.6 | | 41.6 | 33.8 | 9.0 |
| 8.7 | | 44.1 | 7.4 | 9.0 |
| 9.1 | | 58.1 | 5.1 | 8.8 |
| 9.7 | 55 | 20.1 | 58.1 | |
| 9.4 | | 24.1 | 15.5 | |
| 9.0 | | 35.1 | 10.0 | 9.0 |
| 9.4 | | 39.1 | 42.3 | |
| 9.7 | | 50.1 | 14.3 | |
| 9.3 | | 51.1 | 23.6 | |
| 9.2 | 56 | 8.6 | 29.1 | |
| 8.9 | | 48.1 | 13.8 | |
| 9.2 | | 53.6 | 34.7 | |
| 9.2 | 57 | 0.6 | 59.0 | G |
| 9.4 | | 3.6 | 56.8 | |
| 9.6 | | 16.6 | 25.0 | |
| 9.1 | | 19.1 | 32.8 | |
| 8.1 | | 26.6 | 23.0 | GSg |
| 9.4 | | 28.4 | 27.0 | |
| 9.4 | | 28.6 | 42.0 | |
| 9.2 | | 28.9 | 27.9 | |
| 9.6 | | 45.9 | 35.6 | |
| 9.0 | | 53.9 | 54.4 | 9.0 G |
| 8.8 | | 53.9 | 9.8 | 9.5 |
| 9.1 | | 58.9 | 11.5 | |
| 9.2 | 58 | 1.4 | 11.3 | |
| 8.3 | | 1.4 | 10.8 | 9.0 |
| 9.1 | | 5.4 | 29.9 | |
| 8.9 | | 7.4 | 38.1 | |
| 9.7 | | 11.4 | 35.1 | |
| 9.6 | | 11.9 | 55.9 | |
| 9.7 | | 17.9 | 31.8 | |
| 8.4 | | 23.9 | 58.8 | 9.0 G |
| 9.7 | | 33.9 | 18.0 | |
| 9.6 | | 41.4 | 48.3 | |
| 9.7 | | 44.9 | 55.9 | |
| 9.0 | | 55.4 | 12.5 | 9.0 |
| 8.8 | | 58.9 | 33.8 | 9.0 |
| 9.6 | 59 | 9.9 | 49.4 | |
| 9.7 | | 13.9 | 10.4 | |
| 9.7 | | 20.9 | 48.7 | |

## 5581—5640.

| mag. | 12h.–13. m | s | –56° ′ | |
|---|---|---|---|---|
| 9.7 | 59 | 21.9 | 10.0 | |
| 8.7 | | 23.9 | 4.4 | 8.5 |
| 8.2 | | 24.9 | 19.7 | 8.8 G |
| 9.4 | | 38.4 | 13.5 | |
| 9.7 | | 41.8 | 41.1 | |
| 9.7 | | 48.8 | 53.3 | |
| 9.6 | | 49.4 | 36.3 | |
| 9.7 | | 52.4 | 30.1 | |
| 9.0 | | 52.9 | 7.5 | 9.0 |
| 9.2 | | 53.7 | 1.0 | |
| 9.4 | 0 | 11.9 | 43.3 | |
| 9.7 | | 23.9 | 46.3 | |
| 7.6 | | 28.7 | 1.0 | 7.7 GS |
| 9.3 | | 47.9 | 40.7 | |
| 9.3 | | 50.9 | 22.6 | |
| 8.6 | | 51.9 | 26.8 | |
| 9.0 | 1 | 7.9 | 23.4 | |
| 9.6 | | 17.4 | 34.2 | |
| 9.4 | | 17.9 | 56.9 | |
| 9.6 | | 18.9 | 21.9 | |
| 9.1 | | 40.4 | 59.5 | |
| 8.9 | | 42.0 | 56.7 | 9.0 |
| 9.2 | | 43.9 | 29.6 | |
| 9.7 | | 48.4 | 7.7 | |
| 9.7 | | 52.4 | 30.9 | |
| 9.7 | | 58.9 | 54.5 | |
| 9.4 | 2 | 5.4 | 37.9 | |
| 9.2 | | 5.4 | 31.7 | |
| 8.2 | | 9.9 | 5.9 | 8.8 |
| 9.3 | | 16.4 | 18.8 | |
| 9.7 | | 18.9 | 57.2 | |
| 9.4 | | 23.9 | 23.0 | |
| 9.3 | | 25.9 | 19.5 | |
| 9.0 | | 36.9 | 23.9 | |
| 9.2 | | 39.4 | 15.5 | |
| 8.8 | | 40.9 | 20.4 | |
| 8.5 | | 52.9 | 52.2 | 9.0 |
| 9.0 | | 57.4 | 10.5 | 8.5 |
| 9.7 | 3 | 10.4 | 47.4 | |
| 9.7 | | 14.4 | 16.0 | |
| 8.9 | | 31.4 | 59.6 | 9.0 |
| 9.7 | | 34.9 | 35.9 | |
| 9.7 | | 49.1 | 39.1 | |
| 8.2 | | 59.2 | 14.6 | 7.5 GStr |
| 9.9 | 4 | 3.4 | 16.1 | |
| 9.8 | | 3.9 | 43.3 | |
| 9.9 | | 16.6 | 31.8 | |
| 8.0 | | 24.2 | 17.5 | 8.0 GSg |
| 8.8 | | 30.7 | 42.7 | |
| 9.4 | | 32.5 | 34.5 | |
| 9.9 | | 46.2 | 29.4 | |
| 9.4 | | 47.2 | 20.0 | 8.5 G |
| 9.1 | | 51.9 | 1.6 | |
| 9.9 | | 58.7 | 6.4 | |
| 9.4 | 5 | 0.2 | 25.9 | |
| 9.4 | | 8.7 | 43.9 | |
| 8.8 | | 10.2 | 19.5 | 8.5 |
| 9.4 | | 15.2 | 46.2 | |
| 9.3 | | 15.7 | 13.4 | 9.0 |
| 9.6 | | 20.2 | 10.8 | |

## 5641—5700.

| mag. | 13h. m | s | –56° ′ | |
|---|---|---|---|---|
| 9.8 | 5 | 28.2 | 53.5 | |
| 9.9 | | 31.2 | 41.0 | |
| 9.8 | | 34.7 | 59.9 | |
| 9.2 | | 37.2 | 45.1 | |
| 9.4 | | 47.2 | 30.6 | 9.0 |
| 8.8 | | 50.2 | 16.1 | 9.0 |
| 9.7 | | 51.7 | 33.9 | |
| 8.5 | 6 | 0.7 | 27.5 | 8.8 |
| 9.9 | | 0.7 | 3.9 | |
| 9.4 | | 4.7 | 18.4 | 9.0 |
| 9.2 | | 5.7 | 37.7 | |
| 9.4 | | 10.2 | 18.6 | |
| 9.7 | | 12.2 | 20.2 | |
| 9.9 | | 26.7 | 28.1 | |
| 9.6 | | 36.2 | 7.7 | |
| 8.8 | | 41.7 | 53.2 | 9.0 |
| 8.8 | 7 | 0.7 | 8.9 | 8.8 |
| 9.9 | | 2.7 | 46.2 | |
| 9.4 | | 6.2 | 19.1 | |
| 9.8 | | 10.7 | 6.1 | |
| 9.6 | | 15.8 | 7.3 | 9.0 |
| 9.9 | | 25.3 | 31.0 | 9.0 |
| 9.9 | | 26.8 | 17.1 | |
| 9.9 | | 30.3 | 51.5 | |
| 8.8 | | 30.8 | 56.7 | 9.0 |
| 8.0 | | 36.8 | 35.8 | 8.0 GSg |
| 9.7 | | 37.3 | 36.1 | |
| 9.4 | | 39.3 | 33.0 | |
| 8.8 | | 43.8 | 22.4 | 8.5 |
| 9.4 | | 44.8 | 46.7 | |
| 8.9 | 8 | 5.8 | 39.8 | |
| 8.2 | | 20.3 | 10.3 | 9.0 |
| 7.8 | | 23.8 | 23.9 | 7.5 GSt |
| 9.7 | | 27.8 | 1.9 | |
| 9.4 | | 32.8 | 9.4 | |
| 8.9 | | 44.8 | 40.9 | 9.0 |
| 9.7 | | 49.3 | 49.5 | |
| 9.9 | | 50.3 | 46.6 | |
| 9.9 | 9 | 4.7 | 1.4 | |
| 9.2 | | 6.3 | 11.4 | 8.8 |
| 9.6 | | 7.8 | 20.7 | |
| 9.8 | | 7.8 | 48.8 | |
| 8.4 | | 13.3 | 15.6 | 9.0 G |
| 9.9 | | 23.3 | 19.2 | |
| 9.6 | | 24.8 | 23.5 | |
| 9.8 | | 38.3 | 13.1 | |
| 9.9 | | 40.3 | 2.2 | |
| 9.8 | | 42.8 | 18.7 | |
| 9.6 | | 44.8 | 16.3 | |
| 9.6 | | 46.3 | 28.9 | |
| 9.8 | | 47.8 | 5.5 | |
| 9.8 | | 48.8 | 3.5 | |
| 8.4 | | 50.8 | 53.3 | 8.5 G |
| 9.6 | 10 | 13.3 | 25.6 | |
| 9.2 | | 27.3 | 13.9 | |
| 9.7 | | 28.2 | 26.5 | |
| 9.4 | | 30.8 | 0.6 | |
| 7.2 | | 31.8 | 38.4 | 7.5 GSctr |
| 9.7 | | 33.3 | 13.5 | |
| 9.2 | | 34.4 | 58.8 | 9.0 |

25 prec.

| h | m | α + s | δ – ′ |
|---|---|---|---|
| 12 | 40 | 86 | 8.2 |
| | 50 | 88 | 8.2 |
| 13 | 0 | 90 | 8.1 |
| | 10 | 92 | 8.0 |
| | 20 | 94 | 7.9 |



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| 25 prec. | | a + | δ – |
|---|---|---|---|
| h | m | s | ′ |
| 13 | 10 | 92 | 8·0 |
| | 20 | 94 | 7·9 |
| | 30 | 96 | 7·7 |
| | 40 | 98 | 7·6 |
| | 50 | 100 | 7·4 |

### 5701—5760.

| mag. | 13ʰ m | s | –56° ′ | |
|---|---|---|---|---|
| 8·9 | 10 | 36·8 | 37·5 | 9·5 |
| 9·2 | | 49·8 | 47·8 | 9·5 |
| 9·2 | | 59·8 | 24·1 | |
| 9·8 | | 59·8 | 12·8 | |
| 9·7 | 11 | 3·4 | 14·4 | |
| 9·4 | | 3·4 | 32·4 | |
| 9·2 | | 3·9 | 47·0 | |
| 9·9 | | 11·9 | 26·9 | |
| 9·7 | | 16·4 | 43·0 | |
| 9·4 | | 20·9 | 44·8 | |
| 9·9 | | 23·4 | 15·0 | |
| 9·3 | | 50·4 | 14·4 | |
| 9·2 | | 52·9 | 35·0 | |
| 9·6 | 12 | 5·9 | 7·2 | |
| 9·2 | | 13·9 | 58·0 | |
| 9·4 | | 22·9 | 6·8 | |
| 9·4 | | 23·4 | 7·8 | |
| 9·9 | | 25·9 | 22·0 | |
| 9·9 | | 32·4 | 32·0 | |
| 9·4 | | 40·9 | 15·6 | |
| 9·0 | | 41·9 | 1·2 | 9·2 |
| 8·8 | | 44·9 | 25·9 | 9·0 |
| 9·9 | | 47·9 | 28·4 | |
| 9·9 | 13 | 2·4 | 58·0 | |
| 9·9 | | 12·9 | 16·2 | |
| 9·6 | | 17·4 | 26·7 | |
| 9·9 | | 17·4 | 20·7 | |
| 9·2 | | 38·9 | 38·8 | |
| 9·6 | | 39·9 | 56·0 | |
| 9·2 | | 43·4 | 12·0 | 9·0 |
| 9·9 | | 49·4 | 26·2 | |
| 9·9 | | 52·4 | 18·2 | |
| 9·9 | | 56·4 | 24·5 | |
| 9·4 | | 58·4 | 41·9 | |
| 9·7 | | 59·9 | 48·5 | |
| 9·9 | 14 | 8·4 | 3·3 | |
| 9·9 | | 14·4 | 1·4 | |
| 9·6 | | 30·9 | 33·0 | |
| 9·2 | | 38·5 | 48·1 | 9·0 |
| 9·8 | | 40·0 | 5·6 | |
| 9·4 | | 46·5 | 44·0 | |
| 9·4 | | 52·0 | 20·5 | |
| 9·9 | | 53·0 | 25·2 | |
| 9·2 | 15 | 3·0 | 36·0 | |
| 9·4 | | 27·0 | 46·2 | |
| 9·2 | | 29·5 | 40·0 | |
| 9·9 | | 36·0 | 32·6 | |
| 9·4 | 16 | 12·0 | 52·1 | |
| 9·6 | | 12·5 | 52·3 | |
| 9·2 | | 15·5 | 22·3 | |
| 9·9 | | 31·0 | 21·0 | |
| 9·9 | | 32·0 | 25·6 | |
| 9·9 | | 44·0 | 3·8 | |
| 9·9 | | 52·5 | 0·7 | |
| 9·2 | | 56·5 | 5·6 | |
| 9·6 | | 58·0 | 31·0 | |
| 9·9 | 17 | 7·0 | 6·3 | |
| 9·7 | | 10·5 | 10·0 | |
| 9·8 | | 17·0 | 47·0 | |
| 9·6 | | 38·5 | 40·8 | |

### 5761—5820.

| mag. | 13ʰ m | s | –56° ′ | |
|---|---|---|---|---|
| 9·2 | 17 | 40·0 | 5·5 | |
| 9·9 | | 47·0 | 53·2 | |
| 9·2 | | 51·0 | 39·5 | |
| 9·9 | | 52·0 | 7·8 | |
| 9·9 | | 58·5 | 13·7 | |
| 9·9 | 18 | 2·5 | 44·6 | |
| 9·0 | | 17·5 | 23·2 | 9·5 |
| 9·2 | | 27·0 | 12·9 | |
| 9·4 | | 33·5 | 37·0 | |
| 9·7 | | 36·0 | 19·9 | |
| 9·7 | | 55·0 | 27·6 | |
| 9·2 | | 57·0 | 38·2 | |
| 9·9 | 19 | 19·6 | 32·8 | |
| 8·8 | | 30·6 | 8·1 | 9·5 |
| 9·2 | | 32·6 | 33·2 | |
| 9·9 | | 59·1 | 27·6 | |
| 8·5 | 20 | 2·6 | 22·6 | 8·2 GS |
| 9·9 | | 4·6 | 4·1 | |
| 9·7 | | 9·6 | 15·4 | |
| 8·9 | | 48·6 | 52·4 | 9·0 |
| 8·9 | | 53·6 | 3·4 | 9·0 |
| 9·4 | | 58·1 | 3·9 | 9·0 |
| 9·3 | 21 | 5·1 | 22·4 | |
| 9·4 | | 30·6 | 0·8 | |
| 8·7 | | 49·6 | 54·9 | |
| 9·9 | 22 | 3·6 | 3·7 | |
| 9·7 | | 10·1 | 48·9 | |
| 8·1 | | 10·6 | 1·7 | 8·2 GS |
| 9·6 | | 41·1 | 38·1 | |
| 9·6 | | 44·1 | 4·7 | |
| 9·8 | | 54·1 | 32·6 | |
| 9·9 | 23 | 1·6 | 8·1 | |
| 9·2 | | 21·6 | 5·7 | 9·5 |
| 9·4 | | 30·1 | 39·7 | |
| 9·0 | | 32·1 | 39·0 | 9·0 |
| 9·9 | | 33·4 | 59·1 | |
| 9·9 | | 46·1 | 25·0 | |
| 9·9 | | 50·6 | 0·8 | |
| 9·6 | 24 | 4·1 | 23·0 | |
| 9·6 | | 12·1 | 19·0 | |
| 9·6 | | 40·1 | 39·5 | |
| 9·8 | | 50·7 | 37·0 | |
| 9·6 | | 51·7 | 41·7 | |
| 9·9 | | 52·2 | 37·5 | |
| 9·7 | | 52·7 | 42·2 | |
| 9·9 | 25 | 0·7 | 15·5 | |
| 9·8 | | 4·2 | 20·0 | |
| 9·2 | | 10·7 | 1·4 | |
| 9·9 | | 15·7 | 50·7 | |
| 9·6 | | 28·2 | 23·5 | |
| 9·7 | | 31·2 | 56·9 | |
| 9·4 | | 38·7 | 4·7 | |
| 9·2 | | 40·2 | 37·8 | |
| 9·9 | | 43·7 | 1·5 | |
| 9·6 | | 46·2 | 14·1 | |
| 9·9 | 26 | 20·2 | 16·0 | |
| 9·6 | | 40·2 | 52·1 | |
| 9·9 | | 53·2 | 25·9 | |
| 9·6 | 27 | 11·9 | 59·5 | |
| 9·7 | | 14·7 | 28·3 | |

### 5821—5880.

| mag. | 13ʰ m | s | –56° ′ | |
|---|---|---|---|---|
| 8·5 | 27 | 24·7 | 38·9 | 8·0 GSg |
| 9·4 | | 38·7 | 11·7 | |
| 9·9 | | 39·2 | 19·1 | |
| 9·4 | | 44·7 | 5·6 | |
| 9·6 | | 53·2 | 19·1 | |
| 9·4 | 28 | 5·2 | 26·4 | |
| 9·9 | | 9·7 | 18·1 | |
| 8·5 | | 13·2 | 44·0 | |
| 9·9 | | 13·2 | 25·6 | |
| 9·6 | | 16·2 | 53·3 | |
| 9·8 | | 21·7 | 54·7 | |
| 9·6 | | 23·2 | 32·3 | |
| 9·4 | | 31·7 | 42·1 | |
| 9·9 | | 37·2 | 18·0 | |
| 9·8 | | 45·2 | 7·0 | |
| 9·4 | | 48·7 | 36·6 | |
| 9·3 | | 52·2 | 38·0 | |
| 9·9 | | 56·7 | 11·5 | |
| 9·9 | | 58·8 | 27·9 | |
| 9·2 | | 59·8 | 33·6 | |
| 9·2 | 29 | 1·3 | 51·8 | 9·0 |
| 9·7 | | 11·8 | 14·4 | |
| 9·8 | | 18·3 | 42·2 | |
| 9·6 | | 40·1 | 2·6 | |
| 9·4 | | 42·8 | 4·4 | 8·5 |
| 9·6 | | 42·8 | 21·6 | |
| 9·9 | | 47·7 | 2·2 | |
| 9·8 | 30 | 0·3 | 41·2 | |
| 8·7 | | 4·3 | 52·0 | 8·5 |
| 9·2 | | 4·3 | 20·0 | |
| 9·8 | | 7·3 | 59·1 | |
| 9·9 | | 27·3 | 24·0 | |
| 8·4 | | 28·8 | 5·6 | 8·0 |
| 9·4 | | 33·8 | 45·9 | 9·0 |
| 9·6 | | 37·8 | 18·9 | |
| 7·6 | | 40·8 | 59·1 | 6·5 GSt |
| 8·5 | | 44·8 | 50·6 | 8·7 |
| 9·2 | | 48·3 | 57·9 | |
| 9·7 | 31 | 17·8 | 52·6 | |
| 8·4 | | 20·3 | 39·4 | 8·5 |
| 9·9 | | 48·8 | 17·7 | |
| 9·7 | | 51·3 | 8·2 | |
| 9·4 | 32 | 0·3 | 18·8 | |
| 9·9 | | 4·1 | 1·7 | |
| 8·3 | | 8·6 | 58·7 | 7·8 GS |
| 9·9 | | 9·6 | 34·3 | |
| 9·9 | | 13·8 | 5·3 | |
| 9·9 | | 19·8 | 49·1 | |
| 9·4 | | 29·8 | 26·8 | |
| 8·8 | | 41·8 | 38·2 | 8·0 |
| 9·4 | | 44·1 | 1·7 | |
| 9·8 | 33 | 5·3 | 18·9 | |
| 9·7 | | 6·3 | 2·4 | |
| 8·7 | | 13·8 | 48·8 | 8·5 G |
| 9·4 | | 14·8 | 3·6 | |
| 9·8 | | 19·3 | 13·1 | |
| 9·6 | | 22·8 | 55·7 | |
| 9·4 | | 44·8 | 23·4 | |
| 9·6 | | 52·3 | 14·1 | |
| 9·2 | | 52·3 | 53·8 | 9·0 |

### 5881—5940.

| mag. | 13ʰ m | s | –56° ′ | |
|---|---|---|---|---|
| 9·4 | 33 | 57·3 | 30·4 | |
| 9·9 | 34 | 2·8 | 35·5 | |
| 9·3 | | 10·8 | 20·7 | |
| 7·8 | | 11·3 | 41·4 | 8·5 |
| 8·5 | | 14·3 | 13·6 | 9·0 |
| 8·8 | | 20·8 | 10·9 | 9·5 |
| 9·6 | | 27·8 | 42·2 | |
| 9·2 | | 35·3 | 43·0 | |
| 9·9 | | 38·3 | 47·8 | |
| 9·4 | | 42·9 | 1·1 | |
| 6·8 | | 46·8 | 8·1 | 6·5 GSct |
| 9·4 | | 53·3 | 6·9 | |
| 9·3 | 35 | 4·3 | 5·9 | |
| 9·6 | | 13·8 | 12·5 | |
| 9·8 | | 16·3 | 29·1 | |
| 9·3 | | 19·8 | 36·9 | |
| 9·9 | | 20·9 | 22·6 | |
| 8·0 | | 23·1 | 57·5 | 7·8 GS |
| 9·6 | | 40·0 | 58·2 | |
| 10·0 | | 48·7 | 39·6 | |
| 9·7 | | 56·7 | 50·9 | |
| 10·0 | | 58·7 | 32·9 | |
| 9·4 | 36 | 13·0 | 35·9 | |
| 10·0 | | 22·7 | 13·9 | |
| 8·7 | | 28·5 | 3·3 | 8·5 |
| 9·4 | | 29·7 | 51·8 | |
| 10·0 | | 41·2 | 39·9 | |
| 10·0 | | 43·7 | 1·7 | |
| 10·0 | | 47·7 | 18·7 | |
| 10·0 | | 52·7 | 44·6 | |
| 9·2 | | 58·2 | 54·1 | |
| 9·1 | | 59·7 | 18·3 | |
| 9·7 | 37 | 2·2 | 9·1 | |
| 9·6 | | 3·2 | 39·2 | |
| 10·0 | | 8·2 | 24·2 | |
| 10·0 | | 12·2 | 35·6 | |
| 10·0 | | 14·7 | 22·9 | |
| 8·4 | | 23·2 | 6·4 | 8·5 |
| 10·0 | | 44·7 | 3·8 | |
| 10·0 | | 52·2 | 29·3 | |
| 10·0 | | 59·7 | 3·9 | |
| 10·0 | 38 | 17·7 | 39·6 | |
| 10·0 | | 19·9 | 28·6 | |
| 8·8 | | 29·2 | 12·9 | 8·0 G |
| 10·0 | | 47·3 | 47·8 | |
| 9·1 | | 58·3 | 44·5 | 9·0 |
| 9·6 | 39 | 3·8 | 16·0 | |
| 10·0 | | 13·3 | 29·3 | |
| 9·6 | | 15·8 | 39·6 | |
| 9·8 | | 18·3 | 4·8 | |
| 9·4 | | 24·8 | 49·5 | |
| 10·0 | | 28·3 | 42·6 | |
| 9·7 | | 37·3 | 40·3 | |
| 9·6 | | 37·3 | 11·9 | |
| 8·2 | | 39·8 | 8·8 | 8·5 GSg |
| 9·4 | | 41·3 | 41·3 | |
| 9·8 | 40 | 5·8 | 56·5 | |
| 9·4 | | 8·3 | 55·4 | |
| 9·4 | | 13·8 | 41·7 | |
| 9·6 | | 17·3 | 53·4 | |



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### 5941—6000.

| mag. | 13h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.2 | 40 | 18.8 | 38.6 | |
| 9.1 | | 19.8 | 50.4 | |
| 9.0 | | 22.8 | 58.8 | |
| 8.8 | | 23.3 | 40.1 | 8.5 |
| 10.0 | | 25.8 | 14.7 | |
| 8.8 | | 29.8 | 33.3 | |
| 10.0 | | 31.3 | 14.4 | |
| 10.0 | | 34.3 | 9.9 | |
| 10.0 | | 49.8 | 42.9 | |
| 10.0 | 41 | 3.3 | 20.2 | |
| 9.2 | | 5.8 | 13.0 | |
| 9.4 | | 12.3 | 3.9 | |
| 9.2 | | 18.3 | 29.6 | |
| 9.4 | | 20.3 | 55.8 | |
| 9.2 | | 35.8 | 8.9 | |
| 8.4 | 42 | 0.8 | 37.7 | |
| 9.4 | | 3.3 | 47.5 | |
| 10.0 | | 5.9 | 46.0 | |
| 9.7 | | 12.8 | 3.0 | |
| 8.4 | | 23.8 | 57.6 | 7.0 Gt |
| 9.2 | | 23.8 | 23.0 | |
| 9.2 | | 26.8 | 40.1 | |
| 8.2 | | 47.3 | 51.0 | 8.0 Gt |
| 9.2 | | 53.3 | 44.1 | |
| 9.4 | | 58.8 | 13.2 | |
| 9.2 | | 59.8 | 34.1 | |
| 9.6 | 43 | 8.0 | 41.3 | |
| 10.0 | | 18.0 | 0.2 | |
| 9.4 | | 20.5 | 8.5 | |
| 8.2 | | 24.5 | 48.1 | 7.5 G |
| 9.6 | | 30.5 | 47.0 | |
| 9.4 | | 35.0 | 42.4 | |
| 8.2 | | 38.0 | 50.1 | 8.5 |
| 10.0 | | 39.5 | 1.7 | |
| 9.7 | | 41.0 | 55.3 | |
| 10.0 | | 47.8 | 57.1 | |
| 10.0 | | 55.0 | 4.6 | |
| 9.8 | | 58.5 | 33.7 | |
| 9.6 | | 59.0 | 11.0 | 9.5 |
| 9.1 | 44 | 19.0 | 44.4 | |
| 9.4 | | 20.5 | 22.8 | |
| 10.0 | | 33.5 | 10.9 | 9.5 |
| 10.0 | | 37.5 | 36.9 | |
| 10.0 | | 42.5 | 58.1 | |
| 9.6 | | 48.5 | 50.6 | |
| 10.0 | | 49.5 | 49.7 | |
| 9.2 | | 51.2 | 0.0 | |
| 9.6 | | 52.5 | 17.8 | |
| 8.8 | | 56.0 | 4.8 | 8.5 G |
| 10.0 | | 59.5 | 14.4 | |
| 10.0 | 45 | 0.5 | 52.1 | |
| 9.8 | | 5.0 | 36.5 | |
| 10.0 | | 26.5 | 52.6 | |
| 9.6 | | 30.0 | 40.5 | |
| 10.0 | | 31.5 | 27.6 | |
| 10.0 | | 36.5 | 28.4 | |
| 9.4 | | 50.0 | 28.0 | |
| 10.0 | 46 | 11.0 | 56.9 | |
| 10.0 | | 13.5 | 13.0 | |
| 9.8 | | 15.7 | 0.6 | |

### 6001—6060.

| mag. | 13h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 46 | 17.0 | 38.0 | |
| 9.6 | | 21.0 | 43.0 | |
| 9.6 | | 22.5 | 38.4 | |
| 10.0 | | 24.4 | 28.0 | |
| 10.0 | | 30.0 | 15.0 | |
| 10.0 | | 30.0 | 59.9 | |
| 9.7 | | 30.5 | 28.4 | |
| 10.0 | | 31.0 | 15.8 | |
| 10.0 | | 31.5 | 16.2 | |
| 8.0 | | 42.7 | 7.5 | 8.5 |
| 9.6 | | 43.1 | 2.8 | |
| 9.2 | | 45.2 | 58.0 | |
| 10.0 | | 53.7 | 38.5 | |
| 7.6 | | 55.7 | 34.1 | 8.0 G |
| 9.7 | | 57.7 | 11.0 | |
| 9.8 | | 58.2 | 3.7 | |
| 10.0 | | 59.2 | 10.1 | |
| 10.0 | | 59.8 | 2.5 | |
| 9.4 | 47 | 0.2 | 41.4 | |
| 9.2 | | 2.2 | 44.2 | 9.0 |
| 9.8 | | 6.1 | 20.3 | |
| 9.6 | | 8.2 | 50.9 | |
| 10.0 | | 13.7 | 42.6 | |
| 10.0 | | 28.2 | 13.7 | |
| 9.4 | | 28.7 | 53.4 | |
| 9.7 | | 30.7 | 15.2 | |
| 9.6 | | 35.2 | 50.0 | |
| 9.7 | | 38.2 | 20.2 | |
| 9.8 | | 57.2 | 37.0 | |
| 10.0 | 48 | 0.7 | 25.5 | |
| 9.6 | | 6.7 | 24.2 | |
| 9.4 | | 22.2 | 30.1 | |
| 9.4 | | 26.7 | 42.9 | |
| 10.0 | | 42.2 | 36.1 | |
| 9.4 | | 44.2 | 41.4 | |
| 10.0 | | 46.7 | 28.9 | |
| 9.4 | | 50.7 | 28.9 | |
| 9.4 | | 54.2 | 0.4 | |
| 9.8 | | 59.2 | 16.3 | |
| 10.0 | | 59.7 | 45.0 | |
| 10.0 | 49 | 9.7 | 24.0 | |
| 9.2 | | 20.7 | 36.7 | |
| 9.6 | | 24.7 | 55.0 | |
| 9.7 | | 30.2 | 1.1 | |
| 10.0 | | 33.2 | 23.9 | |
| 10.0 | | 41.1 | 16.0 | |
| 9.6 | | 43.7 | 7.6 | |
| 9.6 | | 48.2 | 9.9 | |
| 9.6 | | 51.2 | 24.1 | |
| 10.0 | | 54.1 | 30.0 | |
| 8.9 | 50 | 0.2 | 9.8 | |
| 9.4 | | 0.7 | 54.9 | |
| 9.4 | | 13.9 | 2.0 | |
| 10.0 | | 14.7 | 59.6 | |
| 10.0 | | 14.9 | 48.3 | |
| 9.2 | | 30.4 | 24.1 | |
| 9.4 | | 49.4 | 30.7 | |
| 10.0 | | 58.4 | 13.4 | |
| 10.0 | 51 | 1.4 | 52.4 | |
| 9.4 | | 5.4 | 41.5 | |

### 6061—6120.

| mag. | 13h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.0 | 51 | 6.4 | 10.8 | |
| 9.2 | | 9.4 | 18.7 | |
| 9.6 | | 12.9 | 2.4 | |
| 10.0 | | 27.4 | 35.4 | |
| 9.8 | | 33.9 | 24.2 | |
| 10.0 | | 35.4 | 55.9 | |
| 9.4 | | 38.4 | 40.0 | |
| 9.1 | | 42.4 | 48.8 | |
| 9.2 | | 49.4 | 38.3 | |
| 9.4 | | 50.4 | 22.1 | |
| 9.2 | | 59.5 | 57.7 | |
| 9.2 | 52 | 0.4 | 55.0 | |
| 9.7 | | 0.4 | 12.2 | |
| 10.0 | | 2.9 | 23.2 | |
| 10.0 | | 7.4 | 17.1 | |
| 9.2 | | 13.4 | 51.4 | |
| 9.4 | | 20.4 | 39.8 | |
| 10.0 | | 20.9 | 13.0 | |
| 10.0 | | 22.9 | 55.7 | |
| 10.0 | | 34.9 | 35.0 | |
| 9.8 | | 37.9 | 13.7 | |
| 8.4 | | 49.4 | 37.2 | 7.5 GS |
| 9.6 | | 50.9 | 13.2 | |
| 9.2 | | 52.9 | 32.1 | |
| 9.6 | | 54.9 | 12.9 | |
| 10.0 | 53 | 1.4 | 34.2 | |
| 10.0 | | 8.4 | 57.3 | |
| 9.8 | | 29.4 | 26.8 | |
| 8.2 | | 42.4 | 22.9 | 8.5 |
| 10.0 | | 50.4 | 50.7 | |
| 10.0 | | 53.4 | 43.1 | |
| 9.4 | 54 | 3.4 | 55.6 | |
| 9.2 | | 3.9 | 35.5 | |
| 10.0 | | 3.9 | 13.7 | |
| 9.7 | | 7.9 | 13.6 | |
| 10.0 | | 13.4 | 24.3 | |
| 10.0 | | 13.9 | 48.2 | |
| 8.7 | | 15.9 | 59.1 | 9.5 |
| 9.6 | | 16.4 | 51.1 | |
| 9.7 | | 29.9 | 41.5 | |
| 10.0 | | 30.9 | 6.1 | |
| 9.6 | | 34.3 | 57.2 | |
| 9.8 | | 43.9 | 38.0 | |
| 10.0 | | 46.6 | 32.1 | |
| 9.2 | | 47.9 | 57.0 | |
| 9.0 | | 50.4 | 21.1 | |
| 8.6 | | 51.4 | 44.7 | 8.5 |
| 10.0 | 55 | 12.9 | 39.6 | |
| 9.4 | | 16.4 | 53.1 | |
| 9.4 | | 25.4 | 42.3 | |
| 9.8 | | 26.6 | 9.2 | |
| 9.4 | | 30.4 | 20.6 | |
| 10.0 | | 32.4 | 40.2 | |
| 8.8 | | 42.9 | 48.4 | 9.5 |
| 8.8 | | 43.9 | 52.2 | 9.5 |
| 10.0 | | 45.9 | 42.1 | |
| 9.0 | | 59.4 | 24.0 | |
| 9.8 | 56 | 0.9 | 44.8 | |
| 9.6 | | 2.9 | 17.0 | |
| 9.2 | | 5.4 | 14.2 | |

### 6121—6180.

| mag. | 13h.–14h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.0 | 56 | 7.9 | 3.9 | |
| 10.0 | | 10.9 | 21.6 | |
| 9.2 | | 14.4 | 20.7 | |
| 9.2 | | 16.6 | 2.2 | |
| 9.8 | | 29.4 | 23.1 | |
| 10.0 | | 38.4 | 25.6 | |
| 9.0 | | 38.4 | 19.2 | |
| 9.7 | | 48.4 | 57.6 | |
| 10.0 | | 50.4 | 59.4 | |
| 9.6 | | 52.9 | 48.5 | |
| 9.2 | | 53.4 | 45.1 | |
| 10.0 | | 55.4 | 28.5 | |
| 10.0 | | 58.9 | 5.0 | |
| 10.0 | 57 | 2.4 | 58.0 | |
| 9.4 | | 4.9 | 44.4 | |
| 9.7 | | 12.4 | 25.4 | |
| 9.0 | | 18.9 | 40.1 | 9.0 |
| 10.0 | | 20.4 | 49.2 | |
| 10.0 | | 21.4 | 46.2 | |
| 9.6 | | 25.9 | 53.4 | |
| 9.7 | | 29.4 | 22.8 | |
| 9.8 | | 31.9 | 34.2 | |
| 9.7 | | 37.9 | 39.1 | |
| 8.4 | | 40.4 | 11.2 | 9.0 |
| 10.0 | | 46.7 | 39.1 | |
| 10.0 | | 47.9 | 44.7 | |
| 10.0 | 58 | 9.4 | 56.4 | |
| 8.8 | | 12.4 | 14.9 | 8.2 |
| 10.0 | | 30.4 | 52.1 | |
| 10.0 | | 33.9 | 15.4 | |
| 9.6 | | 49.9 | 3.6 | |
| 9.7 | | 54.4 | 17.0 | |
| 8.7 | | 54.4 | 31.8 | |
| 10.0 | 59 | 1.4 | 55.2 | |
| 9.8 | | 1.4 | 56.8 | |
| 7.4 | | 5.4 | 17.5 | 7.8 GS |
| 9.6 | | 14.9 | 26.6 | |
| 10.0 | | 20.7 | 13.3 | |
| 10.0 | | 22.4 | 42.5 | |
| 9.8 | | 25.9 | 56.0 | |
| 9.8 | | 43.1 | 1.2 | |
| 9.2 | | 44.4 | 43.2 | |
| 9.8 | | 45.4 | 48.8 | |
| 9.4 | 0 | 4.9 | 12.5 | |
| 9.8 | | 5.4 | 43.5 | |
| 9.6 | | 8.9 | 9.3 | |
| 9.8 | | 15.9 | 15.2 | |
| 9.6 | | 16.9 | 27.9 | |
| 8.6 | | 24.9 | 28.1 | 9.0 |
| 9.6 | | 25.4 | 39.1 | |
| 8.8 | | 28.4 | 50.8 | 9.5 |
| 9.7 | | 39.9 | 50.7 | |
| 9.1 | | 48.4 | 14.4 | 8.5 |
| 9.2 | | 54.4 | 41.4 | |
| 10.0 | | 59.4 | 29.7 | |
| 8.9 | 1 | 8.4 | 31.5 | 8.5 |
| 10.0 | | 17.9 | 8.1 | |
| 9.8 | | 54.4 | 8.5 | |
| 9.4 | | 54.4 | 8.7 | |
| 10.0 | 2 | 2.4 | 14.5 | |

25 prec.

| h | m | α + s | − ′ |
|---|---|---|---|
| 13 | 40 | 98 | 7.6 |
| | 50 | 100 | 7.4 |
| 14 | 0 | 102 | 7.2 |
| | 10 | 104 | 7.0 |



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25 prec.

| h | m | α + | δ − |
|---|---|---|---|
| 14 | 0 | 102 | 7·2 |
| | 10 | 104 | 7·0 |
| | 20 | 106 | 6·8 |
| | 30 | 108 | 6·6 |
| | 40 | 109 | 6·4 |

## 6181—6240.

| mag. | 14^h m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 2 | 9·4 | 45·0 | |
| 9·7 | | 11·4 | 3·5 | |
| 10·0 | | 22·9 | 31·7 | |
| 8·7 | | 44·4 | 14·3 | 8·8 |
| 9·2 | | 45·4 | 16·5 | 9·0 |
| 9·2 | | 45·9 | 30·6 | |
| 9·4 | | 51·4 | 37·2 | |
| 10·0 | | 55·4 | 14·8 | |
| 9·6 | 3 | 15·4 | 23·8 | |
| 9·6 | | 23·9 | 4·6 | |
| 9·4 | | 37·9 | 5·2 | 9·0 |
| 10·0 | | 50·4 | 27·6 | |
| 10·0 | | 55·4 | 6·5 | |
| 10·0 | | 56·9 | 15·9 | |
| 9·1 | 4 | 15·4 | 36·5 | |
| 10·0 | | 21·4 | 6·4 | |
| 10·0 | | 22·4 | 3·5 | |
| 9·6 | | 23·4 | 18·8 | |
| 10·0 | | 30·6 | 9·6 | |
| 9·6 | | 33·4 | 29·8 | |
| 9·2 | | 43·4 | 10·1 | |
| 10·0 | | 48·9 | 3·8 | |
| 9·1 | 5 | 35·9 | 6·6 | |
| 9·7 | | 45·4 | 26·3 | |
| 9·6 | | 50·4 | 20·7 | |
| 5·4 | 6 | 15·4 | 29·9 | 6·0 GSt |
| 9·2 | | 25·4 | 37·0 | |
| 10·0 | | 27·4 | 34·2 | |
| 9·4 | | 48·9 | 10·2 | |
| 10·0 | | 48·9 | 7·2 | |
| 10·0 | 7 | 10·9 | 51·1 | |
| 9·1 | | 30·1 | 17·5 | 8·8 |
| 9·2 | | 34·8 | 3·0 | |
| 9·4 | | 41·4 | 35·3 | |
| 7·6 | | 47·9 | 42·8 | 7·0 GSt |
| 9·4 | | 51·4 | 43·0 | 10·0 |
| 10·0 | | 54·2 | 42·1 | |
| 9·2 | 8 | 0·4 | 34·8 | |
| 9·8 | | 8·9 | 14·1 | |
| 9·6 | | 17·1 | 12·3 | |
| 10·2 | | 27·8 | 6·0 | |
| 9·4 | | 45·3 | 1·9 | |
| 10·0 | 9 | 1·3 | 21·9 | |
| 8·9 | | 9·8 | 15·3 | 8·5 G |
| 8·2 | | 9·9 | 27·5 | 8·5 G |
| 7·8 | | 20·9 | 35·6 | 8·0 GSt |
| 9·2 | | 36·4 | 16·9 | 9·5 |
| 10·0 | | 37·4 | 27·0 | |
| 9·4 | | 38·9 | 24·9 | |
| 9·4 | | 45·9 | 13·5 | 8·5 |
| 9·6 | | 50·9 | 25·3 | 9·5 |
| 9·8 | | 53·4 | 46·3 | |
| 8·8 | 10 | 1·9 | 11·1 | 8·0 |
| 9·6 | | 2·9 | 18·2 | |
| 8·7 | | 7·4 | 23·9 | 9·0 |
| 9·8 | | 12·9 | 22·1 | |
| 8·0 | | 24·9 | 20·4 | 8·5 G |
| 8·9 | | 26·9 | 50·6 | G |
| 9·4 | | 39·9 | 51·4 | |
| 9·4 | | 51·9 | 17·7 | 9·5 |

## 6241—6300.

| mag. | 14^h m | s | −56° ′ | |
|---|---|---|---|---|
| 8·0 | 11 | 8·4 | 34·7 | 8·5 GSt |
| 9·0 | | 9·9 | 49·8 | |
| 10·2 | | 17·9 | 39·0 | |
| 9·8 | | 26·9 | 4·8 | |
| 9·6 | | 45·9 | 0·1 | |
| 10·2 | | 46·9 | 31·4 | |
| 10·2 | | 58·1 | 10·5 | |
| 10·0 | 12 | 26·4 | 10·6 | |
| 10·0 | | 32·4 | 27·9 | |
| 8·5 | | 34·4 | 23·2 | 9·5 G |
| 8·9 | | 45·9 | 3·5 | 9·0 |
| 10·2 | 13 | 6·4 | 45·6 | |
| 9·8 | | 9·4 | 11·2 | |
| 10·0 | | 40·9 | 40·6 | |
| 10·0 | 14 | 2·9 | 4·7 | |
| 10·2 | | 45·1 | 9·6 | |
| 10·0 | | 50·9 | 9·8 | |
| 10·2 | 15 | 14·4 | 15·4 | |
| 10·2 | | 54·9 | 30·0 | |
| 9·8 | 16 | 3·4 | 34·4 | |
| 10·0 | | 7·9 | 46·0 | |
| 10·2 | | 22·4 | 49·9 | |
| 10·0 | | 32·4 | 30·3 | |
| 10·2 | | 45·4 | 19·3 | |
| 10·0 | | 48·9 | 57·0 | |
| 9·6 | | 54·9 | 43·7 | |
| 8·8 | 17 | 0·4 | 21·2 | 7·8 GSt |
| 10·2 | | 5·4 | 41·2 | |
| 8·8 | | 10·4 | 17·5 | 9·0 G |
| 10·2 | | 29·7 | 56·9 | |
| 9·8 | | 32·4 | 19·7 | |
| 10·0 | | 41·3 | 38·8 | |
| 10·0 | | 42·4 | 25·9 | |
| 9·5 | 18 | 0·4 | 42·2 | |
| 8·0 | | 7·4 | 43·2 | 8·0 |
| 8·8 | | 28·9 | 13·1 | 9·5 |
| 9·4 | | 59·4 | 26·1 | |
| 9·5 | 20 | 4·4 | 45·8 | |
| 10·2 | | 12·4 | 4·8 | |
| 9·4 | | 31·4 | 35·2 | |
| 9·4 | 21 | 1·9 | 39·0 | |
| 10·0 | | 1·9 | 16·3 | |
| 8·3 | | 9·4 | 21·3 | 8·5 |
| 10·0 | | 39·1 | 2·6 | |
| 10·2 | 22 | 4·4 | 57·3 | |
| 9·5 | | 8·4 | 17·1 | |
| 10·2 | | 13·9 | 10·4 | |
| 9·2 | | 24·4 | 56·2 | 9·5 |
| 9·8 | | 26·9 | 52·2 | |
| 9·5 | | 34·9 | 19·0 | |
| 9·5 | 23 | 1·4 | 9·0 | 9·0 |
| 9·2 | | 6·4 | 9·8 | 10·0 |
| 9·6 | | 15·9 | 16·9 | |
| 10·2 | | 20·4 | 57·5 | |
| 10·2 | | 20·4 | 57·7 | |
| 8·0 | | 36·4 | 19·8 | 7·2 GSt |
| 9·5 | | 37·9 | 59·6 | |
| 10·2 | | 38·9 | 6·9 | |
| 10·0 | | 50·4 | 56·2 | |
| 10·0 | | 51·6 | 0·7 | |

## 6301—6360.

| mag. | 14^h m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 24 | 4·4 | 38·6 | |
| 10·0 | | 4·5 | 24·2 | |
| 8·8 | | 9·0 | 42·6 | |
| 10·2 | | 11·5 | 29·1 | |
| 9·8 | | 16·5 | 16·2 | |
| 10·2 | | 24·5 | 7·2 | |
| 10·0 | | 32·5 | 24·1 | |
| 9·5 | | 42·5 | 4·1 | |
| 10·2 | | 43·5 | 18·2 | |
| 10·0 | | 46·0 | 21·1 | |
| 10·2 | | 50·5 | 17·9 | |
| 9·0 | | 55·5 | 11·5 | |
| 10·2 | 25 | 20·0 | 11·6 | |
| 10·0 | | 21·5 | 34·2 | |
| 9·8 | | 30·5 | 9·6 | |
| 9·8 | | 31·0 | 35·8 | |
| 8·0 | | 36·5 | 33·4 | 8·0 G |
| 9·4 | | 41·0 | 18·6 | |
| 9·5 | | 41·5 | 16·4 | |
| 9·8 | | 50·5 | 9·6 | |
| 9·2 | | 53·5 | 8·6 | |
| 9·4 | 26 | 3·5 | 15·1 | 8·5 |
| 9·8 | | 5·0 | 26·7 | |
| 8·8 | | 11·5 | 10·2 | |
| 8·4 | | 12·0 | 0·8 | 7·2 GSt |
| 8·8 | | 19·0 | 13·2 | 9·5 |
| 10·2 | | 19·5 | 46·2 | |
| 8·8 | | 29·0 | 4·3 | 9·0 |
| 9·2 | | 29·0 | 13·3 | |
| 9·6 | | 30·5 | 3·7 | |
| 10·2 | | 32·5 | 51·6 | |
| 10·2 | | 33·4 | 4·5 | |
| 9·0 | | 33·5 | 4·0 | |
| 9·2 | | 35·0 | 1·0 | |
| 9·0 | | 35·5 | 10·1 | 10·0 |
| 9·8 | | 43·0 | 12·3 | |
| 9·8 | | 44·5 | 3·7 | |
| 10·2 | | 46·5 | 38·0 | |
| 9·8 | | 48·0 | 21·4 | |
| 8·0 | | 50·0 | 4·1 | 8·0 G |
| 9·6 | | 52·0 | 0·4 | |
| 10·0 | | 54·0 | 10·8 | |
| 9·2 | 27 | 0·5 | 43·8 | |
| 10·2 | | 0·5 | 5·0 | |
| 10·2 | | 22·5 | 46·3 | |
| 10·0 | | 25·4 | 2·0 | |
| 9·4 | | 44·0 | 19·3 | |
| 10·0 | | 49·0 | 3·5 | |
| 10·0 | | 50·0 | 10·4 | |
| 10·0 | | 54·4 | 57·6 | |
| 9·8 | | 55·0 | 6·1 | |
| 9·4 | 28 | 0·0 | 45·0 | |
| 10·0 | | 4·0 | 0·2 | |
| 10·0 | | 16·0 | 34·1 | |
| 10·2 | | 19·0 | 51·5 | |
| 9·5 | | 22·0 | 36·8 | |
| 10·2 | | 31·0 | 15·8 | |
| 8·8 | | 39·5 | 54·8 | 8·5 G |
| 10·0 | | 52·5 | 53·6 | |
| 9·6 | 29 | 8·5 | 24·4 | |

## 6361—6420.

| mag. | 14^h m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 29 | 10·5 | 6·7 | |
| 9·8 | | 19·5 | 16·7 | |
| 9·5 | | 38·0 | 51·7 | 9·0 |
| 10·0 | | 44·0 | 7·9 | |
| 9·5 | 30 | 30·5 | 28·7 | |
| 10·0 | | 32·0 | 11·5 | |
| 10·2 | 31 | 13·7 | 42·6 | |
| 7·8 | | 18·5 | 28·7 | 7·5 G |
| 9·8 | | 30·0 | 44·7 | |
| 9·6 | | 39·5 | 6·1 | |
| 9·4 | | 40·5 | 31·0 | 9·5 |
| 9·4 | | 40·7 | 38·0 | |
| 9·6 | | 41·7 | 45·3 | |
| 9·8 | | 44·2 | 38·0 | |
| 10·0 | 32 | 3·2 | 5·2 | |
| 9·8 | | 6·7 | 29·2 | |
| 10·2 | | 19·2 | 35·0 | |
| 10·0 | | 31·2 | 37·5 | |
| 10·2 | | 32·7 | 51·9 | |
| 10·0 | | 33·2 | 7·0 | |
| 9·4 | | 39·2 | 36·4 | |
| 9·5 | | 49·2 | 30·0 | |
| 10·2 | | 59·2 | 6·1 | |
| 9·4 | 33 | 15·2 | 17·1 | |
| 9·4 | | 16·2 | 48·9 | |
| 9·6 | | 29·7 | 41·0 | |
| 10·2 | | 30·2 | 27·2 | |
| 9·6 | | 30·7 | 25·7 | |
| 10·2 | | 32·7 | 40·0 | |
| 10·0 | | 50·7 | 13·3 | |
| 10·0 | | 58·2 | 29·1 | |
| 9·4 | 34 | 2·2 | 28·3 | |
| 10·0 | | 4·2 | 14·1 | |
| 10·2 | | 4·2 | 16·0 | |
| 9·6 | | 6·7 | 57·1 | |
| 9·8 | | 20·7 | 11·5 | |
| 10·2 | | 27·1 | 59·5 | |
| 10·2 | | 34·2 | 34·0 | |
| 9·6 | | 44·2 | 6·1 | |
| 9·2 | | 44·2 | 25·3 | |
| 8·3 | | 45·2 | 8·1 | 9·0 |
| 9·8 | | 47·2 | 19·4 | |
| 10·0 | | 53·2 | 38·3 | |
| 10·2 | 35 | 12·7 | 23·8 | |
| 9·4 | | 19·2 | 51·9 | |
| 9·8 | | 22·4 | 59·9 | |
| 10·2 | | 29·2 | 22·0 | |
| 8·2 | | 37·7 | 56·0 | 9·0 |
| 9·4 | | 40·2 | 7·9 | |
| 10·0 | | 46·7 | 29·9 | |
| 10·0 | | 48·7 | 15·0 | |
| 10·0 | | 50·7 | 15·0 | |
| 9·8 | | 52·8 | 18·4 | |
| 8·0 | 36 | 0·8 | 35·1 | 9·0 |
| 9·6 | | 3·8 | 21·5 | |
| 10·2 | | 15·3 | 45·8 | |
| 9·5 | | 42·8 | 21·7 | |
| 9·8 | | 51·0 | 0·1 | |
| 9·5 | 37 | 4·0 | 56·9 | |
| 9·6 | | 17·8 | 35·6 | |



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**6421—6480.**

| mag. | 14h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 37 | 17·8 | 33·1 | |
| 9·8 | | 26·8 | 22·3 | |
| 7·6 | | 29·3 | 42·2 | 8·5 Scr |
| 10·0 | | 37·8 | 35·0 | |
| 10·0 | | 40·8 | 12·1 | |
| 10·2 | | 57·3 | 28·0 | |
| 10·0 | 38 | 0·8 | 16·8 | |
| 10·2 | | 2·3 | 2·3 | |
| 9·5 | | 9·3 | 6·5 | |
| 9·6 | | 22·8 | 37·4 | |
| 9·0 | | 40·5 | 1·6 | 9·0 G |
| 9·6 | | 45·3 | 3·0 | |
| 10·2 | 39 | 4·6 | 50·8 | |
| 9·8 | | 5·6 | 15·0 | |
| 10·2 | | 33·8 | 48·6 | |
| 9·5 | | 40·3 | 49·6 | |
| 10·2 | | 41·3 | 28·3 | |
| 10·0 | | 42·8 | 56·4 | |
| 10·2 | | 45·0 | 22·5 | |
| 9·5 | | 55·3 | 7·7 | |
| 7·0 | | 59·1 | 8·4 | 6·5 GSct |
| 9·5 | 40 | 0·8 | 39·1 | |
| 10·0 | | 1·1 | 55·1 | |
| 10·0 | | 5·4 | 56·5 | |
| 8·2 | | 9·4 | 54·7 | 8·0 G |
| 9·0 | | 20·4 | 25·8 | 10·0 |
| 10·0 | | 21·9 | 3·1 | |
| 10·1 | | 24·4 | 47·7 | |
| 7·6 | | 38·4 | 49·4 | 8·0 G |
| 10·1 | | 42·9 | 29·6 | |
| 10·0 | 41 | 2·9 | 47·1 | |
| 8·4 | | 18·4 | 37·8 | 8·5 |
| 10·1 | | 19·9 | 20·5 | |
| 10·1 | | 26·4 | 5·5 | |
| 9·8 | | 27·9 | 4·2 | |
| 10·1 | | 33·9 | 45·8 | |
| 9·0 | | 39·3 | 0·9 | 9·5 |
| 9·7 | | 41·4 | 21·7 | |
| 9·6 | 42 | 1·9 | 55·7 | |
| 9·4 | | 4·9 | 23·7 | 9·5 |
| 9·2 | | 8·7 | 2·7 | 8·5 |
| 9·4 | | 23·9 | 26·5 | |
| 9·2 | | 30·9 | 18·8 | |
| 9·4 | | 41·9 | 37·1 | |
| 8·7 | | 53·9 | 24·6 | 9·0 |
| 8·5 | 43 | 10·2 | 56·9 | 9·5 |
| 9·6 | | 17·4 | 4·3 | |
| 10·1 | | 19·9 | 41·9 | |
| 9·2 | | 26·9 | 7·5 | |
| 10·1 | | 49·4 | 19·7 | |
| 9·7 | | 52·9 | 34·1 | |
| 9·2 | 44 | 2·9 | 56·1 | |
| 8·5 | | 8·4 | 21·8 | 8·2 |
| 9·7 | | 19·9 | 44·0 | |
| 9·8 | | 32·9 | 1·2 | |
| 9·8 | | 46·4 | 16·9 | |
| 9·8 | 45 | 3·9 | 35·2 | |
| 10·1 | | 4·3 | 0·1 | |
| 8·3 | | 6·9 | 31·9 | 8·5 |
| 9·6 | | 12·8 | 19·8 | |

**6481—6540.**

| mag. | 14h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 27·3 | 52·1 | |
| 10·1 | | 32·3 | 36·8 | |
| 10·1 | | 42·8 | 26·0 | |
| 10·1 | | 58·8 | 15·6 | |
| 10·0 | | 59·8 | 18·0 | |
| 10·1 | 46 | 10·8 | 18·1 | |
| 9·6 | | 11·8 | 8·0 | |
| 9·6 | | 12·8 | 18·0 | |
| 10·0 | | 19·3 | 43·2 | |
| 10·1 | | 34·8 | 21·6 | |
| 9·7 | | 39·3 | 43·2 | |
| 9·0 | | 43·8 | 26·0 | |
| 10·1 | | 44·8 | 50·5 | |
| 9·6 | 47 | 17·8 | 19·6 | |
| 9·6 | | 18·8 | 4·6 | |
| 9·8 | | 22·8 | 22·9 | |
| 10·1 | | 24·3 | 26·1 | |
| 9·8 | | 26·8 | 41·5 | |
| 9·7 | | 33·8 | 24·9 | |
| 9·8 | | 40·3 | 8·0 | |
| 9·4 | | 45·3 | 18·9 | |
| 10·0 | | 55·3 | 9·9 | |
| 10·0 | | 58·3 | 43·0 | |
| 9·4 | 48 | 5·8 | 5·2 | |
| 9·2 | | 7·3 | 11·9 | |
| 9·8 | | 13·3 | 35·1 | |
| 10·1 | | 14·2 | 56·4 | |
| 9·4 | | 19·3 | 27·1 | 9·0 |
| 9·8 | | 41·3 | 16·6 | 9·5 |
| 10·1 | | 42·3 | 55·3 | |
| 9·6 | | 42·8 | 53·1 | |
| 9·0 | | 49·8 | 28·9 | 9·5 |
| 10·1 | 49 | 0·2 | 32·6 | |
| 9·4 | | 1·8 | 4·0 | |
| 10·0 | | 23·3 | 56·9 | |
| 9·7 | | 24·6 | 58·0 | |
| 10·1 | | 39·8 | 13·2 | |
| 9·8 | | 48·3 | 3·8 | 9·5 |
| 10·0 | 50 | 7·3 | 7·0 | |
| 10·1 | | 16·8 | 57·6 | |
| 9·0 | | 20·7 | 5·1 | 9·0 |
| 8·5 | | 20·8 | 51·1 | 9·0 |
| 8·5 | | 29·2 | 53·3 | 8·5 |
| 10·0 | | 42·7 | 37·9 | |
| 10·0 | | 45·2 | 31·1 | |
| 10·0 | | 49·7 | 3·3 | |
| 10·1 | | 50·7 | 18·0 | |
| 8·5 | | 52·2 | 37·7 | 8·5 |
| 9·6 | 51 | 0·9 | 2·5 | |
| 9·8 | | 1·2 | 37·5 | |
| 10·1 | | 1·7 | 17·9 | |
| 10·1 | | 5·7 | 19·9 | |
| 10·0 | | 10·2 | 5·0 | |
| 9·0 | | 15·7 | 26·1 | |
| 10·1 | | 27·7 | 26·0 | |
| 10·1 | | 29·7 | 55·4 | |
| 10·1 | | 34·7 | 3·0 | |
| 10·1 | | 38·7 | 4·9 | |
| 10·1 | | 49·2 | 41·8 | |
| 9·6 | | 56·7 | 42·3 | |

**6541—6600.**

| mag. | 14h.–15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 52 | 9·7 | 27·7 | |
| 10·0 | | 26·2 | 26·9 | |
| 9·8 | | 33·7 | 10·4 | |
| 10·0 | | 59·7 | 28·8 | |
| 8·4 | 53 | 2·7 | 7·6 | 8·5 |
| 9·6 | | 9·2 | 31·4 | |
| 9·7 | | 9·7 | 32·4 | |
| 8·8 | | 15·7 | 41·8 | 9·5 |
| 9·4 | | 15·7 | 9·5 | |
| 10·1 | | 34·7 | 17·7 | |
| 9·2 | | 40·2 | 27·1 | |
| 9·4 | | 46·2 | 40·0 | |
| 8·4 | | 53·2 | 15·7 | 8·8 |
| 9·6 | 54 | 6·2 | 52·4 | |
| 9·7 | | 6·2 | 43·5 | |
| 9·7 | | 14·7 | 24·6 | |
| 9·8 | | 15·2 | 17·1 | |
| 10·0 | | 18·7 | 57·8 | |
| 10·1 | | 19·0 | 44·0 | |
| 9·8 | | 21·6 | 1·4 | |
| 10·0 | | 28·6 | 41·7 | |
| 10·0 | | 30·6 | 6·2 | |
| 10·1 | | 46·6 | 26·6 | |
| 10·1 | | 51·1 | 6·7 | |
| 9·2 | | 51·6 | 30·0 | |
| 9·6 | | 54·1 | 8·5 | |
| 7·4 | 55 | 0·6 | 25·3 | 8·0 GSt |
| 10·1 | | 15·1 | 32·4 | |
| 10·1 | | 15·6 | 23·6 | |
| 9·6 | | 48·1 | 14·5 | |
| 10·1 | 56 | 12·6 | 26·0 | |
| 9·4 | | 19·1 | 20·5 | |
| 9·6 | | 45·6 | 16·1 | |
| 10·1 | | 50·6 | 29·2 | |
| 9·8 | 57 | 2·1 | 0·4 | |
| 9·4 | | 11·6 | 20·0 | 9·0 |
| 9·8 | | 14·1 | 39·0 | |
| 9·4 | | 15·1 | 17·1 | |
| 8·2 | | 26·6 | 55·2 | 9·0 |
| 9·7 | | 33·1 | 45·6 | |
| 10·1 | | 34·6 | 15·1 | |
| 8·1 | | 45·1 | 57·2 | 7·5 GSg |
| 9·4 | | 54·6 | 17·2 | |
| 9·2 | 58 | 5·1 | 26·9 | 9·5 |
| 9·6 | | 15·1 | 25·0 | |
| 10·0 | | 18·6 | 50·0 | |
| 10·0 | | 36·1 | 51·6 | |
| 10·1 | | 39·1 | 24·0 | |
| 10·1 | | 40·1 | 36·6 | |
| 10·1 | | 58·1 | 28·9 | |
| 9·4 | 59 | 8·1 | 37·7 | |
| 9·4 | | 12·3 | 56·9 | |
| 9·7 | | 24·3 | 51·8 | |
| 8·6 | | 47·8 | 52·8 | 8·5 |
| 9·6 | | 49·3 | 49·9 | 9·5 |
| 8·6 | | 54·8 | 34·9 | 8·0 GS |
| 9·8 | | 59·3 | 15·7 | |
| 10·1 | | 59·8 | 23·9 | |
| 10·0 | 0 | 1·3 | 10·4 | |
| 10·1 | | 14·3 | 13·1 | |

**6601—6660.**

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 0 | 32·3 | 0·3 | |
| 9·2 | | 46·3 | 57·2 | 9·0 |
| 10·0 | | 57·3 | 29·8 | |
| 8·5 | | 59·3 | 39·0 | 8·0 GSt |
| 10·0 | 1 | 3·8 | 26·9 | |
| 9·8 | | 7·8 | 3·8 | |
| 9·7 | | 7·8 | 37·3 | |
| 10·1 | | 15·8 | 8·9 | |
| 10·1 | | 22·3 | 38·8 | |
| 9·8 | | 42·3 | 52·6 | |
| 8·6 | | 46·3 | 59·5 | 9·5 |
| 9·7 | | 48·3 | 44·9 | |
| 9·4 | | 58·8 | 20·7 | |
| 10·1 | 2 | 0·3 | 57·0 | |
| 10·1 | | 4·8 | 10·5 | |
| 9·6 | | 23·8 | 5·0 | |
| 10·0 | | 29·3 | 5·4 | |
| 9·6 | | 30·8 | 54·0 | |
| 9·8 | | 30·8 | 41·0 | |
| 9·6 | | 34·3 | 9·5 | |
| 9·8 | | 37·3 | 1·7 | |
| 9·6 | | 44·8 | 14·2 | |
| 10·1 | | 47·8 | 31·6 | |
| 10·1 | | 53·3 | 33·8 | |
| 10·1 | 3 | 1·6 | 31·9 | |
| 8·9 | | 5·8 | 0·1 | 9·0 |
| 8·8 | | 11·3 | 27·2 | |
| 9·0 | | 12·3 | 18·7 | |
| 10·1 | | 15·8 | 44·6 | |
| 9·7 | | 43·5 | 9·4 | |
| 9·7 | | 45·5 | 46·0 | |
| 10·1 | 4 | 3·0 | 34·6 | |
| 9·7 | | 5·0 | 8·4 | |
| 8·8 | | 7·5 | 24·0 | 9·5 |
| 10·1 | | 14·0 | 33·2 | |
| 9·4 | | 16·5 | 22·9 | |
| 10·1 | | 17·5 | 44·6 | |
| 10·1 | | 23·5 | 44·9 | |
| 9·8 | | 41·5 | 15·0 | |
| 9·2 | | 48·5 | 37·6 | |
| 9·6 | | 49·7 | 0·8 | |
| 9·4 | 5 | 9·0 | 45·4 | 9·0 |
| 10·1 | | 10·0 | 30·7 | |
| 9·7 | | 23·5 | 11·5 | |
| 10·1 | | 26·2 | 7·9 | |
| 9·6 | | 30·5 | 11·8 | |
| 9·2 | | 36·0 | 32·7 | |
| 9·0 | | 52·0 | 23·8 | |
| 9·8 | 6 | 8·0 | 33·2 | |
| 9·7 | | 12·0 | 38·0 | |
| 8·9 | | 16·0 | 32·7 | |
| 9·0 | | 18·5 | 20·7 | |
| 9·4 | | 18·5 | 10·1 | |
| 9·7 | | 29·5 | 58·5 | |
| 10·1 | | 40·5 | 31·9 | |
| 9·6 | | 54·5 | 43·1 | |
| 9·7 | | 55·5 | 32·7 | |
| 9·8 | | 58·2 | 55·9 | |
| 9·8 | 7 | 0·5 | 48·5 | |
| 9·2 | | 5·5 | 46·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 30 | 108 | 6·6 |
| | 40 | 109 | 6·4 |
| | 50 | 111 | 6·2 |
| 15 | 0 | 113 | 5·9 |
| | 10 | 114 | 5·6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 113 | 5.9 |
| | 10 | 114 | 5.6 |
| | 20 | 115 | 5.4 |
| | 30 | 117 | 5.1 |
| | 40 | 118 | 4.8 |

**6661—6720.**

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8.6 | 7 | 11.0 | 54.8 | |
| 10.0 | | 18.5 | 37.6 | |
| 10.1 | | 20.0 | 43.1 | |
| 9.4 | | 27.0 | 15.8 | |
| 9.8 | | 32.5 | 3.4 | |
| 10.1 | | 34.5 | 43.1 | |
| 8.6 | | 35.5 | 33.8 | 9.5 |
| 9.4 | | 59.8 | 44.4 | |
| 9.0 | 8 | 11.8 | 9.2 | |
| 9.6 | | 20.8 | 24.7 | |
| 10.1 | | 40.6 | 56.6 | |
| 10.1 | | 43.3 | 51.7 | |
| 9.8 | | 43.3 | 2.7 | |
| 10.1 | | 48.8 | 11.9 | |
| 10.1 | | 52.8 | 58.6 | |
| 9.4 | | 54.3 | 48.2 | 9.5 |
| 10.1 | | 58.3 | 59.9 | |
| 9.6 | | 58.8 | 17.8 | |
| 10.1 | | 59.8 | 54.9 | |
| 9.7 | 9 | 9.8 | 45.0 | |
| 10.0 | | 16.8 | 21.7 | |
| 9.6 | | 19.3 | 16.3 | |
| 10.1 | | 19.8 | 48.7 | |
| 9.8 | | 21.3 | 29.4 | |
| 9.2 | | 29.3 | 7.0 | |
| 10.1 | | 29.3 | 29.7 | |
| 9.6 | | 29.3 | 44.6 | |
| 9.8 | | 33.8 | 28.1 | |
| 9.6 | | 46.3 | 16.2 | |
| 9.7 | | 52.3 | 16.0 | |
| 9.8 | 10 | 2.8 | 33.6 | |
| 9.8 | | 9.3 | 43.4 | |
| 9.8 | | 28.3 | 44.6 | |
| 9.0 | | 28.8 | 9.0 | |
| 8.6 | | 31.8 | 30.2 | |
| 8.1 | | 34.4 | 56.4 | 7.5 GS |
| 9.0 | | 44.8 | 18.6 | |
| 9.8 | 11 | 0.3 | 35.4 | |
| 10.1 | | 5.3 | 52.0 | |
| 10.0 | | 19.8 | 54.4 | |
| 10.0 | | 23.3 | 51.2 | |
| 9.4 | | 25.8 | 13.9 | |
| 8.9 | | 26.8 | 41.6 | 9.5 S |
| 9.4 | | 31.3 | 20.6 | |
| 10.0 | | 42.3 | 47.5 | |
| 9.2 | | 42.8 | 31.6 | |
| 9.4 | | 54.4 | 32.3 | 9.5 |
| 9.6 | | 57.6 | 47.2 | |
| 9.0 | | 58.2 | 26.7 | 9.5 |
| 10.0 | 12 | 10.8 | 59.9 | |
| 9.7 | | 11.2 | 37.2 | |
| 7.9 | | 22.5 | 41.4 | 7.5 GSt |
| 10.2 | | 25.6 | 51.5 | |
| 10.0 | | 32.5 | 54.5 | |
| 10.1 | | 36.5 | 13.7 | |
| 10.2 | | 37.0 | 49.6 | |
| 10.2 | | 43.9 | 10.4 | |
| 10.1 | | 52.5 | 59.6 | |
| 9.6 | 13 | 0.8 | 36.4 | |
| 10.2 | | 2.5 | 11.0 | |

**6721—6780.**

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 13 | 2.5 | 53.3 | |
| 9.4 | | 14.5 | 36.0 | |
| 10.2 | | 22.5 | 29.7 | |
| 10.2 | | 24.0 | 37.8 | |
| 10.0 | | 28.0 | 0.1 | |
| 10.2 | | 36.5 | 14.0 | |
| 9.2 | | 48.0 | 37.9 | |
| 10.1 | | 49.5 | 57.0 | |
| 7.9 | 14 | 10.5 | 52.8 | 7.0 GSt |
| 10.1 | | 21.5 | 37.3 | |
| 10.2 | | 25.4 | 6.3 | |
| 8.5 | | 26.0 | 13.5 | 8.5 |
| 9.6 | | 31.5 | 23.2 | |
| 10.2 | | 33.4 | 13.7 | |
| 8.3 | | 37.0 | 15.0 | 9.0 |
| 9.6 | | 42.5 | 27.6 | |
| 10.1 | | 50.5 | 20.4 | |
| 9.6 | | 51.5 | 56.6 | |
| 9.6 | | 55.5 | 55.3 | |
| 10.2 | 15 | 7.0 | 16.0 | |
| 9.4 | | 9.0 | 19.8 | 9.5 |
| 9.4 | | 14.0 | 8.0 | |
| 9.7 | | 45.5 | 45.0 | |
| 9.7 | | 52.5 | 6.2 | |
| 8.5 | 16 | 4.0 | 50.9 | 8.5 |
| 7.6 | | 5.0 | 34.0 | GS |
| 9.8 | | 36.5 | 26.9 | |
| 10.2 | | 42.0 | 49.4 | |
| 9.7 | | 55.5 | 39.8 | |
| 9.3 | | 59.0 | 53.1 | |
| 10.2 | 17 | 3.0 | 11.8 | |
| 10.0 | | 5.0 | 4.6 | |
| 9.2 | | 17.0 | 6.4 | G |
| 9.9 | | 42.5 | 55.2 | 8.0 |
| 8.6 | | 50.0 | 34.2 | S |
| 10.2 | 18 | 0.5 | 9.2 | |
| 9.3 | | 5.5 | 55.2 | 7.5 G |
| 9.9 | | 7.0 | 20.1 | |
| 10.1 | | 16.5 | 5.0 | |
| 9.0 | | 17.0 | 4.7 | G |
| 9.8 | | 40.5 | 25.1 | |
| 10.2 | | 43.5 | 29.2 | |
| 9.9 | | 50.0 | 40.6 | |
| 9.4 | | 57.0 | 38.8 | |
| 8.8 | 19 | 0.5 | 36.8 | 9.0 |
| 10.2 | | 42.0 | 41.7 | |
| 9.9 | | 49.0 | 42.2 | |
| 7.9 | | 49.0 | 48.6 | 8.0 G |
| 10.2 | | 50.8 | 3.7 | |
| 10.2 | | 53.5 | 52.0 | |
| 9.4 | 20 | 1.5 | 58.0 | |
| 10.0 | | 2.5 | 9.7 | |
| 9.8 | | 6.0 | 15.7 | |
| 10.0 | | 23.0 | 26.0 | |
| 9.8 | | 36.0 | 0.6 | |
| 10.2 | | 40.5 | 17.9 | |
| 9.3 | | 40.5 | 47.0 | |
| 9.4 | | 50.5 | 51.5 | |
| 10.2 | | 59.0 | 42.0 | |
| 9.8 | 21 | 6.5 | 13.8 | |

**6781—6840.**

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.8 | 21 | 45.0 | 45.8 | |
| 9.7 | 22 | 2.0 | 48.0 | |
| 10.2 | | 7.0 | 25.8 | |
| 9.8 | | 24.8 | 58.8 | |
| 9.7 | | 42.5 | 26.8 | |
| 9.4 | | 48.0 | 22.6 | 9.0 |
| 7.6 | | 54.5 | 58.7 | 7.5 GS |
| 9.8 | 23 | 8.5 | 23.0 | |
| 9.8 | | 32.5 | 8.0 | |
| 9.4 | | 45.5 | 0.2 | |
| 9.7 | | 47.5 | 52.4 | 9.5 |
| 9.3 | 24 | 2.0 | 47.6 | 10.0 |
| 10.0 | | 5.5 | 38.3 | |
| 9.4 | | 9.0 | 1.0 | |
| 8.0 | | 36.5 | 38.8 | 7.5 GSc |
| 8.3 | | 48.5 | 5.7 | 9.0 |
| 10.2 | 25 | 16.0 | 57.6 | |
| 8.2 | | 18.0 | 33.6 | 8.0 G |
| 10.0 | | 21.0 | 50.9 | |
| 10.2 | | 24.0 | 57.9 | |
| 9.0 | | 30.5 | 3.9 | 9.5 |
| 7.8 | | 36.5 | 59.8 | GScr |
| 9.8 | | 36.5 | 31.9 | |
| 9.7 | | 40.0 | 8.8 | |
| 10.2 | | 44.5 | 23.5 | |
| 9.7 | | 48.5 | 39.1 | 9.5 |
| 9.9 | | 50.0 | 12.6 | |
| 10.0 | | 57.0 | 30.1 | |
| 9.6 | | 58.0 | 10.4 | |
| 8.6 | 26 | 0.5 | 28.9 | 8.0 |
| 9.8 | | 3.5 | 2.6 | |
| 9.4 | | 5.5 | 6.7 | |
| 9.4 | | 12.5 | 14.9 | |
| 9.6 | | 23.0 | 5.8 | |
| 9.4 | | 24.0 | 59.2 | |
| 7.6 | | 39.0 | 35.5 | 8.0 G |
| 10.1 | | 39.5 | 16.6 | |
| 9.6 | 27 | 16.5 | 12.5 | |
| 9.2 | | 28.5 | 17.1 | 9.5 |
| 9.4 | | 32.5 | 22.4 | |
| 9.7 | | 46.0 | 11.3 | |
| 10.1 | | 48.0 | 45.0 | |
| 10.2 | 28 | 5.0 | 11.2 | |
| 10.0 | | 8.5 | 45.9 | |
| 10.2 | | 10.5 | 9.8 | |
| 10.2 | | 19.0 | 59.9 | |
| 9.0 | | 22.5 | 51.7 | 8.0 G |
| 10.1 | | 22.5 | 25.9 | |
| 9.7 | | 28.4 | 1.0 | |
| 10.1 | | 29.5 | 3.1 | |
| 10.0 | | 46.5 | 13.9 | |
| 9.9 | | 48.0 | 55.6 | |
| 9.6 | | 49.5 | 14.6 | |
| 10.2 | | 58.0 | 6.2 | |
| 9.2 | 29 | 3.5 | 53.6 | |
| 9.6 | | 22.0 | 2.4 | |
| 9.7 | | 26.5 | 3.8 | |
| 10.2 | | 44.0 | 10.2 | |
| 9.7 | | 45.5 | 26.4 | |
| 9.6 | | 49.0 | 11.1 | |

**6841—6900.**

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 30 | 5.0 | 31.9 | 10.0 |
| 7.9 | | 22.0 | 30.1 | 7.0 GSctr |
| 8.2 | | 27.5 | 43.7 | 8.0 |
| 10.2 | | 44.5 | 45.5 | |
| 10.0 | 31 | 3.0 | 31.4 | |
| 10.1 | | 4.5 | 31.0 | |
| 10.2 | | 14.0 | 3.1 | |
| 9.3 | | 18.0 | 30.7 | |
| 9.4 | | 20.5 | 33.5 | |
| 10.0 | | 28.0 | 35.9 | |
| 10.0 | | 29.5 | 10.4 | |
| 10.1 | | 32.5 | 40.6 | |
| 9.2 | 32 | 8.0 | 27.8 | |
| 9.4 | | 9.0 | 12.3 | |
| 9.2 | | 12.0 | 28.2 | |
| 10.0 | | 19.0 | 37.2 | |
| 9.9 | | 27.5 | 8.0 | |
| 9.2 | | 29.0 | 13.0 | 9.0 |
| 8.9 | | 31.5 | 45.2 | 9.0 |
| 9.7 | | 36.5 | 43.9 | |
| 9.6 | | 50.5 | 15.6 | 9.5 |
| 9.4 | | 54.0 | 53.0 | |
| 9.7 | 33 | 2.5 | 36.7 | |
| 9.6 | | 21.5 | 10.0 | |
| 10.1 | | 32.5 | 0.9 | |
| 9.6 | | 36.5 | 13.9 | |
| 10.2 | | 39.0 | 50.8 | |
| 10.2 | | 41.0 | 1.0 | |
| 10.2 | | 50.0 | 7.0 | |
| 10.2 | 34 | 13.0 | 21.4 | |
| 9.7 | | 19.5 | 13.3 | |
| 8.0 | | 23.5 | 42.7 | 8.0 G |
| 9.8 | | 52.0 | 34.8 | |
| 8.6 | | 56.5 | 24.6 | 8.5 |
| 9.6 | 35 | 2.0 | 57.2 | |
| 8.6 | | 12.0 | 30.6 | 8.0 G |
| 10.2 | | 40.5 | 11.6 | |
| 9.8 | | 50.0 | 11.0 | |
| 9.6 | | 50.5 | 13.1 | |
| 8.4 | | 57.0 | 4.0 | |
| 9.2 | | 58.5 | 43.8 | 8.5 |
| 10.1 | | 59.0 | 8.4 | |
| 10.1 | 36 | 0.5 | 19.0 | |
| 9.9 | | 6.5 | 45.7 | |
| 9.4 | | 28.5 | 53.2 | |
| 9.8 | | 46.5 | 27.2 | |
| 9.4 | 37 | 10.0 | 27.3 | |
| 10.2 | | 12.5 | 13.1 | |
| 10.1 | | 16.5 | 8.5 | |
| 10.2 | | 24.4 | 8.3 | |
| 10.2 | | 35.0 | 17.0 | |
| 10.2 | | 35.5 | 45.8 | |
| 10.2 | | 49.5 | 38.0 | |
| 9.6 | | 58.0 | 53.6 | |
| 10.2 | 38 | 3.0 | 52.8 | |
| 9.4 | | 10.5 | 14.0 | |
| 10.2 | | 10.8 | 58.4 | |
| 10.1 | | 14.0 | 22.3 | |
| 9.6 | | 16.5 | 19.7 | |
| 8.3 | | 19.0 | 10.2 | 9.0 |



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### 6901—6960.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 38 | 19·0 | 15·0 | |
| 9·9 | | 32·5 | 43·5 | |
| 8·4 | | 42·0 | 42·8 | |
| 9·7 | | 42·5 | 53·0 | |
| 9·7 | | 42·5 | 59·9 | |
| 10·2 | | 48·5 | 59·4 | |
| 10·2 | 39 | 3·0 | 42·2 | |
| 9·0 | | 8·0 | 4·9 | 8·5 |
| 10·0 | | 10·5 | 46·9 | |
| 9·4 | | 11·5 | 24·9 | |
| 10·0 | | 19·0 | 36·5 | |
| 8·9 | | 39·0 | 29·8 | 9·0 |
| 10·2 | | 39·0 | 31·5 | |
| 9·6 | | 39·0 | 19·0 | |
| 10·1 | | 41·0 | 37·8 | |
| 9·7 | | 41·0 | 21·9 | |
| 10·1 | | 51·5 | 8·1 | |
| 9·6 | 40 | 0·5 | 40·8 | |
| 10·2 | | 1·0 | 19·1 | |
| 10·2 | | 4·0 | 5·9 | |
| 9·8 | | 5·5 | 40·0 | |
| 9·4 | | 6·0 | 16·7 | |
| 10·0 | | 8·0 | 49·0 | |
| 9·6 | | 10·0 | 0·1 | |
| 9·6 | | 24·5 | 28·4 | |
| 9·9 | | 27·0 | 24·6 | |
| 9·6 | | 27·5 | 29·9 | |
| 9·6 | | 27·5 | 0·5 | |
| 9·7 | | 32·5 | 4·4 | |
| 10·0 | | 35·9 | 3·9 | |
| 9·4 | | 38·0 | 45·9 | 9·0 |
| 9·6 | | 39·5 | 17·2 | |
| 10·1 | | 41·3 | 2·0 | |
| 8·6 | | 47·5 | 55·3 | |
| 10·2 | | 56·0 | 23·8 | |
| 9·6 | 41 | 0·5 | 53·7 | |
| 9·7 | | 9·0 | 18·8 | |
| 9·6 | | 12·5 | 2·4 | |
| 9·4 | | 20·0 | 43·9 | |
| 10·2 | | 23·9 | 46·7 | |
| 10·2 | | 29·5 | 29·6 | |
| 9·4 | | 33·0 | 15·1 | |
| 9·1 | | 34·0 | 43·7 | |
| 10·2 | | 40·9 | 31·1 | |
| 9·9 | | 43·8 | 1·1 | |
| 9·7 | | 47·5 | 28·5 | |
| 9·6 | | 50·0 | 14·7 | |
| 10·2 | 42 | 14·0 | 5·1 | |
| 10·2 | | 17·5 | 2·7 | |
| 9·7 | | 20·5 | 25·7 | |
| 9·6 | | 30·5 | 23·6 | |
| 9·9 | | 31·0 | 57·2 | |
| 10·0 | | 31·5 | 19·0 | |
| 10·2 | | 32·9 | 24·1 | |
| 8·2 | | 34·5 | 33·2 | 8·5 |
| 10·2 | | 39·0 | 27·6 | |
| 8·4 | | 43·0 | 51·8 | 8·5 |
| 8·1 | | 49·0 | 33·3 | 8·5 |
| 9·0 | | 52·5 | 8·8 | 9·5 |
| 9·8 | | 59·5 | 50·4 | |

### 6961—7020.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 43 | 0·5 | 51·9 | |
| 9·8 | | 2·0 | 25·1 | |
| 10·0 | | 8·5 | 58·2 | |
| 9·9 | | 28·5 | 13·7 | |
| 10·1 | | 29·6 | 42·4 | |
| 9·6 | | 30·1 | 6·7 | |
| 10·0 | | 32·2 | 45·0 | |
| 10·2 | | 32·6 | 51·9 | |
| 10·0 | | 33·6 | 9·9 | |
| 10·4 | | 34·1 | 12·2 | |
| 9·3 | | 36·1 | 52·2 | |
| 10·4 | | 36·1 | 26·9 | |
| 10·0 | | 37·1 | 20·6 | |
| 10·4 | | 40·6 | 34·5 | |
| 9·8 | | 41·6 | 46·6 | |
| 10·4 | | 50·1 | 23·1 | |
| 10·4 | | 50·6 | 9·0 | |
| 9·8 | | 54·6 | 4·4 | |
| 10·2 | | 56·1 | 16·8 | |
| 10·4 | 44 | 2·1 | 41·1 | |
| 10·4 | | 2·5 | 47·0 | |
| 10·4 | | 3·1 | 39·3 | |
| 10·4 | | 4·5 | 26·8 | |
| 10·0 | | 5·6 | 15·3 | |
| 10·4 | | 8·1 | 2·9 | |
| 9·3 | | 8·1 | 49·7 | |
| 10·4 | | 9·1 | 29·4 | |
| 10·4 | | 12·1 | 15·9 | |
| 10·4 | | 12·1 | 2·8 | |
| 10·1 | | 12·6 | 4·0 | |
| 10·4 | | 13·6 | 39·8 | |
| 10·2 | | 16·6 | 28·9 | |
| 10·4 | | 17·1 | 15·1 | |
| 10·4 | | 20·6 | 4·9 | |
| 10·1 | | 22·6 | 12·7 | |
| 10·4 | | 27·6 | 24·7 | |
| 9·2 | | 29·6 | 53·9 | |
| 10·1 | | 31·1 | 1·1 | |
| 10·4 | | 34·6 | 20·8 | |
| 10·4 | | 38·1 | 11·8 | |
| 10·4 | | 38·6 | 7·4 | |
| 10·4 | | 40·1 | 9·8 | |
| 9·8 | | 41·9 | 1·2 | |
| 10·2 | | 44·3 | 31·8 | |
| 9·4 | | 46·1 | 27·8 | |
| 10·4 | | 51·1 | 24·7 | |
| 10·4 | | 51·1 | 9·9 | |
| 10·4 | | 51·3 | 33·8 | |
| 10·4 | | 52·6 | 11·5 | |
| 9·8 | | 53·1 | 4·8 | |
| 9·8 | | 53·6 | 5·3 | |
| 9·8 | | 56·1 | 34·2 | |
| 10·4 | | 59·1 | 25·8 | |
| 9·3 | 45 | 3·6 | 16·2 | |
| 9·8 | | 8·1 | 12·8 | |
| 9·6 | | 10·1 | 3·3 | |
| 10·4 | | 12·3 | 33·9 | |
| 10·4 | | 20·3 | 33·1 | |
| 8·7 | | 24·1 | 37·3 | 8·5 |
| 9·6 | | 26·6 | 53·8 | |

### 7021—7080.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8·2 | 45 | 27·1 | 41·0 | 8·0 |
| 10·1 | | 28·1 | 15·7 | |
| 10·2 | | 31·3 | 58·6 | |
| 9·2 | | 32·1 | 38·8 | |
| 10·4 | | 33·6 | 5·2 | |
| 10·0 | | 36·6 | 59·3 | |
| 10·0 | | 38·6 | 16·0 | |
| 9·8 | | 39·1 | 33·2 | |
| 9·0 | | 42·6 | 15·5 | 9·0 |
| 9·4 | | 47·1 | 25·3 | |
| 10·1 | | 49·6 | 40·8 | |
| 10·4 | | 50·1 | 8·2 | |
| 8·9 | | 51·1 | 34·0 | 8·5 |
| 10·4 | | 56·2 | 58·6 | |
| 10·4 | | 56·6 | 17·9 | |
| 10·0 | | 58·6 | 26·0 | |
| 10·4 | 46 | 2·6 | 17·2 | |
| 9·6 | | 8·6 | 7·8 | |
| 10·0 | | 9·1 | 52·3 | |
| 9·8 | | 11·1 | 52·2 | |
| 10·0 | | 16·1 | 13·8 | |
| 9·2 | | 21·1 | 36·1 | |
| 9·2 | | 22·1 | 48·7 | |
| 10·1 | | 23·1 | 54·2 | |
| 9·8 | | 24·6 | 11·0 | |
| 9·8 | | 25·6 | 26·0 | |
| 10·4 | | 26·1 | 11·2 | |
| 9·8 | | 31·1 | 36·2 | |
| 10·4 | | 31·1 | 29·8 | |
| 10·0 | | 31·1 | 54·8 | |
| 9·8 | | 37·6 | 0·9 | |
| 10·4 | | 38·6 | 22·8 | |
| 10·2 | | 40·1 | 42·8 | |
| 10·0 | | 42·1 | 32·4 | |
| 9·6 | | 42·1 | 58·0 | |
| 9·8 | | 46·1 | 29·4 | |
| 10·4 | | 47·6 | 9·3 | |
| 10·0 | | 50·1 | 38·2 | |
| 10·4 | | 51·1 | 26·7 | |
| 9·6 | | 51·1 | 9·0 | |
| 9·0 | | 52·6 | 7·7 | 9·5 |
| 10·4 | | 53·6 | 24·1 | |
| 9·2 | | 53·6 | 38·9 | |
| 10·0 | | 56·1 | 36·8 | |
| 10·4 | | 59·1 | 45·4 | |
| 10·0 | 47 | 1·1 | 20·3 | |
| 9·6 | | 5·6 | 0·0 | |
| 10·1 | | 9·1 | 41·2 | |
| 10·4 | | 9·6 | 34·8 | |
| 10·0 | | 10·1 | 10·2 | |
| 10·0 | | 12·1 | 3·8 | |
| 10·1 | | 14·6 | 28·0 | |
| 10·4 | | 15·1 | 33·8 | |
| 10·2 | | 17·6 | 28·4 | |
| 10·1 | | 19·1 | 51·8 | |
| 10·4 | | 20·1 | 6·0 | |
| 9·6 | | 20·1 | 19·8 | |
| 10·1 | | 21·1 | 53·8 | |
| 10·0 | | 21·1 | 17·8 | |
| 10·1 | | 21·6 | 14·8 | |

### 7081—7140.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 47 | 22·6 | 52·4 | |
| 10·2 | | 31·1 | 28·4 | |
| 9·2 | | 31·6 | 12·8 | 9·5 |
| 8·7 | | 32·1 | 40·4 | |
| 9·8 | | 32·6 | 16·6 | |
| 9·8 | | 32·6 | 41·1 | |
| 9·6 | | 33·1 | 28·6 | |
| 10·4 | | 36·6 | 53·4 | |
| 9·2 | | 37·6 | 31·1 | |
| 10·4 | | 38·6 | 59·5 | |
| 10·0 | | 40·6 | 5·8 | |
| 10·2 | | 42·1 | 9·0 | |
| 10·0 | | 42·6 | 15·0 | |
| 10·4 | | 43·1 | 58·9 | |
| 10·2 | | 50·6 | 9·7 | |
| 10·4 | | 51·1 | 29·4 | |
| 10·2 | | 52·6 | 52·8 | |
| 9·8 | | 57·6 | 1·9 | |
| 10·2 | | 59·1 | 28·4 | |
| 10·4 | | 59·6 | 9·6 | |
| 7·8 | 48 | 3·1 | 46·8 | 8·0 |
| 10·1 | | 6·1 | 14·9 | |
| 9·8 | | 7·6 | 55·3 | |
| 9·6 | | 8·1 | 50·6 | |
| 8·1 | | 9·9 | 1·6 | 7·2 GS |
| 10·4 | | 10·1 | 54·8 | |
| 9·8 | | 10·6 | 14·0 | |
| 10·0 | | 12·1 | 3·9 | |
| 10·4 | | 16·6 | 12·6 | |
| 10·2 | | 18·6 | 10·4 | |
| 10·0 | | 22·1 | 27·2 | |
| 10·1 | | 26·1 | 7·5 | |
| 10·4 | | 27·1 | 48·8 | |
| 10·2 | | 32·1 | 34·4 | |
| 10·0 | | 32·6 | 29·1 | |
| 10·2 | | 34·1 | 9·4 | |
| 10·2 | | 34·6 | 5·2 | |
| 10·1 | | 38·1 | 52·2 | |
| 10·4 | | 41·6 | 50·4 | |
| 10·2 | | 46·1 | 38·1 | |
| 10·2 | | 46·6 | 37·6 | |
| 10·4 | | 50·0 | 58·9 | |
| 10·2 | | 53·6 | 34·6 | |
| 10·0 | | 54·1 | 31·3 | |
| 10·2 | | 56·6 | 48·5 | |
| 10·0 | | 56·6 | 31·0 | |
| 10·0 | | 59·1 | 25·8 | |
| 9·5 | | 59·6 | 34·4 | |
| 10·1 | 49 | 0·6 | 6·5 | |
| 10·0 | | 2·1 | 27·3 | |
| 10·4 | | 4·4 | 0·0 | |
| 10·2 | | 17·1 | 35·3 | |
| 9·6 | | 22·6 | 17·6 | |
| 9·3 | | 24·1 | 52·6 | |
| 10·0 | | 28·1 | 13·6 | |
| 10·1 | | 29·6 | 31·4 | |
| 10·4 | | 29·6 | 46·2 | |
| 10·4 | | 32·6 | 49·9 | |
| 10·2 | | 34·1 | 29·7 | |
| 10·1 | | 36·6 | 6·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 30 | 117 | 5·1 |
| | 40 | 118 | 4·8 |
| | 50 | 119 | 4·5 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 40 | 118 | 4·8 |
| | 50 | 119 | 4·5 |
| 16 | 0 | 121 | 4·2 |
| | 10 | 122 | 3·9 |

## 7141—7200.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 7·9 | 49 | 37·1 | 24·4 | |
| 10·0 | | 37·6 | 40·4 | |
| 9·8 | | 38·1 | 18·1 | |
| 10·4 | | 40·6 | 50·6 | |
| 9·2 | | 41·6 | 27·9 | |
| 10·2 | | 44·1 | 22·7 | |
| 9·0 | | 47·1 | 6·7 | 9·5 |
| 10·4 | | 47·1 | 44·7 | |
| 10·2 | | 51·6 | 31·7 | |
| 7·7 | | 53·6 | 26·9 | GSt |
| 9·6 | | 56·1 | 35·1 | |
| 10·2 | | 58·6 | 30·8 | |
| 10·0 | 50 | 5·6 | 30·8 | |
| 10·1 | | 8·1 | 42·4 | |
| 10·0 | | 10·1 | 23·4 | |
| 10·1 | | 16·1 | 47·6 | |
| 10·4 | | 20·6 | 53·5 | |
| 10·2 | | 23·6 | 30·5 | |
| 10·4 | | 26·1 | 28·2 | |
| 9·8 | | 30·1 | 21·7 | |
| 9·6 | | 31·1 | 55·7 | |
| 9·8 | | 35·6 | 20·2 | |
| 10·4 | | 41·6 | 0·5 | |
| 10·2 | | 43·1 | 58·8 | |
| 10·1 | | 43·6 | 28·9 | |
| 9·5 | | 47·6 | 27·8 | |
| 9·8 | | 48·6 | 33·7 | |
| 10·0 | | 51·1 | 43·1 | |
| 9·6 | | 58·1 | 14·2 | |
| 10·4 | 51 | 12·1 | 23·2 | |
| 10·4 | | 14·1 | 25·0 | |
| 8·2 | | 15·1 | 19·7 | G |
| 10·4 | | 18·6 | 23·1 | |
| 10·4 | | 19·1 | 3·5 | |
| 10·2 | | 30·6 | 25·1 | |
| 8·7 | | 37·1 | 27·3 | |
| 10·4 | | 38·1 | 4·0 | |
| 10·4 | | 43·6 | 7·8 | |
| 10·0 | | 45·6 | 50·6 | |
| 10·4 | | 45·6 | 39·2 | |
| 10·0 | | 46·1 | 8·6 | |
| 10·0 | | 51·1 | 22·7 | |
| 10·0 | | 56·6 | 49·1 | |
| 10·0 | | 59·6 | 24·0 | |
| 10·1 | 52 | 2·1 | 25·8 | |
| 10·1 | | 4·6 | 31·0 | |
| 10·1 | | 6·1 | 9·3 | |
| 10·2 | | 6·1 | 7·2 | |
| 10·4 | | 10·1 | 4·5 | |
| 9·8 | | 13·6 | 17·6 | |
| 10·2 | | 13·6 | 4·1 | |
| 9·6 | | 14·6 | 41·5 | |
| 10·0 | | 18·6 | 54·7 | |
| 10·4 | | 20·6 | 36·7 | |
| 10·0 | | 23·9 | 0·9 | |
| 10·4 | | 24·1 | 58·2 | |
| 9·8 | | 26·4 | 37·3 | |
| 7·6 | | 28·1 | 29·6 | 7·0 GSt |
| 10·2 | | 28·6 | 15·0 | |
| 9·2 | | 28·6 | 51·8 | 9·0 |

## 7201—7260.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 52 | 30·6 | 48·9 | 9·0 |
| 10·4 | | 39·1 | 49·6 | |
| 10·4 | | 42·1 | 9·1 | |
| 10·0 | | 45·4 | 1·8 | |
| 9·8 | | 46·1 | 53·1 | |
| 10·4 | | 48·6 | 17·4 | |
| 7·6 | | 58·6 | 4·2 | 8·2 |
| 9·8 | 53 | 4·1 | 58·3 | |
| 10·1 | | 12·1 | 44·8 | |
| 10·0 | | 17·6 | 21·0 | |
| 9·2 | | 23·6 | 39·4 | |
| 10·4 | | 26·6 | 16·4 | |
| 10·1 | | 28·1 | 52·6 | |
| 10·4 | | 28·6 | 28·2 | |
| 10·0 | | 31·6 | 5·3 | |
| 10·0 | | 37·6 | 36·2 | |
| 10·4 | | 38·6 | 23·3 | |
| 9·4 | | 39·6 | 54·8 | |
| 10·4 | | 43·1 | 22·8 | |
| 10·2 | | 47·6 | 38·5 | |
| 9·2 | | 53·6 | 12·1 | |
| 10·0 | | 55·6 | 12·8 | |
| 9·8 | 54 | 1·1 | 14·6 | |
| 10·4 | | 1·6 | 47·9 | |
| 10·4 | | 8·1 | 52·5 | |
| 9·6 | | 9·6 | 41·3 | |
| 10·2 | | 12·1 | 22·0 | |
| 8·4 | | 15·6 | 5·4 | 9·0 |
| 10·1 | | 15·6 | 15·7 | |
| 10·0 | | 21·6 | 55·8 | |
| 10·4 | | 22·4 | 7·5 | |
| 10·1 | | 23·6 | 6·9 | |
| 10·4 | | 23·6 | 53·8 | |
| 10·0 | | 33·1 | 0·0 | |
| 10·0 | | 33·6 | 58·7 | |
| 10·4 | | 33·6 | 57·8 | |
| 9·8 | | 36·1 | 16·5 | |
| 10·4 | | 37·6 | 19·9 | |
| 9·6 | | 42·6 | 31·4 | |
| 9·8 | | 42·6 | 3·3 | |
| 9·6 | | 47·1 | 22·7 | |
| 10·4 | | 48·6 | 17·1 | |
| 10·4 | | 50·6 | 25·2 | |
| 10·4 | | 55·1 | 44·3 | |
| 9·6 | | 56·1 | 57·8 | 9·5 |
| 10·0 | | 57·1 | 15·6 | |
| 9·6 | | 57·6 | 5·3 | |
| 10·0 | 55 | 0·1 | 32·7 | |
| 10·4 | | 8·6 | 14·4 | |
| 10·4 | | 13·6 | 44·1 | |
| 10·4 | | 20·6 | 57·0 | |
| 10·4 | | 25·1 | 24·5 | |
| 10·4 | | 26·1 | 34·7 | |
| 10·4 | | 27·1 | 14·3 | |
| 9·0 | | 28·1 | 21·9 | |
| 10·4 | | 28·6 | 52·3 | |
| 10·4 | | 33·4 | 36·1 | |
| 10·4 | | 35·6 | 37·8 | |
| 10·2 | | 35·8 | 0·6 | |
| 10·4 | | 39·6 | 32·7 | |

## 7261—7320.

| mag. | 15h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 55 | 44·1 | 33·8 | |
| 10·4 | | 44·6 | 33·3 | |
| 9·0 | | 45·5 | 1·9 | |
| 10·1 | | 46·6 | 20·2 | |
| 10·4 | | 48·6 | 18·8 | |
| 10·4 | | 50·6 | 25·0 | |
| 9·8 | | 59·1 | 40·5 | |
| 10·2 | 56 | 5·6 | 55·9 | |
| 10·0 | | 6·1 | 29·0 | |
| 9·6 | | 17·6 | 48·5 | 9·0 G |
| 10·4 | | 22·1 | 58·0 | |
| 9·2 | | 23·6 | 37·5 | |
| 10·4 | | 27·1 | 54·8 | |
| 10·2 | | 27·1 | 4·5 | |
| 10·0 | | 27·6 | 13·3 | |
| 10·1 | | 30·1 | 36·7 | |
| 9·8 | | 33·6 | 4·2 | |
| 8·4 | | 36·1 | 23·3 | |
| 9·0 | | 38·6 | 41·6 | 9·5 |
| 10·4 | | 41·8 | 1·7 | |
| 10·2 | | 46·1 | 25·1 | |
| 10·0 | | 47·6 | 17·7 | |
| 9·3 | | 47·6 | 14·7 | |
| 10·4 | | 49·1 | 8·9 | |
| 9·8 | | 53·6 | 19·1 | |
| 10·0 | | 57·6 | 41·0 | |
| 10·1 | 57 | 2·8 | 2·9 | |
| 10·0 | | 6·6 | 33·0 | |
| 10·4 | | 8·6 | 59·1 | |
| 10·4 | | 11·6 | 18·5 | |
| 9·6 | | 17·6 | 30·3 | |
| 9·6 | | 18·6 | 7·8 | |
| 9·6 | | 23·1 | 39·7 | |
| 9·6 | | 24·6 | 10·9 | |
| 10·4 | | 31·1 | 52·2 | |
| 10·4 | | 32·1 | 16·3 | |
| 10·0 | | 32·1 | 1·8 | |
| 10·0 | | 34·5 | 58·5 | |
| 9·8 | | 37·2 | 56·5 | |
| 10·4 | | 38·7 | 39·1 | |
| 9·8 | | 40·1 | 8·1 | |
| 9·6 | | 40·1 | 53·9 | |
| 10·4 | | 41·6 | 27·3 | |
| 9·8 | | 42·8 | 0·7 | |
| 9·2 | | 47·1 | 46·9 | |
| 10·0 | | 50·6 | 41·3 | |
| 10·4 | | 52·1 | 20·5 | |
| 9·8 | | 52·6 | 3·3 | |
| 10·0 | 58 | 7·6 | 42·8 | |
| 10·0 | | 8·1 | 57·2 | |
| 10·0 | | 16·1 | 23·3 | |
| 8·2 | | 22·1 | 52·1 | 8·5 |
| 9·8 | | 29·8 | 0·0 | |
| 10·4 | | 31·6 | 17·8 | |
| 9·8 | | 32·1 | 14·3 | |
| 9·2 | | 33·1 | 16·7 | |
| 10·4 | | 33·6 | 4·1 | |
| 10·4 | | 39·1 | 18·8 | |
| 10·2 | | 43·1 | 13·1 | |
| 10·4 | | 44·1 | 18·5 | |

## 7321—7380.

| mag. | 15h.–16h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 58 | 46·1 | 37·1 | |
| 10·2 | | 46·1 | 17·1 | |
| 10·1 | | 47·6 | 18·8 | |
| 10·2 | | 51·6 | 12·9 | |
| 10·4 | | 52·1 | 50·6 | |
| 10·0 | | 55·1 | 40·7 | |
| 10·4 | | 57·6 | 48·7 | |
| 10·4 | 59 | 3·1 | 5·7 | |
| 10·1 | | 4·1 | 39·3 | |
| 10·2 | | 5·3 | 35·0 | |
| 10·4 | | 5·6 | 15·9 | |
| 9·6 | | 7·1 | 27·5 | |
| 8·4 | | 7·1 | 33·9 | |
| 10·1 | | 9·6 | 45·4 | |
| 9·6 | | 10·1 | 49·4 | |
| 10·1 | | 14·1 | 9·1 | |
| 10·4 | | 14·1 | 34·3 | |
| 10·4 | | 23·1 | 3·6 | |
| 9·8 | | 26·1 | 18·7 | |
| 10·4 | | 26·1 | 34·6 | |
| 10·1 | | 29·6 | 51·3 | |
| 10·4 | | 31·1 | 42·3 | |
| 10·4 | | 34·1 | 48·3 | |
| 10·0 | | 37·6 | 35·1 | |
| 7·7 | | 41·1 | 7·2 | 8·0 GSt |
| 9·8 | | 43·1 | 35·7 | |
| 9·0 | | 43·6 | 46·3 | |
| 10·0 | | 47·1 | 34·2 | |
| 10·4 | | 48·1 | 20·0 | |
| 9·2 | | 50·1 | 11·0 | |
| 10·4 | | 50·6 | 51·3 | |
| 10·2 | | 53·1 | 39·7 | |
| 9·3 | | 59·6 | 44·5 | |
| 10·2 | 0 | 0·1 | 17·4 | |
| 10·4 | | 0·3 | 24·2 | |
| 10·0 | | 2·1 | 9·4 | |
| 9·6 | | 10·1 | 12·0 | |
| 10·4 | | 11·3 | 1·5 | |
| 10·4 | | 18·3 | 22·7 | |
| 10·4 | | 21·1 | 54·9 | |
| 9·6 | | 21·1 | 20·5 | |
| 10·2 | | 35·1 | 3·2 | |
| 10·4 | | 36·6 | 12·3 | |
| 10·4 | | 37·1 | 28·3 | |
| 10·4 | | 37·6 | 42·5 | |
| 10·4 | | 38·6 | 16·0 | |
| 9·8 | | 42·1 | 27·9 | |
| 10·0 | | 47·6 | 32·3 | |
| 10·4 | | 49·1 | 15·9 | |
| 10·4 | | 50·1 | 17·1 | |
| 9·8 | | 52·1 | 13·5 | |
| 10·4 | | 54·1 | 12·8 | |
| 9·2 | | 55·1 | 31·0 | |
| 10·4 | 1 | 5·1 | 26·1 | |
| 10·0 | | 13·6 | 11·5 | |
| 10·4 | | 22·1 | 6·8 | |
| 10·4 | | 24·1 | 16·9 | |
| 9·6 | | 25·6 | 2·7 | |
| 9·6 | | 29·1 | 32·9 | |
| 10·1 | | 29·6 | 2·9 | |



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## 7381—7440.

| mag. | 16h. m s | −56° ′ | |
|---|---|---|---|
| 9.8 | 1 34.6 | 2.9 | |
| 9.4 | 35.6 | 15.2 | |
| 9.8 | 40.1 | 24.9 | |
| 10.0 | 44.6 | 36.4 | |
| 9.6 | 44.6 | 1.9 | |
| 9.8 | 45.1 | 7.4 | |
| 10.4 | 54.1 | 29.0 | |
| 10.4 | 54.6 | 44.6 | |
| 10.4 | 56.1 | 23.9 | |
| 9.0 | 2 2.1 | 32.6 | 9.5 |
| 9.8 | 3.1 | 6.8 | |
| 10.2 | 5.1 | 12.1 | |
| 8.3 | 8.1 | 26.9 | 8.5 |
| 10.2 | 8.1 | 53.1 | |
| 10.0 | 9.6 | 11.7 | |
| 10.0 | 12.1 | 31.8 | |
| 9.6 | 15.1 | 2.7 | |
| 10.4 | 20.6 | 46.0 | |
| 9.8 | 30.1 | 28.1 | |
| 10.4 | 32.6 | 6.4 | |
| 10.4 | 33.6 | 1.7 | |
| 10.4 | 34.1 | 56.2 | |
| 10.4 | 42.1 | 3.5 | |
| 9.8 | 44.6 | 14.9 | |
| 10.4 | 3 0.1 | 3.3 | |
| 10.4 | 1.1 | 58.7 | |
| 10.4 | 7.1 | 45.5 | |
| 9.3 | 8.6 | 44.7 | 9.5 |
| 10.4 | 9.6 | 11.1 | |
| 9.8 | 16.8 | 0.3 | |
| 8.0 | 20.1 | 5.3 | 8.0 G |
| 10.4 | 20.1 | 36.6 | |
| 9.8 | 21.1 | 53.0 | |
| 9.2 | 22.1 | 45.5 | 9.0 |
| 10.0 | 23.1 | 29.9 | |
| 10.1 | 23.6 | 38.0 | |
| 10.0 | 27.1 | 27.6 | |
| 10.0 | 36.6 | 34.5 | |
| 10.2 | 37.1 | 32.8 | |
| 8.9 | 37.6 | 44.3 | 9.5 |
| 9.6 | 44.1 | 4.3 | |
| 10.0 | 45.1 | 53.4 | |
| 10.4 | 46.1 | 54.4 | |
| 9.8 | 49.1 | 7.3 | |
| 10.2 | 52.6 | 43.8 | |
| 9.6 | 54.6 | 48.0 | |
| 10.4 | 57.6 | 44.6 | |
| 9.6 | 58.1 | 45.9 | |
| 10.1 | 58.6 | 41.5 | |
| 10.0 | 4 1.3 | 59.0 | |
| 10.2 | 2.1 | 27.8 | |
| 10.0 | 2.4 | 30.6 | |
| 10.4 | 2.6 | 29.6 | |
| 9.4 | 3.6 | 58.0 | |
| 10.4 | 9.4 | 20.4 | |
| 10.1 | 16.9 | 17.4 | |
| 10.4 | 17.4 | 31.7 | |
| 10.0 | 22.9 | 12.3 | |
| 10.1 | 23.4 | 17.9 | |
| 10.0 | 27.4 | 32.5 | |

## 7441—7500.

| mag. | 16h. m s | −56° ′ | |
|---|---|---|---|
| 9.8 | 4 31.9 | 31.4 | |
| 9.8 | 31.9 | 22.3 | |
| 10.0 | 37.9 | 30.4 | |
| 10.4 | 38.9 | 39.9 | |
| 9.6 | 41.4 | 12.6 | |
| 10.2 | 42.9 | 53.0 | |
| 9.0 | 44.4 | 11.5 | |
| 9.6 | 45.9 | 36.2 | |
| 9.5 | 46.9 | 53.2 | |
| 10.2 | 47.4 | 30.6 | |
| 10.4 | 49.9 | 28.3 | |
| 10.1 | 51.4 | 43.1 | |
| 10.0 | 51.6 | 57.1 | |
| 9.2 | 51.9 | 33.7 | |
| 10.4 | 53.4 | 52.1 | |
| 10.4 | 55.4 | 11.0 | |
| 8.1 | 5 1.7 | 2.8 | 8.0 GS |
| 10.1 | 4.4 | 22.6 | |
| 10.4 | 5.4 | 36.7 | |
| 10.1 | 8.9 | 28.6 | |
| 10.4 | 11.9 | 16.0 | |
| 10.4 | 13.4 | 59.0 | |
| 9.8 | 13.9 | 23.5 | |
| 10.0 | 13.9 | 40.9 | |
| 10.4 | 15.4 | 45.9 | |
| 9.6 | 18.9 | 9.0 | |
| 10.2 | 19.9 | 48.0 | |
| 10.4 | 20.9 | 16.2 | |
| 10.4 | 21.4 | 14.4 | |
| 10.4 | 21.9 | 13.8 | |
| 10.4 | 23.4 | 14.7 | |
| 10.4 | 25.7 | 0.7 | |
| 8.4 | 26.4 | 22.0 | G |
| 10.4 | 28.4 | 18.1 | |
| 10.0 | 28.4 | 40.9 | |
| 10.0 | 28.9 | 25.8 | |
| 10.4 | 28.9 | 44.0 | |
| 9.6 | 32.9 | 3.8 | |
| 10.0 | 34.9 | 41.3 | |
| 10.4 | 35.4 | 6.4 | |
| 9.8 | 35.9 | 3.4 | |
| 10.1 | 35.9 | 25.3 | |
| 10.4 | 36.4 | 8.3 | |
| 10.4 | 40.4 | 36.2 | |
| 8.7 | 44.4 | 47.3 | 9.5 |
| 9.4 | 50.4 | 22.2 | |
| 10.4 | 51.4 | 35.5 | |
| 10.2 | 56.4 | 20.4 | |
| 10.2 | 56.9 | 55.3 | |
| 10.4 | 6 0.9 | 5.8 | |
| 9.8 | 1.1 | 59.7 | |
| 10.1 | 3.4 | 16.2 | |
| 10.4 | 3.7 | 0.4 | |
| 10.4 | 12.4 | 10.3 | |
| 9.8 | 26.4 | 41.8 | |
| 10.0 | 28.4 | 36.0 | |
| 10.0 | 31.9 | 37.5 | |
| 10.4 | 32.0 | 8.7 | |
| 10.2 | 37.9 | 36.6 | |
| 10.0 | 37.9 | 22.0 | |

## 7501—7560.

| mag. | 16h. m s | −56° ′ | |
|---|---|---|---|
| 10.0 | 6 39.9 | 14.6 | |
| 9.8 | 45.9 | 47.6 | |
| 10.1 | 46.9 | 21.5 | |
| 10.4 | 49.9 | 42.7 | |
| 8.0 | 54.9 | 22.1 | 8.0 G |
| 9.8 | 55.4 | 39.3 | |
| 10.0 | 56.4 | 32.3 | |
| 9.5 | 7 4.9 | 3.3 | 9.5 |
| 8.8 | 6.9 | 59.5 | |
| 9.8 | 8.4 | 39.5 | |
| 9.8 | 13.4 | 26.3 | |
| 10.4 | 20.2 | 58.3 | |
| 10.4 | 20.4 | 50.9 | |
| 10.0 | 22.9 | 38.8 | |
| 10.0 | 23.4 | 27.2 | |
| 10.4 | 25.9 | 8.8 | |
| 10.0 | 31.9 | 22.3 | |
| 9.6 | 37.4 | 9.0 | |
| 10.2 | 37.9 | 27.9 | |
| 10.4 | 39.4 | 3.7 | |
| 9.6 | 41.9 | 2.5 | |
| 10.0 | 47.9 | 15.1 | |
| 9.0 | 48.4 | 56.0 | |
| 10.4 | 8 0.4 | 7.2 | |
| 9.8 | 3.4 | 54.1 | |
| 10.0 | 5.4 | 14.7 | |
| 10.1 | 10.4 | 13.4 | |
| 10.2 | 15.9 | 36.8 | |
| 9.6 | 16.9 | 6.3 | |
| 8.9 | 17.4 | 21.5 | G |
| 9.6 | 21.7 | 55.0 | |
| 9.8 | 23.9 | 57.5 | |
| 9.6 | 24.7 | 32.3 | |
| 9.8 | 28.5 | 58.7 | |
| 10.4 | 29.7 | 33.9 | |
| 9.8 | 30.7 | 11.7 | |
| 10.1 | 34.7 | 38.9 | |
| 9.8 | 38.7 | 25.6 | |
| 10.4 | 39.7 | 33.2 | |
| 9.3 | 41.2 | 7.1 | |
| 10.4 | 43.2 | 56.6 | |
| 10.4 | 43.2 | 33.2 | |
| 9.8 | 45.2 | 19.7 | |
| 10.4 | 48.7 | 12.7 | |
| 10.4 | 50.2 | 32.3 | |
| 10.1 | 51.7 | 31.2 | |
| 10.4 | 54.7 | 50.1 | |
| 10.1 | 56.2 | 5.6 | |
| 10.4 | 58.2 | 24.6 | |
| 10.0 | 58.2 | 49.6 | |
| 9.6 | 9 5.2 | 34.0 | |
| 8.7 | 6.7 | 54.9 | |
| 10.0 | 7.2 | 37.8 | |
| 9.8 | 7.2 | 53.4 | |
| 9.0 | 14.2 | 36.1 | |
| 10.4 | 19.2 | 15.5 | |
| 10.4 | 19.7 | 32.1 | |
| 10.1 | 21.2 | 4.8 | |
| 10.4 | 21.7 | 34.2 | |
| 10.4 | 28.2 | 17.2 | |

## 7561—7620.

| mag. | 16h. m s | −56° ′ | |
|---|---|---|---|
| 9.8 | 9 31.7 | 6.9 | |
| 10.1 | 34.7 | 39.2 | |
| 8.8 | 37.7 | 18.7 | |
| 10.0 | 38.2 | 39.4 | |
| 10.4 | 40.7 | 29.8 | |
| 10.0 | 46.7 | 15.8 | |
| 9.8 | 47.2 | 42.1 | |
| 10.4 | 54.2 | 53.3 | |
| 10.1 | 58.0 | 54.3 | |
| 10.4 | 10 0.5 | 37.8 | |
| 10.4 | 3.0 | 15.8 | |
| 10.0 | 5.5 | 20.4 | |
| 9.2 | 17.0 | 49.2 | |
| 10.0 | 17.0 | 57.2 | |
| 9.6 | 18.0 | 52.7 | |
| 10.0 | 18.0 | 25.5 | |
| 10.4 | 19.0 | 7.9 | |
| 8.7 | 21.5 | 32.5 | |
| 10.1 | 21.5 | 52.0 | |
| 10.0 | 30.0 | 5.0 | |
| 9.8 | 30.5 | 14.6 | |
| 10.4 | 33.0 | 13.7 | |
| 10.0 | 39.0 | 40.3 | |
| 9.8 | 39.0 | 50.6 | |
| 8.7 | 41.0 | 23.4 | 9.5 |
| 10.0 | 41.0 | 53.9 | |
| 10.4 | 45.5 | 7.9 | |
| 10.0 | 48.0 | 25.3 | |
| 10.4 | 51.5 | 42.2 | |
| 10.1 | 53.5 | 25.5 | |
| 10.0 | 53.5 | 31.6 | |
| 9.2 | 56.5 | 23.8 | |
| 9.2 | 58.0 | 57.8 | |
| 9.6 | 59.5 | 18.9 | |
| 10.4 | 11 2.0 | 21.8 | |
| 10.2 | 2.0 | 11.2 | |
| 10.4 | 2.9 | 22.7 | |
| 9.2 | 4.5 | 33.0 | |
| 9.0 | 9.5 | 30.9 | 8.5 |
| 10.2 | 15.5 | 39.6 | |
| 10.2 | 22.0 | 3.9 | |
| 10.4 | 25.0 | 25.6 | |
| 9.3 | 26.5 | 22.7 | |
| 9.0 | 26.5 | 9.5 | 9.5 |
| 10.4 | 27.5 | 54.8 | |
| 10.2 | 31.7 | 43.2 | |
| 9.8 | 32.0 | 35.1 | |
| 10.4 | 33.5 | 26.7 | |
| 10.0 | 39.0 | 45.9 | |
| 10.4 | 41.5 | 5.3 | |
| 10.4 | 43.0 | 16.6 | |
| 9.8 | 43.0 | 28.0 | |
| 10.0 | 49.5 | 43.0 | |
| 8.7 | 50.5 | 22.9 | 9.0 |
| 9.0 | 53.0 | 25.6 | |
| 10.4 | 56.5 | 1.7 | |
| 10.4 | 12 6.0 | 58.7 | |
| 10.4 | 8.0 | 56.7 | |
| 10.4 | 9.5 | 9.0 | |
| 8.7 | 15.5 | 7.4 | 8.2 G |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 121 | 4.2 |
| | 10 | 122 | 3.9 |
| | 20 | 123 | 3.5 |



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| 25 prec. | α + | δ − |
|---|---|---|
| h m | s | ′ |
| 16 10 | 122 | 3·9 |
| 20 | 123 | 3·5 |
| 30 | 123 | 3·2 |
| 40 | 124 | 2·9 |

## 7621—7680.

| mag. | 16h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 12 | 19·5 | 10·3 | |
| 10·0 | | 19·5 | 55·0 | |
| 10·4 | | 29·5 | 52·9 | |
| 10·0 | | 32·8 | 2·5 | |
| 10·2 | | 34·0 | 21·8 | |
| 10·4 | | 36·5 | 6·8 | |
| 9·8 | | 42·5 | 18·4 | |
| 9·8 | | 44·5 | 18·5 | |
| 10·2 | | 47·5 | 46·1 | |
| 10·4 | | 51·5 | 33·0 | |
| 9·8 | | 54·0 | 54·8 | |
| 9·2 | | 54·5 | 48·7 | |
| 10·0 | | 59·0 | 47·2 | |
| 10·1 | 13 | 1·0 | 46·5 | |
| 10·4 | | 7·7 | 48·8 | |
| 10·1 | | 8·0 | 14·5 | |
| 10·4 | | 10·5 | 17·7 | |
| 10·0 | | 16·5 | 51·4 | |
| 8·0 | | 18·5 | 2·0 | 8·0 |
| 9·8 | | 19·0 | 0·5 | |
| 9·8 | | 24·0 | 21·8 | |
| 10·4 | | 27·5 | 4·3 | |
| 10·4 | | 29·5 | 3·4 | |
| 10·4 | | 33·0 | 45·8 | |
| 8·9 | | 34·5 | 59·2 | 9·0 |
| 9·2 | | 35·0 | 50·7 | |
| 10·0 | | 35·5 | 37·7 | |
| 10·4 | | 37·5 | 40·1 | |
| 10·0 | | 41·5 | 6·7 | |
| 10·4 | | 51·5 | 25·7 | |
| 10·4 | | 52·5 | 8·4 | |
| 9·3 | 14 | 7·0 | 48·2 | |
| 10·2 | | 9·5 | 23·2 | |
| 9·3 | | 10·0 | 55·2 | |
| 10·1 | | 13·0 | 4·9 | |
| 8·7 | | 18·0 | 54·9 | |
| 10·4 | | 19·0 | 28·9 | |
| 10·0 | | 20·5 | 11·6 | |
| 10·0 | | 22·5 | 6·7 | |
| 8·3 | | 32·5 | 42·5 | 7·5 G |
| 9·6 | | 45·5 | 18·3 | |
| 8·3 | | 47·8 | 1·5 | 8·0 |
| 9·4 | | 48·0 | 22·9 | |
| 10·4 | | 50·0 | 25·8 | |
| 10·4 | | 52·0 | 26·6 | |
| 10·0 | | 56·0 | 6·8 | |
| 10·4 | 15 | 4·0 | 21·1 | |
| 8·4 | | 6·0 | 12·7 | 7·5 G |
| 9·5 | | 6·2 | 41·7 | |
| 10·4 | | 8·0 | 40·6 | |
| 10·1 | | 10·0 | 10·0 | |
| 10·4 | | 17·0 | 42·1 | |
| 10·2 | | 19·0 | 56·6 | |
| 9·3 | | 28·2 | 7·5 | |
| 10·4 | | 32·7 | 1·2 | |
| 9·3 | | 33·0 | 39·6 | |
| 10·4 | | 35·5 | 56·6 | |
| 10·2 | | 37·0 | 26·7 | |
| 9·8 | | 39·0 | 40·8 | |
| 10·0 | | 42·0 | 34·8 | |

## 7681—7740.

| mag. | 16h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 15 | 42·0 | 28·8 | |
| 9·8 | | 44·0 | 14·7 | |
| 9·8 | | 44·0 | 37·6 | |
| 10·4 | | 46·5 | 25·6 | |
| 10·0 | | 47·0 | 18·2 | |
| 10·0 | | 48·0 | 16·1 | |
| 9·8 | | 58·5 | 3·0 | |
| 7·8 | 16 | 8·5 | 35·5 | 7·0 G |
| 10·0 | | 11·0 | 19·3 | |
| 9·8 | | 13·5 | 21·9 | |
| 9·6 | | 15·2 | 37·1 | |
| 10·4 | | 18·0 | 45·1 | |
| 10·0 | | 19·5 | 49·8 | |
| 10·4 | | 21·2 | 59·4 | |
| 9·8 | | 31·0 | 22·1 | |
| 9·4 | | 34·9 | 35·4 | 9·0 |
| 9·6 | | 34·9 | 40·6 | |
| 9·8 | | 37·4 | 6·4 | |
| 9·8 | | 57·9 | 33·8 | |
| 9·8 | 17 | 21·9 | 4·0 | |
| 9·4 | | 32·9 | 19·0 | |
| 9·3 | | 34·9 | 16·6 | |
| 7·4 | | 57·9 | 55·6 | 7·5 G |
| 9·7 | 18 | 1·9 | 23·0 | |
| 9·4 | | 2·4 | 44·8 | 8·5 |
| 8·3 | | 14·9 | 6·8 | 8·8 |
| 9·8 | | 15·9 | 43·1 | |
| 8·7 | | 17·4 | 48·0 | 9·0 |
| 9·8 | | 18·9 | 42·4 | |
| 8·5 | | 19·4 | 23·4 | |
| 9·8 | | 27·4 | 1·7 | 9·0 |
| 9·7 | | 34·4 | 32·0 | |
| 9·8 | | 36·4 | 35·6 | |
| 9·2 | | 39·4 | 36·2 | |
| 9·8 | | 41·4 | 8·2 | |
| 8·4 | | 43·4 | 24·6 | |
| 9·1 | | 49·4 | 52·6 | |
| 9·2 | | 55·9 | 24·5 | |
| 8·6 | 19 | 14·9 | 30·8 | |
| 9·5 | | 24·5 | 1·8 | |
| 8·6 | | 35·0 | 17·9 | 9·0 |
| 9·8 | | 41·0 | 4·4 | |
| 9·8 | | 59·0 | 6·2 | |
| 9·5 | 20 | 1·0 | 18·2 | 9·5 |
| 9·8 | | 2·0 | 11·3 | |
| 9·6 | | 16·0 | 58·1 | |
| 9·6 | | 29·0 | 56·5 | |
| 9·8 | | 31·5 | 15·9 | |
| 8·2 | | 46·0 | 13·0 | 8·0 |
| 9·4 | | 47·0 | 26·3 | |
| 9·4 | | 55·0 | 55·9 | |
| 9·8 | 21 | 8·0 | 15·9 | 9·5 |
| 9·8 | | 15·5 | 23·9 | |
| 9·6 | | 34·0 | 24·5 | |
| 9·4 | | 47·5 | 16·5 | |
| 8·0 | | 47·5 | 57·7 | 8·0 G |
| 8·8 | | 53·0 | 56·7 | 10·0 |
| 9·8 | 22 | 2·5 | 39·1 | |
| 9·0 | | 15·0 | 47·5 | |
| 9·8 | | 23·5 | 30·1 | |

## 7741—7800.

| mag. | 16h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8·8 | 22 | 27·5 | 18·5 | |
| 9·6 | | 27·5 | 42·9 | |
| 9·3 | | 28·0 | 33·7 | |
| 9·4 | | 32·0 | 25·1 | |
| 9·5 | | 50·5 | 14·9 | |
| 9·4 | | 51·0 | 52·6 | |
| 8·7 | | 55·5 | 29·5 | 9·0 |
| 9·6 | | 58·5 | 57·1 | |
| 9·5 | | 59·5 | 23·8 | 9·5 |
| 9·3 | 23 | 1·0 | 7·3 | |
| 9·8 | | 2·0 | 22·4 | |
| 9·0 | | 2·5 | 56·0 | |
| 9·8 | | 5·2 | 0·5 | |
| 9·8 | | 9·5 | 59·6 | |
| 9·5 | | 17·5 | 5·7 | |
| 9·6 | | 21·0 | 14·7 | |
| 9·0 | | 21·5 | 25·5 | 9·5 |
| 9·7 | | 34·1 | 45·9 | |
| 9·4 | | 38·6 | 17·1 | |
| 9·0 | | 49·6 | 22·3 | 9·5 |
| 9·6 | | 49·6 | 24·7 | |
| 9·8 | | 52·4 | 59·9 | |
| 8·9 | 24 | 22·6 | 44·7 | |
| 9·7 | | 24·6 | 32·7 | |
| 9·7 | | 33·6 | 42·2 | |
| 9·7 | | 57·6 | 26·1 | |
| 9·3 | | 57·6 | 30·5 | |
| 9·8 | 25 | 1·1 | 29·9 | |
| 9·6 | | 24·6 | 33·1 | |
| 9·8 | | 24·6 | 56·9 | |
| 9·8 | | 27·1 | 32·7 | |
| 9·8 | | 27·6 | 59·9 | |
| 9·3 | | 29·1 | 56·9 | 9·0 |
| 9·8 | 26 | 1·1 | 45·3 | |
| 9·7 | | 1·6 | 25·3 | |
| 9·7 | | 4·6 | 47·7 | |
| 9·4 | | 21·1 | 33·3 | |
| 9·5 | | 31·1 | 18·2 | |
| 9·6 | | 31·6 | 41·3 | |
| 9·0 | | 49·6 | 17·2 | 9·5 |
| 9·8 | | 59·1 | 16·9 | |
| 9·8 | 27 | 1·1 | 8·7 | |
| 9·4 | | 1·1 | 26·7 | |
| 9·8 | | 5·1 | 35·1 | |
| 9·7 | | 28·6 | 15·5 | |
| 9·8 | | 31·7 | 24·9 | |
| 9·6 | | 35·1 | 8·2 | |
| 9·4 | | 41·1 | 13·1 | |
| 9·8 | | 45·6 | 7·5 | |
| 9·8 | | 50·3 | 59·4 | |
| 9·3 | 28 | 1·6 | 12·1 | |
| 9·8 | | 2·6 | 33·6 | |
| 9·2 | | 5·1 | 0·1 | 9·0 |
| 8·6 | | 7·6 | 40·9 | 8·5 |
| 9·8 | | 22·6 | 30·3 | |
| 8·6 | | 26·1 | 51·7 | |
| 9·0 | | 27·6 | 40·8 | 9·0 |
| 9·8 | | 29·7 | 0·1 | |
| 9·1 | | 48·7 | 4·6 | |
| 9·0 | 29 | 14·2 | 21·2 | |

## 7801—7860.

| mag. | 16h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 29 | 17·2 | 21·7 | |
| 8·8 | | 17·7 | 40·8 | 7·5 G |
| 9·5 | | 20·7 | 3·9 | |
| 7·5 | | 22·2 | 44·4 | 7·0 GS |
| 9·6 | | 29·2 | 22·5 | |
| 9·4 | | 39·2 | 35·6 | |
| 9·8 | | 39·2 | 43·3 | |
| 9·6 | 30 | 1·7 | 44·6 | |
| 9·4 | | 9·7 | 8·4 | 9·0 |
| 9·5 | | 14·7 | 40·1 | 9·0 |
| 9·7 | | 21·2 | 55·2 | |
| 9·4 | | 50·2 | 16·3 | |
| 9·4 | | 54·2 | 15·2 | |
| 9·8 | 31 | 8·7 | 39·0 | |
| 9·2 | | 21·7 | 26·9 | |
| 8·2 | | 31·2 | 39·3 | 8·0 |
| 9·0 | | 42·2 | 46·0 | |
| 9·5 | | 56·2 | 26·8 | |
| 9·5 | | 57·7 | 27·7 | |
| 9·4 | | 59·2 | 24·6 | |
| 8·6 | 32 | 6·2 | 33·1 | 7·5 G |
| 9·4 | | 19·7 | 21·8 | |
| 9·6 | | 29·2 | 5·0 | |
| 9·8 | | 51·7 | 37·3 | |
| 9·4 | 33 | 9·2 | 38·2 | |
| 9·1 | | 11·2 | 32·6 | |
| 9·8 | | 14·7 | 15·3 | |
| 9·8 | | 21·2 | 22·2 | |
| 9·4 | | 38·2 | 4·9 | 9·0 |
| 9·3 | | 43·2 | 16·2 | |
| 8·6 | | 55·7 | 31·5 | |
| 9·8 | | 58·7 | 16·2 | |
| 9·6 | 34 | 2·7 | 42·8 | |
| 9·8 | | 7·8 | 56·6 | |
| 9·8 | | 10·3 | 44·3 | |
| 9·6 | | 15·3 | 10·6 | |
| 9·3 | | 17·8 | 20·2 | |
| 9·3 | | 46·3 | 51·0 | |
| 8·8 | 35 | 0·3 | 55·3 | 9·0 |
| 9·6 | | 0·8 | 27·6 | |
| 9·8 | | 16·8 | 9·9 | |
| 8·6 | | 37·8 | 43·3 | 9·0 |
| 9·8 | | 39·3 | 56·2 | |
| 9·8 | | 40·3 | 33·4 | |
| 9·5 | | 44·3 | 31·9 | |
| 9·4 | | 44·3 | 13·0 | |
| 8·7 | 36 | 6·3 | 3·8 | |
| 9·5 | | 17·3 | 43·0 | |
| 9·8 | | 31·8 | 50·6 | |
| 9·4 | | 46·3 | 8·0 | 9·0 |
| 9·5 | | 49·3 | 8·6 | 9·0 |
| 8·8 | | 50·3 | 51·5 | 9·0 |
| 9·2 | | 50·8 | 37·5 | |
| 8·5 | | 55·3 | 48·2 | 9·0 |
| 9·4 | 37 | 6·3 | 30·7 | |
| 9·6 | | 7·8 | 3·2 | |
| 9·6 | 38 | 1·3 | 54·1 | |
| 9·8 | | 15·3 | 6·5 | |
| 8·8 | | 24·3 | 21·5 | |
| 9·7 | | 27·8 | 14·1 | |



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## 7861—7920.

16h. −56°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9.4 | 38 | 32.1 | 1.3 | |
| 9.3 | | 35.3 | 1.2 | 9.0 |
| 9.6 | | 41.3 | 12.8 | 8.5 |
| 9.0 | | 43.8 | 14.2 | 9.0 |
| 9.8 | | 47.8 | 54.3 | |
| 9.2 | 39 | 9.8 | 35.2 | |
| 8.6 | | 12.3 | 4.0 | 9.0 G |
| 9.5 | | 24.3 | 14.4 | |
| 8.5 | | 26.1 | 1.2 | 8.8 G |
| 9.8 | | 35.3 | 10.7 | |
| 8.8 | | 57.8 | 26.7 | 8.5 |
| 9.8 | | 58.1 | 2.3 | |
| 9.7 | 40 | 1.3 | 30.0 | |
| 8.6 | | 13.8 | 10.6 | 9.0 |
| 8.4 | | 38.8 | 30.3 | 8.5 |
| 9.8 | | 41.8 | 5.2 | |
| 8.8 | 41 | 1.3 | 49.9 | |
| 9.6 | | 35.3 | 23.8 | |
| 9.8 | | 36.8 | 21.1 | |
| 8.6 | | 39.8 | 26.2 | 9.0 G |
| 9.4 | | 39.8 | 34.5 | 9.5 |
| 9.8 | | 53.3 | 53.9 | |
| 9.8 | | 55.3 | 18.7 | |
| 9.8 | 42 | 5.3 | 36.4 | 9.0 |
| 9.8 | | 21.3 | 26.2 | |
| 9.4 | | 21.8 | 39.9 | |
| 8.6 | | 52.8 | 48.7 | 9.0 |
| 9.8 | 43 | 0.3 | 52.1 | |
| 8.2 | | 17.8 | 9.7 | 8.8 GSt |
| 9.6 | | 20.3 | 36.9 | |
| 9.8 | | 55.8 | 18.9 | |
| 9.5 | 44 | 2.3 | 52.6 | |
| 9.5 | | 25.1 | 1.2 | |
| 9.8 | | 31.3 | 3.8 | |
| 9.5 | 45 | 6.3 | 32.3 | |
| 9.8 | | 34.3 | 22.4 | |
| 9.2 | 46 | 3.3 | 31.5 | |
| 9.4 | | 16.3 | 30.1 | |
| 9.4 | | 37.8 | 22.9 | |
| 9.4 | 47 | 35.7 | 41.2 | |
| 10.1 | | 38.7 | 33.6 | |
| 10.1 | | 39.2 | 49.7 | |
| 10.1 | | 41.7 | 0.0 | |
| 10.1 | | 46.7 | 41.0 | |
| 10.0 | | 47.7 | 33.0 | |
| 10.1 | | 49.7 | 13.9 | |
| 9.6 | | 53.2 | 31.6 | |
| 10.0 | | 53.8 | 14.2 | |
| 10.0 | 48 | 2.7 | 15.5 | |
| 10.1 | | 12.7 | 12.9 | |
| 10.1 | | 16.7 | 14.9 | |
| 10.0 | | 16.7 | 46.4 | |
| 9.8 | | 22.7 | 41.7 | |
| 10.1 | | 22.7 | 9.1 | |
| 9.6 | | 28.7 | 13.4 | |
| 10.1 | | 44.2 | 57.4 | |
| 10.1 | | 44.7 | 56.3 | |
| 10.1 | | 50.7 | 30.2 | |
| 9.6 | | 56.7 | 1.2 | |
| 9.8 | 49 | 19.2 | 10.7 | |

## 7921—7980.

16h. −56°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9.6 | 49 | 33.2 | 54.9 | |
| 10.1 | | 33.7 | 28.3 | |
| 9.5 | | 33.7 | 12.8 | |
| 10.0 | | 43.8 | 57.7 | |
| 7.5 | | 50.7 | 24.7 | 7.5 GS |
| 9.6 | | 51.7 | 26.8 | |
| 10.1 | | 51.7 | 11.8 | |
| 10.0 | | 52.2 | 17.3 | |
| 10.1 | | 59.7 | 47.2 | |
| 9.5 | 50 | 1.7 | 3.9 | 9.0 |
| 9.5 | | 9.2 | 7.7 | 9.0 |
| 9.6 | | 16.7 | 54.9 | |
| 10.1 | | 19.2 | 9.9 | |
| 9.6 | | 22.2 | 16.3 | |
| 10.0 | | 24.2 | 25.0 | |
| 10.1 | | 26.7 | 46.9 | |
| 10.1 | | 29.2 | 15.3 | |
| 8.8 | | 30.7 | 17.1 | 7.8 G |
| 8.4 | | 32.7 | 3.2 | 8.5 |
| 6.9 | | 41.7 | 21.6 | 7.0 GSct |
| 10.0 | | 54.2 | 21.2 | |
| 10.1 | | 56.7 | 41.2 | |
| 10.1 | 51 | 1.2 | 40.1 | |
| 9.8 | | 23.2 | 53.0 | |
| 10.1 | | 24.2 | 16.2 | |
| 10.1 | | 40.7 | 7.9 | |
| 10.0 | | 41.7 | 0.2 | |
| 10.1 | | 50.7 | 35.1 | |
| 9.6 | | 52.7 | 13.8 | |
| 10.0 | | 53.7 | 54.0 | |
| 9.6 | | 59.2 | 16.3 | |
| 7.5 | 52 | 1.7 | 29.2 | 7.3 GSt |
| 9.6 | | 6.2 | 53.6 | |
| 10.1 | | 15.7 | 30.7 | |
| 10.1 | | 17.7 | 7.9 | |
| 10.1 | | 17.7 | 55.9 | |
| 10.1 | | 18.4 | 30.3 | |
| 10.1 | | 22.7 | 54.8 | |
| 9.0 | | 27.7 | 55.6 | |
| 10.1 | | 30.7 | 17.9 | |
| 10.1 | | 35.2 | 57.2 | |
| 10.0 | | 37.2 | 44.1 | |
| 8.6 | | 44.7 | 42.8 | 8.6 |
| 10.1 | | 46.7 | 4.0 | |
| 9.8 | | 56.7 | 57.4 | |
| 10.1 | 53 | 3.2 | 43.5 | |
| 9.6 | | 8.7 | 33.8 | |
| 10.0 | | 12.7 | 4.9 | |
| 10.0 | | 14.2 | 15.8 | |
| 10.1 | | 22.2 | 55.0 | |
| 10.1 | | 22.4 | 4.8 | |
| 9.1 | | 25.7 | 55.8 | 9.0 |
| 9.8 | | 27.7 | 10.5 | |
| 8.8 | | 31.7 | 19.4 | |
| 10.1 | | 45.1 | 2.8 | |
| 10.1 | | 47.2 | 45.1 | |
| 10.1 | | 54.2 | 33.1 | |
| 10.1 | 54 | 4.2 | 57.5 | |
| 9.4 | | 11.2 | 34.0 | |
| 9.1 | | 25.2 | 21.8 | |

## 7981—8040.

16h. −56°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9.4 | 54 | 35.2 | 17.3 | |
| 8.4 | | 35.7 | 4.6 | 9.0 |
| 8.1 | | 41.7 | 53.8 | 8.3 |
| 9.8 | 55 | 3.7 | 56.7 | |
| 8.6 | | 5.7 | 54.2 | 8.3 |
| 10.1 | | 13.7 | 5.4 | |
| 9.8 | | 16.2 | 39.2 | |
| 9.8 | | 17.7 | 29.1 | |
| 9.6 | | 20.2 | 28.0 | |
| 10.1 | | 22.2 | 5.4 | |
| 10.1 | | 31.7 | 42.3 | |
| 10.1 | | 35.2 | 18.8 | |
| 9.8 | | 40.2 | 52.5 | |
| 9.0 | | 45.7 | 25.5 | 9.8 |
| 10.1 | | 45.7 | 54.7 | |
| 9.4 | | 46.7 | 20.1 | |
| 9.6 | | 51.7 | 28.8 | 9.5 |
| 9.8 | | 51.7 | 48.0 | |
| 9.6 | | 55.7 | 11.5 | |
| 10.0 | | 57.2 | 8.2 | |
| 9.6 | | 58.7 | 11.3 | |
| 10.0 | 56 | 11.7 | 42.2 | |
| 10.1 | | 18.7 | 4.3 | |
| 10.0 | | 19.7 | 18.2 | |
| 9.8 | | 32.7 | 45.0 | |
| 10.1 | | 33.7 | 54.1 | |
| 10.0 | | 34.2 | 9.2 | |
| 10.0 | | 34.7 | 19.2 | |
| 10.1 | | 40.5 | 57.9 | |
| 10.1 | | 45.2 | 58.8 | |
| 9.4 | | 46.7 | 19.2 | 9.5 |
| 10.0 | | 47.6 | 13.8 | |
| 10.0 | | 47.6 | 3.1 | |
| 10.0 | | 51.7 | 32.2 | |
| 10.1 | | 53.2 | 26.2 | |
| 10.1 | | 54.5 | 13.8 | 10.0 |
| 10.1 | | 56.7 | 19.1 | |
| 9.8 | 57 | 6.7 | 21.1 | |
| 10.1 | | 11.7 | 4.1 | |
| 10.1 | | 12.2 | 1.0 | |
| 10.0 | | 21.7 | 23.3 | |
| 10.1 | | 33.7 | 56.0 | |
| 8.5 | | 41.0 | 58.9 | 8.8 |
| 9.8 | | 41.7 | 45.5 | |
| 10.0 | | 55.2 | 4.2 | |
| 9.2 | | 59.2 | 31.7 | |
| 9.8 | 58 | 6.7 | 32.3 | |
| 9.4 | | 6.7 | 20.7 | |
| 9.8 | | 14.2 | 32.0 | |
| 9.8 | | 18.2 | 40.9 | |
| 9.6 | | 23.7 | 25.0 | |
| 9.8 | | 29.2 | 44.8 | |
| 10.1 | | 40.7 | 31.2 | |
| 9.4 | | 51.2 | 21.7 | |
| 8.4 | | 55.2 | 40.0 | 9.0 |
| 9.6 | | 56.7 | 15.0 | |
| 8.4 | 59 | 23.7 | 6.9 | 8.8 |
| 10.0 | | 25.5 | 58.8 | |
| 9.8 | | 26.2 | 6.0 | |
| 8.8 | | 32.7 | 42.0 | 9.0 |

## 8041—8100.

16h.–17h. −56°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10.1 | 59 | 35.2 | 44.7 | |
| 8.3 | | 36.2 | 16.8 | 8.0 |
| 10.1 | | 50.2 | 12.9 | |
| 10.1 | | 51.2 | 26.7 | |
| 10.1 | | 52.2 | 4.2 | |
| 10.1 | | 55.7 | 18.3 | |
| 10.1 | | 57.7 | 3.1 | |
| 10.1 | | 58.8 | 59.4 | |
| 9.5 | 0 | 10.7 | 5.2 | |
| 10.1 | | 13.2 | 13.0 | |
| 10.0 | | 13.7 | 46.7 | |
| 10.1 | | 17.2 | 49.3 | |
| 10.1 | | 22.7 | 20.8 | |
| 10.0 | | 32.7 | 56.0 | |
| 10.0 | | 35.7 | 23.2 | |
| 10.1 | | 36.7 | 12.7 | |
| 10.1 | | 37.7 | 10.2 | |
| 10.1 | | 42.7 | 37.8 | |
| 7.9 | | 43.7 | 30.9 | 7.5 GS |
| 9.5 | | 44.2 | 1.2 | |
| 8.8 | | 46.2 | 56.3 | 8.5 |
| 10.1 | | 47.7 | 38.8 | |
| 10.0 | | 52.2 | 43.9 | |
| 10.1 | | 55.7 | 41.5 | |
| 10.0 | | 56.7 | 58.5 | |
| 10.1 | 1 | 1.2 | 12.1 | |
| 10.1 | | 1.2 | 42.1 | |
| 10.1 | | 2.5 | 0.2 | |
| 9.6 | | 9.2 | 24.4 | |
| 9.6 | | 9.2 | 2.4 | |
| 10.1 | | 10.2 | 30.2 | |
| 10.1 | | 11.7 | 26.6 | |
| 10.0 | | 18.7 | 21.9 | |
| 9.5 | | 22.7 | 13.8 | |
| 9.6 | | 22.7 | 3.4 | |
| 10.1 | | 23.7 | 27.1 | |
| 9.3 | | 25.2 | 40.7 | 8.8 |
| 9.8 | | 30.2 | 50.3 | |
| 9.3 | | 32.2 | 49.1 | |
| 9.8 | | 55.2 | 34.1 | |
| 9.3 | 2 | 1.2 | 1.0 | |
| 8.4 | | 9.2 | 31.4 | 9.0 |
| 8.5 | | 11.2 | 14.7 | 8.5 |
| 10.0 | | 21.7 | 42.2 | |
| 9.6 | | 30.2 | 52.3 | |
| 10.1 | | 32.7 | 44.2 | |
| 9.8 | | 42.2 | 53.7 | |
| 10.0 | | 55.7 | 31.8 | |
| 10.0 | | 56.7 | 3.1 | |
| 9.6 | 3 | 20.7 | 48.1 | |
| 7.4 | | 21.2 | 38.7 | 7.2 GSt |
| 10.1 | | 21.2 | 30.1 | |
| 9.1 | | 21.7 | 59.9 | |
| 9.5 | | 22.7 | 3.2 | |
| 9.8 | | 24.2 | 19.0 | |
| 10.1 | | 27.2 | 11.9 | |
| 9.8 | | 36.7 | 44.8 | |
| 7.8 | | 40.2 | 44.0 | 7.0 GSt |
| 10.1 | | 51.2 | 22.2 | |
| 10.1 | 4 | 7.7 | 10.9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 30 | 123 | 3.2 |
| | 40 | 124 | 2.9 |
| | 50 | 125 | 2.5 |
| 17 | 0 | 126 | 2.2 |
| | 10 | 126 | 1.8 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 17 | 0 | 126 | 2·2 |
| | 10 | 126 | 1·8 |
| | 20 | 127 | 1·5 |
| | 30 | 127 | 1·1 |

## 8101—8160.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 4 | 10·2 | 27·3 | |
| 9·6 | | 13·7 | 9·0 | |
| 10·1 | | 18·4 | 0·0 | |
| 9·8 | | 20·7 | 20·5 | |
| 9·6 | | 25·2 | 4·3 | |
| 9·4 | | 30·2 | 22·4 | |
| 9·0 | | 46·2 | 56·1 | 9·0 |
| 10·1 | | 52·2 | 2·3 | |
| 9·6 | | 57·2 | 9·2 | |
| 9·5 | | 59·2 | 43·6 | |
| 10·1 | 5 | 3·2 | 7·0 | |
| 9·6 | | 3·7 | 55·6 | |
| 9·6 | | 14·2 | 9·3 | |
| 9·3 | | 31·2 | 12·1 | |
| 9·6 | 6 | 0·4 | 3·0 | |
| 10·1 | | 2·2 | 23·1 | |
| 10·0 | | 3·7 | 29·3 | |
| 10·1 | | 8·7 | 25·9 | |
| 9·8 | | 11·7 | 40·0 | |
| 9·0 | | 22·2 | 31·1 | 9·0 |
| 9·6 | | 26·2 | 19·8 | |
| 10·0 | | 27·0 | 57·4 | |
| 9·3 | | 38·7 | 19·8 | |
| 10·1 | | 40·2 | 20·2 | |
| 9·6 | | 48·7 | 35·7 | |
| 10·0 | | 54·7 | 20·6 | |
| 10·1 | 7 | 1·2 | 28·4 | |
| 10·1 | | 9·2 | 12·7 | |
| 10·0 | | 14·7 | 15·9 | |
| 9·6 | | 15·9 | 1·0 | |
| 9·4 | | 17·2 | 1·6 | |
| 10·0 | | 19·9 | 57·0 | |
| 9·8 | | 25·7 | 6·1 | |
| 9·8 | | 27·7 | 26·6 | |
| 9·8 | | 28·7 | 0·3 | |
| 10·0 | | 30·7 | 4·2 | |
| 9·6 | | 37·7 | 53·2 | |
| 10·0 | | 38·2 | 53·0 | |
| 10·0 | | 42·7 | 17·8 | |
| 9·5 | | 56·7 | 49·4 | |
| 10·1 | 8 | 11·7 | 40·8 | |
| 10·1 | | 16·7 | 5·3 | |
| 10·1 | | 21·7 | 54·4 | |
| 10·1 | | 31·2 | 50·4 | |
| 8·2 | | 34·2 | 12·7 | 9·0 |
| 10·0 | | 56·1 | 59·4 | |
| 9·4 | 9 | 23·7 | 12·2 | |
| 10·0 | | 25·2 | 28·1 | |
| 9·8 | | 47·2 | 47·9 | |
| 10·0 | | 49·2 | 55·6 | |
| 10·0 | | 52·7 | 21·3 | |
| 9·6 | | 54·7 | 39·7 | |
| 10·1 | 10 | 7·2 | 23·2 | |
| 8·6 | | 10·2 | 17·4 | 9·0 |
| 8·8 | | 13·2 | 17·5 | 9·0 |
| 10·1 | | 15·7 | 37·6 | |
| 9·5 | | 19·2 | 27·7 | |
| 10·1 | | 20·7 | 14·8 | |
| 10·0 | | 35·7 | 34·7 | |
| 10·1 | | 36·7 | 14·3 | |

## 8161—8220.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 10 | 37·2 | 45·6 | |
| 9·5 | | 54·2 | 55·1 | |
| 10·0 | | 56·2 | 28·0 | |
| 9·5 | | 58·2 | 20·7 | 9·0 |
| 8·3 | 11 | 0·7 | 20·3 | 8·5 |
| 10·0 | | 8·7 | 25·7 | |
| 10·1 | | 12·7 | 51·6 | |
| 10·1 | | 17·2 | 56·2 | |
| 9·8 | | 20·2 | 7·4 | |
| 9·8 | | 22·7 | 35·8 | |
| 10·0 | | 22·7 | 54·7 | |
| 10·1 | | 26·2 | 15·2 | |
| 9·8 | | 33·7 | 33·0 | |
| 10·0 | | 47·2 | 38·2 | |
| 10·0 | | 52·7 | 48·6 | |
| 10·1 | 12 | 0·2 | 16·1 | |
| 9·8 | | 0·7 | 52·8 | |
| 7·6 | | 1·2 | 10·6 | 8·2 |
| 9·8 | | 2·7 | 52·6 | |
| 9·8 | | 6·2 | 53·0 | |
| 10·1 | | 6·8 | 45·5 | |
| 9·0 | | 7·2 | 31·2 | |
| 9·8 | | 10·2 | 51·0 | |
| 9·0 | | 15·2 | 17·2 | 8·7 |
| 9·3 | | 18·9 | 0·1 | |
| 10·0 | | 19·2 | 33·2 | |
| 10·0 | | 22·7 | 1·2 | |
| 10·0 | | 22·7 | 8·0 | |
| 10·0 | | 23·7 | 3·8 | |
| 10·1 | | 32·2 | 37·6 | |
| 7·6 | | 34·7 | 23·8 | 6·5 GSt |
| 10·1 | | 38·7 | 50·0 | |
| 10·1 | | 39·7 | 56·1 | |
| 10·1 | | 42·2 | 50·2 | |
| 9·6 | | 45·7 | 47·2 | |
| 10·1 | | 49·2 | 3·4 | |
| 10·1 | | 52·2 | 4·0 | |
| 10·1 | 13 | 2·7 | 53·1 | |
| 9·8 | | 6·7 | 18·5 | |
| 8·0 | | 8·7 | 42·4 | 8·5 |
| 9·6 | | 9·2 | 30·2 | |
| 10·0 | | 10·7 | 50·4 | |
| 9·0 | | 28·7 | 25·1 | |
| 10·0 | | 34·7 | 45·3 | |
| 9·8 | | 35·7 | 7·6 | |
| 8·5 | | 38·2 | 52·9 | 8·8 |
| 10·0 | | 38·2 | 34·5 | |
| 9·6 | | 39·2 | 8·7 | |
| 9·8 | | 40·7 | 32·1 | |
| 10·1 | | 46·2 | 48·0 | |
| 10·0 | | 49·2 | 22·7 | |
| 10·1 | | 58·7 | 23·9 | |
| 10·1 | | 58·7 | 7·7 | |
| 9·6 | 14 | 1·2 | 21·3 | |
| 9·5 | | 4·7 | 21·5 | S |
| 9·6 | | 10·2 | 16·4 | |
| 9·3 | | 15·2 | 35·5 | |
| 10·0 | | 19·2 | 38·1 | |
| 10·1 | | 23·2 | 37·0 | |
| 10·0 | | 31·2 | 53·9 | |

## 8221—8280.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 14 | 32·7 | 43·5 | |
| 10·1 | | 34·2 | 39·3 | |
| 9·4 | | 36·7 | 4·9 | |
| 10·1 | | 40·7 | 54·9 | |
| 4·0 | | 53·7 | 15·3 | 4·0 GStrλ |
| 10·1 | | 55·2 | 36·6 | |
| 10·1 | | 57·3 | 2·1 | |
| 9·4 | 15 | 7·7 | 34·8 | |
| 10·1 | | 11·7 | 22·9 | |
| 10·1 | | 11·7 | 20·1 | |
| 10·1 | | 13·2 | 3·3 | |
| 9·8 | | 20·7 | 31·5 | |
| 9·6 | | 22·2 | 26·3 | |
| 9·6 | | 22·7 | 27·1 | |
| 10·0 | | 23·7 | 15·5 | |
| 9·6 | | 25·7 | 30·9 | |
| 10·1 | | 31·2 | 14·5 | |
| 10·0 | | 38·7 | 31·1 | |
| 9·8 | | 45·7 | 47·9 | |
| 9·4 | | 45·9 | 2·9 | |
| 10·1 | | 51·7 | 41·1 | |
| 9·1 | 16 | 5·7 | 32·3 | |
| 10·1 | | 6·2 | 48·1 | |
| 10·1 | | 10·2 | 25·7 | |
| 9·6 | | 11·2 | 34·3 | |
| 10·0 | | 16·7 | 51·6 | |
| 10·1 | | 18·6 | 42·9 | |
| 10·1 | | 23·7 | 46·0 | |
| 9·4 | | 26·7 | 5·9 | |
| 10·1 | | 29·2 | 53·0 | |
| 10·0 | | 37·2 | 10·0 | |
| 7·6 | | 41·1 | 59·3 | 8·5 |
| 9·5 | | 42·2 | 28·8 | |
| 10·1 | | 44·2 | 41·8 | |
| 10·1 | | 46·7 | 11·7 | |
| 10·0 | | 53·2 | 2·1 | |
| 10·1 | | 54·7 | 10·1 | |
| 10·1 | | 56·7 | 36·9 | |
| 10·1 | 17 | 7·7 | 16·9 | |
| 10·1 | | 8·4 | 57·3 | |
| 10·0 | | 12·2 | 25·9 | |
| 10·1 | | 16·7 | 23·9 | |
| 10·1 | | 22·2 | 41·4 | |
| 10·0 | | 25·7 | 36·7 | |
| 10·1 | | 36·7 | 29·6 | |
| 9·1 | | 46·7 | 34·9 | |
| 9·8 | | 47·7 | 28·5 | |
| 9·8 | | 50·2 | 38·9 | |
| 8·6 | | 54·2 | 26·6 | 9·5 |
| 10·1 | 18 | 10·2 | 41·4 | |
| 9·8 | | 11·2 | 49·4 | |
| 9·3 | | 13·2 | 9·7 | |
| 9·8 | | 15·2 | 5·8 | |
| 9·6 | | 24·2 | 37·7 | |
| 9·0 | | 34·2 | 9·7 | 9·0 |
| 10·1 | | 35·7 | 44·6 | |
| 10·1 | | 39·2 | 41·5 | |
| 9·6 | | 57·7 | 12·7 | |
| 9·3 | 19 | 1·2 | 29·1 | |
| 10·1 | | 7·2 | 10·8 | |

## 8281—8340.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·1 | 19 | 8·7 | 11·2 | |
| 9·8 | | 14·2 | 43·1 | |
| 9·8 | | 19·2 | 45·2 | |
| 10·0 | | 27·7 | 33·5 | |
| 9·8 | | 29·2 | 37·5 | |
| 10·0 | | 29·2 | 32·1 | |
| 9·6 | | 31·7 | 37·0 | |
| 9·3 | | 47·0 | 58·7 | |
| 9·6 | | 54·0 | 26·1 | |
| 10·1 | | 56·7 | 33·9 | |
| 9·4 | | 58·0 | 57·3 | |
| 10·1 | 20 | 9·2 | 8·6 | |
| 9·3 | | 10·2 | 44·3 | |
| 8·8 | | 10·7 | 45·6 | 8·2 G |
| 10·0 | | 13·2 | 27·9 | |
| 9·4 | | 19·2 | 31·3 | 9·0 |
| 10·1 | | 22·7 | 47·3 | |
| 9·0 | | 25·7 | 14·3 | |
| 8·5 | | 26·2 | 55·8 | 8·2 |
| 9·6 | | 26·7 | 16·3 | |
| 9·8 | | 28·7 | 39·2 | |
| 10·1 | | 33·9 | 58·3 | |
| 8·2 | | 43·2 | 38·7 | 8·0 |
| 7·1 | | 46·2 | 49·1 | 6·2 GScgr |
| 9·6 | | 53·7 | 52·4 | |
| 9·4 | | 54·2 | 22·4 | 9·0 |
| 9·6 | | 59·7 | 31·0 | |
| 9·8 | 21 | 8·2 | 58·9 | |
| 9·8 | | 18·7 | 40·7 | |
| 10·1 | | 23·2 | 7·1 | |
| 10·1 | 22 | 12·7 | 35·6 | |
| 9·6 | | 15·7 | 3·3 | |
| 9·8 | | 35·7 | 59·2 | |
| 7·8 | | 40·2 | 11·2 | 7·5 G |
| 9·4 | | 44·2 | 55·9 | 9·5 |
| 9·6 | | 51·7 | 55·4 | 9·0 |
| 10·1 | | 58·2 | 30·8 | |
| 8·8 | 23 | 3·7 | 20·0 | 8·0 |
| 9·2 | | 13·2 | 45·9 | 9·0 G |
| 10·1 | | 23·7 | 49·4 | |
| 9·0 | | 37·7 | 4·3 | |
| 9·8 | | 39·2 | 30·1 | |
| 9·6 | | 44·2 | 14·0 | |
| 9·6 | | 48·2 | 27·7 | |
| 8·6 | | 54·2 | 33·6 | 9·0 |
| 10·1 | | 57·2 | 8·0 | |
| 10·1 | 24 | 16·2 | 46·6 | |
| 7·4 | | 19·7 | 49·4 | 7·8 G |
| 9·2 | | 23·7 | 16·1 | |
| 9·8 | | 24·7 | 37·5 | |
| 8·6 | | 28·2 | 53·3 | 8·8 |
| 10·1 | | 45·2 | 8·0 | |
| 8·6 | 25 | 7·2 | 15·4 | 8·2 G |
| 9·4 | | 23·2 | 1·9 | |
| 10·0 | | 25·7 | 8·9 | |
| 8·6 | | 30·2 | 49·5 | |
| 10·1 | | 37·7 | 54·4 | |
| 10·0 | | 42·2 | 29·0 | |
| 9·6 | 26 | 3·7 | 51·2 | |
| 8·3 | | 8·7 | 13·6 | 8·2 G |



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## 8341—8400.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 26 | 21·2 | 31·9 | |
| 10·0 | | 23·7 | 48·1 | |
| 9·4 | | 23·7 | 51·4 | |
| 9·8 | | 26·2 | 11·9 | |
| 9·0 | | 34·2 | 20·9 | 9·5 |
| 9·2 | | 55·7 | 6·6 | |
| 10·0 | 27 | 21·2 | 50·2 | |
| 7·6 | | 29·2 | 44·4 | 7·8 GSc |
| 10·0 | | 51·0 | 0·8 | |
| 10·1 | | 53·2 | 0·6 | |
| 10·0 | 28 | 3·2 | 2·9 | |
| 10·1 | | 3·7 | 19·8 | |
| 9·6 | | 10·4 | 6·9 | |
| 8·6 | | 28·4 | 11·5 | 8·0 |
| 10·0 | | 28·4 | 35·9 | |
| 9·4 | | 38·4 | 20·9 | |
| 9·6 | | 38·9 | 46·0 | |
| 10·0 | | 45·4 | 7·4 | |
| 9·4 | | 51·9 | 39·1 | |
| 10·0 | | 52·4 | 6·1 | |
| 10·1 | | 54·9 | 0·1 | |
| 10·0 | | 55·9 | 38·1 | |
| 9·4 | 29 | 1·1 | 59·6 | |
| 10·1 | | 1·9 | 47·9 | |
| 10·0 | | 1·9 | 45·8 | |
| 9·8 | | 8·9 | 5·3 | |
| 10·0 | | 12·2 | 15·2 | |
| 8·0 | | 12·4 | 47·9 | 8·5 |
| 9·4 | | 12·4 | 43·6 | |
| 9·8 | | 20·4 | 39·9 | |
| 10·0 | | 38·4 | 25·3 | |
| 10·1 | | 46·4 | 48·7 | |
| 9·6 | | 48·9 | 54·8 | 9·0 |
| 10·0 | | 48·9 | 54·3 | |
| 9·6 | | 53·9 | 42·1 | |
| 9·8 | 30 | 2·4 | 7·0 | 9·5 |
| 10·1 | | 4·4 | 17·8 | |
| 8·8 | | 25·9 | 48·8 | 9·0 |
| 9·6 | | 27·9 | 45·0 | |
| 9·4 | | 39·9 | 33·8 | |
| 9·4 | | 48·4 | 13·6 | 9·0 |
| 9·2 | | 53·4 | 54·9 | |
| 10·0 | 31 | 0·4 | 8·5 | |
| 10·1 | | 32·4 | 1·8 | |
| 10·1 | | 37·6 | 50·3 | |
| 9·6 | | 39·6 | 18·2 | |
| 10·0 | | 41·1 | 29·6 | |
| 9·8 | | 42·6 | 37·5 | |
| 9·8 | | 46·6 | 35·3 | |
| 10·0 | | 47·1 | 30·6 | |
| 10·1 | | 56·1 | 59·9 | |
| 10·1 | | 57·6 | 6·9 | |
| 10·1 | 32 | 2·6 | 18·1 | |
| 9·4 | | 10·6 | 34·3 | 9·5 |
| 9·8 | | 12·6 | 19·7 | |
| 9·8 | | 13·6 | 2·8 | |
| 10·0 | | 18·1 | 39·2 | |
| 10·1 | | 25·6 | 39·2 | |
| 10·1 | | 27·1 | 59·6 | |
| 10·1 | | 28·1 | 20·2 | |

## 8401—8460.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 32 | 29·1 | 24·0 | |
| 10·0 | | 35·6 | 19·0 | |
| 9·2 | | 44·1 | 45·0 | |
| 10·0 | | 50·4 | 0·0 | |
| 7·1 | | 52·9 | 57·4 | 7·0 GS |
| 10·1 | | 55·1 | 6·2 | |
| 9·4 | | 59·1 | 30·0 | |
| 9·5 | | 59·1 | 5·0 | |
| 9·8 | 33 | 8·6 | 14·6 | 9·0 |
| 10·0 | | 22·6 | 2·6 | |
| 8·3 | | 23·1 | 17·3 | 8·0 GSt |
| 10·0 | | 28·6 | 52·9 | |
| 10·1 | | 39·0 | 58·8 | |
| 9·1 | | 52·6 | 45·5 | 9·0 |
| 10·1 | 34 | 13·6 | 2·0 | |
| 9·1 | | 18·6 | 46·0 | 9·0 G |
| 9·8 | | 32·8 | 30·1 | |
| 9·8 | | 36·8 | 14·8 | |
| 10·0 | | 39·3 | 12·6 | |
| 10·0 | | 46·8 | 35·9 | |
| 9·8 | | 50·8 | 49·3 | |
| 9·0 | 35 | 8·3 | 50·3 | 9·5 |
| 10·0 | | 10·0 | 0·9 | |
| 10·1 | | 12·8 | 13·9 | |
| 9·6 | | 21·3 | 6·4 | |
| 9·5 | | 28·3 | 27·8 | |
| 9·8 | | 32·9 | 59·6 | |
| 9·5 | | 43·5 | 1·1 | 9·0 |
| 10·0 | | 43·8 | 21·7 | |
| 10·1 | | 47·5 | 16·3 | |
| 10·1 | | 52·8 | 15·1 | |
| 9·8 | | 54·3 | 26·6 | |
| 10·1 | 36 | 18·8 | 54·1 | |
| 10·0 | | 22·8 | 3·8 | |
| 10·1 | | 41·3 | 26·9 | |
| 9·0 | | 41·8 | 2·7 | |
| 10·1 | | 43·8 | 22·0 | |
| 10·1 | | 48·5 | 6·2 | |
| 10·1 | | 51·8 | 55·9 | |
| 7·8 | 37 | 0·3 | 6·7 | 7·8 GS |
| 10·1 | | 12·3 | 14·6 | |
| 8·6 | | 19·8 | 32·3 | 9·0 |
| 9·6 | | 25·3 | 45·9 | |
| 8·8 | | 36·3 | 49·6 | 9·5 |
| 10·1 | | 46·3 | 16·0 | |
| 8·8 | | 53·8 | 44·1 | 9·5 |
| 9·4 | 38 | 10·3 | 50·4 | 9·2 |
| 9·8 | | 17·3 | 29·5 | |
| 10·1 | | 30·3 | 17·8 | |
| 10·0 | | 42·3 | 14·2 | |
| 9·4 | | 58·8 | 4·7 | 9·5 |
| 10·1 | 39 | 13·8 | 38·8 | |
| 10·0 | | 23·3 | 16·9 | |
| 10·0 | | 33·3 | 28·8 | |
| 10·1 | | 45·8 | 33·3 | |
| 8·8 | | 52·3 | 31·7 | |
| 9·6 | 40 | 17·8 | 15·9 | |
| 9·8 | | 25·8 | 52·5 | |
| 10·1 | | 37·8 | 2·0 | |
| 10·1 | | 55·3 | 58·2 | |

## 8461—8520.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 41 | 1·3 | 8·6 | |
| 9·4 | | 33·8 | 2·3 | |
| 10·0 | | 37·3 | 9·3 | |
| 10·1 | | 42·3 | 47·2 | |
| 10·1 | | 50·8 | 46·8 | |
| 10·1 | 42 | 0·8 | 56·4 | |
| 10·1 | | 11·8 | 8·1 | |
| 7·6 | | 19·3 | 6·9 | 7·0 GS |
| 9·6 | | 25·1 | 2·5 | |
| 9·4 | | 43·8 | 54·2 | |
| 9·8 | | 46·3 | 21·4 | |
| 10·1 | 43 | 3·3 | 42·2 | |
| 9·4 | | 13·3 | 59·2 | |
| 9·8 | | 13·8 | 44·0 | |
| 10·1 | | 20·8 | 5·4 | |
| 10·0 | | 23·8 | 32·0 | |
| 10·0 | | 24·3 | 5·0 | |
| 9·2 | | 28·3 | 7·0 | |
| 8·8 | | 31·8 | 46·5 | 9·0 |
| 10·1 | | 32·8 | 20·4 | |
| 9·8 | | 43·3 | 38·2 | |
| 10·0 | | 51·3 | 48·6 | |
| 10·0 | 44 | 1·3 | 52·4 | |
| 10·1 | | 3·3 | 50·8 | |
| 10·0 | | 6·3 | 55·4 | |
| 10·1 | | 24·3 | 54·7 | |
| 9·6 | | 43·3 | 32·0 | |
| 10·1 | | 44·8 | 19·3 | |
| 10·1 | | 48·3 | 8·4 | |
| 10·0 | | 53·3 | 9·7 | |
| 10·0 | | 53·8 | 52·2 | |
| 8·8 | | 55·3 | 16·1 | 8·5 |
| 9·6 | 45 | 13·8 | 51·0 | |
| 9·4 | | 22·3 | 50·1 | |
| 10·0 | | 38·8 | 24·1 | |
| 9·4 | | 40·3 | 44·9 | |
| 9·6 | | 50·3 | 25·9 | |
| 9·6 | 46 | 8·3 | 13·6 | |
| 9·5 | | 8·8 | 48·8 | |
| 10·1 | | 13·8 | 54·3 | |
| 8·4 | | 20·3 | 38·2 | 8·5 |
| 10·0 | | 27·5 | 14·5 | |
| 9·5 | | 32·0 | 39·3 | 9·0 |
| 10·1 | | 42·0 | 18·3 | |
| 10·0 | | 52·5 | 57·8 | |
| 6·7 | 47 | 2·0 | 52·4 | 6·5 GSct |
| 9·6 | | 25·5 | 44·8 | |
| 10·1 | | 28·3 | 33·9 | |
| 10·1 | | 29·0 | 5·0 | |
| 9·4 | | 41·5 | 12·7 | |
| 9·8 | | 43·5 | 39·5 | |
| 10·1 | | 45·0 | 5·3 | |
| 10·0 | | 52·5 | 24·2 | |
| 9·8 | | 57·5 | 4·3 | |
| 8·8 | | 59·5 | 11·6 | |
| 10·1 | 48 | 2·0 | 29·9 | |
| 10·0 | | 8·5 | 24·1 | |
| 9·5 | | 29·0 | 52·9 | |
| 10·1 | | 31·5 | 27·8 | |
| 9·4 | | 42·0 | 26·8 | |

## 8521—8580.

| mag. | 17h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 48 | 53·5 | 19·0 | |
| 9·6 | | 58·5 | 28·7 | |
| 9·4 | 49 | 2·0 | 35·9 | |
| 8·0 | | 3·5 | 14·2 | 7·5 GS |
| 9·0 | | 4·8 | 2·0 | |
| 9·6 | | 5·0 | 22·2 | |
| 9·8 | | 11·0 | 55·7 | |
| 10·0 | | 40·0 | 49·7 | |
| 10·1 | | 41·0 | 27·8 | |
| 8·0 | | 51·0 | 55·8 | 8·0 GS |
| 10·1 | | 56·5 | 22·8 | |
| 10·0 | 50 | 0·0 | 30·2 | |
| 9·0 | | 0·5 | 20·2 | 9·0 |
| 9·0 | | 10·0 | 15·7 | 9·2 |
| 9·8 | | 14·0 | 22·8 | |
| 10·1 | | 18·5 | 23·4 | |
| 10·1 | | 42·2 | 16·2 | |
| 9·6 | | 44·2 | 28·6 | |
| 10·0 | | 52·2 | 31·8 | |
| 9·8 | | 53·2 | 15·9 | |
| 9·8 | | 58·7 | 56·5 | |
| 9·6 | | 58·7 | 11·0 | |
| 9·8 | 51 | 10·7 | 46·9 | |
| 10·1 | | 37·0 | 31·9 | |
| 9·8 | | 37·7 | 55·6 | |
| 10·1 | | 43·4 | 16·2 | |
| 9·4 | | 58·0 | 58·9 | |
| 9·8 | 52 | 8·8 | 42·2 | |
| 9·7 | | 9·5 | 38·2 | |
| 9·8 | | 14·4 | 7·0 | |
| 9·8 | | 19·5 | 57·7 | |
| 9·8 | | 21·9 | 23·9 | |
| 9·8 | | 21·9 | 18·0 | |
| 9·2 | | 26·9 | 13·4 | 9·0 |
| 8·1 | | 29·9 | 3·6 | 8·3 G |
| 9·4 | | 29·9 | 48·2 | |
| 9·8 | | 33·9 | 53·0 | |
| 8·3 | | 37·4 | 7·1 | 8·7 |
| 9·8 | | 37·5 | 56·7 | |
| 9·2 | 53 | 4·9 | 29·7 | |
| 9·2 | | 7·9 | 15·2 | |
| 8·5 | | 9·9 | 15·8 | 8·0 |
| 9·6 | | 14·9 | 32·0 | |
| 9·3 | | 16·9 | 53·9 | |
| 9·7 | | 36·9 | 29·3 | |
| 9·6 | | 37·4 | 29·6 | |
| 8·5 | | 45·4 | 38·4 | 9·0 |
| 9·0 | | 45·4 | 4·0 | |
| 9·8 | | 47·9 | 12·4 | |
| 9·0 | | 54·4 | 18·7 | 9·0 |
| 9·8 | | 55·9 | 23·0 | |
| 9·8 | 54 | 5·9 | 51·4 | |
| 8·9 | | 15·9 | 10·3 | 9·0 |
| 9·8 | | 18·4 | 7·3 | |
| 9·4 | | 25·9 | 21·5 | |
| 8·9 | | 31·9 | 32·7 | |
| 9·7 | | 33·4 | 55·1 | |
| 9·8 | | 44·4 | 45·1 | |
| 9·8 | | 45·4 | 51·9 | |
| 9·7 | | 48·4 | 51·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 20 | 127 | 1·5 |
| | 30 | 127 | 1·1 |
| | 40 | 127 | 0·7 |
| | 50 | 127 | 0·4 |
| 18 | 0 | 127 | 0·0 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 17 | 50 | 127 | 0.4 |
| 18 | 0 | 127 | 0.0 |
| | | | + |
| | 10 | 127 | 0.4 |
| | 20 | 127 | 0.7 |
| | 30 | 127 | 1.1 |

## 8581—8640.

| mag. | 17h.–18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.7 | 54 | 48.9 | 40.2 | |
| 8.9 | | 48.9 | 44.8 | |
| 9.4 | | 55.4 | 39.8 | |
| 9.8 | 55 | 14.4 | 34.9 | |
| 9.2 | | 23.4 | 12.6 | |
| 8.2 | | 25.9 | 49.5 | 8.0 G |
| 9.4 | | 36.4 | 51.5 | |
| 9.6 | | 38.4 | 52.8 | |
| 9.4 | | 41.9 | 24.9 | |
| 9.8 | 56 | 6.9 | 8.7 | |
| 9.8 | | 8.9 | 59.2 | |
| 9.8 | | 21.4 | 47.1 | |
| 9.8 | | 33.4 | 21.1 | |
| 9.7 | | 39.9 | 22.1 | |
| 9.7 | | 42.9 | 7.0 | |
| 9.4 | | 43.4 | 51.3 | |
| 9.4 | | 56.4 | 8.4 | |
| 9.6 | 57 | 2.9 | 7.5 | |
| 9.8 | | 3.4 | 2.3 | |
| 9.8 | | 4.5 | 58.8 | |
| 9.5 | | 9.9 | 46.1 | |
| 9.7 | | 13.4 | 37.2 | |
| 9.8 | | 13.9 | 1.9 | |
| 9.6 | | 25.4 | 9.7 | |
| 9.6 | | 32.4 | 16.1 | |
| 9.8 | | 38.9 | 2.5 | |
| 9.0 | | 41.9 | 46.1 | 9.0 |
| 8.5 | | 43.4 | 46.6 | 8.5 |
| 9.4 | | 52.4 | 49.9 | |
| 9.8 | | 52.4 | 36.6 | |
| 9.8 | | 53.4 | 35.4 | |
| 9.7 | 58 | 5.4 | 47.5 | |
| 9.3 | | 13.9 | 11.0 | |
| 9.6 | | 15.9 | 47.6 | |
| 9.8 | | 23.4 | 7.2 | |
| 9.4 | | 34.9 | 39.8 | |
| 9.0 | | 38.4 | 20.7 | |
| 9.3 | | 42.4 | 58.9 | |
| 9.5 | | 44.4 | 34.7 | |
| 9.4 | | 45.9 | 13.6 | |
| 9.8 | | 53.4 | 19.7 | |
| 9.6 | 59 | 1.4 | 10.0 | |
| 9.8 | | 3.4 | 38.9 | |
| 9.8 | | 4.4 | 49.4 | |
| 9.3 | | 11.9 | 35.3 | |
| 9.4 | | 12.4 | 36.6 | |
| 9.7 | | 14.0 | 11.0 | |
| 8.6 | | 18.5 | 24.8 | 9.0 |
| 9.6 | | 22.5 | 28.4 | |
| 9.8 | | 26.0 | 40.1 | |
| 9.8 | | 35.0 | 7.9 | |
| 9.0 | | 35.0 | 34.2 | |
| 9.3 | | 38.0 | 31.0 | |
| 9.7 | | 38.5 | 28.0 | |
| 9.4 | | 40.0 | 25.2 | |
| 9.6 | | 44.0 | 10.5 | |
| 9.6 | | 58.5 | 57.0 | |
| 9.3 | | 59.5 | 25.1 | 9.5 |
| 9.8 | 0 | 10.0 | 19.0 | |
| 9.0 | | 11.5 | 13.0 | |

## 8641—8700.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.8 | 0 | 13.5 | 28.0 | |
| 9.0 | | 16.0 | 11.8 | |
| 9.8 | | 17.5 | 30.2 | |
| 9.8 | | 17.9 | 1.3 | |
| 9.8 | | 25.0 | 4.3 | |
| 9.8 | | 32.0 | 54.3 | |
| 8.2 | | 32.5 | 8.3 | 8.7 |
| 9.2 | | 38.0 | 26.7 | |
| 9.0 | | 42.0 | 9.2 | 9.5 |
| 9.4 | | 49.0 | 11.4 | |
| 9.0 | | 51.0 | 38.1 | |
| 9.8 | | 52.5 | 26.8 | |
| 9.8 | 1 | 13.5 | 15.1 | |
| 9.8 | | 15.0 | 31.2 | |
| 7.6 | | 15.5 | 25.2 | 7.0 GS |
| 7.8 | | 27.5 | 26.9 | 7.7 GS |
| 9.7 | | 33.0 | 24.0 | |
| 9.8 | | 43.5 | 51.3 | |
| 9.8 | 2 | 3.0 | 51.8 | |
| 9.8 | | 23.0 | 5.9 | |
| 9.4 | | 29.5 | 34.2 | |
| 9.8 | | 30.5 | 31.6 | |
| 9.7 | | 30.5 | 37.0 | |
| 9.8 | | 36.5 | 50.3 | |
| 9.8 | | 38.0 | 32.1 | |
| 9.8 | | 42.0 | 48.4 | |
| 9.8 | | 47.1 | 2.1 | |
| 9.8 | 3 | 2.7 | 14.7 | |
| 9.8 | | 2.7 | 2.9 | |
| 9.0 | | 3.2 | 55.8 | |
| 9.7 | | 11.7 | 42.2 | |
| 9.4 | | 11.7 | 42.4 | |
| 9.2 | | 12.7 | 13.2 | |
| 9.4 | | 20.2 | 38.9 | 9.5 |
| 9.8 | | 31.7 | 9.4 | |
| 9.6 | | 37.2 | 40.2 | |
| 9.6 | | 50.2 | 8.0 | |
| 9.4 | | 56.2 | 4.5 | |
| 9.4 | 4 | 0.8 | 58.3 | |
| 9.4 | | 13.7 | 53.3 | |
| 9.8 | | 15.7 | 6.1 | |
| 9.3 | | 30.7 | 38.9 | |
| 9.8 | | 31.7 | 34.4 | |
| 9.8 | | 32.0 | 58.5 | |
| 9.6 | | 32.7 | 29.2 | |
| 9.7 | | 50.2 | 23.2 | |
| 9.7 | 5 | 2.7 | 49.8 | |
| 9.8 | | 10.7 | 3.6 | |
| 8.9 | | 20.2 | 43.6 | 9.2 |
| 9.8 | | 22.7 | 4.5 | |
| 9.4 | | 22.7 | 24.4 | |
| 9.2 | | 26.7 | 29.7 | |
| 8.2 | | 30.2 | 40.9 | 7.2 GSg |
| 8.5 | | 32.7 | 19.9 | 9.0 |
| 9.6 | | 33.7 | 36.1 | |
| 9.3 | | 38.7 | 10.1 | |
| 9.8 | | 48.2 | 42.1 | |
| 9.2 | 6 | 13.7 | 51.1 | 9.2 |
| 8.9 | | 20.2 | 35.4 | |
| 9.8 | | 28.7 | 19.9 | |

## 8701—8760.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.8 | 6 | 29.7 | 12.7 | |
| 8.6 | | 30.2 | 29.9 | 9.0 |
| 8.2 | | 33.8 | 48.2 | 8.5 |
| 9.8 | | 34.8 | 58.3 | |
| 9.8 | | 34.8 | 50.6 | |
| 6.6 | | 35.8 | 3.6 | 6.0 GSct |
| 9.8 | | 40.8 | 49.6 | |
| 9.8 | | 43.8 | 32.4 | |
| 9.4 | | 46.3 | 13.0 | |
| 9.7 | | 56.3 | 19.3 | |
| 9.8 | 7 | 3.3 | 21.8 | |
| 7.8 | | 14.3 | 30.9 | 7.5 GS |
| 9.8 | | 16.3 | 10.2 | |
| 9.8 | | 33.8 | 27.1 | |
| 9.8 | | 33.8 | 46.0 | |
| 9.1 | | 40.3 | 20.9 | 9.0 |
| 9.8 | | 41.8 | 13.0 | |
| 9.3 | | 41.8 | 3.4 | |
| 9.3 | 8 | 1.8 | 32.1 | |
| 9.3 | | 2.3 | 5.1 | |
| 9.6 | | 13.8 | 5.0 | |
| 9.8 | | 38.8 | 8.1 | |
| 9.6 | | 42.8 | 22.6 | |
| 9.8 | | 47.8 | 43.1 | |
| 9.8 | 9 | 0.8 | 27.0 | |
| 9.8 | | 3.8 | 56.7 | |
| 9.2 | | 9.3 | 2.0 | 9.0 |
| 9.2 | | 11.8 | 24.7 | |
| 9.8 | | 15.3 | 14.2 | |
| 9.8 | | 18.8 | 40.1 | |
| 9.0 | | 22.3 | 14.5 | |
| 9.8 | | 33.3 | 53.0 | |
| 9.8 | | 34.3 | 6.1 | |
| 9.8 | | 38.8 | 16.1 | |
| 7.8 | | 47.8 | 15.6 | 7.5 GSg |
| 8.8 | | 50.3 | 48.4 | 8.5 |
| 9.7 | | 58.8 | 52.1 | |
| 9.8 | 10 | 2.3 | 35.2 | |
| 9.5 | | 2.3 | 30.6 | |
| 7.8 | | 7.4 | 58.8 | 8.0 GS |
| 9.6 | | 12.3 | 13.4 | |
| 9.0 | | 16.3 | 40.2 | |
| 9.0 | | 23.8 | 11.0 | |
| 9.6 | | 35.3 | 15.2 | |
| 9.2 | | 51.8 | 32.2 | |
| 9.2 | | 51.8 | 27.0 | |
| 9.3 | 11 | 0.3 | 25.3 | |
| 9.2 | | 1.9 | 59.6 | |
| 9.4 | | 5.8 | 7.3 | |
| 9.3 | | 6.3 | 28.2 | |
| 9.7 | | 12.3 | 7.7 | |
| 9.8 | | 17.3 | 27.3 | |
| 9.6 | | 33.3 | 31.0 | |
| 9.8 | 12 | 33.8 | 33.6 | |
| 8.4 | | 37.3 | 40.9 | |
| 9.3 | | 41.3 | 23.2 | |
| 9.3 | | 42.3 | 21.0 | |
| 9.7 | | 45.3 | 56.0 | |
| 9.7 | | 54.8 | 12.0 | |
| 9.8 | 13 | 1.8 | 35.0 | |

## 8761—8820.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 13 | 2.3 | 42.5 | |
| 9.8 | | 10.3 | 51.6 | |
| 9.8 | | 12.8 | 12.6 | |
| 9.2 | | 18.8 | 2.4 | |
| 9.7 | | 24.3 | 21.6 | |
| 9.8 | | 28.8 | 39.3 | |
| 9.8 | | 35.3 | 14.0 | |
| 9.8 | | 37.8 | 27.0 | |
| 9.4 | | 42.8 | 22.4 | |
| 9.4 | | 51.3 | 21.0 | |
| 9.4 | 14 | 10.3 | 7.6 | |
| 9.4 | | 15.3 | 36.5 | |
| 9.8 | | 16.3 | 21.0 | |
| 9.7 | | 23.8 | 2.5 | |
| 9.5 | | 29.8 | 15.0 | |
| 9.6 | | 32.8 | 13.0 | |
| 9.6 | | 33.8 | 2.0 | |
| 9.8 | | 38.4 | 31.6 | |
| 8.8 | | 52.3 | 44.4 | |
| 9.7 | | 54.8 | 48.9 | |
| 9.8 | | 57.8 | 44.7 | |
| 8.9 | 15 | 1.3 | 13.9 | 9.0 |
| 9.5 | | 11.8 | 42.0 | |
| 9.3 | | 17.3 | 28.8 | |
| 9.5 | | 20.3 | 22.4 | |
| 9.8 | | 37.8 | 36.5 | |
| 9.8 | | 38.3 | 13.0 | |
| 9.6 | 16 | 3.3 | 32.5 | |
| 9.4 | | 10.8 | 23.5 | |
| 9.8 | | 17.3 | 27.2 | |
| 7.6 | | 46.6 | 1.2 | 8.0 G |
| 8.9 | 17 | 3.8 | 37.6 | 9.5 |
| 9.8 | | 23.3 | 37.8 | |
| 9.7 | | 40.3 | 15.6 | |
| 9.4 | | 42.8 | 5.0 | |
| 9.4 | | 46.3 | 16.8 | |
| 9.3 | | 46.8 | 35.5 | |
| 9.5 | | 50.8 | 8.0 | |
| 9.5 | | 53.8 | 12.0 | |
| 9.8 | | 54.6 | 11.7 | |
| 9.8 | | 58.8 | 32.0 | |
| 9.7 | | 59.3 | 49.6 | |
| 9.8 | 18 | 0.8 | 17.7 | |
| 9.8 | | 6.3 | 1.8 | |
| 9.8 | | 16.3 | 52.4 | |
| 9.5 | | 31.3 | 1.9 | |
| 9.6 | | 53.3 | 36.4 | |
| 9.8 | | 55.3 | 15.8 | |
| 9.8 | | 58.8 | 43.7 | |
| 9.8 | 19 | 4.8 | 19.4 | |
| 9.4 | | 11.8 | 39.5 | |
| 9.8 | | 19.3 | 50.4 | |
| 9.5 | | 31.8 | 43.5 | |
| 9.7 | | 43.3 | 36.0 | |
| 9.5 | | 53.3 | 19.9 | |
| 9.8 | 20 | 15.3 | 41.2 | |
| 9.3 | | 17.3 | 2.3 | |
| 9.8 | | 21.3 | 43.7 | |
| 9.6 | | 22.3 | 4.5 | |
| 9.6 | | 23.3 | 44.1 | |



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## 8821—8880.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.8 | 20 | 29.3 | 11.2 | |
| 9.3 | | 39.3 | 51.4 | |
| 9.8 | | 44.3 | 45.3 | |
| 9.8 | | 51.3 | 13.1 | |
| 8.4 | | 55.8 | 33.3 | 9.0 |
| 9.4 | 21 | 3.3 | 48.1 | |
| 8.4 | | 8.8 | 37.5 | 9.0 |
| 8.8 | | 37.3 | 55.2 | 8.5 |
| 9.7 | | 37.8 | 9.0 | |
| 9.0 | | 48.3 | 24.5 | |
| 9.5 | | 49.8 | 9.0 | |
| 9.8 | 22 | 20.8 | 8.3 | |
| 8.6 | | 26.3 | 43.8 | 8.0 G |
| 9.8 | | 36.8 | 20.2 | |
| 9.8 | | 37.8 | 12.2 | |
| 9.6 | | 40.3 | 35.0 | |
| 9.4 | | 40.3 | 42.8 | |
| 9.7 | | 58.3 | 10.7 | |
| 9.8 | 23 | 3.8 | 6.8 | |
| 9.8 | | 6.3 | 15.9 | |
| 9.4 | | 7.8 | 47.9 | |
| 9.8 | | 14.2 | 39.9 | |
| 9.4 | | 29.8 | 46.5 | |
| 9.3 | | 30.8 | 42.5 | |
| 9.8 | | 33.6 | 32.9 | |
| 10.0 | | 39.2 | 38.9 | |
| 10.0 | | 46.3 | 3.8 | |
| 9.4 | | 50.8 | 32.2 | |
| 9.1 | | 55.8 | 14.7 | |
| 9.2 | 24 | 17.3 | 57.4 | |
| 9.4 | | 28.8 | 57.8 | |
| 10.0 | | 33.3 | 53.4 | |
| 9.2 | | 45.8 | 42.9 | |
| 9.6 | | 49.8 | 11.1 | |
| 10.0 | | 53.3 | 33.4 | |
| 9.9 | | 54.3 | 28.0 | |
| 9.6 | | 56.3 | 23.4 | |
| 10.0 | | 59.8 | 33.8 | |
| 10.0 | 25 | 2.3 | 33.6 | |
| 10.0 | | 27.3 | 12.9 | |
| 9.8 | | 36.3 | 0.0 | |
| 9.2 | | 48.3 | 39.4 | |
| 8.8 | | 58.8 | 6.0 | |
| 9.9 | | 59.3 | 8.0 | |
| 8.1 | 26 | 1.8 | 24.2 | 8.5 |
| 7.8 | | 9.8 | 19.2 | 7.0 GSt |
| 9.1 | | 19.8 | 7.0 | |
| 9.2 | | 24.8 | 49.5 | |
| 10.0 | | 32.8 | 5.2 | |
| 9.9 | | 43.3 | 4.0 | |
| 10.0 | | 43.8 | 14.8 | |
| 10.0 | | 44.8 | 28.8 | |
| 10.0 | | 55.3 | 28.0 | |
| 10.0 | 27 | 16.8 | 17.4 | |
| 9.2 | | 23.3 | 0.0 | |
| 10.0 | | 41.8 | 58.3 | |
| 9.5 | | 46.8 | 41.7 | |
| 8.8 | | 49.3 | 31.0 | |
| 9.9 | | 49.8 | 21.8 | |
| 9.2 | 28 | 0.3 | 6.9 | |

## 8881—8940.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.0 | 28 | 1.8 | 36.0 | |
| 9.8 | | 1.8 | 49.2 | |
| 10.0 | | 8.8 | 20.3 | |
| 9.6 | | 32.3 | 34.0 | |
| 9.2 | | 49.8 | 20.5 | |
| 9.8 | | 56.3 | 47.4 | |
| 8.8 | 29 | 7.8 | 15.7 | 9.0 |
| 9.9 | | 18.8 | 46.2 | |
| 10.0 | | 20.3 | 56.4 | |
| 9.4 | | 41.0 | 58.3 | |
| 9.6 | | 42.3 | 22.6 | |
| 10.0 | | 43.8 | 34.0 | |
| 9.4 | | 44.3 | 43.7 | |
| 8.8 | | 47.8 | 24.4 | |
| 9.4 | 30 | 1.8 | 53.6 | |
| 9.9 | | 5.8 | 50.4 | |
| 10.0 | | 11.3 | 36.5 | |
| 9.5 | | 18.8 | 53.2 | |
| 8.0 | | 21.8 | 11.8 | 7.0 GS |
| 9.9 | | 26.3 | 3.0 | |
| 9.4 | | 32.8 | 53.2 | |
| 9.6 | | 33.6 | 59.0 | |
| 9.9 | | 42.6 | 1.0 | |
| 9.4 | | 57.3 | 15.0 | |
| 10.0 | 31 | 5.3 | 27.7 | |
| 9.2 | | 27.8 | 19.6 | S |
| 10.0 | | 32.3 | 13.5 | |
| 9.6 | | 37.8 | 19.9 | |
| 9.4 | | 41.5 | 57.2 | |
| 9.6 | | 58.1 | 0.3 | G |
| 9.9 | 32 | 1.6 | 1.0 | |
| 9.6 | | 3.3 | 19.2 | |
| 10.0 | | 8.8 | 57.7 | |
| 8.2 | | 9.6 | 0.2 | GS |
| 9.6 | | 18.3 | 53.0 | |
| 9.1 | | 21.8 | 38.6 | |
| 9.9 | | 31.8 | 42.8 | |
| 8.4 | | 33.8 | 24.5 | 9.0 |
| 10.0 | | 39.8 | 53.2 | |
| 9.6 | | 40.8 | 18.2 | |
| 9.0 | | 42.8 | 6.0 | |
| 9.4 | | 44.3 | 38.7 | |
| 10.0 | | 44.8 | 6.8 | |
| 10.0 | 33 | 14.3 | 34.6 | |
| 9.6 | | 21.8 | 50.2 | |
| 7.7 | | 23.3 | 29.4 | 8.0 G |
| 9.4 | | 29.8 | 2.2 | |
| 9.6 | | 41.8 | 48.0 | |
| 9.9 | | 45.8 | 20.4 | |
| 9.4 | | 48.8 | 33.6 | |
| 9.6 | | 49.8 | 24.8 | |
| 9.4 | | 52.8 | 16.8 | |
| 9.6 | | 54.3 | 17.8 | |
| 9.6 | | 59.3 | 12.4 | |
| 10.0 | 34 | 8.3 | 43.0 | |
| 9.4 | | 14.8 | 32.2 | |
| 8.7 | | 14.8 | 13.8 | |
| 8.8 | | 35.3 | 37.2 | |
| 8.6 | | 39.8 | 19.2 | |
| 10.0 | | 48.8 | 49.3 | |

## 8941—9000.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8.7 | 34 | 53.3 | 24.8 | |
| 9.1 | 35 | 29.8 | 55.0 | 9.0 |
| 9.8 | | 38.3 | 38.2 | |
| 9.2 | | 49.3 | 8.2 | |
| 9.5 | | 55.8 | 36.2 | |
| 9.9 | | 58.8 | 14.8 | |
| 9.4 | | 59.8 | 19.0 | |
| 10.0 | 36 | 9.3 | 56.4 | |
| 10.0 | | 13.3 | 37.2 | |
| 9.6 | | 17.3 | 35.2 | |
| 10.0 | | 20.3 | 39.8 | |
| 9.2 | | 27.3 | 15.2 | |
| 9.9 | | 31.3 | 52.2 | |
| 9.9 | | 39.8 | 33.0 | |
| 10.0 | | 45.8 | 22.2 | |
| 9.4 | | 48.8 | 7.4 | |
| 10.0 | | 52.3 | 23.6 | |
| 9.6 | | 59.8 | 49.6 | |
| 10.0 | 37 | 24.8 | 41.6 | |
| 9.8 | | 26.3 | 47.9 | |
| 9.5 | | 31.8 | 34.0 | |
| 9.4 | | 33.8 | 10.4 | |
| 9.6 | | 59.8 | 13.0 | |
| 9.6 | 38 | 2.8 | 41.0 | |
| 8.6 | | 9.8 | 37.2 | 9.0 |
| 10.0 | | 14.8 | 35.7 | |
| 8.5 | | 22.8 | 35.9 | 8.5 |
| 9.9 | | 23.8 | 12.1 | |
| 9.6 | | 26.3 | 43.0 | |
| 10.0 | | 37.3 | 9.4 | |
| 9.2 | | 42.3 | 42.0 | |
| 9.2 | | 43.5 | 40.2 | |
| 9.6 | | 43.5 | 28.2 | |
| 10.0 | | 44.0 | 16.5 | |
| 9.2 | | 45.0 | 16.0 | |
| 9.4 | | 45.5 | 29.6 | |
| 9.1 | | 58.0 | 39.0 | |
| 9.8 | 39 | 2.5 | 9.5 | |
| 9.8 | | 5.5 | 59.6 | |
| 10.0 | | 14.0 | 29.3 | |
| 9.2 | | 20.5 | 29.6 | |
| 9.0 | | 26.0 | 34.4 | |
| 9.5 | | 38.0 | 23.5 | |
| 9.9 | | 51.5 | 47.8 | |
| 10.0 | | 58.5 | 48.8 | |
| 9.6 | 40 | 0.0 | 23.0 | |
| 9.4 | | 4.5 | 53.2 | |
| 8.8 | | 5.5 | 44.4 | |
| 10.0 | | 5.5 | 59.4 | |
| 10.0 | | 12.0 | 17.9 | |
| 10.0 | | 22.0 | 7.2 | |
| 10.0 | | 23.5 | 8.0 | |
| 9.1 | | 31.0 | 13.7 | |
| 9.9 | 41 | 5.0 | 9.0 | |
| 9.8 | | 7.0 | 43.2 | |
| 9.6 | | 9.5 | 41.0 | |
| 8.3 | | 20.0 | 52.0 | |
| 10.0 | | 34.5 | 3.6 | |
| 10.0 | 42 | 2.5 | 8.1 | |
| 9.4 | | 13.5 | 46.4 | |

## 9001—9060.

| mag. | 18h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 42 | 15.0 | 13.0 | |
| 9.2 | | 17.5 | 10.0 | |
| 9.1 | | 27.5 | 38.8 | |
| 9.8 | | 35.0 | 58.8 | |
| 9.1 | | 45.5 | 37.5 | |
| 9.6 | | 55.0 | 24.5 | |
| 9.8 | 43 | 6.7 | 55.0 | |
| 9.9 | | 24.7 | 53.0 | |
| 9.2 | | 36.2 | 16.1 | |
| 9.9 | | 37.7 | 7.9 | |
| 10.0 | | 43.7 | 22.0 | |
| 10.0 | | 43.7 | 2.9 | |
| 9.5 | | 48.7 | 29.8 | |
| 9.9 | | 58.2 | 2.7 | |
| 9.9 | 44 | 9.7 | 34.1 | |
| 10.0 | | 13.7 | 56.1 | |
| 9.4 | | 17.7 | 5.2 | |
| 9.2 | | 23.2 | 11.1 | |
| 9.2 | | 32.7 | 37.3 | |
| 9.8 | | 40.2 | 39.1 | |
| 9.4 | | 40.7 | 16.7 | |
| 9.6 | | 52.2 | 1.1 | |
| 9.9 | 45 | 1.2 | 54.6 | |
| 9.8 | | 8.7 | 32.3 | |
| 9.9 | | 12.2 | 25.1 | |
| 7.6 | | 15.2 | 34.5 | 7.0 GS |
| 9.5 | | 17.5 | 58.0 | |
| 9.4 | | 22.5 | 54.9 | |
| 8.6 | | 37.2 | 40.7 | 8.5 |
| 9.2 | | 47.7 | 21.4 | |
| 10.0 | | 52.4 | 2.4 | |
| 7.9 | | 53.2 | 0.8 | 7.5 G |
| 9.8 | | 54.2 | 17.2 | |
| 9.6 | 46 | 10.2 | 44.0 | |
| 9.9 | | 16.7 | 39.8 | |
| 10.0 | | 51.7 | 41.4 | |
| 9.0 | 47 | 3.7 | 8.1 | 9.0 |
| 10.0 | | 18.2 | 3.3 | |
| 8.3 | | 20.2 | 17.0 | 8.0 |
| 9.6 | | 22.2 | 5.6 | |
| 9.6 | | 53.2 | 54.9 | |
| 9.9 | 48 | 5.5 | 5.4 | |
| 9.4 | | 10.2 | 3.3 | |
| 9.8 | | 12.7 | 45.5 | |
| 9.6 | | 22.2 | 19.1 | |
| 10.0 | | 24.7 | 51.0 | |
| 8.8 | | 36.7 | 32.5 | |
| 9.8 | | 37.7 | 49.4 | |
| 10.0 | | 41.2 | 9.3 | |
| 8.2 | 49 | 31.7 | 49.5 | 8.5 |
| 9.1 | | 48.2 | 41.8 | |
| 8.3 | 50 | 7.2 | 23.5 | |
| 10.0 | | 10.2 | 17.9 | |
| 9.4 | | 22.2 | 6.6 | |
| 9.4 | | 30.2 | 3.8 | |
| 9.1 | | 42.2 | 43.9 | |
| 9.4 | | 51.2 | 12.6 | |
| 9.5 | 51 | 6.2 | 32.2 | |
| 9.2 | | 11.2 | 10.7 | |
| 9.2 | | 15.7 | 55.3 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 20 | 127 | 0.7 |
| | 30 | 127 | 1.1 |
| | 40 | 127 | 1.5 |
| | 50 | 126 | 1.8 |
| 19 | 0 | 126 | 2.2 |



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25 prec.

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 18 | 50 | 126 | 1·8 |
| 19 | 0 | 126 | 2·2 |
| | 10 | 125 | 2·5 |
| | 20 | 124 | 2·9 |
| | 30 | 123 | 3·2 |
| | 40 | 123 | 3·5 |
| | 50 | 122 | 3·9 |

## 9061—9120.

| mag. | 18h.–19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·0 | 51 | 37·2 | 49·0 | |
| 10·0 | | 52·2 | 9·8 | |
| 9·9 | 52 | 2·2 | 23·8 | |
| 9·2 | | 3·2 | 41·0 | |
| 10·0 | | 3·2 | 45·2 | |
| 9·4 | | 8·2 | 4·4 | |
| 9·6 | | 22·2 | 33·4 | |
| 9·6 | | 28·7 | 51·6 | |
| 10·0 | | 49·0 | 58·1 | |
| 9·4 | | 53·7 | 15·0 | |
| 10·0 | | 56·2 | 31·5 | |
| 9·4 | 53 | 6·2 | 6·9 | |
| 9·9 | | 12·2 | 8·8 | |
| 8·5 | | 15·2 | 29·4 | 8·5 |
| 10·0 | | 15·2 | 4·7 | |
| 9·5 | | 22·2 | 23·1 | |
| 9·6 | | 22·7 | 15·0 | |
| 9·8 | | 30·7 | 15·3 | |
| 9·8 | | 33·2 | 23·7 | |
| 9·9 | 54 | 0·2 | 33·7 | |
| 9·4 | | 27·7 | 36·1 | |
| 9·4 | | 33·2 | 39·0 | |
| 9·6 | | 33·7 | 10·4 | |
| 9·4 | 55 | 1·7 | 15·3 | |
| 9·1 | | 8·2 | 17·6 | |
| 9·5 | | 39·5 | 54·0 | |
| 10·0 | | 58·2 | 46·0 | |
| 10·0 | 56 | 6·7 | 5·3 | |
| 10·0 | | 35·7 | 2·0 | |
| 9·6 | | 47·8 | 19·7 | |
| 10·3 | | 53·1 | 46·1 | |
| 9·6 | 57 | 0·8 | 29·7 | |
| 9·2 | 58 | 1·8 | 29·8 | |
| 10·0 | | 36·3 | 40·3 | |
| 7·8 | | 48·1 | 0·9 | 8·0 G |
| 10·3 | | 53·3 | 50·9 | |
| 9·8 | 59 | 2·3 | 40·9 | |
| 10·3 | | 26·3 | 33·3 | |
| 10·3 | | 42·3 | 28·5 | |
| 9·8 | | 44·8 | 56·2 | |
| 10·3 | | 59·8 | 44·9 | |
| 8·2 | 0 | 14·6 | 57·9 | G |
| 10·3 | | 15·8 | 57·0 | |
| 9·4 | | 17·8 | 41·9 | |
| 8·4 | | 29·8 | 22·8 | G |
| 9·2 | | 29·8 | 13·6 | |
| 9·2 | | 41·3 | 35·7 | |
| 9·4 | | 48·3 | 11·8 | |
| 8·4 | | 57·3 | 30·2 | 7·5 GS |
| 8·9 | 1 | 3·3 | 54·4 | |
| 10·3 | | 17·3 | 15·1 | |
| 10·3 | | 19·8 | 49·3 | |
| 10·0 | | 41·3 | 14·8 | |
| 9·2 | | 46·3 | 49·0 | 9·0 |
| 9·4 | 2 | 0·8 | 55·6 | |
| 10·3 | | 12·8 | 21·0 | |
| 10·3 | | 18·8 | 6·7 | |
| 9·8 | | 19·8 | 52·0 | |
| 10·3 | | 48·3 | 51·8 | |
| 9·8 | 3 | 17·3 | 50·6 | |

## 9121—9180.

| mag. | 19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 3 | 23·8 | 58·2 | |
| 9·4 | | 39·6 | 45·1 | |
| 9·8 | | 47·1 | 44·8 | |
| 10·2 | 4 | 14·1 | 29·9 | |
| 10·3 | | 31·1 | 40·1 | |
| 10·3 | | 32·1 | 45·8 | |
| 9·2 | | 42·1 | 0·1 | |
| 9·2 | 5 | 1·1 | 15·8 | 9·5 |
| 8·9 | | 12·1 | 14·9 | 9·0 |
| 10·3 | | 34·1 | 45·3 | |
| 10·3 | | 40·6 | 52·1 | |
| 9·6 | | 51·1 | 38·8 | |
| 8·9 | 6 | 12·1 | 35·2 | |
| 8·0 | | 27·6 | 33·2 | G |
| 8·8 | | 31·1 | 9·0 | 9·0 G |
| 9·0 | | 55·6 | 13·6 | 8·5 G |
| 9·8 | 7 | 12·1 | 32·8 | |
| 10·3 | | 19·6 | 5·3 | |
| 10·0 | | 31·8 | 57·9 | |
| 10·3 | 8 | 20·1 | 13·7 | |
| 6·8 | | 20·6 | 21·7 | 7·0 GSt |
| 10·3 | | 49·6 | 50·3 | |
| 10·3 | 9 | 0·1 | 37·9 | |
| 9·2 | | 5·1 | 50·9 | |
| 8·4 | | 15·1 | 33·5 | |
| 10·0 | | 31·6 | 45·7 | |
| 10·2 | | 51·6 | 51·1 | |
| 10·3 | 10 | 16·6 | 35·1 | |
| 10·3 | | 54·1 | 41·0 | |
| 8·8 | | 59·6 | 11·8 | 8·0 G |
| 9·8 | 11 | 12·1 | 47·1 | |
| 9·8 | | 17·1 | 49·8 | 9·5 |
| 9·0 | | 52·1 | 47·6 | 9·5 |
| 9·4 | 12 | 1·8 | 53·2 | |
| 9·4 | | 7·3 | 42·4 | |
| 9·8 | | 19·8 | 17·1 | |
| 8·4 | | 28·3 | 37·1 | 9·0 |
| 10·3 | | 37·3 | 49·2 | |
| 9·6 | 13 | 19·8 | 40·2 | |
| 7·4 | | 20·3 | 10·0 | 7·2 GS |
| 9·2 | | 20·8 | 54·2 | |
| 10·2 | | 24·3 | 45·6 | |
| 10·2 | 14 | 9·3 | 30·1 | |
| 6·8 | | 9·8 | 7·4 | 7·8 GSt |
| 10·3 | | 13·8 | 6·7 | |
| 10·3 | | 17·8 | 31·6 | |
| 10·3 | | 26·3 | 28·9 | |
| 9·8 | | 33·8 | 21·4 | |
| 10·3 | | 39·3 | 6·4 | |
| 9·4 | | 42·3 | 18·9 | |
| 10·0 | | 49·3 | 26·4 | |
| 8·6 | | 49·8 | 25·0 | 7·5 GS |
| 8·0 | 15 | 7·8 | 59·3 | 8·5 |
| 8·4 | | 33·3 | 11·8 | 8·2 G |
| 9·8 | | 34·3 | 47·9 | |
| 9·4 | 16 | 11·3 | 58·5 | |
| 10·0 | | 19·8 | 40·5 | |
| 9·6 | | 20·8 | 56·8 | |
| 9·8 | | 33·3 | 42·1 | 9·5 |
| 9·8 | | 37·3 | 47·7 | |

## 9181—9240.

| mag. | 19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 16 | 38·3 | 43·6 | |
| 9·2 | | 49·8 | 44·5 | 8·0 G |
| 9·8 | | 54·3 | 30·6 | |
| 9·4 | 17 | 10·3 | 26·5 | |
| 8·2 | | 13·3 | 10·7 | 8·2 G |
| 9·6 | | 16·8 | 54·0 | |
| 8·2 | 18 | 24·8 | 20·6 | 8·0 GS |
| 9·8 | | 49·8 | 19·1 | 10·0 |
| 9·0 | 19 | 3·3 | 48·5 | |
| 10·2 | | 22·9 | 33·9 | |
| 9·4 | | 25·4 | 38·1 | |
| 9·2 | | 32·4 | 5·6 | |
| 9·6 | | 40·9 | 42·9 | |
| 10·3 | | 48·9 | 46·0 | |
| 9·8 | 20 | 56·2 | 2·3 | |
| 9·6 | | 56·4 | 8·6 | |
| 10·3 | 21 | 0·4 | 28·6 | |
| 10·3 | | 5·9 | 5·9 | |
| 10·3 | | 24·4 | 17·4 | |
| 9·8 | | 55·4 | 0·5 | |
| 9·4 | 22 | 3·9 | 53·4 | |
| 10·3 | | 11·4 | 0·9 | |
| 9·2 | | 18·4 | 38·3 | |
| 10·3 | | 19·9 | 9·9 | |
| 10·3 | | 26·8 | 59·6 | |
| 9·8 | | 30·9 | 42·8 | |
| 10·3 | | 37·9 | 15·4 | |
| 10·3 | | 48·9 | 51·5 | |
| 8·6 | 23 | 32·9 | 26·9 | 8·0 G |
| 9·4 | | 38·9 | 36·8 | 9·0 G |
| 10·3 | | 43·4 | 8·4 | |
| 8·0 | | 50·4 | 21·7 | 7·0 GS |
| 7·7 | | 59·9 | 40·9 | 8·0 G |
| 9·2 | 24 | 22·9 | 48·2 | |
| 10·2 | | 38·9 | 34·1 | |
| 10·3 | | 51·4 | 4·6 | |
| 9·2 | 25 | 18·4 | 56·1 | 9·0 |
| 10·2 | | 29·4 | 16·2 | |
| 10·3 | | 37·9 | 19·9 | |
| 8·7 | | 53·9 | 3·8 | |
| 10·3 | | 54·9 | 33·0 | |
| 9·6 | 26 | 16·9 | 53·1 | |
| 9·2 | | 35·9 | 39·1 | |
| 9·4 | | 36·9 | 35·1 | |
| 10·3 | | 42·9 | 57·6 | |
| 8·4 | | 43·4 | 21·3 | 8·5 |
| 9·4 | | 43·4 | 46·0 | |
| 10·3 | 27 | 1·9 | 54·0 | |
| 10·4 | | 4·8 | 49·2 | |
| 10·4 | | 33·8 | 33·3 | |
| 10·4 | 28 | 2·3 | 6·9 | |
| 9·8 | | 9·3 | 59·6 | |
| 9·8 | | 13·1 | 45·7 | |
| 9·8 | | 18·3 | 20·7 | |
| 10·2 | | 30·3 | 33·2 | |
| 9·8 | | 59·3 | 50·0 | |
| 9·8 | 29 | 2·3 | 6·0 | |
| 7·6 | | 3·3 | 35·5 | 8·5 G |
| 10·0 | | 11·2 | 40·0 | |
| 10·4 | | 57·7 | 29·5 | |

## 9241—9300.

| mag. | 19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 29 | 59·7 | 54·6 | |
| 9·8 | 30 | 3·2 | 43·1 | |
| 10·0 | | 58·2 | 24·5 | |
| 10·2 | | 59·2 | 21·9 | |
| 10·4 | 31 | 0·2 | 3·9 | |
| 9·1 | | 5·7 | 36·2 | 9·0 |
| 10·2 | | 5·7 | 44·0 | |
| 9·4 | | 12·2 | 51·1 | |
| 10·4 | | 24·2 | 31·9 | |
| 9·8 | | 54·2 | 44·1 | |
| 9·2 | | 58·2 | 18·2 | |
| 9·8 | 32 | 0·7 | 47·0 | |
| 10·4 | | 9·7 | 40·8 | |
| 9·8 | | 11·1 | 2·6 | |
| 10·4 | | 11·7 | 24·3 | |
| 10·4 | | 15·7 | 4·1 | |
| 10·4 | | 22·2 | 49·5 | |
| 10·4 | | 52·7 | 43·9 | |
| 9·6 | 33 | 0·2 | 54·4 | |
| 8·4 | | 1·2 | 32·9 | 8·0 G |
| 10·4 | | 24·2 | 58·7 | |
| 10·4 | | 33·2 | 27·4 | |
| 10·4 | | 41·7 | 11·1 | |
| 9·6 | | 47·2 | 26·2 | |
| 9·6 | | 48·7 | 15·9 | |
| 10·2 | | 51·7 | 19·9 | |
| 10·4 | 34 | 3·7 | 0·0 | |
| 8·8 | | 12·2 | 33·9 | 8·0 G |
| 9·8 | | 22·8 | 2·1 | |
| 9·6 | | 27·7 | 18·5 | |
| 9·6 | | 35·7 | 30·9 | 9·0 |
| 9·8 | | 42·2 | 43·6 | |
| 9·1 | | 43·9 | 59·6 | |
| 9·8 | | 48·2 | 11·9 | |
| 10·4 | 35 | 22·2 | 51·1 | |
| 9·4 | | 32·7 | 0·4 | |
| 10·4 | | 46·7 | 50·8 | |
| 10·4 | | 52·7 | 50·9 | |
| 9·0 | 36 | 25·5 | 1·6 | |
| 10·2 | | 28·7 | 50·1 | |
| 10·4 | | 39·7 | 11·1 | |
| 9·6 | | 51·2 | 43·0 | |
| 9·2 | 37 | 3·2 | 53·9 | |
| 10·0 | | 4·2 | 10·2 | |
| 10·0 | | 12·2 | 36·5 | |
| 10·2 | | 24·2 | 12·7 | |
| 10·4 | | 28·7 | 24·2 | |
| 10·0 | | 37·7 | 48·5 | |
| 8·9 | | 42·7 | 38·0 | 9·5 |
| 6·2 | | 47·7 | 39·5 | 6·0 GSct |
| 10·4 | | 51·7 | 48·4 | |
| 10·2 | 38 | 2·7 | 10·0 | |
| 10·2 | | 42·2 | 40·2 | |
| 10·2 | | 54·7 | 48·9 | |
| 10·4 | 39 | 45·7 | 35·1 | |
| 10·4 | 40 | 2·7 | 54·9 | |
| 10·4 | | 10·2 | 9·0 | |
| 9·4 | | 15·7 | 16·1 | |
| 10·4 | | 20·7 | 53·2 | |
| 10·2 | | 28·7 | 34·6 | |



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### 9301—9360.

| mag. | 19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.4 | 40 | 28.7 | 51.1 | |
| 10.4 | | 40.7 | 17.3 | |
| 10.4 | | 47.2 | 36.0 | |
| 10.4 | | 48.2 | 46.1 | |
| 9.6 | 41 | 5.2 | 10.1 | |
| 10.0 | | 8.2 | 52.3 | |
| 9.0 | | 9.2 | 9.8 | 9.0 |
| 10.2 | | 28.7 | 18.2 | |
| 10.2 | | 31.2 | 8.2 | |
| 10.4 | | 35.7 | 39.0 | |
| 10.4 | | 43.7 | 44.3 | |
| 10.4 | 42 | 0.7 | 24.9 | |
| 9.8 | | 26.2 | 14.9 | |
| 10.4 | | 32.5 | 15.1 | |
| 9.6 | | 42.7 | 44.9 | |
| 10.0 | | 54.0 | 51.6 | |
| 8.4 | | 59.0 | 59.1 | G |
| 8.9 | 43 | 18.0 | 9.6 | |
| 8.8 | | 20.0 | 13.0 | 8.5 |
| 10.4 | | 22.0 | 41.3 | |
| 10.4 | | 27.5 | 50.1 | |
| 10.4 | | 33.0 | 33.8 | |
| 9.8 | | 37.0 | 16.9 | |
| 10.2 | | 39.0 | 23.1 | |
| 10.4 | | 42.0 | 49.1 | |
| 9.8 | | 43.0 | 23.6 | |
| 9.6 | | 58.0 | 15.0 | |
| 8.2 | 44 | 21.0 | 22.1 | 8.0 G |
| 10.4 | | 26.5 | 9.9 | |
| 10.4 | | 52.0 | 56.9 | |
| 10.4 | | 58.0 | 43.2 | |
| 10.0 | 45 | 10.0 | 6.2 | |
| 10.4 | | 22.5 | 9.7 | |
| 10.0 | | 45.5 | 41.7 | |
| 10.2 | | 52.0 | 40.7 | |
| 10.2 | | 58.5 | 38.9 | |
| 10.4 | 46 | 40.5 | 31.1 | |
| 9.8 | | 45.0 | 24.1 | |
| 10.4 | 47 | 5.5 | 11.9 | |
| 9.2 | | 22.5 | 5.2 | |
| 9.6 | | 31.5 | 51.1 | |
| 9.8 | | 50.0 | 9.2 | |
| 9.6 | | 55.5 | 29.0 | |
| 10.4 | | 56.0 | 38.9 | |
| 9.8 | 48 | 11.0 | 1.9 | |
| 10.0 | | 26.5 | 9.8 | |
| 9.8 | | 30.0 | 43.7 | |
| 9.6 | | 35.6 | 36.9 | |
| 10.4 | | 39.6 | 35.7 | |
| 10.0 | | 40.8 | 2.3 | |
| 9.2 | | 53.6 | 57.9 | |
| 9.0 | 49 | 20.6 | 39.5 | |
| 9.1 | | 35.1 | 16.0 | |
| 10.0 | | 39.1 | 23.4 | |
| 10.4 | | 52.1 | 44.1 | |
| 10.4 | | 53.6 | 3.6 | |
| 8.6 | 50 | 7.6 | 36.5 | |
| 10.4 | | 8.6 | 14.0 | |
| 10.2 | | 13.1 | 40.1 | |
| 9.8 | | 19.1 | 44.9 | |

### 9361—9420.

| mag. | 19h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10.4 | 50 | 32.9 | 1.9 | |
| 10.0 | | 37.1 | 32.6 | |
| 10.2 | | 41.1 | 55.7 | |
| 10.0 | | 59.0 | 1.0 | |
| 10.2 | 51 | 13.1 | 16.9 | |
| 10.4 | | 20.6 | 26.4 | |
| 10.4 | | 21.6 | 15.5 | |
| 8.4 | | 23.1 | 21.2 | |
| 9.6 | | 30.1 | 5.4 | |
| 10.4 | | 31.1 | 56.1 | |
| 9.4 | | 41.1 | 42.9 | |
| 10.2 | | 45.1 | 37.9 | |
| 10.4 | | 55.1 | 13.8 | |
| 8.9 | 52 | 0.1 | 50.7 | |
| 9.6 | | 15.1 | 6.3 | |
| 10.4 | | 19.6 | 20.7 | |
| 9.6 | | 25.6 | 18.2 | |
| 8.2 | | 28.6 | 2.1 | 8.5 G |
| 9.1 | | 41.1 | 45.1 | 9.0 G |
| 9.8 | | 51.1 | 29.9 | |
| 10.4 | | 52.1 | 46.8 | |
| 10.4 | 53 | 10.6 | 9.8 | |
| 10.4 | | 27.6 | 54.4 | |
| 10.4 | | 31.6 | 25.7 | |
| 10.2 | | 46.6 | 55.8 | |
| 10.4 | | 50.1 | 23.0 | |
| 8.0 | | 51.1 | 47.5 | 8.5 |
| 9.8 | | 51.6 | 10.8 | |
| 9.8 | | 56.1 | 46.0 | |
| 10.0 | 54 | 12.1 | 8.1 | |
| 10.4 | | 28.5 | 46.9 | |
| 10.4 | 55 | 3.5 | 27.9 | |
| 9.8 | | 12.5 | 6.1 | |
| 10.0 | | 15.0 | 0.1 | |
| 10.4 | | 17.5 | 53.2 | |
| 9.6 | | 37.0 | 37.0 | |
| 9.6 | | 51.5 | 4.6 | |
| 8.4 | 56 | 0.5 | 14.6 | |
| 9.6 | | 9.5 | 50.1 | |
| 10.4 | | 15.0 | 35.6 | |
| 9.6 | | 23.0 | 1.6 | |
| 10.0 | | 31.5 | 32.1 | |
| 10.4 | | 41.0 | 37.2 | |
| 9.6 | | 46.5 | 27.9 | |
| 8.4 | | 51.0 | 36.2 | 9.0 |
| 9.6 | | 53.5 | 8.7 | |
| 9.6 | | 59.5 | 42.8 | |
| 9.8 | 57 | 14.9 | 0.2 | |
| 9.8 | | 27.0 | 57.6 | |
| 10.4 | | 40.5 | 34.3 | |
| 10.4 | | 45.0 | 51.6 | |
| 10.4 | | 53.0 | 18.8 | |
| 9.8 | 58 | 3.0 | 3.6 | |
| 8.4 | | 5.0 | 11.8 | 8.0 |
| 9.8 | | 5.5 | 43.0 | |
| 10.2 | | 30.5 | 37.2 | |
| 10.4 | | 32.5 | 1.5 | |
| 9.6 | | 35.0 | 18.4 | |
| 9.4 | | 37.5 | 18.3 | |
| 9.6 | | 51.5 | 20.0 | |

### 9421—9480.

| mag. | 19h.—20h. m | s | −56° ′ | |
|---|---|---|---|---|
| 8.6 | 58 | 56.0 | 25.1 | |
| 9.8 | 59 | 3.0 | 3.9 | |
| 10.4 | | 7.5 | 33.2 | |
| 10.4 | | 13.1 | 5.5 | |
| 10.4 | | 21.0 | 14.8 | |
| 10.4 | | 39.5 | 3.0 | |
| 10.2 | | 41.0 | 50.1 | |
| 10.4 | | 49.5 | 43.0 | |
| 10.4 | 0 | 49.0 | 57.8 | |
| 10.4 | 1 | 1.5 | 10.8 | |
| 8.9 | | 17.9 | 34.9 | 9.0 |
| 9.3 | | 28.3 | 18.7 | |
| 9.6 | | 39.0 | 0.2 | |
| 8.6 | | 44.3 | 0.6 | |
| 9.7 | 2 | 10.8 | 55.3 | |
| 9.7 | | 12.8 | 38.2 | |
| 9.6 | | 18.8 | 39.3 | |
| 9.4 | | 20.3 | 13.9 | |
| 9.4 | | 35.8 | 41.0 | |
| 9.3 | | 46.8 | 46.9 | |
| 9.6 | 3 | 18.8 | 5.2 | |
| 9.7 | | 19.8 | 16.7 | |
| 9.7 | 4 | 3.3 | 22.3 | |
| 9.7 | | 12.8 | 24.7 | |
| 9.4 | | 29.8 | 31.1 | |
| 9.7 | 5 | 18.3 | 4.3 | |
| 9.7 | | 28.3 | 23.5 | |
| 9.6 | | 37.0 | 0.4 | |
| 9.7 | 6 | 8.3 | 27.8 | |
| 8.4 | | 8.8 | 53.1 | 9.0 G |
| 9.3 | | 11.8 | 6.6 | |
| 9.2 | | 56.3 | 18.3 | |
| 9.7 | 7 | 12.3 | 4.6 | |
| 9.6 | | 35.3 | 39.6 | |
| 9.7 | 8 | 8.8 | 20.0 | |
| 9.0 | | 32.8 | 4.7 | |
| 9.6 | | 44.8 | 6.4 | |
| 9.7 | | 45.8 | 29.0 | |
| 9.0 | 9 | 10.8 | 31.9 | |
| 9.0 | | 14.8 | 43.3 | |
| 8.7 | | 26.8 | 7.9 | |
| 9.7 | | 56.3 | 34.4 | |
| 9.6 | | 58.3 | 8.7 | |
| 9.2 | 10 | 39.8 | 12.9 | |
| 9.2 | | 48.3 | 3.3 | |
| 9.7 | | 57.8 | 36.5 | |
| 9.7 | 11 | 0.0 | 20.6 | |
| 9.0 | | 15.8 | 59.1 | |
| 8.9 | | 28.3 | 9.5 | |
| 9.0 | 12 | 26.3 | 53.6 | 8.0 G |
| 9.7 | | 54.8 | 28.1 | |
| 9.3 | 13 | 12.3 | 35.1 | |
| 9.7 | | 25.3 | 58.1 | |
| 9.7 | | 27.8 | 1.1 | |
| 9.4 | | 31.8 | 17.5 | |
| 9.7 | | 40.3 | 35.9 | |
| 9.7 | 14 | 3.3 | 51.6 | |
| 9.4 | | 38.3 | 32.0 | |
| 9.2 | 15 | 0.8 | 51.0 | |
| 8.6 | | 8.3 | 20.3 | 8.5 G |

### 9481—9540.

| mag. | 20h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9.6 | 15 | 8.8 | 40.0 | |
| 9.7 | | 20.8 | 38.1 | |
| 9.3 | | 25.8 | 49.7 | |
| 9.0 | | 33.3 | 28.0 | |
| 9.6 | | 54.3 | 23.7 | |
| 9.7 | 16 | 39.8 | 37.1 | |
| 9.3 | | 42.8 | 52.0 | |
| 9.7 | | 54.8 | 14.9 | |
| 9.2 | 17 | 5.8 | 52.3 | |
| 9.7 | | 30.8 | 21.3 | |
| 8.9 | | 53.3 | 45.7 | |
| 9.0 | | 59.3 | 55.1 | |
| 9.7 | | 59.8 | 50.1 | |
| 9.7 | 18 | 31.8 | 49.9 | |
| 9.7 | | 33.3 | 53.3 | |
| 9.4 | | 38.3 | 7.3 | |
| 9.2 | | 44.8 | 28.3 | |
| 9.0 | | 47.8 | 32.1 | 10.0 |
| 9.0 | 19 | 33.3 | 54.3 | 9.5 |
| 9.4 | | 42.8 | 12.2 | |
| 9.6 | | 45.8 | 48.8 | |
| 9.2 | | 55.3 | 15.5 | |
| 9.7 | 20 | 8.3 | 52.6 | |
| 9.7 | | 10.3 | 3.2 | |
| 9.2 | | 12.8 | 29.6 | |
| 9.7 | | 19.3 | 1.9 | |
| 9.4 | | 20.8 | 32.2 | |
| 9.6 | | 40.8 | 0.9 | |
| 9.7 | 21 | 27.3 | 26.6 | |
| 9.6 | | 42.3 | 30.9 | |
| 9.6 | 22 | 9.8 | 51.9 | |
| 9.2 | | 29.8 | 3.4 | |
| 9.6 | 23 | 25.8 | 21.7 | |
| 9.2 | | 58.3 | 53.4 | |
| 9.7 | | 59.8 | 24.6 | |
| 9.7 | 24 | 37.3 | 10.2 | |
| 9.7 | | 45.8 | 11.0 | |
| 9.4 | | 45.8 | 28.9 | |
| 8.9 | 25 | 28.8 | 14.7 | |
| 9.2 | | 30.8 | 45.9 | |
| 9.3 | | 58.3 | 58.6 | |
| 8.9 | 26 | 8.3 | 10.9 | |
| 9.4 | | 57.3 | 29.9 | |
| 9.7 | 27 | 13.8 | 54.4 | |
| 9.7 | | 15.3 | 47.4 | |
| 9.2 | | 30.3 | 33.7 | |
| 9.0 | 28 | 11.7 | 21.5 | |
| 9.2 | | 51.2 | 52.9 | |
| 9.4 | | 51.7 | 24.6 | |
| 9.2 | 30 | 19.2 | 32.7 | |
| 9.6 | | 32.2 | 38.0 | |
| 9.7 | | 37.2 | 20.5 | |
| 9.4 | 31 | 1.7 | 10.2 | |
| 8.4 | | 11.7 | 25.1 | 9.0 |
| 8.2 | | 29.7 | 2.6 | 8.0 GS |
| 9.6 | | 48.7 | 51.4 | |
| 9.2 | 32 | 3.2 | 27.2 | |
| 9.7 | | 25.3 | 18.6 | |
| 8.8 | | 55.8 | 7.0 | 8.5 G |
| 10.0 | | 57.4 | 30.2 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 40 | 123 | 3.5 |
| | 50 | 122 | 3.9 |
| 20 | 0 | 121 | 4.2 |
| | 10 | 119 | 4.5 |
| | 20 | 118 | 4.8 |
| | 30 | 117 | 5.1 |
| | 40 | 115 | 5.4 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 20 | 30 | 117 | 5·1 |
| | 40 | 115 | 5·4 |
| | 50 | 114 | 5·6 |
| 21 | 0 | 113 | 5·9 |
| | 10 | 111 | 6·2 |
| | 20 | 109 | 6·4 |
| | 30 | 108 | 6·6 |
| | 40 | 106 | 6·8 |
| | 50 | 104 | 7·0 |
| 22 | 0 | 102 | 7·2 |

### 9541—9600.

| mag. | 20h.–21h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 33 | 10·4 | 23·9 | 9·5 |
| 10·0 | | 45·4 | 10·5 | |
| 10·0 | 34 | 42·4 | 19·3 | |
| 10·0 | | 43·9 | 5·8 | |
| 9·8 | | 51·9 | 0·6 | |
| 10·0 | 35 | 23·4 | 25·5 | |
| 9·0 | | 43·4 | 32·6 | 9·5 |
| 9·8 | 36 | 3·6 | 1·4 | |
| 10·0 | 37 | 32·3 | 21·3 | |
| 10·0 | | 53·8 | 3·5 | |
| 10·0 | 39 | 25·8 | 10·9 | |
| 10·0 | 40 | 48·8 | 18·9 | |
| 9·0 | 41 | 8·3 | 41·8 | 9·2 |
| 10·0 | | 17·3 | 27·4 | |
| 8·4 | 42 | 0·8 | 51·1 | 8·7 |
| 10·0 | | 23·3 | 33·3 | |
| 8·7 | 43 | 32·3 | 41·1 | 8·0 GS |
| 10·0 | 44 | 16·8 | 49·9 | |
| 8·4 | | 25·3 | 3·3 | 8·5 G |
| 9·6 | 45 | 10·8 | 33·3 | 9·0 |
| 10·0 | | 34·7 | 19·9 | |
| 9·3 | 46 | 24·7 | 23·3 | |
| 9·2 | | 25·2 | 23·8 | 9·0 |
| 10·0 | | 29·7 | 39·0 | |
| 9·8 | | 32·7 | 54·3 | |
| 10·0 | | 55·7 | 31·0 | |
| 9·6 | 47 | 18·7 | 17·7 | |
| 10·0 | 48 | 13·2 | 11·2 | |
| 10·0 | | 14·7 | 2·8 | |
| 10·0 | | 22·2 | 9·0 | |
| 8·8 | | 35·2 | 25·7 | 8·5 |
| 8·9 | | 43·2 | 19·8 | 9·5 G |
| 9·6 | | 46·7 | 9·0 | |
| 8·9 | | 52·7 | 24·7 | 9·5 |
| 9·2 | 49 | 8·7 | 16·6 | 9·5 G |
| 9·3 | | 34·7 | 50·9 | |
| 10·0 | | 57·2 | 6·1 | |
| 9·8 | 50 | 44·2 | 19·0 | |
| 9·2 | 51 | 39·7 | 55·5 | |
| 9·4 | | 41·2 | 23·7 | |
| 10·0 | 52 | 5·7 | 2·3 | |
| 10·0 | 53 | 35·2 | 3·2 | |
| 8·8 | | 36·7 | 24·9 | 9·0 G |
| 9·0 | 54 | 11·7 | 37·5 | |
| 10·0 | 55 | 1·2 | 25·0 | |
| 9·2 | | 12·2 | 50·1 | |
| 9·0 | | 43·7 | 36·8 | 8·5 |
| 10·0 | | 45·7 | 14·0 | |
| 9·2 | | 52·4 | 56·7 | |
| 10·0 | 57 | 57·7 | 3·2 | |
| 9·0 | 58 | 21·7 | 14·2 | |
| 10·0 | 59 | 25·1 | 26·9 | |
| 9·3 | 0 | 11·6 | 17·7 | |
| 10·0 | | 26·1 | 32·9 | |
| 9·8 | 1 | 19·6 | 6·2 | |
| 9·6 | 2 | 13·1 | 1·7 | |
| 10·2 | | 57·8 | 56·9 | |
| 9·8 | 3 | 0·2 | 15·7 | |
| 10·2 | | 1·4 | 57·9 | |
| 10·2 | | 43·9 | 16·6 | |

### 9601—9660.

| mag. | 21h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 3 | 50·7 | 30·0 | |
| 10·2 | 4 | 9·2 | 46·6 | |
| 10·2 | | 37·0 | 23·1 | |
| 8·0 | 5 | 0·7 | 45·9 | 8·0 GS |
| 9·8 | | 17·2 | 30·7 | |
| 8·5 | | 21·2 | 22·3 | |
| 10·2 | | 28·2 | 28·9 | |
| 10·0 | | 34·2 | 41·5 | |
| 9·8 | | 37·7 | 50·3 | |
| 10·0 | | 52·7 | 35·0 | |
| 10·0 | | 57·7 | 44·1 | |
| 9·4 | 6 | 25·7 | 55·2 | |
| 10·2 | 7 | 10·7 | 31·0 | |
| 9·4 | | 30·0 | 2·5 | |
| 8·5 | | 46·2 | 49·5 | 9·0 |
| 10·0 | | 53·7 | 2·2 | |
| 10·0 | 8 | 11·2 | 38·9 | |
| 10·2 | 9 | 18·5 | 36·9 | |
| 9·4 | | 41·2 | 35·0 | |
| 9·3 | 10 | 31·2 | 30·1 | |
| 9·8 | | 58·2 | 30·2 | |
| 10·0 | 11 | 5·5 | 58·3 | |
| 9·2 | | 9·2 | 18·9 | 8·0 |
| 9·6 | | 21·2 | 47·4 | |
| 9·2 | | 27·7 | 23·0 | |
| 10·2 | 12 | 0·2 | 44·4 | |
| 10·2 | | 14·2 | 39·0 | |
| 9·6 | | 45·2 | 3·9 | |
| 10·0 | 13 | 1·7 | 51·9 | |
| 7·0 | | 30·2 | 18·7 | 8·0 GSg |
| 9·0 | | 32·2 | 41·9 | 9·5 |
| 10·2 | | 35·2 | 59·0 | |
| 10·2 | | 38·2 | 38·2 | |
| 9·4 | | 38·7 | 0·0 | |
| 9·3 | 14 | 30·7 | 3·0 | |
| 7·4 | | 35·2 | 4·2 | 7·5 GS |
| 9·6 | | 43·2 | 29·3 | |
| 9·0 | | 51·2 | 55·7 | |
| 9·2 | | 59·2 | 41·0 | |
| 8·6 | 15 | 17·2 | 31·0 | |
| 10·2 | | 49·5 | 4·1 | |
| 8·6 | | 59·5 | 24·4 | |
| 10·0 | 16 | 41·0 | 35·1 | |
| 8·5 | | 54·0 | 25·4 | 8·0 GS |
| 8·6 | 17 | 46·5 | 40·1 | 8·5 G |
| 10·0 | 18 | 16·5 | 7·3 | |
| 10·2 | | 38·0 | 37·1 | |
| 9·0 | | 41·5 | 31·7 | |
| 10·2 | | 49·0 | 19·1 | |
| 9·6 | | 56·0 | 54·0 | |
| 10·2 | 19 | 57·0 | 26·1 | |
| 10·2 | 20 | 6·7 | 59·7 | |
| 10·0 | | 24·0 | 38·8 | |
| 8·4 | | 27·0 | 18·0 | 9·0 G |
| 9·8 | | 37·0 | 32·5 | ? |
| 7·7 | 21 | 1·5 | 49·3 | 8·5 GS |
| 10·2 | | 51·5 | 54·3 | |
| 10·2 | 22 | 11·0 | 50·0 | |
| 10·2 | | 15·0 | 19·1 | |
| 9·8 | | 19·0 | 46·3 | |

### 9661—9720.

| mag. | 21h. m | s | −56° ′ | |
|---|---|---|---|---|
| 10·2 | 22 | 41·5 | 11·2 | |
| 10·2 | 23 | 9·5 | 37·3 | |
| 10·2 | | 13·0 | 48·3 | |
| 10·2 | | 13·5 | 52·0 | |
| 9·8 | | 21·1 | 59·4 | |
| 10·2 | | 29·0 | 33·7 | |
| 9·4 | 24 | 19·5 | 55·0 | |
| 9·2 | | 51·5 | 22·6 | |
| 9·4 | | 59·5 | 46·0 | |
| 9·6 | 25 | 3·0 | 32·3 | |
| 9·2 | | 22·5 | 28·1 | |
| 9·8 | | 23·0 | 44·8 | |
| 9·6 | | 28·0 | 38·0 | |
| 9·8 | | 47·5 | 31·9 | |
| 10·2 | | 48·5 | 3·6 | |
| 9·8 | 26 | 9·0 | 23·3 | |
| 10·2 | | 12·0 | 1·3 | |
| 10·2 | | 27·0 | 33·9 | |
| 9·8 | | 29·5 | 29·3 | |
| 10·2 | | 30·5 | 15·0 | |
| 9·6 | | 32·5 | 18·8 | |
| 10·2 | | 50·5 | 14·7 | |
| 10·2 | 27 | 5·0 | 22·5 | |
| 9·6 | | 9·5 | 51·2 | |
| 10·2 | | 22·0 | 46·0 | |
| 8·5 | | 31·0 | 56·1 | |
| 10·0 | | 49·5 | 33·4 | |
| 10·2 | 28 | 20·5 | 56·4 | |
| 10·2 | | 38·0 | 11·3 | |
| 10·2 | | 42·5 | 33·4 | |
| 10·2 | | 59·5 | 8·3 | |
| 9·8 | 29 | 3·0 | 48·2 | |
| 10·2 | | 15·5 | 54·1 | |
| 10·2 | | 42·0 | 52·2 | |
| 9·6 | 30 | 4·5 | 56·6 | |
| 9·0 | | 41·5 | 53·8 | |
| 10·2 | | 56·5 | 9·1 | |
| 10·2 | 31 | 1·0 | 53·9 | |
| 9·0 | | 20·5 | 53·6 | |
| 7·2 | | 43·5 | 18·1 | 65 GSct |
| 8·8 | 32 | 1·5 | 8·9 | |
| 9·3 | | 14·5 | 22·1 | |
| 10·2 | | 22·5 | 51·6 | |
| 10·2 | | 36·5 | 21·1 | |
| 9·4 | | 42·0 | 37·7 | |
| 10·0 | 33 | 20·5 | 48·7 | |
| 10·2 | | 27·5 | 40·2 | |
| 10·0 | | 33·0 | 16·8 | |
| 10·2 | | 35·0 | 27·9 | |
| 10·2 | | 48·5 | 1·6 | |
| 10·2 | 34 | 50·8 | 19·4 | |
| 10·2 | 35 | 4·0 | 41·1 | |
| 9·4 | | 6·8 | 29·6 | |
| 10·2 | | 17·3 | 52·9 | |
| 9·3 | | 32·0 | 6·2 | |
| 7·5 | | 32·5 | 2·6 | 7·0 GSct |
| 9·0 | | 33·5 | 25·2 | |
| 10·2 | | 34·1 | 23·6 | |
| 9·8 | | 42·5 | 2·7 | 9·0 G |
| 9·2 | | 44·5 | 41·8 | |

### 9721—9780.

| mag. | 21h. m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 36 | 1·0 | 53·6 | |
| 10·2 | | 22·2 | 0·0 | |
| 10·2 | | 31·1 | 51·4 | |
| 10·2 | | 36·0 | 30·5 | |
| 9·8 | | 38·0 | 58·8 | |
| 9·8 | 37 | 25·1 | 41·0 | |
| 9·6 | | 32·6 | 24·5 | |
| 9·8 | | 44·1 | 2·4 | |
| 9·8 | | 53·1 | 49·8 | |
| 9·2 | | 58·6 | 21·3 | |
| 9·6 | | 59·6 | 46·7 | |
| 9·8 | 38 | 3·2 | 3·5 | |
| 9·6 | | 9·2 | 51·9 | |
| 9·2 | | 20·2 | 16·9 | |
| 9·4 | | 38·7 | 32·7 | |
| 8·3 | 39 | 0·7 | 13·5 | 8·5 G |
| 9·8 | | 1·7 | 59·6 | |
| 9·8 | | 7·7 | 37·7 | |
| 9·6 | | 9·2 | 16·3 | |
| 9·4 | | 21·0 | 58·1 | |
| 9·0 | | 28·2 | 56·3 | |
| 9·2 | | 39·7 | 32·7 | |
| 6·8 | 40 | 9·2 | 51·1 | 6·5 GSt |
| 9·8 | | 15·2 | 24·9 | |
| 9·2 | | 15·2 | 3·1 | |
| 9·4 | | 46·7 | 14·6 | |
| 9·6 | | 49·2 | 32·3 | |
| 9·2 | 41 | 0·2 | 32·1 | |
| 9·6 | | 20·2 | 36·1 | |
| 9·4 | | 27·2 | 39·9 | |
| 9·4 | | 49·2 | 26·5 | |
| 9·8 | | 51·2 | 57·3 | |
| 9·8 | 42 | 4·2 | 27·1 | |
| 9·6 | | 24·2 | 40·5 | |
| 9·6 | | 26·2 | 49·9 | |
| 9·8 | | 59·7 | 17·5 | |
| 9·0 | 43 | 18·7 | 17·5 | |
| 7·8 | | 19·2 | 21·7 | 7·5 GS |
| 8·9 | | 23·5 | 59·1 | |
| 9·2 | | 32·7 | 34·9 | |
| 9·8 | | 49·2 | 35·3 | |
| 9·2 | | 49·2 | 33·9 | |
| 9·2 | 44 | 22·7 | 7·1 | |
| 9·8 | | 45·2 | 14·4 | |
| 9·5 | 45 | 5·2 | 10·5 | |
| 9·6 | | 35·2 | 55·0 | |
| 9·8 | 46 | 12·7 | 55·7 | |
| 9·8 | 47 | 23·2 | 42·9 | |
| 9·8 | | 23·2 | 8·3 | |
| 9·8 | | 37·2 | 15·8 | |
| 8·1 | | 49·7 | 16·8 | 8·0 GS |
| 9·6 | 48 | 14·2 | 1·3 | |
| 9·3 | | 15·7 | 11·6 | |
| 9·4 | | 35·7 | 24·6 | |
| 9·8 | 49 | 5·2 | 13·8 | |
| 9·8 | | 34·3 | 59·4 | |
| 9·8 | | 48·2 | 30·8 | |
| 9·0 | 50 | 14·7 | 43·4 | 8·5 |
| 9·6 | | 33·2 | 9·2 | |
| 9·2 | 51 | 7·7 | 19·0 | |

**9781—9840.**

| mag. | $21^h$—$22^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 51 | 19·7 | 42·7 | |
| 9·8 | | 21·2 | 55·0 | |
| 9·6 | | 48·2 | 12·4 | |
| 6·9 | | 51·2 | 28·8 | 6·0 GSct |
| 9·6 | | 54·7 | 42·2 | |
| 8·7 | 52 | 33·7 | 21·1 | |
| 9·8 | | 36·2 | 50·1 | |
| 9·4 | | 51·7 | 39·0 | |
| 9·2 | 53 | 5·7 | 38·8 | |
| 9·6 | | 19·2 | 19·2 | |
| 9·8 | | 42·2 | 45·2 | |
| 9·8 | | 49·2 | 38·2 | |
| 8·9 | 54 | 16·7 | 36·8 | |
| 9·5 | | 19·2 | 11·5 | |
| 9·2 | | 25·7 | 28·7 | |
| 9·6 | 55 | 0·7 | 31·4 | |
| 9·8 | | 4·2 | 43·8 | |
| 7·2 | | 8·2 | 34·4 | 7·0 GSt |
| 9·4 | | 8·7 | 45·5 | |
| 9·8 | | 38·2 | 26·1 | |
| 8·8 | | 56·7 | 29·6 | |
| 9·6 | | 57·2 | 50·0 | |
| 7·7 | 56 | 5·2 | 54·2 | 8·0 GSr |
| 9·8 | | 27·7 | 46·4 | |
| 9·8 | | 38·7 | 54·1 | |
| 9·8 | | 47·6 | 34·0 | |
| 9·8 | 57 | 16·2 | 36·2 | |
| 9·0 | | 42·7 | 35·9 | |
| 9·8 | 58 | 21·3 | 59·2 | |
| 9·4 | | 30·6 | 34·1 | |
| 9·8 | | 36·1 | 18·2 | |
| 9·4 | | 44·6 | 42·3 | |
| 9·6 | 59 | 17·6 | 42·1 | |
| 9·6 | | 19·6 | 40·8 | |
| 9·8 | | 45·6 | 17·3 | |
| 9·4 | 0 | 5·6 | 46·4 | |
| 9·0 | | 12·6 | 42·9 | |
| 9·8 | | 52·6 | 26·9 | |
| 9·8 | 1 | 1·6 | 10·8 | |
| 9·2 | | 17·6 | 50·2 | |
| 9·2 | | 19·6 | 48·4 | |
| 9·8 | | 25·1 | 45·8 | |
| 9·4 | | 54·6 | 25·9 | |
| 9·8 | | 54·6 | 27·5 | |
| 7·5 | 2 | 25·6 | 3·9 | 8·0 GStr |
| 9·0 | | 49·1 | 29·8 | |
| 9·8 | 3 | 14·1 | 6·1 | |
| 9·8 | | 19·5 | 0·6 | |
| 9·8 | | 38·6 | 26·9 | |
| 9·8 | | 39·6 | 23·9 | |
| 9·8 | | 41·1 | 32·6 | |
| 8·7 | 4 | 4·6 | 8·3 | 9·0 |
| 9·8 | | 5·1 | 49·4 | |
| 8·9 | | 27·1 | 50·0 | |
| 7·9 | | 35·1 | 33·7 | GSct |
| 9·8 | | 41·1 | 7·0 | |
| 9·8 | | 50·6 | 23·0 | |
| 8·7 | 5 | 18·1 | 5·4 | |
| 9·8 | | 21·1 | 56·8 | |
| 9·6 | | 34·1 | 35·9 | |

**9841—9900.**

| mag. | $22^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·6 | 5 | 34·6 | 10·2 | |
| 9·8 | | 40·8 | 58·4 | |
| 9·8 | | 45·1 | 31·7 | |
| 9·4 | | 46·6 | 3·8 | |
| 9·2 | | 49·1 | 19·7 | |
| 9·8 | 6 | 2·1 | 0·0 | |
| 9·2 | | 7·1 | 37·5 | |
| 9·6 | | 29·4 | 23·8 | |
| 8·5 | | 47·9 | 7·9 | 8·5 |
| 9·5 | 7 | 35·9 | 48·7 | |
| 9·8 | | 36·9 | 47·2 | |
| 9·6 | | 39·4 | 11·3 | |
| 8·8 | | 45·4 | 41·7 | |
| 9·8 | 8 | 19·4 | 19·9 | |
| 9·8 | | 19·4 | 20·1 | |
| 9·8 | | 26·9 | 5·9 | |
| 9·3 | | 27·6 | 31·5 | |
| 9·8 | | 36·9 | 40·1 | |
| 9·8 | | 40·4 | 11·9 | |
| 9·0 | | 41·0 | 1·4 | 8·5 |
| 10·4 | 9 | 3·3 | 2·5 | |
| 8·9 | | 51·8 | 24·0 | 8·5 |
| 10·2 | 10 | 11·8 | 5·5 | |
| 9·4 | | 35·8 | 30·9 | |
| 9·2 | 11 | 16·8 | 48·2 | |
| 8·4 | | 35·3 | 12·7 | 8·0 GS |
| 9·4 | 12 | 6·8 | 42·6 | |
| 9·2 | | 12·3 | 51·0 | |
| 9·6 | | 50·3 | 17·1 | |
| 9·4 | | 54·8 | 55·1 | |
| 9·2 | | 57·3 | 43·0 | 9·0 G |
| 7·6 | 13 | 10·3 | 23·6 | 8·0 GS |
| 9·4 | | 47·6 | 14·5 | 9·5 |
| 8·6 | | 52·6 | 25·3 | 9·0 |
| 7·2 | 14 | 23·6 | 46·9 | GSt |
| 9·6 | | 37·6 | 39·6 | |
| 9·2 | | 56·6 | 31·1 | |
| 9·8 | 15 | 20·1 | 26·6 | |
| 9·4 | | 28·6 | 54·6 | |
| 10·4 | | 50·3 | 14·8 | |
| 10·4 | | 56·1 | 5·0 | |
| 10·2 | 16 | 30·6 | 44·1 | |
| 9·2 | | 37·1 | 38·1 | |
| 10·2 | | 57·1 | 23·3 | |
| 9·8 | 17 | 13·1 | 20·7 | |
| 10·2 | | 20·1 | 19·5 | |
| 9·4 | | 22·1 | 27·4 | |
| 10·2 | | 22·1 | 24·0 | |
| 9·8 | | 48·6 | 34·4 | |
| 10·3 | 18 | 56·8 | 2·9 | |
| 10·3 | 19 | 6·1 | 33·7 | |
| 9·8 | | 23·6 | 4·9 | |
| 10·4 | 20 | 23·6 | 27·5 | |
| 10·4 | | 53·3 | 23·7 | |
| 9·6 | | 56·1 | 16·6 | |
| 10·4 | 21 | 34·1 | 37·6 | |
| 9·4 | | 41·1 | 29·5 | |
| 10·4 | | 53·6 | 4·4 | |
| 10·4 | 22 | 38·6 | 37·2 | |
| 10·2 | 23 | 46·1 | 31·7 | |

**9901—9960.**

| mag. | $22^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·0 | 23 | 47·6 | 13·1 | 9·5 |
| 8·9 | 24 | 17·1 | 34·6 | |
| 8·6 | | 22·1 | 15·3 | 9·0 |
| 10·2 | | 25·1 | 33·7 | |
| 9·2 | | 31·1 | 36·4 | 9·5 |
| 8·8 | | 41·1 | 37·8 | 8·5 |
| 10·4 | | 58·6 | 16·2 | |
| 8·2 | 25 | 22·1 | 47·2 | 8·5 G |
| 9·4 | | 51·1 | 15·4 | |
| 10·0 | 26 | 2·1 | 4·9 | |
| 10·2 | | 8·1 | 22·8 | |
| 9·4 | | 32·6 | 6·5 | |
| 9·4 | 27 | 27·7 | 25·2 | |
| 9·8 | | 53·2 | 15·9 | |
| 10·2 | 28 | 5·7 | 11·0 | |
| 9·2 | | 21·2 | 8·9 | |
| 9·4 | | 46·2 | 5·5 | |
| 10·0 | 29 | 10·7 | 46·3 | |
| 8·2 | 30 | 8·2 | 7·1 | 8·5 GS |
| 10·4 | | 51·7 | 7·9 | |
| 10·4 | 31 | 27·2 | 38·9 | |
| 10·4 | | 37·2 | 17·9 | |
| 10·4 | | 42·8 | 42·9 | |
| 10·4 | | 48·2 | 43·8 | |
| 9·4 | 32 | 21·7 | 20·0 | |
| 8·9 | | 34·2 | 12·1 | |
| 10·2 | | 41·7 | 50·4 | |
| 10·4 | | 50·7 | 27·0 | |
| 9·6 | 33 | 16·2 | 5·2 | |
| 10·3 | 34 | 15·2 | 40·7 | |
| 9·6 | | 30·7 | 35·9 | |
| 10·2 | | 51·0 | 0·0 | |
| 10·4 | | 51·2 | 27·9 | |
| 9·6 | | 57·2 | 48·9 | |
| 9·6 | 35 | 6·2 | 9·3 | |
| 9·6 | | 19·2 | 36·5 | |
| 9·2 | | 42·2 | 18·7 | |
| 10·2 | | 44·7 | 35·6 | |
| 10·4 | | 59·8 | 4·4 | |
| 9·2 | 36 | 0·2 | 21·5 | |
| 10·4 | | 25·3 | 18·6 | |
| 8·2 | | 38·3 | 56·8 | 9·0 |
| 10·4 | | 41·3 | 57·1 | |
| 9·0 | | 47·8 | 49·0 | 8·5 |
| 10·4 | 37 | 5·8 | 39·2 | |
| 8·9 | | 11·3 | 31·8 | |
| 10·0 | | 38·3 | 7·7 | |
| 9·2 | | 52·3 | 31·7 | |
| 9·8 | | 56·8 | 24·0 | |
| 9·2 | 38 | 8·3 | 54·1 | |
| 9·8 | | 35·3 | 5·8 | |
| 9·8 | | 58·9 | 19·2 | |
| 9·6 | 39 | 4·8 | 21·1 | |
| 10·2 | | 9·3 | 52·9 | |
| 10·3 | | 17·6 | 25·7 | |
| 9·4 | | 33·1 | 42·2 | |
| 9·0 | 40 | 22·3 | 26·9 | |
| 10·4 | | 27·8 | 29·6 | |
| 10·4 | | 42·8 | 33·3 | |
| 10·4 | | 49·7 | 59·0 | |

**9961—10020.**

| mag. | $22^h$—$23^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 10·4 | 41 | 18·3 | 15·7 | |
| 10·4 | | 39·5 | 1·7 | |
| 9·4 | 42 | 0·5 | 15·9 | |
| 9·8 | | 21·5 | 21·4 | |
| 8·4 | | 30·5 | 34·5 | 7·5 G |
| 10·4 | | 31·0 | 42·4 | |
| 8·2 | | 42·5 | 28·7 | 8·5 G |
| 9·6 | 43 | 20·0 | 7·5 | |
| 9·2 | 44 | 20·5 | 41·6 | |
| 9·2 | | 21·5 | 7·5 | |
| 9·5 | | 43·0 | 43·9 | |
| 10·4 | 45 | 44·0 | 12·5 | |
| 9·6 | 46 | 9·0 | 14·7 | |
| 8·4 | 47 | 28·5 | 20·6 | 9·0 |
| 9·6 | | 32·5 | 31·0 | |
| 10·4 | | 41·0 | 16·2 | |
| 10·4 | | 50·0 | 36·7 | |
| 10·4 | 48 | 38·0 | 38·8 | |
| 10·4 | 49 | 16·5 | 52·4 | |
| 9·8 | | 20·5 | 23·0 | |
| 9·8 | | 42·5 | 49·8 | |
| 9·5 | 51 | 5·5 | 28·7 | 9·5 |
| 9·5 | 52 | 31·5 | 52·7 | |
| 9·5 | | 51·5 | 47·8 | |
| 9·5 | 53 | 33·0 | 10·6 | |
| 9·8 | | 35·0 | 51·2 | |
| 10·2 | 54 | 4·5 | 24·5 | |
| 9·8 | | 12·5 | 46·8 | |
| 10·2 | | 56·0 | 20·9 | |
| 9·4 | 56 | 7·0 | 58·0 | |
| 9·4 | | 8·0 | 58·2 | |
| 7·4 | | 30·5 | 22·1 | GSct |
| 9·8 | | 32·0 | 16·0 | |
| 9·4 | 57 | 3·0 | 39·7 | |
| 10·4 | | 51·5 | 38·2 | |
| 9·4 | 58 | 20·5 | 30·3 | |
| 10·2 | | 38·0 | 52·1 | |
| 10·4 | | 40·0 | 4·0 | |
| 8·4 | | 56·0 | 38·3 | 8·0 |
| 8·4 | 59 | 38·5 | 37·7 | 8·0 G |
| 8·6 | | 40·0 | 13·4 | |
| 8·0 | 0 | 2·0 | 37·4 | 8·5 G |
| 10·4 | | 15·0 | 43·7 | |
| 8·5 | | 25·0 | 49·1 | 7·5 G |
| 10·2 | 1 | 22·0 | 37·7 | |
| 10·4 | | 57·0 | 43·8 | |
| 10·4 | 2 | 18·5 | 43·4 | |
| 9·8 | | 19·0 | 21·8 | |
| 10·4 | | 25·5 | 20·0 | |
| 10·0 | | 34·5 | 28·2 | |
| 10·4 | | 42·5 | 39·2 | |
| 9·4 | | 49·5 | 28·1 | |
| 10·4 | 3 | 10·5 | 38·6 | |
| 10·4 | | 16·0 | 43·4 | |
| 9·2 | | 49·5 | 37·6 | |
| 10·4 | 4 | 6·5 | 16·7 | |
| 10·4 | | 6·5 | 4·6 | |
| 10·4 | | 15·5 | 49·2 | |
| 9·4 | | 20·5 | 57·6 | |
| 10·0 | 5 | 0·0 | 12·2 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 50 | 104 | 7·0 |
| 22 | 0 | 102 | 7·2 |
| | 10 | 100 | 7·4 |
| | 20 | 98 | 7·6 |
| | 30 | 96 | 7·7 |
| | 40 | 94 | 7·9 |
| | 50 | 92 | 8·0 |
| 23 | 0 | 90 | 8·1 |
| | 10 | 88 | 8·2 |



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25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 23 | 0 | 90 | 8·1 |
| | 10 | 88 | 8·2 |
| | 20 | 86 | 8·2 |
| | 30 | 83 | 8·3 |
| | 40 | 81 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

## 10021—10072.

| mag. | $23^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 8·9 | 5 | 2·5 | 10·0 | |
| 10·4 | | 4·5 | 37·7 | |
| 9·8 | | 5·0 | 27·2 | 10·0 |
| 8·8 | | 8·5 | 25·7 | |
| 8·6 | | 43·5 | 14·9 | 9·5 |
| 9·6 | 6 | 14·5 | 16·6 | |
| 10·4 | | 16·0 | 56·3 | |
| 8·5 | | 18·5 | 45·7 | |
| 9·0 | | 33·0 | 19·5 | |
| 8·6 | | 38·8 | 1·6 | |
| 10·2 | | 46·0 | 41·1 | |
| 10·4 | | 48·5 | 55·8 | |
| 10·4 | 7 | 15·5 | 20·3 | |
| 10·4 | | 29·0 | 58·7 | |
| 10·4 | | 45·2 | 35·8 | |
| 10·0 | | 53·2 | 46·8 | |
| 8·6 | 8 | 9·2 | 41·7 | 9·0 |
| 9·8 | | 32·2 | 25·6 | |
| 10·2 | | 33·2 | 7·8 | |
| 6·8 | 9 | 10·2 | 12·6 | 7·0 GSct |
| 9·2 | | 49·7 | 14·3 | |
| 9·5 | | 50·2 | 4·4 | |
| 9·6 | 10 | 9·2 | 4·4 | |
| 9·8 | | 32·2 | 6·4 | |
| 10·4 | | 52·6 | 58·0 | |
| 10·4 | 11 | 29·1 | 50·9 | |
| 9·4 | | 46·7 | 6·3 | |
| 10·2 | 12 | 11·6 | 32·4 | |
| 9·1 | | 31·1 | 17·7 | |
| 10·2 | | 44·1 | 30·0 | |
| 10·2 | 13 | 52·5 | 50·9 | |
| 8·8 | | 52·5 | 59·3 | |
| 9·8 | 14 | 12·0 | 21·2 | |
| 9·8 | | 32·0 | 21·0 | |
| 10·0 | | 32·0 | 16·8 | |
| 9·4 | | 42·0 | 55·1 | |
| 9·4 | 15 | 32·0 | 44·5 | |
| 9·6 | | 39·5 | 40·4 | |
| 9·1 | 16 | 6·0 | 34·4 | |
| 10·2 | | 8·0 | 26·6 | |
| 7·3 | | 16·0 | 14·2 | 7·0 GSct |
| 9·0 | | 31·0 | 46·8 | G |
| 10·2 | 17 | 0·5 | 35·2 | |
| 10·2 | | 32·1 | 18·2 | |
| 10·2 | | 53·6 | 26·0 | |
| 10·2 | | 57·1 | 30·6 | |
| 9·8 | 18 | 1·6 | 58·7 | |
| 10·2 | | 2·6 | 50·6 | |
| 9·4 | | 9·1 | 0·8 | |
| 10·2 | | 26·1 | 40·3 | |
| 8·4 | | 26·6 | 8·3 | 8·5 G |
| 10·2 | | 55·6 | 20·0 | |

## 10073—10123.

| mag. | $23^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 8·5 | 19 | 5·6 | 37·3 | |
| 9·2 | | 29·6 | 29·9 | |
| 9·8 | | 57·1 | 26·0 | |
| 9·4 | 20 | 18·8 | 0·6 | |
| 10·2 | | 33·1 | 43·7 | |
| 9·2 | | 41·6 | 10·6 | |
| 8·8 | 21 | 43·6 | 32·2 | |
| 10·2 | 22 | 8·6 | 53·8 | |
| 9·6 | | 33·1 | 41·0 | |
| 9·6 | | 39·6 | 43·3 | |
| 9·6 | | 47·4 | 59·0 | |
| 10·2 | 23 | 28·7 | 57·2 | |
| 9·0 | | 32·1 | 54·2 | |
| 10·0 | | 37·1 | 16·0 | |
| 9·8 | | 39·6 | 8·0 | |
| 7·8 | 24 | 30·1 | 49·8 | 7·0 GSg |
| 8·2 | | 58·6 | 57·6 | 8·5 GS |
| 8·8 | 25 | 0·6 | 56·4 | 8·5 GS |
| 10·0 | | 3·6 | 51·6 | |
| 10·2 | | 42·1 | 45·4 | |
| 10·2 | 26 | 17·6 | 24·2 | |
| 9·4 | | 37·1 | 17·6 | |
| 10·2 | 27 | 25·6 | 16·9 | |
| 10·2 | | 28·1 | 29·0 | |
| 9·2 | | 31·1 | 35·9 | |
| 10·2 | | 32·6 | 40·5 | |
| 9·4 | 28 | 1·1 | 27·9 | |
| 8·2 | | 9·1 | 41·9 | 8·0 GS |
| 9·4 | | 9·9 | 0·4 | |
| 9·4 | | 16·1 | 1·3 | |
| 9·8 | | 24·1 | 23·7 | |
| 10·2 | | 50·1 | 44·6 | |
| 9·8 | 29 | 0·1 | 23·9 | |
| 9·8 | | 13·6 | 30·9 | |
| 10·2 | | 17·1 | 23·2 | |
| 10·2 | | 33·6 | 19·0 | |
| 9·6 | | 34·1 | 34·5 | |
| 9·8 | | 43·1 | 47·0 | |
| 9·4 | | 52·6 | 9·5 | |
| 8·6 | 30 | 21·6 | 47·2 | |
| 10·2 | | 22·1 | 24·2 | |
| 9·8 | | 32·1 | 8·0 | |
| 9·4 | | 33·6 | 46·4 | |
| 10·2 | | 46·1 | 30·2 | |
| 9·8 | | 55·1 | 46·9 | |
| 9·0 | 31 | 34·6 | 37·0 | |
| 9·2 | | 38·6 | 34·0 | |
| 9·4 | 32 | 33·1 | 58·0 | |
| 10·2 | | 40·1 | 40·0 | |
| 9·1 | 33 | 22·1 | 39·0 | |
| 10·2 | | 55·1 | 54·1 | |

## 10124—10174.

| mag. | $23^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·8 | 33 | 59·6 | 53·8 | |
| 9·8 | 34 | 12·1 | 5·1 | |
| 10·0 | | 30·1 | 46·8 | |
| 9·8 | | 32·6 | 22·7 | |
| 10·2 | | 53·6 | 30·2 | |
| 9·6 | 35 | 34·6 | 15·7 | |
| 9·8 | | 57·1 | 37·6 | |
| 9·6 | 36 | 6·6 | 46·9 | |
| 9·2 | | 12·6 | 5·9 | |
| 9·6 | | 32·1 | 47·8 | |
| 9·4 | | 37·6 | 26·8 | |
| 9·8 | 37 | 2·1 | 32·9 | |
| 10·2 | | 21·1 | 49·8 | |
| 10·2 | | 34·1 | 57·6 | |
| 10·2 | 38 | 1·1 | 5·3 | |
| 9·2 | | 3·6 | 5·4 | |
| 10·0 | | 40·1 | 32·5 | |
| 10·2 | | 44·6 | 47·1 | |
| 9·8 | 39 | 11·7 | 56·6 | |
| 9·6 | | 36·1 | 22·7 | |
| 8·0 | 40 | 8·6 | 30·1 | 7·0 GS |
| 7·2 | | 18·1 | 6·2 | 8·0 GS |
| 9·4 | | 23·6 | 23·8 | |
| 10·2 | | 32·8 | 1·2 | |
| 9·1 | | 41·1 | 14·7 | |
| 10·2 | | 47·6 | 2·9 | |
| 9·4 | 41 | 7·6 | 16·8 | |
| 10·2 | | 15·1 | 16·4 | |
| 10·0 | | 38·1 | 28·4 | |
| 10·0 | 42 | 18·6 | 55·4 | |
| 9·6 | | 18·6 | 20·1 | |
| 10·2 | | 23·6 | 22·3 | |
| 10·2 | | 25·4 | 2·3 | |
| 9·2 | | 35·8 | 58·7 | |
| 9·8 | | 37·1 | 45·7 | |
| 10·2 | | 55·3 | 59·1 | |
| 9·8 | 43 | 1·6 | 43·3 | |
| 9·2 | | 18·9 | 30·0 | |
| 9·1 | | 21·9 | 58·3 | 9·5 |
| 10·2 | | 24·2 | 8·0 | |
| 9·2 | | 25·4 | 5·3 | |
| 10·4 | | 32·2 | 9·0 | |
| 9·0 | | 37·7 | 34·1 | |
| 11·0 | 44 | 6·2 | 26·6 | |
| 10·6 | | 20·7 | 48·0 | |
| 11·0 | | 38·7 | 42·8 | |
| 10·2 | | 58·9 | 28·0 | |
| 10·6 | 45 | 23·8 | 30·7 | |
| 11·0 | | 31·2 | 27·8 | |
| 10·4 | | 38·2 | 58·5 | |
| 10·6 | 46 | 36·7 | 42·4 | |

## 10175—10225.

| mag. | $23^h$ m | s | −56° ′ | |
|---|---|---|---|---|
| 9·4 | 47 | 38·2 | 10·1 | |
| 11·0 | | 52·2 | 12·2 | |
| 11·0 | 48 | 1·2 | 29·8 | |
| 11·0 | | 52·7 | 22·2 | |
| 10·4 | | 57·7 | 12·5 | |
| 10·6 | 49 | 3·2 | 53·8 | |
| 11·0 | | 22·2 | 46·5 | |
| 9·8 | | 23·2 | 34·3 | |
| 10·0 | | 39·7 | 34·9 | |
| 8·3 | 50 | 2·8 | 23·5 | 8·5 GS |
| 7·6 | | 3·8 | 10·7 | 8·0 GS |
| 8·2 | | 5·3 | 52·4 | 9·5 |
| 10·2 | | 22·3 | 36·5 | |
| 10·6 | | 28·3 | 12·9 | |
| 11·0 | | 39·8 | 32·1 | |
| 11·0 | 51 | 0·8 | 21·9 | |
| 10·6 | | 9·8 | 21·8 | |
| 11·0 | 52 | 1·8 | 3·8 | |
| 11·0 | | 9·8 | 50·0 | |
| 11·0 | | 19·3 | 19·8 | |
| 11·0 | | 22·3 | 31·4 | |
| 11·0 | | 40·3 | 44·9 | |
| 9·8 | | 57·8 | 23·2 | |
| 11·0 | 54 | 30·3 | 24·1 | |
| 11·0 | | 48·3 | 39·0 | |
| 11·0 | 55 | 0·8 | 28·7 | |
| 11·0 | | 3·3 | 26·5 | |
| 10·4 | | 9·3 | 28·8 | |
| 11·0 | | 33·3 | 50·0 | |
| 11·0 | | 47·0 | 2·0 | |
| 11·0 | 56 | 11·3 | 18·2 | |
| 11·0 | | 15·5 | 0·1 | |
| 11·0 | | 18·8 | 22·5 | |
| 11·0 | | 35·6 | 41·2 | |
| 9·8 | | 46·3 | 24·1 | |
| 8·8 | | 51·3 | 6·1 | G |
| 11·0 | 57 | 15·8 | 50·6 | |
| 11·0 | | 33·3 | 47·9 | |
| 11·0 | 58 | 12·3 | 7·2 | |
| 9·6 | | 27·8 | 23·4 | |
| 10·2 | | 33·8 | 35·8 | |
| 11·0 | | 36·8 | 10·9 | |
| 11·0 | | 41·6 | 25·3 | |
| 9·6 | | 47·8 | 29·4 | |
| 10·0 | | 58·8 | 14·3 | |
| 10·6 | 59 | 11·4 | 29·1 | |
| 11·0 | | 11·4 | 13·7 | |
| 11·0 | | 25·9 | 0·1 | |
| 11·0 | | 37·9 | 41·9 | |
| 10·2 | | 41·9 | 16·9 | |
| 8·2 | | 53·4 | 11·7 | 9·0 |



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# ZONE — 57°.

## 1—45.

| mag. | 0h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 0 | 0·5 | 22·9 | |
| 10·4 | | 10·0 | 58·9 | |
| 11·0 | | 14·5 | 39·0 | |
| 11·0 | | 32·5 | 13·7 | |
| 9·2 | | 33·0 | 32·5 | 9·5 |
| 8·0 | 1 | 2·5 | 31·9 | 8·0 GSct |
| 8·8 | | 3·0 | 52·0 | |
| 10·4 | | 5·0 | 50·7 | |
| 10·6 | | 28·0 | 47·1 | |
| 8·8 | 2 | 7·1 | 53·6 | |
| 10·4 | | 17·6 | 3·3 | |
| 9·8† | | 39·5 | 45·3 | |
| 9·4 | | 47·6 | 30·3 | |
| 9·4 | | 48·6 | 49·9 | |
| 11·0 | | 58·1 | 23·9 | |
| 10·4 | 3 | 5·6 | 48·6 | |
| 10·6 | | 11·6 | 25·4 | |
| 10·0 | | 25·6 | 41·7 | |
| 10·4 | | 31·1 | 26·8 | |
| 11·0 | | 33·1 | 52·2 | |
| 10·4 | | 37·6 | 27·0 | |
| 9·6 | | 51·6 | 32·2 | |
| 11·0 | | 55·1 | 33·3 | |
| 9·4 | 4 | 11·1 | 16·8 | G |
| 11·0 | | 11·1 | 2·0 | |
| 10·6 | | 28·6 | 39·5 | |
| 11·0 | | 49·0 | 2·5 | |
| 10·6 | 5 | 6·6 | 56·3 | |
| 11·0 | | 21·1 | 17·8 | |
| 11·0 | | 25·6 | 59·4 | |
| 11·0 | | 36·1 | 6·9 | |
| 10·4 | | 42·1 | 47·9 | |
| 11·0 | 6 | 3·6 | 36·4 | |
| 11·0 | | 9·1 | 56·9 | |
| 9·0 | | 15·6 | 6·6 | |
| 11·0 | | 24·1 | 37·2 | |
| 10·0 | | 45·1 | 26·8 | |
| 10·6 | | 55·6 | 19·2 | |
| 9·6 | 7 | 9·1 | 32·0 | |
| 10·2 | | 13·1 | 21·2 | |
| 10·4 | | 32·6 | 51·0 | |
| 7·2 | | 39·1 | 41·7 | 7·0 GSct |
| 8·8 | | 48·1 | 33·4 | 9·5 |
| 10·2 | 8 | 8·1 | 27·0 | |
| 9·4 | | 19·1 | 11·9 | |

## 46—90.

| mag. | 0h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 8 | 37·6 | 18·3 | |
| 9·6 | | 41·1 | 48·9 | |
| 11·0 | | 42·1 | 33·3 | |
| 9·6 | | 43·6 | 22·7 | |
| 11·0 | | 55·6 | 43·2 | |
| 9·4 | | 58·1 | 54·3 | |
| 10·4 | 9 | 1·6 | 17·0 | |
| 11·0 | | 5·6 | 8·3 | |
| 9·6 | | 25·6 | 18·2 | |
| 11·0 | | 56·6 | 41·6 | |
| 11·0 | 10 | 10·6 | 59·9 | |
| 10·6 | | 10·6 | 38·0 | |
| 10·0 | | 27·1 | 7·4 | |
| 11·0 | | 47·6 | 10·1 | |
| 11·0 | 11 | 9·0 | 38·1 | |
| 11·0 | 12 | 48·6 | 38·4 | |
| 11·0 | | 49·6 | 29·5 | |
| 9·0 | | 59·6 | 9·3 | |
| 10·2 | 13 | 13·6 | 5·2 | |
| 10·4 | | 21·6 | 38·5 | |
| 11·0 | | 24·1 | 21·3 | |
| 9·0 | | 38·6 | 32·7 | |
| 10·6 | | 50·6 | 21·3 | |
| 11·0 | 14 | 11·6 | 5·0 | |
| 8·8 | | 16·1 | 51·5 | 9·0 |
| 11·0 | | 31·1 | 43·8 | |
| 11·0 | | 40·6 | 22·6 | |
| 11·0 | | 53·1 | 10·6 | |
| 10·0 | 15 | 19·1 | 37·9 | |
| 10·4 | | 47·1 | 39·5 | |
| 9·8 | 16 | 8·4 | 48·3 | |
| 10·2 | | 43·8 | 37·0 | |
| 8·8 | | 54·2 | 51·8 | |
| 10·2 | 17 | 25·9 | 20·2 | |
| 9·6 | | 39·7 | 24·8 | |
| 9·6 | | 45·4 | 59·9 | |
| 9·8 | | 59·7 | 8·9 | |
| 10·2 | 18 | 16·7 | 1·2 | |
| 8·4 | | 18·7 | 20·5 | |
| 9·6 | | 27·7 | 32·9 | |
| 9·4 | | 38·7 | 43·7 | 9·5 |
| 9·8 | | 59·7 | 39·7 | |
| 9·4 | 19 | 48·7 | 18·8 | |
| 9·6 | 20 | 9·7 | 46·6 | |
| 9·9 | | 13·2 | 35·1 | |

## 91—135.

| mag. | 0h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 20 | 40·7 | 10·8 | |
| 9·4 | | 52·2 | 7·8 | |
| 10·2 | 21 | 14·2 | 47·9 | |
| 8·8 | | 59·7 | 56·1 | |
| 10·2 | 22 | 1·7 | 17·8 | |
| 10·2 | | 40·7 | 52·1 | |
| 10·2 | | 52·2 | 56·7 | |
| 9·4 | | 52·7 | 27·9 | |
| 10·2 | 23 | 36·8 | 10·4 | |
| 9·7 | | 57·8 | 23·2 | |
| 10·2 | 24 | 10·3 | 18·2 | |
| 9·0 | | 17·8 | 2·8 | |
| 10·2 | | 28·3 | 18·4 | |
| 9·9 | | 34·8 | 14·2 | |
| 8·6 | | 55·3 | 17·2 | |
| 9·8 | | 58·8 | 33·0 | |
| 10·2 | 25 | 19·3 | 3·4 | |
| 9·6 | | 32·8 | 52·2 | |
| 10·2 | | 38·8 | 17·7 | |
| 8·8 | 26 | 1·3 | 39·2 | |
| 10·2 | 27 | 0·8 | 9·4 | |
| 10·0 | | 19·0 | 49·1 | |
| 10·2 | | 29·0 | 3·6 | |
| 9·6 | | 47·5 | 58·0 | |
| 7·9 | 28 | 11·0 | 46·4 | 8·0 GSg |
| 9·0 | | 49·0 | 55·4 | |
| 10·2 | 29 | 19·0 | 21·3 | |
| 9·2 | | 21·0 | 55·3 | |
| 9·0 | | 49·5 | 48·9 | |
| 10·2 | 30 | 21·5 | 18·1 | |
| 9·9 | | 26·0 | 36·7 | |
| 9·6 | | 41·0 | 26·8 | |
| 8·8 | | 45·5 | 47·0 | |
| 10·2 | | 49·5 | 40·7 | |
| 9·4 | 31 | 0·5 | 33·1 | |
| 10·0 | | 39·0 | 6·1 | |
| 10·2 | | 55·5 | 10·1 | |
| 9·7 | 32 | 3·0 | 30·2 | |
| 10·0 | | 30·0 | 21·0 | |
| 9·2 | | 49·0 | 32·2 | |
| 8·2 | | 57·0 | 37·2 | |
| 8·6 | 33 | 0·0 | 21·1 | |
| 8·2 | | 9·0 | 2·3 | G |
| 10·2 | | 29·0 | 44·0 | |
| 9·4 | | 47·5 | 32·1 | |

## 136—180.

| mag. | 0h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 34 | 22·0 | 59·5 | |
| 9·7 | | 30·5 | 22·3 | |
| 9·9 | | 34·0 | 39·0 | |
| 9·6 | | 34·5 | 0·6 | |
| 10·2 | 35 | 21·0 | 29·3 | |
| 10·2 | | 51·0 | 21·1 | |
| 9·4 | | 51·0 | 59·3 | |
| 6·1 | 36 | 4·0 | 11·3 | GSc |
| 9·6 | | 38·5 | 33·7 | |
| 9·4 | 37 | 1·0 | 37·9 | |
| 9·7 | | 12·5 | 14·2 | |
| 9·6 | | 14·5 | 35·0 | |
| 9·2 | | 29·0 | 46·3 | |
| 9·9 | | 32·5 | 59·7 | |
| 10·0 | 38 | 15·5 | 18·0 | |
| 10·2 | | 18·7 | 31·3 | |
| 9·4 | | 31·0 | 29·0 | |
| 9·7 | 39 | 9·7 | 38·9 | |
| 10·2 | | 9·7 | 21·7 | |
| 10·2 | | 19·7 | 7·7 | |
| 9·0 | 40 | 0·2 | 0·4 | |
| 8·8 | | 4·7 | 59·6 | 9·0 |
| 9·6 | | 8·2 | 29·2 | |
| 9·4 | | 29·2 | 39·0 | |
| 10·2 | | 55·7 | 5·1 | |
| 10·2 | 41 | 9·2 | 22·2 | |
| 10·0 | | 39·2 | 35·5 | |
| 9·9 | | 39·2 | 5·8 | |
| 9·2 | | 50·2 | 14·9 | |
| 9·4 | | 52·2 | 45·9 | |
| 9·0 | 42 | 5·7 | 35·6 | |
| 9·8 | | 34·2 | 52·5 | |
| 10·2 | | 41·2 | 20·9 | |
| 8·2 | 43 | 19·7 | 52·8 | |
| 10·0 | | 54·2 | 2·3 | |
| 9·7 | 44 | 27·7 | 27·9 | |
| 9·7 | | 31·7 | 9·1 | |
| 9·9 | | 53·2 | 35·3 | |
| 8·6 | 45 | 20·7 | 42·4 | 9·0 |
| 10·0 | | 31·2 | 31·1 | |
| 10·2 | | 41·2 | 42·3 | |
| 10·2 | | 50·2 | 52·1 | |
| 10·0 | 46 | 19·2 | 55·7 | |
| 7·4 | | 21·2 | 15·6 | 7·5 GS |
| 9·8 | | 28·2 | 52·9 | |

25 prec.

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 75 | 8·3 |
| | 20 | 72 | 8·3 |
| | 30 | 70 | 8·3 |
| | 40 | 68 | 8·2 |
| | 50 | 65 | 8·2 |

| | 25 prec. | |
|---|---|---|
| | α | δ |
| | + | + |
| h m | s | ′ |
| 40 | 68 | 8·2 |
| 50 | 65 | 8·2 |
| 0 | 63 | 8·1 |
| 10 | 61 | 8·0 |
| 20 | 59 | 7·9 |
| 30 | 57 | 7·7 |
| 40 | 55 | 7·6 |
| 50 | 53 | 7·4 |
| 0 | 51 | 7·2 |
| 10 | 49 | 7·0 |
| 20 | 47 | 6·8 |

**181—240.**

| | 0h.–1h. | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·2 | 46 | 34·7 | 4·8 | |
| 9·9 | | 42·7 | 12·5 | |
| 10·2 | | 50·2 | 5·4 | |
| 10·4 | | 53·7 | 47·9 | |
| 10·2 | | 54·7 | 26·9 | |
| 10·2 | 47 | 27·7 | 38·0 | |
| 10·4 | | 32·7 | 33·9 | |
| 9·8 | | 50·2 | 40·8 | |
| 9·4 | | 58·7 | 42·3 | |
| 10·4 | 48 | 3·7 | 44·0 | |
| 10·0 | | 9·2 | 13·0 | |
| 10·0 | | 20·2 | 58·9 | |
| 9·3 | | 23·2 | 37·4 | |
| 10·4 | | 44·2 | 11·9 | |
| 10·4 | 49 | 2·5 | 17·2 | |
| 9·8 | | 30·2 | 55·7 | |
| 10·4 | | 36·7 | 3·7 | |
| 9·8 | | 59·7 | 46·9 | |
| 9·1 | 50 | 7·7 | 25·0 | 9·0 |
| 10·4 | | 29·6 | 2·6 | |
| 10·4 | | 44·7 | 48·8 | |
| 9·8 | 51 | 3·7 | 7·1 | |
| 8·6 | | 10·2 | 13·5 | |
| 10·2 | | 52·7 | 52·8 | |
| 10·4 | 52 | 4·7 | 39·8 | |
| 9·5 | 53 | 21·2 | 18·4 | |
| 9·5 | | 22·7 | 18·3 | |
| 9·3 | | 50·2 | 29·4 | |
| 10·2 | | 52·2 | 19·6 | |
| 10·2 | 54 | 16·2 | 19·9 | |
| 10·4 | | 33·7 | 36·4 | |
| 8·6 | | 36·7 | 10·6 | |
| 7·8 | 55 | 1·2 | 36·2 | 8·0 GSct |
| 10·4 | | 29·0 | 0·2 | |
| 10·0 | | 41·2 | 28·1 | |
| 10·0 | 56 | 18·2 | 22·7 | |
| 10·4 | | 20·2 | 49·9 | |
| 10·4 | | 39·2 | 28·2 | |
| 10·4 | | 40·7 | 12·1 | |
| 6·4 | | 44·7 | 40·5 | 6·0 GSctr |
| 8·6 | 57 | 46·2 | 34·7 | 9·0 |
| 10·4 | | 48·2 | 30·0 | |
| 10·4 | 58 | 5·2 | 10·0 | |
| 10·4 | | 9·2 | 42·0 | |
| 10·4 | | 32·2 | 32·0 | |
| 10·4 | 59 | 2·2 | 27·4 | |
| 10·4 | | 10·2 | 55·9 | |
| 9·0 | | 26·2 | 49·4 | |
| 10·4 | | 34·2 | 19·0 | |
| 9·5 | | 39·2 | 22·9 | |
| 10·4 | | 52·2 | 43·6 | |
| 10·4 | 0 | 0·2 | 31·0 | |
| 9·4 | | 5·7 | 22·6 | |
| 10·2 | | 10·2 | 9·8 | |
| 9·6 | | 10·7 | 47·0 | |
| 10·4 | | 40·2 | 5·5 | |
| 9·0 | | 51·7 | 1·6 | |
| 9·6 | | 54·2 | 21·8 | |
| 10·0 | | 57·7 | 28·4 | |
| 10·4 | | 59·7 | 8·2 | |

**241—300.**

| | 1h. | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·4 | 2 | 12·2 | 1·9 | |
| 10·4 | | 18·7 | 6·8 | |
| 10·4 | | 21·2 | 7·0 | |
| 9·3 | | 21·7 | 24·8 | |
| 9·2 | | 40·2 | 34·4 | |
| 9·6 | 3 | 5·2 | 19·6 | |
| 10·4 | | 14·7 | 57·8 | |
| 9·6 | | 17·2 | 17·1 | |
| 10·4 | | 59·4 | 16·3 | : |
| 10·2 | 4 | 0·4 | 33·4 | |
| 6·8 | | 9·4 | 15·7 | 7·0 GSctr |
| 8·4 | | 36·9 | 1·4 | |
| 10·4 | | 53·9 | 39·8 | |
| 8·2 | | 55·9 | 40·2 | |
| 6·4 | 5 | 7·4 | 31·5 | 7·0 GSctr |
| 10·4 | 6 | 9·4 | 40·4 | |
| 10·4 | | 9·4 | 50·8 | |
| 10·4 | | 40·4 | 8·4 | |
| 10·4 | | 48·9 | 31·9 | |
| 10·2 | | 49·4 | 27·3 | |
| 9·5 | 7 | 3·9 | 35·4 | |
| 9·3 | | 36·9 | 48·9 | |
| 10·4 | | 37·9 | 18·4 | |
| 9·5 | | 38·4 | 16·2 | |
| 10·2 | | 50·9 | 54·0 | |
| 8·8 | | 51·4 | 52·0 | |
| 10·4 | 8 | 59·4 | 19·0 | |
| 9·4 | 9 | 13·9 | 27·6 | |
| 9·4 | | 49·4 | 14·0 | |
| 9·1 | 10 | 1·4 | 50·1 | |
| 8·6 | | 27·4 | 54·8 | 8·5 G |
| 10·4 | | 41·9 | 4·8 | |
| 9·8 | | 45·4 | 43·8 | |
| 9·1 | | 57·9 | 48·5 | |
| 10·4 | 12 | 4·4 | 0·0 | |
| 10·4 | | 9·4 | 3·3 | |
| 9·0 | | 50·4 | 56·4 | |
| 10·4 | 13 | 16·4 | 29·5 | |
| 9·6 | | 28·4 | 35·6 | |
| 9·3 | | 30·4 | 31·6 | |
| 9·3 | | 48·9 | 16·4 | |
| 10·4 | | 56·9 | 19·3 | |
| 10·4 | 14 | 10·4 | 28·2 | |
| 9·2 | | 10·9 | 47·0 | |
| 10·2 | | 19·0 | 29·0 | |
| 9·6 | | 27·7 | 1·8 | |
| 10·4 | | 34·0 | 9·9 | |
| 9·0 | | 40·5 | 16·4 | 8·5 G |
| 9·8 | 15 | 20·0 | 35·0 | |
| 9·4 | | 26·5 | 25·0 | |
| 10·2 | | 28·5 | 57·4 | |
| 6·8 | | 29·5 | 59·9 | 6·5 GS |
| 10·4 | | 42·5 | 41·9 | |
| 9·2 | 16 | 4·0 | 19·9 | |
| 10·0 | 17 | 1·5 | 54·7 | |
| 8·5 | | 23·0 | 23·1 | 8·0 G |
| 10·2 | | 23·5 | 45·4 | |
| 10·4 | | 38·5 | 14·3 | |
| 10·4 | | 50·5 | 9·8 | |
| 8·8 | | 59·0 | 51·0 | |

**301—360.**

| | 1h. | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·4 | 18 | 11·0 | 41·0 | |
| 8·6 | | 55·0 | 15·4 | 8·5 |
| 9·3 | 19 | 10·3 | 1·8 | |
| 9·4 | | 15·0 | 30·6 | |
| 8·5 | | 49·0 | 59·7 | 8·5 G |
| 9·3 | 20 | 11·0 | 22·7 | 9·0 |
| 9·4 | | 19·4 | 48·4 | |
| 9·1 | | 36·5 | 16·6 | 9·2 G |
| 9·0 | | 40·7 | 47·5 | 8·5 |
| 10·2 | | 43·5 | 27·7 | |
| 8·6 | 21 | 14·0 | 29·5 | |
| 10·2 | | 14·0 | 16·9 | |
| 9·8 | 22 | 10·8 | 40·9 | |
| 10·0 | | 14·3 | 20·7 | |
| 8·4 | | 19·3 | 4·8 | 8·5 |
| 10·0 | 23 | 46·3 | 19·1 | |
| 10·0 | 25 | 3·3 | 17·1 | |
| 9·6 | | 7·8 | 14·1 | |
| 9·8 | | 43·3 | 15·9 | |
| 10·0 | 26 | 38·3 | 3·3 | |
| 10·0 | 27 | 19·3 | 36·7 | |
| 10·0 | | 19·8 | 5·2 | |
| 9·8 | | 50·8 | 41·3 | |
| 9·8 | 28 | 1·8 | 5·9 | |
| 9·2 | | 11·3 | 50·7 | |
| 9·8 | | 49·1 | 0·1 | |
| 9·4 | | 49·8 | 35·7 | |
| 9·8 | | 59·8 | 6·4 | |
| 10·0 | 29 | 5·0 | 0·2 | |
| 6·6 | | 29·8 | 38·5 | 6·5 GSt |
| 9·8 | 30 | 52·8 | 42·2 | |
| 9·2 | 31 | 59·3 | 13·1 | |
| 9·6 | 32 | 9·2 | 11·3 | |
| 2·4 | 33 | 3·0 | 52·5 | 1·0 GStrλ |
| 9·2 | | 23·8 | 18·1 | |
| 8·6 | 34 | 18·3 | 27·1 | 8·5 G |
| 7·2 | | 26·3 | 3·9 | 7·0 GSt |
| 10·0 | | 36·8 | 23·1 | |
| 10·0 | 35 | 11·8 | 11·7 | |
| 10·0 | | 40·8 | 29·0 | |
| 9·6 | 36 | 8·6 | 57·4 | |
| 10·0 | | 35·8 | 46·2 | |
| 10·0 | | 39·2 | 27·1 | |
| 9·4 | 37 | 40·1 | 1·3 | |
| 9·4 | | 49·3 | 21·0 | |
| 9·6 | 38 | 9·8 | 27·2 | |
| 9·6 | | 24·3 | 8·9 | |
| 9·4 | 39 | 14·8 | 29·8 | |
| 9·1 | 41 | 30·8 | 35·0 | |
| 8·8 | | 38·8 | 22·8 | |
| 10·0 | 42 | 8·3 | 27·9 | |
| 9·2 | | 12·3 | 33·3 | |
| 10·0 | | 20·8 | 22·0 | |
| 9·4 | | 29·4 | 58·3 | |
| 9·2 | | 39·8 | 4·4 | |
| 9·8 | | 39·8 | 12·0 | |
| 10·0 | | 40·8 | 51·9 | |
| 9·8 | 43 | 35·9 | 57·0 | |
| 8·4 | | 36·8 | 0·8 | 8·0 G |
| 9·4 | 44 | 3·3 | 28·8 | |

**361—420.**

| | 1h.–2h. | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8·6 | 44 | 11·8 | 46·0 | 8·5 |
| 10·0 | | 22·8 | 45·0 | |
| 9·8 | | 45·8 | 46·6 | |
| 9·2 | 45 | 32·8 | 48·2 | 9·0 |
| 10·0 | 46 | 28·6 | 57·8 | |
| 10·0 | | 51·8 | 33·6 | |
| 8·6 | 47 | 18·6 | 59·0 | |
| 10·0 | | 36·7 | 57·8 | |
| 9·8 | | 56·8 | 17·8 | |
| 9·2 | 48 | 29·8 | 50·0 | |
| 8·6 | | 30·3 | 15·6 | 9·0 |
| 9·6 | | 40·3 | 13·0 | |
| 9·4 | 50 | 12·8 | 10·6 | |
| 9·2 | | 19·8 | 17·8 | |
| 9·4 | | 33·8 | 22·1 | |
| 9·6 | | 54·3 | 1·8 | |
| 9·4 | 52 | 2·9 | 55·0 | |
| 10·0 | | 5·5 | 39·2 | |
| 9·6 | | 24·6 | 30·1 | |
| 8·7 | | 49·5 | 33·4 | 8·5 |
| 10·0 | 53 | 20·5 | 34·0 | |
| 10·0 | | 54·5 | 53·2 | |
| 8·4 | 54 | 30·5 | 28·8 | 8·0 G |
| 9·9 | | 33·5 | 35·2 | |
| 8·6 | | 34·0 | 29·2 | 8·5 G |
| 10·0 | 55 | 55·4 | 0·6 | |
| 9·8 | 56 | 44·5 | 36·2 | |
| 9·8 | | 53·2 | 58·1 | |
| 9·4 | | 59·5 | 20·9 | |
| 9·6 | 57 | 19·5 | 4·2 | |
| 10·0 | 58 | 25·5 | 12·1 | |
| 9·8 | | 27·5 | 59·7 | |
| 9·1 | 59 | 26·5 | 44·0 | |
| 9·4 | | 49·5 | 47·1 | |
| 10·0 | 0 | 20·5 | 11·0 | |
| 9·8 | | 33·0 | 47·2 | |
| 8·2 | | 49·9 | 58·4 | |
| 9·4 | | 50·5 | 14·9 | |
| 9·1 | | 59·5 | 43·0 | |
| 9·2 | 1 | 23·5 | 44·5 | |
| 10·0 | | 52·5 | 27·0 | |
| 10·0 | 3 | 20·0 | 1·1 | |
| 8·2 | | 37·0 | 47·2 | GS |
| 10·0 | | 38·0 | 32·8 | |
| 10·0 | | 42·5 | 21·1 | |
| 9·9 | 4 | 33·0 | 36·8 | |
| 9·5 | 5 | 41·0 | 14·1 | |
| 9·8 | 6 | 34·5 | 11·2 | |
| 8·6 | | 48·0 | 26·1 | 9·0 |
| 9·6 | | 50·5 | 43·3 | |
| 9·4 | 7 | 30·0 | 16·4 | 9·5 |
| 10·0 | | 42·0 | 1·9 | |
| 10·0 | 8 | 26·5 | 52·5 | |
| 10·0 | 9 | 27·0 | 27·0 | |
| 8·8 | | 30·5 | 47·8 | |
| 8·2 | | 32·5 | 55·8 | GSt |
| 8·8 | 10 | 12·5 | 9·9 | 9·5 |
| 10·0 | | 21·5 | 14·4 | |
| 10·0 | | 33·5 | 49·3 | |
| 8·8 | | 56·0 | 30·1 | 9·0 |



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## 421—480.

| mag. | 2h. m | s | − 57° ′ | |
|---|---|---|---|---|
| 10·0 | 10 | 57·5 | 30·8 | |
| 9·0 | 12 | 4·0 | 13·9 | 9·5 |
| 9·4 | | 20·0 | 12·1 | |
| 9·4 | | 23·5 | 40·2 | |
| 9·1 | 14 | 40·0 | 41·7 | |
| 9·0 | 15 | 33·5 | 30·3 | |
| 7·2 | 16 | 25·5 | 21·3 | 7·5 GSt |
| 9·0 | 17 | 24·5 | 4·9 | |
| 10·0 | 18 | 10·0 | 47·1 | |
| 8·7 | | 24·0 | 23·6 | 9·2 |
| 9·1 | | 46·0 | 2·4 | |
| 9·1 | | 54·5 | 24·9 | 9·5 |
| 8·7 | 19 | 0·5 | 44·9 | |
| 8·6 | | 12·0 | 6·9 | 8·5 Gt |
| 8·4 | | 25·0 | 7·1 | 8·5 Gt |
| 7·6 | | 29·5 | 22·9 | 7·0 GSct |
| 10·0 | | 50·0 | 53·1 | |
| 9·9 | 20 | 17·0 | 46·5 | |
| 9·2 | 21 | 30·5 | 56·3 | |
| 9·9 | 22 | 3·0 | 43·1 | |
| 9·2 | | 14·0 | 44·6 | |
| 10·0 | | 26·0 | 20·8 | |
| 9·2 | | 28·5 | 23·3 | |
| 9·4 | | 45·5 | 16·9 | |
| 9·4 | 23 | 12·5 | 6·3 | |
| 8·6 | | 24·0 | 58·7 | |
| 9·6 | | 25·5 | 52·9 | |
| 9·4 | | 33·0 | 18·0 | |
| 9·0 | 24 | 40·3 | 21·2 | 8·8 G |
| 9·5 | | 41·5 | 39·3 | |
| 10·0 | | 54·5 | 11·4 | |
| 9·2 | 25 | 18·6 | 50·3 | |
| 9·8 | | 46·6 | 54·9 | |
| 8·8 | 27 | 45·1 | 9·2 | 8·5 G |
| 8·7 | 29 | 30·6 | 34·6 | 9·0 |
| 9·6 | 30 | 52·1 | 26·9 | |
| 10·3 | | 59·6 | 21·2 | ? |
| 9·4 | 31 | 5·1 | 32·0 | |
| 9·4 | 33 | 30·1 | 38·5 | |
| 8·9 | 34 | 1·1 | 7·4 | 9·5 |
| 8·8 | 35 | 1·1 | 33·7 | 9·5 |
| 10·2 | | 13·6 | 48·1 | |
| 9·6 | 37 | 56·1 | 53·4 | |
| 8·4 | 38 | 51·6 | 10·2 | 8·2 GS |
| 9·8 | 39 | 1·3 | 0·8 | |
| 10·3 | | 6·6 | 40·4 | |
| 10·2 | 40 | 17·6 | 42·2 | |
| 10·3 | | 20·1 | 27·1 | |
| 9·4 | 41 | 5·1 | 42·0 | K |
| 9·6 | | 6·6 | 53·0 | |
| 9·2 | 42 | 29·1 | 27·6 | |
| 9·4 | | 59·6 | 45·7 | |
| 8·3 | 43 | 36·6 | 57·9 | 8·5 G |
| 9·8 | 44 | 18·1 | 6·1 | |
| 10·2 | | 20·6 | 29·5 | |
| 10·3 | | 21·1 | 12·2 | |
| 10·3 | | 38·1 | 25·0 | |
| 10·3 | 46 | 2·6 | 42·7 | |
| 10·0 | 47 | 15·1 | 25·4 | |
| 10·2 | | 29·6 | 4·6 | |

## 481—540.

| mag. | 2h.–3h. m | s | − 57° ′ | |
|---|---|---|---|---|
| 8·2 | 47 | 40·1 | 42·4 | 7·5 GSct |
| 8·3 | 48 | 42·1 | 30·3 | 8·5 GS |
| 8·9 | | 45·1 | 14·7 | 9·5 G |
| 8·9 | 50 | 12·6 | 52·0 | 9·0 G |
| 10·3 | | 21·6 | 11·2 | |
| 9·2 | | 39·1 | 18·3 | 9·2 G |
| 9·4 | 51 | 23·6 | 14·2 | |
| 9·6 | | 59·7 | 0·4 | |
| 9·8 | 55 | 58·0 | 17·9 | |
| 9·4 | 58 | 48·0 | 51·2 | 9·0 G |
| 9·2 | 59 | 14·5 | 52·0 | 9·0 G |
| 9·4 | | 46·5 | 39·0 | |
| 9·6 | 0 | 48·0 | 22·3 | |
| 10·0 | | 50·0 | 40·9 | |
| 9·8 | 1 | 15·5 | 19·4 | |
| 7·6 | | 39·0 | 39·1 | 8·0 GS |
| 8·0 | | 42·0 | 53·6 | |
| 11·0 | 2 | 18·5 | 22·0 | |
| 8·4 | 4 | 4·0 | 18·2 | 8·5 GS |
| 9·8 | | 9·0 | 13·4 | |
| 10·3 | | 13·0 | 25·3 | |
| 9·4 | 5 | 9·0 | 29·2 | 9·2 |
| 10·2 | | 12·5 | 38·4 | |
| 10·6 | | 27·0 | 46·4 | |
| 9·4 | 6 | 33·5 | 25·3 | 8·8 |
| 11·0 | 7 | 13·5 | 3·3 | |
| 10·8 | | 31·5 | 11·5 | |
| 9·4 | | 57·0 | 39·8 | |
| 11·0 | | 59·0 | 44·5 | |
| 9·4 | 8 | 29·0 | 26·9 | 9·0 |
| 9·2 | | 34·2 | 59·1 | |
| 10·8 | | 49·0 | 20·8 | |
| 7·4 | 9 | 22·5 | 47·3 | 6·5 GSct |
| 10·3 | | 37·0 | 49·1 | |
| 10·0 | | 54·0 | 9·6 | |
| 11·0 | 10 | 42·0 | 39·2 | |
| 8·6 | | 43·0 | 22·9 | 9·2 G |
| 10·0 | 12 | 2·9 | 2·4 | |
| 9·4 | | 29·0 | 28·8 | 10·0 |
| 10·8 | | 45·8 | 31·3 | |
| 10·6 | 13 | 24·8 | 28·6 | |
| 11·0 | 14 | 20·8 | 26·4 | |
| 9·2 | | 33·1 | 0·3 | 9·5 |
| 9·2 | 15 | 9·3 | 1·5 | 9·2 G |
| 9·6 | | 24·8 | 40·9 | |
| 11·0 | | 59·6 | 8·7 | |
| 10·4 | 17 | 3·3 | 28·8 | |
| 11·0 | | 8·8 | 3·9 | |
| 10·8 | | 41·8 | 59·9 | |
| 9·4 | 18 | 11·8 | 56·6 | |
| 10·6 | | 39·3 | 18·9 | |
| 11·0 | 19 | 47·8 | 14·0 | |
| 9·0 | | 59·3 | 19·4 | 9·5 |
| 11·0 | 20 | 32·8 | 12·8 | |
| 11·0 | | 44·3 | 9·7 | |
| 10·6 | | 50·8 | 7·2 | |
| 9·6 | 21 | 7·8 | 53·5 | |
| 7·4 | | 24·3 | 59·6 | 7·5 G |
| 9·4 | | 41·3 | 0·8 | 9·5 |
| 10·8 | | 59·8 | 19·8 | |

## 541—600.

| mag. | 3h. m | s | − 57° ′ | |
|---|---|---|---|---|
| 10·3 | 22 | 20·8 | 35·7 | |
| 11·0 | | 49·6 | 41·6 | |
| 9·4 | 23 | 39·3 | 14·2 | |
| 9·4 | | 43·3 | 10·4 | |
| 10·2 | 24 | 16·8 | 10·4 | |
| 9·2 | | 27·3 | 34·1 | 8·5 G |
| 10·6 | 25 | 15·3 | 5·8 | |
| 10·6 | | 17·8 | 11·8 | |
| 11·0 | | 39·3 | 19·5 | |
| 10·8 | 26 | 20·8 | 57·0 | |
| 10·3 | | 40·3 | 17·8 | |
| 9·4 | 27 | 16·7 | 51·3 | |
| 10·2 | 30 | 5·0 | 0·6 | |
| 10·2 | 32 | 3·6 | 58·0 | |
| 9·4 | | 5·6 | 32·1 | |
| 9·0 | 33 | 5·1 | 44·8 | |
| 9·1 | | 20·1 | 28·5 | |
| 10·2 | | 21·6 | 7·0 | |
| 10·2 | | 32·6 | 51·9 | |
| 8·6 | | 45·8 | 58·0 | 9·0 |
| 9·0 | 34 | 2·6 | 32·2 | 9·0 |
| 8·8 | | 3·6 | 13·1 | |
| 9·0 | | 52·1 | 18·3 | 8·5 |
| 8·0 | 35 | 13·6 | 41·6 | 7·5 GS |
| 10·0 | | 20·1 | 18·6 | |
| 10·2 | | 41·6 | 43·4 | |
| 8·8 | 41 | 10·1 | 1·0 | 8·5 G |
| 9·7 | | 25·1 | 13·1 | |
| 8·1 | 42 | 0·1 | 3·0 | 7·5 GS |
| 10·2 | 43 | 16·6 | 44·6 | |
| 10·2 | | 17·2 | 22·1 | |
| 8·4 | 44 | 11·1 | 3·6 | 9·0 |
| 9·8 | 45 | 24·1 | 4·1 | |
| 10·2 | | 43·2 | 7·3 | |
| 10·2 | | 52·2 | 43·9 | |
| 9·4 | 46 | 0·1 | 33·0 | |
| 8·8 | | 11·1 | 20·9 | |
| 10·0 | | 40·1 | 20·5 | |
| 10·0 | 47 | 20·2 | 43·9 | |
| 10·2 | | 20·2 | 0·0 | |
| 9·2 | | 28·1 | 14·5 | |
| 10·0 | | 52·1 | 38·7 | |
| 9·6 | 48 | 8·6 | 46·8 | |
| 9·1 | | 26·3 | 57·7 | |
| 10·0 | | 38·9 | 45·1 | |
| 8·2 | | 56·5 | 1·6 | |
| 9·4 | 49 | 9·4 | 21·1 | |
| 10·2 | | 10·4 | 7·9 | |
| 10·2 | | 52·4 | 46·5 | |
| 9·7 | | 53·9 | 23·9 | |
| 8·8 | 51 | 4·4 | 27·1 | 8·5 G |
| 10·2 | | 19·9 | 44·3 | |
| 9·8 | | 52·4 | 26·3 | |
| 10·2 | 52 | 27·7 | 17·6 | |
| 10·0 | | 37·9 | 44·4 | |
| 9·8 | 53 | 17·4 | 14·1 | |
| 10·2 | | 26·9 | 41·0 | |
| 10·0 | | 32·9 | 1·7 | |
| 9·8 | | 58·4 | 49·1 | |
| 8·5 | 54 | 40·4 | 47·3 | |

## 601—660.

| mag. | 3h.–4h. m | s | − 57° ′ | |
|---|---|---|---|---|
| 9·0 | 54 | 41·4 | 21·3 | |
| 8·1 | 55 | 10·9 | 7·3 | 9·0 Gt |
| 8·4 | | 34·9 | 7·0 | 8·5 G |
| 9·6 | | 40·9 | 23·1 | |
| 8·5 | | 43·9 | 14·2 | 9·0 Gt |
| 6·6 | 56 | 1·9 | 27·5 | 6·5 GSct |
| 10·2 | | 22·7 | 9·5 | |
| 9·2 | | 24·9 | 36·0 | |
| 9·4 | 57 | 1·9 | 51·3 | |
| 10·2 | | 32·4 | 16·1 | |
| 8·8 | | 58·9 | 1·3 | |
| 7·8 | 59 | 2·4 | 34·0 | 8·5 GS |
| 9·7 | 0 | 1·5 | 14·4 | |
| 7·8 | | 14·7 | 48·4 | 8·5 GS |
| 9·9 | | 15·0 | 30·3 | |
| 9·2 | 1 | 29·9 | 0·8 | |
| 8·6 | | 56·5 | 30·0 | |
| 9·0 | 2 | 12·5 | 34·7 | |
| 9·9 | 3 | 8·5 | 51·0 | |
| 9·9 | | 11·5 | 2·9 | |
| 9·2 | | 49·5 | 52·3 | |
| 9·0 | 4 | 53·0 | 22·9 | |
| 9·8 | 5 | 23·0 | 16·8 | |
| 9·0 | | 59·5 | 41·1 | |
| 9·0 | 6 | 55·8 | 58·8 | 9·0 |
| 9·2 | 7 | 0·5 | 40·1 | |
| 9·2 | | 21·5 | 19·5 | |
| 8·8 | 8 | 59·5 | 16·0 | |
| 9·6 | 9 | 22·0 | 21·2 | |
| 8·8 | 10 | 31·5 | 8·8 | 8·5 |
| 9·8 | | 35·0 | 21·2 | |
| 9·9 | | 55·5 | 39·4 | |
| 8·8 | 11 | 10·5 | 13·8 | 9·0 |
| 9·8 | 12 | 10·5 | 34·0 | |
| 9·8 | 13 | 21·0 | 22·2 | |
| 9·7 | | 32·5 | 37·3 | |
| 9·2 | 14 | 41·5 | 21·7 | |
| 9·9 | 15 | 15·5 | 14·8 | |
| 8·5 | | 17·0 | 36·7 | 8·0 G |
| 8·9 | | 35·0 | 18·0 | |
| 9·6 | 16 | 0·0 | 10·0 | |
| 9·4 | 17 | 27·0 | 33·4 | |
| 9·9 | 18 | 21·0 | 25·6 | |
| 9·9 | | 57·6 | 15·9 | |
| 8·5 | | 59·6 | 50·1 | |
| 9·6 | 19 | 7·6 | 34·7 | |
| 9·4 | | 13·1 | 0·0 | |
| 9·4 | | 31·1 | 28·1 | |
| 8·6 | | 37·1 | 16·4 | 9·5 |
| 9·6 | 20 | 19·6 | 19·5 | |
| 9·8 | | 38·6 | 28·8 | |
| 9·7 | | 50·6 | 29·4 | |
| 9·6 | | 52·1 | 8·7 | |
| 9·7 | | 59·6 | 27·9 | |
| 9·9 | 21 | 5·1 | 8·7 | |
| 9·8 | | 13·1 | 5·9 | |
| 9·7 | | 18·1 | 45·3 | |
| 7·2 | | 40·1 | 32·3 | 7·3 GS |
| 7·1 | | 45·6 | 21·2 | 6·6 G ct |
| 9·0 | 22 | 13·1 | 52·2 | |

25 prec.

| h | m | α + s | δ + |
|---|---|---|---|
| 2 | 10 | 49 | 7·0 |
| | 20 | 47 | 6·8 |
| | 30 | 45 | 6·6 |
| | 40 | 43 | 6·4 |
| | 50 | 41 | 6·2 |
| 3 | 0 | 40 | 5·9 |
| | 10 | 38 | 5·6 |
| | 20 | 37 | 5·4 |
| | 30 | 35 | 5·1 |
| | 40 | 34 | 4·8 |
| | 50 | 33 | 4·5 |
| 4 | 0 | 31 | 4·2 |
| | 10 | 30 | 3·9 |
| | 20 | 29 | 3·5 |
| | 30 | 28 | 3·2 |



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| 25 prec. | | α + | δ + |
|---|---|---|---|
| h | m | s | ' |
| 4 | 20 | 29 | 3·5 |
| | 30 | 28 | 3·2 |
| | 40 | 28 | 2·9 |
| | 50 | 27 | 2·5 |
| 5 | 0 | 26 | 2·2 |
| | 10 | 26 | 1·8 |
| | 20 | 25 | 1·5 |
| | 30 | 25 | 1·1 |
| | 40 | 25 | 0·7 |
| | 50 | 24 | 0·4 |

## 661—720.

| mag. | 4h. m | s | −57° ' | |
|---|---|---|---|---|
| 9·2 | 22 | 13·5 | 57·5 | |
| 9·2 | 26 | 20·6 | 55·5 | |
| 9·0 | | 28·1 | 2·0 | |
| 8·1 | | 53·1 | 27·5 | 8·5 GS |
| 9·0 | 27 | 11·1 | 51·6 | |
| 9·6 | 28 | 21·1 | 40·9 | |
| 8·2 | | 27·1 | 43·1 | |
| 9·2 | 29 | 31·6 | 43·7 | |
| 8·4 | | 39·6 | 25·7 | 8·0 G |
| 9·0 | 30 | 8·6 | 21·3 | |
| 9·2 | | 52·1 | 23·1 | |
| 9·6 | 31 | 4·6 | 44·4 | |
| 9·9 | | 50·1 | 13·1 | |
| 8·6 | | 50·3 | 1·1 | |
| 9·4 | 32 | 18·1 | 39·9 | |
| 9·1 | | 31·6 | 20·2 | |
| 9·0 | 33 | 15·6 | 9·9 | |
| 7·8 | | 21·6 | 40·9 | 8·0 G |
| 9·4 | 34 | 8·6 | 8·9 | |
| 8·7 | | 22·1 | 47·9 | 9·0 |
| 8·5 | | 31·6 | 11·3 | 8·5 |
| 9·7 | | 51·8 | 0·9 | |
| 9·7 | 35 | 37·1 | 39·3 | |
| 8·6 | 36 | 17·2 | 1·3 | 8·0 G |
| 8·4 | 37 | 2·1 | 7·9 | 8·0 G |
| 9·2 | | 39·1 | 54·8 | |
| 9·7 | 38 | 18·5 | 10·1 | |
| 9·0 | | 49·5 | 1·0 | |
| 9·2 | 39 | 8·0 | 37·7 | |
| 9·7 | | 27·0 | 9·0 | |
| 9·2 | 41 | 3·5 | 19·3 | |
| 9·2 | | 10·0 | 43·3 | |
| 9·4 | 42 | 17·5 | 48·3 | |
| 9·2 | 43 | 6·5 | 17·1 | |
| 9·6 | 44 | 33·4 | 32·6 | |
| 8·7 | 45 | 4·4 | 22·1 | 9·0 |
| 9·7 | | 23·9 | 21·7 | |
| 8·3 | | 50·9 | 2·1 | 7·5 GS |
| 9·0 | | 52·7 | 59·9 | |
| 9·6 | 46 | 18·9 | 19·5 | |
| 9·7 | | 38·4 | 14·9 | |
| 9·2 | | 52·0 | 40·3 | |
| 9·2 | | 52·5 | 43·8 | 9·5 |
| 9·3 | | 58·5 | 28·7 | |
| 8·3 | 47 | 2·5 | 18·9 | 8·5 |
| 9·7 | | 47·0 | 13·5 | |
| 8·4 | 48 | 0·5 | 56·8 | |
| 9·7 | 49 | 2·5 | 7·1 | |
| 9·3 | | 48·0 | 32·6 | |
| 9·7 | 50 | 9·4 | 6·1 | |
| 8·9 | | 38·5 | 39·5 | |
| 8·8 | | 40·0 | 24·3 | 8·5 |
| 7·8 | 51 | 23·0 | 32·1 | 8·0 GS |
| 9·2 | 52 | 9·0 | 45·1 | 9·0 |
| 8·4 | 53 | 6·5 | 37·4 | 9·0 |
| 9·1 | 54 | 13·0 | 21·9 | |
| 8·9 | | 22·5 | 6·5 | |
| 9·2 | 56 | 30·0 | 37·1 | |
| 9·7 | 57 | 5·0 | 36·7 | |
| 9·6 | | 46·4 | 57·9 | |

## 721—780.

| mag. | 4h.–5h. m | s | −57° ' | |
|---|---|---|---|---|
| 7·4 | 58 | 3·8 | 47·5 | 8·0 GS |
| 9·7 | | 8·3 | 36·4 | |
| 9·4 | | 34·3 | 26·4 | |
| 9·2 | 59 | 2·3 | 20·2 | |
| 8·8 | | 49·8 | 48·5 | |
| 9·4 | | 58·3 | 39·7 | |
| 9·7 | 0 | 1·3 | 29·1 | |
| 9·2 | 1 | 4·8 | 45·0 | |
| 9·1 | | 10·8 | 21·0 | |
| 9·7 | 2 | 29·8 | 13·3 | |
| 9·1 | | 31·3 | 32·3 | |
| 7·6 | | 43·8 | 50·6 | 8·0 GS |
| 8·4 | 3 | 12·0 | 21·7 | 7·8 GS |
| 10·0 | | 20·7 | 8·6 | |
| 6·4 | | 22·8 | 38·6 | 5·0 GSt |
| 9·4 | | 32·2 | 51·1 | |
| 9·3 | | 39·2 | 43·5 | 8·5 G |
| 10·0 | | 51·7 | 30·7 | |
| 9·6 | 4 | 0·7 | 18·9 | |
| 9·6 | | 8·6 | 51·7 | |
| 9·0 | | 29·7 | 42·9 | 9·0 |
| 9·3 | | 44·2 | 37·8 | |
| 9·8 | 5 | 0·2 | 26·5 | |
| 10·0 | | 0·4 | 8·3 | |
| 9·0 | | 50·7 | 56·0 | |
| 9·6 | 6 | 1·7 | 13·8 | |
| 10·0 | | 5·7 | 33·0 | |
| 8·4 | | 16·7 | 8·9 | 8·0 GS |
| 10·0 | | 41·2 | 4·3 | |
| 9·2 | | 59·2 | 10·9 | |
| 10·0 | 7 | 1·7 | 31·4 | |
| 9·3 | 8 | 4·7 | 44·5 | |
| 9·7 | | 19·2 | 41·2 | |
| 9·4 | | 42·7 | 46·1 | |
| 10·0 | | 58·2 | 51·0 | |
| 8·8 | 9 | 2·2 | 20·2 | 9·5 |
| 9·4 | | 9·2 | 20·9 | |
| 8·8 | | 19·2 | 45·8 | 8·5 |
| 9·6 | | 37·7 | 10·2 | |
| 9·4 | 10 | 11·7 | 45·5 | |
| 9·0 | | 16·4 | 28·3 | 9·0 |
| 9·7 | | 33·4 | 11·4 | |
| 9·0 | | 59·4 | 27·7 | 9·5 |
| 9·4 | 11 | 54·4 | 43·5 | |
| 8·8 | 12 | 11·7 | 58·4 | |
| 9·4 | | 12·4 | 48·0 | |
| 10·0 | | 38·4 | 25·6 | |
| 10·0 | | 44·9 | 49·3 | |
| 10·0 | 13 | 1·4 | 47·4 | |
| 9·4 | | 7·9 | 27·0 | |
| 9·4 | | 38·9 | 50·7 | |
| 9·4 | | 43·9 | 40·7 | |
| 9·7 | | 52·4 | 52·0 | |
| 9·8 | | 54·4 | 16·9 | |
| 9·4 | | 58·9 | 40·2 | |
| 10·0 | 14 | 57·2 | 2·4 | |
| 9·6 | 15 | 26·4 | 18·7 | |
| 10·0 | | 26·9 | 39·5 | |
| 9·5† | | 29·5 | 58·8 | |
| 9·4 | | 31·9 | 14·9 | |

## 781—840.

| mag. | 5h. m | s | −57° ' | |
|---|---|---|---|---|
| 9·3 | 15 | 41·0 | 2·9 | |
| 9·8 | | 43·9 | 20·4 | |
| 8·8 | | 52·4 | 34·5 | 9·0 |
| 8·8 | 16 | 17·4 | 32·9 | 8·8 |
| 9·8 | | 18·9 | 53·2 | |
| 10·0 | | 34·7 | 59·4 | |
| 10·0 | | 37·9 | 31·1 | |
| 10·0 | | 40·4 | 15·5 | |
| 9·2 | | 50·4 | 9·5 | |
| 9·4 | | 54·7 | 58·8 | |
| 9·6 | 17 | 3·4 | 51·5 | |
| 9·4 | | 36·9 | 22·2 | |
| 9·8 | | 49·4 | 42·0 | |
| 9·6 | 18 | 30·4 | 11·9 | |
| 9·0 | | 44·9 | 28·6 | 9·0 |
| 9·6 | | 49·9 | 28·0 | |
| 9·4 | 19 | 16·9 | 26·2 | |
| 9·6 | | 19·9 | 48·1 | |
| 9·7 | | 40·4 | 26·2 | |
| 9·8 | 20 | 15·4 | 41·0 | |
| 9·4 | | 41·4 | 43·3 | |
| 10·0 | | 44·3 | 58·1 | |
| 9·8 | 21 | 9·3 | 35·2 | |
| 9·4 | | 21·3 | 31·6 | |
| 9·4 | | 28·8 | 14·9 | |
| 9·2 | | 40·8 | 40·0 | |
| 9·2 | 22 | 9·8 | 18·6 | |
| 9·8 | | 14·3 | 20·6 | |
| 9·4 | | 19·3 | 29·6 | |
| 10·0 | | 40·4 | 38·0 | |
| 10·0 | | 47·8 | 36·6 | |
| 10·0 | | 53·3 | 37·1 | |
| 9·2 | | 56·3 | 20·7 | |
| 9·2 | 23 | 18·8 | 45·6 | |
| 9·6 | | 53·8 | 12·7 | |
| 9·2 | | 59·3 | 7·5 | |
| 9·4 | 24 | 2·8 | 54·8 | |
| 9·6 | | 29·8 | 55·9 | |
| 9·6 | 25 | 3·3 | 21·2 | |
| 10·0 | | 12·3 | 58·0 | |
| 9·4 | | 19·8 | 50·3 | |
| 10·0 | | 46·3 | 19·4 | |
| 8·8 | 26 | 9·3 | 46·0 | |
| 8·9 | 27 | 26·7 | 56·8 | |
| 10·0 | | 31·3 | 6·2 | |
| 9·6 | | 41·8 | 18·1 | |
| 9·8 | | 59·3 | 22·0 | |
| 10·0 | 28 | 30·8 | 21·0 | |
| 8·4 | | 33·8 | 29·0 | 8·5 |
| 7·4 | | 38·3 | 15·1 | 7·0 GSg |
| 8·8 | | 48·3 | 4·7 | 9·0 |
| 9·7 | 29 | 23·8 | 40·9 | |
| 10·0 | | 38·8 | 3·7 | |
| 8·8 | | 44·3 | 20·6 | 8·2 |
| 9·7 | | 49·8 | 2·4 | |
| 10·0 | 31 | 13·8 | 13·2 | |
| 7·4 | | 27·3 | 10·2 | 7·0 GS |
| 10·0 | | 32·8 | 57·0 | |
| 9·4 | | 49·3 | 44·4 | |
| 9·3 | | 58·8 | 23·0 | |

## 841—900.

| mag. | 5h. m | s | −57° ' | |
|---|---|---|---|---|
| 9·6 | 32 | 0·3 | 2·1 | |
| 9·6 | | 9·8 | 7·3 | |
| 9·7 | | 35·3 | 18·7 | |
| 9·0 | | 38·8 | 46·6 | |
| 10·0 | 33 | 17·3 | 50·0 | |
| 10·0 | | 26·8 | 52·2 | |
| 8·6 | | 30·3 | 12·9 | |
| 9·3 | | 46·3 | 21·3 | |
| 10·0 | | 57·3 | 8·2 | |
| 10·0 | 34 | 1·8 | 32·8 | |
| 8·4 | | 18·8 | 32·1 | 7·8 GS |
| 10·0 | | 27·8 | 34·8 | |
| 9·4 | 35 | 10·8 | 22·9 | |
| 9·8 | | 18·8 | 35·6 | |
| 9·4 | | 35·6 | 33·8 | |
| 9·8 | | 47·8 | 54·0 | |
| 9·0 | | 49·3 | 52·9 | |
| 9·8 | 36 | 0·8 | 10·7 | |
| 8·7 | | 10·1 | 16·7 | 9·5 |
| 10·0 | | 19·3 | 59·7 | |
| 9·3 | | 20·6 | 23·1 | |
| 10·0 | | 38·3 | 22·0 | |
| 10·4 | 37 | 14·6 | 13·6 | |
| 10·2 | | 28·4 | 53·0 | |
| 9·0 | | 31·4 | 14·8 | |
| 9·6 | | 54·9 | 26·0 | |
| 10·0 | 38 | 12·4 | 40·8 | |
| 8·7 | | 23·4 | 54·0 | |
| 10·2 | | 33·4 | 29·4 | |
| 9·4 | | 45·4 | 35·3 | 9·5 |
| 10·0 | 39 | 2·9 | 5·0 | |
| 8·7 | | 10·4 | 30·1 | 9·2 |
| 8·8 | | 12·9 | 26·8 | 9·0 |
| 9·8 | | 32·9 | 8·2 | |
| 8·8 | 40 | 41·9 | 58·4 | |
| 10·4 | | 50·4 | 56·9 | |
| 9·0 | | 53·9 | 30·6 | |
| 10·4 | 41 | 1·9 | 58·6 | |
| 9·1 | | 56·4 | 48·6 | |
| 10·4 | 42 | 40·9 | 37·9 | |
| 10·4 | | 42·1 | 45·1 | |
| 9·3 | | 57·4 | 44·0 | |
| 10·4 | 43 | 25·9 | 32·2 | |
| 10·0 | | 54·9 | 7·5 | |
| 10·4 | 44 | 20·4 | 27·6 | |
| 10·4 | | 44·9 | 18·0 | |
| 10·4 | | 54·9 | 29·0 | |
| 10·2 | 45 | 10·4 | 25·7 | |
| 9·6 | | 31·9 | 7·8 | |
| 10·4 | | 40·3 | 49·4 | |
| 10·4 | | 48·9 | 3·3 | |
| 10·4 | 46 | 12·4 | 20·8 | |
| 9·6 | | 59·4 | 29·6 | |
| 9·9 | 47 | 29·9 | 40·3 | |
| 10·0 | | 35·9 | 6·6 | |
| 10·2 | | 38·9 | 26·8 | |
| 10·0† | | 47·0 | 59·4 | |
| 10·4 | | 54·9 | 49·3 | |
| 9·4 | 48 | 47·4 | 37·2 | |
| 9·9 | 49 | 34·4 | 16·6 | |



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### 901—960.

| mag. | $5^{h}$–$6^{h}$ m | s | −57° ′ | |
|---|---|---|---|---|
| 7·0 | 50 | 14·9 | 10·7 | 6·5 GSt |
| 10·2 | | 25·9 | 25·5 | |
| 8·2 | | 30·2 | 55·7 | 8·5 GS |
| 8·7 | | 32·2 | 54·9 | S |
| 10·4 | | 56·2 | 30·9 | |
| 9·8 | 51 | 5·2 | 27·7 | |
| 10·0 | | 32·7 | 6·7 | |
| 10·4 | | 40·2 | 46·5 | |
| 10·2 | 52 | 1·2 | 47·9 | |
| 10·4 | | 51·2 | 19·7 | |
| 9·6 | 53 | 5·7 | 16·5 | |
| 10·2 | | 12·2 | 29·1 | |
| 9·1 | | 29·2 | 18·2 | |
| 10·2 | | 39·7 | 34·0 | |
| 8·8 | | 56·2 | 4·7 | 9·0 |
| 9·2 | 54 | 12·7 | 4·8 | 9·0 |
| 9·3 | | 42·2 | 8·3 | 8·5 G |
| 10·4 | | 51·2 | 39·3 | |
| 10·2 | 55 | 2·2 | 6·9 | |
| 10·4 | | 22·2 | 27·8 | |
| 9·6 | 56 | 0·2 | 59·2 | |
| 9·6 | | 1·7 | 19·0 | |
| 8·7 | | 9·2 | 22·7 | 9·2 |
| 9·9 | | 9·7 | 10·5 | |
| 10·2 | | 17·2 | 7·8 | |
| 9·6 | | 31·2 | 37·9 | |
| 9·6 | | 54·2 | 6·0 | |
| 10·2 | | 56·2 | 10·9 | |
| 10·4 | 57 | 36·7 | 24·0 | |
| 8·6 | 58 | 10·2 | 53·8 | 9·5 |
| 9·6 | | 10·7 | 42·1 | |
| 10·2 | | 17·7 | 14·3 | |
| 9·0 | | 55·2 | 54·6 | |
| 9·1 | 59 | 7·2 | 47·0 | 8·5 |
| 9·9 | | 39·2 | 8·9 | |
| 10·2 | 0 | 2·7 | 5·9 | |
| 9·6 | | 3·9 | 1·6 | S |
| 10·4 | | 44·2 | 30·6 | |
| 10·4 | | 46·2 | 32·5 | |
| 10·0 | 1 | 11·2 | 38·4 | |
| 10·2 | 2 | 16·7 | 17·5 | |
| 9·4 | | 31·2 | 39·8 | |
| 10·4 | | 36·2 | 45·0 | |
| 9·2 | | 51·7 | 1·7 | |
| 10·2 | | 54·7 | 45·7 | |
| 10·4 | | 58·7 | 15·0 | |
| 8·6 | 3 | 0·2 | 50·2 | 9·5 |
| 10·4 | | 0·7 | 18·4 | |
| 9·6 | | 21·7 | 51·9 | |
| 10·4 | | 41·3 | 19·6 | |
| 9·9 | | 47·7 | 31·7 | |
| 8·6 | | 48·7 | 58·5 | 8·5 |
| 10·2 | 4 | 13·2 | 31·0 | |
| 9·3 | | 17·2 | 8·8 | |
| 10·2 | | 25·2 | 56·2 | |
| 9·6 | | 50·2 | 4·8 | 9·0 |
| 9·4 | 5 | 14·7 | 9·4 | 9·0 |
| 9·6 | | 25·2 | 46·4 | |
| 9·8 | | 53·7 | 9·0 | |
| 9·6 | 6 | 11·2 | 11·8 | |

### 961—1020.

| mag. | $6^{h}$ m | s | −57° ′ | |
|---|---|---|---|---|
| 8·4 | 6 | 18·0 | 54·5 | 8·5 |
| 9·3 | | 22·2 | 34·6 | 9·5 |
| 9·4 | | 26·7 | 17·8 | |
| 9·1 | 7 | 30·8 | 55·1 | G |
| 9·4 | | 43·3 | 45·7 | 9·0 |
| 9·8 | 8 | 46·5 | 47·9 | G |
| 9·6 | 10 | 9·8 | 48·9 | |
| 10·0 | | 10·4 | 7·5 | |
| 9·8 | | 31·3 | 22·6 | |
| 10·0 | | 46·1 | 1·7 | |
| 9·3 | 12 | 1·3 | 52·7 | |
| 9·8 | 13 | 9·3 | 29·7 | |
| 8·8 | | 20·8 | 0·8 | 9·0 |
| 8·4 | | 38·3 | 39·5 | 8·8 |
| 9·0 | | 59·8 | 57·6 | |
| 9·6 | 14 | 51·8 | 48·4 | |
| 9·8 | 15 | 40·8 | 29·9 | |
| 10·0 | | 52·8 | 22·8 | |
| 10·0 | | 59·4 | 0·1 | |
| 8·2 | 16 | 5·8 | 17·0 | |
| 8·9 | | 7·8 | 52·7 | |
| 10·0 | | 37·8 | 31·8 | |
| 9·8 | | 43·8 | 19·9 | |
| 9·8 | 17 | 8·3 | 34·2 | |
| 9·3 | | 30·8 | 14·1 | |
| 8·9 | | 51·8 | 58·9 | |
| 10·0 | | 59·8 | 11·9 | |
| 9·8 | 18 | 1·3 | 24·6 | |
| 9·8 | | 30·3 | 48·4 | |
| 9·8 | | 43·3 | 17·4 | |
| 9·8 | | 55·8 | 19·8 | |
| 10·0 | 19 | 12·8 | 50·2 | |
| 9·2 | 20 | 25·8 | 31·5 | 9·0 |
| 9·6 | 21 | 14·8 | 22·8 | |
| 9·4 | 22 | 47·8 | 35·7 | |
| 10·0 | 23 | 22·3 | 48·9 | |
| 9·6 | | 35·8 | 24·5 | |
| 9·4 | | 55·3 | 58·7 | |
| 8·8 | 24 | 7·3 | 21·2 | |
| 10·0 | | 13·7 | 57·3 | |
| 7·1 | 25 | 5·2 | 55·3 | 6·0 GSct |
| 9·4 | | 17·7 | 6·9 | 9·5 |
| 9·8 | | 35·2 | 50·2 | |
| 10·0 | | 40·5 | 54·9 | |
| 8·7 | 26 | 5·2 | 15·2 | 8·5 |
| 9·0 | | 41·2 | 41·6 | |
| 9·6 | | 50·7 | 51·6 | |
| 8·4 | | 51·7 | 31·0 | 8·5 |
| 8·4 | 27 | 40·7 | 11·3 | 9·0 |
| 9·4 | 28 | 24·2 | 41·9 | |
| 9·1 | | 39·2 | 0·9 | |
| 8·4 | 29 | 19·2 | 31·2 | 8·0 |
| 8·8 | 30 | 30·2 | 47·2 | |
| 10·0 | | 42·2 | 58·0 | |
| 9·1 | 31 | 1·7 | 14·8 | |
| 9·4 | | 4·2 | 3·3 | |
| 9·4 | | 13·7 | 39·6 | |
| 9·4 | 33 | 0·7 | 46·1 | |
| 9·6 | | 2·2 | 22·1 | |
| 8·4 | | 8·2 | 9·8 | 8·2 |

### 1021—1080.

| mag. | $6^{h}$ m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 33 | 25·2 | 8·8 | |
| 8·8 | | 34·2 | 47·0 | |
| 9·4 | | 39·2 | 27·1 | |
| 10·0 | 34 | 1·7 | 31·1 | |
| 9·2 | | 5·2 | 3·6 | |
| 9·6 | | 8·7 | 36·4 | 9·5 |
| 7·4 | | 21·2 | 26·0 | 7·2 GSt |
| 8·8 | | 36·7 | 1·1 | |
| 9·4 | | 40·2 | 31·8 | |
| 9·3 | | 56·2 | 54·2 | |
| 8·9 | | 59·2 | 50·2 | |
| 8·9 | 35 | 31·2 | 19·6 | 8·5 G |
| 9·8 | 36 | 37·7 | 8·9 | |
| 9·8 | 37 | 43·2 | 3·9 | |
| 9·2 | | 44·2 | 34·8 | |
| 9·8 | 38 | 11·7 | 7·0 | |
| 9·3 | | 33·7 | 8·4 | |
| 9·8 | | 50·7 | 21·3 | |
| 9·8 | 39 | 49·7 | 41·9 | |
| 10·0 | 40 | 9·7 | 22·0 | |
| 10·0 | | 23·7 | 8·5 | |
| 10·2 | | 57·7 | 16·3 | |
| 9·5 | 41 | 20·2 | 39·6 | |
| 9·2 | 42 | 0·2 | 16·4 | |
| 10·3 | | 7·2 | 56·0 | |
| 10·0 | | 25·7 | 52·8 | |
| 8·5 | | 36·2 | 18·7 | |
| 10·0 | 43 | 19·7 | 44·1 | |
| 10·0 | | 51·2 | 24·6 | |
| 9·4 | 44 | 24·7 | 4·2 | |
| 10·0 | | 50·2 | 28·0 | |
| 10·2 | 45 | 8·4 | 1·8 | |
| 9·6 | | 19·6 | 58·9 | |
| 10·0 | | 50·2 | 28·3 | |
| 9·4 | | 52·2 | 56·5 | |
| 10·0 | | 57·1 | 48·6 | |
| 10·0 | 46 | 1·6 | 59·9 | |
| 8·4 | | 5·6 | 20·5 | 8·3 Gt |
| 8·0 | | 10·1 | 30·9 | 7·5 GSt |
| 9·5 | | 46·6 | 56·0 | |
| 10·3 | 47 | 5·6 | 21·6 | |
| 10·1 | | 18·6 | 25·4 | |
| 9·5 | | 48·8 | 56·8 | |
| 10·3 | 48 | 4·1 | 23·9 | |
| 8·5 | | 32·1 | 14·2 | 8·5 |
| 9·5 | | 36·1 | 39·0 | |
| 9·6 | 49 | 0·1 | 53·8 | |
| 9·4 | | 12·6 | 6·7 | 9·0 |
| 10·2 | | 21·6 | 35·6 | |
| 10·1 | | 40·1 | 23·6 | |
| 9·8 | 50 | 21·5 | 58·4 | |
| 9·0 | | 35·1 | 50·4 | 9·5 |
| 9·6 | | 39·6 | 25·8 | |
| 10·3 | | 43·1 | 1·0 | |
| 10·1 | 51 | 30·1 | 33·6 | |
| 9·0 | | 33·6 | 32·2 | 9·0 |
| 10·2 | | 40·1 | 33·8 | |
| 9·8 | | 50·1 | 33·8 | |
| 10·0 | 52 | 39·6 | 44·4 | |
| 9·2 | | 42·6 | 41·7 | |

### 1081—1140.

| mag. | $6^{h}$–$7^{h}$ m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 53 | 15·1 | 11·0 | |
| 9·5 | | 25·6 | 35·0 | 9·0 |
| 10·3 | | 41·7 | 58·9 | |
| 8·6 | | 58·1 | 36·0 | 9·0 G |
| 8·0 | 54 | 13·1 | 24·2 | 8·0 GSg |
| 9·6 | | 37·1 | 39·0 | |
| 10·3 | | 57·6 | 44·7 | |
| 10·1 | 55 | 1·1 | 35·9 | |
| 10·3 | 56 | 1·6 | 5·9 | |
| 8·8 | | 15·6 | 46·2 | 9·0 |
| 8·6 | | 22·1 | 55·0 | 9·0 |
| 10·2 | | 24·1 | 2·4 | |
| 9·6 | | 24·1 | 31·0 | |
| 9·6 | | 37·6 | 44·2 | |
| 10·2 | | 43·8 | 59·9 | |
| 9·0 | | 50·1 | 42·1 | 9·0 |
| 9·6 | | 56·6 | 21·0 | |
| 9·2 | 57 | 4·6 | 31·1 | |
| 8·8 | | 13·6 | 49·8 | 8·0 |
| 10·1 | | 19·3 | 16·1 | |
| 9·4 | | 59·8 | 19·7 | |
| 10·2 | 58 | 20·3 | 52·1 | |
| 9·5 | | 22·3 | 44·1 | |
| 10·2 | | 24·8 | 15·2 | |
| 10·2 | | 28·8 | 43·0 | |
| 10·3 | | 40·3 | 36·0 | |
| 8·5 | | 54·1 | 0·8 | 8·5 |
| 10·1 | 59 | 18·8 | 4·2 | |
| 10·0 | | 24·8 | 59·0 | |
| 7·5 | | 49·3 | 8·0 | Gg |
| 8·4 | | 50·8 | 25·1 | 8·0 Gg |
| 10·1 | | 56·3 | 32·9 | |
| 10·0 | 0 | 21·3 | 18·0 | |
| 10·3 | | 52·3 | 40·2 | |
| 9·0 | | 58·8 | 32·6 | 9·0 |
| 9·0 | 1 | 4·3 | 18·9 | GS |
| 10·3 | | 19·8 | 41·8 | |
| 10·1 | | 34·3 | 39·0 | |
| 9·6 | | 34·8 | 27·2 | |
| 9·2 | | 36·8 | 17·8 | GSg |
| 9·8 | | 40·3 | 32·2 | |
| 8·8 | | 41·3 | 26·4 | 9·0 |
| 10·3 | | 42·3 | 12·0 | |
| 10·3 | | 51·3 | 55·0 | |
| 9·4 | 2 | 10·3 | 53·6 | |
| 9·6 | | 18·8 | 21·2 | |
| 9·6 | | 29·3 | 25·4 | |
| 9·0 | | 29·8 | 0·0 | |
| 9·5 | | 43·3 | 18·0 | |
| 10·3 | | 45·5 | 49·5 | |
| 9·6 | 3 | 0·3 | 22·6 | |
| 9·6 | | 0·3 | 30·5 | |
| 10·3 | | 3·3 | 6·0 | |
| 8·6 | | 14·8 | 9·4 | 8·0 |
| 9·4 | | 19·8 | 52·0 | |
| 10·3 | | 49·8 | 57·5 | |
| 8·6 | | 49·8 | 48·5 | |
| 9·0 | 4 | 1·8 | 3·2 | |
| 9·1 | | 17·3 | 17·0 | |
| 7·8 | | 19·8 | 34·9 | 7·5 GSg |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 5 | 50 | 24 | 0·4 |
| 6 | 0 | 24 | 0·0 |
| | | | − |
| | 10 | 24 | 0·4 |
| | 20 | 25 | 0·7 |
| | 30 | 23 | 1·1 |
| | 40 | 25 | 1·5 |
| | 50 | 26 | 1·8 |
| 7 | 0 | 26 | 2·2 |
| | 10 | 27 | 2·5 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 7 | 0 | 26 | 2·2 |
| | 10 | 27 | 2·5 |
| | 20 | 28 | 2·9 |
| | 30 | 28 | 3·2 |
| | 40 | 29 | 3·5 |
| | 50 | 30 | 3·9 |
| 8 | 0 | 31 | 4·2 |

**1141—1200.**

| | $7^{h.}$ | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·1 | 4 | 29·2 | 9·0 | |
| 10·2 | | 38·7 | 53·2 | |
| 9·6 | 5 | 31·2 | 51·6 | |
| 9·8 | | 36·2 | 3·5 | |
| 7·4 | | 51·2 | 7·9 | 7·0 GSt |
| 9·6 | 6 | 21·7 | 44·1 | 9·5 G |
| 9·5 | | 24·2 | 52·4 | 9·0 |
| 10·2 | | 45·7 | 3·5 | |
| 10·3 | | 54·7 | 58·5 | |
| 9·0 | 7 | 9·7 | 17·7 | |
| 10·0 | | 11·2 | 18·0 | |
| 9·0 | | 22·2 | 22·9 | 9·0 |
| 10·2 | | 29·2 | 14·1 | |
| 9·0 | | 55·2 | 33·8 | 9·0 |
| 10·0 | 8 | 36·4 | 0·5 | |
| 9·6 | | 38·2 | 24·3 | |
| 10·3 | | 38·3 | 45·0 | |
| 10·0 | 9 | 8·2 | 48·8 | |
| 10·3 | | 10·1 | 32·9 | |
| 10·3 | | 29·7 | 29·5 | |
| 10·2 | | 40·4 | 27·8 | |
| 10·0 | | 43·4 | 36·7 | |
| 8·4 | 10 | 8·4 | 19·9 | 9·0 |
| 9·6 | | 26·1 | 0·9 | 9·0 |
| 7·0 | | 30·4 | 16·5 | 7·0 GSg |
| 9·6 | | 34·9 | 40·9 | |
| 10·3 | | 49·1 | 40·9 | |
| 10·0 | | 51·5 | 14·8 | |
| 10·3 | | 59·9 | 17·7 | |
| 9·0 | 11 | 28·9 | 55·7 | 9·0 |
| 10·3 | | 29·9 | 7·3 | |
| 10·2 | | 31·9 | 20·9 | |
| 9·4 | | 55·6 | 39·2 | |
| 9·7 | 12 | 0·1 | 26·6 | |
| 9·7 | | 7·1 | 42·8 | |
| 9·0 | | 53·2 | 16·0 | |
| 9·4 | | 55·1 | 30·8 | |
| 9·4 | 13 | 48·6 | 29·6 | |
| 9·0 | 14 | 5·1 | 24·8 | |
| 8·6 | | 42·1 | 47·2 | 8·0 |
| 9·7 | 15 | 14·1 | 24·6 | |
| 8·0 | | 15·1 | 39·8 | 7·9 G |
| 8·7 | | 20·1 | 58·5 | |
| 9·6 | | 24·1 | 37·8 | |
| 9·3 | | 29·6 | 49·0 | |
| 9·6 | | 52·1 | 32·3 | |
| 7·6 | 16 | 8·1 | 7·2 | 7·8 GSg |
| 9·7 | 17 | 0·1 | 55·0 | |
| 6·9 | | 5·1 | 49·2 | 7·0 GSt |
| 9·7 | | 7·1 | 53·0 | |
| 7·6 | | 14·6 | 12·9 | GSg |
| 7·9 | | 27·6 | 32·7 | |
| 9·0 | | 52·1 | 27·0 | |
| 9·4 | | 57·6 | 39·7 | |
| 8·8 | 18 | 1·1 | 26·8 | |
| 8·6 | | 5·1 | 24·8 | |
| 9·0 | | 12·6 | 38·7 | |
| 8·8 | | 15·6 | 15·1 | 9·5 |
| 8·9 | | 16·6 | 3·5 | |
| 9·0 | | 39·6 | 25·4 | |

**1201—1260.**

| | $7^{h.}$ | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·0 | 18 | 41·6 | 30·0 | |
| 9·7 | | 50·1 | 30·4 | |
| 9·4 | 19 | 2·1 | 6·4 | |
| 8·8 | | 8·6 | 13·3 | 9·5 |
| 8·9 | | 20·1 | 2·6 | 9·0 |
| 9·0 | | 41·6 | 8·7 | 10·0 |
| 9·2 | 20 | 19·6 | 7·7 | |
| 9·7 | | 47·1 | 27·2 | |
| 9·2 | | 48·1 | 28·8 | |
| 9·3 | 21 | 3·6 | 51·5 | |
| 9·7 | | 11·6 | 47·1 | |
| 8·2 | | 23·1 | 51·2 | 8·0 |
| 9·0 | | 25·6 | 21·5 | |
| 9·7 | | 47·4 | 45·3 | |
| 9·6 | | 51·1 | 39·7 | |
| 9·7 | | 53·6 | 10·5 | |
| 9·6 | | 56·6 | 34·0 | |
| 8·8 | | 58·9 | 2·9 | |
| 9·6 | 22 | 1·6 | 52·7 | |
| 9·2 | | 16·1 | 41·0 | 8·8 |
| 9·6 | | 26·1 | 3·1 | |
| 9·2 | | 30·4 | 0·3 | |
| 9·0 | | 31·1 | 45·3 | |
| 9·7 | | 33·1 | 11·0 | |
| 9·7 | | 47·6 | 9·5 | |
| 9·2 | | 51·6 | 56·1 | |
| 9·0 | | 58·1 | 18·0 | |
| 9·6 | 23 | 33·1 | 41·9 | |
| 9·2 | | 39·1 | 13·9 | |
| 9·7 | | 52·1 | 30·8 | |
| 9·2 | 24 | 5·7 | 58·6 | |
| 8·8 | | 16·1 | 16·1 | 9·5 |
| 9·6 | | 38·6 | 39·6 | |
| 8·8 | | 40·1 | 21·4 | 9·5 |
| 9·7 | 25 | 48·6 | 44·1 | |
| 7·4 | | 55·1 | 48·9 | 7·0 GSt |
| 8·8 | 26 | 14·1 | 43·1 | 9·0 |
| 9·7 | | 48·6 | 28·8 | |
| 8·6 | 27 | 33·6 | 7·9 | 8·0 |
| 8·5 | | 37·0 | 58·0 | 8·5 |
| 9·7 | | 45·6 | 35·9 | |
| 8·4 | | 57·1 | 11·2 | 8·0 |
| 9·2 | 28 | 1·1 | 6·0 | |
| 9·2 | | 17·1 | 30·6 | |
| 8·4 | | 23·6 | 28·2 | |
| 8·3 | | 39·6 | 43·6 | 8·0 |
| 9·0 | | 40·6 | 18·6 | 9·0 G |
| 9·0 | | 52·1 | 19·4 | 8·2 G |
| 9·4 | 29 | 3·1 | 20·4 | |
| 7·6 | | 5·6 | 40·4 | 7·2 GSt |
| 9·4 | | 20·1 | 52·6 | |
| 9·4 | | 21·6 | 20·0 | |
| 9·6 | | 26·6 | 4·4 | |
| 9·6 | | 29·1 | 25·3 | |
| 9·6 | | 51·1 | 6·0 | |
| 9·2 | 30 | 0·1 | 27·0 | |
| 8·2 | | 20·1 | 6·2 | 8·5 |
| 9·6 | | 28·1 | 45·1 | |
| 8·7 | | 46·6 | 31·4 | |
| 9·2 | | 48·6 | 17·8 | |

**1261—1320.**

| | $7^{h.}$ | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8·8 | 30 | 49·1 | 40·0 | |
| 9·2 | 31 | 3·1 | 54·3 | |
| 8·9 | | 19·1 | 29·4 | |
| 9·7 | | 24·1 | 14·2 | |
| 9·7 | | 29·6 | 43·0 | |
| 9·7 | | 52·4 | 46·5 | |
| 9·6 | | 53·6 | 20·3 | |
| 9·6 | 32 | 0·1 | 1·4 | |
| 9·3 | | 1·6 | 51·7 | |
| 8·4 | | 30·1 | 16·6 | 8·2 |
| 9·0 | | 52·1 | 18·1 | 8·2 |
| 9·2 | | 52·1 | 54·2 | |
| 8·8 | 33 | 10·1 | 33·6 | |
| 9·6 | | 21·1 | 18·6 | |
| 9·3 | | 31·1 | 4·1 | |
| 9·6 | | 35·6 | 25·0 | |
| 7·7 | | 35·9 | 1·2 | 7·2 GSt |
| 8·6 | | 46·1 | 24·6 | 8·8 |
| 9·4 | 34 | 9·1 | 46·2 | |
| 9·3 | | 9·1 | 37·0 | |
| 9·4 | | 15·1 | 16·3 | |
| 8·7 | | 28·6 | 46·5 | |
| 9·3 | | 35·1 | 30·7 | |
| 8·9 | | 47·1 | 16·0 | |
| 9·0 | 35 | 13·1 | 18·1 | 9·5 |
| 9·0 | | 48·6 | 7·3 | 9·0 |
| 9·0 | 36 | 1·1 | 38·5 | |
| 9·4 | | 20·1 | 45·7 | |
| 9·4 | | 44·1 | 1·8 | |
| 9·6 | | 49·1 | 9·3 | |
| 9·2 | | 50·1 | 2·3 | |
| 9·2 | | 55·1 | 42·2 | |
| 9·4 | | 59·1 | 43·1 | |
| 9·4 | 37 | 0·6 | 7·7 | |
| 9·7 | | 20·1 | 24·2 | |
| 9·3 | | 31·6 | 40·0 | |
| 9·7 | | 54·1 | 41·9 | |
| 9·3 | | 56·1 | 49·5 | |
| 9·6 | 38 | 10·1 | 28·1 | |
| 9·4 | | 17·1 | 14·7 | |
| 9·0 | 39 | 35·6 | 40·4 | |
| 9·0 | | 41·1 | 43·5 | |
| 9·0 | 40 | 21·1 | 26·0 | 9·0 |
| 9·7 | | 22·6 | 14·1 | |
| 7·2 | | 31·6 | 56·0 | 6·5 GSct |
| 9·6 | | 33·6 | 51·6 | |
| 9·7 | | 43·6 | 13·1 | |
| 9·2 | 41 | 4·1 | 37·2 | 9·5 |
| 8·3 | | 27·1 | 28·2 | 8·5 |
| 9·4 | | 34·1 | 50·8 | |
| 8·6 | | 54·6 | 38·6 | 8·8 |
| 9·4 | | 57·6 | 39·9 | |
| 9·7 | 42 | 2·4 | 59·9 | |
| 9·6 | | 28·6 | 42·9 | |
| 8·8 | | 29·1 | 59·1 | 9·0 |
| 8·9 | | 35·1 | 47·0 | |
| 9·2 | | 45·1 | 48·1 | |
| 9·7 | 43 | 13·6 | 19·0 | |
| 9·4 | | 16·1 | 16·8 | |
| 10·2 | | 24·6 | 7·3 | |

**1321—1380.**

| | $7^{h.}$ | | −57° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·0 | 43 | 32·1 | 7·6 | |
| 10·0 | 44 | 11·1 | 4·9 | |
| 10·2 | | 19·6 | 5·5 | |
| 8·6 | | 56·6 | 40·7 | 8·5 |
| 10·2 | 45 | 6·1 | 53·9 | |
| 9·2 | | 58·6 | 15·8 | |
| 9·6 | 46 | 0·1 | 20·2 | |
| 10·0 | | 46·1 | 44·3 | |
| 9·8 | | 57·6 | 16·8 | |
| 9·8 | 47 | 43·2 | 40·8 | |
| 10·2 | 48 | 40·2 | 41·2 | |
| 9·2 | 49 | 9·7 | 32·6 | 9·0 |
| 10·2 | | 32·2 | 21·6 | |
| 9·4 | | 53·7 | 25·7 | |
| 9·8 | | 59·7 | 43·6 | |
| 9·5 | 50 | 1·7 | 49·3 | |
| 10·2 | | 10·2 | 10·0 | |
| 10·0 | | 17·2 | 13·8 | |
| 10·2 | | 17·2 | 49·5 | |
| 9·8 | | 20·2 | 30·1 | |
| 10·0 | | 43·7 | 13·6 | |
| 9·4 | | 59·7 | 32·9 | |
| 8·5 | 51 | 2·9 | 1·4 | 9·0 |
| 9·4 | | 16·2 | 40·3 | 9·0 |
| 9·4 | | 20·7 | 43·8 | |
| 8·4 | | 28·2 | 14·7 | 9·0 |
| 9·4 | 52 | 10·2 | 22·6 | |
| 10·2 | | 28·2 | 18·9 | |
| 8·5 | | 38·2 | 15·1 | 9·0 |
| 9·4 | | 38·2 | 45·6 | |
| 9·6 | | 45·7 | 26·9 | |
| 9·4 | | 58·7 | 53·4 | |
| 10·0 | 53 | 12·3 | 53·0 | |
| 8·0 | 54 | 20·8 | 5·8 | 7·5 GSt |
| 9·8 | | 29·3 | 39·8 | |
| 9·4 | | 49·3 | 44·3 | |
| 9·8 | 55 | 4·8 | 4·1 | |
| 7·0 | | 5·8 | 8·5 | 7·5 GSt |
| 10·2 | | 47·8 | 41·1 | |
| 9·5 | 56 | 3·3 | 20·1 | |
| 9·4 | | 11·3 | 7·1 | 9·5 |
| 9·8 | | 31·8 | 48·0 | |
| 9·4 | | 46·8 | 48·0 | |
| 9·4 | | 57·8 | 20·5 | |
| 9·5 | 57 | 5·3 | 4·6 | |
| 10·2 | | 12·2 | 27·6 | |
| 10·0 | | 17·8 | 21·9 | |
| 9·0 | | 27·3 | 25·6 | |
| 9·8 | | 28·8 | 12·7 | |
| 10·2 | 58 | 16·8 | 41·7 | |
| 8·4 | | 19·8 | 6·2 | 8·0 |
| 9·5 | | 45·8 | 25·6 | |
| 7·8 | | 55·8 | 46·2 | 8·0 |
| 10·2 | | 56·7 | 0·9 | |
| 10·2 | 59 | 4·8 | 42·6 | |
| 9·8 | | 15·8 | 7·7 | |
| 9·4 | | 19·8 | 53·0 | |
| 9·4 | | 21·3 | 24·0 | |
| 10·0 | | 23·8 | 31·1 | |
| 10·2 | | 29·8 | 16·7 | |



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### 1381—1440.

| mag. | 7h.–8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 59 | 39·3 | 37·4 | |
| 8·9 | | 50·8 | 29·1 | 9·5 |
| 9·6 | 0 | 3·9 | 57·7 | |
| 9·2 | | 13·8 | 17·9 | 9·5 G |
| 10·2 | | 23·8 | 32·8 | |
| 10·2 | | 55·2 | 3·1 | |
| 9·4 | | 56·3 | 10·0 | 8·5 G |
| 10·2 | 1 | 0·0 | 1·0 | |
| 9·6 | | 9·8 | 18·5 | |
| 9·4 | | 47·3 | 43·2 | |
| 8·4 | | 51·8 | 39·4 | 9·0 |
| 10·2 | 2 | 5·8 | 33·2 | |
| 8·2 | | 18·8 | 25·3 | 8·5 |
| 9·5 | | 18·8 | 26·0 | |
| 9·4 | | 41·0 | 2·5 | |
| 10·2 | | 51·3 | 30·9 | |
| 10·0 | | 55·3 | 31·1 | |
| 8·9 | 3 | 19·3 | 53·7 | 9·5 |
| 10·0 | | 40·3 | 42·6 | |
| 9·6 | 4 | 10·8 | 45·3 | |
| 10·0 | | 41·3 | 43·1 | |
| 9·5 | | 42·3 | 22·9 | |
| 9·8 | 5 | 56·3 | 6·9 | |
| 10·2 | | 59·8 | 48·5 | |
| 10·2 | 6 | 6·8 | 12·6 | |
| 10·0 | | 16·3 | 46·1 | |
| 10·2 | | 34·8 | 47·0 | |
| 10·2 | | 41·3 | 32·4 | |
| 9·5 | | 45·3 | 43·1 | |
| 9·8 | | 47·3 | 23·6 | |
| 8·3 | | 54·8 | 36·9 | 8·8 |
| 9·4 | | 55·3 | 1·2 | 9·5 |
| 10·0 | | 55·3 | 14·3 | |
| 10·2 | | 55·8 | 48·0 | |
| 9·4 | 7 | 26·8 | 42·7 | |
| 10·0 | | 29·8 | 5·3 | |
| 9·8 | | 45·8 | 35·9 | |
| 10·2 | | 53·0 | 28·3 | |
| 9·4 | | 53·3 | 37·1 | |
| 10·0 | | 54·3 | 10·2 | |
| 10·2 | 8 | 19·3 | 56·0 | |
| 9·2 | | 24·3 | 16·2 | |
| 9·4 | | 29·3 | 22·6 | 9·0 |
| 10·0 | | 29·8 | 42·8 | |
| 9·8 | | 30·8 | 28·0 | |
| 9·5 | | 48·8 | 46·6 | |
| 10·0 | | 59·8 | 12·4 | |
| 10·0 | 9 | 2·8 | 5·5 | |
| 10·0 | | 13·8 | 8·2 | |
| 9·4 | | 22·8 | 31·7 | |
| 9·4 | | 30·8 | 36·7 | |
| 9·8 | | 30·8 | 23·7 | |
| 10·0 | | 38·3 | 6·2 | |
| 9·2 | | 57·8 | 54·7 | |
| 9·5 | 10 | 6·8 | 3·1 | |
| 9·4 | | 11·3 | 17·2 | 9·5 G |
| 9·5 | | 11·8 | 40·9 | |
| 10·0 | | 15·3 | 24·0 | |
| 9·8 | 11 | 9·3 | 20·9 | |
| 8·8 | | 9·8 | 23·2 | 8·2 |

### 1441—1500.

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 11 | 20·3 | 18·2 | |
| 10·0 | | 31·8 | 17·3 | |
| 9·4 | | 38·8 | 17·3 | G |
| 9·2 | | 45·3 | 43·3 | |
| 10·2 | | 49·3 | 11·6 | |
| 9·4 | | 49·8 | 59·0 | |
| 8·6 | | 59·3 | 46·9 | 8·5 G |
| 10·2 | 12 | 4·3 | 44·6 | |
| 10·2 | | 6·3 | 3·0 | |
| 9·8 | | 11·3 | 15·0 | |
| 9·8 | | 26·3 | 53·3 | |
| 9·6 | | 29·8 | 45·0 | |
| 9·5 | | 31·3 | 24·9 | |
| 10·2 | | 35·3 | 9·9 | |
| 10·2 | | 49·8 | 28·8 | |
| 9·5 | | 50·3 | 56·9 | |
| 9·0 | | 51·3 | 14·2 | |
| 10·0 | 13 | 1·8 | 20·5 | |
| 10·2 | | 2·2 | 1·3 | |
| 9·6 | | 24·3 | 43·7 | |
| 10·0 | | 59·8 | 46·8 | |
| 8·8 | 14 | 10·8 | 4·5 | 8·5 Gg |
| 9·0 | | 11·8 | 14·3 | 9·5 |
| 8·6 | | 29·3 | 5·9 | 8·5 Gg |
| 9·8 | | 37·3 | 13·5 | |
| 10·0 | | 39·8 | 59·4 | |
| 9·5 | | 44·8 | 39·5 | |
| 9·5 | | 46·3 | 33·4 | |
| 9·0 | | 48·3 | 30·5 | |
| 9·5 | | 58·3 | 55·8 | |
| 10·0 | 15 | 0·8 | 9·1 | |
| 9·8 | | 4·8 | 10·0 | |
| 9·5 | | 42·1 | 0·7 | |
| 9·4 | | 52·5 | 29·2 | |
| 10·2 | | 54·3 | 58·4 | |
| 10·1 | 16 | 0·8 | 20·1 | |
| 10·0 | | 20·2 | 19·8 | |
| 10·1 | | 25·8 | 1·9 | |
| 9·2 | | 26·0 | 23·9 | 9·5 |
| 10·0 | | 39·2 | 11·1 | |
| 10·1 | | 52·2 | 11·1 | |
| 10·1 | 17 | 9·8 | 16·0 | |
| 8·7 | | 12·2 | 16·4 | |
| 8·6 | | 12·2 | 16·6 | |
| 9·6 | | 33·2 | 35·9 | |
| 9·0 | | 40·7 | 54·1 | |
| 10·1 | 18 | 0·7 | 49·4 | |
| 10·1 | | 10·7 | 33·4 | |
| 10·0 | | 23·7 | 11·0 | |
| 6·8 | | 25·2 | 34·5 | 6·5 GSct |
| 8·7 | | 44·2 | 43·0 | 7·5 G |
| 9·4 | | 53·7 | 31·9 | |
| 10·0 | | 54·2 | 31·1 | |
| 9·8 | 19 | 30·2 | 35·8 | |
| 10·1 | | 45·1 | 8·2 | |
| 8·0 | | 58·7 | 29·2 | 7·5 GSg |
| 9·4 | 20 | 0·7 | 40·4 | |
| 10·1 | | 11·2 | 32·0 | |
| 10·1 | | 11·7 | 7·4 | |
| 9·7 | | 39·2 | 29·1 | |

### 1501—1560.

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 20 | 40·2 | 4·0 | |
| 9·4 | | 45·2 | 14·1 | |
| 10·0 | | 55·7 | 28·7 | |
| 10·1 | | 56·7 | 49·2 | |
| 9·6 | 21 | 29·7 | 23·0 | |
| 9·8 | | 32·2 | 20·1 | |
| 10·1 | | 42·2 | 55·2 | |
| 10·1 | | 50·2 | 24·4 | |
| 10·1 | | 50·7 | 34·5 | |
| 9·8 | 22 | 14·7 | 25·8 | |
| 8·7 | | 17·7 | 5·7 | |
| 9·8 | | 33·2 | 9·9 | |
| 7·1 | | 41·2 | 43·4 | 7·0 GSt |
| 9·7 | | 48·2 | 2·3 | |
| 9·8 | 23 | 4·7 | 39·1 | |
| 10·0 | | 6·7 | 50·3 | |
| 9·6 | | 7·2 | 26·0 | |
| 9·6 | | 21·2 | 8·2 | |
| 9·7 | | 21·2 | 6·3 | |
| 8·6 | | 21·7 | 29·5 | 9·0 |
| 9·0 | | 32·2 | 52·5 | |
| 9·6 | | 43·7 | 30·2 | |
| 9·7 | | 45·2 | 31·2 | |
| 9·4 | | 46·2 | 33·0 | |
| 9·0 | | 46·2 | 25·7 | 9·5 |
| 9·6 | | 47·7 | 51·7 | |
| 9·6 | 24 | 5·1 | 58·1 | |
| 10·0 | | 11·2 | 1·3 | |
| 9·6 | | 30·7 | 52·0 | |
| 9·6 | | 40·2 | 17·0 | |
| 9·7 | | 59·7 | 33·9 | |
| 8·7 | 25 | 8·7 | 19·7 | 9·2 |
| 10·0 | | 37·2 | 26·6 | |
| 8·4 | | 39·2 | 23·5 | 8·8 |
| 8·4 | | 49·7 | 57·3 | 8·0 |
| 10·1 | | 57·2 | 23·9 | |
| 8·7 | 26 | 6·2 | 25·0 | 9·0 |
| 8·7 | | 7·2 | 44·1 | 9·5 |
| 10·1 | | 26·7 | 33·6 | |
| 9·4 | | 49·7 | 46·4 | |
| 9·7 | | 55·2 | 8·7 | |
| 10·0 | 27 | 0·2 | 16·1 | |
| 10·1 | | 8·2 | 17·7 | |
| 10·1 | | 10·8 | 35·6 | |
| 10·1 | | 12·7 | 36·2 | |
| 9·3 | | 17·7 | 13·8 | |
| 10·1 | | 20·2 | 7·7 | |
| 9·6 | | 28·2 | 38·1 | |
| 9·4 | | 39·7 | 48·8 | |
| 9·3 | | 42·2 | 13·5 | |
| 9·8 | | 49·7 | 5·5 | |
| 9·7 | | 51·2 | 7·1 | |
| 9·6 | | 59·2 | 36·2 | |
| 8·5 | 28 | 18·2 | 24·9 | 9·0 |
| 9·8 | | 24·2 | 14·1 | |
| 10·0 | | 24·7 | 6·1 | |
| 9·6 | | 40·7 | 5·3 | |
| 9·4 | 29 | 1·7 | 44·7 | |
| 9·7 | | 9·0 | 1·1 | |
| 9·6 | | 11·2 | 25·7 | |

### 1561—1620.

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·1 | 29 | 15·2 | 19·1 | |
| 9·8 | | 17·7 | 6·6 | |
| 10·1 | | 27·2 | 49·9 | |
| 9·2 | | 33·2 | 27·7 | 9·5 |
| 9·4 | | 47·2 | 53·7 | |
| 10·0 | | 53·2 | 47·3 | |
| 9·4 | 30 | 0·2 | 27·1 | |
| 9·4 | | 6·7 | 28·1 | 9·0 |
| 9·7 | | 7·7 | 43·5 | |
| 9·4 | | 25·7 | 43·1 | |
| 10·1 | | 27·7 | 24·7 | |
| 9·4 | | 28·2 | 18·0 | |
| 8·9 | | 29·7 | 27·1 | 8·5 |
| 9·8 | | 41·2 | 18·9 | |
| 9·6 | | 41·7 | 23·3 | |
| 10·1 | | 51·7 | 35·3 | |
| 9·8 | | 54·7 | 19·9 | |
| 10·0 | 31 | 15·2 | 33·1 | |
| 9·4 | | 16·7 | 56·5 | |
| 9·7 | | 19·2 | 14·3 | |
| 9·4 | | 21·2 | 6·7 | 9·5 |
| 9·6 | | 23·2 | 48·0 | |
| 9·8 | | 25·2 | 36·8 | |
| 10·1 | | 33·2 | 53·2 | |
| 10·0 | | 40·7 | 12·2 | |
| 9·8 | | 47·2 | 50·9 | |
| 9·6 | | 47·2 | 13·1 | |
| 10·1 | | 48·3 | 1·6 | |
| 9·2 | | 54·2 | 6·8 | |
| 5·6 | 32 | 20·7 | 47·5 | 6·0 GSct |
| 6·8 | | 22·2 | 34·5 | 5·5 GSt |
| 9·4 | | 33·2 | 8·4 | |
| 10·1 | | 35·7 | 4·8 | |
| 9·3 | | 41·7 | 48·1 | |
| 10·0 | | 45·2 | 0·8 | |
| 9·7 | | 45·7 | 33·0 | G |
| 9·4 | | 52·2 | 48·8 | 9·0 |
| 9·6 | | 59·7 | 3·2 | |
| 9·8 | 33 | 13·7 | 26·7 | |
| 10·0 | | 17·7 | 20·0 | |
| 10·1 | | 19·7 | 50·7 | |
| 9·0 | | 31·2 | 47·0 | 9·0 |
| 10·0 | | 38·2 | 17·4 | |
| 10·1 | | 39·2 | 28·8 | |
| 10·1 | | 42·2 | 23·2 | |
| 10·0 | | 51·7 | 20·8 | |
| 10·1 | | 58·7 | 17·2 | |
| 10·0 | 34 | 1·2 | 38·8 | |
| 10·0 | | 1·2 | 0·5 | |
| 10·0 | | 3·2 | 54·8 | |
| 9·8 | | 7·2 | 41·3 | |
| 10·1 | | 11·2 | 38·0 | |
| 9·8 | | 15·2 | 4·1 | |
| 9·4 | | 41·2 | 31·0 | |
| 10·1 | | 51·2 | 25·2 | |
| 9·8 | 35 | 5·2 | 14·8 | |
| 10·0 | | 6·7 | 57·1 | |
| 9·6 | | 9·2 | 11·6 | |
| 10·1 | | 21·7 | 56·0 | |
| 10·1 | | 30·2 | 30·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 50 | 30 | 3·9 |
| 8 | 0 | 31 | 4·2 |
| | 10 | 33 | 4·5 |
| | 20 | 34 | 4·8 |
| | 30 | 35 | 5·1 |
| | 40 | 37 | 5·4 |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 8 | 30 | 35 | 5.1 |
| | 40 | 37 | 5.4 |
| | 50 | 38 | 5.6 |
| 9 | 0 | 40 | 5.9 |
| | 10 | 41 | 6.2 |

**1621—1680.**

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.4 | 35 | 30.7 | 13.0 | |
| 9.8 | | 45.2 | 45.7 | |
| 9.8 | | 58.7 | 0.0 | |
| 9.6 | 36 | 1.7 | 46.4 | |
| 10.1 | | 7.7 | 22.1 | |
| 9.7 | | 10.7 | 31.4 | |
| 10.1 | | 24.7 | 28.8 | |
| 9.8 | | 27.7 | 48.4 | |
| 10.0 | | 30.7 | 30.4 | |
| 9.6 | | 31.2 | 30.0 | |
| 9.3 | | 32.2 | 3.4 | |
| 10.1 | | 32.7 | 48.1 | |
| 9.6 | | 33.7 | 48.7 | |
| 9.4 | | 39.2 | 6.8 | |
| 9.4 | | 52.2 | 24.9 | |
| 9.6 | | 56.7 | 42.4 | |
| 9.6 | 37 | 4.7 | 30.7 | |
| 9.0 | | 7.2 | 57.3 | 9.0 |
| 9.4 | | 8.7 | 36.1 | |
| 10.1 | | 10.7 | 11.2 | |
| 9.8 | | 22.7 | 28.0 | |
| 9.2 | | 25.2 | 55.9 | 8.5 |
| 9.3 | | 38.7 | 57.7 | |
| 7.2 | | 40.7 | 5.9 | 7.0 GStr |
| 9.6 | | 43.7 | 26.7 | |
| 10.1 | | 55.2 | 57.4 | |
| 10.0 | 38 | 0.7 | 52.4 | |
| 8.5 | | 5.2 | 1.9 | 9.0 |
| 9.4 | | 30.4 | 57.1 | |
| 9.6 | | 30.7 | 59.9 | |
| 9.8 | | 35.6 | 0.9 | |
| 9.4 | | 41.2 | 55.2 | |
| 10.1 | | 43.6 | 8.1 | |
| 10.1 | | 43.7 | 31.9 | |
| 9.3 | | 46.7 | 1.6 | |
| 9.1 | 39 | 42.7 | 7.7 | 9.0 |
| 9.7 | | 50.2 | 1.0 | |
| 10.1 | | 50.7 | 49.9 | |
| 9.6 | | 52.2 | 52.6 | |
| 10.0 | 40 | 2.2 | 15.8 | |
| 9.6 | | 6.2 | 52.7 | |
| 9.4 | | 11.0 | 58.9 | |
| 9.4 | | 14.8 | 35.1 | |
| 9.8 | | 16.3 | 43.8 | |
| 9.6 | | 21.8 | 50.1 | |
| 9.8 | | 23.3 | 36.3 | |
| 9.8 | | 39.8 | 18.0 | |
| 10.0 | | 39.8 | 45.1 | |
| 9.7 | | 49.3 | 52.6 | |
| 9.6 | 41 | 4.1 | 59.2 | |
| 10.1 | | 4.3 | 12.1 | |
| 9.4 | | 5.3 | 26.4 | |
| 10.1 | | 6.8 | 28.0 | |
| 10.0 | | 10.3 | 8.6 | |
| 9.4 | | 10.3 | 41.9 | |
| 10.0 | | 11.8 | 42.0 | |
| 10.1 | | 13.3 | 52.7 | |
| 8.4 | | 18.8 | 18.9 | |
| 10.1 | | 23.3 | 36.1 | |
| 10.1 | | 39.3 | 29.4 | |

**1681—1740.**

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.0 | 41 | 40.3 | 7.0 | |
| 9.8 | | 43.8 | 22.1 | |
| 10.1 | | 48.3 | 7.8 | |
| 10.0 | | 50.3 | 17.2 | |
| 9.6 | | 53.3 | 8.8 | |
| 10.1 | | 56.3 | 54.1 | |
| 9.4 | | 57.8 | 26.7 | |
| 8.7 | | 58.3 | 53.4 | 9.0 |
| 9.6 | 42 | 0.3 | 16.5 | |
| 8.9 | | 21.8 | 11.5 | |
| 10.0 | | 24.3 | 36.3 | |
| 10.1 | | 26.3 | 45.4 | |
| 10.1 | | 29.8 | 12.1 | |
| 10.1 | | 32.3 | 38.7 | |
| 10.1 | | 38.3 | 48.1 | |
| 9.8 | | 45.8 | 48.0 | |
| 8.9 | | 49.1 | 17.1 | |
| 8.9 | 43 | 0.6 | 47.3 | |
| 9.4 | | 5.1 | 10.5 | |
| 10.1 | | 16.1 | 10.9 | |
| 9.4 | | 20.1 | 30.7 | 9.5 |
| 9.8 | | 25.1 | 9.5 | |
| 10.0 | | 30.1 | 35.2 | |
| 9.8 | | 31.6 | 8.7 | |
| 10.1 | | 39.1 | 38.0 | |
| 10.1 | | 55.1 | 10.5 | |
| 10.1 | | 56.1 | 33.6 | |
| 10.1 | | 57.8 | 57.2 | |
| 8.3 | 44 | 0.6 | 37.0 | 8.2 G |
| 9.1 | | 1.6 | 20.0 | |
| 9.8 | | 6.1 | 4.6 | |
| 10.1 | | 11.1 | 36.4 | |
| 10.0 | | 14.6 | 24.6 | |
| 8.8 | | 20.1 | 12.0 | |
| 9.4 | | 20.6 | 52.9 | |
| 10.1 | | 25.6 | 13.0 | |
| 9.4 | | 27.6 | 29.8 | |
| 9.4 | | 36.3 | 59.9 | |
| 9.8 | | 38.6 | 28.8 | |
| 10.1 | | 47.6 | 48.8 | |
| 9.4 | | 49.1 | 35.9 | 9.0 |
| 9.7 | | 53.1 | 31.7 | |
| 9.7 | | 55.1 | 45.9 | |
| 10.1 | 45 | 3.6 | 9.2 | |
| 8.5 | | 5.1 | 11.8 | 8.0 |
| 9.6 | | 9.6 | 58.4 | |
| 9.2 | | 10.1 | 35.1 | 9.5 |
| 8.4 | | 22.6 | 45.9 | 7.5 G |
| 10.0 | | 25.6 | 21.7 | |
| 10.1 | | 33.4 | 37.4 | |
| 9.8 | | 33.7 | 59.2 | |
| 8.9 | | 36.9 | 1.5 | 8.0 |
| 9.4 | | 45.9 | 8.1 | |
| 8.8 | | 58.9 | 7.3 | 9.0 |
| 10.1 | | 59.9 | 18.6 | |
| 8.4 | 46 | 4.9 | 12.6 | 8.5 |
| 9.6 | | 7.9 | 45.6 | |
| 9.4 | | 9.9 | 14.9 | |
| 9.8 | | 12.4 | 12.4 | |
| 9.8 | | 15.4 | 54.5 | |

**1741—1800.**

| mag. | 8h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.1 | 46 | 30.4 | 10.1 | |
| 10.1 | | 30.4 | 32.9 | |
| 9.6 | | 48.9 | 42.4 | |
| 9.6 | | 51.9 | 5.0 | |
| 9.6 | | 59.9 | 18.0 | |
| 10.1 | 47 | 7.4 | 55.0 | |
| 10.1 | | 8.9 | 38.5 | |
| 10.1 | | 10.4 | 18.4 | |
| 9.8 | | 13.4 | 33.6 | |
| 10.0 | | 28.9 | 53.0 | |
| 9.6 | | 32.9 | 41.8 | |
| 9.8 | | 49.9 | 56.6 | |
| 8.9 | | 52.4 | 17.9 | 8.5 |
| 10.0 | | 56.4 | 6.8 | |
| 10.0 | 48 | 6.4 | 7.2 | |
| 9.4 | | 8.9 | 42.9 | |
| 9.6 | | 20.4 | 9.3 | |
| 10.1 | | 22.4 | 36.3 | |
| 6.4 | | 25.4 | 9.8 | 6.2 GSctr |
| 10.1 | | 25.4 | 11.2 | |
| 9.6 | | 28.9 | 42.0 | |
| 10.0 | | 32.9 | 38.5 | |
| 8.2 | | 39.4 | 53.7 | 8.5 |
| 9.6 | | 40.4 | 39.7 | |
| 9.1 | | 40.4 | 2.7 | 9.0 |
| 9.1 | | 51.9 | 36.8 | |
| 8.6 | | 52.4 | 4.4 | 9.0 |
| 9.2 | | 56.9 | 4.8 | |
| 9.0 | 49 | 4.4 | 45.8 | |
| 9.1 | | 5.4 | 4.0 | 9.5 |
| 9.2 | | 9.4 | 15.8 | |
| 8.8 | | 19.9 | 41.0 | |
| 9.6 | | 38.4 | 12.9 | |
| 9.4 | | 40.9 | 11.6 | 9.5 |
| 9.3 | | 48.4 | 28.0 | |
| 9.4 | 50 | 11.9 | 17.1 | |
| 8.6 | | 13.4 | 16.6 | 9.5 |
| 9.6 | | 26.4 | 12.8 | |
| 9.6 | | 28.4 | 53.0 | |
| 9.6 | | 45.4 | 30.3 | |
| 9.2 | | 59.9 | 15.1 | |
| 9.2 | 51 | 2.4 | 13.3 | |
| 9.6 | | 31.9 | 13.2 | |
| 9.3 | | 34.4 | 6.3 | |
| 9.6 | | 37.4 | 48.4 | |
| 9.6 | | 39.4 | 42.5 | |
| 8.6 | | 39.4 | 17.0 | 9.0 |
| 9.2 | | 45.4 | 36.0 | |
| 9.6 | | 45.4 | 31.5 | |
| 7.1 | | 45.4 | 45.7 | 7.0 GSctr |
| 9.6 | | 48.4 | 55.9 | |
| 9.0 | 52 | 9.4 | 17.1 | |
| 9.6 | | 12.0 | 3.0 | |
| 9.6 | | 12.4 | 31.2 | |
| 9.4 | | 13.4 | 58.8 | |
| 9.6 | | 44.4 | 41.6 | |
| 9.6 | 53 | 12.4 | 7.3 | |
| 9.6 | | 19.6 | 37.4 | |
| 9.4 | | 43.4 | 32.2 | |
| 9.1 | | 56.9 | 59.9 | |

**1801—1860.**

| mag. | 8h.—9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.6 | 54 | 14.4 | 33.1 | |
| 9.2 | | 19.9 | 6.4 | |
| 9.6 | | 28.2 | 30.3 | |
| 9.6 | | 31.9 | 38.0 | |
| 9.2 | | 38.4 | 5.7 | 9.0 |
| 9.6 | | 49.8 | 44.0 | |
| 8.5 | | 50.9 | 53.0 | |
| 9.0 | | 55.5 | 59.4 | |
| 9.6 | | 56.2 | 53.0 | |
| 9.4 | | 56.9 | 30.4 | |
| 9.4 | 55 | 3.4 | 12.5 | |
| 9.6 | | 7.4 | 53.7 | |
| 9.1 | | 16.4 | 20.2 | |
| 9.0 | | 29.9 | 44.5 | |
| 9.2 | | 47.9 | 49.2 | |
| 9.2 | | 59.4 | 17.9 | |
| 9.2 | 56 | 3.4 | 19.2 | |
| 9.6 | | 18.4 | 2.9 | |
| 9.6 | | 36.2 | 29.6 | |
| 9.0 | | 37.4 | 18.2 | 9.0 |
| 9.6 | | 52.2 | 58.0 | |
| 8.0 | | 54.9 | 46.4 | |
| 9.2 | 57 | 7.8 | 45.0 | |
| 8.6 | | 13.4 | 26.9 | 9.0 |
| 8.8 | | 33.9 | 25.6 | 8.5 |
| 9.6 | | 40.9 | 41.0 | |
| 9.6 | | 42.2 | 2.8 | |
| 9.0 | | 56.9 | 8.8 | |
| 9.3 | 58 | 1.9 | 32.4 | |
| 9.4 | | 26.4 | 11.3 | 9.0 |
| 9.6 | | 29.4 | 31.0 | |
| 9.2 | | 37.9 | 39.9 | |
| 9.4 | | 38.9 | 40.4 | |
| 9.4 | | 44.4 | 4.4 | |
| 9.1 | | 58.4 | 30.0 | |
| 9.2 | | 59.9 | 32.2 | |
| 8.8 | 59 | 2.4 | 17.0 | 9.5 |
| 9.2 | | 8.9 | 10.6 | 9.5 |
| 9.4 | | 13.4 | 51.3 | |
| 9.3 | | 13.4 | 27.3 | |
| 8.8 | | 42.9 | 54.0 | 8.5 |
| 9.4 | | 47.9 | 15.8 | |
| 9.2 | | 47.9 | 42.2 | |
| 9.6 | | 50.9 | 55.7 | |
| 9.4 | | 52.4 | 8.8 | 9.0 |
| 9.4 | | 59.4 | 9.0 | |
| 9.6 | 0 | 1.4 | 33.2 | |
| 8.1 | | 3.4 | 16.2 | 8.5 |
| 9.6 | | 8.7 | 36.1 | |
| 9.6 | | 13.4 | 6.1 | |
| 9.2 | | 21.9 | 35.2 | |
| 9.6 | | 23.0 | 57.2 | |
| 9.4 | | 23.4 | 25.8 | |
| 9.4 | | 52.7 | 44.2 | |
| 9.6 | 1 | 3.4 | 17.6 | |
| 9.6 | | 6.9 | 42.7 | |
| 8.8 | | 11.4 | 22.9 | 8.7 |
| 9.0 | | 11.4 | 10.1 | 9.5 |
| 7.4 | | 28.4 | 21.2 | 7.0 GSgt |
| 9.6 | | 29.0 | 35.6 | |



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## 1861—1920.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 1 | 30·4 | 17·4 | |
| 9·3 | | 39·9 | 0·6 | |
| 9·4 | 2 | 8·1 | 20·9 | |
| 9·4 | | 14·6 | 15·2 | |
| 9·6 | | 20·6 | 36·1 | |
| 9·4 | | 27·1 | 2·3 | 10·0 |
| 9·6 | | 43·3 | 0·4 | |
| 9·6 | | 58·6 | 28·9 | |
| 9·6 | 3 | 13·6 | 5·6 | |
| 9·1 | | 19·6 | 48·3 | |
| 9·4 | | 24·6 | 3·2 | |
| 9·2 | | 28·1 | 56·9 | |
| 9·4 | | 31·1 | 8·4 | |
| 9·2 | | 31·1 | 55·2 | |
| 9·2 | | 34·6 | 38·2 | |
| 9·2 | | 37·1 | 56·9 | |
| 9·6 | | 39·6 | 43·6 | |
| 8·6 | 4 | 8·1 | 55·2 | G |
| 9·4 | | 10·6 | 48·1 | |
| 9·6 | | 10·6 | 40·4 | |
| 9·6 | | 15·6 | 31·1 | |
| 8·8 | | 20·6 | 13·6 | |
| 9·6 | | 40·1 | 38·1 | |
| 9·2 | | 41·1 | 24·6 | |
| 7·6 | | 44·6 | 37·4 | 7·0 GS |
| 8·4 | | 48·6 | 3·0 | 8·0 |
| 9·2 | | 49·6 | 32·7 | |
| 9·2 | | 52·6 | 10·4 | |
| 8·8 | | 53·6 | 38·4 | |
| 9·3 | 5 | 9·1 | 25·3 | |
| 9·4 | | 13·6 | 39·3 | |
| 8·6 | | 22·1 | 48·9 | 8·0 G |
| 9·1 | | 22·6 | 45·0 | |
| 9·6 | | 32·6 | 12·5 | |
| 9·6 | | 34·0 | 0·1 | |
| 9·3 | | 36·1 | 51·9 | |
| 9·6 | | 39·6 | 56·8 | |
| 9·0 | | 39·6 | 21·5 | |
| 9·3 | | 43·6 | 28·0 | |
| 9·2 | | 47·6 | 20·8 | |
| 9·4 | | 50·6 | 50·1 | |
| 9·0 | 6 | 6·1 | 36·1 | |
| 9·4 | | 28·6 | 18·2 | |
| 9·2 | | 30·1 | 57·0 | 9·0 |
| 8·8 | | 56·1 | 43·9 | 8·5 |
| 9·0 | | 59·8 | 1·0 | 10·0 |
| 9·1 | 7 | 6·0 | 1·7 | |
| 8·8 | | 8·8 | 1·2 | 9·2 |
| 8·2 | | 29·1 | 9·2 | 8·5 |
| 8·8 | | 39·6 | 38·9 | |
| 9·2 | | 42·1 | 11·7 | |
| 8·0 | | 46·1 | 49·1 | 8·5 G |
| 7·6 | 8 | 4·6 | 6·4 | 8·0 GSg |
| 6·8 | | 7·6 | 27·2 | 7·0 GSt |
| 8·6 | | 8·1 | 49·6 | |
| 9·0 | | 12·6 | 54·0 | |
| 9·6 | | 14·6 | 29·7 | |
| 9·6 | | 17·6 | 34·3 | |
| 8·8 | | 18·6 | 13·9 | 9·2 |
| 9·3 | | 27·1 | 27·1 | 9·5 |

## 1921—1980.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 8 | 46·6 | 0·2 | |
| 9·4 | | 53·0 | 2·2 | |
| 9·4 | | 57·6 | 54·8 | |
| 9·6 | | 58·6 | 25·3 | |
| 9·6 | 9 | 14·1 | 53·2 | |
| 8·6 | | 15·1 | 12·1 | 9·0 |
| 9·6 | | 29·1 | 18·3 | |
| 9·6 | | 38·1 | 36·3 | |
| 9·4 | | 45·1 | 23·1 | |
| 9·4 | | 50·1 | 5·5 | |
| 9·6 | | 51·1 | 26·2 | |
| 9·3 | | 53·1 | 25·8 | |
| 9·3 | | 54·1 | 42·2 | |
| 9·4 | | 55·1 | 38·0 | |
| 9·4 | 10 | 5·1 | 46·1 | |
| 9·4 | | 18·1 | 33·2 | 9·5 |
| 9·2 | | 23·1 | 56·4 | |
| 9·0 | | 24·1 | 51·4 | |
| 9·3 | | 27·1 | 52·7 | |
| 9·3 | | 33·1 | 47·0 | |
| 9·2 | | 48·1 | 38·2 | |
| 9·6 | 11 | 10·6 | 21·2 | |
| 8·7 | | 13·6 | 8·6 | 8·5 |
| 9·2 | | 18·6 | 54·8 | |
| 9·2 | | 30·6 | 4·0 | |
| 9·6 | | 32·1 | 35·6 | |
| 8·9 | | 36·6 | 9·7 | 8·5 |
| 8·7 | | 48·6 | 53·1 | 9·5 t |
| 6·2 | | 52·6 | 52·1 | 7·0 GSc |
| 9·0 | | 59·6 | 10·1 | |
| 7·4 | 12 | 3·6 | 3·5 | 7·0 GSt |
| 8·9 | | 5·1 | 40·5 | |
| 9·1 | | 7·1 | 41·5 | |
| 9·1 | | 8·6 | 30·8 | |
| 9·4 | | 9·1 | 12·4 | |
| 9·6 | | 21·1 | 9·0 | |
| 9·6 | | 21·6 | 56·2 | |
| 8·9 | | 28·6 | 3·1 | 9·0 |
| 8·8 | | 35·1 | 41·0 | |
| 9·6 | | 35·6 | 11·0 | |
| 7·3 | | 39·8 | 1·3 | 4·8 GSct |
| 9·2 | | 48·6 | 24·0 | |
| 9·6 | | 49·1 | 4·7 | |
| 8·8 | | 49·6 | 46·8 | |
| 9·3 | 13 | 7·1 | 43·6 | |
| 9·0 | | 8·6 | 53·0 | |
| 9·1 | | 20·1 | 58·6 | |
| 9·6 | | 22·1 | 43·7 | |
| 9·4 | | 30·6 | 39·9 | |
| 9·1 | | 38·6 | 17·3 | 9·0 |
| 9·6 | | 49·6 | 20·2 | |
| 9·2 | 14 | 9·6 | 58·0 | |
| 9·0 | | 17·6 | 14·2 | |
| 9·4 | | 25·6 | 58·0 | |
| 9·2 | | 35·6 | 20·7 | |
| 9·1 | | 38·6 | 15·4 | 9·5 G |
| 8·6 | | 40·1 | 26·4 | |
| 8·7 | | 41·1 | 34·7 | 9·0 |
| 9·6 | | 46·5 | 2·6 | |
| 9·3 | | 58·1 | 10·1 | |

## 1981—2040.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 14 | 59·6 | 57·9 | |
| 9·2 | 15 | 11·6 | 23·9 | |
| 9·2 | | 33·1 | 31·7 | |
| 9·6 | 16 | 1·6 | 11·1 | |
| 9·2 | | 3·1 | 17·1 | |
| 9·3 | | 22·1 | 6·0 | |
| 9·4 | | 28·6 | 52·6 | |
| 9·4 | | 30·1 | 31·9 | |
| 9·3 | | 41·6 | 47·6 | |
| 9·2 | | 47·1 | 20·8 | 9·5 |
| 9·2 | | 53·6 | 57·5 | |
| 9·4 | 17 | 9·6 | 59·3 | |
| 8·7 | | 9·6 | 44·2 | 9·5 |
| 9·6 | | 13·6 | 26·9 | |
| 9·2 | | 25·1 | 39·1 | |
| 9·3 | | 28·1 | 11·8 | |
| 9·6 | | 28·6 | 49·0 | |
| 9·0 | | 39·6 | 33·9 | |
| 9·4 | | 42·1 | 9·0 | |
| 9·1 | | 56·6 | 19·3 | |
| 9·2 | 18 | 12·6 | 46·7 | |
| 8·7 | | 26·1 | 47·9 | |
| 9·4 | | 31·6 | 29·9 | |
| 9·1 | | 59·1 | 34·4 | 9·0 |
| 9·2 | 19 | 23·7 | 11·4 | |
| 9·6 | | 27·4 | 39·1 | |
| 9·4 | | 27·7 | 8·0 | |
| 9·1 | | 33·0 | 11·0 | |
| 9·6 | | 38·7 | 19·3 | |
| 9·3 | | 43·7 | 6·3 | |
| 9·4 | | 46·7 | 28·2 | |
| 10·0 | | 47·8 | 37·4 | |
| 10·0 | | 53·2 | 6·8 | |
| 10·4 | | 58·3 | 58·9 | |
| 10·4 | | 58·8 | 55·8 | |
| 9·2 | | 59·3 | 20·3 | |
| 10·4 | 20 | 9·0 | 56·5 | |
| 10·4 | | 11·1 | 1·2 | |
| 10·4 | | 16·8 | 27·5 | |
| 10·4 | | 21·7 | 9·5 | |
| 10·2 | | 30·8 | 13·2 | |
| 10·4 | | 35·7 | 8·3 | |
| 9·0 | | 39·3 | 51·9 | 9·5 |
| 10·0 | | 55·3 | 44·7 | |
| 10·0 | | 57·3 | 16·0 | 9·5 |
| 10·4 | 21 | 5·3 | 5·4 | |
| 10·4 | | 5·3 | 24·3 | |
| 10·2 | | 12·3 | 27·7 | |
| 10·0 | | 19·8 | 55·1 | 9·5 |
| 9·4 | | 20·8 | 12·8 | |
| 10·4 | | 22·0 | 27·0 | |
| 10·0 | | 22·3 | 15·1 | |
| 10·2 | | 24·3 | 39·7 | |
| 10·0 | | 26·8 | 32·9 | |
| 10·2 | | 27·9 | 34·3 | |
| 10·4 | | 49·4 | 25·7 | |
| 10·2 | | 51·4 | 22·1 | |
| 10·0 | | 52·9 | 12·1 | |
| 10·2 | | 58·7 | 2·9 | |
| 10·0 | 22 | 4·9 | 34·3 | |

## 2041—2100.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 22 | 5·4 | 49·6 | |
| 10·4 | | 19·4 | 40·9 | |
| 9·6 | | 23·4 | 34·9 | |
| 10·2 | | 26·4 | 31·0 | |
| 8·6 | | 34·9 | 10·1 | 9·0 |
| 10·4 | | 39·4 | 11·1 | |
| 10·4 | | 42·9 | 25·3 | |
| 10·4 | | 48·4 | 48·3 | |
| 10·4 | | 49·4 | 16·9 | |
| 10·4 | | 59·4 | 49·4 | |
| 10·4 | 23 | 23·9 | 58·3 | |
| 10·4 | | 25·9 | 7·2 | |
| 10·4 | | 28·4 | 24·9 | |
| 9·4 | | 34·4 | 25·9 | |
| 9·2 | | 40·4 | 28·1 | 10·0 |
| 10·2 | | 45·9 | 31·5 | |
| 10·4 | | 51·4 | 42·3 | |
| 7·7 | | 55·4 | 32·9 | 7·5 G |
| 9·6 | | 59·4 | 40·1 | |
| 10·0 | 24 | 0·9 | 46·0 | |
| 10·2 | | 1·4 | 28·7 | |
| 10·2 | | 10·4 | 22·6 | |
| 10·4 | | 15·9 | 47·0 | |
| 10·2 | | 17·9 | 3·8 | |
| 8·2 | | 24·7 | 57·9 | 9·0 |
| 10·2 | | 39·9 | 47·8 | |
| 9·0 | | 43·4 | 19·7 | 9·5 |
| 10·4 | | 48·4 | 20·3 | |
| 10·2 | | 48·9 | 28·9 | |
| 10·4 | | 50·2 | 1·9 | |
| 7·6 | | 52·4 | 47·3 | 8·5 |
| 10·4 | 25 | 1·4 | 3·7 | |
| 9·2 | | 14·9 | 11·7 | 8·5 |
| 10·4 | | 17·9 | 8·5 | |
| 9·5 | | 19·4 | 54·1 | |
| 10·4 | | 31·4 | 13·9 | |
| 9·6 | | 41·4 | 16·7 | |
| 10·4 | | 45·4 | 29·9 | |
| 10·4 | | 45·4 | 41·4 | |
| 10·2 | | 57·9 | 39·9 | |
| 7·9 | | 58·9 | 45·1 | 7·5 GSg |
| 10·0 | 26 | 4·9 | 26·2 | |
| 10·0 | | 9·9 | 12·4 | |
| 9·6 | | 13·9 | 20·3 | |
| 8·3 | | 14·4 | 0·1 | 9·0 |
| 10·2 | | 20·9 | 16·7 | |
| 10·4 | | 26·9 | 41·1 | |
| 9·0 | | 39·4 | 51·6 | 9·5 |
| 9·5 | | 40·9 | 23·1 | |
| 7·7 | | 44·4 | 48·7 | 6·5 GSg |
| 10·2 | | 46·9 | 45·5 | |
| 10·4 | | 49·4 | 51·1 | |
| 9·5 | | 54·4 | 36·7 | |
| 8·8 | 27 | 0·2 | 34·8 | |
| 10·4 | | 8·2 | 22·2 | |
| 10·4 | | 20·7 | 6·4 | |
| 10·0 | | 24·7 | 55·1 | |
| 10·0 | | 31·7 | 44·4 | |
| 10·4 | | 41·7 | 59·8 | |
| 10·4 | | 45·7 | 49·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 0 | 40 | 5·9 |
| | 10 | 41 | 6·2 |
| | 20 | 43 | 6·4 |
| | 30 | 45 | 6·6 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 20 | 43 | 6·4 |
| | 30 | 45 | 6·6 |
| | 40 | 47 | 6·8 |
| | 50 | 49 | 7·0 |

## 2101—2160.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 27 | 47·7 | 42·9 | |
| 9·0 | | 49·7 | 52·5 | |
| 10·4 | 28 | 1·7 | 13·5 | |
| 10·4 | | 9·7 | 54·4 | |
| 9·6 | | 11·7 | 28·5 | |
| 8·9 | | 19·7 | 7·9 | 8·5 |
| 10·4 | | 30·7 | 25·0 | |
| 9·8 | | 41·7 | 8·0 | |
| 9·5 | | 42·4 | 3·1 | |
| 7·6 | | 44·2 | 23·5 | 8·5 |
| 9·8 | | 46·5 | 2·7 | |
| 9·2 | | 49·7 | 8·1 | |
| 10·4 | | 56·2 | 32·9 | |
| 10·2 | | 57·2 | 43·4 | |
| 9·8 | 29 | 2·7 | 7·5 | |
| 10·0 | | 7·2 | 9·8 | |
| 10·2 | | 11·7 | 24·1 | |
| 9·6 | | 17·2 | 38·5 | |
| 10·0 | | 27·2 | 36·7 | |
| 8·4 | | 29·7 | 19·7 | 7·5 G |
| 9·6 | | 31·2 | 41·1 | |
| 6·9 | | 32·7 | 24·4 | 7·2 GSg |
| 10·4 | | 32·7 | 9·1 | |
| 10·4 | | 34·7 | 4·4 | |
| 10·0 | | 38·2 | 19·1 | |
| 8·0 | | 49·7 | 49·8 | 8·0 |
| 9·4 | | 51·2 | 52·0 | |
| 8·8 | | 51·7 | 8·8 | 8·8 |
| 10·4 | | 52·2 | 20·4 | |
| 9·8 | | 59·2 | 57·1 | |
| 9·5 | | 59·7 | 56·4 | |
| 10·4 | | 59·7 | 21·0 | |
| 10·4 | 30 | 14·7 | 28·0 | |
| 9·8 | | 19·7 | 7·1 | |
| 9·4 | | 20·2 | 57·5 | |
| 9·0 | | 24·7 | 17·8 | 9·0 |
| 10·4 | | 29·2 | 16·0 | |
| 10·4 | | 29·7 | 7·0 | |
| 8·6 | | 33·1 | 52·2 | 9·0 |
| 10·2 | | 39·7 | 46·1 | |
| 10·2 | | 43·7 | 20·7 | |
| 10·4 | | 49·7 | 46·7 | |
| 10·4 | | 54·2 | 48·3 | |
| 10·4 | 31 | 2·2 | 22·6 | |
| 10·4 | | 2·7 | 46·4 | |
| 10·4 | | 8·2 | 27·7 | |
| 10·4 | | 9·2 | 16·1 | |
| 10·4 | | 9·7 | 31·0 | |
| 10·2 | | 11·7 | 37·9 | |
| 10·4 | | 21·7 | 48·1 | |
| 9·8 | | 21·7 | 48·7 | |
| 9·6 | | 31·2 | 54·9 | |
| 10·0 | | 41·2 | 14·7 | |
| 10·4 | | 54·2 | 48·4 | |
| 10·2 | 32 | 0·7 | 57·7 | |
| 10·4 | | 1·2 | 7·2 | |
| 10·0 | | 6·7 | 29·5 | |
| 10·4 | | 9·7 | 43·2 | |
| 8·4 | | 25·2 | 28·0 | 8·0 |
| 10·4 | | 31·2 | 58·8 | |

## 2161—2220.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8·8 | 32 | 38·7 | 8·8 | 9·5 |
| 10·4 | | 38·7 | 51·7 | |
| 10·2 | | 47·2 | 21·3 | |
| 10·2 | | 51·2 | 29·2 | |
| 10·4 | 33 | 1·2 | 36·4 | |
| 10·0 | | 7·2 | 53·8 | |
| 10·4 | | 9·7 | 52·7 | |
| 10·0 | | 14·7 | 31·0 | |
| 10·0 | | 20·2 | 15·8 | |
| 9·0 | | 21·2 | 25·9 | 9·0 |
| 10·2 | | 22·7 | 45·2 | |
| 10·4 | | 29·7 | 30·0 | |
| 10·4 | | 30·7 | 36·3 | |
| 10·2 | | 36·7 | 46·2 | |
| 9·0 | | 41·2 | 12·2 | |
| 10·4 | | 41·2 | 41·2 | |
| 10·0 | | 45·3 | 0·8 | |
| 10·2 | | 49·7 | 37·9 | |
| 10·0 | | 57·7 | 25·0 | |
| 10·4 | 34 | 1·7 | 23·8 | |
| 9·4 | | 6·2 | 12·2 | |
| 10·4 | | 9·7 | 38·4 | |
| 10·2 | | 12·2 | 38·4 | |
| 9·8 | | 16·2 | 51·5 | |
| 10·0 | | 17·7 | 58·3 | 9·5 |
| 10·4 | | 17·7 | 35·8 | |
| 10·4 | | 17·7 | 10·8 | |
| 9·8 | | 19·7 | 49·2 | |
| 10·4 | | 21·2 | 9·0 | |
| 10·4 | | 23·5 | 58·7 | |
| 10·0 | | 28·7 | 49·4 | |
| 10·2 | | 29·2 | 40·4 | |
| 9·5 | | 29·7 | 2·2 | |
| 10·4 | | 30·7 | 50·0 | |
| 9·6 | | 31·2 | 18·5 | |
| 10·4 | | 32·2 | 33·4 | |
| 9·0 | | 32·6 | 59·0 | 9·5 |
| 10·0 | | 42·7 | 24·0 | |
| 10·4 | | 47·2 | 37·4 | |
| 9·6 | | 48·2 | 35·0 | |
| 10·2 | | 48·2 | 15·7 | |
| 10·4 | | 57·2 | 19·1 | |
| 10·2 | 35 | 2·2 | 25·1 | |
| 10·4 | | 3·2 | 40·0 | |
| 10·4 | | 4·7 | 23·9 | |
| 9·6 | | 13·2 | 25·8 | |
| 10·0 | | 16·7 | 52·4 | |
| 7·8 | | 18·2 | 42·9 | 8·0 GSt |
| 10·4 | | 22·7 | 4·8 | |
| 10·0 | | 25·7 | 18·8 | |
| 10·4 | | 37·2 | 13·3 | |
| 10·2 | | 48·2 | 45·4 | |
| 9·8 | | 49·7 | 55·0 | |
| 8·6 | | 51·7 | 21·2 | 9·0 |
| 10·4 | | 52·7 | 25·1 | |
| 10·2 | 36 | 3·2 | 1·9 | |
| 10·0 | | 8·2 | 51·0 | |
| 10·4 | | 13·2 | 4·6 | |
| 10·0 | | 20·2 | 50·6 | |
| 10·4 | | 25·7 | 59·4 | |

## 2221—2280.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 36 | 26·2 | 31·0 | |
| 10·4 | | 28·7 | 18·1 | |
| 10·4 | | 34·2 | 46·3 | |
| 10·4 | | 35·2 | 11·9 | |
| 9·8 | | 39·7 | 31·1 | |
| 8·6 | | 41·7 | 52·4 | 9·5 |
| 9·0 | | 49·7 | 50·9 | 9·5 |
| 6·0 | | 51·2 | 24·8 | 6·0 GSctr |
| 9·2 | 37 | 0·2 | 28·9 | |
| 9·6 | | 3·2 | 20·7 | |
| 10·4 | | 9·7 | 47·8 | |
| 10·4 | | 10·7 | 22·0 | |
| 9·4 | | 31·5 | 57·4 | |
| 10·4 | | 36·2 | 55·3 | |
| 10·4 | | 37·2 | 56·0 | |
| 10·4 | | 44·2 | 7·0 | |
| 8·8 | | 47·2 | 25·9 | 9·5 |
| 10·4 | | 53·2 | 10·4 | |
| 10·4 | | 55·2 | 37·6 | |
| 10·4 | | 57·7 | 25·6 | |
| 9·8 | | 58·0 | 57·7 | |
| 10·0 | 38 | 9·7 | 31·0 | |
| 10·4 | | 18·2 | 35·8 | |
| 10·0 | | 28·8 | 0·0 | |
| 10·4 | | 29·2 | 11·2 | |
| 10·4 | | 30·2 | 6·8 | |
| 10·2 | | 31·2 | 5·4 | |
| 10·4 | | 38·2 | 21·2 | |
| 10·2 | | 41·2 | 13·9 | |
| 10·0 | | 42·2 | 9·9 | |
| 9·5 | | 47·2 | 25·3 | |
| 9·6 | | 48·7 | 18·9 | |
| 10·4 | | 49·7 | 44·3 | |
| 8·2 | | 49·7 | 32·0 | 8·5 |
| 10·4 | | 52·7 | 29·1 | |
| 9·8 | | 55·2 | 32·0 | 10·0 |
| 10·4 | 39 | 2·7 | 10·9 | |
| 9·2 | | 3·7 | 4·1 | 9·0 |
| 9·6 | | 4·2 | 50·9 | |
| 10·4 | | 9·7 | 19·6 | |
| 10·2 | | 16·7 | 31·4 | |
| 10·4 | | 17·7 | 22·1 | |
| 10·2 | | 20·2 | 20·5 | |
| 10·2 | | 21·7 | 8·5 | |
| 10·2 | | 22·7 | 30·0 | |
| 10·4 | | 29·2 | 25·6 | |
| 10·4 | | 32·7 | 25·6 | |
| 9·8 | | 41·2 | 51·5 | |
| 10·2 | | 41·2 | 47·1 | |
| 10·4 | | 43·2 | 52·4 | |
| 10·4 | | 45·7 | 44·1 | |
| 10·4 | | 49·7 | 7·7 | |
| 8·4 | | 58·2 | 3·9 | 8·0 G |
| 9·0 | 40 | 0·2 | 35·1 | 8·5 |
| 10·4 | | 6·2 | 27·7 | |
| 10·2 | | 11·2 | 55·2 | |
| 8·4 | | 11·7 | 21·3 | 9·0 |
| 10·4 | | 13·2 | 45·5 | |
| 10·4 | | 15·2 | 42·0 | |
| 9·8 | | 15·7 | 45·1 | |

## 2281—2340.

| mag. | 9h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 40 | 19·7 | 16·4 | |
| 9·0 | | 20·7 | 4·4 | |
| 8·9 | | 21·7 | 27·8 | 9·0 |
| 10·4 | | 25·2 | 57·0 | |
| 9·8 | | 29·7 | 33·5 | |
| 10·0 | | 31·0 | 2·4 | |
| 10·4 | | 33·0 | 51·1 | |
| 9·6 | | 39·5 | 4·0 | |
| 10·4 | | 51·0 | 34·7 | |
| 10·4 | | 54·0 | 19·4 | |
| 10·4 | | 54·5 | 36·0 | |
| 10·0 | | 58·0 | 50·5 | |
| 9·0 | | 59·5 | 24·0 | 9·5 |
| 9·6 | 41 | 1·0 | 4·8 | |
| 10·4 | | 2·0 | 28·3 | |
| 10·0 | | 6·0 | 55·8 | |
| 9·8 | | 23·0 | 37·0 | |
| 10·4 | | 25·0 | 52·5 | |
| 10·2 | | 32·5 | 24·6 | |
| 10·4 | | 34·5 | 18·2 | |
| 10·4 | | 41·0 | 8·0 | |
| 8·2 | | 45·5 | 45·2 | 8·5 |
| 10·0 | | 48·5 | 59·1 | |
| 10·4 | | 51·0 | 41·6 | |
| 10·2 | 42 | 0·0 | 30·8 | |
| 9·6 | | 3·5 | 18·1 | |
| 10·4 | | 20·0 | 11·6 | |
| 10·2 | | 20·0 | 27·6 | |
| 10·4 | | 34·0 | 42·2 | |
| 10·4 | | 37·0 | 45·0 | |
| 9·5 | | 48·0 | 10·4 | |
| 10·4 | | 48·0 | 12·9 | |
| 9·5 | | 56·5 | 55·9 | 9·5 |
| 9·6 | | 59·0 | 46·0 | |
| 10·4 | 43 | 4·5 | 38·6 | |
| 10·4 | | 11·0 | 53·9 | |
| 10·2 | | 16·5 | 44·6 | |
| 10·4 | | 18·5 | 59·0 | |
| 10·4 | | 20·0 | 4·0 | |
| 10·4 | | 22·5 | 50·0 | |
| 10·2 | | 28·0 | 9·0 | |
| 8·0 | | 38·0 | 36·5 | 8·4 |
| 9·0 | | 39·5 | 36·0 | 9·5 |
| 10·4 | | 42·5 | 23·8 | |
| 10·2 | | 45·5 | 20·6 | |
| 10·2 | | 47·0 | 44·1 | |
| 10·0 | | 50·5 | 4·0 | |
| 10·2 | | 51·0 | 34·4 | |
| 10·4 | | 54·5 | 18·6 | |
| 9·0 | | 56·5 | 4·8 | 9·0 |
| 10·0 | | 57·5 | 7·7 | |
| 10·0 | | 58·5 | 46·3 | |
| 10·4 | | 58·5 | 38·2 | |
| 8·6 | 44 | 0·5 | 36·2 | 8·6 |
| 9·8 | | 8·0 | 25·9 | |
| 10·0 | | 9·5 | 18·2 | |
| 9·8 | | 16·5 | 35·1 | |
| 9·6 | | 20·5 | 36·9 | |
| 9·8 | | 26·0 | 45·6 | |
| 9·2 | | 27·0 | 4·7 | |



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## 2341—2400.

| mag. | 9h m | s | −57° ′ | |
|---|---|---|---|---|
| 9.8 | 44 | 27.0 | 52.5 | |
| 10.0 | | 31.3 | 27.9 | |
| 10.2 | | 31.5 | 29.5 | |
| 10.4 | | 33.5 | 27.0 | |
| 10.0 | | 34.0 | 46.9 | |
| 9.4 | | 35.0 | 31.1 | |
| 10.4 | | 39.0 | 26.0 | |
| 10.2 | | 41.0 | 25.7 | |
| 10.0 | | 41.0 | 44.9 | |
| 10.2 | | 46.5 | 27.6 | |
| 10.4 | | 49.0 | 57.1 | |
| 10.4 | | 51.5 | 56.7 | |
| 10.2 | | 56.5 | 43.4 | |
| 10.2 | | 57.0 | 49.5 | |
| 10.4 | 45 | 3.0 | 22.5 | |
| 10.2 | | 13.5 | 20.0 | |
| 10.4 | | 21.5 | 22.7 | |
| 9.2 | | 27.5 | 28.2 | 9.0 |
| 10.0 | | 43.0 | 38.5 | |
| 10.4 | | 46.0 | 55.0 | |
| 10.2 | | 49.5 | 45.0 | |
| 8.6 | | 51.0 | 19.3 | 9.0 |
| 10.4 | | 53.0 | 12.9 | |
| 10.4 | | 57.5 | 55.6 | |
| 10.4 | 46 | 5.0 | 11.5 | |
| 9.8 | | 11.5 | 23.2 | |
| 7.8 | | 12.5 | 37.9 | 8.5 |
| 7.9 | | 14.5 | 27.7 | 8.1 G |
| 10.0 | | 16.0 | 32.6 | |
| 10.4 | | 29.5 | 55.6 | |
| 10.4 | | 39.0 | 59.7 | |
| 10.0 | | 39.5 | 27.6 | 9.2 |
| 9.6 | | 49.5 | 46.3 | |
| 10.0 | | 49.5 | 36.7 | |
| 9.8 | | 50.0 | 22.9 | |
| 9.8 | | 51.0 | 24.2 | |
| 10.4 | | 57.0 | 54.1 | |
| 10.4 | | 58.5 | 53.8 | |
| 9.0 | 47 | 0.0 | 32.3 | 9.0 |
| 9.4 | | 5.0 | 22.9 | 9.0 |
| 9.8 | | 12.5 | 53.2 | |
| 9.2 | | 14.0 | 25.9 | 9.5 |
| 10.0 | | 24.0 | 40.8 | 9.5 |
| 10.4 | | 26.5 | 23.3 | |
| 9.8 | | 37.5 | 6.6 | |
| 9.8 | | 37.5 | 28.3 | |
| 10.4 | | 45.5 | 22.0 | |
| 10.4 | | 47.5 | 17.6 | |
| 10.4 | | 47.5 | 25.4 | |
| 10.2 | | 48.0 | 12.5 | |
| 10.4 | | 51.5 | 25.1 | |
| 10.4 | | 54.0 | 34.2 | |
| 10.4 | | 56.0 | 46.1 | |
| 10.4 | 48 | 5.0 | 16.9 | |
| 10.4 | | 15.5 | 17.1 | |
| 9.0 | | 17.5 | 39.8 | 10.0 |
| 10.4 | | 28.0 | 37.8 | |
| 10.4 | | 39.5 | 39.3 | |
| 10.4 | | 59.5 | 34.3 | |
| 9.6 | 49 | 10.5 | 57.2 | |

## 2401—2460.

| mag. | 9h m | s | −57° ′ | |
|---|---|---|---|---|
| 10.4 | 49 | 16.0 | 54.0 | |
| 10.2 | | 16.5 | 14.8 | |
| 10.2 | | 19.5 | 36.2 | |
| 9.8 | | 26.0 | 36.0 | |
| 10.4 | | 27.0 | 43.2 | |
| 10.0 | | 31.5 | 47.1 | |
| 9.6 | | 38.5 | 51.9 | |
| 9.8 | | 44.0 | 51.6 | |
| 8.9 | | 50.8 | 1.8 | 9.0 Gg |
| 8.8 | | 54.5 | 3.4 | 9.0 Gg |
| 10.2 | | 55.5 | 47.9 | |
| 10.4 | | 59.5 | 49.7 | |
| 10.4 | | 59.5 | 43.4 | |
| 9.8 | 50 | 14.0 | 57.5 | |
| 9.6 | | 18.0 | 57.2 | |
| 10.4 | | 22.0 | 41.9 | |
| 9.8 | | 30.5 | 27.0 | |
| 7.1 | | 31.5 | 49.7 | 7.0 GSt |
| 10.4 | | 36.0 | 22.1 | |
| 8.2 | | 47.5 | 8.1 | 8.5 GSg |
| 10.4 | | 53.0 | 50.4 | |
| 9.5 | | 54.0 | 44.4 | 9.0 |
| 10.2 | | 56.0 | 32.2 | |
| 8.6 | | 59.0 | 52.6 | 9.0 |
| 10.0 | 51 | 0.0 | 52.9 | |
| 10.2 | | 0.0 | 20.1 | |
| 9.8 | | 4.0 | 36.0 | |
| 10.2 | | 9.5 | 45.9 | |
| 10.4 | | 11.5 | 43.0 | |
| 10.2 | | 12.5 | 24.1 | |
| 9.2 | | 16.5 | 24.5 | 9.5 |
| 10.0 | | 18.0 | 44.9 | |
| 9.5 | | 22.8 | 50.2 | |
| 9.2 | | 24.0 | 21.5 | 9.0 |
| 10.2 | | 25.5 | 56.3 | |
| 10.4 | | 26.4 | 19.9 | |
| 10.4 | | 36.3 | 20.0 | |
| 9.8 | | 40.5 | 57.0 | |
| 10.4 | | 41.5 | 15.4 | |
| 10.2 | | 50.5 | 2.6 | |
| 10.4 | | 59.5 | 8.5 | |
| 10.2 | 52 | 2.8 | 0.3 | |
| 10.4 | | 5.5 | 3.9 | |
| 10.0 | | 12.3 | 59.0 | |
| 10.0 | | 17.7 | 43.7 | |
| 10.4 | | 19.9 | 18.8 | |
| 9.4 | | 28.2 | 29.7 | |
| 10.5 | | 30.5 | 47.9 | |
| 10.0 | | 36.7 | 50.1 | |
| 9.7 | | 37.2 | 23.3 | |
| 7.9 | | 37.4 | 3.6 | 8.5 Gg |
| 10.0 | | 44.2 | 15.1 | |
| 10.4 | | 44.7 | 40.6 | |
| 9.0 | | 46.7 | 55.0 | |
| 10.5 | | 47.7 | 55.9 | |
| 10.5 | | 50.2 | 41.5 | |
| 9.6 | | 54.2 | 9.0 | |
| 10.5 | | 58.7 | 32.9 | |
| 10.4 | 53 | 2.7 | 49.8 | |
| 10.5 | | 3.1 | 30.1 | |

## 2461—2520.

| mag. | 9h m | s | −57° ′ | |
|---|---|---|---|---|
| 10.5 | 53 | 3.2 | 32.9 | |
| 10.0 | | 5.7 | 29.7 | 9.5 |
| 10.4 | | 5.8 | 35.1 | |
| 10.2 | | 6.7 | 51.2 | |
| 10.2 | | 9.2 | 31.3 | |
| 10.5 | | 10.2 | 43.7 | |
| 10.4 | | 16.7 | 4.4 | |
| 10.5 | | 19.7 | 13.4 | |
| 9.8 | | 30.7 | 12.9 | |
| 10.5 | | 34.2 | 57.9 | |
| 9.2 | | 34.7 | 22.7 | 9.5 |
| 10.4 | | 43.2 | 21.0 | |
| 9.4 | | 43.7 | 9.9 | |
| 10.2 | | 50.7 | 19.2 | |
| 10.0 | | 52.7 | 10.2 | |
| 10.0 | | 52.7 | 10.5 | |
| 10.5 | 54 | 0.7 | 58.8 | |
| 10.4 | | 7.7 | 30.8 | |
| 9.7 | | 9.2 | 40.4 | |
| 10.5 | | 10.7 | 31.6 | |
| 10.5 | | 11.7 | 54.7 | |
| 9.7 | | 11.7 | 20.9 | |
| 10.5 | | 11.8 | 16.1 | |
| 9.8 | | 13.7 | 14.5 | 9.0 |
| 9.4 | | 15.7 | 19.5 | |
| 8.6 | | 16.7 | 7.7 | 8.5 |
| 9.2 | | 17.2 | 55.6 | G |
| 9.6 | | 19.2 | 43.1 | |
| 10.4 | | 20.7 | 19.9 | |
| 10.4 | | 23.0 | 0.5 | |
| 10.4 | | 23.5 | 0.1 | |
| 10.5 | | 24.8 | 2.0 | |
| 10.4 | | 26.7 | 13.6 | |
| 10.0 | | 28.2 | 20.7 | 9.5 |
| 10.5 | | 34.7 | 53.9 | |
| 10.0 | | 37.2 | 4.0 | |
| 10.0 | | 40.7 | 13.9 | |
| 10.2 | | 42.7 | 19.8 | |
| 9.9 | | 44.2 | 53.0 | |
| 10.4 | | 44.2 | 7.8 | |
| 9.9 | | 46.7 | 15.9 | |
| 10.5 | | 46.7 | 59.2 | |
| 10.5 | | 48.7 | 59.7 | |
| 10.2 | | 49.2 | 19.9 | |
| 10.0 | | 51.7 | 43.5 | |
| 10.4 | | 54.2 | 20.4 | |
| 10.2 | | 55.1 | 59.1 | |
| 9.0 | 55 | 3.7 | 38.9 | 9.5 |
| 10.0 | | 4.7 | 42.8 | |
| 7.7 | | 5.2 | 31.8 | 7.8 GSgt |
| 10.5 | | 6.5 | 39.2 | |
| 8.8 | | 6.7 | 17.6 | 9.0 |
| 9.8 | | 10.7 | 15.4 | |
| 10.2 | | 11.7 | 29.1 | |
| 10.5 | | 18.7 | 54.7 | |
| 10.5 | | 20.7 | 17.6 | |
| 10.5 | | 30.2 | 50.0 | |
| 9.4 | | 30.7 | 30.7 | |
| 9.8 | | 31.7 | 15.2 | |
| 10.2 | | 31.7 | 52.7 | |

## 2521—2580.

| mag. | 9h m | s | −57° ′ | |
|---|---|---|---|---|
| 10.4 | 55 | 41.7 | 44.8 | |
| 10.2 | | 42.7 | 40.2 | |
| 10.4 | | 48.2 | 20.9 | |
| 10.5 | | 48.7 | 45.0 | |
| 10.4 | | 50.2 | 5.4 | |
| 9.6 | | 50.7 | 5.9 | |
| 10.0 | | 51.7 | 31.7 | |
| 10.4 | | 54.7 | 30.8 | |
| 10.0 | | 58.2 | 51.8 | |
| 10.2 | 56 | 0.2 | 41.8 | |
| 10.5 | | 0.7 | 30.8 | |
| 9.7 | | 6.2 | 12.3 | |
| 10.4 | | 9.2 | 34.2 | |
| 7.8 | | 13.7 | 27.3 | 8.5 |
| 10.2 | | 21.7 | 40.8 | |
| 10.0 | | 22.2 | 0.5 | |
| 9.8 | | 32.2 | 21.6 | |
| 10.5 | | 32.2 | 43.0 | |
| 9.4 | | 32.7 | 43.3 | |
| 8.6 | | 44.2 | 30.7 | 9.0 |
| 9.6 | | 52.7 | 34.5 | |
| 10.4 | | 56.7 | 25.4 | |
| 10.5 | 57 | 0.7 | 58.0 | |
| 10.4 | | 2.7 | 16.1 | |
| 9.8 | | 8.2 | 20.7 | |
| 10.0 | | 12.7 | 35.6 | |
| 9.4 | | 16.7 | 29.8 | 9.5 |
| 9.9 | | 20.7 | 16.4 | |
| 10.5 | | 23.2 | 5.4 | |
| 10.4 | | 23.8 | 16.3 | |
| 10.4 | | 46.2 | 39.3 | |
| 9.8 | | 46.7 | 29.9 | |
| 10.0 | | 50.7 | 19.2 | |
| 10.0 | | 54.2 | 34.9 | |
| 10.5 | | 55.7 | 59.2 | |
| 10.2 | | 58.2 | 14.6 | |
| 9.4 | | 58.2 | 46.6 | |
| 8.3 | 58 | 0.7 | 6.1 | 8.5 |
| 10.4 | | 2.7 | 9.3 | |
| 10.2 | | 5.2 | 38.4 | |
| 10.4 | | 5.7 | 37.7 | |
| 10.0 | | 7.7 | 6.5 | |
| 10.0 | | 11.2 | 3.5 | |
| 10.2 | | 14.2 | 12.0 | |
| 10.5 | | 16.2 | 45.6 | |
| 10.0 | | 18.2 | 46.2 | |
| 10.4 | | 19.2 | 54.6 | |
| 10.4 | | 24.2 | 27.3 | |
| 9.4 | | 28.2 | 41.9 | |
| 10.2 | | 28.7 | 36.1 | |
| 9.4 | | 29.2 | 51.5 | |
| 10.5 | | 31.8 | 22.4 | |
| 10.4 | | 33.2 | 3.3 | |
| 9.6 | | 33.2 | 4.9 | 9.5 |
| 10.4 | | 36.7 | 41.9 | |
| 10.0 | | 36.7 | 51.0 | |
| 10.0 | | 37.2 | 18.8 | |
| 10.2 | | 37.7 | 29.4 | |
| 10.2 | | 39.2 | 30.1 | |
| 8.8 | | 40.7 | 9.5 | 9.0 |

25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 9 40 | 47 | 6.8 |
| 50 | 49 | 7.0 |
| 10 0 | 51 | 7.2 |



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| 25 prec. | | | |
|---|---|---|---|
| h | m | α + s | δ − ′ |
| 9 | 50 | 49 | 7.0 |
| 10 | 0 | 51 | 7.2 |
| | 10 | 53 | 7.4 |

## 2581—2640.

| mag. | 9h.–10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.9 | 58 | 41.2 | 36.1 | |
| 9.8 | | 42.2 | 31.2 | |
| 9.4 | | 55.7 | 32.2 | |
| 9.0 | | 58.2 | 29.7 | 8.5 |
| 10.5 | | 59.2 | 16.4 | |
| 9.6 | 59 | 2.2 | 12.1 | |
| 10.0 | | 3.2 | 30.2 | |
| 10.4 | | 3.5 | 26.3 | |
| 10.4 | | 4.2 | 38.4 | |
| 10.5 | | 5.2 | 53.6 | |
| 10.4 | | 8.2 | 31.0 | |
| 9.8 | | 8.7 | 52.0 | |
| 10.0 | | 10.2 | 28.2 | |
| 10.5 | | 19.2 | 23.6 | |
| 10.2 | | 24.2 | 38.4 | |
| 9.2 | | 24.2 | 29.6 | |
| 10.4 | | 25.7 | 58.5 | |
| 10.4 | | 29.7 | 59.9 | |
| 10.2 | | 36.7 | 6.9 | |
| 10.2 | | 37.7 | 32.9 | |
| 9.2 | | 39.2 | 10.2 | |
| 9.2 | | 46.7 | 55.7 | |
| 10.5 | | 54.2 | 53.6 | |
| 10.0 | | 55.7 | 30.2 | |
| 10.4 | | 59.2 | 50.9 | |
| 9.4 | 0 | 0.7 | 6.5 | |
| 10.0 | | 6.2 | 42.5 | |
| 10.2 | | 15.2 | 8.7 | |
| 10.2 | | 16.7 | 47.9 | |
| 10.2 | | 18.7 | 50.6 | |
| 10.4 | | 25.2 | 32.5 | |
| 9.6 | | 25.7 | 45.4 | |
| 9.4 | | 29.2 | 55.7 | |
| 10.4 | | 30.7 | 42.1 | |
| 10.4 | | 42.2 | 57.6 | |
| 9.4 | | 42.7 | 37.8 | |
| 10.4 | | 49.2 | 38.3 | |
| 10.4 | | 50.2 | 35.1 | |
| 10.0 | | 53.2 | 3.6 | |
| 10.2 | | 55.2 | 21.5 | |
| 9.8 | 1 | 2.7 | 10.9 | |
| 10.2 | | 6.7 | 41.0 | |
| 10.4 | | 9.0 | 1.4 | |
| 10.5 | | 10.7 | 17.3 | |
| 10.5 | | 12.7 | 55.6 | |
| 10.4 | | 14.2 | 6.6 | |
| 10.5 | | 16.7 | 5.4 | |
| 10.5 | | 16.7 | 55.3 | |
| 10.2 | | 20.7 | 3.7 | |
| 10.5 | | 21.7 | 12.4 | |
| 9.4 | | 24.2 | 37.1 | |
| 10.5 | | 24.2 | 51.7 | |
| 8.8 | | 31.4 | 3.1 | 8.5 |
| 9.6 | | 32.2 | 9.1 | 9.0 |
| 10.4 | | 32.7 | 30.9 | |
| 10.5 | | 33.7 | 24.9 | |
| 10.2 | | 35.2 | 16.1 | |
| 10.4 | | 37.7 | 54.6 | |
| 10.5 | | 40.2 | 40.8 | |
| 10.5 | | 43.7 | 31.0 | |

## 2641—2700.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.2 | 1 | 44.7 | 22.8 | |
| 10.4 | | 46.2 | 27.4 | |
| 8.0 | | 48.2 | 17.4 | 8.5 |
| 10.2 | | 50.7 | 12.0 | |
| 10.4 | | 51.2 | 32.9 | |
| 10.4 | | 52.7 | 52.9 | |
| 10.4 | | 56.2 | 31.8 | |
| 10.5 | | 56.6 | 1.0 | |
| 9.8 | | 58.7 | 9.7 | |
| 10.4 | 2 | 1.7 | 32.8 | |
| 9.2 | | 2.7 | 38.7 | |
| 9.8 | | 2.7 | 11.3 | 9.0 |
| 10.5 | | 8.7 | 30.3 | |
| 9.7 | | 9.2 | 16.4 | |
| 9.8 | | 9.7 | 39.8 | |
| 10.0 | | 11.7 | 38.4 | |
| 9.0 | | 12.2 | 22.4 | 8.5 |
| 9.9 | | 12.7 | 40.4 | |
| 10.0 | | 12.7 | 48.8 | |
| 10.0 | | 13.2 | 21.3 | |
| 10.5 | | 14.7 | 20.9 | |
| 10.4 | | 17.2 | 37.1 | |
| 9.7 | | 19.7 | 45.1 | |
| 9.9 | | 21.7 | 16.4 | |
| 10.2 | | 22.7 | 38.7 | |
| 9.9 | | 36.2 | 35.3 | |
| 10.0 | | 36.7 | 56.5 | |
| 10.2 | | 37.2 | 56.0 | |
| 9.2 | | 39.2 | 53.7 | |
| 9.8 | | 44.9 | 1.8 | |
| 10.2 | | 46.2 | 59.9 | |
| 9.8 | | 47.7 | 35.2 | |
| 10.0 | | 47.7 | 15.2 | |
| 10.4 | | 47.7 | 52.3 | |
| 10.4 | | 51.7 | 20.7 | |
| 10.0 | | 54.2 | 24.2 | |
| 9.6 | | 57.7 | 5.9 | |
| 10.4 | 3 | 0.7 | 38.8 | |
| 9.9 | | 1.7 | 17.0 | |
| 10.5 | | 2.2 | 27.3 | |
| 10.4 | | 5.2 | 16.2 | |
| 10.5 | | 5.7 | 32.8 | |
| 10.4 | | 9.2 | 24.8 | |
| 9.8 | | 10.7 | 22.8 | |
| 9.8 | | 11.2 | 48.0 | |
| 8.6 | | 16.7 | 51.0 | 8.5 G |
| 10.0 | | 20.2 | 23.5 | |
| 10.4 | | 21.2 | 41.9 | |
| 10.5 | | 21.2 | 50.3 | |
| 10.5 | | 22.2 | 1.2 | |
| 10.5 | | 28.2 | 37.0 | |
| 10.4 | | 28.2 | 0.9 | |
| 8.2 | | 29.2 | 45.7 | 8.0 G |
| 9.8 | | 33.2 | 19.8 | |
| 9.7 | | 39.7 | 42.8 | |
| 9.4 | | 42.7 | 46.8 | |
| 10.0 | | 43.2 | 29.7 | |
| 9.2 | | 45.7 | 38.2 | |
| 8.8 | | 46.2 | 52.3 | 8.5 |
| 10.5 | | 52.7 | 53.2 | |

## 2701—2760.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.2 | 3 | 53.1 | 59.9 | 8.5 |
| 10.0 | 4 | 0.7 | 26.0 | |
| 7.9 | | 1.2 | 35.2 | 7.0 GSt |
| 10.5 | | 1.7 | 12.1 | |
| 10.2 | | 5.2 | 13.7 | |
| 9.8 | | 5.8 | 35.0 | |
| 10.0 | | 9.2 | 9.8 | |
| 8.6 | | 10.2 | 6.7 | 9.0 |
| 9.9 | | 10.7 | 55.8 | |
| 10.2 | | 11.7 | 31.0 | |
| 9.8 | | 16.2 | 11.9 | |
| 10.5 | | 18.8 | 46.9 | |
| 9.4 | | 19.2 | 12.8 | |
| 10.4 | | 24.3 | 0.1 | |
| 10.5 | | 25.7 | 52.1 | |
| 10.5 | | 29.2 | 3.5 | |
| 9.6 | | 30.2 | 36.4 | |
| 10.5 | | 34.7 | 40.0 | |
| 10.4 | | 36.7 | 37.4 | |
| 9.6 | | 39.2 | 34.1 | |
| 10.2 | | 42.7 | 28.6 | |
| 9.8 | | 44.2 | 36.6 | |
| 10.2 | | 46.2 | 15.1 | |
| 7.8 | | 48.2 | 25.6 | 7.8 GSt |
| 10.5 | | 49.7 | 23.0 | |
| 10.0 | | 58.7 | 38.1 | |
| 10.2 | 5 | 3.2 | 42.5 | |
| 10.4 | | 8.2 | 39.8 | |
| 10.0 | | 10.7 | 1.8 | |
| 10.4 | | 11.7 | 21.0 | |
| 10.4 | | 12.7 | 14.1 | |
| 10.4 | | 14.2 | 6.7 | |
| 10.4 | | 14.7 | 57.2 | |
| 10.2 | | 21.7 | 28.8 | |
| 10.4 | | 23.7 | 9.4 | |
| 10.0 | | 24.7 | 43.7 | |
| 10.0 | | 27.7 | 32.7 | |
| 9.8 | | 29.2 | 34.9 | |
| 10.2 | | 29.7 | 23.7 | |
| 10.0 | | 32.7 | 31.1 | |
| 10.5 | | 33.7 | 3.8 | |
| 9.8 | | 34.2 | 30.6 | |
| 9.4 | | 47.7 | 12.9 | |
| 10.5 | | 47.7 | 55.1 | |
| 10.5 | | 50.2 | 27.8 | |
| 10.5 | | 54.2 | 44.2 | |
| 10.0 | | 55.7 | 4.9 | |
| 9.4 | | 56.7 | 34.2 | 9.5 |
| 10.0 | | 58.2 | 18.5 | |
| 10.0 | 6 | 0.2 | 26.7 | 9.8 S |
| 9.9 | | 0.2 | 24.7 | |
| 10.0 | | 0.7 | 3.2 | |
| 10.0 | | 2.7 | 12.5 | |
| 10.4 | | 4.7 | 15.3 | |
| 9.4 | | 9.2 | 10.3 | |
| 10.5 | | 9.2 | 56.7 | |
| 10.4 | | 14.7 | 57.1 | |
| 10.2 | | 20.2 | 29.3 | |
| 9.2 | | 20.2 | 8.8 | 9.5 |
| 9.9 | | 24.2 | 6.2 | |

## 2761—2820.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.4 | 6 | 28.7 | 19.6 | |
| 9.9 | | 30.7 | 12.0 | |
| 10.5 | | 31.7 | 30.9 | |
| 10.0 | | 32.2 | 27.4 | |
| 10.5 | | 38.2 | 29.3 | |
| 10.2 | | 40.7 | 3.8 | |
| 10.2 | | 40.7 | 55.4 | |
| 10.0 | | 41.2 | 11.3 | |
| 10.2 | | 45.2 | 34.0 | |
| 8.4 | | 45.2 | 35.2 | 9.0 |
| 9.8 | | 50.2 | 45.1 | |
| 10.0 | | 50.2 | 23.7 | |
| 10.0 | | 51.2 | 11.3 | |
| 10.0 | | 54.2 | 43.1 | |
| 10.5 | | 54.2 | 54.9 | |
| 10.4 | | 56.7 | 55.0 | |
| 10.2 | | 57.2 | 8.4 | |
| 10.4 | 7 | 0.2 | 29.5 | |
| 10.0 | | 1.7 | 41.4 | |
| 8.6 | | 2.2 | 25.6 | 8.5 GS |
| 6.7 | | 25.2 | 26.5 | 6.5 GSct |
| 10.5 | | 33.1 | 12.7 | |
| 10.5 | | 34.7 | 7.1 | |
| 10.0 | | 37.2 | 12.2 | |
| 10.4 | | 37.2 | 15.3 | |
| 10.4 | | 39.1 | 26.9 | |
| 9.8 | | 41.2 | 41.1 | |
| 10.4 | | 49.2 | 27.0 | |
| 9.7 | | 49.2 | 16.0 | |
| 10.4 | | 49.2 | 31.3 | |
| 9.7 | | 50.7 | 32.0 | |
| 10.5 | | 52.7 | 29.9 | |
| 10.5 | | 53.7 | 24.5 | |
| 10.5 | | 58.2 | 25.7 | |
| 10.5 | 8 | 4.7 | 6.1 | |
| 10.5 | | 9.2 | 26.8 | |
| 10.4 | | 10.2 | 26.1 | |
| 10.2 | | 11.2 | 4.0 | |
| 10.2 | | 14.7 | 1.5 | |
| 9.8 | | 16.7 | 14.6 | |
| 9.4 | | 16.7 | 59.3 | |
| 10.2 | | 24.2 | 31.9 | |
| 10.5 | | 31.7 | 41.1 | |
| 9.4 | | 33.0 | 59.9 | |
| 10.0 | | 35.7 | 54.6 | |
| 10.4 | | 42.7 | 6.8 | |
| 10.2 | | 43.2 | 43.2 | |
| 10.2 | | 44.7 | 31.1 | |
| 10.2 | | 58.7 | 19.6 | |
| 8.6 | | 59.8 | 44.6 | |
| 10.2 | 9 | 1.7 | 19.0 | |
| 9.2 | | 2.7 | 3.8 | 9.0 G |
| 9.9 | | 2.7 | 47.0 | |
| 10.0 | | 3.7 | 15.4 | |
| 9.5 | | 4.2 | 15.9 | |
| 9.0 | | 7.7 | 19.2 | |
| 10.2 | | 9.2 | 49.5 | |
| 10.0 | | 12.7 | 55.9 | |
| 10.5 | | 13.2 | 34.1 | |
| 10.2 | | 16.7 | 24.6 | |

**2821—2880.**

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8.3 | 9 | 18.7 | 6.0 | 8.5 G |
| 10.4 | | 18.7 | 8.5 | |
| 10.5 | | 19.2 | 42.5 | |
| 10.5 | | 20.7 | 18.8 | |
| 10.5 | | 21.7 | 18.1 | |
| 10.0 | | 29.2 | 4.5 | |
| 10.4 | | 33.2 | 8.4 | |
| 10.0 | | 35.2 | 8.7 | |
| 9.9 | | 38.2 | 4.7 | |
| 10.4 | | 39.2 | 53.9 | |
| 10.4 | | 41.2 | 19.6 | |
| 10.0 | | 41.2 | 2.3 | |
| 9.8 | | 41.7 | 4.0 | |
| 8.8 | | 41.7 | 5.5 | 9.0 |
| 10.0 | | 43.2 | 41.5 | |
| 9.8 | | 48.2 | 31.6 | |
| 10.5 | | 49.2 | 11.9 | |
| 10.4 | 10 | 0.7 | 50.4 | |
| 10.4 | | 1.7 | 38.3 | |
| 9.9 | | 2.7 | 0.7 | |
| 10.4 | | 6.7 | 35.2 | |
| 10.2 | | 9.8 | 42.2 | |
| 10.4 | | 10.2 | 56.9 | |
| 10.5 | | 13.2 | 35.2 | |
| 10.4 | | 15.2 | 13.4 | |
| 10.4 | | 16.7 | 19.9 | |
| 9.6 | | 16.9 | 41.5 | |
| 10.0 | | 18.2 | 29.9 | |
| 10.4 | | 18.2 | 23.6 | |
| 8.8 | | 19.7 | 56.0 | 8.5 |
| 10.2 | | 20.7 | 33.8 | |
| 9.2 | | 20.7 | 15.2 | |
| 9.7 | | 20.7 | 19.7 | |
| 10.0 | | 21.2 | 49.4 | |
| 9.8 | | 21.7 | 45.0 | |
| 10.0 | | 22.7 | 21.0 | |
| 9.9 | | 27.2 | 46.6 | |
| 10.5 | | 27.7 | 8.0 | |
| 10.2 | | 28.7 | 30.5 | |
| 9.9 | | 33.2 | 52.1 | |
| 9.4 | | 33.7 | 27.6 | |
| 10.5 | | 33.7 | 24.6 | |
| 10.5 | | 33.9 | 23.9 | |
| 9.8 | | 35.2 | 20.7 | |
| 10.4 | | 37.2 | 47.0 | |
| 10.5 | | 37.7 | 29.4 | |
| 10.5 | | 38.2 | 8.2 | |
| 10.0 | | 40.7 | 41.5 | |
| 10.5 | | 41.7 | 23.6 | |
| 9.7 | | 45.2 | 47.6 | |
| 10.0 | | 46.7 | 1.9 | |
| 10.2 | | 48.7 | 50.9 | |
| 8.6 | | 52.7 | 13.9 | 9.0 |
| 10.2 | | 56.2 | 14.4 | |
| 10.2 | | 57.2 | 48.0 | |
| 9.9 | | 57.2 | 11.0 | |
| 10.0 | 11 | 2.2 | 22.7 | |
| 10.0 | | 5.7 | 24.8 | |
| 10.2 | | 6.7 | 51.0 | |
| 10.5 | | 8.7 | 33.1 | |

**2881—2940.**

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.2 | 11 | 14.2 | 55.8 | |
| 10.0 | | 14.5 | 2.2 | |
| 10.4 | | 17.2 | 14.1 | |
| 10.4 | | 19.7 | 47.5 | |
| 10.2 | | 22.7 | 44.4 | |
| 9.4 | | 22.7 | 52.2 | |
| 10.5 | | 28.7 | 12.1 | |
| 10.2 | | 32.7 | 13.1 | |
| 10.0 | | 33.7 | 14.3 | |
| 10.5 | | 38.7 | 41.2 | |
| 9.6 | | 40.2 | 6.1 | |
| 9.6 | | 40.2 | 14.8 | |
| 9.8 | | 41.2 | 16.9 | |
| 10.0 | | 42.6 | 57.9 | |
| 10.5 | | 42.7 | 52.4 | |
| 10.2 | | 47.7 | 13.6 | |
| 10.4 | | 47.7 | 35.7 | |
| 10.2 | | 49.2 | 27.6 | |
| 10.0 | | 50.7 | 46.8 | |
| 10.5 | | 50.7 | 50.3 | |
| 10.4 | | 53.7 | 23.8 | |
| 10.0 | | 55.2 | 48.6 | |
| 9.8 | | 55.7 | 42.9 | |
| 10.2 | 12 | 0.2 | 27.1 | |
| 10.0 | | 4.2 | 25.7 | |
| 10.4 | | 13.7 | 41.0 | |
| 10.4 | | 15.7 | 55.5 | |
| 10.4 | | 19.2 | 28.0 | |
| 9.9 | | 20.7 | 21.5 | |
| 10.0 | | 23.2 | 45.5 | |
| 10.4 | | 25.2 | 46.9 | |
| 10.2 | | 27.7 | 43.2 | |
| 10.0 | | 34.2 | 17.2 | |
| 9.9 | | 35.2 | 26.1 | |
| 9.0 | | 35.7 | 28.1 | 9.5 |
| 9.0 | | 36.7 | 49.9 | |
| 10.0 | | 38.2 | 50.7 | |
| 10.5 | | 40.7 | 28.1 | |
| 9.9 | | 40.7 | 53.5 | |
| 10.2 | | 40.7 | 49.0 | |
| 9.6 | | 45.7 | 14.2 | |
| 10.0 | | 45.7 | 15.0 | |
| 10.2 | | 47.7 | 22.9 | |
| 10.5 | | 50.2 | 8.9 | |
| 9.9 | | 59.2 | 48.4 | |
| 10.5 | | 59.2 | 53.1 | |
| 10.4 | 13 | 0.7 | 27.4 | |
| 10.0 | | 1.2 | 5.6 | |
| 8.0 | | 2.7 | 54.6 | 9.0 |
| 9.6 | | 4.7 | 52.6 | |
| 9.7 | | 6.7 | 45.2 | |
| 10.4 | | 8.2 | 27.1 | |
| 9.8 | | 9.2 | 44.5 | |
| 10.4 | | 11.2 | 31.1 | |
| 10.5 | | 12.2 | 13.3 | |
| 10.4 | | 17.7 | 58.7 | |
| 9.6 | | 19.2 | 48.6 | 9.5 |
| 10.0 | | 23.2 | 58.1 | |
| 10.4 | | 27.2 | 12.8 | |
| 10.2 | | 28.7 | 30.8 | |

**2941—3000.**

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.9 | 13 | 32.7 | 38.0 | |
| 10.4 | | 34.7 | 19.8 | |
| 10.2 | | 42.7 | 54.8 | |
| 10.4 | | 45.7 | 49.5 | |
| 10.0 | | 46.2 | 12.1 | |
| 10.5 | | 46.7 | 32.9 | |
| 9.7 | | 46.7 | 42.7 | |
| 10.2 | | 51.7 | 58.1 | |
| 10.4 | | 52.7 | 23.4 | |
| 10.0 | | 54.2 | 52.2 | |
| 10.2 | | 54.7 | 20.3 | |
| 10.5 | | 58.7 | 10.4 | |
| 10.0 | 14 | 0.2 | 9.6 | |
| 10.4 | | 3.2 | 19.2 | |
| 9.8 | | 7.2 | 8.3 | |
| 9.8 | | 7.7 | 6.6 | |
| 10.2 | | 8.7 | 7.6 | |
| 9.8 | | 10.2 | 7.9 | |
| 10.0 | | 10.7 | 45.2 | |
| 10.2 | | 16.1 | 0.4 | |
| 9.9 | | 22.7 | 30.2 | |
| 10.4 | | 26.2 | 25.2 | |
| 10.2 | | 27.2 | 37.6 | |
| 10.4 | | 28.7 | 15.2 | |
| 10.5 | | 31.7 | 13.9 | |
| 10.4 | | 35.7 | 30.3 | |
| 10.2 | | 36.4 | 0.2 | |
| 10.2 | | 36.7 | 39.5 | |
| 9.0 | | 37.2 | 7.5 | |
| 10.5 | | 38.7 | 25.0 | |
| 10.5 | | 40.2 | 47.1 | |
| 10.0 | | 40.7 | 49.3 | |
| 10.4 | | 41.2 | 11.5 | |
| 9.6 | | 43.7 | 5.0 | |
| 9.8 | | 45.7 | 48.4 | |
| 9.4 | | 47.7 | 29.1 | |
| 10.0 | | 50.7 | 34.5 | |
| 10.0 | | 53.2 | 30.4 | |
| 10.0 | | 53.7 | 10.7 | |
| 10.4 | | 55.7 | 46.0 | |
| 10.2 | | 56.7 | 39.5 | |
| 10.4 | | 56.7 | 57.1 | |
| 10.4 | | 57.7 | 7.0 | |
| 10.5 | 15 | 3.7 | 18.1 | |
| 9.8 | | 9.2 | 42.5 | |
| 10.4 | | 10.2 | 18.0 | |
| 9.0 | | 10.2 | 34.1 | 10.0 |
| 9.0 | | 11.7 | 28.1 | 9.5 |
| 10.4 | | 18.2 | 44.1 | |
| 10.5 | | 18.7 | 48.2 | |
| 10.0 | | 21.2 | 5.1 | |
| 10.4 | | 21.7 | 25.1 | |
| 10.4 | | 22.7 | 51.5 | |
| 10.0 | | 23.2 | 56.7 | |
| 9.8 | | 24.7 | 6.6 | |
| 10.0 | | 25.7 | 19.9 | |
| 10.5 | | 28.2 | 46.6 | |
| 10.0 | | 30.2 | 45.1 | |
| 9.2 | | 31.7 | 9.3 | |
| 9.9 | | 32.2 | 53.0 | |

**3001—3060.**

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.5 | 15 | 32.7 | 49.8 | |
| 10.4 | | 33.7 | 39.6 | |
| 9.8 | | 40.7 | 31.1 | |
| 9.6 | | 42.7 | 11.8 | |
| 9.8 | | 43.7 | 15.2 | |
| 10.2 | | 44.2 | 7.1 | |
| 10.2 | | 44.2 | 21.3 | |
| 8.6 | | 47.9 | 1.9 | 9.0 |
| 10.2 | | 48.7 | 59.2 | |
| 10.4 | | 50.2 | 55.3 | |
| 10.5 | | 52.2 | 29.5 | |
| 10.5 | | 55.2 | 57.0 | |
| 10.4 | | 55.7 | 21.4 | |
| 9.4 | | 56.7 | 8.9 | |
| 9.7 | | 57.2 | 12.4 | |
| 10.0 | 16 | 0.7 | 23.9 | |
| 10.2 | | 1.2 | 20.0 | |
| 10.0 | | 2.2 | 38.0 | |
| 9.2 | | 3.7 | 8.2 | 8.0 |
| 10.2 | | 3.7 | 33.1 | |
| 10.4 | | 9.2 | 36.1 | |
| 9.0 | | 13.8 | 8.0 | 9.5 |
| 10.0 | | 14.2 | 40.5 | |
| 10.5 | | 14.7 | 4.5 | |
| 10.2 | | 15.7 | 32.4 | |
| 9.9 | | 17.2 | 23.2 | |
| 10.5 | | 18.8 | 49.6 | |
| 10.2 | | 20.7 | 14.8 | |
| 10.5 | | 22.2 | 28.9 | |
| 10.5 | | 23.7 | 27.9 | |
| 10.4 | | 23.7 | 40.9 | |
| 10.2 | | 28.7 | 59.4 | |
| 10.0 | | 30.7 | 26.1 | |
| 10.4 | | 32.7 | 43.8 | |
| 7.9 | | 38.7 | 51.3 | 8.0 Gt |
| 10.2 | | 38.7 | 36.6 | |
| 10.2 | | 39.2 | 33.0 | |
| 9.8 | | 42.2 | 8.1 | |
| 10.0 | | 46.2 | 56.0 | |
| 10.4 | | 46.2 | 12.8 | |
| 9.9 | | 47.2 | 9.5 | |
| 10.0 | | 48.2 | 51.3 | |
| 10.2 | | 48.2 | 42.2 | |
| 9.9 | | 52.7 | 41.6 | |
| 10.2 | | 53.7 | 17.0 | |
| 10.0 | | 58.7 | 17.4 | |
| 10.4 | 17 | 1.7 | 14.8 | |
| 10.4 | | 1.7 | 46.9 | |
| 10.2 | | 2.2 | 6.6 | |
| 10.2 | | 2.7 | 49.9 | |
| 10.5 | | 4.2 | 14.7 | |
| 9.2 | | 4.7 | 18.0 | 9.5 |
| 10.0 | | 4.7 | 23.7 | |
| 10.4 | | 5.7 | 11.1 | |
| 10.0 | | 6.7 | 25.2 | |
| 10.4 | | 11.7 | 5.1 | |
| 9.9 | | 21.7 | 41.0 | |
| 10.0 | | 27.0 | 0.3 | |
| 10.0 | | 28.2 | 54.8 | |
| 10.0 | | 29.7 | 19.4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 0 | 51 | 7.2 |
| | 10 | 53 | 7.4 |
| | 20 | 55 | 7.6 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 10 | 10 | 53 | 7·4 |
| | 20 | 55 | 7·6 |
| | 30 | 57 | 7·7 |

**3061—3120.**

| mag. | 10h. m s | −57° ′ | |
|---|---|---|---|
| 10·0 | 17 29·7 | 18·6 | |
| 10·5 | 30·7 | 12·1 | |
| 10·0 | 32·2 | 39·1 | |
| 10·0 | 32·7 | 13·9 | |
| 8·8 | 32·7 | 13·8 | |
| 9·8 | 32·7 | 33·9 | |
| 10·5 | 34·2 | 48·8 | |
| 10·0 | 38·7 | 36·8 | |
| 7·5 | 40·2 | 38·1 | 7·0 GSgt |
| 10·4 | 41·2 | 52·9 | |
| 10·4 | 41·2 | 21·3 | |
| 10·0 | 44·7 | 56·6 | |
| 10·2 | 46·7 | 18·4 | |
| 10·0 | 47·2 | 50·4 | |
| 9·0 | 47·2 | 38·7 | Gg |
| 10·2 | 50·2 | 14·0 | |
| 10·5 | 51·7 | 33·3 | |
| 10·2 | 52·2 | 32·2 | |
| 10·2 | 52·2 | 39·6 | |
| 10·5 | 52·7 | 33·9 | |
| 10·2 | 52·7 | 16·9 | |
| 10·5 | 54·2 | 10·9 | |
| 9·6 | 56·2 | 26·7 | |
| 9·8 | 57·2 | 45·1 | |
| 10·4 | 57·2 | 31·4 | |
| 10·4 | 57·7 | 7·9 | |
| 10·0 | 59·7 | 9·9 | |
| 8·6 | 18 2·5 | 2·4 | 9·0 |
| 10·5 | 2·7 | 1·8 | |
| 9·8 | 7·2 | 46·9 | |
| 9·9 | 10·7 | 56·0 | |
| 9·4 | 10·7 | 52·0 | 9·0 |
| 8·4 | 12·7 | 53·8 | 8·5 |
| 10·0 | 12·7 | 29·7 | |
| 10·4 | 14·2 | 11·7 | |
| 9·9 | 15·2 | 29·8 | |
| 10·5 | 15·7 | 25·5 | |
| 10·0 | 17·2 | 3·9 | |
| 9·7 | 20·7 | 33·8 | |
| 10·0 | 22·2 | 31·6 | |
| 9·8 | 23·7 | 48·5 | |
| 10·2 | 24·7 | 15·1 | |
| 10·2 | 28·2 | 6·0 | |
| 10·4 | 30·7 | 5·7 | |
| 8·8 | 34·2 | 21·9 | 9·0 |
| 10·2 | 34·7 | 26·0 | |
| 9·7 | 37·7 | 10·0 | |
| 10·2 | 38·7 | 32·9 | |
| 10·0 | 41·7 | 36·5 | |
| 10·4 | 42·2 | 20·0 | |
| 10·0 | 43·7 | 3·3 | |
| 9·9 | 44·7 | 49·9 | |
| 9·9 | 45·2 | 14·4 | |
| 10·0 | 45·7 | 33·3 | |
| 10·4 | 46·2 | 4·1 | |
| 10·2 | 46·6 | 8·4 | |
| 10·2 | 52·2 | 55·4 | |
| 10·5 | 55·2 | 16·9 | |
| 10·0 | 56·2 | 37·0 | |
| 9·8 | 56·7 | 27·9 | |

**3121—3180.**

| mag. | 10h. m s | −57° ′ | |
|---|---|---|---|
| 10·0 | 18 57·7 | 51·4 | |
| 10·4 | 57·7 | 4·2 | |
| 10·2 | 19 2·2 | 53·2 | |
| 10·4 | 7·2 | 26·7 | |
| 8·8 | 9·2 | 0·7 | 9·0 |
| 10·5 | 13·7 | 1·4 | |
| 8·0 | 16·2 | 19·2 | 7·0 GSt |
| 10·5 | 18·2 | 3·1 | |
| 10·4 | 24·7 | 14·4 | |
| 10·4 | 26·2 | 3·6 | |
| 9·8 | 27·2 | 37·8 | |
| 10·4 | 27·2 | 22·1 | |
| 9·4 | 27·5 | 0·2 | |
| 10·4 | 31·2 | 15·8 | |
| 10·4 | 31·2 | 37·9 | |
| 10·2 | 34·2 | 31·2 | |
| 9·4 | 37·2 | 25·7 | |
| 10·4 | 40·7 | 14·9 | |
| 10·5 | 44·2 | 36·2 | |
| 10·4 | 45·7 | 29·4 | |
| 10·0 | 47·2 | 6·2 | |
| 9·9 | 50·7 | 50·1 | |
| 9·0 | 51·2 | 52·5 | |
| 10·0 | 52·7 | 48·4 | |
| 10·4 | 56·7 | 51·0 | |
| 10·5 | 20 2·2 | 3·4 | |
| 8·8 | 3·7 | 39·1 | 8·5 G |
| 10·2 | 4·7 | 22·9 | |
| 10·0 | 5·2 | 12·8 | |
| 9·8 | 6·2 | 2·8 | |
| 9·2 | 12·2 | 23·2 | |
| 10·0 | 12·7 | 27·5 | |
| 10·0 | 13·7 | 22·0 | |
| 10·0 | 18·2 | 14·9 | |
| 9·8 | 18·2 | 28·2 | |
| 10·4 | 19·7 | 33·8 | |
| 10·5 | 22·2 | 47·4 | |
| 10·4 | 22·7 | 38·1 | |
| 10·0 | 22·7 | 32·9 | |
| 9·2 | 22·7 | 21·9 | |
| 10·2 | 23·7 | 18·0 | |
| 9·8 | 25·4 | 57·8 | |
| 10·2 | 26·2 | 26·1 | |
| 7·0 | 27·7 | 56·6 | GScgt |
| 10·5 | 27·7 | 3·7 | |
| 9·2 | 34·7 | 34·0 | 9·5 |
| 10·0 | 35·7 | 31·1 | |
| 10·4 | 36·7 | 15·9 | |
| 8·8 | 38·7 | 34·4 | 9·0 |
| 10·0 | 40·7 | 35·0 | |
| 10·0 | 43·7 | 6·1 | |
| 10·2 | 43·7 | 18·0 | |
| 10·5 | 46·7 | 50·2 | |
| 9·4 | 47·7 | 31·6 | 9·5 |
| 10·4 | 48·2 | 56·2 | |
| 9·6 | 50·7 | 20·9 | |
| 10·4 | 50·7 | 7·5 | |
| 10·0 | 50·7 | 32·3 | |
| 10·2 | 52·7 | 46·3 | |
| 9·2 | 57·2 | 4·7 | |

**3181—3240.**

| mag. | 10h. m s | −57° ′ | |
|---|---|---|---|
| 10·4 | 21 0·7 | 31·8 | |
| 10·4 | 2·2 | 19·1 | |
| 10·4 | 2·5 | 16·3 | |
| 10·5 | 2·7 | 9·0 | |
| 10·4 | 8·2 | 18·1 | |
| 10·2 | 8·7 | 17·1 | |
| 10·4 | 9·7 | 25·2 | |
| 10·2 | 10·7 | 8·6 | |
| 9·0 | 10·7 | 46·5 | |
| 9·8 | 11·2 | 36·0 | |
| 10·5 | 12·2 | 10·3 | |
| 10·5 | 12·2 | 29·1 | |
| 9·2 | 12·7 | 14·3 | |
| 9·9 | 14·0 | 1·7 | |
| 10·5 | 15·7 | 4·7 | |
| 10·0 | 17·2 | 16·8 | |
| 9·0 | 23·2 | 11·5 | 9·5 |
| 10·5 | 25·2 | 5·1 | |
| 10·5 | 26·7 | 17·2 | |
| 10·5 | 26·7 | 23·9 | |
| 10·4 | 27·2 | 19·5 | |
| 10·5 | 30·7 | 5·1 | |
| 10·0 | 31·7 | 32·0 | |
| 10·5 | 31·7 | 40·4 | |
| 9·8 | 32·2 | 54·2 | |
| 9·4 | 33·2 | 41·9 | |
| 8·8 | 33·2 | 59·0 | |
| 10·4 | 36·2 | 39·8 | |
| 10·4 | 39·2 | 39·0 | |
| 9·0 | 39·7 | 58·8 | |
| 10·4 | 40·7 | 12·1 | |
| 10·4 | 40·7 | 24·1 | |
| 8·8 | 44·2 | 41·4 | 9·0 |
| 9·7 | 45·7 | 28·9 | |
| 10·4 | 47·2 | 41·0 | |
| 10·4 | 47·2 | 16·1 | |
| 9·8 | 47·7 | 59·2 | |
| 10·5 | 48·2 | 40·3 | |
| 10·0 | 48·7 | 4·9 | |
| 10·2 | 49·2 | 54·4 | |
| 10·5 | 49·2 | 14·1 | |
| 10·0 | 50·7 | 45·6 | |
| 10·5 | 51·7 | 12·0 | |
| 10·4 | 52·7 | 52·1 | |
| 10·0 | 52·7 | 33·7 | |
| 9·6 | 54·2 | 42·9 | 9·5 |
| 10·4 | 57·7 | 57·0 | |
| 10·5 | 22 4·7 | 58·1 | |
| 9·4 | 10·2 | 39·9 | 9·5 |
| 10·4 | 10·2 | 41·3 | |
| 9·9 | 10·2 | 30·8 | |
| 10·5 | 17·2 | 3·0 | |
| 10·5 | 17·7 | 42·5 | |
| 10·5 | 17·7 | 7·1 | |
| 9·8 | 18·7 | 32·6 | |
| 10·4 | 19·7 | 45·9 | |
| 8·4 | 20·7 | 2·3 | 9·0 |
| 9·8 | 21·7 | 38·3 | |
| 10·0 | 24·2 | 22·9 | |
| 10·5 | 27·2 | 35·1 | |

**3241—3300.**

| mag. | 10h. m s | −57° ′ | |
|---|---|---|---|
| 10·5 | 22 27·7 | 0·0 | |
| 10·4 | 29·7 | 12·1 | |
| 10·4 | 30·2 | 42·3 | |
| 10·5 | 30·2 | 6·7 | |
| 10·5 | 30·7 | 39·9 | |
| 9·9 | 34·7 | 51·4 | |
| 10·4 | 36·7 | 43·2 | |
| 10·2 | 37·2 | 54·0 | |
| 10·4 | 37·2 | 40·1 | |
| 9·8 | 37·7 | 26·7 | |
| 10·0 | 40·8 | 1·0 | |
| 9·6 | 43·7 | 13·7 | |
| 10·0 | 44·2 | 14·2 | |
| 9·7 | 44·2 | 1·6 | |
| 10·2 | 46·2 | 50·7 | |
| 6·4 | 46·5 | 0·1 | 5·0 GSt |
| 9·9 | 51·0 | 0·4 | |
| 10·0 | 52·7 | 5·8 | |
| 10·4 | 52·7 | 40·8 | |
| 9·8 | 53·2 | 49·1 | |
| 9·2 | 53·5 | 1·1 | |
| 10·0 | 53·7 | 7·5 | |
| 9·4 | 56·5 | 0·0 | |
| 10·5 | 58·7 | 24·9 | |
| 9·0 | 59·0 | 0·1 | |
| 9·2 | 23 0·7 | 45·0 | |
| 10·5 | 4·7 | 53·2 | |
| 10·4 | 6·7 | 43·0 | |
| 9·2 | 8·7 | 34·5 | |
| 9·8 | 8·7 | 21·1 | |
| 10·2 | 10·7 | 15·1 | |
| 10·5 | 10·7 | 54·5 | |
| 10·0 | 12·7 | 55·0 | |
| 9·8 | 16·2 | 49·7 | |
| 10·0 | 16·7 | 34·1 | |
| 10·0 | 17·2 | 39·1 | |
| 10·0 | 18·7 | 3·6 | |
| 10·2 | 22·2 | 42·1 | |
| 10·0 | 24·7 | 35·5 | |
| 10·0 | 26·2 | 39·6 | |
| 10·4 | 26·6 | 2·6 | |
| 10·4 | 30·2 | 54·0 | |
| 9·7 | 30·2 | 59·2 | |
| 10·2 | 32·3 | 10·3 | |
| 9·9 | 34·3 | 59·9 | |
| 9·6 | 34·7 | 51·8 | |
| 9·4 | 35·7 | 27·0 | |
| 9·2 | 36·2 | 3·3 | |
| 10·4 | 37·2 | 14·4 | |
| 10·0 | 37·2 | 17·7 | |
| 10·5 | 37·2 | 53·0 | |
| 10·2 | 37·2 | 29·1 | |
| 10·0 | 37·5 | 41·7 | |
| 10·4 | 41·2 | 47·7 | |
| 10·5 | 41·2 | 24·5 | |
| 10·5 | 41·7 | 3·0 | |
| 10·2 | 42·3 | 26·5 | |
| 10·0 | 45·2 | 42·5 | |
| 10·2 | 49·0 | 17·7 | |
| 10·5 | 50·7 | 44·0 | |



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### 3301—3360.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 23 | 51·3 | 4·0 | |
| 10·5 | | 54·2 | 41·1 | |
| 10·2 | | 57·2 | 17·1 | |
| 10·2 | | 57·2 | 28·7 | |
| 10·0 | 24 | 3·0 | 22·8 | |
| 10·4 | | 7·2 | 49·1 | |
| 10·5 | | 8·7 | 56·9 | |
| 9·2 | | 9·5 | 7·6 | |
| 10·4 | | 10·2 | 16·2 | |
| 9·9 | | 10·8 | 44·8 | |
| 10·0 | | 11·3 | 35·6 | |
| 8·8 | | 12·2 | 45·8 | |
| 8·4 | | 15·8 | 24·8 | 8·5 |
| 9·8 | | 18·0 | 9·4 | |
| 10·0 | | 18·3 | 52·4 | |
| 10·4 | | 18·7 | 55·0 | |
| 10·2 | | 19·0 | 34·5 | |
| 10·0 | | 19·2 | 12·0 | |
| 9·2 | | 26·8 | 7·5 | |
| 8·6 | | 26·8 | 48·9 | 9·0 |
| 9·8 | | 29·3 | 41·3 | |
| 9·4 | | 29·8 | 8·0 | |
| 9·6 | | 30·3 | 3·9 | |
| 10·0 | | 33·3 | 32·8 | |
| 9·8 | | 36·3 | 41·6 | |
| 9·6 | | 41·3 | 43·7 | |
| 10·1 | | 43·8 | 20·6 | |
| 9·8 | | 45·8 | 53·6 | |
| 10·1 | | 46·3 | 9·4 | |
| 10·0 | | 49·0 | 0·3 | |
| 10·1 | | 50·3 | 8·6 | |
| 9·2 | | 50·5 | 2·3 | 8·5 |
| 9·6 | | 51·8 | 27·3 | |
| 9·5 | | 54·8 | 19·6 | |
| 9·6 | | 57·8 | 22·5 | |
| 9·8 | | 58·8 | 18·9 | |
| 9·2 | 25 | 2·8 | 28·3 | |
| 10·1 | | 7·8 | 30·7 | |
| 9·6 | | 10·3 | 2·1 | |
| 10·0 | | 10·4 | 18·2 | |
| 9·4 | | 12·4 | 24·8 | |
| 9·2 | | 12·4 | 31·8 | |
| 10·0 | | 17·4 | 52·0 | |
| 9·0 | | 20·4 | 18·9 | |
| 10·1 | | 33·9 | 7·3 | |
| 10·1 | | 38·7 | 7·3 | |
| 9·5 | | 38·9 | 23·7 | |
| 10·1 | | 41·9 | 40·2 | |
| 9·6 | | 47·9 | 38·6 | |
| 10·1 | | 47·9 | 51·2 | |
| 10·1 | | 55·9 | 48·6 | |
| 10·1 | | 56·9 | 24·7 | |
| 9·8 | | 58·9 | 23·6 | |
| 9·5 | 26 | 2·9 | 3·8 | |
| 9·6 | | 3·4 | 26·2 | |
| 9·8 | | 5·9 | 49·8 | |
| 9·6 | | 6·9 | 17·2 | |
| 9·8 | | 7·4 | 39·9 | |
| 9·6 | | 10·9 | 39·0 | |
| 10·1 | | 13·4 | 18·3 | |

### 3361—3420.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 26 | 16·4 | 33·9 | |
| 10·0 | | 16·4 | 31·9 | |
| 9·8 | | 17·4 | 46·8 | |
| 10·1 | | 21·9 | 48·7 | |
| 9·6 | | 23·9 | 38·2 | |
| 8·0 | | 26·9 | 24·4 | 8·2 GSt |
| 10·0 | | 28·9 | 51·4 | |
| 9·6 | | 30·4 | 29·0 | |
| 9·6 | | 30·9 | 25·8 | |
| 9·4 | | 30·9 | 52·8 | |
| 9·8 | | 37·4 | 26·1 | |
| 9·8 | | 40·3 | 1·3 | |
| 10·1 | | 40·4 | 49·9 | |
| 9·6 | | 51·9 | 46·1 | |
| 10·1 | | 52·4 | 23·8 | |
| 9·4 | | 57·4 | 6·9 | |
| 9·2 | | 58·8 | 2·6 | |
| 9·5 | 27 | 3·9 | 7·7 | |
| 9·4 | | 4·4 | 25·1 | |
| 10·1 | | 4·4 | 46·3 | |
| 9·2 | | 5·9 | 36·2 | |
| 9·6 | | 6·4 | 46·1 | |
| 9·6 | | 12·1 | 1·5 | |
| 10·0 | | 16·9 | 8·9 | |
| 9·4 | | 18·4 | 25·8 | 9·0 |
| 9·4 | | 19·4 | 37·6 | |
| 8·8 | | 20·4 | 35·1 | 9·5 |
| 9·8 | | 20·4 | 6·8 | |
| 9·6 | | 21·4 | 44·8 | |
| 10·1 | | 22·9 | 44·9 | |
| 10·0 | | 22·9 | 56·4 | |
| 10·1 | | 27·9 | 53·0 | |
| 10·0 | | 28·8 | 2·2 | |
| 9·6 | | 29·4 | 15·1 | |
| 10·1 | | 30·9 | 3·9 | |
| 10·1 | | 33·9 | 40·4 | |
| 7·2 | | 40·4 | 54·2 | GSt |
| 9·6 | | 42·9 | 6·9 | |
| 9·2 | | 43·4 | 49·0 | |
| 9·4 | | 44·9 | 43·9 | |
| 10·1 | | 45·9 | 2·5 | |
| 10·0 | | 48·9 | 41·4 | |
| 9·2 | | 49·4 | 33·4 | 8·8 G |
| 10·1 | | 50·4 | 26·5 | |
| 9·6 | | 51·9 | 53·0 | |
| 9·0 | | 52·4 | 58·8 | 9·5 |
| 10·1 | | 56·0 | 41·0 | |
| 9·2 | 28 | 0·0 | 49·1 | |
| 10·0 | | 2·0 | 38·7 | |
| 9·6 | | 2·5 | 33·8 | |
| 9·8 | | 2·5 | 13·4 | |
| 10·1 | | 8·0 | 22·8 | |
| 9·2 | | 14·0 | 43·3 | |
| 10·1 | | 15·5 | 8·7 | |
| 9·8 | | 18·0 | 7·6 | |
| 9·4 | | 19·0 | 51·1 | |
| 9·4 | | 23·0 | 33·9 | |
| 9·6 | | 23·5 | 19·2 | |
| 9·1 | | 26·0 | 47·5 | |
| 10·0 | | 26·0 | 55·6 | |

### 3421—3480.

| mag. | 10h. m | s | −57° ′ | | |
|---|---|---|---|---|---|
| 10·1 | 28 | 27·5 | 4·6 | | |
| 8·4 | | 27·5 | 50·1 | 9·5 | |
| 8·0 | | 29·0 | 31·6 | 8·5 *G* | |
| 8·2 | | 29·0 | 51·3 | 8·5 | |
| 8·8 | | 30·0 | 19·7 | | |
| 9·8 | | 31·5 | 40·3 | | |
| 9·4 | | 35·5 | 47·1 | | |
| 9·6 | | 36·0 | 46·6 | | |
| 10·0 | | 41·0 | 19·1 | | |
| 10·0 | | 41·5 | 21·7 | | |
| 7·4 | | 42·0 | 32·6 | 7·0 *G*Scgt | |
| 9·1 | | 44·5 | 14·5 | | |
| 10·0 | | 51·0 | 9·7 | | |
| 9·8 | | 51·0 | 2·0 | | |
| 10·1 | 29 | 1·0 | 5·9 | | |
| 10·1 | | 5·0 | 42·9 | | |
| 10·0 | | 9·2 | 47·7 | | |
| 10·1 | | 9·7 | 38·6 | | |
| 10·1 | | 12·2 | 2·3 | | |
| 10·1 | | 14·7 | 44·2 | | |
| 10·1 | | 15·2 | 22·9 | | |
| 9·6 | | 21·7 | 31·0 | | |
| 10·0 | | 21·7 | 40·9 | | |
| 9·6 | | 24·2 | 51·9 | | |
| 10·1 | | 25·0 | 54·5 | | |
| 9·8 | | 32·2 | 41·4 | | |
| 10·0 | | 32·7 | 45·8 | | |
| 9·8 | | 35·2 | 3·8 | | |
| 9·2 | | 35·7 | 58·9 | 10·0 | |
| 10·1 | | 36·1 | 34·8 | | |
| 8·8 | | 37·5 | 58·0 | 9·0 | |
| 10·1 | | 40·2 | 30·0 | | |
| 10·0 | | 43·2 | 22·9 | | |
| 9·4 | | 45·2 | 7·8 | | |
| 10·0 | | 47·7 | 1·5 | | |
| 9·6 | | 48·2 | 30·1 | *G* | |
| 9·6 | | 49·7 | 33·7 | | |
| 9·5 | | 52·2 | 7·7 | | |
| 9·6 | | 53·7 | 28·8 | | : |
| 10·1 | | 58·0 | 36·9 | | |
| 9·1 | 30 | 0·7 | 34·4 | | |
| 10·1 | | 1·2 | 4·7 | | |
| 8·2 | | 1·7 | 30·6 | 8·5 *G* | |
| 9·0 | | 3·2 | 30·2 | *G* | |
| 9·2 | | 3·7 | 31·3 | | |
| 10·1 | | 3·7 | 28·4 | | |
| 9·4 | | 7·2 | 20·7 | | |
| 8·8 | | 11·2 | 32·4 | *G* | |
| 10·0 | | 12·2 | 50·8 | | |
| 10·0 | | 13·7 | 38·1 | | |
| 8·5 | | 15·2 | 10·9 | 9·0 GSg | |
| 8·0 | | 18·2 | 1·9 | 7·5 GSgt | |
| 9·8 | | 18·7 | 52·3 | | |
| 9·6 | | 21·2 | 31·8 | | |
| 9·6 | | 25·5 | 1·6 | | |
| 10·1 | | 29·1 | 32·3 | | |
| 10·0 | | 29·2 | 25·7 | | |
| 9·4 | | 32·2 | 17·2 | | |
| 10·0 | | 32·2 | 13·1 | | |
| 10·0 | | 32·2 | 59·5 | | |

### 3481—3540.

| mag. | 10h. m | s | −57° ′ | | |
|---|---|---|---|---|---|
| 9·4 | 30 | 34·7 | 28·3 | | |
| 10·1 | | 36·0 | 46·5 | | |
| 10·1 | | 39·0 | 54·9 | | |
| 10·0 | | 41·3 | 5·1 | | |
| 10·0 | | 42·8 | 34·0 | | |
| 9·0 | | 43·8 | 33·3 | *G* | |
| 10·1 | | 43·8 | 30·6 | | |
| 10·1 | | 44·3 | 58·8 | | |
| 9·6 | | 47·3 | 20·7 | | |
| 9·6 | | 47·3 | 36·6 | | |
| 10·0 | | 50·5 | 38·0 | | |
| 10·0 | | 50·8 | 37·3 | | |
| 9·6 | | 51·3 | 56·7 | | |
| 10·1 | | 51·8 | 33·3 | | |
| 9·6 | | 52·3 | 1·9 | | |
| 10·0 | | 52·8 | 6·0 | | |
| 9·5 | | 54·8 | 35·1 | | |
| 10·1 | | 55·3 | 6·9 | | |
| 7·4 | | 56·8 | 32·7 | 7·5 *G*Sgt | |
| 8·4 | | 56·8 | 34·0 | *G* | |
| 10·1 | | 58·8 | 36·5 | | |
| 9·0 | | 58·8 | 35·9 | 7·5 *G*g | |
| 9·1 | | 58·8 | 34·8 | *G* | : |
| 9·0 | | 59·3 | 33·4 | *G* | |
| 10·1 | | 59·5 | 37·8 | | |
| 8·1 | 31 | 0·8 | 35·4 | *G* | : |
| 9·0 | | 1·8 | 33·8 | | |
| 7·3 | | 2·8 | 34·6 | 7·5 *G*Sgt | |
| 9·8 | | 3·2 | 36·1 | | |
| 10·0 | | 4·2 | 36·9 | | |
| 10·0 | | 5·3 | 8·8 | | |
| 10·1 | | 5·8 | 32·8 | | |
| 10·0 | | 6·8 | 53·5 | | |
| 9·6 | | 7·8 | 33·4 | | |
| 8·8 | | 8·8 | 34·2 | | |
| 8·7 | | 8·8 | 36·6 | | |
| 9·0 | | 8·8 | 36·0 | | |
| 9·8 | | 8·8 | 35·0 | | |
| 9·6 | | 9·3 | 33·5 | | |
| 9·8 | | 10·3 | 33·9 | | |
| 8·6 | | 10·3 | 35·8 | *G* | |
| 9·4 | | 10·3 | 32·7 | | |
| 8·3 | | 11·3 | 34·5 | 8·5 *G* | |
| 8·5 | | 11·8 | 33·6 | | : |
| 10·0 | | 12·3 | 26·4 | | |
| 8·2 | | 12·8 | 35·5 | *G* | : |
| 8·8 | | 16·8 | 36·3 | *G* | |
| 9·8 | | 18·3 | 35·9 | | |
| 10·1 | | 18·8 | 50·9 | | |
| 9·2 | | 18·8 | 31·8 | | |
| 9·6 | | 19·8 | 35·7 | | |
| 10·0 | | 20·8 | 36·4 | | |
| 8·8 | | 21·3 | 34·2 | 8·5 Gg | |
| 8·8 | | 21·8 | 7·0 | | |
| 8·8 | | 23·8 | 12·9 | S | |
| 10·1 | | 24·0 | 42·3 | | |
| 9·8 | | 26·8 | 40·9 | | |
| 9·8 | | 27·8 | 38·7 | | |
| 9·1 | | 29·3 | 8·1 | | |
| 8·4 | | 29·8 | 37·7 | *G* | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 20 | 55 | 7·6 |
| | 30 | 57 | 7·7 |
| | 40 | 59 | 7·9 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 57 | 7·7 |
| | 40 | 59 | 7·9 |
| | 50 | 61 | 8·0 |

## 3541—3600.

| mag. | 10ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 31 | 30·3 | 29·5 | |
| 9·4 | | 30·3 | 12·0 | |
| 10·1 | | 32·4 | 1·4 | |
| 10·1 | | 36·0 | 32·0 | |
| 8·4 | | 36·3 | 17·6 | |
| 10·0 | | 36·8 | 11·0 | |
| 9·8 | | 42·3 | 17·4 | |
| 10·1 | | 42·5 | 34·7 | |
| 10·0 | | 42·8 | 26·7 | |
| 9·6 | | 49·8 | 45·2 | |
| 10·0 | | 49·8 | 55·4 | |
| 9·6 | | 50·8 | 18·6 | |
| 9·0 | | 50·8 | 21·3 | |
| 9·6 | | 52·8 | 26·9 | |
| 10·1 | | 53·5 | 43·8 | |
| 10·0 | | 55·8 | 23·9 | |
| 9·8 | | 56·8 | 54·9 | |
| 9·2 | | 57·3 | 9·4 | |
| 10·1 | | 57·3 | 53·7 | |
| 10·0 | | 57·8 | 15·9 | |
| 9·6 | | 57·8 | 53·6 | |
| 9·6 | | 58·8 | 53·3 | |
| 8·8 | 32 | 0·3 | 38·9 | *G* |
| 10·1 | | 1·6 | 1·0 | |
| 10·1 | | 4·3 | 24·4 | |
| 8·8 | | 4·8 | 11·7 | |
| 8·8 | | 8·8 | 58·8 | 9·0 |
| 10·0 | | 9·2 | 18·5 | |
| 9·6 | | 12·3 | 12·9 | |
| 10·1 | | 14·5 | 58·5 | |
| 10·1 | | 16·2 | 43·4 | |
| 9·8 | | 16·3 | 29·0 | |
| 10·1 | | 16·5 | 59·7 | |
| 10·1 | | 17·5 | 31·0 | |
| 10·1 | | 22·3 | 16·0 | |
| 10·0 | | 24·3 | 16·8 | |
| 10·1 | | 24·8 | 39·5 | |
| 9·6 | | 28·6 | 57·9 | |
| 8·8 | | 31·8 | 46·7 | |
| 8·6 | | 32·3 | 58·8 | 9·5 GS |
| 9·6 | | 32·8 | 4·9 | |
| 10·1 | | 35·5 | 30·5 | |
| 9·6 | | 35·8 | 35·4 | |
| 7·9 | | 36·3 | 58·5 | 9·0 GS |
| 9·8 | | 37·2 | 56·6 | |
| 9·1 | | 37·3 | 21·3 | |
| 9·8 | | 37·8 | 8·5 | |
| 10·1 | | 40·2 | 15·2 | |
| 10·1 | | 47·2 | 59·6 | |
| 9·4 | | 47·4 | 5·4 | |
| 10·1 | | 48·4 | 13·8 | |
| 10·0 | | 51·9 | 55·8 | |
| 10·1 | | 52·6 | 48·1 | |
| 10·1 | | 54·3 | 24·1 | |
| 9·8 | | 54·9 | 49·4 | |
| 9·6 | | 55·3 | 14·0 | |
| 9·1 | | 59·4 | 18·0 | |
| 9·1 | 33 | 3·4 | 15·2 | |
| 8·6 | | 4·4 | 55·7 | 8·5 |
| 9·6 | | 4·9 | 49·9 | |

## 3601—3660.

| mag. | 10ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 33 | 12·2 | 52·4 | |
| 10·0 | | 12·5 | 1·9 | |
| 9·2 | | 17·4 | 36·1 | *G* |
| 10·0 | | 19·4 | 17·0 | |
| 9·8 | | 19·4 | 21·7 | |
| 10·1 | | 20·2 | 44·4 | |
| 10·0 | | 21·4 | 22·9 | |
| 8·4 | | 22·4 | 38·3 | *G* |
| 9·8† | | 23·5 | 39·0 | |
| 10·0 | | 23·9 | 24·8 | |
| 10·0 | | 24·4 | 13·5 | |
| 10·0 | | 30·9 | 55·9 | |
| 9·2 | | 35·9 | 47·9 | |
| 9·0 | | 36·4 | 2·8 | 9·0 |
| 9·6 | | 38·4 | 8·5 | |
| 9·6 | | 40·4 | 6·3 | |
| 9·8† | | 44·9 | 59·9 | |
| 9·2 | | 44·9 | 14·5 | |
| 9·8 | | 44·9 | 0·7 | |
| 10·1 | | 45·9 | 45·5 | |
| 9·0 | | 47·3 | 23·4 | |
| 10·0 | | 48·9 | 46·9 | |
| 9·6 | | 50·4 | 24·0 | |
| 9·2 | | 58·4 | 6·5 | |
| 9·6 | 34 | 2·4 | 15·0 | |
| 10·0 | | 7·4 | 48·6 | |
| 8·8 | | 8·9 | 7·7 | 8·5 |
| 8·8 | | 12·1 | 58·1 | |
| 10·1 | | 13·6 | 6·8 | |
| 10·1 | | 15·1 | 32·9 | |
| 10·1 | | 15·1 | 51·9 | |
| 9·6 | | 19·1 | 51·7 | |
| 10·0 | | 20·1 | 38·5 | |
| 9·6 | | 21·1 | 54·5 | |
| 9·4 | | 21·6 | 58·1 | |
| 10·0 | | 25·6 | 23·5 | |
| 8·8 | | 27·1 | 28·8 | |
| 9·6 | | 27·6 | 23·3 | |
| 10·0 | | 28·6 | 38·9 | |
| 9·4 | | 28·6 | 53·7 | |
| 9·6 | | 28·6 | 45·1 | |
| 10·0 | | 29·6 | 4·2 | |
| 9·4 | | 30·1 | 36·9 | |
| 9·6 | | 32·6 | 54·7 | |
| 10·1 | | 38·6 | 42·7 | |
| 10·0 | | 39·6 | 30·6 | |
| 10·0 | | 41·1 | 43·9 | |
| 9·5 | | 42·1 | 25·7 | |
| 9·6 | | 43·6 | 40·3 | |
| 9·8 | | 55·1 | 25·8 | |
| 10·1 | | 56·6 | 22·5 | |
| 9·5 | | 57·6 | 44·4 | |
| 9·6 | 35 | 2·1 | 21·7 | |
| 10·1 | | 3·6 | 28·0 | |
| 9·6 | | 8·6 | 50·3 | |
| 10·1 | | 10·1 | 19·4 | |
| 9·6 | | 26·6 | 12·8 | |
| 10·1 | | 28·6 | 2·3 | |
| 10·0 | | 36·6 | 52·6 | |
| 9·5 | | 39·6 | 10·2 | |

## 3661—3720.

| mag. | 10ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 35 | 50·6 | 20·1 | |
| 9·4 | 36 | 0·4 | 31·6 | |
| 8·1 | | 1·1 | 16·9 | GSt |
| 9·4 | | 1·1 | 18·5 | |
| 10·1 | | 1·6 | 48·0 | |
| 10·1 | | 2·6 | 46·8 | |
| 10·1 | | 7·9 | 23·9 | |
| 10·1 | | 9·9 | 31·0 | |
| 10·1 | | 9·9 | 49·3 | |
| 10·1 | | 11·9 | 28·3 | |
| 9·0 | | 13·9 | 55·0 | 9·5 |
| 9·0 | | 16·9 | 7·1 | |
| 10·1 | | 21·9 | 36·4 | |
| 9·2 | | 28·4 | 0·8 | 9·5 |
| 9·4 | | 30·4 | 7·1 | |
| 9·4 | | 30·4 | 45·5 | |
| 9·1 | | 32·4 | 27·2 | |
| 9·5 | | 33·4 | 21·7 | |
| 9·6 | | 34·4 | 39·1 | |
| 9·6 | | 39·9 | 15·5 | |
| 9·2 | | 45·4 | 21·4 | |
| 10·0 | | 45·9 | 36·8 | |
| 10·1 | | 49·9 | 32·0 | |
| 10·1 | | 51·0 | 57·8 | |
| 9·8 | | 51·4 | 17·7 | |
| 10·0 | | 51·9 | 41·9 | |
| 9·0 | | 53·9 | 42·6 | 9·0 |
| 10·1 | | 58·9 | 21·7 | |
| 9·8 | 37 | 2·9 | 7·4 | |
| 10·0 | | 2·9 | 39·7 | |
| 10·1 | | 3·0 | 55·9 | |
| 10·1 | | 11·4 | 55·0 | |
| 10·0 | | 13·9 | 12·1 | |
| 9·8 | | 14·9 | 8·5 | |
| 10·1 | | 29·4 | 31·1 | |
| 9·1 | | 36·4 | 22·1 | |
| 10·0 | | 40·9 | 53·3 | |
| 10·1 | | 44·4 | 21·1 | |
| 10·1 | | 56·4 | 15·1 | |
| 8·6 | | 57·9 | 39·1 | 8·8 |
| 10·0 | | 58·4 | 54·3 | |
| 10·0 | | 59·4 | 12·9 | |
| 9·6 | 38 | 1·9 | 25·7 | |
| 9·4 | | 5·4 | 36·9 | |
| 10·0 | | 5·5 | 41·9 | |
| 9·8 | | 9·0 | 33·5 | |
| 9·1 | | 9·5 | 4·5 | |
| 10·1 | | 12·0 | 14·7 | |
| 8·8 | | 12·0 | 29·5 | 9·0 |
| 10·1 | | 12·0 | 49·9 | |
| 10·1 | | 12·2 | 58·4 | 10·0 |
| 10·0 | | 16·0 | 48·9 | |
| 9·6 | | 20·0 | 41·1 | |
| 10·1 | | 21·0 | 52·5 | |
| 10·0 | | 21·5 | 13·3 | |
| 10·0 | | 22·0 | 29·7 | |
| 10·1 | | 23·5 | 28·8 | |
| 10·1 | | 25·0 | 26·5 | |
| 10·1 | | 25·5 | 14·5 | |
| 10·1 | | 26·0 | 10·1 | |

## 3721—3780.

| mag. | 10ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 38 | 33·0 | 3·3 | |
| 10·1 | | 36·0 | 36·9 | |
| 9·8 | | 39·0 | 25·9 | |
| 9·6 | | 41·0 | 18·7 | |
| 10·1 | | 42·5 | 24·4 | |
| 10·0 | | 48·0 | 24·5 | |
| 9·8 | | 48·5 | 14·1 | |
| 10·1 | | 51·5 | 48·9 | |
| 9·5 | | 55·5 | 21·7 | |
| 10·1 | | 56·0 | 16·8 | |
| 8·6 | 39 | 3·0 | 1·8 | 9·0 |
| 10·1 | | 3·5 | 30·6 | |
| 9·6 | | 5·5 | 16·4 | |
| 10·0 | | 8·5 | 39·3 | |
| 9·2 | | 10·0 | 25·2 | |
| 10·0 | | 12·0 | 27·2 | |
| 9·6 | | 15·0 | 18·7 | |
| 10·0 | | 15·0 | 46·0 | |
| 9·6 | | 15·5 | 27·5 | |
| 9·8 | | 16·5 | 47·1 | |
| 8·4 | | 18·0 | 43·7 | 8·8 |
| 9·8 | | 18·7 | 24·3 | |
| 9·6 | | 20·0 | 19·6 | |
| 9·8 | | 23·1 | 31·2 | |
| 9·6 | | 24·5 | 5·8 | |
| 10·1 | | 24·5 | 24·5 | G |
| 9·8† | | 25·0 | 43·6 | |
| 9·4 | | 27·1 | 44·7 | 9·0 |
| 10·0 | | 30·6 | 19·7 | |
| 10·1 | | 30·9 | 1·8 | |
| 10·1 | | 37·1 | 2·8 | |
| 10·0 | | 37·6 | 31·0 | |
| 10·1 | | 38·6 | 30·7 | |
| 10·1† | | 39·4 | 31·0 | |
| 10·1 | | 47·1 | 31·5 | |
| 8·8 | | 53·1 | 25·0 | 8·8 G |
| 9·8 | | 53·5 | 1·3 | |
| 9·8 | | 55·6 | 53·3 | |
| 10·1 | | 59·6 | 53·8 | |
| 9·4 | 40 | 4·6 | 25·9 | |
| 10·0 | | 6·1 | 46·7 | |
| 9·8 | | 6·6 | 33·9 | |
| 8·4 | | 9·6 | 29·5 | 8·1 G |
| 10·0 | | 12·9 | 35·2 | |
| 8·6 | | 13·1 | 4·7 | 7·5 |
| 10·0 | | 17·6 | 4·7 | |
| 10·1 | | 23·6 | 59·1 | |
| 9·5 | | 34·1 | 32·9 | |
| 10·1 | | 39·2 | 25·0 | |
| 9·8 | | 41·9 | 43·9 | |
| 10·0 | | 44·1 | 51·5 | |
| 10·0 | | 44·6 | 57·1 | |
| 9·8 | | 45·1 | 56·8 | |
| 9·6 | | 47·1 | 15·5 | |
| 10·1 | | 52·6 | 10·7 | |
| 9·8 | | 53·1 | 6·3 | |
| 9·6 | | 59·6 | 13·1 | |
| 9·6 | 41 | 1·6 | 13·8 | |
| 10·0 | | 5·6 | 31·8 | |
| 10·0 | | 9·6 | 45·3 | |



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## 3781—3840.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 41 | 16·3 | 59·8 | |
| 9·6 | | 21·6 | 5·3 | |
| 9·2 | | 25·1 | 48·6 | |
| 10·1 | | 28·1 | 59·8 | 9·5 |
| 10·0 | | 31·6 | 2·7 | |
| 9·8 | | 35·6 | 9·8 | |
| 10·0 | | 37·7 | 56·5 | |
| 9·8 | | 40·2 | 26·1 | |
| 10·1 | | 41·2 | 40·1 | |
| 9·8 | | 49·7 | 44·1 | |
| 10·1 | | 53·2 | 42·5 | |
| 10·0 | | 55·2 | 55·9 | |
| 8·8 | 42 | 3·2 | 17·9 | |
| 8·8 | | 4·2 | 18·9 | |
| 9·4 | | 5·2 | 54·9 | |
| 9·6 | | 7·2 | 11·9 | |
| 9·8 | | 8·7 | 7·5 | |
| 9·8 | | 10·7 | 55·7 | |
| 9·6 | | 13·2 | 6·1 | |
| 9·5 | | 14·7 | 24·9 | |
| 9·5 | | 20·7 | 43·2 | |
| 9·8 | | 24·7 | 39·9 | |
| 8·8 | | 27·2 | 25·9 | 9·0 |
| 10·1 | | 38·2 | 33·8 | |
| 9·4 | | 40·2 | 15·9 | |
| 10·0 | | 43·9 | 1·9 | |
| 9·8 | | 44·2 | 59·2 | |
| 10·0 | | 45·2 | 17·7 | |
| 9·6 | | 54·2 | 23·6 | |
| 10·1 | | 56·7 | 40·8 | |
| 9·2 | | 58·7 | 32·1 | |
| 10·1 | 43 | 0·7 | 21·1 | |
| 10·0 | | 5·9 | 41·3 | |
| 9·6 | | 6·2 | 48·9 | |
| 10·1 | | 10·2 | 40·5 | |
| 10·0 | | 13·2 | 54·0 | |
| 9·6 | | 22·7 | 18·0 | |
| 10·1 | | 24·2 | 45·3 | |
| 10·1 | | 24·2 | 14·9 | |
| 10·0 | | 24·7 | 0·0 | |
| 9·1 | | 31·7 | 31·3 | |
| 9·5 | | 32·2 | 1·5 | 9·5 |
| 9·8 | | 32·7 | 29·7 | |
| 10·1 | | 36·2 | 40·1 | |
| 8·4 | | 37·4 | 0·8 | 7·5 GSt |
| 9·6 | | 38·3 | 12·8 | |
| 9·6 | | 38·8 | 19·7 | 9·0 |
| 9·4 | | 39·8 | 45·3 | 9·0 |
| 9·2 | | 39·8 | 54·7 | 9·5 |
| 9·2 | | 44·3 | 8·4 | |
| 9·2 | | 44·8 | 5·2 | |
| 9·8 | | 46·3 | 40·0 | |
| 9·5 | | 48·8 | 15·5 | |
| 10·1 | | 52·8 | 37·3 | |
| 9·5 | | 54·3 | 39·9 | 10·0 |
| 9·8 | | 59·3 | 53·1 | |
| 8·8 | 44 | 7·5 | 1·0 | 9·0 |
| 8·0 | | 10·8 | 18·4 | 7·5 |
| 10·0 | | 14·3 | 17·7 | |
| 10·1 | | 18·3 | 33·5 | |

## 3841—3900.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 44 | 19·3 | 16·7 | |
| 10·0 | | 22·8 | 49·3 | |
| 9·8 | | 22·8 | 58·1 | |
| 9·8 | | 23·8 | 2·9 | |
| 9·8 | | 23·8 | 59·8 | |
| 9·4 | | 24·3 | 21·4 | |
| 10·1 | | 24·7 | 0·9 | |
| 9·8 | | 27·3 | 26·4 | |
| 9·6 | | 29·8 | 47·4 | |
| 10·0 | | 34·3 | 19·4 | |
| 9·8 | | 35·8 | 7·4 | |
| 10·1 | | 43·3 | 57·3 | |
| 9·4 | | 47·3 | 5·0 | |
| 10·1 | | 55·3 | 6·1 | |
| 10·1 | | 56·8 | 41·9 | |
| 8·6 | | 59·8 | 12·7 | 8·5 |
| 9·8 | 45 | 0·8 | 38·3 | |
| 10·0 | | 1·8 | 22·4 | |
| 10·1 | | 13·8 | 20·7 | |
| 9·8 | | 14·8 | 30·7 | |
| 9·2 | | 19·8 | 17·9 | |
| 10·1 | | 24·8 | 59·1 | |
| 10·1 | | 25·8 | 35·1 | |
| 9·8 | | 28·8 | 19·0 | |
| 10·0 | | 29·8 | 17·2 | |
| 9·6 | | 32·4 | 54·2 | |
| 9·0 | | 33·4 | 11·3 | 9·0 |
| 9·2 | | 33·4 | 31·9 | 9·2 |
| 9·8 | | 33·9 | 43·4 | |
| 9·6 | | 38·4 | 46·0 | |
| 10·0 | | 46·9 | 13·0 | |
| 9·8 | | 53·9 | 33·8 | |
| 9·5 | | 55·9 | 29·4 | |
| 9·8 | | 56·4 | 19·2 | |
| 9·5 | 46 | 1·9 | 21·5 | |
| 9·5 | | 2·4 | 25·8 | |
| 10·0 | | 3·9 | 48·8 | |
| 8·8 | | 8·4 | 42·8 | 8·5 G |
| 9·2 | | 8·4 | 22·8 | |
| 9·0 | | 13·9 | 6·3 | 9·5 |
| 8·8 | | 15·9 | 26·0 | 9·0 |
| 9·5 | | 16·4 | 34·6 | 9·0 |
| 9·0 | | 17·9 | 18·8 | |
| 9·5 | | 17·9 | 3·7 | |
| 9·2 | | 30·9 | 24·9 | 9·0 |
| 9·5 | | 31·9 | 42·1 | |
| 8·4 | | 36·4 | 35·2 | 9·0 |
| 10·0 | | 36·4 | 2·6 | |
| 9·5 | | 36·9 | 47·3 | |
| 9·4 | | 43·9 | 12·6 | |
| 10·1 | | 43·9 | 39·1 | |
| 9·6 | | 48·9 | 2·0 | |
| 8·8 | | 51·4 | 20·6 | |
| 10·0 | | 52·9 | 38·2 | |
| 7·4 | | 53·9 | 45·1 | 7·5 GSt |
| 10·0 | | 57·9 | 53·8 | |
| 9·6 | | 59·9 | 30·2 | |
| 9·6 | 47 | 1·9 | 36·4 | |
| 10·0 | | 7·4 | 39·3 | |
| 10·0 | | 8·9 | 44·2 | |

## 3901—3960.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 47 | 10·4 | 38·3 | |
| 9·5 | | 11·9 | 27·6 | |
| 10·1 | | 12·4 | 0·1 | |
| 9·8 | | 13·9 | 32·9 | |
| 8·8 | | 15·5 | 32·1 | 9·0 G |
| 10·0 | | 16·5 | 21·4 | |
| 9·5 | | 20·0 | 11·3 | |
| 10·0 | | 20·0 | 34·4 | |
| 7·4 | | 21·2 | 35·3 | 7·8 GSt |
| 9·8 | | 22·7 | 29·5 | |
| 10·1 | | 23·7 | 24·2 | |
| 9·6 | | 25·7 | 45·6 | G |
| 9·4 | | 26·2 | 10·1 | |
| 8·8 | | 39·7 | 21·2 | 9·0 |
| 10·1 | | 40·2 | 30·9 | |
| 8·2 | | 41·2 | 54·2 | G |
| 10·0 | | 46·7 | 43·4 | |
| 9·8 | | 46·7 | 8·8 | |
| 9·4 | | 47·2 | 57·8 | |
| 9·2 | | 48·2 | 6·6 | |
| 10·1 | | 51·7 | 37·8 | |
| 10·1 | | 57·7 | 46·7 | |
| 9·6 | | 59·7 | 6·8 | |
| 9·1 | 48 | 0·7 | 19·0 | |
| 10·1 | | 1·6 | 54·8 | |
| 9·2 | | 2·2 | 37·1 | |
| 8·3 | | 2·7 | 9·5 | 7·0 GSt |
| 8·8 | | 6·2 | 11·5 | |
| 8·8 | | 8·7 | 11·0 | 9·0 |
| 10·1 | | 10·7 | 42·9 | |
| 9·6 | | 11·7 | 2·3 | |
| 9·6 | | 13·2 | 20·2 | |
| 8·8 | | 15·2 | 13·3 | 9·0 |
| 9·8 | | 15·2 | 44·2 | |
| 9·6 | | 16·6 | 11·4 | |
| 8·8 | | 17·2 | 11·6 | |
| 10·1 | | 20·2 | 16·2 | |
| 10·0 | | 21·7 | 15·7 | |
| 8·8 | | 23·2 | 45·6 | G |
| 10·0 | | 25·2 | 18·6 | |
| 10·0 | | 31·6 | 2·1 | |
| 9·4 | | 33·2 | 37·0 | |
| 9·4 | | 33·6 | 33·8 | |
| 10·0 | | 35·1 | 27·9 | |
| 10·0 | | 35·1 | 58·6 | |
| 10·1 | | 36·1 | 35·1 | |
| 9·6 | | 38·4 | 36·6 | |
| 10·1 | | 39·1 | 35·2 | |
| 9·8 | | 40·6 | 54·6 | |
| 9·6 | | 41·1 | 56·1 | |
| 10·1 | | 41·6 | 27·1 | |
| 10·1 | | 46·4 | 31·4 | |
| 10·1 | | 50·6 | 34·1 | |
| 9·8 | | 51·1 | 7·3 | |
| 10·1 | | 51·6 | 30·8 | |
| 9·8 | | 55·4 | 37·8 | |
| 9·6 | | 55·6 | 3·9 | |
| 10·0 | | 56·1 | 58·7 | |
| 9·2 | | 59·6 | 13·8 | |
| 9·2 | 49 | 0·1 | 25·4 | |

## 3961—4020.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 49 | 1·1 | 20·6 | |
| 10·1 | | 1·6 | 40·9 | |
| 10·1 | | 2·6 | 2·9 | |
| 10·1 | | 9·6 | 46·5 | |
| 10·1 | | 10·6 | 38·3 | |
| 10·0 | | 12·6 | 14·7 | |
| 9·2 | | 13·1 | 4·9 | |
| 9·2 | | 15·6 | 24·3 | |
| 9·6 | | 16·1 | 45·3 | |
| 9·2 | | 22·6 | 10·7 | |
| 9·5 | | 41·1 | 30·5 | 9·5 |
| 9·5 | | 42·1 | 45·7 | G |
| 10·1 | | 45·6 | 4·7 | |
| 8·6 | | 46·6 | 54·3 | 9·5 G |
| 10·1 | | 51·4 | 4·7 | |
| 10·1 | | 51·6 | 11·4 | |
| 10·1 | | 53·6 | 35·9 | |
| 10·0 | 50 | 0·1 | 5·9 | |
| 9·6 | | 3·4 | 0·1 | |
| 10·0 | | 4·1 | 18·9 | |
| 10·1 | | 6·1 | 58·7 | |
| 9·6 | | 12·1 | 29·3 | |
| 9·5 | | 16·9 | 37·3 | |
| 10·0 | | 16·9 | 35·6 | |
| 9·6 | | 19·4 | 6·2 | |
| 10·0 | | 24·4 | 29·2 | |
| 9·2 | | 24·9 | 57·2 | 8·5 G |
| 10·1 | | 29·4 | 17·1 | |
| 9·5 | | 31·3 | 7·3 | |
| 10·0 | | 33·4 | 25·1 | |
| 9·8 | | 33·9 | 49·1 | |
| 10·1 | | 43·9 | 5·7 | |
| 10·0 | | 44·9 | 17·3 | |
| 10·0 | | 44·9 | 54·0 | |
| 9·4 | | 50·9 | 24·5 | 8·5 G |
| 10·1 | | 58·4 | 52·0 | |
| 10·1 | | 59·4 | 5·6 | |
| 8·4 | 51 | 0·4 | 24·5 | 8·5 G |
| 9·6 | | 5·4 | 20·1 | |
| 9·6 | | 7·3 | 1·0 | |
| 10·1 | | 7·3 | 47·1 | |
| 8·4 | | 7·4 | 23·1 | 7·0 GSt |
| 10·0 | | 24·9 | 16·7 | |
| 9·5 | | 32·4 | 50·8 | |
| 9·8 | | 34·9 | 5·3 | |
| 10·1 | | 37·9 | 46·8 | |
| 8·6 | | 42·4 | 59·5 | 8·0 G |
| 9·4 | | 42·9 | 6·6 | |
| 9·2 | | 54·4 | 23·1 | |
| 10·1 | | 58·4 | 46·8 | |
| 10·0 | 52 | 2·9 | 27·7 | |
| 10·0 | | 10·9 | 29·8 | |
| 10·0 | | 10·9 | 55·5 | |
| 10·1 | | 12·3 | 19·9 | |
| 9·5 | | 12·9 | 47·2 | G |
| 10·1 | | 16·4 | 52·7 | |
| 9·8 | | 19·4 | 27·8 | |
| 9·8 | | 22·4 | 48·2 | G |
| 9·0 | | 24·4 | 17·6 | |
| 10·0 | | 24·9 | 37·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 59 | 7·9 |
| | 50 | 61 | 8·0 |
| 11 | 0 | 63 | 8·1 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + | − |
| | | s | ′ |
| 10 | 50 | 61 | 8·0 |
| 11 | 0 | 63 | 8·1 |
| | 10 | 65 | 8·2 |

## 4021—4080.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·1 | 52 | 26·9 | 53·2 | |
| 9·4 | | 29·9 | 32·9 | |
| 10·0 | | 31·4 | 38·9 | |
| 9·5 | | 31·4 | 37·0 | |
| 9·6 | | 38·4 | 35·5 | |
| 8·4 | | 40·9 | 16·7 | 9·0 |
| 9·4 | | 41·9 | 22·7 | 8·5 G |
| 9·8 | | 45·4 | 44·8 | |
| 9·0 | | 52·4 | 9·7 | |
| 9·6 | | 59·4 | 33·7 | |
| 10·0 | | 59·9 | 50·8 | |
| 10·0 | 53 | 8·6 | 0·6 | |
| 10·1 | | 14·9 | 18·6 | |
| 10·1 | | 21·4 | 10·2 | |
| 7·6 | | 21·9 | 19·4 | 7·5 Gt |
| 10·1 | | 24·4 | 55·9 | |
| 10·1 | | 26·4 | 9·1 | |
| 9·1 | | 29·9 | 32·7 | 9·5 |
| 10·1 | | 31·9 | 33·2 | |
| 9·0 | | 32·4 | 10·6 | |
| 9·6 | | 34·4 | 8·5 | |
| 9·6 | | 35·9 | 35·8 | |
| 9·8 | | 47·2 | 42·2 | |
| 9·6 | | 48·4 | 28·1 | |
| 10·0 | | 49·4 | 50·1 | |
| 9·6 | | 50·9 | 13·1 | |
| 10·1 | 54 | 1·4 | 32·8 | |
| 8·2 | | 3·9 | 0·7 | 9·0 |
| 9·1 | | 3·9 | 28·0 | 9·5 G |
| 9·6 | | 4·4 | 11·2 | |
| 9·6 | | 7·4 | 25·4 | |
| 8·5 | | 9·4 | 27·2 | 9·0 |
| 9·6 | | 10·4 | 33·5 | 10·0 |
| 10·0 | | 12·4 | 10·7 | |
| 9·5 | | 14·4 | 50·9 | |
| 9·6 | | 15·9 | 24·4 | |
| 10·0 | | 18·9 | 17·9 | |
| 10·0 | | 29·4 | 37·4 | |
| 9·8 | | 34·9 | 7·5 | |
| 9·2 | | 38·4 | 0·8 | 9·0 |
| 9·6 | | 39·4 | 36·3 | |
| 8·4 | | 40·9 | 29·8 | 9·5 G |
| 10·1 | | 41·5 | 58·7 | |
| 10·0 | | 44·5 | 5·2 | |
| 10·1 | | 45·4 | 0·9 | |
| 9·8 | | 50·4 | 1·9 | |
| 10·1 | | 51·9 | 54·3 | |
| 10·1 | | 52·5 | 31·1 | |
| 10·1 | | 53·5 | 31·7 | |
| 8·8 | | 55·4 | 40·7 | 9·5 |
| 9·4 | | 57·4 | 24·5 | 10·0 |
| 9·6 | | 57·5 | 28·0 | |
| 10·0 | | 58·9 | 25·8 | |
| 9·8 | 55 | 1·4 | 32·7 | |
| 10·0 | | 3·9 | 2·1 | |
| 8·6 | | 7·4 | 44·3 | 9·5 G |
| 10·0 | | 12·9 | 21·3 | |
| 9·5 | | 13·9 | 3·5 | |
| 8·8 | | 20·6 | 1·7 | 9·0 |
| 9·6 | | 21·9 | 49·4 | G |

## 4081—4140.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 25·9 | 58·7 | |
| 9·8 | | 27·9 | 36·2 | |
| 9·8 | | 29·1 | 54·9 | |
| 9·2 | | 30·4 | 32·9 | |
| 9·8 | | 31·9 | 39·5 | |
| 9·6 | | 34·6 | 48·3 | |
| 9·4 | | 40·6 | 20·3 | |
| 9·8 | | 44·9 | 31·8 | |
| 10·0 | | 46·9 | 18·3 | |
| 9·4 | | 48·9 | 40·9 | |
| 9·6 | | 51·1 | 57·0 | G |
| 9·0 | | 51·6 | 15·9 | 9·0 |
| 9·6 | | 52·3 | 19·3 | |
| 10·0 | | 56·9 | 10·4 | |
| 9·8 | | 57·3 | 16·9 | |
| 10·0 | | 57·9 | 44·2 | |
| 10·0 | | 59·8 | 55·2 | |
| 9·4 | 56 | 1·3 | 29·0 | |
| 8·6 | | 2·8 | 26·4 | 9·0 G |
| 9·6 | | 2·8 | 34·0 | |
| 9·6 | | 3·3 | 20·9 | |
| 10·0 | | 3·8 | 49·9 | G |
| 9·6 | | 8·4 | 17·7 | |
| 10·0 | | 15·3 | 21·6 | |
| 9·6 | | 19·8 | 14·6 | |
| 9·8 | | 25·9 | 10·4 | |
| 9·8 | | 28·4 | 19·9 | |
| 9·4 | | 33·3 | 5·1 | |
| 8·6 | | 33·3 | 31·2 | 9·0 G |
| 9·4 | | 36·8 | 19·9 | |
| 9·6 | | 36·8 | 55·4 | |
| 10·0 | | 36·9 | 38·4 | |
| 9·8 | | 37·8 | 5·8 | |
| 10·0 | | 38·8 | 7·9 | |
| 10·0 | | 42·3 | 14·7 | |
| 9·4 | | 52·3 | 40·9 | |
| 9·4 | | 53·3 | 29·4 | |
| 9·6 | 57 | 0·3 | 54·4 | |
| 8·2 | | 8·3 | 13·2 | 8·5 |
| 9·4 | | 9·8 | 4·3 | |
| 9·8 | | 12·3 | 16·1 | |
| 9·4 | | 16·3 | 54·1 | |
| 9·1 | | 17·3 | 42·0 | |
| 10·0 | | 18·3 | 51·5 | |
| 10·0 | | 20·3 | 39·8 | |
| 9·8 | | 21·8 | 53·9 | |
| 8·4 | | 22·8 | 44·4 | G |
| 10·0 | | 24·3 | 31·2 | |
| 10·0 | | 24·8 | 25·0 | |
| 9·8 | | 24·8 | 24·5 | |
| 10·0 | | 25·3 | 48·8 | |
| 9·8 | | 27·3 | 17·2 | |
| 9·0 | | 35·8 | 50·1 | |
| 10·0 | | 42·3 | 26·8 | |
| 9·2 | | 42·8 | 25·6 | |
| 10·0 | | 43·3 | 49·2 | |
| 9·1 | | 45·3 | 31·9 | G |
| 9·8 | | 48·8 | 54·9 | |
| 9·8 | | 55·8 | 30·7 | |
| 9·8 | | 56·3 | 27·9 | |

## 4141—4200.

| mag. | 10h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8·6 | 57 | 56·3 | 43·1 | G |
| 9·5 | | 59·3 | 55·5 | |
| 10·0 | 58 | 1·3 | 45·0 | |
| 10·0 | | 2·3 | 49·0 | |
| 9·1 | | 5·3 | 48·1 | |
| 9·8 | | 5·3 | 30·2 | G |
| 9·4 | | 6·3 | 46·0 | |
| 9·5 | | 7·3 | 39·5 | |
| 9·6 | | 8·8 | 35·1 | |
| 9·8 | | 10·8 | 21·9 | |
| 9·4 | | 11·3 | 49·5 | |
| 9·2 | | 12·8 | 16·3 | 9·0 |
| 9·4 | | 14·8 | 25·2 | |
| 9·8 | | 16·8 | 20·9 | |
| 9·6 | | 18·8 | 45·1 | |
| 8·8 | | 18·8 | 53·2 | |
| 9·5 | | 20·3 | 48·8 | |
| 9·8 | | 21·3 | 44·8 | |
| 9·2 | | 21·8 | 39·2 | |
| 9·8 | | 23·8 | 18·5 | |
| 10·0 | | 25·8 | 52·2 | |
| 9·1 | | 26·8 | 10·6 | 9·0 |
| 9·4 | | 28·3 | 28·0 | |
| 9·4 | | 28·8 | 33·9 | 9·0 G |
| 10·0 | | 30·3 | 13·0 | |
| 10·0 | | 30·8 | 56·2 | |
| 9·6 | | 32·3 | 51·8 | |
| 9·4 | | 32·8 | 54·2 | |
| 9·4 | | 33·8 | 55·0 | |
| 8·5 | | 37·8 | 43·2 | G |
| 10·0 | | 38·3 | 44·8 | |
| 10·0 | | 38·8 | 9·5 | |
| 9·6 | | 39·3 | 48·5 | G |
| 7·2 | | 42·8 | 16·7 | 7·0 GSt |
| 9·2 | | 46·3 | 46·2 | |
| 10·0 | | 47·3 | 55·8 | |
| 9·4 | | 49·8 | 46·8 | |
| 9·6 | | 51·1 | 0·8 | |
| 10·0 | | 54·3 | 28·0 | |
| 8·8 | | 55·8 | 5·5 | 9·0 |
| 8·7 | | 58·3 | 47·5 | G |
| 9·4 | 59 | 0·8 | 37·2 | |
| 9·6 | | 1·8 | 56·0 | |
| 9·8 | | 1·8 | 24·0 | |
| 10·0 | | 2·3 | 39·2 | |
| 9·6 | | 2·8 | 56·2 | |
| 9·8 | | 4·8 | 23·1 | |
| 9·8 | | 5·6 | 59·9 | |
| 9·8 | | 7·8 | 49·2 | |
| 9·6 | | 12·3 | 5·9 | 9·0 |
| 9·8 | | 18·3 | 51·4 | |
| 9·6 | | 18·8 | 49·5 | |
| 10·0 | | 19·8 | 47·9 | |
| 9·8 | | 20·8 | 10·8 | |
| 10·0 | | 21·7 | 26·8 | |
| 10·0 | | 24·3 | 59·4 | |
| 9·8 | | 24·3 | 25·1 | |
| 9·8 | | 27·3 | 47·5 | |
| 9·4 | | 27·3 | 48·1 | |
| 10·0 | | 29·7 | 16·2 | |

## 4201—4260.

| mag. | 10h.–11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 59 | 30·3 | 56·1 | |
| 10·0 | | 30·7 | 50·0 | |
| 9·6 | | 31·3 | 59·1 | |
| 10·0 | | 31·3 | 10·8 | |
| 9·6 | | 34·3 | 57·7 | |
| 8·2 | | 37·8 | 52·7 | |
| 10·0 | | 39·7 | 6·1 | |
| 8·5 | | 39·8 | 59·6 | G |
| 10·0 | | 39·8 | 1·7 | |
| 9·6 | | 46·8 | 55·4 | |
| 9·6 | | 47·8 | 48·7 | |
| 10·0 | | 48·3 | 6·9 | |
| 10·0 | | 48·7 | 5·2 | |
| 9·4 | | 50·7 | 42·0 | |
| 9·8 | | 50·8 | 0·5 | |
| 10·0 | | 50·8 | 38·7 | |
| 9·0 | | 53·3 | 44·5 | |
| 9·8 | | 55·3 | 43·7 | |
| 10·0 | | 56·3 | 38·2 | |
| 10·0 | | 56·8 | 55·9 | |
| 9·8 | | 57·8 | 55·4 | |
| 10·0 | | 58·8 | 44·2 | |
| 9·6 | | 59·8 | 58·4 | |
| 8·7 | 0 | 0·3 | 31·5 | 9·0 G |
| 10·0 | | 0·4 | 39·0 | |
| 9·4 | | 2·6 | 41·1 | |
| 9·4 | | 2·8 | 8·3 | |
| 9·6 | | 4·0 | 58·2 | |
| 9·4 | | 4·3 | 35·4 | |
| 9·6 | | 4·3 | 44·5 | |
| 9·8 | | 8·8 | 33·2 | |
| 9·4 | | 8·8 | 52·2 | |
| 9·6 | | 8·8 | 55·5 | |
| 10·0 | | 13·8 | 46·9 | |
| 8·5 | | 14·3 | 56·9 | 9·5 G |
| 9·6 | | 16·8 | 22·1 | |
| 9·6 | | 17·8 | 56·6 | |
| 9·6 | | 21·8 | 59·1 | |
| 9·2 | | 22·8 | 55·5 | |
| 10·0 | | 23·8 | 8·9 | |
| 10·0 | | 24·6 | 1·0 | |
| 9·8 | | 24·8 | 49·7 | |
| 9·4 | | 27·3 | 49·0 | |
| 9·4 | | 29·8 | 21·2 | 9·0 |
| 10·0 | | 30·8 | 55·2 | |
| 9·4 | | 31·3 | 54·9 | |
| 9·0 | | 31·3 | 52·1 | |
| 9·6 | | 31·3 | 28·6 | |
| 9·8 | | 31·6 | 49·2 | |
| 9·8 | | 32·3 | 11·4 | |
| 9·5 | | 35·3 | 58·6 | |
| 10·0 | | 35·6 | 34·5 | |
| 8·4 | | 35·9 | 59·3 | G |
| 10·0 | | 36·3 | 55·2 | |
| 10·0 | | 39·8 | 14·5 | |
| 10·0 | | 49·3 | 59·5 | |
| 8·8 | | 49·8 | 57·9 | |
| 9·4 | | 50·8 | 59·9 | |
| 9·8 | | 51·8 | 36·1 | |
| 9·4 | | 55·0 | 38·7 | |



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## 4261—4320.

| mag. | 11h. m s | −57° ′ | |
|---|---|---|---|
| 10·0 | 0 55·0 | 59·2 | |
| 10·0 | 55·5 | 24·1 | |
| 9·8 | 56·5 | 14·4 | |
| 9·4 | 59·0 | 45·0 | |
| 9·8 | 59·2 | 29·2 | |
| 9·6 | 1 2·0 | 47·2 | |
| 9·6 | 2·0 | 45·3 | |
| 9·8 | 2·5 | 46·3 | |
| 8·6 | 4·5 | 17·2 | 8·5 |
| 9·6 | 4·5 | 49·9 | |
| 10·0 | 6·5 | 51·3 | |
| 9·0 | 8·0 | 51·1 | |
| 10·0 | 11·0 | 47·0 | |
| 9·5 | 12·5 | 58·3 | |
| 9·6 | 13·5 | 56·8 | |
| 9·8 | 14·5 | 3·2 | |
| 10·0 | 19·2 | 34·9 | |
| 9·6 | 21·0 | 46·6 | |
| 9·4 | 25·0 | 54·6 | 8·5 *G* |
| 9·8 | 25·5 | 3·4 | |
| 9·8 | 28·0 | 29·5 | |
| 10·0 | 28·5 | 51·6 | |
| 9·6 | 29·0 | 25·0 | |
| 9·5 | 29·5 | 38·9 | |
| 9·8 | 29·5 | 58·6 | |
| 9·4 | 32·5 | 6·6 | |
| 8·4 | 37·5 | 33·6 | 8·8 *G* |
| 9·8 | 37·5 | 56·9 | |
| 9·8 | 38·2 | 59·7 | |
| 9·4 | 39·0 | 47·6 | |
| 9·4 | 40·5 | 58·2 | |
| 9·8 | 41·0 | 25·3 | |
| 9·0 | 42·5 | 47·3 | |
| 9·5 | 43·0 | 29·7 | |
| 9·0 | 49·0 | 42·9 | |
| 9·0 | 50·5 | 51·1 | |
| 9·8 | 51·0 | 57·0 | |
| 9·2 | 52·5 | 36·0 | |
| 9·8 | 53·0 | 48·4 | |
| 10·0 | 57·0 | 48·0 | |
| 9·6 | 59·0 | 34·8 | |
| 10·0 | 59·5 | 3·6 | |
| 9·8 | 2 1·0 | 19·5 | |
| 9·5 | 4·0 | 15·7 | |
| 10·0 | 9·8 | 0·7 | |
| 9·1 | 10·5 | 47·8 | |
| 9·6 | 10·5 | 19·1 | |
| 10·0 | 11·0 | 23·6 | |
| 9·6 | 11·2 | 1·9 | |
| 9·8 | 15·8 | 58·0 | |
| 9·6 | 19·0 | 43·2 | |
| 9·1 | 21·5 | 49·9 | |
| 9·8 | 22·5 | 42·8 | |
| 9·8 | 24·5 | 29·1 | |
| 9·1 | 27·5 | 48·5 | |
| 9·5 | 28·5 | 46·3 | |
| 9·4 | 29·0 | 41·4 | |
| 9·3 | 31·0 | 36·7 | *G* |
| 9·3 | 33·7 | 58·5 | *G* |
| 8·6 | 37·0 | 36·8 | 7·5 *G* |

## 4321—4380.

| mag. | 11h. m s | −57° ′ | |
|---|---|---|---|
| 10·0 | 2 39·5 | 45·7 | |
| 8·8 | 42·5 | 49·4 | |
| 10·0 | 42·7 | 2·5 | |
| 9·2 | 45·0 | 15·9 | 9·0 |
| 9·5 | 45·0 | 29·1 | |
| 9·6 | 49·5 | 44·6 | |
| 10·0 | 50·0 | 39·3 | |
| 9·6 | 53·0 | 27·9 | |
| 9·6 | 55·5 | 59·6 | |
| 10·0 | 58·5 | 25·1 | |
| 9·4 | 3 1·5 | 45·1 | *G* |
| 9·8 | 4·0 | 37·7 | |
| 9·8 | 5·0 | 7·8 | |
| 9·6 | 5·5 | 1·4 | |
| 8·6 | 9·0 | 45·2 | *G* |
| 9·6 | 12·5 | 51·1 | |
| 9·2 | 15·0 | 51·3 | |
| 10·0 | 15·0 | 57·1 | |
| 10·0 | 15·2 | 2·2 | |
| 9·3 | 22·0 | 25·2 | |
| 9·4 | 34·0 | 44·9 | |
| 9·8 | 35·5 | 23·4 | |
| 9·4 | 41·0 | 17·8 | |
| 9·6 | 43·0 | 54·0 | *G* |
| 10·0 | 49·0 | 47·0 | |
| 9·6 | 50·0 | 51·7 | *G* |
| 10·0 | 51·5 | 38·6 | |
| 9·5 | 4 1·0 | 50·8 | *G* |
| 10·0 | 5·0 | 40·0 | |
| 9·6 | 12·5 | 4·2 | |
| 9·6 | 14·0 | 22·3 | |
| 9·4 | 14·5 | 10·9 | |
| 9·8 | 14·5 | 33·8 | |
| 10·0 | 14·5 | 43·7 | |
| 9·4 | 18·7 | 59·8 | *G* |
| 9·5 | 20·5 | 53·0 | |
| 9·8 | 21·5 | 59·2 | |
| 9·5 | 23·5 | 35·9 | *G* |
| 9·8 | 26·5 | 25·4 | |
| 8·8 | 29·0 | 35·0 | 9·0 *G* |
| 10·0 | 30·5 | 5·1 | |
| 10·0 | 30·5 | 48·6 | |
| 10·0 | 33·0 | 35·7 | |
| 10·0 | 37·0 | 24·5 | |
| 10·0 | 37·5 | 24·8 | |
| 9·8 | 38·5 | 8·5 | |
| 9·6 | 40·5 | 52·8 | |
| 9·8 | 49·0 | 15·8 | |
| 9·6 | 52·0 | 37·3 | |
| 8·6 | 53·5 | 50·0 | 9·0 *G* |
| 9·6 | 53·6 | 22·4 | |
| 10·0 | 56·0 | 39·4 | |
| 10·0 | 58·0 | 36·0 | |
| 9·0 | 58·5 | 28·2 | 8·5 *G* |
| 9·4 | 5 2·5 | 23·2 | |
| 10·0 | 4·0 | 31·0 | |
| 10·0 | 4·5 | 32·0 | |
| 10·0 | 8·1 | 43·6 | |
| 10·0 | 18·0 | 55·5 | |
| 10·0 | 18·1 | 23·1 | |

## 4381—4440.

| mag. | 11h. m s | −57° ′ | |
|---|---|---|---|
| 9·8 | 5 19·5 | 13·4 | |
| 9·0 | 27·0 | 43·8 | 9·0 |
| 9·8 | 27·5 | 29·0 | 9·0 *G* |
| 9·2 | 28·0 | 32·2 | 9·0 |
| 9·3 | 28·0 | 48·6 | |
| 10·0 | 28·5 | 58·7 | |
| 7·6 | 31·0 | 46·6 | 7·5 *G*St |
| 10·0 | 37·5 | 15·3 | |
| 9·4 | 41·3 | 57·2 | |
| 9·4 | 44·0 | 33·9 | |
| 9·4 | 51·0 | 51·2 | 9·0 |
| 10·0 | 54·5 | 39·0 | |
| 9·4 | 56·5 | 36·6 | |
| 9·4 | 59·0 | 47·6 | |
| 9·8 | 6 0·0 | 55·2 | |
| 9·5 | 2·5 | 45·7 | 9·0 |
| 9·8 | 8·0 | 11·7 | |
| 9·4 | 16·0 | 35·1 | |
| 9·8 | 23·5 | 26·7 | |
| 9·5 | 24·5 | 13·6 | |
| 10·0 | 26·5 | 23·2 | |
| 9·6 | 29·0 | 12·5 | |
| 9·8 | 32·0 | 47·8 | |
| 10·0† | 38·0 | 57·5 | |
| 8·3 | 39·0 | 44·6 | 7·5 GSt |
| 10·0 | 40·0 | 41·8 | |
| 9·4 | 41·0 | 31·3 | 9·0 |
| 9·8 | 44·5 | 47·2 | |
| 9·6 | 45·5 | 27·4 | |
| 9·8 | 45·5 | 16·1 | |
| 10·0 | 49·5 | 4·2 | |
| 9·8 | 52·5 | 10·3 | |
| 9·4 | 56·5 | 14·0 | |
| 8·6 | 57·5 | 53·9 | 9·0 |
| 10·0 | 58·0 | 56·1 | |
| 9·5 | 58·5 | 8·9 | |
| 10·0 | 7 1·0 | 27·1 | |
| 9·4 | 4·5 | 22·2 | |
| 10·0 | 9·0 | 51·9 | |
| 8·6 | 10·7 | 57·9 | 8·5 |
| 10·0 | 22·0 | 25·2 | |
| 9·8 | 22·7 | 58·0 | |
| 9·2 | 27·5 | 13·0 | |
| 10·0 | 29·5 | 13·1 | |
| 9·6 | 32·0 | 26·9 | |
| 9·8 | 33·0 | 49·7 | |
| 10·0 | 41·5 | 11·5 | |
| 10·0 | 42·5 | 45·1 | |
| 9·8 | 43·0 | 44·1 | |
| 9·5 | 43·5 | 30·5 | |
| 9·8 | 46·0 | 51·1 | |
| 9·6 | 46·5 | 53·0 | |
| 10·0 | 49·2 | 33·3 | |
| 9·8 | 51·5 | 58·2 | |
| 9·6 | 51·5 | 28·1 | |
| 10·0 | 53·0 | 38·2 | |
| 10·0 | 53·5 | 15·2 | |
| 10·0 | 56·0 | 41·8 | |
| 8·5 | 58·0 | 55·3 | 8·5 |
| 9·6 | 58·3 | 59·5 | |

## 4441—4500.

| mag. | 11h. m s | −57° ′ | |
|---|---|---|---|
| 9·8 | 7 59·0 | 15·4 | |
| 9·0 | 8 0·0 | 49·2 | 9·0 |
| 10·0 | 2·5 | 19·0 | |
| 10·0 | 7·0 | 25·9 | |
| 9·4 | 8·5 | 7·2 | |
| 10·0 | 9·5 | 48·0 | |
| 9·8 | 13·0 | 58·5 | |
| 10·0 | 14·5 | 49·5 | |
| 10·0 | 16·0 | 29·4 | |
| 10·0 | 21·0 | 47·9 | |
| 9·3 | 26·0 | 55·8 | 9·0 |
| 9·4 | 28·0 | 36·0 | |
| 10·0 | 28·0 | 15·6 | |
| 8·8 | 31·5 | 13·8 | 8·5 |
| 9·4 | 32·5 | 37·0 | |
| 9·1 | 34·8 | 57·0 | 9·0 |
| 10·0 | 39·0 | 43·3 | |
| 10·0 | 41·5 | 43·8 | |
| 10·0 | 45·0 | 22·3 | |
| 9·6 | 49·0 | 26·6 | |
| 9·6 | 50·5 | 18·2 | |
| 9·6 | 51·0 | 44·7 | |
| 9·2 | 51·0 | 27·9 | 9·0 |
| 10·0 | 53·5 | 27·2 | |
| 8·2 | 55·5 | 7·3 | 8·0 |
| 10·0 | 56·1 | 3·4 | |
| 9·0 | 56·5 | 36·1 | 8·5 |
| 10·0 | 58·5 | 1·5 | |
| 10·0 | 59·0 | 13·7 | |
| 10·0 | 59·0 | 16·1 | |
| 10·0 | 9 0·0 | 46·3 | |
| 9·8 | 2·0 | 27·0 | |
| 9·6 | 9·0 | 10·0 | |
| 9·6 | 10·0 | 53·3 | |
| 9·4 | 10·0 | 12·3 | |
| 9·6 | 11·5 | 6·4 | |
| 9·4 | 12·0 | 9·0 | |
| 9·8 | 13·0 | 38·1 | |
| 9·6 | 15·0 | 14·1 | |
| 9·8 | 26·5 | 33·8 | |
| 9·8 | 28·0 | 46·1 | |
| 9·2 | 33·0 | 54·8 | |
| 10·0 | 34·0 | 49·7 | |
| 10·0 | 34·5 | 27·2 | |
| 9·8 | 37·0 | 42·1 | |
| 7·8 | 37·5 | 34·6 | 8·2 GSt |
| 9·8 | 43·5 | 29·2 | |
| 8·8 | 47·5 | 30·0 | 8·2 GSt |
| 8·9 | 50·0 | 28·0 | 8·8 G |
| 9·5 | 51·0 | 6·1 | |
| 9·5 | 55·5 | 22·2 | |
| 10·0 | 56·1 | 49·7 | |
| 10·0 | 59·0 | 53·1 | |
| 10·0 | 10 9·1 | 14·8 | 9·0 |
| 9·6 | 10·0 | 28·5 | |
| 10·0 | 12·0 | 41·4 | |
| 10·0 | 12·0 | 34·2 | |
| 9·0 | 13·0 | 18·5 | 8·0 Gt |
| 10·0 | 17·0 | 19·3 | |
| 9·2 | 19·5 | 16·0 | |

25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 11 0 | 63 | 8·1 |
| 10 | 65 | 8·2 |
| 20 | 68 | 8·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 10 | 65 | 8.2 |
| | 20 | 68 | 8.2 |
| | 30 | 70 | 8.3 |

### 4501—4560.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.0 | 10 | 21.0 | 3.6 | |
| 9.6 | | 26.0 | 40.0 | |
| 9.8 | | 27.5 | 32.8 | |
| 9.6 | | 38.5 | 22.0 | |
| 9.4 | | 39.0 | 35.0 | |
| 10.0 | | 39.5 | 12.8 | |
| 10.0 | | 41.0 | 4.2 | |
| 10.0 | | 51.0 | 54.0 | |
| 10.0 | | 58.0 | 4.9 | |
| 9.4 | 11 | 0.0 | 13.1 | |
| 9.8 | | 1.0 | 4.8 | |
| 9.6 | | 1.5 | 1.4 | |
| 9.5 | | 6.5 | 12.9 | |
| 10.0 | | 10.2 | 57.9 | |
| 10.0 | | 14.5 | 8.3 | |
| 9.4 | | 18.5 | 12.1 | |
| 10.0 | | 20.0 | 27.7 | |
| 9.6 | | 21.0 | 43.1 | |
| 10.0 | | 26.0 | 53.1 | |
| 9.6 | | 28.0 | 28.0 | 9.0 |
| 10.0 | | 29.0 | 52.9 | |
| 9.4 | | 35.5 | 11.5 | |
| 9.5 | | 37.5 | 59.2 | |
| 10.0 | | 44.7 | 49.2 | |
| 9.8 | | 47.5 | 42.0 | |
| 10.0 | | 48.5 | 46.0 | |
| 10.0 | | 51.7 | 41.6 | |
| 9.8 | | 54.5 | 7.0 | |
| 9.0 | | 58.0 | 27.7 | 9.2 |
| 9.8 | 12 | 1.0 | 29.0 | 9.5 |
| 9.8 | | 2.5 | 23.2 | |
| 9.2 | | 5.0 | 55.3 | |
| 9.6 | | 5.5 | 27.7 | 9.5 |
| 9.6 | | 7.5 | 36.7 | |
| 9.8 | | 9.5 | 50.8 | |
| 9.0 | | 11.0 | 18.5 | 9.5 |
| 9.2 | | 12.5 | 28.9 | 9.2 |
| 9.8 | | 13.0 | 46.0 | |
| 9.8 | | 16.0 | 36.5 | |
| 10.0 | | 19.0 | 23.0 | |
| 10.0 | | 21.0 | 12.2 | |
| 9.8 | | 21.5 | 43.0 | |
| 10.0 | | 26.0 | 15.1 | |
| 10.0 | | 32.5 | 42.1 | |
| 10.0 | | 39.0 | 16.6 | |
| 9.6 | | 39.0 | 17.3 | |
| 9.4 | | 39.5 | 6.3 | |
| 9.2 | | 42.5 | 29.8 | 9.5 |
| 10.0 | | 52.3 | 59.9 | |
| 10.0 | | 53.5 | 14.2 | |
| 10.0 | | 57.5 | 41.8 | |
| 9.6 | 13 | 1.0 | 58.0 | |
| 9.6 | | 5.0 | 38.5 | |
| 8.8 | | 7.5 | 52.6 | |
| 8.4 | | 11.0 | 30.1 | 7.0 GSt |
| 9.6 | | 15.0 | 41.0 | 9.5 |
| 9.5 | | 15.5 | 46.5 | |
| 9.4 | | 17.5 | 59.8 | |
| 10.0 | | 25.5 | 15.1 | |
| 10.0 | | 27.5 | 9.1 | |

### 4561—4620.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.2 | 13 | 27.5 | 55.4 | |
| 10.0 | | 29.4 | 6.8 | |
| 9.0 | | 31.0 | 32.5 | 9.5 G |
| 9.6 | | 38.2 | 56.4 | |
| 10.0 | | 41.0 | 26.6 | |
| 10.0 | | 41.5 | 46.3 | |
| 9.8 | | 42.5 | 45.2 | |
| 10.0 | | 43.1 | 7.4 | |
| 10.0 | | 46.5 | 42.8 | |
| 9.8† | | 49.0 | 58.3 | |
| 10.0 | | 50.0 | 54.8 | |
| 9.8 | | 51.0 | 30.0 | |
| 10.0 | | 55.1 | 44.5 | |
| 9.4 | | 55.5 | 49.2 | |
| 10.0 | 14 | 0.1 | 43.8 | |
| 9.4 | | 1.0 | 35.5 | |
| 10.0 | | 5.5 | 7.8 | |
| 10.0 | | 6.0 | 4.6 | |
| 9.8 | | 14.0 | 37.2 | |
| 9.5 | | 14.5 | 43.0 | |
| 10.0 | | 15.0 | 40.9 | |
| 10.0 | | 16.5 | 12.8 | |
| 8.0 | | 20.0 | 28.2 | 8.2 GSt |
| 9.8 | | 20.0 | 39.8 | |
| 10.0 | | 21.5 | 52.8 | |
| 10.0 | | 23.5 | 4.6 | |
| 10.0 | | 28.0 | 31.6 | |
| 9.8 | | 35.5 | 7.6 | |
| 9.6 | | 43.5 | 23.8 | |
| 9.8 | | 47.0 | 7.0 | |
| 9.8 | | 47.5 | 30.8 | 10.0 |
| 10.0 | | 47.6 | 57.4 | |
| 10.0 | | 51.5 | 53.0 | |
| 8.8 | | 52.0 | 46.6 | |
| 9.1 | | 59.5 | 54.4 | |
| 10.0 | | 59.5 | 3.2 | |
| 10.0 | 15 | 1.1 | 51.0 | |
| 10.0 | | 2.0 | 1.2 | |
| 10.0 | | 4.0 | 19.0 | |
| 10.0 | | 6.0 | 43.3 | |
| 8.6 | | 7.5 | 37.8 | 8.0 G |
| 10.0 | | 8.8 | 55.6 | |
| 9.5 | | 10.0 | 16.2 | |
| 9.4 | | 10.5 | 33.0 | 9.5 |
| 9.2 | | 16.0 | 24.2 | 9.5 |
| 9.4 | | 16.0 | 43.2 | |
| 9.6 | | 17.5 | 13.7 | |
| 8.4 | | 17.5 | 48.0 | 8.5 G |
| 10.0 | | 32.5 | 41.0 | |
| 10.0 | | 32.8 | 33.0 | |
| 9.6 | | 42.5 | 32.2 | |
| 8.8 | | 43.2 | 29.2 | 9.0 |
| 10.0 | | 44.5 | 22.3 | |
| 9.8 | | 49.7 | 45.5 | |
| 10.0 | | 51.0 | 57.0 | |
| 10.0 | | 57.7 | 52.2 | |
| 9.2 | | 57.7 | 15.4 | 9.5 |
| 10.0 | | 59.2 | 22.6 | |
| 10.0 | 16 | 5.7 | 24.6 | |
| 9.6 | | 6.2 | 46.8 | |

### 4621—4680.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8.7 | 16 | 9.2 | 40.4 | 9.0 |
| 10.0 | | 9.5 | 55.3 | |
| 8.9 | | 9.7 | 55.7 | 9.5 |
| 9.4 | | 12.7 | 50.7 | |
| 9.4 | | 15.7 | 24.2 | |
| 9.5 | | 16.7 | 17.9 | |
| 9.8 | | 31.2 | 25.6 | |
| 10.0 | | 34.2 | 8.6 | |
| 9.4 | | 34.7 | 41.2 | 10.0 |
| 8.2 | | 38.7 | 41.9 | 7.5 GScgt |
| 10.0 | | 44.0 | 33.1 | |
| 10.0 | | 46.2 | 31.6 | |
| 9.8 | | 47.7 | 35.0 | |
| 9.8 | | 49.2 | 10.9 | |
| 9.6 | | 50.7 | 35.4 | |
| 9.8 | | 51.2 | 17.1 | |
| 9.5 | 17 | 1.2 | 59.9 | |
| 9.5 | | 6.7 | 49.0 | |
| 9.3 | | 9.2 | 47.1 | |
| 8.2 | | 10.7 | 37.8 | 8.0 GSgt |
| 9.6 | | 15.2 | 50.8 | |
| 9.3 | | 15.7 | 20.0 | |
| 9.4 | | 18.2 | 7.8 | |
| 9.8 | | 23.7 | 28.6 | |
| 9.3 | | 29.7 | 22.6 | |
| 9.5 | | 39.2 | 22.2 | |
| 10.0 | | 46.0 | 37.9 | |
| 10.0 | | 47.5 | 55.8 | |
| 10.0 | | 48.2 | 50.2 | |
| 10.0 | | 48.5 | 34.1 | |
| 10.0 | | 48.7 | 39.4 | |
| 10.0 | | 52.5 | 28.8 | |
| 9.6 | | 55.7 | 39.2 | |
| 8.5 | 18 | 0.2 | 34.8 | 7.5 GSgt |
| 9.4 | | 2.2 | 9.4 | |
| 10.0 | | 2.5 | 22.5 | |
| 10.0 | | 4.0 | 58.8 | |
| 9.8 | | 7.5 | 38.2 | |
| 9.1 | | 11.5 | 31.4 | 8.3 |
| 10.0 | | 12.2 | 23.3 | |
| 8.2 | | 16.7 | 11.8 | 7.0 G |
| 9.4 | | 23.2 | 42.6 | |
| 9.4 | | 26.2 | 40.6 | |
| 10.0 | | 28.7 | 42.2 | |
| 9.4 | | 34.2 | 33.3 | |
| 9.6 | | 38.7 | 12.0 | |
| 8.0 | | 45.7 | 29.7 | 7.5 GSt |
| 8.8 | | 46.7 | 2.6 | 8.5 |
| 9.8 | | 49.2 | 41.8 | |
| 10.0 | 19 | 0.0 | 56.0 | |
| 10.0 | | 3.7 | 58.9 | |
| 10.0 | | 7.0 | 31.8 | |
| 9.6 | | 7.2 | 45.0 | |
| 9.6 | | 9.7 | 9.8 | |
| 9.8 | | 11.2 | 38.4 | |
| 10.0 | | 12.2 | 26.2 | |
| 9.4 | | 14.2 | 59.1 | |
| 9.4 | | 18.2 | 6.5 | |
| 9.8 | | 19.2 | 56.2 | |
| 9.6 | | 36.7 | 23.2 | |

### 4681—4740.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.4 | 19 | 39.2 | 17.2 | 9.0 G |
| 9.8 | | 46.2 | 38.0 | |
| 9.2 | | 49.7 | 8.7 | 8.0 |
| 10.0 | | 51.0 | 30.1 | |
| 10.0 | | 59.0 | 30.3 | |
| 9.8 | | 59.2 | 48.0 | |
| 9.8 | 20 | 4.2 | 40.7 | 10.0 |
| 8.6 | | 6.2 | 27.3 | 8.2 |
| 10.0 | | 11.2 | 20.1 | |
| 9.8 | | 12.7 | 29.9 | |
| 9.8† | | 13.5 | 27.6 | |
| 9.8 | | 21.2 | 49.8 | |
| 9.5 | | 22.0 | 2.4 | |
| 9.8 | | 26.2 | 35.7 | |
| 9.6 | | 30.2 | 0.2 | |
| 9.4 | | 31.7 | 42.0 | 9.0 |
| 10.0 | | 32.2 | 43.8 | |
| 8.4 | | 33.2 | 14.2 | 8.2 Gt |
| 10.0 | | 39.7 | 43.8 | |
| 9.6 | | 56.7 | 10.1 | |
| 9.8 | 21 | 3.7 | 30.4 | 9.5 |
| 9.6 | | 5.2 | 53.8 | |
| 9.5 | | 6.7 | 23.2 | |
| 10.0 | | 9.0 | 27.8 | |
| 9.8 | | 15.2 | 46.4 | |
| 9.8 | | 19.2 | 8.0 | |
| 10.0 | | 22.7 | 18.7 | |
| 10.0 | | 23.2 | 22.9 | |
| 10.0 | | 32.2 | 32.0 | |
| 9.8 | | 34.7 | 36.6 | |
| 9.6 | | 36.7 | 19.9 | |
| 10.0 | | 41.7 | 25.2 | |
| 10.0 | | 51.7 | 23.0 | |
| 10.0 | | 59.3 | 1.9 | |
| 9.6 | 22 | 6.2 | 1.7 | |
| 7.8 | | 8.4 | 59.6 | 8.5 GSt |
| 10.0 | | 9.7 | 4.2 | |
| 9.5 | | 13.7 | 53.3 | |
| 9.5 | | 17.7 | 50.9 | |
| 9.6 | | 19.2 | 27.7 | |
| 9.4 | | 22.2 | 55.3 | 9.5 |
| 10.0 | | 22.2 | 18.9 | |
| 9.5 | | 23.7 | 4.1 | |
| 9.8 | | 29.2 | 12.1 | |
| 10.0 | | 29.7 | 3.1 | |
| 9.4 | | 39.2 | 33.5 | |
| 9.6 | | 41.7 | 15.7 | |
| 9.6 | | 43.2 | 49.6 | 10.0 |
| 9.4 | | 43.2 | 31.4 | |
| 7.8 | | 50.2 | 27.2 | 7.5 GSot |
| 10.0 | | 51.2 | 51.0 | |
| 9.8 | | 57.7 | 15.1 | |
| 9.8 | 23 | 0.7 | 3.8 | |
| 8.3 | | 1.2 | 42.2 | 9.0 GSt |
| 9.4 | | 12.2 | 40.3 | 9.0 G |
| 9.6 | | 15.2 | 12.8 | |
| 9.4 | | 15.7 | 55.4 | |
| 9.4 | | 16.2 | 1.8 | |
| 9.6 | | 20.2 | 10.9 | |
| 9.6 | | 20.7 | 10.0 | |



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**4741—4800.**

| mag. | 11ʰ m s | −57° ′ | |
|---|---|---|---|
| 9.4 | 23 21.2 | 37.7 | 9.5 |
| 10.0 | 29.7 | 24.6 | |
| 9.6 | 32.7 | 32.1 | |
| 9.8 | 34.5 | 15.9 | |
| 7.7 | 35.2 | 8.7 | 7.5 GSt |
| 10.0 | 35.2 | 35.7 | |
| 9.6 | 40.7 | 20.9 | |
| 9.6 | 41.2 | 19.3 | |
| 10.0 | 41.5 | 4.3 | |
| 10.0 | 54.5 | 10.1 | |
| 10.0 | 55.2 | 54.4 | 9.0 |
| 9.4 | 57.7 | 6.1 | 9.0 |
| 10.0 | 58.2 | 35.1 | |
| 9.6 | 59.2 | 12.8 | |
| 9.6 | 24 5.7 | 7.0 | 9.5 |
| 9.8 | 11.7 | 4.0 | |
| 9.6 | 15.2 | 32.0 | |
| 9.4 | 29.2 | 21.6 | |
| 9.8 | 43.2 | 19.8 | |
| 10.0 | 45.2 | 14.8 | |
| 9.8 | 45.2 | 48.3 | |
| 9.8 | 47.7 | 35.8 | |
| 10.0 | 51.2 | 57.5 | |
| 9.8 | 52.7 | 46.1 | |
| 9.3 | 55.7 | 6.2 | |
| 9.8 | 25 0.2 | 8.3 | |
| 9.6 | 2.2 | 30.9 | |
| 9.8 | 11.2 | 48.7 | |
| 9.4 | 12.7 | 34.9 | |
| 9.8 | 19.7 | 49.2 | |
| 9.6 | 24.2 | 49.2 | |
| 9.5 | 31.7 | 42.6 | |
| 9.6 | 34.7 | 35.0 | |
| 9.4 | 35.7 | 54.3 | 9.0 |
| 10.0† | 36.0 | 58.6 | |
| 9.4 | 38.5 | 0.7 | 9.0 |
| 10.0 | 42.7 | 13.9 | |
| 9.4 | 45.2 | 55.9 | |
| 9.4 | 26 1.2 | 7.0 | |
| 9.4 | 4.7 | 26.7 | |
| 10.0 | 6.7 | 11.7 | |
| 10.0 | 8.7 | 10.5 | |
| 9.6 | 10.7 | 41.8 | |
| 10.0 | 14.7 | 26.7 | |
| 9.4 | 18.7 | 30.9 | |
| 9.6 | 20.2 | 42.2 | |
| 9.8 | 20.7 | 21.9 | S |
| 9.6 | 21.7 | 41.1 | |
| 9.0 | 22.2 | 49.0 | 9.0 |
| 9.8 | 22.7 | 16.9 | |
| 10.0 | 23.3 | 3.8 | |
| 10.0 | 33.7 | 52.8 | |
| 10.0 | 40.2 | 44.9 | |
| 9.0 | 41.7 | 39.0 | 9.0 |
| 9.5 | 47.7 | 27.8 | |
| 9.2 | 52.2 | 49.4 | 9.5 G |
| 9.5 | 53.2 | 21.8 | |
| 9.8 | 54.7 | 20.4 | |
| 9.3 | 57.2 | 52.0 | |
| 10.0 | 27 8.8 | 26.9 | |

**4801—4860.**

| mag. | 11ʰ m s | −57° ′ | |
|---|---|---|---|
| 9.6 | 27 18.2 | 50.3 | |
| 10.0 | 19.2 | 59.4 | |
| 10.0 | 20.2 | 45.2 | |
| 9.0 | 20.7 | 27.8 | |
| 9.3 | 22.2 | 24.3 | 9.0 |
| 9.2 | 26.6 | 56.7 | 9.0 |
| 9.5 | 47.7 | 6.3 | |
| 9.8 | 52.7 | 0.8 | |
| 9.9 | 53.0 | 10.3 | |
| 9.9 | 53.4 | 38.3 | |
| 9.6 | 28 5.7 | 13.8 | |
| 9.9 | 7.7 | 57.0 | |
| 9.6 | 9.7 | 8.9 | |
| 9.3 | 11.2 | 39.5 | |
| 9.8 | 16.2 | 41.1 | |
| 9.8 | 24.2 | 58.1 | |
| 9.3 | 29.2 | 13.5 | |
| 9.8 | 33.2 | 20.0 | |
| 8.2 | 39.2 | 25.0 | 8.5 |
| 9.8 | 41.2 | 13.7 | |
| 9.5 | 41.7 | 5.3 | |
| 9.0 | 48.7 | 11.9 | |
| 9.4 | 51.2 | 36.7 | |
| 9.5 | 51.7 | 15.4 | |
| 8.7 | 52.7 | 34.6 | 9.0 |
| 9.4 | 54.2 | 17.8 | |
| 9.8 | 58.7 | 52.2 | |
| 9.5 | 59.2 | 23.6 | |
| 9.5 | 59.2 | 43.1 | |
| 9.9 | 29 1.7 | 52.8 | |
| 9.8 | 7.5 | 8.9 | |
| 9.6 | 8.2 | 0.4 | |
| 9.5 | 11.2 | 0.9 | |
| 9.9 | 16.7 | 53.8 | |
| 9.8 | 21.2 | 52.4 | |
| 9.9 | 24.7 | 57.0 | |
| 9.6 | 30.7 | 52.5 | |
| 9.6 | 41.2 | 50.1 | |
| 8.4 | 43.7 | 32.2 | 8.8 |
| 9.8 | 46.2 | 3.5 | |
| 9.3 | 52.2 | 39.9 | |
| 9.4 | 52.7 | 54.4 | |
| 9.8 | 53.7 | 41.9 | |
| 9.6 | 54.2 | 12.3 | |
| 9.4 | 55.2 | 6.1 | |
| 9.9 | 57.2 | 55.4 | |
| 9.5 | 30 0.2 | 36.9 | |
| 9.5 | 0.7 | 27.6 | |
| 9.4 | 1.2 | 6.1 | |
| 9.9 | 8.2 | 59.0 | |
| 9.9 | 13.2 | 5.9 | |
| 9.3 | 14.7 | 43.9 | |
| 8.4 | 16.2 | 24.3 | 8.8 |
| 9.6 | 23.2 | 24.3 | |
| 9.1 | 25.2 | 11.4 | |
| 9.4 | 26.2 | 49.7 | |
| 9.5 | 26.2 | 48.2 | |
| 9.8 | 29.2 | 42.8 | |
| 9.2 | 30.2 | 9.6 | |
| 9.6 | 44.2 | 25.1 | |

**4861—4920.**

| mag. | 11ʰ m s | −57° ′ | |
|---|---|---|---|
| 9.9 | 30 45.7 | 24.8 | |
| 9.3 | 47.7 | 35.2 | |
| 9.5 | 57.2 | 10.9 | |
| 9.3 | 31 0.2 | 6.5 | |
| 9.6 | 3.7 | 59.4 | |
| 9.5 | 4.2 | 36.5 | |
| 9.4 | 10.7 | 8.4 | |
| 9.8 | 11.7 | 27.5 | |
| 9.3 | 12.2 | 44.5 | |
| 8.8 | 22.7 | 49.3 | 9.0 |
| 9.8 | 26.7 | 33.9 | |
| 9.8 | 39.2 | 38.4 | |
| 9.8 | 52.2 | 15.9 | |
| 9.4 | 53.2 | 31.8 | |
| 9.9 | 54.7 | 40.6 | |
| 9.8 | 58.4 | 57.9 | 9.0 |
| 9.6 | 59.7 | 10.6 | |
| 8.6 | 32 8.7 | 55.7 | 9.0 |
| 9.4 | 10.2 | 21.9 | |
| 9.9 | 13.2 | 31.9 | |
| 9.8 | 25.1 | 1.7 | |
| 9.6 | 27.7 | 39.8 | |
| 9.2 | 41.2 | 34.1 | |
| 9.6 | 45.2 | 41.9 | |
| 9.8 | 50.7 | 25.2 | |
| 9.6 | 52.7 | 10.2 | |
| 9.8 | 52.7 | 6.8 | |
| 9.8 | 55.2 | 12.8 | |
| 9.9 | 56.7 | 22.5 | |
| 9.4 | 59.2 | 3.8 | |
| 9.9 | 33 10.2 | 42.9 | |
| 9.8 | 10.7 | 0.7 | |
| 8.1 | 13.2 | 54.3 | 8.0 G |
| 7.6 | 13.7 | 2.9 | 8.0 GSt |
| 9.0 | 13.7 | 29.3 | |
| 9.9 | 15.2 | 31.2 | |
| 9.9 | 17.7 | 23.9 | |
| 9.8 | 24.1 | 1.5 | |
| 9.6 | 27.7 | 43.2 | |
| 9.3 | 35.2 | 48.0 | |
| 9.8 | 37.2 | 38.0 | |
| 8.9 | 42.7 | 17.1 | |
| 9.9 | 53.3 | 11.0 | |
| 9.9 | 34 9.2 | 0.9 | |
| 8.8 | 15.2 | 5.5 | 9.0 |
| 9.9 | 28.7 | 33.0 | |
| 9.8 | 30.7 | 6.3 | |
| 9.4 | 31.2 | 39.8 | 9.5 |
| 9.4 | 31.7 | 19.0 | |
| 8.8 | 43.7 | 24.7 | 9.0 |
| ? 9.8 | 53.7 | 12.8 | |
| 9.4 | 54.2 | 8.4 | |
| 9.3 | 56.3 | 1.4 | |
| 9.9 | 59.2 | 14.1 | |
| 9.5 | 35 4.2 | 31.0 | |
| 9.5 | 4.2 | 31.6 | |
| 9.8 | 9.7 | 39.6 | |
| 9.4 | 11.2 | 49.1 | 9.0 |
| 9.9 | 11.3 | 20.9 | |
| 9.8 | 17.7 | 41.6 | |

**4921—4980.**

| mag. | 11ʰ m s | −57° ′ | |
|---|---|---|---|
| 9.8 | 35 21.2 | 14.0 | |
| 9.9 | 27.2 | 56.1 | |
| 9.6 | 27.7 | 49.0 | |
| 9.2 | 30.2 | 3.9 | |
| 9.4 | 37.1 | 58.9 | |
| 9.3 | 49.2 | 53.6 | 9.0 S |
| 9.9 | 49.2 | 10.6 | |
| 9.6 | 54.7 | 14.0 | |
| 9.9 | 55.8 | 42.5 | |
| 9.9 | 58.2 | 25.4 | |
| 8.9 | 36 1.2 | 18.4 | |
| 9.8 | 8.7 | 10.4 | |
| 9.8 | 19.7 | 50.5 | |
| 9.2 | 22.2 | 40.8 | 9.5 |
| 9.3 | 29.7 | 11.8 | |
| 9.5 | 30.2 | 20.4 | |
| 9.6 | 36.2 | 12.0 | |
| 9.9 | 41.7 | 10.2 | |
| 9.8 | 52.7 | 16.0 | |
| 9.9 | 58.7 | 46.8 | |
| 9.6 | 37 0.2 | 17.4 | |
| 9.8 | 1.7 | 20.2 | |
| 9.3 | 2.7 | 19.8 | |
| 9.8 | 7.7 | 49.1 | |
| 9.9 | 21.2 | 41.0 | |
| 9.5 | 25.2 | 21.8 | |
| 9.8 | 27.2 | 35.0 | |
| 8.7 | 28.7 | 19.4 | 8.5 |
| 9.9 | 29.7 | 18.2 | |
| 9.6 | 29.7 | 53.8 | |
| 9.5 | 36.2 | 30.0 | |
| 9.8 | 42.7 | 6.0 | |
| 9.2 | 49.2 | 41.4 | |
| 9.3 | 50.2 | 43.2 | |
| 9.8 | 51.2 | 13.6 | |
| 9.8 | 54.2 | 13.2 | |
| 9.4 | 54.7 | 53.2 | |
| 8.9 | 38 0.2 | 35.0 | 8.8 |
| 8.8 | 12.2 | 44.8 | 8.0 G |
| 9.9 | 13.7 | 31.5 | |
| 9.5 | 29.2 | 3.1 | |
| 9.9 | 34.7 | 38.9 | |
| 8.9 | 36.2 | 28.3 | 9.0 |
| 8.8 | 45.2 | 34.2 | 8.5 |
| 9.4 | 57.9 | 2.7 | |
| 9.4 | 39 9.2 | 26.2 | |
| 9.5 | 11.7 | 17.2 | |
| 9.8 | 18.9 | 59.6 | |
| 9.0 | 23.2 | 26.0 | 9.0 |
| 9.0 | 32.7 | 11.1 | |
| 8.4 | 58.2 | 23.5 | 9.0 |
| 9.9 | 40 1.2 | 48.9 | |
| 9.9 | 4.7 | 0.5 | |
| 8.8 | 9.2 | 17.5 | 9.5 |
| 9.8 | 11.7 | 10.2 | |
| 9.8 | 14.2 | 27.1 | |
| 9.9 | 15.7 | 35.5 | |
| 8.7 | 17.2 | 12.2 | 9.0 |
| 8.0 | 22.2 | 20.2 | 8.0 G |
| 9.9 | 32.7 | 7.0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 20 | 68 | 8.2 |
| | 30 | 70 | 8.3 |
| | 40 | 72 | 8.3 |
| | 50 | 75 | 8.3 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 40 | 72 | 8·3 |
| | 50 | 75 | 8·3 |
| 12 | 0 | 77 | 8·4 |

## 4981—5040.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8·4 | 40 | 37·0 | 56·2 | 9·0 |
| 9·4 | | 42·2 | 8·4 | |
| 9·3 | | 43·2 | 48·4 | |
| 9·2 | | 49·7 | 26·1 | |
| 9·9 | 41 | 2·7 | 50·8 | |
| 9·3 | | 3·7 | 40·8 | |
| 9·6 | | 11·2 | 7·5 | |
| 9·8 | | 11·2 | 45·3 | |
| 7·8 | | 13·4 | 0·3 | 6·0 GSt |
| 9·9 | | 13·7 | 48·1 | |
| 8·9 | | 17·2 | 38·9 | 8·5 G |
| 9·5 | | 20·2 | 17·6 | |
| 9·8 | | 23·2 | 38·2 | |
| 9·9 | | 25·7 | 18·8 | |
| 9·9 | | 27·3 | 28·6 | |
| 9·6 | | 30·7 | 51·1 | |
| 9·9 | | 31·7 | 39·1 | |
| 8·5 | | 32·7 | 38·1 | 9·0 |
| 9·1 | | 36·7 | 11·3 | 9·0 |
| 9·6 | | 37·2 | 3·6 | |
| 9·8 | | 53·7 | 37·5 | |
| 9·2 | | 59·2 | 11·7 | |
| 9·8 | | 59·2 | 8·0 | 9·0 |
| 9·6 | | 59·4 | 0·6 | |
| 9·5 | | 59·7 | 37·5 | |
| 8·9 | 42 | 0·7 | 18·0 | 8·5 |
| 9·9 | | 1·7 | 36·8 | |
| 7·9 | | 3·7 | 31·5 | 7·5 GS |
| 9·8 | | 4·2 | 26·1 | |
| 9·4 | | 17·2 | 0·2 | |
| 9·9 | | 21·0 | 29·1 | |
| 9·8 | | 26·7 | 56·2 | |
| 9·3 | | 28·2 | 25·2 | |
| 9·9 | | 28·7 | 22·1 | |
| 9·8 | | 39·2 | 20·0 | |
| 9·9 | | 40·4 | 24·7 | |
| 9·4 | | 43·7 | 16·1 | 9·5 |
| 9·9 | | 47·7 | 24·6 | |
| 9·8 | | 49·2 | 3·9 | |
| 9·4 | | 49·4 | 2·1 | |
| 9·9 | | 50·4 | 22·0 | |
| 9·1 | | 51·2 | 39·1 | 9·5 |
| 9·8 | | 54·2 | 9·8 | |
| 9·3 | 43 | 1·2 | 32·3 | 9·5 |
| 9·2 | | 6·7 | 38·0 | |
| 9·3 | | 12·7 | 33·1 | |
| 9·9 | | 14·0 | 40·2 | |
| 9·8 | | 15·7 | 34·9 | |
| 9·9 | | 21·2 | 5·9 | |
| 9·8 | | 44·2 | 2·6 | |
| 9·8 | | 46·7 | 17·0 | |
| 9·3 | | 49·7 | 12·1 | |
| 9·2 | | 57·7 | 22·0 | |
| 9·4 | 44 | 1·2 | 35·9 | |
| 9·3 | | 8·2 | 17·8 | |
| 9·2 | | 17·7 | 35·6 | 9·0 |
| 9·8 | | 21·2 | 31·4 | |
| 9·9 | | 22·7 | 48·4 | |
| 8·8 | | 27·7 | 31·9 | 9·0 |
| 9·6 | | 29·2 | 8·5 | |

## 5041—5100.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·9 | 44 | 32·2 | 45·9 | |
| 8·3 | | 34·2 | 8·1 | GSt |
| 9·4 | | 35·2 | 4·4 | |
| 9·3 | | 38·2 | 28·7 | 9·5 |
| 9·9 | | 40·2 | 26·1 | |
| 9·9 | | 45·7 | 49·0 | |
| 9·3 | | 50·2 | 10·7 | |
| 9·6 | | 52·2 | 31·3 | |
| 9·6 | 45 | 1·2 | 22·3 | |
| 9·4 | | 2·2 | 54·3 | 9·0 |
| 9·9 | | 3·7 | 41·1 | |
| 9·9 | | 4·7 | 26·2 | |
| 9·9 | | 10·2 | 31·0 | |
| 9·6 | | 12·7 | 21·4 | |
| 9·8 | | 13·7 | 24·7 | |
| 9·4 | | 18·2 | 3·1 | |
| 8·8 | | 18·2 | 6·1 | |
| 9·6 | | 21·2 | 36·6 | |
| 9·6 | | 25·2 | 9·9 | |
| 9·9 | | 27·7 | 48·1 | |
| 9·2 | | 28·7 | 22·1 | |
| 9·3 | | 31·2 | 21·1 | |
| 9·8 | | 39·2 | 43·8 | |
| 9·8 | | 39·2 | 21·4 | |
| 9·2 | | 40·2 | 20·8 | |
| 9·3 | | 55·2 | 7·1 | |
| 8·9 | | 56·7 | 25·4 | 9·0 |
| 8·8 | | 59·2 | 6·3 | Gt |
| 9·8 | 46 | 9·2 | 40·8 | |
| 9·8 | | 13·7 | 29·3 | 9·5 |
| 9·2 | | 17·2 | 28·0 | 9·5 |
| 9·9 | | 18·7 | 41·1 | |
| 9·3 | | 32·2 | 11·4 | |
| 9·5 | | 44·2 | 50·0 | |
| 9·8 | | 45·2 | 33·9 | |
| 8·4 | | 52·2 | 33·4 | 8·5 |
| 9·5 | | 52·4 | 57·4 | |
| 9·5 | 47 | 0·2 | 17·2 | |
| 9·9 | | 7·2 | 57·3 | |
| 9·5 | | 14·7 | 16·6 | |
| 9·9 | | 23·2 | 6·2 | |
| 9·9 | | 30·2 | 17·6 | |
| 9·5 | | 33·2 | 56·1 | |
| 9·4 | | 34·2 | 51·1 | 9·5 |
| 9·9 | | 35·7 | 2·0 | |
| 8·9 | | 47·7 | 49·5 | 9·5 |
| 9·8 | | 50·7 | 18·9 | |
| 9·9 | | 51·2 | 8·3 | |
| 9·8 | | 57·7 | 19·4 | |
| 9·6 | | 58·7 | 39·6 | |
| 9·9 | | 59·2 | 23·8 | |
| 9·4 | 48 | 1·4 | 58·9 | |
| 9·6 | | 2·7 | 2·9 | |
| 9·2 | | 6·2 | 10·6 | |
| 9·0 | | 8·4 | 58·5 | 9·0 |
| 8·9 | | 12·7 | 7·1 | |
| 9·9 | | 13·7 | 34·4 | |
| 9·8 | | 16·2 | 22·0 | |
| 9·4 | | 21·2 | 9·6 | |
| 9·9 | | 28·7 | 32·2 | |

## 5101—5160.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·3 | 48 | 49·7 | 27·3 | |
| 9·2 | | 59·2 | 26·6 | 9·5 |
| 9·9 | 49 | 7·2 | 57·3 | |
| 9·9 | | 18·2 | 58·8 | |
| 8·8 | | 29·2 | 17·4 | 9·0 G |
| 9·4 | | 30·2 | 35·0 | |
| 9·6 | | 31·2 | 35·2 | |
| 9·9 | | 40·2 | 55·2 | |
| 9·6 | | 42·7 | 21·2 | |
| 9·8 | | 45·7 | 31·3 | |
| 9·4 | | 53·7 | 44·1 | |
| 9·8 | 50 | 2·5 | 1·1 | |
| 9·6 | | 4·2 | 44·8 | |
| 9·6 | | 4·2 | 12·5 | |
| 9·8 | | 7·7 | 37·7 | |
| 9·4 | | 11·2 | 32·0 | |
| 9·5 | | 15·7 | 33·8 | |
| 9·1 | | 16·2 | 44·2 | 9·5 |
| 9·6 | | 16·2 | 18·5 | |
| 9·5 | | 19·2 | 35·5 | |
| 9·6 | | 26·2 | 45·4 | |
| 9·0 | | 36·2 | 43·1 | 8·5 G |
| 8·5 | | 39·7 | 37·3 | 9·0 |
| 9·4 | | 39·7 | 3·3 | |
| 9·4 | | 44·2 | 10·7 | 9·0 |
| 9·9 | | 47·6 | 0·7 | |
| 9·9 | | 51·2 | 38·4 | |
| 8·4 | | 51·2 | 45·6 | 8·5 |
| 9·4 | | 56·2 | 0·4 | |
| 9·9 | | 57·2 | 32·7 | |
| 9·0 | | 59·2 | 21·3 | 9·0 G |
| 9·3 | | 59·2 | 8·3 | |
| 9·9 | 51 | 6·7 | 50·1 | |
| 9·9 | | 9·0 | 30·2 | |
| 9·4 | | 10·2 | 15·8 | |
| 9·9 | | 11·7 | 18·6 | |
| 9·5 | | 16·2 | 15·1 | |
| 9·2 | | 18·7 | 27·9 | 9·5 G |
| 9·5 | | 30·2 | 6·9 | |
| 9·9 | | 44·2 | 6·7 | |
| 9·8 | 52 | 2·7 | 33·0 | |
| 8·8 | | 3·2 | 17·4 | 9·0 |
| 9·9 | | 5·7 | 59·1 | |
| 9·3 | | 6·2 | 17·9 | 9·5 |
| 9·2 | | 10·2 | 17·7 | 9·5 |
| 9·4 | | 14·4 | 58·8 | |
| 9·9 | | 17·2 | 23·2 | |
| 9·2 | | 19·7 | 31·5 | 9·0 |
| 9·8 | | 26·2 | 39·8 | |
| 9·9 | | 30·2 | 35·2 | |
| 9·9 | | 31·7 | 16·4 | |
| 9·0 | | 37·7 | 16·7 | 9·5 |
| 9·8 | | 40·2 | 18·5 | |
| 9·9 | | 40·2 | 48·9 | |
| 8·6 | | 43·7 | 45·0 | 8·0 G |
| 9·8 | | 44·2 | 11·5 | |
| 9·8 | | 50·7 | 30·0 | |
| 9·8 | 53 | 0·7 | 1·9 | |
| 9·6 | | 5·2 | 0·5 | |
| 9·8 | | 8·2 | 24·0 | |

## 5161—5220.

| mag. | 11h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 53 | 12·7 | 2·8 | |
| 9·9 | | 13·7 | 30·1 | |
| 9·4 | | 13·7 | 6·0 | |
| 8·8 | | 17·7 | 38·9 | 9·0 |
| 9·4 | | 19·2 | 18·5 | |
| 9·8 | | 31·2 | 28·9 | |
| 9·9 | | 32·2 | 40·2 | |
| 9·9 | | 36·2 | 10·0 | |
| 9·9 | | 39·2 | 54·4 | 9·0 |
| 9·9 | | 40·2 | 18·3 | |
| 9·2 | | 44·2 | 15·5 | |
| 9·9 | 54 | 4·7 | 20·1 | |
| 9·8 | | 5·2 | 8·0 | |
| 9·8 | | 5·7 | 4·6 | |
| 9·9 | | 13·7 | 57·3 | |
| 9·8 | | 18·2 | 33·7 | |
| 8·8 | | 22·2 | 16·8 | 9·0 |
| 9·6 | | 23·7 | 19·9 | |
| 7·9 | | 28·7 | 22·3 | 8·5 |
| 9·8 | | 32·2 | 36·3 | |
| 9·8 | | 35·2 | 0·5 | |
| 9·2 | | 41·2 | 3·9 | 9·5 |
| 9·3 | | 47·7 | 44·9 | |
| 9·9 | | 49·7 | 14·0 | |
| 8·9 | | 51·7 | 2·3 | 9·0 |
| 9·6 | | 56·7 | 13·4 | |
| 9·8 | 55 | 1·2 | 25·1 | |
| 9·9 | | 3·7 | 35·6 | |
| 9·1 | | 7·2 | 30·9 | 8·8 |
| 8·8 | | 14·2 | 47·2 | |
| 9·8 | | 17·2 | 14·2 | |
| 9·6 | | 19·2 | 7·3 | |
| 9·4 | | 32·2 | 33·4 | |
| 9·3 | | 32·7 | 51·6 | |
| 9·8 | | 39·7 | 6·2 | |
| 9·8 | | 53·2 | 5·6 | |
| 9·2 | | 58·2 | 39·3 | |
| 9·8 | | 59·2 | 31·9 | |
| 8·9 | 56 | 4·7 | 32·8 | 9·0 |
| 9·8 | | 5·2 | 55·2 | |
| 9·9 | | 13·7 | 0·1 | |
| 9·9 | | 17·7 | 54·3 | |
| 9·8 | | 18·2 | 12·2 | |
| 8·9 | | 19·2 | 23·8 | 8·8 |
| 9·8 | | 28·2 | 53·0 | |
| 9·5 | | 29·2 | 17·0 | |
| 9·9 | | 29·4 | 36·3 | |
| 9·9 | | 32·7 | 8·3 | |
| 9·1 | | 35·2 | 23·9 | 9·0 |
| 9·8 | | 36·7 | 16·2 | |
| 9·6 | | 39·7 | 50·6 | |
| 8·9 | | 52·7 | 12·2 | 9·0 |
| 9·8 | 57 | 1·2 | 3·5 | |
| 9·8 | | 2·2 | 50·1 | |
| 9·9 | | 6·4 | 44·3 | |
| 9·8 | | 13·4 | 2·2 | |
| 7·9 | | 22·4 | 2·8 | 8·5 GSt |
| 9·6 | | 33·2 | 56·1 | |
| 9·9 | | 34·7 | 59·5 | |
| 9·0 | | 37·2 | 39·9 | 9·0 |

**5221—5280.**

| mag. | 11h–12h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 57 | 37·7 | 17·0 | |
| 9·4 | | 44·2 | 54·2 | |
| 9·8 | | 56·7 | 59·9 | |
| 9·8 | 58 | 9·9 | 59·8 | |
| 10·2† | | 10·5 | 57·5 | |
| 9·8 | | 11·7 | 23·5 | |
| 8·4 | | 13·2 | 48·0 | 9·0 |
| 9·9 | | 15·2 | 41·5 | |
| 9·5 | | 23·7 | 9·5 | |
| 9·6 | | 29·7 | 36·4 | |
| 9·8 | | 45·2 | 21·2 | |
| 9·6 | | 50·2 | 55·9 | |
| 10·0† | | 51·5 | 50·5 | |
| 8·4 | | 52·7 | 23·1 | 8·8 |
| 9·5 | | 54·2 | 27·3 | |
| 9·8 | | 55·7 | 55·5 | |
| 9·5 | 59 | 6·9 | 27·4 | |
| 9·4 | | 6·9 | 39·8 | |
| 9·6 | | 9·6 | 57·3 | |
| 9·9 | | 19·2 | 36·9 | |
| 9·9 | | 39·0 | 3·0 | |
| 9·4 | | 39·8 | 2·7 | |
| 9·6 | | 51·5 | 53·8 | |
| 9·2 | 0 | 6·8 | 21·8 | |
| 9·7 | | 13·2 | 47·6 | |
| 9·4 | | 16·5 | 14·0 | |
| 9·9 | | 18·0 | 36·1 | |
| 9·8 | | 18·0 | 23·5 | |
| 9·9 | | 19·2 | 56·8 | |
| 9·9 | | 19·8 | 57·7 | |
| 9·9 | | 20·2 | 44·0 | |
| 9·6 | | 29·5 | 55·2 | |
| 8·4 | | 31·0 | 36·6 | 9·0 |
| 9·4 | | 32·3 | 7·5 | |
| 9·8 | | 37·5 | 44·8 | |
| 9·4 | | 44·2 | 29·7 | 9·5 |
| 8·2 | | 45·5 | 54·4 | 8·5 G |
| 9·6 | | 48·3 | 33·2 | |
| 9·7 | | 51·6 | 14·8 | |
| 8·3 | | 53·6 | 53·2 | 8·8 |
| 9·9 | 1 | 4·5 | 50·6 | |
| 9·8 | | 6·3 | 0·2 | |
| 9·8 | | 24·0 | 8·9 | |
| 9·9 | | 39·0 | 39·1 | |
| 9·4 | | 45·0 | 56·8 | |
| 9·9 | | 45·5 | 57·0 | |
| 9·4 | | 48·0 | 7·0 | |
| 9·4 | | 57·0 | 38·2 | |
| 9·2 | | 59·5 | 53·9 | |
| 9·9 | 2 | 18·0 | 25·8 | |
| 9·4 | | 20·0 | 19·8 | |
| 9·2 | | 21·0 | 58·4 | 9·5 |
| 9·8 | | 33·0 | 36·8 | |
| 9·8 | | 46·0 | 39·2 | |
| 9·7 | 3 | 1·0 | 22·3 | |
| 9·2 | | 5·0 | 27·6 | 9·0 |
| 7·6 | | 8·3 | 39·1 | 8·0 G |
| 9·9 | | 10·3 | 27·8 | |
| 9·7 | | 11·3 | 6·0 | |
| 9·8 | | 12·3 | 12·4 | |

**5281—5340.**

| mag. | 12h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 3 | 12·8 | 45·8 | |
| 9·3 | | 19·3 | 23·9 | |
| 9·8 | | 19·3 | 2·1 | |
| 8·6 | | 29·3 | 4·1 | 9·5 |
| 9·8 | | 31·3 | 57·4 | |
| 9·6 | | 36·8 | 44·4 | |
| 9·4 | | 40·8 | 19·0 | |
| 9·7 | | 45·8 | 26·1 | |
| 9·6 | | 46·3 | 10·5 | |
| 9·4 | 4 | 5·3 | 32·8 | |
| 9·8 | | 8·3 | 58·5 | |
| 9·9 | | 16·3 | 30·9 | |
| 9·7 | | 17·7 | 39·5 | |
| 9·6 | | 17·8 | 56·1 | |
| 9·7 | | 21·7 | 19·4 | |
| 9·9 | | 22·3 | 43·3 | |
| 9·9 | | 22·7 | 22·9 | |
| 9·3 | | 24·8 | 41·4 | 9·0 |
| 8·8 | | 27·7 | 2·8 | 9·0 |
| 9·6 | | 36·8 | 26·2 | |
| 9·9 | | 37·8 | 55·8 | |
| 9·6 | | 40·3 | 32·8 | |
| 8·8 | | 41·3 | 0·9 | 9·0 |
| 9·9 | | 55·3 | 50·1 | |
| 9·6 | | 58·8 | 35·0 | |
| 8·8 | | 59·3 | 33·6 | 9·0 |
| 9·6 | 5 | 0·3 | 47·2 | |
| 9·3 | | 4·3 | 7·9 | 9·0 |
| 9·8 | | 4·8 | 22·2 | |
| 9·6 | | 9·3 | 42·9 | |
| 9·3 | | 14·3 | 47·9 | |
| 9·2 | | 15·8 | 59·0 | 9·0 |
| 9·4 | | 19·3 | 48·1 | |
| 9·9 | | 31·3 | 21·1 | |
| 9·4 | | 49·3 | 56·4 | |
| 9·3 | | 50·3 | 35·0 | 8·8 G |
| 9·8 | | 59·3 | 37·8 | |
| 9·7 | | 59·3 | 58·4 | |
| 9·7 | 6 | 8·8 | 30·8 | |
| 9·6 | | 12·3 | 21·7 | |
| 9·7 | | 20·8 | 47·7 | |
| 9·9 | | 22·0 | 33·2 | |
| 9·6 | | 25·5 | 25·0 | |
| 9·4 | | 25·5 | 15·0 | |
| 9·6 | | 31·5 | 37·1 | |
| 9·9 | | 31·5 | 20·0 | |
| 9·9 | | 34·0 | 8·6 | |
| 9·6 | | 37·0 | 30·4 | 9·0 G |
| 9·8 | | 38·5 | 33·6 | |
| 9·6 | | 38·5 | 28·9 | |
| 9·8 | | 49·0 | 37·0 | |
| 9·9 | | 51·5 | 41·1 | |
| 9·9 | | 56·5 | 21·0 | |
| 9·8 | 7 | 10·0 | 41·5 | |
| 9·1 | | 10·5 | 9·6 | 8·5 |
| 9·6 | | 13·0 | 15·5 | |
| 9·1 | | 19·0 | 28·8 | 9·5 |
| 7·9 | | 21·5 | 14·8 | 8·0 G |
| 9·9 | | 27·5 | 57·5 | |
| 9·0 | | 30·0 | 32·7 | |

**5341—5400.**

| mag. | 12h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·1 | 7 | 31·5 | 39·5 | 9·5 |
| 9·9 | | 32·6 | 35·0 | |
| 9·6 | | 41·5 | 39·1 | |
| 9·7 | | 45·5 | 15·2 | |
| 9·4 | | 48·5 | 21·7 | |
| 9·4 | | 59·0 | 36·7 | |
| 9·1 | 8 | 3·0 | 13·6 | 9·0 |
| 9·8 | | 13·5 | 38·5 | |
| 9·6 | | 17·0 | 45·3 | |
| 9·9 | | 17·5 | 7·3 | |
| 9·3 | | 21·0 | 40·9 | |
| 9·9 | | 30·5 | 37·5 | |
| 9·8 | | 36·5 | 52·8 | |
| 9·4 | | 39·0 | 40·8 | |
| 9·9 | | 43·0 | 47·3 | |
| 9·9 | | 47·5 | 48·3 | |
| 9·6 | | 49·5 | 11·6 | 9·5 |
| 9·6 | | 52·0 | 29·3 | |
| 9·4 | | 53·0 | 44·4 | 9·5 |
| 9·7 | | 54·5 | 42·6 | |
| 9·9 | | 57·0 | 53·7 | |
| 9·3 | 9 | 1·0 | 47·9 | 9·0 |
| 9·4 | | 5·5 | 29·1 | |
| 9·2 | | 7·5 | 53·8 | |
| 8·8 | | 9·0 | 43·1 | 9·5 |
| 9·7 | | 33·8 | 42·4 | |
| 9·7 | | 38·3 | 3·8 | |
| 9·4 | | 47·8 | 3·7 | |
| 9·9 | 10 | 11·8 | 28·4 | |
| 9·4 | | 17·0 | 57·1 | |
| 9·4 | | 25·3 | 20·8 | |
| 9·0 | | 30·0 | 0·5 | 9·0 |
| 9·6 | | 34·8 | 25·0 | |
| 9·4 | | 45·8 | 53·9 | |
| 8·4 | | 57·3 | 28·2 | 9·0 G |
| 9·7 | | 57·5 | 2·3 | |
| 9·4 | | 58·3 | 0·2 | |
| 9·4 | 11 | 0·8 | 41·4 | |
| 9·2 | | 8·0 | 33·1 | |
| 9·6 | | 9·8 | 29·0 | |
| 9·3 | | 12·3 | 22·6 | 9·5 |
| 8·2 | | 14·8 | 9·2 | 7·0 GSt |
| 9·7 | | 15·8 | 27·0 | |
| 9·8 | | 18·3 | 48·0 | |
| 9·9 | | 18·8 | 29·0 | |
| 9·6 | | 20·8 | 46·4 | |
| 9·9 | | 26·0 | 24·1 | |
| 9·7 | | 27·9 | 58·4 | |
| 9·9 | | 39·3 | 24·4 | |
| 9·9 | | 41·8 | 14·8 | |
| 8·6 | | 44·8 | 29·0 | 8·0 G |
| 9·9 | | 47·3 | 59·0 | |
| 9·9 | | 52·3 | 18·1 | |
| 9·6 | | 53·0 | 43·3 | |
| 9·0 | 12 | 1·8 | 55·2 | 9·0 |
| 9·9 | | 5·8 | 34·2 | |
| 9·0 | | 17·8 | 52·9 | 9·0 |
| 9·8 | | 33·3 | 5·6 | |
| 9·6 | | 36·8 | 15·2 | |
| 8·8 | 13 | 11·3 | 29·8 | 9·5 |

**5401—5460.**

| mag. | 12h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·3 | 13 | 13·3 | 26·0 | 9·5 |
| 9·4 | | 21·9 | 4·7 | |
| 9·2 | | 22·9 | 20·6 | |
| 9·9 | | 32·4 | 6·2 | |
| 9·8 | | 35·4 | 25·4 | |
| 9·8 | | 42·0 | 10·1 | |
| 9·4 | | 42·4 | 49·5 | |
| 9·8 | | 45·0 | 59·4 | |
| 9·8 | 14 | 0·9 | 6·7 | |
| 9·2 | | 1·4 | 7·4 | |
| 9·4 | | 3·9 | 36·2 | |
| 9·8 | | 4·0 | 15·3 | |
| 9·2 | | 31·9 | 47·2 | |
| 9·4 | | 34·4 | 31·9 | 9·0 |
| 9·0 | | 34·9 | 10·4 | |
| 9·4 | | 47·4 | 31·4 | |
| 9·9 | | 52·4 | 13·2 | |
| 9·2 | 15 | 1·9 | 10·8 | |
| 9·9 | | 2·9 | 22·2 | |
| 8·2 | | 11·9 | 43·2 | 8·5 |
| 9·9 | | 20·4 | 15·6 | |
| 9·9 | | 22·0 | 9·1 | |
| 9·6 | | 24·4 | 46·9 | |
| 9·7 | | 30·9 | 24·0 | |
| 9·4 | 16 | 0·9 | 32·3 | |
| 9·6 | | 1·4 | 18·8 | |
| 9·9 | | 12·9 | 52·2 | |
| 9·8 | | 14·9 | 16·0 | |
| 9·3 | | 15·4 | 36·2 | |
| 9·9 | | 25·4 | 33·1 | |
| 9·9 | | 26·4 | 53·0 | |
| 9·9 | | 36·9 | 51·3 | |
| 9·9 | | 43·4 | 34·8 | |
| 9·0 | | 49·9 | 14·7 | |
| 9·9 | | 53·4 | 49·4 | |
| 9·6 | | 53·9 | 53·2 | |
| 9·2 | | 56·4 | 38·8 | 9·0 |
| 9·9 | | 58·9 | 28·3 | |
| 9·7 | 17 | 0·9 | 23·6 | |
| 9·9 | | 4·9 | 35·3 | |
| 9·8 | | 14·0 | 23·4 | |
| 8·0 | | 22·0 | 13·4 | 8·0 G |
| 9·6 | | 26·0 | 12·7 | |
| 9·3 | | 27·5 | 24·0 | |
| 9·9 | | 28·0 | 10·4 | |
| 9·9 | | 32·0 | 42·3 | |
| 9·2 | | 35·5 | 48·6 | |
| 9·7 | | 38·0 | 1·9 | |
| 9·9 | | 39·5 | 58·0 | |
| 9·0 | 18 | 0·0 | 39·4 | 9·2 |
| 7·6 | | 0·0 | 25·5 | 8·0 G |
| 9·6 | | 4·0 | 53·6 | |
| 9·9 | | 6·0 | 50·2 | |
| 9·9 | | 9·5 | 45·6 | |
| 9·7 | | 12·0 | 34·3 | |
| 9·0 | | 15·5 | 12·8 | 9·5 |
| 9·8 | | 17·8 | 59·4 | |
| 9·2 | | 18·5 | 28·2 | |
| 9·2 | | 22·0 | 45·0 | 8·0 |
| 9·7 | | 33·5 | 47·2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 50 | 75 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 12 | 10 | 79 | 8·3 |
| | 20 | 81 | 8·3 |
| | 30 | 84 | 8·3 |
| | 40 | 86 | 8·2 |

**5461—5520.**

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 18 | 48·0 | 56·0 | |
| 8·8 | 19 | 4·5 | 16·8 | 9·5 |
| 9·9 | | 6·5 | 52·8 | |
| 9·9 | | 8·0 | 18·6 | |
| 9·1 | | 8·0 | 18·8 | 9·5 |
| 9·4 | | 9·5 | 23·0 | |
| 9·7 | | 14·0 | 11·2 | |
| 8·8 | | 19·8 | 57·7 | |
| 9·4 | | 22·7 | 57·1 | |
| 9·8 | | 24·0 | 53·0 | |
| 9·6 | | 28·0 | 40·8 | |
| 9·8 | | 28·0 | 56·1 | |
| 9·9 | | 32·0 | 56·4 | |
| 8·2 | | 39·0 | 25·0 | 8·5 G |
| 9·2 | | 41·5 | 43·0 | |
| 9·2 | | 48·5 | 32·0 | |
| 9·3 | | 51·5 | 43·8 | |
| 9·4 | | 56·0 | 59·2 | |
| 9·4 | 20 | 2·0 | 29·4 | |
| 9·7 | | 3·5 | 27·7 | 9·5 |
| 9·9 | | 4·6 | 6·0 | |
| 9·4 | | 5·0 | 34·8 | |
| 9·9 | | 7·1 | 0·1 | |
| 9·6 | | 16·1 | 8·1 | |
| 9·3 | | 18·1 | 56·2 | |
| 9·3 | | 29·1 | 37·0 | 9·5 |
| 8·5 | | 31·1 | 19·2 | 9·0 |
| 9·8 | | 32·1 | 27·9 | |
| 9·6 | | 32·6 | 19·5 | |
| 7·6 | | 37·1 | 37·5 | 7·0 GSt |
| 9·9 | | 46·3 | 39·0 | |
| 9·2 | | 47·6 | 45·0 | |
| 9·4 | | 52·1 | 38·3 | |
| 9·6 | | 53·6 | 19·1 | |
| 9·4 | | 54·6 | 33·0 | |
| 9·7 | 21 | 6·9 | 0·4 | |
| 9·9 | | 10·6 | 34·7 | |
| 9·9 | | 14·3 | 58·8 | |
| 9·9 | | 20·6 | 0·9 | |
| 9·7 | | 36·3 | 21·3 | |
| 9·4 | | 41·1 | 33·6 | |
| 8·8 | | 46·1 | 29·5 | 8·7 |
| 9·4 | | 50·6 | 4·2 | |
| 9·4 | | 53·6 | 34·3 | |
| 9·4 | 22 | 25·1 | 48·0 | |
| 9·4 | | 28·6 | 28·6 | |
| 8·8 | | 35·1 | 43·0 | |
| 9·7 | | 35·1 | 1·5 | |
| 9·7 | | 37·4 | 0·1 | |
| 8·2 | | 43·6 | 55·1 | 8·5 |
| 9·9 | | 46·6 | 45·2 | |
| 8·8 | | 48·1 | 32·9 | 9·0 G |
| 9·6 | | 48·1 | 10·3 | |
| 9·8 | | 48·6 | 7·8 | |
| 9·3 | | 50·1 | 12·0 | |
| 9·7 | | 53·6 | 53·3 | |
| 9·8 | 23 | 1·6 | 2·0 | |
| 9·2 | | 9·1 | 34·4 | 9·5 |
| 9·8 | | 16·1 | 7·4 | |
| 9·2 | | 20·1 | 4·7 | |

**5521—5580.**

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8·8 | 23 | 24·6 | 50·1 | 9·0 |
| 9·4 | | 25·6 | 24·1 | |
| 9·4 | | 40·8 | 49·0 | |
| 9·0 | | 45·3 | 49·7 | |
| 8·6 | | 51·3 | 29·7 | 8·5 |
| 9·9 | 24 | 3·8 | 12·8 | |
| 9·4 | | 15·3 | 35·0 | |
| 9·9 | | 19·8 | 14·9 | |
| 9·0 | | 20·3 | 17·8 | |
| 9·9 | | 20·3 | 18·8 | |
| 9·6 | | 29·3 | 30·9 | |
| 9·6 | | 36·3 | 26·6 | |
| 9·9 | | 37·8 | 9·6 | |
| 9·9 | | 52·3 | 19·8 | • |
| 9·9 | | 57·3 | 56·4 | |
| 7·6 | | 58·3 | 35·9 | 7·5 GSt |
| 9·6 | 25 | 1·3 | 14·2 | |
| 9·9 | | 4·8 | 46·5 | |
| 9·9 | | 5·3 | 28·8 | |
| 9·9 | | 21·5 | 29·3 | |
| 9·9 | | 32·8 | 15·5 | |
| 9·9 | | 37·3 | 25·5 | |
| 8·8 | | 55·8 | 39·9 | 9·0 |
| 9·9 | 26 | 6·3 | 28·1 | |
| 9·6 | | 9·3 | 53·9 | |
| 9·7 | | 20·8 | 29·4 | 10·0 |
| 7·6 | | 22·3 | 1·7 | 8·0 GSt |
| 9·6 | | 24·8 | 44·5 | |
| 9·9 | | 32·3 | 9·5 | |
| 9·2 | | 36·3 | 13·3 | |
| 9·9 | | 47·7 | 37·5 | |
| 9·9 | | 51·3 | 27·8 | |
| 8·1 | | 51·3 | 25·6 | 8·5 |
| 8·3 | | 52·8 | 17·0 | 8·5 |
| 9·9 | | 59·8 | 14·7 | |
| 9·6 | 27 | 6·3 | 19·1 | |
| 9·8 | | 17·8 | 33·7 | |
| 9·9 | | 29·3 | 15·8 | |
| 9·4 | | 30·3 | 32·9 | 9·0 |
| 8·1 | | 30·3 | 38·5 | 8·0 G |
| 9·2 | | 38·3 | 11·2 | |
| 9·9 | | 41·4 | 22·9 | |
| 8·5 | | 46·1 | 1·1 | 8·5 |
| 9·9 | | 50·8 | 46·5 | |
| 9·6 | | 52·8 | 57·0 | |
| 8·8 | | 53·8 | 32·2 | 8·8 |
| 9·4 | | 53·8 | 16·6 | |
| 9·6 | | 57·3 | 25·2 | |
| 9·4 | 28 | 4·8 | 24·5 | |
| 9·4 | | 8·4 | 20·3 | |
| 9·3 | | 12·8 | 40·7 | |
| 9·9 | | 20·3 | 13·6 | |
| 9·1 | | 23·8 | 34·7 | |
| 8·2 | | 28·3 | 15·5 | 8·8 |
| 9·9 | | 28·8 | 52·2 | |
| 9·4 | | 29·3 | 39·8 | |
| 9·4 | | 35·3 | 10·9 | |
| 9·6 | | 36·8 | 53·1 | |
| 9·9 | | 38·8 | 36·2 | |
| 9·4 | | 39·8 | 16·7 | |

**5581—5640.**

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·7 | 28 | 53·3 | 47·1 | 9·5 |
| 9·9 | | 56·0 | 54·2 | |
| 9·3 | | 58·8 | 29·3 | |
| 9·9 | 29 | 1·3 | 8·6 | |
| 9·8 | | 5·8 | 39·5 | |
| 9·7 | | 6·3 | 44·6 | |
| 9·8 | | 8·4 | 32·4 | |
| 9·6 | | 15·3 | 5·3 | |
| 9·7 | | 21·3 | 3·5 | |
| 9·4 | | 35·8 | 42·5 | |
| 9·9 | | 44·8 | 12·3 | |
| 9·9 | | 59·8 | 54·9 | |
| 9·9 | 30 | 10·3 | 6·6 | |
| 9·0 | | 10·3 | 11·0 | |
| 9·9 | | 12·8 | 43·5 | |
| 9·9 | | 18·3 | 21·1 | |
| 9·9 | | 18·6 | 23·0 | |
| 9·9 | | 20·6 | 2·1 | |
| 9·2 | | 25·3 | 25·4 | 9·2 |
| 7·9 | | 31·3 | 24·0 | 8·0 Gt |
| 8·4 | | 46·3 | 33·9 | 9·0 |
| 7·5 | | 48·3 | 10·7 | 8·0 Gt |
| 8·8 | | 52·8 | 8·8 | 8·5 |
| 9·2 | | 54·8 | 40·9 | |
| 9·0 | | 55·8 | 20·0 | |
| 9·2 | 31 | 11·3 | 25·5 | 9·0 |
| 9·2 | | 13·3 | 25·6 | 9·0 |
| 8·4 | | 21·3 | 17·9 | 8·5 G |
| 9·7 | | 40·3 | 41·9 | |
| 9·4 | | 56·3 | 34·6 | |
| 9·7 | | 59·8 | 34·6 | |
| 9·3 | 32 | 3·3 | 42·4 | |
| 9·7 | | 3·3 | 30·8 | |
| 9·6 | | 9·3 | 27·8 | |
| 9·7 | | 19·8 | 11·7 | |
| 9·7 | | 36·2 | 13·7 | |
| 9·3 | | 36·3 | 13·0 | 9·5 |
| 9·7 | | 37·8 | 15·3 | |
| 9·7 | | 43·8 | 35·6 | |
| 8·7 | | 52·8 | 4·1 | 9·0 |
| 9·1 | | 58·8 | 45·8 | |
| 9·7 | | 59·8 | 37·7 | |
| 9·6 | 33 | 9·3 | 11·3 | |
| 9·7 | | 10·3 | 29·3 | |
| 9·4 | | 12·3 | 25·4 | |
| 9·6 | | 27·8 | 10·3 | |
| 9·7 | | 29·8 | 13·0 | |
| 8·6 | | 33·8 | 0·3 | 9·0 |
| 9·1 | | 40·3 | 32·0 | |
| 9·6 | | 45·2 | 57·5 | |
| 9·4 | | 53·3 | 9·2 | |
| 8·4 | | 56·3 | 34·0 | 8·8 |
| 8·7 | 34 | 3·8 | 37·8 | 9·0 |
| 9·6 | | 9·8 | 4·2 | |
| 9·6 | | 10·3 | 14·7 | |
| 9·3 | | 10·8 | 44·8 | |
| 9·1 | | 13·8 | 29·3 | |
| 9·1 | | 14·8 | 1·9 | |
| 9·6 | | 23·3 | 51·7 | |
| 9·7 | | 26·8 | 16·3 | |

**5641—5700.**

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 34 | 27·3 | 15·6 | |
| 9·3 | | 36·8 | 7·8 | |
| 8·4 | | 37·8 | 34·5 | 8·5 |
| 8·0 | | 53·8 | 5·4 | 8·2 G |
| 9·0 | 35 | 1·8 | 13·6 | |
| 9·6 | | 12·3 | 46·9 | 9·0 |
| 9·7 | | 22·8 | 20·8 | |
| 9·4 | | 27·3 | 36·5 | 8·8 |
| 9·7 | | 27·3 | 12·5 | |
| 9·6 | | 32·3 | 57·5 | |
| 9·6 | | 33·8 | 14·1 | |
| 8·0 | | 38·8 | 47·5 | 7·8 G |
| 9·7 | | 42·8 | 18·7 | |
| 9·7 | | 47·8 | 21·3 | |
| 9·7 | | 50·8 | 32·8 | |
| 9·0 | | 58·3 | 5·4 | |
| 8·8 | 36 | 3·3 | 3·4 | 9·0 |
| 9·4 | | 5·8 | 47·8 | |
| 9·7 | | 10·3 | 25·2 | |
| 9·2 | | 23·3 | 11·6 | |
| 9·6 | | 38·3 | 45·9 | |
| 9·6 | | 39·3 | 43·8 | |
| 9·7 | | 49·3 | 11·2 | |
| 9·2 | 37 | 2·8 | 16·8 | |
| 9·7 | | 2·8 | 57·2 | |
| 9·6 | | 5·3 | 33·8 | |
| 9·7 | | 9·2 | 20·6 | |
| 9·4 | | 14·3 | 37·2 | |
| 9·7 | | 17·8 | 50·7 | |
| 9·4 | | 29·3 | 50·0 | |
| 9·2 | | 30·3 | 53·0 | |
| 9·1 | | 30·8 | 28·6 | |
| 9·4 | | 33·3 | 22·5 | |
| 9·7 | | 44·0 | 40·3 | |
| 9·7 | | 47·8 | 47·4 | |
| 9·7 | | 56·3 | 42·2 | |
| 9·7 | | 57·3 | 41·7 | |
| 9·3 | 38 | 6·3 | 51·9 | |
| 9·7 | | 7·8 | 45·3 | |
| 9·6 | | 9·8 | 21·7 | |
| 9·1 | | 10·8 | 21·4 | |
| 9·7 | | 15·8 | 8·2 | |
| 9·2 | | 24·3 | 53·1 | 9·0 G |
| 9·7 | | 28·3 | 0·3 | |
| 9·0 | | 31·8 | 32·6 | 9·5 |
| 8·8 | | 33·3 | 31·5 | 9·0 |
| 9·4 | | 34·8 | 7·1 | |
| 9·6 | | 39·2 | 31·2 | |
| 9·3 | | 39·3 | 6·5 | |
| 8·0 | | 39·3 | 48·8 | 8·0 G |
| 9·4 | | 43·3 | 29·6 | 9·5 |
| 9·6 | | 50·3 | 53·1 | |
| 9·7 | 39 | 8·0 | 51·0 | |
| 8·6 | | 10·3 | 53·5 | 8·0 |
| 9·1 | | 15·8 | 16·0 | 9·0 |
| 9·3 | | 17·3 | 8·3 | |
| 9·6 | | 19·3 | 45·7 | |
| 9·7 | | 21·8 | 22·3 | |
| 9·7 | | 26·8 | 48·7 | |
| 9·6 | | 52·3 | 1·9 | |

## 5701—5760.

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·7 | 39 | 59·8 | 0·4 | |
| 9·2 | 40 | 0·8 | 16·3 | |
| 9·2 | | 13·3 | 17·2 | |
| 9·6 | | 16·3 | 48·1 | |
| 9·6 | | 23·3 | 0·1 | |
| 8·9 | | 23·8 | 43·9 | 8·8 G |
| 7·7 | | 24·3 | 36·8 | 7·5 GS |
| 8·3 | | 26·8 | 44·9 | 7·8 G |
| 9·1 | | 26·8 | 28·1 | |
| 9·7 | | 32·8 | 56·2 | |
| 9·6 | | 36·2 | 35·7 | |
| 9·4 | | 39·3 | 0·5 | |
| 9·1 | | 40·8 | 7·3 | |
| 9·2 | | 45·3 | 25·4 | |
| 9·3 | | 58·8 | 21·2 | |
| 9·6 | 41 | 13·8 | 38·9 | |
| 9·7 | | 13·8 | 10·2 | |
| 9·4 | | 14·8 | 28·9 | |
| 9·7 | | 18·8 | 24·1 | |
| 9·7 | | 20·3 | 29·9 | |
| 9·0 | | 33·3 | 10·8 | |
| 9·4 | | 33·3 | 31·2 | |
| 9·3 | | 34·8 | 56·5 | |
| 8·8 | | 49·8 | 46·0 | 8·8 |
| 9·7 | 42 | 3·8 | 21·8 | |
| 8·9 | | 9·6 | 59·3 | 9·5 |
| 9·0 | | 10·3 | 15·1 | |
| 9·6 | | 15·3 | 39·0 | |
| 9·7 | | 23·3 | 30·5 | |
| 9·4 | | 28·3 | 21·5 | |
| 9·7 | | 28·3 | 21·1 | |
| 9·4 | | 31·8 | 54·0 | |
| 9·4 | | 33·3 | 30·6 | |
| 9·7 | | 40·3 | 50·5 | |
| 8·8 | | 41·8 | 20·0 | 8·8 |
| 8·6 | | 43·3 | 55·0 | 8·5 |
| 9·6 | | 57·8 | 33·0 | |
| 8·1 | 43 | 2·3 | 22·2 | 8·0 G |
| 8·9 | | 20·8 | 13·5 | |
| 8·4 | | 21·8 | 29·1 | 7·5 Gt |
| 9·4 | | 32·8 | 35·8 | |
| 9·2 | | 38·3 | 26·4 | |
| 8·7 | | 38·3 | 2·5 | 8·5 |
| 9·7 | | 45·8 | 42·1 | |
| 9·3 | | 47·3 | 34·3 | |
| 9·7 | | 48·3 | 20·7 | |
| 9·6 | | 50·8 | 15·9 | |
| 9·0 | | 55·3 | 6·7 | 9·0 |
| 8·5 | 44 | 16·3 | 48·1 | 7·5 G |
| 9·0 | | 22·3 | 34·0 | |
| 9·4 | | 25·8 | 12·5 | |
| 9·7 | | 36·3 | 35·1 | |
| 9·4 | | 41·8 | 56·5 | |
| 9·7 | | 42·0 | 54·6 | |
| 8·9 | | 44·3 | 50·0 | 9·2 |
| 9·7 | | 45·8 | 23·4 | |
| 9·3 | | 52·8 | 3·7 | 9·0 |
| 9·4 | 45 | 2·3 | 18·7 | |
| 9·4 | | 16·1 | 57·4 | |
| 9·2 | | 16·8 | 35·3 | |

## 5761—5820.

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·3 | 45 | 26·8 | 12·3 | |
| 9·3 | | 34·4 | 59·9 | |
| 9·2 | | 35·3 | 16·0 | |
| 9·7 | | 37·3 | 26·7 | |
| 9·4 | | 37·3 | 34·5 | |
| 9·2 | | 54·3 | 34·4 | |
| 9·2 | 46 | 0·3 | 22·0 | |
| 8·5 | | 3·8 | 15·0 | |
| 9·6 | | 5·8 | 17·5 | |
| 9·6 | | 18·8 | 53·8 | |
| 9·7 | | 20·3 | 43·0 | |
| 9·6 | | 21·8 | 35·8 | |
| 9·4 | | 27·8 | 7·0 | |
| 9·7 | | 39·3 | 24·0 | |
| 9·4 | | 52·8 | 45·5 | |
| 7·9 | | 59·3 | 45·0 | 7·0 GSt |
| 9·7 | 47 | 4·8 | 42·0 | |
| 9·2 | | 11·8 | 55·8 | 9·0 |
| 9·7 | | 12·3 | 20·4 | |
| 9·3 | | 22·3 | 12·2 | |
| 9·3 | | 23·3 | 43·6 | |
| 9·0 | | 28·8 | 1·9 | |
| 9·6 | | 28·8 | 47·9 | |
| 9·7 | | 30·4 | 22·3 | |
| 9·7 | | 33·8 | 40·1 | |
| 9·7 | | 35·3 | 45·7 | |
| 9·7 | | 36·4 | 54·2 | |
| 9·3 | | 38·8 | 22·1 | |
| 9·3 | | 39·3 | 13·2 | |
| 9·7 | | 43·8 | 54·9 | |
| 9·2 | | 51·8 | 32·4 | |
| 9·7 | | 56·4 | 14·4 | |
| 9·7 | | 58·3 | 58·4 | |
| 9·2 | 48 | 9·3 | 4·1 | |
| 9·6 | | 10·4 | 12·5 | |
| 9·2 | | 10·8 | 8·1 | |
| 9·6 | | 17·8 | 52·5 | |
| 9·6 | | 26·3 | 4·9 | |
| 9·7 | | 30·3 | 27·9 | |
| 9·6 | | 31·3 | 29·6 | |
| 9·6 | | 41·4 | 9·5 | |
| 9·7 | | 44·3 | 52·7 | |
| 9·6 | | 49·4 | 16·8 | |
| 9·1 | | 57·4 | 14·4 | |
| 9·7 | 49 | 18·4 | 39·3 | |
| 9·7 | | 18·9 | 47·5 | |
| 9·3 | | 42·9 | 56·4 | |
| 8·8 | 50 | 2·4 | 2·8 | 9·0 |
| 9·2 | | 5·9 | 53·6 | |
| 8·5 | | 16·4 | 42·7 | 9·0 |
| 9·6 | | 18·4 | 16·4 | |
| 9·7 | | 23·9 | 49·0 | |
| 9·1 | | 31·4 | 23·0 | |
| 9·7 | | 37·4 | 0·3 | |
| 9·1 | | 47·9 | 38·7 | 9·5 |
| 9·2 | | 51·4 | 49·6 | |
| 8·4 | | 53·4 | 47·6 | 7·5 G |
| 9·7 | | 53·9 | 14·2 | |
| 9·7 | | 55·4 | 12·2 | |
| 8·6 | | 56·4 | 39·1 | 9·0 |

## 5821—5880.

| mag. | 12h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·7 | 51 | 0·4 | 58·4 | |
| 9·1 | | 2·4 | 36·1 | 9·5 |
| 8·0 | | 3·9 | 34·7 | 8·2 G |
| 9·3 | | 9·9 | 22·0 | |
| 9·4 | | 10·9 | 12·9 | |
| 9·6 | | 13·4 | 55·1 | |
| 9·3 | | 13·7 | 0·6 | |
| 9·7 | | 40·4 | 58·0 | |
| 9·7 | | 43·4 | 34·6 | |
| 9·2 | | 46·9 | 11·7 | |
| 9·6 | | 52·9 | 39·2 | |
| 9·7 | 52 | 7·4 | 21·3 | |
| 9·4 | | 16·7 | 2·0 | |
| 9·7 | | 24·4 | 34·1 | |
| 9·7 | | 28·9 | 54·7 | |
| 9·7 | | 28·9 | 45·8 | |
| 9·0 | | 29·4 | 50·4 | |
| 9·7 | | 40·4 | 13·0 | |
| 9·7 | | 45·6 | 39·5 | |
| 9·2 | | 47·4 | 24·0 | |
| 9·2 | | 50·4 | 31·4 | |
| 9·2 | | 56·4 | 29·1 | |
| 9·7 | | 56·4 | 1·5 | |
| 9·3 | | 57·9 | 34·6 | |
| 9·3 | 53 | 0·9 | 34·3 | |
| 9·6 | | 19·4 | 52·2 | |
| 9·7 | | 28·4 | 32·7 | |
| 9·7 | | 29·9 | 35·6 | |
| 9·7 | | 30·9 | 39·5 | |
| 9·7 | | 47·0 | 58·8 | |
| 8·8 | | 58·4 | 27·5 | 9·0 |
| 8·8 | | 58·4 | 27·7 | 9·0 |
| 9·7 | | 58·9 | 26·8 | |
| 9·6 | 54 | 15·9 | 4·9 | |
| 9·7 | | 17·9 | 54·6 | |
| 9·7 | | 22·9 | 2·4 | |
| 9·6 | | 27·9 | 41·5 | |
| 9·4 | | 32·4 | 34·9 | |
| 9·7 | | 43·9 | 56·7 | |
| 9·7 | 55 | 3·4 | 56·3 | |
| 9·6 | | 12·5 | 56·8 | 9·5 |
| 9·4 | | 23·4 | 15·8 | |
| 9·1 | | 31·4 | 53·9 | |
| 9·7 | 56 | 1·9 | 55·7 | |
| 8·6 | | 2·4 | 0·8 | 9·0 |
| 9·7 | | 4·4 | 7·8 | |
| 9·7 | | 8·9 | 29·4 | |
| 9·4 | | 17·9 | 24·7 | |
| 9·6 | | 20·4 | 32·7 | |
| 9·7 | | 39·4 | 20·0 | |
| 9·2 | | 53·4 | 54·1 | 9·0 |
| 9·4 | 57 | 5·9 | 9·2 | |
| 9·7 | | 10·9 | 28·2 | |
| 8·6 | | 12·9 | 54·8 | 8·5 |
| 9·6 | | 15·4 | 11·5 | |
| 8·7 | | 17·4 | 34·0 | 9·0 |
| 9·7 | | 24·9 | 43·4 | |
| 9·7 | | 28·4 | 8·6 | |
| 9·2 | | 33·4 | 4·2 | 9·0 |
| 9·2 | | 43·4 | 17·9 | |

## 5881—5940.

| mag. | 12h.—13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 57 | 47·9 | 40·4 | |
| 9·6 | | 48·9 | 44·7 | 9·5 |
| 8·2 | | 56·9 | 51·8 | 8·0 G |
| 9·2 | 58 | 2·4 | 6·6 | 9·0 |
| 9·6 | | 4·4 | 59·4 | |
| 9·7 | | 20·9 | 13·6 | |
| 8·6 | | 28·9 | 54·5 | 9·2 G |
| 9·1 | | 33·4 | 13·3 | |
| 8·6 | | 38·9 | 35·4 | 8·8 G |
| 9·0 | | 40·4 | 55·5 | 9·5 |
| 9·6 | | 48·4 | 11·0 | |
| 9·6 | | 49·4 | 11·4 | |
| 9·4 | | 57·5 | 34·3 | |
| 9·7 | | 58·4 | 22·8 | |
| 9·7 | | 58·9 | 26·4 | |
| 9·7 | 59 | 20·4 | 26·3 | |
| 9·6 | | 32·4 | 5·3 | |
| 9·7 | | 37·4 | 50·2 | |
| 9·2 | | 41·4 | 31·5 | |
| 9·6 | | 51·4 | 5·9 | |
| 9·6 | | 52·9 | 41·2 | |
| 9·7 | | 53·5 | 7·3 | |
| 9·6 | 0 | 0·4 | 50·0 | |
| 9·9† | | 0·5 | 47·3 | |
| 9·7 | | 1·9 | 51·3 | |
| 9·7 | | 28·7 | 37·8 | |
| 9·0 | | 36·4 | 7·8 | |
| 9·2 | | 51·9 | 9·4 | 9·0 G |
| 8·8 | 1 | 6·6 | 1·3 | 9·0 |
| 9·7 | | 16·7 | 51·9 | |
| 9·4 | | 17·9 | 42·9 | 8·5 |
| 9·6 | | 20·4 | 41·4 | |
| 9·6 | | 32·9 | 18·9 | |
| 9·4 | | 32·9 | 39·3 | |
| 9·0 | | 43·9 | 10·4 | |
| 8·7 | | 48·9 | 6·1 | 8·7 G |
| 9·2 | | 54·4 | 23·0 | |
| 9·2 | 2 | 6·4 | 21·5 | |
| 9·1 | | 22·1 | 2·0 | |
| 9·7 | | 25·4 | 12·5 | |
| 7·9 | | 43·9 | 4·7 | 8·0 Gt |
| 9·3 | | 48·9 | 57·1 | |
| 9·0 | | 51·4 | 12·2 | |
| 9·1 | 3 | 2·4 | 36·6 | 9·5 |
| 9·7 | | 13·4 | 1·6 | |
| 8·8 | | 16·4 | 22·5 | 9·5 |
| 9·6 | | 26·9 | 55·5 | |
| 9·7 | | 29·4 | 14·6 | |
| 9·1 | | 30·4 | 13·5 | |
| 9·7 | | 46·3 | 21·0 | |
| 9·9 | | 50·0 | 30·4 | |
| 9·9 | | 50·2 | 46·9 | |
| 9·4 | 4 | 8·5 | 21·2 | |
| 9·4 | | 11·2 | 55·0 | |
| 9·4 | | 11·9 | 19·8 | |
| 9·4 | | 12·2 | 9·1 | |
| 9·9 | | 15·5 | 4·0 | |
| 9·9 | | 24·5 | 8·3 | |
| 9·8 | | 27·2 | 33·5 | |
| 9·2 | | 28·0 | 7·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 30 | 84 | 8·3 |
| | 40 | 86 | 8·2 |
| | 50 | 88 | 8·2 |
| 13 | 0 | 90 | 8·1 |
| | 10 | 93 | 8·0 |



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25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 13 | 0 | 90 | 8·1 |
| | 10 | 93 | 8·0 |
| | 20 | 95 | 7·9 |
| | 30 | 97 | 7·7 |
| | 40 | 99 | 7·6 |

**5941—6000.**

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·7 | 4 | 35·0 | 2·1 | |
| 9·7 | | 38·5 | 28·2 | |
| 9·6 | | 42·0 | 11·6 | |
| 8·8 | | 45·8 | 59·1 | 9·0 |
| 9·2 | | 49·0 | 8·6 | |
| 9·0 | 5 | 2·8 | 0·0 | |
| 9·9 | | 10·5 | 57·6 | |
| 9·2 | | 22·8 | 1·7 | |
| 9·4 | | 23·0 | 8·7 | |
| 9·9 | | 34·5 | 52·3 | |
| 9·9 | | 35·3 | 58·9 | |
| 9·0 | | 46·0 | 41·9 | 9·5 |
| 9·6 | | 49·5 | 18·1 | |
| 9·9 | 6 | 1·0 | 7·4 | |
| 9·6 | | 4·5 | 32·3 | |
| 9·4 | | 5·2 | 57·7 | 9·0 |
| 9·2 | | 11·5 | 4·0 | |
| 9·3 | | 16·5 | 47·9 | |
| 8·0 | | 19·5 | 39·1 | 7·8 G |
| 9·4 | | 22·5 | 49·3 | 9·0 |
| 9·3 | | 26·0 | 2·0 | |
| 9·9 | | 36·0 | 13·4 | |
| 9·6 | | 38·5 | 39·1 | |
| 9·2 | | 51·0 | 5·7 | 8·5 G |
| 9·1 | | 54·0 | 40·1 | 9·0 |
| 9·7 | | 55·0 | 40·5 | |
| 9·8 | 7 | 4·0 | 15·8 | |
| 9·8 | | 15·0 | 3·1 | |
| 9·4 | | 16·0 | 54·1 | |
| 9·9 | | 20·0 | 58·5 | |
| 9·9 | | 27·0 | 28·3 | |
| 9·6 | | 45·0 | 51·1 | |
| 9·9 | | 56·7 | 51·3 | |
| 9·8 | 8 | 6·0 | 9·3 | |
| 9·6 | | 20·0 | 53·1 | |
| 9·3 | | 29·0 | 9·9 | |
| 8·8 | | 29·0 | 42·5 | 9·0 |
| 9·4 | 9 | 15·0 | 41·5 | 9·5 |
| 9·9 | | 16·1 | 6·4 | |
| 9·6 | 10 | 6·5 | 34·7 | |
| 8·6 | | 39·5 | 28·6 | 9·0 |
| 8·7 | | 56·0 | 36·4 | 8·5 |
| 9·9 | 11 | 26·5 | 14·9 | |
| 9·9 | | 28·7 | 35·1 | |
| 9·8 | | 30·5 | 36·4 | |
| 8·6 | | 31·5 | 32·0 | 9·0 |
| 9·9 | | 33·5 | 20·7 | |
| 8·8 | | 37·5 | 49·1 | 8·5 |
| 9·4 | | 47·7 | 51·9 | 9·5 |
| 9·2 | | 59·7 | 44·0 | 9·5 |
| 9·4 | 12 | 9·4 | 59·6 | |
| 9·7 | | 11·7 | 56·3 | |
| 9·4 | | 15·2 | 33·6 | |
| 9·4 | | 23·7 | 53·9 | |
| 9·7 | | 26·2 | 32·8 | 9·5 |
| 9·3 | | 39·2 | 56·0 | |
| 9·9 | | 43·7 | 31·6 | |
| 8·6 | | 44·7 | 59·5 | 9·0 |
| 9·2 | | 55·2 | 52·5 | 9·5 G |
| 9·9 | | 56·7 | 37·5 | |

**6001—6060.**

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 12 | 56·7 | 54·8 | 9·5 |
| 8·6 | 13 | 1·7 | 49·4 | 9·0 |
| 9·4 | | 2·7 | 53·8 | |
| 9·6 | | 9·2 | 3·0 | |
| 9·4 | | 18·2 | 0·4 | |
| 9·2 | | 25·2 | 17·5 | 9·5 |
| 9·2 | | 27·7 | 38·2 | |
| 9·2 | | 31·2 | 15·6 | 8·8 |
| 9·9 | | 42·2 | 34·2 | |
| 9·2 | | 42·2 | 47·1 | 9·5 |
| 9·6 | | 52·7 | 13·5 | |
| 9·4 | | 53·7 | 38·3 | |
| 9·4 | 14 | 6·2 | 8·8 | |
| 9·4 | | 9·2 | 15·4 | |
| 8·4 | | 14·5 | 2·0 | 9·0 |
| 9·6 | | 22·7 | 49·0 | |
| 9·6 | | 26·7 | 26·0 | |
| 9·8 | | 30·7 | 51·9 | |
| 9·6 | | 43·7 | 44·4 | |
| 9·3 | | 45·2 | 41·5 | 9·5 |
| 9·9 | | 46·5 | 19·5 | |
| 9·4 | | 49·7 | 52·0 | |
| 9·9 | 15 | 2·5 | 25·5 | |
| 9·1 | | 36·2 | 31·9 | 9·5 |
| 9·2 | | 44·7 | 6·0 | |
| 9·9 | | 51·7 | 22·2 | |
| 9·8 | | 59·2 | 18·0 | |
| 9·7 | 16 | 29·7 | 6·8 | 9·5 |
| 9·7 | | 46·7 | 3·7 | |
| 9·8 | | 47·7 | 20·3 | |
| 8·8 | | 51·4 | 36·4 | 9·0 |
| 9·6 | 17 | 1·4 | 59·5 | |
| 9·8 | | 5·9 | 15·2 | |
| 9·9 | | 7·9 | 55·8 | |
| 9·3 | | 19·4 | 31·9 | 9·5 |
| 9·4 | | 24·9 | 27·9 | 8·7 |
| 9·4 | | 34·4 | 25·8 | 9·5 |
| 9·3 | | 41·4 | 14·7 | |
| 9·7 | | 45·9 | 13·3 | |
| 9·6 | | 47·9 | 2·7 | |
| 9·1 | | 55·4 | 4·9 | 9·5 |
| 9·9 | | 59·4 | 43·2 | |
| 9·7 | | 59·9 | 38·7 | |
| 8·8 | 18 | 3·4 | 55·5 | 9·0 |
| 9·9 | | 13·7 | 59·0 | |
| 9·6 | | 13·9 | 53·6 | |
| 8·9 | | 19·4 | 18·9 | 9·5 |
| 8·3 | | 21·4 | 25·5 | 8·5 |
| 9·8 | | 21·9 | 17·8 | |
| 9·9 | | 33·9 | 11·4 | |
| 9·9 | | 35·9 | 56·2 | |
| 9·6 | | 36·4 | 54·2 | |
| 9·9 | | 39·4 | 22·3 | |
| 8·9 | | 41·4 | 5·3 | 8·8 |
| 9·9 | | 45·4 | 47·0 | 9·0 |
| 9·2 | 19 | 11·9 | 22·7 | |
| 8·3 | | 14·9 | 38·1 | 8·5 |
| 9·9 | | 15·4 | 53·7 | |
| 9·1 | | 16·4 | 21·7 | |
| 9·8 | | 19·9 | 53·1 | |

**6061—6120.**

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 19 | 41·4 | 20·2 | |
| 9·9 | | 41·4 | 15·0 | |
| 9·9 | | 48·9 | 15·9 | |
| 9·9 | 20 | 0·4 | 42·7 | |
| 8·6 | | 1·4 | 27·1 | 9·0 |
| 9·7 | | 6·4 | 38·2 | |
| 9·9 | | 17·4 | 20·5 | |
| 9·9 | | 29·9 | 13·3 | |
| 9·8 | | 33·4 | 27·2 | |
| 9·9 | | 37·4 | 4·5 | |
| 9·3 | | 48·4 | 41·5 | 9·0 G |
| 9·2 | 21 | 4·9 | 38·3 | |
| 9·9 | | 9·9 | 40·4 | |
| 9·7 | | 18·4 | 8·8 | |
| 9·4 | | 33·6 | 13·1 | |
| 9·4 | | 33·6 | 37·4 | |
| 9·6 | | 36·6 | 34·9 | |
| 9·4 | | 42·1 | 50·7 | |
| 9·7 | | 46·6 | 12·1 | |
| 9·3 | | 47·6 | 28·9 | 9·5 |
| 9·6 | | 50·9 | 0·8 | |
| 9·4 | | 55·7 | 57·0 | 9·0 |
| 8·4 | 22 | 6·6 | 50·1 | 8·2 G |
| 9·9 | | 15·6 | 26·9 | |
| 9·9 | | 17·1 | 10·0 | |
| 9·7 | | 21·1 | 20·9 | |
| 9·9 | | 23·6 | 55·1 | |
| 9·8 | | 33·1 | 29·7 | |
| 9·9 | | 35·1 | 24·5 | |
| 9·1 | | 37·6 | 59·2 | |
| 9·4 | | 40·1 | 24·5 | 9·5 |
| 9·9 | | 40·6 | 29·2 | |
| 9·9 | | 42·1 | 47·6 | |
| 9·9 | | 52·1 | 54·3 | |
| 9·4 | | 55·1 | 22·0 | 9·5 |
| 9·2 | 23 | 24·6 | 44·2 | |
| 9·9 | | 27·1 | 40·3 | |
| 9·4 | | 34·6 | 29·2 | |
| 9·7 | | 34·6 | 14·2 | |
| 9·9 | | 35·6 | 41·6 | |
| 9·6 | | 39·1 | 44·8 | |
| 9·8 | | 40·1 | 13·3 | |
| 9·7 | | 45·6 | 48·2 | |
| 9·9 | | 49·8 | 2·1 | |
| 8·3 | | 50·1 | 47·6 | 9·0 |
| 9·6 | | 52·6 | 48·4 | |
| 9·9 | | 58·1 | 40·7 | |
| 9·4 | 24 | 0·5 | 59·1 | |
| 9·6 | | 1·8 | 2·4 | 9·0 |
| 9·6 | | 2·6 | 48·2 | |
| 8·3 | | 7·6 | 5·3 | 8·5 G |
| 8·7 | | 8·1 | 49·5 | 9·0 |
| 9·3 | | 8·6 | 50·9 | |
| 9·9 | | 16·1 | 54·6 | |
| 8·6 | | 18·1 | 12·2 | 8·8 G |
| 9·2 | | 19·6 | 49·6 | |
| 9·0 | | 26·6 | 49·0 | 10·0 |
| 9·9 | | 32·1 | 27·8 | |
| 9·9 | | 32·6 | 56·3 | |
| 9·2 | | 41·9 | 1·7 | 9·0 |

**6121—6180.**

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·9 | 24 | 45·2 | 50·4 | |
| 9·3 | | 47·2 | 10·3 | 9·0 |
| 9·6 | 25 | 2·4 | 2·0 | 9·0 |
| 9·8 | | 16·7 | 13·5 | |
| 9·6 | | 34·2 | 43·4 | |
| 9·9 | | 39·2 | 43·5 | |
| 9·2 | | 40·7 | 6·1 | |
| 8·4 | | 42·2 | 35·0 | 8·5 GSt |
| 9·7 | | 49·2 | 57·8 | |
| 9·9 | | 49·7 | 15·2 | |
| 9·9 | | 52·2 | 8·2 | |
| 9·2 | | 58·7 | 24·7 | 9·0 |
| 9·9 | 26 | 20·7 | 17·7 | |
| 9·1 | | 23·2 | 55·2 | |
| 9·3 | | 25·2 | 20·9 | 9·5 |
| 9·9 | | 37·0 | 12·2 | |
| 9·8 | | 39·2 | 7·7 | |
| 9·9 | | 45·0 | 37·4 | |
| 9·8 | | 51·7 | 7·9 | |
| 9·6 | | 52·2 | 36·3 | |
| 9·9 | | 55·0 | 21·2 | |
| 9·3 | 27 | 0·2 | 33·0 | 9·5 |
| 8·2 | | 0·7 | 43·4 | 8·0 G |
| 8·4 | | 2·2 | 44·7 | 9·0 |
| 9·8 | | 8·2 | 52·7 | |
| 8·5 | | 37·4 | 2·5 | 8·2 |
| 9·8 | | 46·7 | 13·0 | |
| 9·8 | | 52·2 | 9·7 | |
| 9·4 | | 55·7 | 49·3 | |
| 9·4 | | 57·7 | 35·1 | 9·0 |
| 8·9 | 28 | 0·2 | 4·6 | 9·0 |
| 9·9 | | 16·7 | 17·0 | |
| 9·9 | | 22·7 | 49·2 | |
| 9·6 | | 23·2 | 20·0 | |
| 9·9 | | 26·2 | 10·1 | |
| 8·0 | | 29·2 | 51·5 | 8·0 GSt |
| 9·9 | | 29·7 | 44·4 | |
| 8·6 | | 42·2 | 9·1 | 8·0 G |
| 9·9 | | 51·2 | 44·5 | |
| 9·9 | | 52·7 | 56·8 | |
| 9·9 | | 59·7 | 36·1 | |
| 9·3 | 29 | 10·2 | 7·6 | |
| 9·7 | | 30·2 | 40·2 | |
| 9·6 | | 33·2 | 45·4 | 9·5 |
| 9·9 | | 44·7 | 19·8 | |
| 8·0 | | 47·7 | 34·1 | 8·0 GSt |
| 9·8 | | 49·3 | 18·4 | |
| 9·4 | | 50·8 | 45·4 | |
| 7·3 | | 56·8 | 46·6 | 7·0 GSt |
| 9·9 | 30 | 0·3 | 31·4 | |
| 10·1† | | 1·0 | 59·6 | |
| 9·8 | | 2·3 | 43·5 | |
| 9·3 | | 11·3 | 43·0 | |
| 9·7 | | 12·3 | 37·0 | |
| 7·6 | | 13·3 | 40·3 | 8·0 GSt |
| 9·9 | | 13·3 | 5·1 | |
| 8·7 | | 14·3 | 53·7 | 9·0 |
| 9·8 | | 30·3 | 16·0 | |
| 8·8 | | 33·3 | 31·0 | 8·5 |
| 9·7 | | 34·3 | 37·3 | |



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## 6181—6240.

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·3 | 30 | 34·3 | 38·7 | |
| 9·3 | | 35·3 | 12·4 | |
| 9·9 | | 36·3 | 16·2 | |
| 9·8 | | 51·3 | 51·1 | |
| 9·6 | | 55·8 | 45·2 | |
| 8·6 | | 59·3 | 58·7 | 8·5 |
| 9·9 | 31 | 4·3 | 41·3 | |
| 9·9 | | 7·8 | 41·1 | |
| 9·8 | | 8·8 | 25·9 | |
| 9·8 | | 10·3 | 50·9 | |
| 9·9 | | 32·8 | 52·4 | |
| 9·9 | | 44·8 | 50·8 | |
| 9·9 | | 55·8 | 37·9 | |
| 9·4 | | 57·8 | 53·0 | |
| 9·2 | | 57·8 | 46·9 | |
| 9·0 | | 59·3 | 13·1 | |
| 9·6 | 32 | 0·3 | 57·3 | |
| 9·3 | | 3·8 | 6·3 | |
| 9·2 | | 8·3 | 50·9 | |
| 7·7 | | 12·8 | 17·5 | 8·2 G |
| 9·3 | | 22·3 | 33·9 | 9·0 |
| 9·7 | | 26·8 | 35·4 | |
| 9·7 | | 32·3 | 6·9 | |
| 9·4 | | 48·3 | 38·7 | 9·2 |
| 9·0 | | 52·3 | 58·8 | |
| 9·9 | 33 | 13·3 | 42·9 | |
| 9·4 | | 17·8 | 3·3 | |
| 8·6 | | 36·8 | 19·4 | 9·0 |
| 9·9 | | 36·8 | 50·3 | |
| 9·4 | | 57·8 | 52·2 | |
| 7·6 | 34 | 1·4 | 59·2 | 8·0 GSt |
| 9·4 | | 11·8 | 32·8 | |
| 10·1† | | 16·0 | 58·5 | |
| 8·2 | | 19·8 | 13·1 | 8·0 G |
| 9·6 | | 20·3 | 57·9 | |
| 9·9 | | 20·8 | 1·8 | |
| 9·6 | | 30·0 | 59·3 | |
| 9·3 | | 42·3 | 46·8 | |
| 9·1 | | 45·8 | 6·5 | 9·5 |
| 9·3 | | 56·8 | 13·6 | |
| 9·0 | | 58·3 | 28·0 | 9·0 |
| 9·9 | | 59·8 | 16·7 | |
| 9·9 | 35 | 0·2 | 57·2 | |
| 9·2 | | 1·3 | 51·0 | |
| 9·9 | | 2·3 | 50·1 | |
| 9·6 | | 8·3 | 20·5 | |
| 8·8 | | 8·8 | 52·0 | 9·0 |
| 9·9 | | 11·8 | 42·0 | |
| 8·3 | | 12·8 | 6·0 | 8·8 |
| 9·9 | | 14·9 | 32·1 | |
| 9·9 | | 15·3 | 12·1 | |
| 9·2 | | 19·3 | 54·5 | 9·0 |
| 9·9 | | 23·0 | 52·1 | |
| 9·9 | | 27·9 | 2·1 | |
| 9·6 | | 32·8 | 3·2 | |
| 9·9 | | 33·3 | 39·8 | |
| 8·8 | | 38·8 | 13·2 | 9·0 |
| 9·4 | | 42·7 | 29·5 | |
| 9·6 | | 44·0 | 26·9 | |
| 10·0 | 36 | 6·2 | 51·4 | |

## 6241—6300.

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 36 | 6·9 | 58·9 | |
| 10·0 | | 8·3 | 12·5 | |
| 10·0 | | 19·7 | 25·9 | |
| 9·2 | | 21·2 | 18·8 | |
| 10·0 | | 22·7 | 26·5 | |
| 9·6 | | 22·8 | 41·9 | |
| 9·0 | | 24·2 | 15·3 | |
| 9·6 | | 29·2 | 5·7 | |
| 10·0 | | 34·2 | 29·0 | |
| 9·6 | | 41·7 | 7·5 | |
| 9·6 | | 48·2 | 55·5 | |
| 8·8 | | 54·2 | 34·7 | 8·2 G |
| 10·0 | 37 | 7·7 | 15·8 | |
| 9·2 | | 13·7 | 42·9 | |
| 8·2 | | 21·7 | 36·7 | 7·5 GSt |
| 10·0 | | 21·7 | 51·5 | |
| 8·8 | | 25·2 | 47·2 | |
| 10·0 | | 29·2 | 4·3 | |
| 8·4 | | 31·2 | 56·8 | |
| 10·0 | | 32·7 | 27·1 | |
| 9·4 | | 35·7 | 19·9 | |
| 10·0 | | 45·7 | 3·1 | |
| 9·4 | | 51·7 | 23·9 | |
| 10·0 | 38 | 0·7 | 21·3 | |
| 9·4 | | 11·2 | 40·9 | |
| 9·0 | | 16·7 | 10·3 | |
| 10·0 | | 21·7 | 38·1 | |
| 9·1 | | 26·2 | 7·5 | |
| 10·0 | | 34·9 | 56·0 | |
| 9·8 | | 38·7 | 18·9 | |
| 9·4 | | 40·7 | 38·1 | |
| 8·4 | | 44·2 | 26·5 | |
| 10·0 | | 45·8 | 59·9 | |
| 8·6 | | 47·0 | 39·6 | 9·0 |
| 8·8 | | 50·5 | 3·0 | 9·5 |
| 9·7 | | 58·0 | 10·9 | |
| 9·2 | 39 | 1·5 | 12·8 | |
| 9·7 | | 2·0 | 49·9 | |
| 9·4 | | 4·0 | 21·7 | |
| 8·9 | | 5·7 | 58·8 | |
| 9·2 | | 16·5 | 53·0 | |
| 9·2 | | 35·5 | 15·9 | |
| 9·8 | | 38·0 | 39·2 | |
| 10·0 | | 39·5 | 38·1 | |
| 9·4 | | 39·5 | 17·4 | |
| 9·0 | | 40·5 | 4·1 | |
| 10·0 | | 46·0 | 16·4 | |
| 10·0 | | 47·9 | 2·0 | |
| 9·8 | | 49·5 | 56·2 | |
| 9·2 | | 49·5 | 37·4 | |
| 9·6 | | 49·5 | 35·3 | |
| 10·0 | | 49·8 | 56·6 | |
| 10·0 | | 50·5 | 36·3 | |
| 10·0 | | 56·5 | 35·9 | |
| 9·6 | | 57·0 | 10·8 | |
| 9·6 | | 57·0 | 6·3 | |
| 9·4 | 40 | 26·0 | 47·0 | |
| 9·6 | | 26·0 | 25·1 | |
| 10·0 | | 26·0 | 44·1 | |
| 10·0 | | 28·3 | 48·1 | |

## 6301—6360.

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 40 | 28·5 | 55·2 | |
| 9·1 | | 29·5 | 45·3 | |
| 10·0 | | 35·5 | 53·1 | |
| 10·0 | | 46·0 | 45·6 | |
| 9·6 | 41 | 4·5 | 52·0 | |
| 9·7 | | 8·5 | 7·3 | |
| 8·4 | | 11·0 | 8·1 | 9·0 |
| 10·0 | | 12·5 | 48·1 | |
| 9·8 | | 15·5 | 28·4 | |
| 9·6 | | 23·5 | 23·7 | |
| 10·0 | | 24·9 | 1·7 | |
| 9·2 | | 28·0 | 33·7 | |
| 9·2 | | 29·5 | 26·1 | 9·0 |
| 9·8 | | 30·5 | 26·3 | 10·0 |
| 9·6 | | 31·0 | 2·5 | |
| 9·4 | | 33·6 | 9·1 | |
| 9·6 | | 37·6 | 11·1 | |
| 10·0 | | 52·1 | 41·9 | |
| 10·0 | | 55·6 | 5·4 | |
| 9·7 | 42 | 1·1 | 49·0 | |
| 9·6 | | 1·6 | 33·3 | |
| 9·6 | | 8·6 | 54·4 | |
| 9·6 | | 9·6 | 5·7 | |
| 8·2 | | 10·6 | 52·7 | 9·0 |
| 10·0 | | 10·8 | 45·0 | |
| 9·4 | | 12·6 | 30·8 | |
| 10·0 | | 14·7 | 57·7 | |
| 9·8 | | 18·1 | 24·3 | |
| 8·4 | | 18·1 | 21·8 | 9·0 |
| 9·4 | | 28·1 | 32·9 | |
| 9·2 | | 30·6 | 45·9 | |
| 9·8 | | 32·1 | 28·9 | |
| 10·0 | | 39·6 | 17·0 | |
| 10·0 | | 40·1 | 11·4 | |
| 10·0 | | 46·4 | 57·2 | |
| 10·0 | | 58·6 | 59·9 | |
| 9·4 | 43 | 1·8 | 58·1 | |
| 9·2 | | 4·6 | 6·0 | |
| 8·2 | | 8·6 | 55·1 | 9·0 |
| 9·1 | | 21·6 | 10·4 | |
| 8·6 | | 23·1 | 5·4 | |
| 9·8 | | 24·1 | 45·2 | |
| 10·0 | | 25·6 | 10·2 | |
| 8·7 | | 27·3 | 57·9 | 9·5 |
| 10·0 | | 28·4 | 57·0 | |
| 9·6 | | 28·6 | 54·8 | |
| 8·0 | | 32·6 | 48·6 | 9·0 |
| 9·6 | | 34·6 | 21·9 | |
| 9·7 | | 37·6 | 8·9 | |
| 10·0 | | 38·1 | 53·9 | |
| 10·0 | | 38·1 | 43·0 | |
| 9·6 | | 46·1 | 23·7 | |
| 10·0 | | 49·4 | 41·0 | |
| 9·6 | | 52·5 | 2·4 | |
| 9·0 | | 57·6 | 18·3 | |
| 9·4 | | 58·6 | 59·2 | |
| 9·2 | 44 | 16·1 | 25·1 | |
| 9·4 | | 23·1 | 39·4 | |
| 9·2 | | 30·1 | 38·4 | |
| 9·4 | | 33·6 | 26·0 | |

## 6361—6420.

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·1 | 44 | 35·9 | 40·4 | |
| 9·4 | | 37·9 | 23·6 | 9·5 |
| 10·0 | | 53·9 | 58·8 | |
| 9·6 | 45 | 3·9 | 16·6 | |
| 9·6 | | 4·9 | 45·2 | |
| 9·1 | | 6·4 | 11·2 | |
| 9·2 | | 7·9 | 28·5 | |
| 7·8 | | 10·4 | 49·2 | 8·0 |
| 10·0 | | 12·9 | 22·8 | |
| 9·4 | | 20·9 | 45·0 | |
| 9·7 | | 23·4 | 8·6 | |
| 9·7 | | 25·9 | 3·8 | |
| 9·2 | | 31·4 | 14·4 | |
| 10·0 | | 39·9 | 42·6 | |
| 10·0 | | 46·9 | 29·2 | |
| 9·2 | | 49·9 | 5·8 | 9·5 |
| 9·4 | | 49·9 | 33·6 | |
| 9·2 | | 56·9 | 35·4 | |
| 9·4 | | 56·9 | 50·8 | |
| 9·8 | 46 | 0·9 | 40·0 | |
| 9·6 | | 3·4 | 48·8 | |
| 10·0 | | 9·4 | 47·8 | |
| 10·0 | | 15·4 | 14·6 | |
| 9·8 | | 16·9 | 5·6 | |
| 9·2 | | 16·9 | 32·8 | |
| 9·8 | | 19·4 | 41·2 | |
| 9·0 | | 31·4 | 15·0 | |
| 8·6 | | 32·4 | 0·9 | 9·5 |
| 9·7 | | 37·7 | 0·6 | |
| 9·2 | | 41·4 | 3·3 | 9·0 |
| 10·0 | | 47·2 | 40·9 | |
| 9·4 | | 58·4 | 5·2 | |
| 9·4 | 47 | 7·9 | 48·9 | |
| 8·9 | | 14·4 | 50·0 | 9·5 |
| 10·0 | | 18·9 | 11·3 | |
| 10·0 | | 32·4 | 47·0 | |
| 10·0 | | 33·4 | 12·0 | |
| 10·0 | | 40·4 | 52·2 | |
| 9·4 | | 49·9 | 10·6 | |
| 9·4 | | 57·9 | 53·1 | |
| 9·8 | | 58·4 | 20·0 | |
| 8·8 | 48 | 5·0 | 37·2 | |
| 9·7 | | 10·0 | 48·5 | |
| 10·0 | | 11·0 | 17·2 | |
| 9·4 | | 19·0 | 4·5 | |
| 10·0 | | 40·0 | 43·2 | |
| 9·6 | | 49·0 | 0·5 | |
| 8·6 | | 50·5 | 55·2 | 8·5 |
| 8·4 | | 53·0 | 6·0 | 9·0 |
| 8·6 | 49 | 0·0 | 5·9 | 7·5 G |
| 9·2 | | 2·5 | 13·2 | |
| 9·8 | | 9·0 | 25·7 | |
| 9·1 | | 14·5 | 17·4 | 9·5 |
| 9·6 | | 18·5 | 45·5 | |
| 9·4 | | 40·0 | 0·9 | |
| 10·0 | | 40·5 | 19·5 | |
| 10·0 | | 40·5 | 49·2 | |
| 9·7 | | 43·5 | 45·5 | |
| 10·0 | | 48·0 | 17·9 | |
| 10·0 | 50 | 3·5 | 17·2 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 13 | 30 | 97 | 7·7 |
| | 40 | 99 | 7·6 |
| | 50 | 101 | 7·4 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 50 | 101 | 7.4 |
| 14 | 0 | 103 | 7.2 |
|  | 10 | 105 | 7.0 |
|  | 20 | 107 | 6.8 |
|  | 30 | 109 | 6.6 |

## 6421—6480.

| mag. | 13h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.0 | 50 | 5.3 | 49.0 | |
| 8.7 | | 14.5 | 17.0 | 9.5 |
| 10.0 | | 29.0 | 56.5 | |
| 8.7 | | 30.0 | 29.2 | 9.5 |
| 9.8 | | 35.0 | 46.7 | |
| 9.2 | | 40.9 | 2.5 | |
| 9.6 | | 44.0 | 8.0 | |
| 9.6 | | 47.5 | 45.4 | |
| 9.7 | | 50.5 | 49.0 | |
| 9.6 | | 50.5 | 23.2 | |
| 8.6 | | 54.0 | 13.6 | 9.5 |
| 8.7 | 51 | 0.0 | 47.2 | 9.5 |
| 9.6 | | 1.0 | 6.2 | |
| 9.7 | | 15.5 | 44.0 | |
| 8.7 | | 18.5 | 13.2 | 9.0 |
| 10.0 | | 39.0 | 10.2 | |
| 10.0 | | 40.5 | 22.8 | |
| 9.6 | | 48.5 | 33.9 | |
| 9.2 | | 54.3 | 57.3 | |
| 9.2 | 52 | 25.1 | 15.9 | |
| 10.0 | | 30.1 | 32.2 | |
| 9.4 | | 30.1 | 19.0 | |
| 9.2 | | 38.1 | 4.0 | |
| 9.7 | | 45.6 | 13.8 | |
| 10.0 | | 49.6 | 52.7 | |
| 9.6 | | 50.1 | 6.2 | |
| 10.0 | | 58.6 | 7.0 | |
| 9.4 | 53 | 7.5 | 57.0 | |
| 9.6 | | 19.1 | 29.2 | |
| 10.0 | | 19.6 | 27.6 | |
| 9.7 | | 20.1 | 0.0 | |
| 10.0 | | 24.1 | 44.3 | |
| 10.0 | | 25.8 | 30.3 | |
| 10.0 | | 27.6 | 27.2 | |
| 9.7 | | 30.1 | 35.0 | |
| 10.0 | | 31.3 | 37.2 | |
| 9.4 | | 37.6 | 28.0 | |
| 9.6 | | 39.6 | 27.4 | |
| 10.0 | | 40.1 | 32.2 | |
| 9.7 | | 42.6 | 27.2 | |
| 8.9 | | 55.1 | 16.4 | |
| 10.0 | 54 | 0.3 | 53.8 | |
| 10.0 | | 3.1 | 51.2 | |
| 9.8 | | 10.1 | 34.0 | |
| 9.2 | | 25.1 | 17.8 | |
| 9.2 | | 39.1 | 7.0 | |
| 10.0 | | 39.6 | 33.1 | |
| 10.0 | | 40.1 | 44.8 | |
| 10.0 | | 41.1 | 39.8 | |
| 10.0 | | 57.1 | 51.8 | |
| 10.0 | 55 | 5.1 | 39.7 | |
| 9.6 | | 6.6 | 27.1 | |
| 9.4 | | 10.1 | 18.0 | |
| 10.0 | | 24.7 | 0.8 | |
| 10.0 | | 35.1 | 6.8 | |
| 9.4 | | 35.1 | 7.4 | |
| 9.6 | | 37.1 | 39.0 | |
| 10.0 | | 38.6 | 16.1 | |
| 9.4 | | 43.2 | 57.6 | |
| 9.1 | | 44.7 | 17.2 | |

## 6481—6540.

| mag. | 13h.–14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.6 | 55 | 47.2 | 28.0 | |
| 7.8 | | 48.7 | 35.8 | 8.3 |
| 10.0 | | 49.2 | 49.0 | |
| 10.0 | 56 | 7.7 | 29.0 | |
| 9.7 | | 11.7 | 28.5 | |
| 10.0 | | 20.2 | 46.0 | |
| 9.4 | | 26.2 | 14.3 | |
| 10.0 | | 32.2 | 47.7 | |
| 9.6 | | 34.2 | 10.8 | |
| 9.6 | | 54.2 | 43.1 | |
| 9.7 | 57 | 14.7 | 42.0 | |
| 9.2 | | 18.7 | 40.3 | |
| 10.0 | | 22.7 | 21.5 | |
| 9.4 | | 24.2 | 5.5 | |
| 10.0 | | 27.5 | 0.4 | |
| 10.0 | | 40.4 | 2.7 | |
| 10.0 | | 41.4 | 16.1 | |
| 8.9 | 58 | 2.7 | 28.7 | 8.7 |
| 9.2 | | 3.7 | 7.3 | |
| 10.0 | | 49.4 | 19.1 | |
| 9.6 | | 51.2 | 5.9 | |
| 9.4 | | 52.7 | 6.0 | |
| 9.7 | | 56.7 | 32.0 | |
| 10.0 | 59 | 2.5 | 1.6 | |
| 9.4 | | 4.7 | 1.7 | |
| 9.6 | | 41.2 | 26.1 | |
| 10.0 | 0 | 36.4 | 32.9 | |
| 8.8 | | 46.4 | 58.7 | 8.2 |
| 10.0 | | 49.2 | 33.1 | |
| 10.0 | 1 | 3.2 | 31.2 | |
| 9.7 | | 12.4 | 40.9 | |
| 10.0 | | 22.9 | 38.2 | |
| 9.6 | | 23.9 | 48.9 | |
| 10.0 | | 30.9 | 18.1 | |
| 10.0 | | 35.4 | 16.9 | |
| 10.0 | | 52.4 | 27.3 | |
| 9.4 | | 55.4 | 18.5 | |
| 10.0 | | 59.9 | 41.0 | |
| 10.0 | 2 | 1.9 | 55.3 | |
| 10.0 | | 4.4 | 54.0 | |
| 10.0 | | 13.9 | 36.2 | |
| 9.2 | | 18.4 | 54.2 | |
| 9.6 | | 20.4 | 19.7 | |
| 9.6 | | 53.9 | 14.0 | |
| 9.8 | | 55.9 | 32.8 | |
| 10.0 | 3 | 1.2 | 37.0 | |
| 8.9 | | 40.9 | 14.3 | |
| 9.4 | | 50.9 | 44.3 | |
| 9.6 | | 56.9 | 33.7 | |
| 7.5 | | 57.9 | 43.7 | 8.0 GSg |
| 10.0 | 4 | 1.9 | 36.1 | |
| 9.7 | | 5.9 | 33.2 | |
| 9.6 | | 11.4 | 52.0 | |
| 10.0 | | 24.4 | 41.3 | |
| 9.7 | | 24.4 | 42.8 | |
| 8.9 | | 26.4 | 41.5 | 9.5 |
| 10.0 | | 34.4 | 52.8 | |
| 10.0 | | 37.4 | 52.0 | |
| 10.0 | | 48.2 | 35.7 | |
| 9.2 | | 50.9 | 52.0 | |

## 6541—6600.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.2 | 4 | 56.4 | 15.0 | |
| 9.6 | 5 | 6.4 | 45.5 | 9.5 |
| 9.1 | | 6.9 | 57.1 | 8.8 |
| 9.8 | | 24.4 | 16.1 | |
| 9.6 | | 26.4 | 19.0 | |
| 9.4 | | 31.4 | 58.9 | |
| 9.7 | | 31.4 | 17.2 | |
| 9.6 | | 43.4 | 51.7 | |
| 9.7 | | 43.9 | 36.9 | |
| 8.4 | | 46.9 | 48.8 | |
| 10.0 | 6 | 1.5 | 46.8 | |
| 10.2† | | 2.0 | 59.2 | |
| 9.4 | | 4.5 | 40.1 | |
| 9.4 | | 7.0 | 46.3 | |
| 9.7 | | 11.0 | 53.2 | |
| 9.2 | | 11.0 | 37.3 | |
| 9.2 | | 20.0 | 39.0 | |
| 8.9 | | 27.3 | 57.5 | |
| 10.0 | | 53.0 | 54.0 | |
| 9.7 | | 57.0 | 14.8 | |
| 9.2 | 7 | 3.0 | 48.7 | |
| 9.8 | | 3.8 | 39.2 | |
| 10.0 | | 8.0 | 37.3 | |
| 9.2 | | 8.8 | 48.0 | 9.0 |
| 9.8 | | 31.0 | 58.8 | |
| 10.0 | | 35.0 | 41.3 | |
| 9.6 | | 41.0 | 11.0 | |
| 9.7 | | 43.0 | 10.4 | |
| 9.4 | | 45.5 | 18.2 | |
| 8.0 | | 51.0 | 44.5 | 7.8 GS |
| 9.8 | 8 | 1.2 | 26.8 | |
| 7.3 | | 10.2 | 16.2 | 7.5 GS |
| 9.8 | | 16.7 | 0.8 | |
| 9.5 | | 21.8 | 5.1 | |
| 10.2 | | 27.7 | 31.1 | |
| 10.2 | | 30.7 | 31.5 | |
| 9.8 | | 39.2 | 20.1 | |
| 9.8 | | 43.1 | 52.2 | |
| 9.0 | | 51.8 | 57.6 | |
| 9.8 | 9 | 6.6 | 44.8 | |
| 9.0 | | 11.6 | 53.3 | 9.5 |
| 10.2 | | 11.8 | 37.9 | |
| 8.8 | | 14.6 | 14.7 | 9.5 |
| 9.5 | | 15.1 | 20.2 | |
| 9.0 | | 31.1 | 21.2 | |
| 9.5 | | 38.1 | 9.0 | |
| 8.8 | | 51.6 | 27.0 | |
| 9.4 | 10 | 7.6 | 19.6 | |
| 10.0 | | 9.6 | 55.1 | |
| 9.8 | | 16.1 | 26.0 | |
| 9.5 | | 19.6 | 36.7 | |
| 9.4 | | 21.6 | 51.8 | |
| 9.4 | | 32.6 | 49.8 | |
| 10.0 | | 45.1 | 32.0 | |
| 9.4 | | 48.6 | 35.3 | |
| 9.6 | 11 | 0.1 | 44.7 | |
| 9.8 | | 7.1 | 46.9 | |
| 9.0 | | 10.1 | 18.1 | |
| 10.0 | | 29.1 | 24.9 | |
| 10.2 | | 33.1 | 52.6 | |

## 6601—6660.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.2 | 11 | 33.6 | 17.1 | |
| 8.7 | | 34.1 | 24.3 | 8.7 |
| 7.6 | | 40.2 | 56.4 | 8.0 GSt |
| 10.2 | | 50.6 | 57.1 | |
| 9.5 | | 54.6 | 18.6 | |
| 9.6 | | 55.1 | 25.8 | |
| 10.2 | | 57.1 | 58.9 | |
| 10.2 | 12 | 11.1 | 45.8 | |
| 10.2 | | 21.6 | 50.0 | |
| 9.4 | | 35.6 | 32.5 | 9.0 |
| 10.0 | | 39.1 | 42.6 | |
| 9.8 | | 53.6 | 34.6 | |
| 10.2 | | 59.1 | 37.3 | |
| 9.5 | 13 | 2.6 | 23.8 | |
| 10.0 | | 5.1 | 19.9 | |
| 7.4 | | 8.1 | 43.0 | 7.8 GSt |
| 10.0 | | 11.9 | 40.8 | |
| 10.2 | | 21.9 | 33.8 | |
| 6.5 | | 41.4 | 53.2 | 5.8 GStr |
| 9.4 | | 41.9 | 52.5 | |
| 9.6 | | 43.9 | 37.7 | |
| 9.2 | | 45.9 | 22.4 | |
| 9.4 | 14 | 25.1 | 41.3 | |
| 10.0 | | 50.9 | 27.2 | |
| 8.7 | | 51.4 | 34.1 | 8.8 |
| 10.0 | | 51.9 | 38.8 | |
| 9.4 | 15 | 1.9 | 55.9 | |
| 10.2 | | 2.4 | 35.8 | |
| 10.2 | | 9.9 | 30.6 | |
| 10.2 | | 19.4 | 31.0 | |
| 10.2 | | 40.4 | 14.9 | |
| 10.2 | | 42.9 | 18.9 | |
| 10.2 | | 47.9 | 9.9 | |
| 10.2 | | 59.9 | 47.2 | |
| 10.2 | 17 | 1.4 | 47.0 | |
| 9.6 | | 15.4 | 32.7 | |
| 10.0 | | 41.9 | 32.0 | |
| 10.0 | | 42.4 | 27.6 | |
| 9.8 | | 43.9 | 39.6 | |
| 9.6 | | 54.9 | 47.8 | |
| 9.8 | 18 | 0.9 | 39.7 | |
| 9.6 | | 1.4 | 35.9 | |
| 10.2 | | 14.4 | 27.8 | |
| 9.6 | | 21.9 | 39.1 | |
| 10.0 | | 28.4 | 30.3 | |
| 10.2 | | 29.7 | 30.8 | |
| 9.8 | | 43.4 | 34.7 | |
| 9.6 | | 51.4 | 16.7 | |
| 8.4 | | 51.4 | 52.0 | 8.5 |
| 9.8 | | 51.9 | 47.5 | |
| 9.6 | 19 | 9.9 | 47.2 | |
| 9.2 | | 30.9 | 34.7 | 9.0 |
| 10.2 | | 37.9 | 44.5 | |
| 10.0 | | 45.9 | 33.9 | |
| 9.0 | | 56.9 | 38.8 | 9.5 |
| 9.8 | 20 | 0.4 | 32.8 | |
| 10.0 | | 9.4 | 10.0 | |
| 10.2 | | 35.9 | 40.1 | |
| 10.0 | | 36.9 | 19.3 | |
| 9.6 | | 42.4 | 14.7 | |



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## 6661—6720.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 21 | 0·9 | 33·9 | |
| 9·4 | | 28·9 | 35·5 | |
| 9·5 | | 42·4 | 49·2 | |
| 10·2 | | 44·9 | 57·9 | |
| 9·4 | | 48·4 | 46·2 | |
| 10·2 | | 51·9 | 54·2 | |
| 10·2 | 22 | 4·4 | 26·8 | |
| 9·8 | | 9·4 | 35·4 | |
| 10·2 | | 17·4 | 2·9 | |
| 10·2 | | 18·5 | 51·5 | |
| 10·2 | | 50·4 | 29·7 | |
| 10·2 | | 53·4 | 48·0 | |
| 9·4 | | 57·4 | 4·5 | |
| 9·4 | | 59·9 | 26·8 | |
| 10·0 | 23 | 0·4 | 3·2 | |
| 10·0 | | 5·5 | 7·6 | |
| 9·6 | | 11·9 | 55·0 | |
| 10·0 | | 18·4 | 2·8 | |
| 10·2 | | 20·4 | 6·8 | |
| 10·2 | | 21·9 | 7·0 | |
| 9·0 | | 22·4 | 15·0 | |
| 9·2 | | 26·4 | 37·8 | |
| 8·8 | | 35·9 | 54·7 | 9·5 |
| 9·8 | 24 | 7·4 | 42·8 | |
| 9·6 | | 24·3 | 16·4 | |
| 10·2 | | 58·8 | 39·6 | |
| 9·8 | 25 | 0·8 | 5·5 | |
| 9·6 | | 6·8 | 53·5 | |
| 9·6 | | 9·8 | 26·9 | |
| 10·2 | | 13·3 | 43·9 | |
| 9·5 | | 13·8 | 32·1 | |
| 10·2 | | 20·8 | 6·5 | |
| 10·2 | | 32·3 | 43·0 | |
| 10·2 | | 33·3 | 58·0 | |
| 9·8 | 26 | 2·8 | 3·0 | |
| 10·0 | | 10·3 | 10·5 | |
| 10·2 | | 14·8 | 7·9 | |
| 8·8 | | 26·3 | 48·1 | 9·0 |
| 8·8 | | 32·3 | 48·3 | 9·0 |
| 10·0 | | 50·8 | 51·7 | |
| 9·4 | | 51·3 | 49·5 | |
| 10·2 | | 59·3 | 45·4 | |
| 9·4 | 27 | 7·8 | 5·9 | |
| 10·0 | | 9·3 | 37·9 | |
| 9·6 | | 29·8 | 11·9 | |
| 10·2 | | 36·8 | 59·0 | |
| 10·0 | | 39·3 | 14·2 | |
| 10·2 | | 40·8 | 14·0 | |
| 10·0 | | 44·3 | 51·2 | |
| 9·6 | | 47·3 | 42·9 | |
| 9·4 | | 52·3 | 15·8 | |
| 8·4 | 28 | 0·8 | 53·2 | 8·5 |
| 9·0 | | 13·3 | 40·0 | 8·2 G |
| 10·0 | | 20·8 | 36·1 | |
| 9·6 | | 30·8 | 5·1 | |
| 9·6 | | 58·2 | 57·8 | |
| 10·2 | 29 | 11·3 | 13·1 | |
| 10·0 | | 12·3 | 50·7 | |
| 10·2 | | 16·8 | 36·5 | |
| 10·2 | | 25·8 | 45·9 | |

## 6721—6780.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 29 | 40·3 | 13·6 | 9·0 |
| 9·5 | | 40·3 | 19·8 | |
| 8·8 | | 40·8 | 12·3 | 9·5 |
| 9·8 | | 42·3 | 2·5 | |
| 10·2 | | 49·9 | 43·3 | |
| 10·2 | | 56·9 | 41·1 | |
| 10·2 | 30 | 2·9 | 47·9 | |
| 10·0 | | 13·9 | 30·8 | |
| 9·4 | | 14·9 | 21·1 | |
| 9·8 | | 20·4 | 32·1 | |
| 10·2 | | 21·4 | 24·3 | |
| 8·8 | | 25·9 | 37·9 | |
| 9·4 | | 50·9 | 27·2 | 8·5 |
| 10·0 | | 51·4 | 26·3 | |
| 9·6 | | 52·0 | 0·0 | |
| 10·2 | 31 | 6·9 | 1·9 | |
| 9·5 | | 49·9 | 31·0 | |
| 9·8 | 32 | 10·9 | 6·8 | |
| 8·7 | | 17·9 | 9·0 | 9·5 |
| 9·6 | | 19·9 | 53·5 | |
| 10·0 | | 24·4 | 23·1 | |
| 9·4 | | 26·4 | 35·7 | |
| 10·2 | | 37·9 | 0·1 | |
| 7·6 | | 50·9 | 49·3 | 7·8 GS |
| 10·2 | | 51·9 | 53·0 | |
| 9·4 | | 52·4 | 24·9 | |
| 9·4 | | 53·9 | 5·2 | |
| 10·2 | | 55·9 | 22·9 | |
| 10·2 | | 58·9 | 4·9 | |
| 8·3 | 33 | 0·9 | 16·1 | 9·0 |
| 9·6 | | 10·9 | 58·0 | |
| 10·2 | | 19·4 | 36·9 | |
| 9·8 | | 24·9 | 49·6 | |
| 9·5 | | 35·4 | 34·8 | |
| 9·8 | | 35·9 | 29·9 | |
| 7·3 | | 39·4 | 33·0 | 7·8 GS |
| 9·4 | | 42·9 | 46·2 | |
| 8·2 | | 54·4 | 43·8 | 7·2 G |
| 8·4 | | 56·4 | 21·1 | |
| 8·8 | 34 | 2·9 | 7·9 | 9·5 |
| 9·8 | | 11·4 | 23·4 | |
| 10·0 | | 11·4 | 36·9 | |
| 9·6 | | 29·1 | 2·1 | |
| 10·0 | | 43·6 | 4·6 | |
| 9·5 | | 54·1 | 8·6 | |
| 9·2 | | 56·1 | 56·5 | 9·5 |
| 10·0 | | 56·6 | 11·2 | |
| 9·8 | 35 | 10·1 | 9·2 | |
| 10·2 | | 17·6 | 41·8 | |
| 9·2 | | 18·8 | 57·6 | 9·0 |
| 10·2 | | 25·6 | 38·7 | |
| 7·3 | | 38·8 | 56·5 | 6·5 GSt |
| 9·4 | | 39·1 | 4·2 | |
| 9·6 | | 39·6 | 9·2 | |
| 9·2 | | 48·4 | 2·3 | |
| 7·8 | | 59·1 | 0·3 | 8·0 G |
| 10·2 | 36 | 16·6 | 20·3 | |
| 9·6 | | 29·6 | 24·6 | |
| 9·6 | | 30·6 | 45·7 | |
| 10·2 | 37 | 2·1 | 39·3 | |

## 6781—6840.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 37 | 5·6 | 4·1 | 9·0 |
| 9·8 | | 15·6 | 18·8 | |
| 9·6 | | 22·6 | 35·1 | |
| 9·2 | | 23·1 | 8·3 | |
| 7·6 | | 58·6 | 8·9 | 8·0 |
| 10·2 | 38 | 23·1 | 55·1 | |
| 9·8 | | 45·1 | 20·3 | |
| 9·8 | | 59·6 | 7·2 | |
| 10·2 | 39 | 7·1 | 57·6 | |
| 10·0 | | 22·5 | 7·4 | |
| 10·0 | | 34·6 | 2·8 | |
| 7·3 | | 40·0 | 35·6 | 7·0 GS |
| 9·8 | | 51·5 | 30·8 | |
| 9·2 | 40 | 2·9 | 39·7 | 9·5 |
| 9·7 | | 9·9 | 42·0 | |
| 10·1 | | 39·4 | 41·8 | |
| 10·0 | 41 | 6·7 | 57·9 | |
| 9·7 | | 20·6 | 1·9 | |
| 10·1 | | 24·4 | 10·8 | |
| 10·0 | | 27·9 | 44·7 | |
| 9·8 | | 41·4 | 38·0 | |
| 10·1 | | 58·9 | 19·1 | |
| 10·0 | 42 | 7·9 | 3·4 | |
| 10·0 | | 21·4 | 46·9 | |
| 9·6 | | 30·9 | 6·3 | |
| 10·0 | | 37·4 | 13·0 | |
| 9·8 | | 51·4 | 21·5 | |
| 9·7 | | 52·9 | 31·2 | |
| 9·8 | 43 | 2·9 | 39·8 | 9·0 |
| 10·0 | | 16·9 | 50·1 | |
| 9·8 | | 42·4 | 52·8 | |
| 9·4 | | 43·9 | 17·4 | |
| 9·4 | | 44·4 | 20·2 | |
| 10·1 | | 44·9 | 28·3 | |
| 9·4 | | 47·4 | 14·1 | |
| 9·4 | | 56·2 | 57·7 | 9·0 |
| 9·0 | 44 | 2·9 | 48·6 | 9·0 |
| 9·4 | | 12·4 | 54·1 | |
| 9·4 | | 19·9 | 25·1 | |
| 9·7 | | 22·4 | 54·9 | |
| 9·8 | | 24·9 | 25·5 | |
| 9·8 | | 24·9 | 41·9 | 9·5 |
| 10·1 | | 47·9 | 39·8 | |
| 9·8 | | 52·9 | 48·2 | |
| 9·6 | 45 | 0·3 | 47·0 | |
| 9·2 | | 0·4 | 56·7 | |
| 9·7 | | 2·8 | 53·5 | |
| 10·0 | | 30·8 | 7·5 | |
| 10·0 | | 32·8 | 48·4 | |
| 9·7 | | 36·8 | 45·5 | |
| 9·6 | | 37·3 | 17·0 | |
| 9·0 | | 38·3 | 43·9 | 9·0 |
| 10·1 | | 51·3 | 16·4 | |
| 10·0 | 46 | 23·3 | 34·0 | |
| 9·6 | | 29·3 | 26·7 | 9·5 |
| 10·1 | | 31·8 | 22·0 | |
| 9·7 | | 41·3 | 55·9 | |
| 9·8 | | 56·8 | 14·8 | |
| 9·7 | 47 | 1·3 | 5·4 | |
| 10·0 | | 2·8 | 33·4 | |

## 6841—6900.

| mag. | 14h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 47 | 8·3 | 10·4 | |
| 9·7 | | 13·3 | 28·3 | |
| 10·0 | | 13·3 | 30·0 | |
| 10·0 | | 19·3 | 22·0 | |
| 9·8 | | 34·8 | 22·1 | |
| 8·1 | | 36·8 | 40·9 | 8·5 |
| 10·0 | | 43·8 | 39·0 | |
| 9·7 | 48 | 10·8 | 40·9 | |
| 10·1 | | 31·3 | 45·1 | |
| 8·7 | | 34·8 | 15·4 | 9·5 |
| 10·1 | | 45·8 | 50·0 | |
| 10·0 | | 53·3 | 30·0 | |
| 10·1 | | 56·8 | 23·9 | |
| 9·0 | 49 | 1·8 | 23·6 | 9·8 |
| 10·1 | | 15·8 | 30·0 | |
| 9·0 | | 15·8 | 20·7 | 8·2 |
| 10·1 | | 17·3 | 26·0 | |
| 10·1 | | 17·8 | 58·9 | |
| 9·8 | | 35·3 | 56·8 | |
| 9·8 | | 44·8 | 59·9 | |
| 10·1 | | 44·8 | 3·0 | |
| 9·6 | | 54·4 | 58·7 | |
| 10·1 | 50 | 18·1 | 15·2 | |
| 9·7 | | 20·1 | 13·1 | |
| 9·8 | | 25·1 | 31·8 | |
| 8·4 | | 29·1 | 48·8 | 8·5 |
| 9·7 | | 31·1 | 34·1 | |
| 9·6 | | 33·6 | 18·8 | |
| 10·1 | | 41·1 | 43·8 | |
| 10·1 | | 42·0 | 36·2 | |
| 8·8 | | 46·1 | 48·2 | 7·5 G |
| 10·0 | | 48·6 | 29·9 | |
| 10·1 | | 52·6 | 32·3 | |
| 9·4 | 51 | 20·1 | 4·9 | |
| 9·7 | | 50·1 | 56·0 | |
| 10·1 | | 50·6 | 38·2 | |
| 9·7 | 52 | 1·1 | 39·1 | |
| 9·6 | | 4·1 | 38·6 | |
| 9·4 | | 8·1 | 44·2 | 9·5 |
| 10·0 | | 26·6 | 2·2 | |
| 9·2 | | 27·6 | 53·3 | |
| 9·0 | | 35·1 | 55·9 | |
| 10·0 | | 36·6 | 12·6 | |
| 9·8 | | 48·6 | 47·6 | |
| 9·7 | 53 | 0·1 | 23·5 | |
| 9·8 | | 11·1 | 9·4 | |
| 8·3 | | 28·6 | 23·2 | 8·0 G |
| 10·0 | | 29·1 | 53·1 | |
| 9·7 | | 31·1 | 24·9 | |
| 9·4 | | 33·1 | 44·0 | 8·0 G |
| 10·1 | | 40·1 | 43·6 | |
| 10·1 | | 47·0 | 54·6 | |
| 9·4 | | 48·6 | 36·2 | |
| 9·8 | | 51·1 | 15·7 | |
| 9·4 | 54 | 12·6 | 58·0 | |
| 9·6 | | 32·1 | 3·1 | |
| 9·6 | | 34·1 | 18·3 | |
| 10·1 | | 36·1 | 10·5 | |
| 9·6 | | 57·6 | 12·1 | |
| 7·6 | 55 | 1·1 | 12·3 | 7·5 GSt |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 107 | 6·8 |
| | 30 | 109 | 6·6 |
| | 40 | 111 | 6·4 |
| | 50 | 112 | 6·2 |
| 15 | 0 | 114 | 5·9 |



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| 25 | prec. | | |
|---|---|---|---|
| | | a | δ |
| | | + | − |
| h m | | s | ′ |
| 14 | 50 | 112 | 6·2 |
| 15 | 0 | 114 | 5·9 |
| | 10 | 115 | 5·6 |
| | 20 | 117 | 5·4 |
| | 30 | 118 | 5·1 |
| | 40 | 120 | 4·8 |

## 6901—6960.

| mag. | 14h.–15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 55 | 17·6 | 9·4 | |
| 9·4 | | 24·6 | 10·9 | |
| 9·6 | | 29·0 | 46·2 | |
| 10·0 | | 54·5 | 28·1 | |
| 9·8 | 56 | 3·5 | 33·7 | |
| 9·8 | | 10·5 | 18·0 | |
| 9·7 | | 11·0 | 51·0 | |
| 10·1 | | 38·5 | 13·1 | |
| 9·8 | | 45·0 | 14·9 | |
| 10·1 | 57 | 18·5 | 33·0 | |
| 9·2 | | 20·0 | 5·8 | |
| 9·6 | | 46·5 | 35·9 | |
| 9·4 | | 48·0 | 2·2 | |
| 9·6 | | 48·0 | 4·4 | |
| 10·1 | | 52·5 | 19·3 | |
| 10·1 | | 52·5 | 15·9 | |
| 10·0 | 58 | 28·0 | 42·0 | |
| 9·4 | | 36·0 | 29·2 | |
| 9·4 | 59 | 14·0 | 6·7 | |
| 9·6 | | 54·0 | 3·8 | |
| 9·6 | 0 | 18·0 | 10·4 | |
| 8·8 | | 36·5 | 25·9 | 9·2 |
| 9·6 | | 39·2 | 57·0 | |
| 9·6 | 1 | 0·0 | 24·9 | |
| 10·0 | | 25·0 | 25·2 | |
| 10·0 | | 26·0 | 14·0 | |
| 10·1 | | 28·0 | 3·8 | |
| 9·7 | | 44·5 | 20·6 | |
| 9·8 | | 46·0 | 17·4 | |
| 7·6 | | 48·5 | 26·5 | 8·5 |
| 9·8 | | 49·7 | 59·3 | |
| 9·4 | | 52·2 | 58·9 | |
| 9·6 | 2 | 0·5 | 54·1 | |
| 10·1 | | 5·5 | 21·7 | |
| 9·7 | | 25·0 | 6·3 | 9·5 |
| 10·1 | | 35·0 | 53·9 | |
| 9·2 | | 46·0 | 53·9 | |
| 10·1 | | 52·5 | 20·7 | |
| 9·6 | 3 | 1·0 | 24·8 | |
| 10·1 | | 1·5 | 5·2 | |
| 9·8 | | 9·5 | 7·5 | |
| 10·0 | | 11·5 | 18·6 | |
| 8·7 | | 18·3 | 48·3 | 9·0 |
| 9·8 | | 18·3 | 17·4 | |
| 10·0 | | 19·8 | 29·6 | |
| 9·6 | | 25·3 | 12·1 | |
| 10·1 | | 30·8 | 7·0 | |
| 9·8 | | 56·3 | 41·7 | |
| 9·7 | 4 | 5·8 | 13·9 | |
| 10·1 | | 11·3 | 27·8 | |
| 9·8 | | 12·3 | 20·0 | |
| 10·1 | | 22·8 | 23·1 | |
| 9·7 | | 26·8 | 15·1 | |
| 9·6 | | 36·8 | 39·9 | |
| 9·4 | | 57·8 | 32·8 | |
| 9·6 | | 57·8 | 33·1 | |
| 8·8 | | 59·8 | 52·6 | 9·0 |
| 9·0 | 5 | 17·8 | 20·8 | |
| 10·0 | | 25·3 | 34·7 | |
| 8·1 | | 34·3 | 42·2 | 8·8 G |

## 6961—7020.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 5 | 46·8 | 21·1 | 9·5 |
| 9·4 | | 52·3 | 15·3 | |
| 10·1 | | 56·8 | 28·0 | |
| 9·0 | 6 | 0·3 | 42·1 | |
| 9·4 | | 0·8 | 39·6 | |
| 10·1 | | 2·8 | 36·3 | |
| 9·8 | | 6·3 | 50·1 | |
| 10·1 | | 11·8 | 34·9 | |
| 10·1 | | 14·3 | 44·8 | |
| 9·7 | | 18·8 | 53·7 | |
| 10·1 | | 28·3 | 40·0 | |
| 9·6 | | 30·4 | 2·8 | |
| 8·6 | | 32·8 | 35·4 | 9·0 |
| 9·8 | | 52·3 | 17·6 | |
| 10·0 | 7 | 5·3 | 0·2 | |
| 10·0 | | 11·3 | 43·6 | |
| 10·1 | | 19·6 | 29·3 | |
| 9·2 | | 26·3 | 51·8 | |
| 10·1 | | 31·3 | 22·4 | |
| 8·7 | | 37·8 | 54·2 | 7·5 G |
| 10·0 | | 37·8 | 35·7 | |
| 9·6 | | 39·8 | 59·0 | 9·0 |
| 9·4 | | 52·8 | 3·4 | |
| 9·4 | 8 | 6·3 | 23·6 | |
| 10·1 | | 7·3 | 59·9 | |
| 9·7 | | 12·1 | 1·2 | |
| 10·0 | | 16·4 | 39·1 | |
| 10·1 | | 17·9 | 56·2 | |
| 10·1 | | 33·9 | 55·1 | |
| 9·7 | | 35·9 | 45·2 | |
| 9·8 | | 38·1 | 45·8 | |
| 9·8 | | 38·4 | 52·9 | |
| 9·4 | 9 | 11·9 | 18·9 | |
| 10·0 | | 14·1 | 2·6 | |
| 9·0 | | 19·4 | 4·9 | 8·5 |
| 9·7 | | 20·4 | 59·7 | |
| 9·4 | | 21·4 | 38·9 | |
| 9·7 | | 25·9 | 25·1 | |
| 10·0 | | 29·9 | 33·5 | |
| 10·0 | | 39·9 | 3·1 | |
| 9·4 | | 49·9 | 44·1 | 9·2 |
| 9·8 | | 58·9 | 12·8 | |
| 10·0 | 10 | 8·4 | 3·8 | |
| 9·7 | | 9·9 | 44·5 | |
| 10·1 | | 13·1 | 42·1 | |
| 9·7 | | 15·4 | 46·5 | 9·5 |
| 10·1 | | 19·9 | 2·8 | |
| 10·0 | | 23·4 | 51·0 | |
| 10·1 | | 28·9 | 48·0 | |
| 10·1 | | 29·9 | 8·0 | |
| 10·1 | | 33·4 | 23·6 | |
| 10·0 | | 35·9 | 50·5 | |
| 10·1 | | 59·9 | 1·3 | |
| 10·1 | 11 | 0·9 | 35·9 | |
| 10·0 | | 0·9 | 8·3 | |
| 9·2 | | 16·3 | 7·1 | |
| 10·1 | | 20·4 | 42·5 | |
| 9·8 | | 21·9 | 15·5 | |
| 10·0 | | 24·8 | 23·1 | |
| 10·0 | | 34·8 | 1·8 | |

## 7021—7080.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·7 | 11 | 35·8 | 11·1 | |
| 9·8 | | 40·4 | 37·3 | |
| 10·2 | | 46·2 | 24·7 | |
| 9·4 | | 58·7 | 32·2 | |
| 9·7 | 12 | 8·2 | 8·8 | |
| 9·6 | | 12·7 | 56·2 | |
| 10·2 | | 36·2 | 18·0 | |
| 9·9 | | 48·7 | 29·5 | |
| 10·2 | | 59·4 | 27·0 | |
| 10·1 | 13 | 6·2 | 14·6 | |
| 9·2 | | 46·2 | 41·0 | 8·0 G |
| 10·2 | | 56·0 | 29·0 | |
| 9·9 | | 57·2 | 41·0 | |
| 9·4 | 14 | 43·7 | 6·4 | |
| 9·6 | | 59·7 | 8·4 | |
| 10·2 | 15 | 16·7 | 13·1 | |
| 10·1 | | 32·2 | 51·6 | |
| 9·9 | | 36·2 | 8·0 | |
| 10·1 | | 55·7 | 30·2 | |
| 10·0 | 16 | 1·2 | 13·0 | |
| 9·9 | | 12·7 | 16·8 | |
| 9·6 | | 22·2 | 41·2 | 9·0 |
| 9·8 | | 24·2 | 3·2 | 9·5 |
| 9·0 | | 30·7 | 7·2 | 8·5 |
| 9·6 | | 31·2 | 41·1 | |
| 8·6 | | 42·2 | 31·6 | 9·0 |
| 10·2 | 17 | 1·2 | 24·1 | |
| 9·4 | | 8·4 | 56·5 | |
| 9·4 | | 8·7 | 32·3 | 9·5 |
| 10·1 | | 14·7 | 21·5 | |
| 10·2 | | 18·2 | 9·7 | |
| 9·8 | | 25·2 | 55·9 | |
| 9·3 | | 48·7 | 29·1 | 9·2 |
| 10·1 | | 49·7 | 17·2 | |
| 10·2 | 18 | 6·2 | 17·1 | |
| 10·2 | | 10·7 | 5·1 | |
| 8·6 | | 13·7 | 42·9 | 8·8 |
| 10·2 | | 16·2 | 34·0 | |
| 9·9 | | 38·7 | 40·9 | 9·0 |
| 10·0† | | 42·1 | 58·5 | |
| 9·0 | | 52·7 | 20·8 | 9·0 |
| 10·2 | | 56·7 | 16·1 | |
| 10·2 | 19 | 17·8 | 57·1 | |
| 9·6 | | 37·7 | 56·1 | |
| 10·0 | | 38·7 | 47·3 | |
| 7·4 | | 40·2 | 54·8 | 7·0 GScr |
| 9·6 | | 42·7 | 9·2 | |
| 9·1 | 20 | 5·6 | 2·2 | 9·0 |
| 9·4 | | 36·2 | 41·6 | |
| 7·9 | | 42·2 | 40·3 | 8·0 |
| 9·3 | 21 | 5·7 | 23·8 | |
| 8·2 | | 13·7 | 3·2 | 8·0 |
| 9·8† | | 31·0 | 57·7 | |
| 10·0 | | 33·7 | 12·5 | |
| 9·4 | | 43·7 | 50·2 | |
| 10·0 | | 48·2 | 23·4 | |
| 9·7 | | 49·2 | 22·1 | 9·0 |
| 9·7 | | 53·7 | 53·5 | |
| 10·0 | 22 | 19·2 | 29·1 | 9·5 |
| 10·2 | 23 | 3·2 | 51·8 | |

## 7081—7140.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8·8 | 23 | 11·2 | 45·9 | 8·5 |
| 8·6 | | 12·2 | 21·6 | 8·8 |
| 8·8 | | 15·7 | 46·1 | 8·5 |
| 9·1 | | 26·2 | 57·1 | |
| 9·6 | | 35·7 | 46·0 | |
| 9·7 | | 41·2 | 37·7 | |
| 10·2 | | 49·2 | 16·0 | |
| 9·6 | 24 | 5·2 | 7·1 | |
| 9·7 | | 9·9 | 58·4 | |
| 10·2 | | 16·2 | 37·1 | |
| 10·2 | | 45·7 | 39·5 | |
| 10·2 | | 50·2 | 38·9 | |
| 10·2 | | 53·3 | 58·7 | |
| 10·2 | | 59·7 | 9·9 | |
| 10·0 | 25 | 10·2 | 18·2 | |
| 10·2 | | 25·2 | 50·0 | |
| 10·0 | | 35·2 | 31·2 | |
| 8·8 | | 35·2 | 33·6 | |
| 10·0 | | 40·0 | 54·8 | |
| 9·7 | | 45·2 | 31·6 | |
| 9·8 | | 46·2 | 55·4 | |
| 8·8 | | 54·7 | 18·9 | 8·0 |
| 10·2 | 26 | 21·7 | 48·0 | |
| 9·3 | | 42·7 | 28·0 | 9·0 |
| 9·4 | | 50·2 | 39·1 | |
| 8·9 | 27 | 0·2 | 12·1 | 9·0 |
| 9·4 | | 11·2 | 9·5 | 9·5 G |
| 9·4 | | 38·7 | 25·1 | |
| 9·7 | | 50·2 | 32·1 | |
| 9·8 | 28 | 2·2 | 15·0 | |
| 9·8 | | 2·2 | 55·8 | |
| 9·7 | | 8·2 | 57·4 | |
| 10·0 | | 20·2 | 30·8 | |
| 9·6 | | 33·7 | 24·7 | |
| 10·1† | | 42·2 | 58·3 | |
| 9·7 | | 43·7 | 3·7 | |
| 10·2 | | 45·7 | 57·0 | |
| 9·8 | | 46·2 | 20·4 | |
| 10·1 | | 50·7 | 9·4 | |
| 9·0 | | 53·7 | 47·8 | 8·5 |
| 8·3 | 29 | 2·7 | 17·3 | 8·0 G |
| 9·8 | | 5·2 | 53·4 | |
| 10·1† | | 12·7 | 58·8 | |
| 9·4 | | 20·2 | 24·8 | |
| 9·7 | | 22·2 | 31·4 | |
| 9·4 | | 22·7 | 5·9 | 9·5 |
| 9·9 | | 32·7 | 39·2 | |
| 9·4 | | 53·7 | 50·5 | |
| 10·0 | | 54·2 | 29·9 | |
| 9·3 | 30 | 6·7 | 8·2 | |
| 9·7 | | 10·9 | 1·4 | |
| 9·4 | | 18·2 | 21·6 | 8·5 |
| 9·4 | | 18·7 | 39·1 | |
| 9·7 | | 23·2 | 6·9 | |
| 10·2 | | 30·7 | 39·2 | |
| 9·6 | | 35·7 | 18·9 | 9·0 |
| 9·7 | | 40·7 | 33·9 | |
| 9·8 | | 41·7 | 26·8 | |
| 9·7 | | 45·7 | 49·1 | |
| 9·4 | 31 | 5·2 | 20·6 | |



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### 7141—7200.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.0 | 31 | 13.7 | 7.0 | |
| 9.6 | | 15.2 | 5.6 | |
| 10.2 | | 15.2 | 56.2 | |
| 10.2 | | 22.2 | 48.0 | |
| 10.2 | | 37.7 | 51.2 | |
| 9.9 | | 39.2 | 54.5 | |
| 9.9 | | 47.2 | 38.1 | |
| 10.1 | 32 | 1.2 | 17.2 | |
| 10.1 | | 1.7 | 58.1 | |
| 9.6 | | 16.7 | 16.3 | |
| 9.8 | | 19.7 | 17.8 | |
| 10.1† | | 32.0 | 59.2 | |
| 9.6 | | 45.2 | 19.9 | |
| 9.6 | | 52.2 | 6.4 | |
| 8.5 | | 57.7 | 42.6 | 7.5 G |
| 9.4 | 33 | 2.2 | 11.9 | |
| 8.8 | | 8.7 | 34.2 | 9.0 |
| 10.1 | | 20.2 | 30.4 | |
| 10.1 | | 21.7 | 4.0 | 10.0 |
| 9.6 | | 28.7 | 10.5 | |
| 9.0 | | 41.2 | 28.0 | 9.0 |
| 10.2 | | 41.4 | 9.0 | |
| 7.9 | | 44.2 | 3.0 | 7.5 GS |
| 9.4 | | 45.2 | 29.8 | |
| 9.7 | | 48.2 | 36.0 | |
| 9.7 | | 48.7 | 47.4 | |
| 9.0 | | 48.7 | 17.7 | |
| 10.2 | | 52.6 | 58.3 | |
| 10.1 | | 54.7 | 11.2 | |
| 9.9 | | 57.7 | 24.2 | |
| 10.1 | 34 | 2.2 | 48.2 | |
| 9.3 | | 5.2 | 56.2 | |
| 10.1 | | 8.2 | 52.2 | |
| 10.1 | | 9.7 | 52.2 | |
| 9.4 | | 12.2 | 45.0 | |
| 10.2 | | 17.2 | 13.0 | |
| 9.7 | | 17.7 | 56.6 | |
| 9.7 | | 19.2 | 5.0 | 9.5 |
| 9.9 | | 28.7 | 26.4 | |
| 10.2 | | 32.4 | 34.9 | |
| 10.1 | | 38.2 | 35.2 | |
| 9.2 | | 46.7 | 4.0 | 9.5 |
| 9.6 | 35 | 0.2 | 14.0 | |
| 8.8 | | 2.7 | 29.6 | |
| 9.8 | | 3.2 | 20.2 | |
| 10.0 | | 8.7 | 28.6 | |
| 10.2 | | 9.2 | 10.6 | |
| 9.6 | | 23.7 | 31.6 | |
| 9.7 | | 23.7 | 15.0 | |
| 10.0 | | 28.2 | 1.2 | |
| 10.2 | | 28.7 | 27.3 | |
| 9.1 | | 29.2 | 53.8 | |
| 9.6 | | 31.7 | 55.6 | |
| 9.6 | | 33.2 | 52.6 | |
| 10.1 | | 42.2 | 7.2 | |
| 10.2 | | 51.9 | 58.3 | |
| 9.9 | 36 | 0.7 | 28.0 | |
| 9.4 | | 3.7 | 22.6 | |
| 8.9 | | 7.7 | 15.0 | |
| 8.9 | | 7.9 | 57.2 | |

### 7201—7260.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 8.2 | 36 | 18.7 | 25.0 | 7.2 GS |
| 9.7 | | 21.2 | 50.2 | |
| 9.2 | | 39.7 | 34.0 | 9.5 |
| 10.1 | | 43.7 | 42.8 | |
| 10.0 | | 46.2 | 3.0 | |
| 7.3 | | 47.2 | 43.8 | 7.0 GScr |
| 10.2 | | 55.7 | 39.4 | |
| 9.4 | | 58.7 | 43.2 | |
| 9.4 | 37 | 6.2 | 2.8 | |
| 10.2 | | 12.7 | 56.0 | |
| 8.6 | | 15.2 | 22.8 | 8.5 |
| 9.9 | | 18.7 | 2.0 | |
| 9.9 | | 25.7 | 8.5 | |
| 8.9 | | 30.2 | 0.3 | |
| 10.2 | | 41.2 | 53.0 | |
| 10.2 | | 42.2 | 35.2 | |
| 8.9 | | 46.2 | 25.0 | 8.5 |
| 9.6 | | 52.2 | 24.6 | |
| 10.0 | | 59.2 | 35.6 | |
| 9.9 | 38 | 0.2 | 55.9 | |
| 9.4 | | 10.9 | 57.6 | |
| 9.1 | | 11.7 | 28.2 | |
| 8.7 | | 18.7 | 41.2 | |
| 9.2 | | 23.6 | 1.9 | 8.0 |
| 10.2 | | 24.2 | 26.4 | |
| 9.8 | | 25.2 | 9.9 | |
| 10.1 | | 26.7 | 24.0 | |
| 10.2 | | 27.2 | 32.8 | |
| 9.9 | | 29.7 | 27.2 | |
| 8.4 | | 33.2 | 23.6 | 8.5 |
| 9.6 | | 38.7 | 39.4 | |
| 10.0 | | 42.7 | 34.5 | |
| 9.2 | | 43.7 | 39.8 | |
| 9.4 | | 46.7 | 40.0 | |
| 10.2 | | 47.7 | 20.1 | |
| 9.0 | | 49.2 | 14.5 | |
| 10.2 | | 52.2 | 20.1 | |
| 9.8 | | 53.7 | 47.1 | |
| 9.4 | | 56.2 | 41.0 | |
| 9.4 | | 58.2 | 47.9 | |
| 9.2 | | 58.7 | 48.0 | |
| 9.2 | 39 | 10.2 | 17.0 | |
| 10.2 | | 10.7 | 40.3 | |
| 9.8 | | 15.2 | 41.0 | |
| 10.2 | | 18.4 | 21.5 | |
| 9.8 | | 19.2 | 41.6 | |
| 10.1 | | 22.2 | 12.1 | |
| 10.0 | | 23.7 | 27.1 | |
| 9.4 | | 34.2 | 6.0 | 9.0 |
| 9.7 | | 38.7 | 8.1 | |
| 10.0 | | 39.7 | 29.9 | |
| 10.1 | | 42.2 | 51.6 | |
| 10.2 | | 43.4 | 11.3 | |
| 9.4 | | 43.7 | 23.1 | |
| 9.6 | | 53.7 | 16.7 | |
| 9.9 | | 56.2 | 18.0 | |
| 10.1 | | 59.7 | 16.1 | |
| 9.6 | 40 | 3.2 | 18.5 | |
| 9.6 | | 3.7 | 29.9 | 8.8 |
| 10.1 | | 16.2 | 56.2 | |

### 7261—7320.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.8 | 40 | 17.9 | 57.7 | |
| 9.7 | | 21.2 | 54.2 | 9.0 |
| 10.0 | | 22.2 | 50.7 | |
| 8.3 | | 25.2 | 16.2 | 8.5 |
| 10.2 | | 33.7 | 6.0 | |
| 9.4 | | 41.7 | 5.2 | |
| 9.9 | | 45.2 | 44.1 | |
| 9.6 | | 46.7 | 19.0 | |
| 10.1 | | 47.2 | 3.2 | |
| 9.6 | | 53.2 | 51.0 | |
| 9.4 | 41 | 4.7 | 58.8 | 9.0 |
| 9.6 | | 12.2 | 45.8 | |
| 10.2 | | 31.2 | 45.0 | |
| 9.9 | | 31.7 | 31.2 | |
| 10.1 | | 55.7 | 32.4 | |
| 10.2 | | 59.2 | 57.8 | |
| 10.1 | 42 | 8.7 | 38.5 | |
| 10.2 | | 12.7 | 44.0 | |
| 10.1 | | 18.7 | 56.4 | |
| 9.9 | | 24.2 | 54.6 | |
| 10.2 | | 35.2 | 21.9 | |
| 9.6 | | 35.7 | 40.0 | |
| 10.1 | | 52.2 | 22.9 | |
| 9.8 | | 55.7 | 39.9 | |
| 9.8 | | 56.7 | 17.8 | |
| 8.7 | | 58.2 | 12.3 | 8.0 |
| 9.2 | 43 | 10.2 | 48.5 | |
| 9.8 | | 10.3 | 59.6 | |
| 9.7 | | 26.2 | 37.3 | |
| 10.4 | | 30.4 | 21.8 | |
| 10.0 | | 32.4 | 13.1 | |
| 10.4 | | 35.7 | 58.9 | |
| 10.0 | | 36.1 | 49.4 | |
| 10.0 | | 36.4 | 6.0 | |
| 10.4 | | 36.9 | 42.1 | |
| 8.6 | | 42.1 | 32.2 | 9.0 G |
| 10.2 | | 43.0 | 1.8 | |
| 10.0 | | 49.9 | 28.7 | |
| 10.0 | | 56.3 | 0.6 | |
| 9.8 | | 59.9 | 26.7 | |
| 9.8 | | 59.9 | 6.5 | |
| 10.4 | 44 | 2.4 | 30.1 | |
| 9.6 | | 9.4 | 53.7 | |
| 10.4 | | 13.4 | 32.0 | |
| 10.2 | | 18.7 | 33.2 | |
| 9.8 | | 20.6 | 10.0 | |
| 10.4 | | 22.7 | 24.0 | |
| 9.6 | | 23.7 | 59.4 | |
| 10.4 | | 23.9 | 7.8 | |
| 10.2 | | 25.4 | 14.3 | |
| 10.0 | | 26.4 | 36.0 | |
| 10.4 | | 26.7 | 1.0 | |
| 10.4 | | 28.9 | 46.6 | |
| 10.4 | | 29.9 | 23.9 | |
| 10.0 | | 31.4 | 1.6 | |
| 9.8 | | 33.4 | 31.7 | |
| 10.2 | | 33.9 | 52.2 | |
| 10.1 | | 37.9 | 24.0 | |
| 10.4 | | 39.4 | 38.7 | |
| 10.1 | | 43.9 | 39.8 | |

### 7321—7380.

| mag. | 15h. m | s | −57° ′ |
|---|---|---|---|
| 10.4 | 44 | 49.9 | 49.0 |
| 10.1 | | 52.9 | 22.8 |
| 9.8 | | 56.4 | 35.2 |
| 10.0 | | 59.9 | 27.1 |
| 9.8 | 45 | 0.9 | 4.9 |
| 9.8 | | 3.9 | 14.4 |
| 10.4 | | 8.9 | 59.7 |
| 10.2 | | 16.4 | 38.3 |
| 10.4 | | 24.4 | 39.1 |
| 10.4 | | 24.4 | 36.0 |
| 10.4 | | 25.6 | 42.7 |
| 9.5 | | 28.9 | 43.7 |
| 9.6 | | 31.4 | 6.8 |
| 9.2 | | 32.4 | 40.6 |
| 9.8 | | 33.9 | 6.8 |
| 9.2 | | 36.4 | 16.7 |
| 10.1 | | 38.9 | 40.1 |
| 10.0 | | 39.9 | 51.5 |
| 10.4 | | 44.9 | 23.4 |
| 9.6 | | 46.1 | 59.8 |
| 9.6 | | 46.4 | 44.8 |
| 10.4 | | 46.9 | 35.4 |
| 10.4 | | 47.4 | 1.9 |
| 10.0 | | 58.9 | 31.8 |
| 10.0 | 46 | 1.4 | 15.6 |
| 10.4 | | 5.9 | 41.8 |
| 9.8 | | 8.4 | 22.3 |
| 10.4 | | 8.6 | 17.3 |
| 9.8 | | 13.4 | 26.7 |
| 10.4 | | 14.4 | 8.2 |
| 10.1 | | 14.4 | 53.3 |
| 10.4 | | 17.4 | 3.1 |
| 10.0 | | 17.4 | 50.1 |
| 10.0 | | 20.4 | 13.4 |
| 10.1 | | 27.4 | 21.1 |
| 9.8 | | 31.9 | 19.0 |
| 10.4 | | 38.6 | 27.3 |
| 10.1 | | 42.4 | 39.6 |
| 10.4 | | 43.9 | 14.1 |
| 9.6 | | 54.4 | 32.2 |
| 10.4 | | 57.9 | 58.6 |
| 10.4 | | 58.9 | 53.0 |
| 8.4 | 47 | 2.4 | 12.8 |
| 10.4 | | 7.4 | 56.9 |
| 10.0 | | 12.4 | 29.2 |
| 9.8 | | 13.4 | 53.4 |
| 10.4 | | 14.4 | 28.8 |
| 10.4 | | 18.9 | 5.6 |
| 10.0 | | 23.9 | 21.1 |
| 10.0 | | 25.4 | 27.4 |
| 10.2 | | 26.4 | 48.4 |
| 10.0 | | 26.4 | 45.2 |
| 10.0 | | 28.4 | 46.6 |
| 10.0 | | 30.6 | 59.7 |
| 10.4 | | 30.9 | 7.4 |
| 10.4 | | 36.4 | 25.6 |
| 7.8 | | 42.4 | 55.8 |
| 9.6 | | 43.9 | 44.2 |
| 10.4 | | 44.4 | 6.0 |
| 9.8 | | 46.4 | 11.2 |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 15 | 30 | 1.18 | 5.1 |
| | 40 | 1.20 | 4.8 |
| | 50 | 1.21 | 4.5 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 40 | 120 | 4·8 |
| | 50 | 121 | 4·5 |
| 16 | 0 | 122 | 4·2 |

## 7381—7440.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 47 | 47·9 | 44·8 | |
| 10·0 | | 51·4 | 40·1 | |
| 10·0 | | 54·9 | 31·0 | |
| 10·4 | | 56·9 | 55·6 | |
| 9·8 | 48 | 1·4 | 2·0 | |
| 10·2 | | 2·9 | 6·0 | |
| 9·8 | | 5·4 | 11·0 | |
| 9·6 | | 5·9 | 37·8 | |
| 10·0 | | 10·4 | 10·0 | |
| 10·1 | | 19·4 | 32·0 | |
| 10·2 | | 20·4 | 10·1 | |
| 10·0 | | 24·4 | 46·4 | |
| 10·0 | | 25·3 | 58·9 | |
| 10·4 | | 27·9 | 42·0 | |
| 10·4 | | 32·4 | 21·2 | |
| 10·0 | | 33·4 | 40·2 | |
| 10·4 | | 33·9 | 21·6 | |
| 9·0 | | 36·4 | 24·0 | 8·0 |
| 10·4 | | 37·9 | 11·8 | |
| 9·3 | | 38·9 | 33·0 | |
| 10·4 | | 41·4 | 15·4 | |
| 10·4 | | 42·4 | 43·8 | |
| 10·4 | | 42·9 | 25·3 | |
| 10·4 | | 48·4 | 29·6 | |
| 10·4 | | 50·9 | 26·6 | |
| 8·8 | | 57·9 | 32·0 | 9·0 |
| 10·4 | | 57·9 | 48·0 | |
| 10·4 | | 59·4 | 23·1 | |
| 10·4 | 49 | 0·9 | 5·4 | |
| 10·4 | | 1·4 | 38·1 | |
| 10·4 | | 4·5 | 22·9 | |
| 10·0 | | 6·9 | 57·4 | |
| 10·0 | | 8·2 | 1·6 | |
| 10·2 | | 9·9 | 40·2 | |
| 9·8 | | 10·9 | 3·8 | |
| 8·6 | | 11·4 | 23·5 | 9·5 |
| 10·4 | | 13·9 | 36·2 | |
| 10·4 | | 15·2 | 2·4 | |
| 10·1 | | 21·9 | 52·0 | |
| 10·1 | | 22·4 | 25·0 | |
| 10·4 | | 24·9 | 41·9 | |
| 9·6 | | 27·4 | 56·9 | |
| 10·0 | | 27·9 | 22·0 | |
| 9·8 | | 28·4 | 51·8 | |
| 9·5 | | 39·4 | 59·0 | |
| 9·2 | | 40·9 | 42·4 | 9·0 G |
| 10·4 | | 42·4 | 12·8 | |
| 7·9 | | 45·4 | 41·2 | 7·5 G |
| 10·4 | | 46·5 | 40·1 | |
| 10·0 | | 47·4 | 55·8 | |
| 10·0 | | 47·4 | 46·6 | |
| 10·4 | | 50·4 | 53·9 | |
| 10·2 | | 51·4 | 28·9 | |
| 10·2 | | 58·9 | 34·6 | |
| 9·8 | 50 | 0·4 | 47·1 | |
| 10·4 | | 3·4 | 49·6 | |
| 8·3 | | 8·4 | 32·5 | 9·0 |
| 10·4 | | 8·9 | 45·2 | |
| 9·5 | | 10·4 | 21·6 | |
| 10·4 | | 15·4 | 31·2 | |

## 7441—7500.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 50 | 16·4 | 33·0 | |
| 9·6 | | 17·4 | 6·2 | |
| 10·4 | | 17·5 | 52·0 | |
| 10·1 | | 19·9 | 15·2 | |
| 10·4 | | 20·7 | 18·5 | |
| 10·0 | | 22·4 | 16·2 | |
| 10·4 | | 26·4 | 15·0 | |
| 10·4 | | 28·4 | 33·2 | |
| 10·4 | | 32·9 | 42·8 | |
| 9·5 | | 34·9 | 36·8 | |
| 10·4 | | 36·9 | 26·0 | |
| 10·4 | | 39·4 | 22·8 | |
| 8·9 | | 42·9 | 15·1 | 8·5 |
| 9·6 | | 44·9 | 43·1 | |
| 9·8 | | 47·4 | 6·1 | |
| 9·5 | | 53·9 | 9·2 | |
| 9·0 | | 54·9 | 1·6 | 9·5 |
| 10·4 | | 57·9 | 30·8 | |
| 10·4 | | 58·9 | 20·0 | |
| 10·4 | 51 | 0·4 | 57·1 | |
| 10·0 | | 6·9 | 2·8 | |
| 9·2 | | 12·7 | 1·1 | |
| 9·6 | | 14·9 | 44·6 | |
| 9·6 | | 19·4 | 54·7 | |
| 10·2 | | 29·9 | 41·2 | |
| 10·2 | | 29·9 | 14·0 | |
| 9·8 | | 34·9 | 43·6 | |
| 10·4 | | 40·4 | 53·0 | |
| 10·0 | | 40·9 | 11·9 | |
| 9·8 | | 43·4 | 49·8 | |
| 10·1 | | 43·9 | 6·2 | |
| 10·0 | | 45·9 | 18·9 | |
| 10·2 | | 53·9 | 52·6 | |
| 10·1 | | 57·9 | 24·5 | |
| 9·8 | 52 | 0·4 | 44·3 | |
| 8·7 | | 0·9 | 12·6 | 9·0 |
| 10·4 | | 1·4 | 49·4 | |
| 10·4 | | 5·9 | 36·1 | |
| 10·4 | | 6·4 | 45·2 | |
| 10·4 | | 10·9 | 6·0 | |
| 10·0 | | 13·9 | 51·0 | |
| 10·4 | | 15·8 | 36·5 | |
| 10·4 | | 28·8 | 30·3 | |
| 9·6 | | 29·9 | 38·4 | |
| 10·0 | | 32·4 | 57·4 | |
| 10·0 | | 33·9 | 33·0 | |
| 9·0 | | 36·4 | 29·2 | |
| 9·8 | | 36·4 | 36·9 | |
| 10·4 | | 36·9 | 5·0 | |
| 10·0 | | 38·9 | 41·4 | |
| 8·8 | | 38·9 | 46·0 | 9·5 |
| 10·0 | | 39·4 | 58·5 | |
| 10·4 | | 40·4 | 43·5 | |
| 10·4 | | 46·4 | 0·5 | |
| 9·6 | | 52·4 | 47·4 | |
| 10·2 | | 55·9 | 59·4 | |
| 10·4 | | 59·9 | 54·0 | |
| 10·0 | 53 | 13·9 | 50·0 | |
| 10·2 | | 18·4 | 54·6 | |
| 5·5 | | 22·9 | 25·1 | 5·5 GSc |

## 7501—7560.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 53 | 23·9 | 4·6 | |
| 10·4 | | 23·9 | 43·6 | |
| 10·0 | | 24·4 | 56·6 | |
| 10·4 | | 28·9 | 19·0 | |
| 10·4 | | 30·4 | 33·5 | |
| 10·2 | | 35·9 | 54·0 | |
| 10·0 | | 38·9 | 50·0 | |
| 8·3 | | 39·4 | 45·8 | 8·5 |
| 10·0 | | 40·4 | 50·2 | |
| 9·3 | | 40·4 | 0·2 | |
| 9·8 | | 47·9 | 34·8 | |
| 9·8 | | 50·4 | 49·8 | |
| 10·0 | | 50·9 | 57·5 | |
| 9·5 | 54 | 4·4 | 22·0 | |
| 9·8 | | 5·9 | 52·0 | |
| 9·8 | | 12·4 | 21·8 | |
| 10·4 | | 12·8 | 12·9 | |
| 9·8 | | 15·4 | 5·0 | |
| 10·1 | | 16·9 | 0·6 | |
| 9·8 | | 18·9 | 2·2 | |
| 10·4 | | 20·8 | 4·8 | |
| 10·0 | | 22·9 | 52·4 | |
| 10·4 | | 27·9 | 57·4 | |
| 10·4 | | 29·4 | 34·0 | |
| 10·4 | | 29·9 | 57·0 | |
| 10·1 | | 40·4 | 43·4 | |
| 8·8 | | 42·9 | 21·8 | 9·0 |
| 9·6 | | 43·9 | 40·7 | |
| 9·0 | | 43·9 | 6·5 | 9·5 |
| 10·2 | | 49·9 | 23·9 | |
| 9·6 | 55 | 8·4 | 10·8 | |
| 10·4 | | 12·9 | 28·0 | |
| 10·2 | | 16·6 | 28·9 | |
| 9·8 | | 17·4 | 47·4 | |
| 9·4 | | 17·4 | 44·6 | |
| 9·6 | | 17·9 | 4·6 | 9·0 |
| 10·4 | | 30·4 | 31·4 | |
| 10·4 | | 30·9 | 10·9 | |
| 10·2 | | 31·9 | 48·5 | |
| 10·2 | | 35·9 | 13·8 | |
| 9·8 | | 46·4 | 44·0 | |
| 10·1 | | 47·9 | 16·8 | |
| 8·5 | | 53·4 | 17·5 | 9·5 |
| 10·4 | | 53·9 | 19·1 | |
| 10·4 | | 55·4 | 9·0 | |
| 10·4 | | 56·4 | 43·9 | |
| 10·0 | | 57·9 | 34·2 | |
| 10·4 | | 58·4 | 7·4 | |
| 9·8 | | 59·9 | 54·4 | |
| 10·4 | 56 | 0·4 | 38·0 | |
| 10·2 | | 9·4 | 33·6 | |
| 9·8 | | 16·4 | 59·0 | |
| 10·4 | | 18·4 | 10·4 | |
| 10·0 | | 23·9 | 40·2 | |
| 10·0 | | 23·9 | 14·2 | |
| 10·4 | | 25·4 | 8·0 | |
| 10·1 | | 27·4 | 47·8 | |
| 10·4 | | 30·4 | 46·0 | |
| 10·4 | | 30·9 | 22·8 | |
| 9·2 | | 33·4 | 45·2 | |

## 7561—7620.

| mag. | 15h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·4 | 56 | 33·9 | 59·7 | |
| 10·4 | | 35·9 | 25·9 | |
| 9·8 | | 35·9 | 56·0 | |
| 10·4 | | 37·9 | 28·8 | |
| 10·0 | | 38·4 | 38·8 | |
| 10·0 | | 38·4 | 44·6 | |
| 10·4 | | 40·4 | 57·2 | |
| 10·0 | | 43·4 | 33·2 | |
| 10·4 | | 43·9 | 29·0 | |
| 9·8 | | 45·4 | 38·9 | |
| 10·4 | | 47·9 | 2·8 | |
| 10·1 | | 55·9 | 38·7 | |
| 10·4 | | 57·8 | 57·2 | |
| 10·4 | 57 | 3·9 | 16·0 | |
| 9·8 | | 3·9 | 46·2 | |
| 10·0 | | 7·4 | 9·0 | |
| 10·1 | | 7·9 | 37·6 | |
| 10·0 | | 13·4 | 42·6 | |
| 10·0 | | 17·9 | 1·8 | |
| 10·2 | | 18·4 | 48·6 | |
| 10·4 | | 21·4 | 27·3 | |
| 10·4 | | 43·4 | 55·0 | |
| 9·0 | 58 | 1·9 | 10·1 | |
| 10·4 | | 3·9 | 28·0 | |
| 10·4 | | 5·4 | 25·0 | |
| 10·0 | | 6·5 | 0·2 | |
| 10·2 | | 7·9 | 20·4 | |
| 9·5 | | 9·9 | 56·2 | |
| 10·4 | | 14·4 | 40·5 | |
| 10·2 | | 16·4 | 40·6 | |
| 10·4 | | 17·9 | 59·0 | |
| 9·6 | | 19·4 | 20·6 | |
| 10·2 | | 19·4 | 51·0 | |
| 10·0 | | 23·9 | 55·0 | |
| 10·0 | | 25·9 | 50·3 | |
| 10·2 | | 25·9 | 59·6 | |
| 9·3 | | 26·4 | 11·0 | |
| 10·4 | | 31·9 | 38·2 | |
| 10·2 | | 34·9 | 34·2 | |
| 10·0 | | 38·9 | 37·4 | |
| 9·8 | | 42·9 | 47·6 | |
| 10·1 | | 45·4 | 51·2 | |
| 10·2 | | 45·9 | 32·6 | |
| 9·2 | | 46·9 | 10·6 | |
| 10·4 | | 50·4 | 9·1 | |
| 10·4 | | 51·4 | 44·8 | |
| 10·4 | | 52·9 | 29·0 | |
| 10·4 | | 55·9 | 40·2 | |
| 9·4 | | 56·9 | 47·0 | |
| 10·4 | | 58·9 | 30·3 | |
| 9·8 | 59 | 0·4 | 49·6 | |
| 10·0 | | 2·4 | 21·4 | |
| 6·4 | | 2·4 | 35·6 | 6·0 GSct |
| 10·1 | | 4·4 | 29·2 | |
| 10·4 | | 8·9 | 3·6 | |
| 10·4 | | 14·9 | 24·1 | |
| 10·4 | | 18·9 | 21·7 | |
| 10·0 | | 19·4 | 37·8 | |
| 9·8 | | 21·4 | 12·8 | |
| 10·0 | | 25·4 | 54·7 | |

### 7621—7680.

| mag. | 15h.–16h. m s | −57° ′ | |
|---|---|---|---|
| 9.2 | 59 26.4 | 53.5 | |
| 10.0 | 27.4 | 44.9 | |
| 10.0 | 32.4 | 49.6 | |
| 10.4 | 33.9 | 24.0 | |
| 10.4 | 34.4 | 4.0 | |
| 9.8 | 36.9 | 21.1 | |
| 10.4 | 38.4 | 58.0 | |
| 10.1 | 47.4 | 14.6 | |
| 8.5 | 50.4 | 25.4 | 7.8 |
| 10.4 | 52.9 | 24.6 | |
| 9.6 | 55.4 | 24.4 | |
| 10.4 | 0 2.9 | 13.6 | |
| 10.4 | 9.4 | 23.1 | |
| 10.4 | 10.4 | 3.5 | |
| 10.0 | 10.9 | 14.9 | |
| 10.4 | 14.4 | 12.4 | |
| 10.4 | 15.9 | 15.1 | |
| 10.4 | 20.4 | 18.0 | |
| 10.0 | 21.4 | 41.4 | |
| 8.5 | 26.9 | 27.4 | 8.8 |
| 10.4 | 27.4 | 36.1 | |
| 9.6 | 27.4 | 7.8 | |
| 9.8 | 27.9 | 37.8 | |
| 10.4 | 29.9 | 41.4 | |
| 10.4 | 33.9 | 18.2 | |
| 10.0 | 33.9 | 23.8 | |
| 10.4 | 36.4 | 55.2 | |
| 7.6 | 45.4 | 16.4 | |
| 9.2 | 50.4 | 40.5 | 8.8 |
| 9.6 | 50.9 | 5.6 | |
| 10.1 | 53.4 | 33.0 | |
| 10.4 | 53.9 | 30.0 | |
| 10.2 | 59.7 | 1.9 | |
| 10.1 | 1 2.4 | 39.0 | |
| 9.8 | 3.9 | 16.8 | |
| 10.0 | 8.9 | 39.5 | 10.0 |
| 10.0 | 8.9 | 52.1 | |
| 9.8 | 12.4 | 46.4 | |
| 10.0 | 14.4 | 41.4 | |
| 10.0 | 19.4 | 35.6 | |
| 9.6 | 22.4 | 28.0 | 9.0 |
| 10.4 | 25.8 | 39.8 | |
| 10.4 | 29.4 | 27.4 | |
| 8.8 | 35.4 | 43.6 | 9.5 |
| 9.6 | 40.9 | 29.8 | |
| 9.6 | 46.9 | 6.6 | |
| 9.0 | 2 0.4 | 40.6 | |
| 9.8 | 4.9 | 4.7 | |
| 10.2 | 5.4 | 30.6 | |
| 10.4 | 5.9 | 46.5 | |
| 10.4 | 8.4 | 43.9 | |
| 9.8 | 10.4 | 53.4 | |
| 10.0 | 11.4 | 10.2 | |
| 9.2 | 11.9 | 40.0 | |
| 10.4 | 14.9 | 49.8 | |
| 9.5 | 14.9 | 55.6 | |
| 10.0 | 16.4 | 42.5 | |
| 10.4 | 21.4 | 38.5 | |
| 9.8 | 27.9 | 10.6 | |
| 9.8 | 28.4 | 30.2 | |

### 7681—7740.

| mag. | 16h. m s | −57° ′ | |
|---|---|---|---|
| 9.0 | 2 34.4 | 45.0 | 9.5 |
| 10.0 | 36.4 | 3.1 | |
| 10.4 | 42.9 | 1.4 | |
| 8.8 | 45.4 | 22.2 | |
| 10.4 | 3 1.9 | 8.6 | |
| 9.8 | 11.9 | 44.9 | |
| 9.0 | 26.4 | 8.8 | |
| 9.0 | 31.9 | 45.0 | |
| 10.4 | 43.4 | 23.6 | |
| 8.0 | 44.9 | 12.2 | 7.0 G |
| 8.0 | 45.4 | 42.8 | 7.5 GSt |
| 10.4 | 46.4 | 24.2 | |
| 10.4 | 51.4 | 30.9 | |
| 9.6 | 4 0.4 | 20.9 | |
| 10.4 | 10.9 | 51.6 | |
| 10.0 | 20.4 | 41.6 | |
| 8.9 | 21.4 | 42.2 | |
| 10.4 | 26.4 | 54.4 | |
| 10.2 | 29.4 | 8.9 | |
| 9.6 | 29.9 | 42.1 | 9.0 |
| 10.4 | 31.9 | 26.4 | |
| 9.8 | 33.9 | 26.4 | |
| 10.4 | 36.7 | 49.1 | |
| 10.1 | 38.9 | 9.0 | |
| 10.1 | 40.4 | 0.6 | |
| 10.0 | 40.9 | 10.2 | |
| 10.1 | 43.9 | 55.6 | |
| 10.4 | 47.7 | 27.2 | |
| 10.2 | 49.4 | 34.0 | |
| 10.4 | 52.9 | 38.8 | |
| 8.8 | 58.9 | 27.2 | 9.2 |
| 10.4 | 59.9 | 54.0 | |
| 10.4 | 5 12.9 | 33.0 | |
| 10.0 | 13.9 | 46.0 | |
| 10.0 | 23.4 | 41.1 | |
| 6.8 | 30.4 | 35.4 | 6.0 GSct |
| 10.0 | 31.4 | 57.6 | |
| 9.0 | 31.9 | 55.3 | |
| 10.4 | 33.4 | 13.3 | |
| 10.4 | 35.4 | 14.3 | |
| 10.4 | 37.4 | 22.5 | |
| 9.8 | 39.9 | 16.8 | |
| 9.8 | 40.2 | 0.6 | |
| 9.8 | 42.4 | 7.8 | |
| 10.2 | 42.4 | 28.9 | |
| 10.4 | 43.9 | 56.8 | |
| 10.0 | 44.9 | 28.6 | |
| 9.6 | 44.9 | 4.8 | |
| 10.0 | 45.9 | 31.6 | |
| 9.6 | 47.4 | 12.8 | |
| 10.4 | 50.9 | 7.8 | |
| 10.4 | 52.4 | 34.2 | |
| 9.6 | 52.9 | 44.2 | |
| 10.1 | 53.4 | 23.5 | |
| 10.4 | 55.4 | 33.2 | |
| 10.4 | 58.9 | 41.4 | |
| 10.2 | 6 3.9 | 23.6 | |
| 10.4 | 5.4 | 11.4 | |
| 10.4 | 8.4 | 59.6 | |
| 10.4 | 10.9 | 3.0 | |

### 7741—7800.

| mag. | 16h. m s | −57° ′ | |
|---|---|---|---|
| 10.0 | 6 12.4 | 50.8 | |
| 10.4 | 21.4 | 52.6 | |
| 10.4 | 22.4 | 35.1 | |
| 10.0 | 25.9 | 36.8 | |
| 10.4 | 30.9 | 46.2 | |
| 10.2 | 31.9 | 7.2 | |
| 10.4 | 33.4 | 34.2 | |
| 10.4 | 33.4 | 56.1 | |
| 10.4 | 33.9 | 18.8 | |
| 10.4 | 33.9 | 8.3 | |
| 10.4 | 35.4 | 8.6 | |
| 10.2 | 37.4 | 43.2 | |
| 10.2 | 37.4 | 43.4 | |
| 9.8 | 38.4 | 57.0 | |
| 10.0 | 46.4 | 16.2 | |
| 10.4 | 50.4 | 8.0 | |
| 9.8 | 57.9 | 45.1 | |
| 10.1 | 7 1.4 | 52.4 | |
| 10.2 | 1.5 | 40.4 | |
| 10.4 | 4.9 | 7.4 | |
| 10.1 | 6.5 | 27.0 | |
| 9.0 | 8.9 | 46.4 | |
| 10.4 | 12.4 | 55.9 | |
| 10.1 | 22.2 | 0.4 | |
| 10.4 | 24.4 | 44.3 | |
| 10.1 | 26.9 | 34.1 | |
| 10.4 | 29.9 | 29.2 | |
| 10.4 | 31.4 | 39.5 | |
| 8.0 | 32.4 | 37.4 | 7.5 GSt |
| 9.6 | 35.4 | 0.1 | |
| 9.0 | 36.4 | 47.4 | |
| 10.2 | 38.5 | 53.4 | |
| 9.3 | 38.9 | 40.4 | 8.5 |
| 10.0 | 38.9 | 21.8 | |
| 8.2 | 39.9 | 44.2 | 8.5 |
| 10.4 | 40.4 | 22.9 | |
| 9.6 | 41.4 | 50.8 | |
| 10.0 | 42.4 | 53.8 | |
| 9.2 | 46.4 | 32.2 | |
| 9.8 | 50.4 | 38.6 | |
| 10.2 | 51.4 | 24.6 | |
| 10.2 | 52.4 | 11.8 | |
| 10.4 | 52.9 | 34.3 | |
| 10.2 | 53.9 | 55.5 | |
| 10.4 | 54.9 | 1.5 | |
| 10.4 | 55.9 | 37.0 | |
| 10.4 | 56.4 | 46.6 | |
| 10.0 | 56.9 | 29.9 | |
| 10.0 | 57.9 | 39.0 | |
| 10.4 | 8 2.4 | 24.4 | |
| 9.0 | 2.9 | 32.8 | |
| 10.4 | 3.9 | 35.0 | |
| 8.8 | 5.4 | 30.8 | |
| 10.0 | 8.9 | 40.3 | |
| 10.4 | 9.9 | 37.9 | |
| 10.1 | 10.4 | 33.9 | |
| 9.8 | 10.4 | 11.7 | |
| 10.2 | 14.4 | 34.4 | |
| 10.1 | 15.4 | 47.4 | |
| 10.4 | 15.4 | 50.6 | |

### 7801—7860.

| mag. | 16h. m s | −57° ′ | |
|---|---|---|---|
| 10.0 | 8 16.9 | 32.4 | |
| 10.4 | 17.4 | 27.8 | |
| 8.5 | 17.4 | 37.6 | 9.0 |
| 8.0 | 18.9 | 23.0 | G |
| 10.2 | 21.4 | 20.4 | |
| 10.4 | 21.6 | 11.4 | |
| 10.0 | 22.4 | 16.2 | |
| 10.4 | 23.6 | 29.3 | |
| 7.9 | 24.9 | 49.4 | |
| 9.6 | 26.4 | 16.1 | |
| 9.0 | 26.4 | 38.0 | G |
| 10.4 | 26.6 | 41.6 | |
| 10.4 | 26.6 | 11.0 | |
| 10.4 | 27.4 | 44.1 | |
| 10.4 | 27.6 | 46.3 | |
| 7.6 | 28.4 | 37.2 | 8.2 G |
| 9.2 | 28.9 | 35.8 | |
| 8.6 | 29.9 | 38.0 | 8.5 G |
| 10.0 | 30.6 | 33.2 | |
| 10.4 | 30.6 | 27.6 | |
| 7.4 | 31.4 | 35.3 | 6.5 GSt |
| 10.4 | 35.6 | 37.8 | |
| 10.0 | 35.9 | 37.0 | |
| 10.4 | 36.4 | 44.4 | |
| 10.1 | 36.9 | 33.2 | |
| 9.3 | 37.4 | 32.8 | |
| 10.1 | 37.4 | 25.7 | |
| 9.5 | 37.9 | 48.2 | |
| 9.8 | 38.4 | 26.2 | |
| 10.2 | 38.9 | 31.8 | |
| 10.0 | 40.4 | 30.8 | |
| 10.0 | 41.9 | 43.1 | |
| 10.0 | 43.4 | 46.1 | |
| 9.8 | 43.9 | 21.0 | |
| 9.8 | 44.4 | 31.7 | |
| 10.0 | 45.9 | 43.1 | |
| 10.4 | 46.4 | 38.0 | |
| 10.4 | 47.9 | 19.8 | |
| 10.0 | 51.4 | 47.8 | |
| 10.1 | 52.9 | 15.0 | |
| 9.8 | 53.4 | 23.1 | |
| 8.6 | 53.9 | 47.0 | 8.0 G |
| 10.4 | 53.9 | 39.8 | |
| 10.4 | 54.4 | 46.6 | |
| 10.4 | 54.4 | 38.6 | |
| 10.4 | 55.4 | 39.5 | |
| 8.3 | 57.4 | 34.6 | |
| 8.8 | 57.4 | 35.0 | 9.0 G |
| 10.4 | 58.4 | 25.1 | |
| 9.3 | 59.9 | 33.8 | |
| 9.6 | 9 0.4 | 35.8 | |
| 9.8 | 2.4 | 37.5 | |
| 10.1 | 2.9 | 23.6 | |
| 8.4 | 3.9 | 34.5 | 8.8 G |
| 10.4 | 3.9 | 5.8 | |
| 10.1 | 5.4 | 27.8 | |
| 10.4 | 12.9 | 11.5 | |
| 8.8 | 15.4 | 37.5 | 9.0 G |
| 8.2 | 16.4 | 35.8 | 8.2 G |
| 9.8 | 23.4 | 55.8 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 15 | 50 | 121 | 4.5 |
| 16 | 0 | 122 | 4.2 |
| | 10 | 123 | 3.9 |

| 25 prec. | | a | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 16 | 0 | 122 | 4·2 |
| | 10 | 123 | 3·9 |
| | 20 | 124 | 3·5 |
| | 30 | 125 | 3·2 |

## 7861—7920.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 9 | 23·9 | 41·2 | |
| 10·4 | | 24·9 | 37·7 | |
| 10·4 | | 25·9 | 57·8 | |
| 10·2 | | 29·3 | 37·3 | |
| 9·4 | | 31·4 | 44·7 | |
| 8·9 | | 31·9 | 51·5 | |
| 10·4 | | 31·9 | 18·1 | |
| 10·0 | | 31·9 | 16·1 | |
| 10·1 | | 34·9 | 27·0 | |
| 10·0 | | 37·4 | 21·1 | |
| 10·1 | | 37·9 | 27·1 | |
| 9·2 | | 38·4 | 36·0 | G |
| 10·4 | | 40·4 | 33·5 | |
| 9·8 | | 44·4 | 27·0 | |
| 9·5 | | 45·4 | 26·4 | |
| 9·2 | | 46·9 | 52·6 | |
| 10·4 | | 51·4 | 52·7 | |
| 10·1 | | 55·4 | 33·0 | |
| 10·4 | | 55·4 | 49·5 | |
| 10·1 | | 56·4 | 5·2 | |
| 8·4 | | 57·3 | 58·2 | 8·5 |
| 10·2 | | 57·3 | 54·0 | |
| 10·1 | | 57·3 | 38·4 | G |
| 10·4 | 10 | 5·3 | 43·6 | |
| 10·0 | | 5·4 | 39·0 | |
| 10·1 | | 5·9 | 2·8 | |
| 10·1 | | 6·4 | 45·9 | |
| 9·5 | | 7·8 | 58·2 | |
| 9·5 | | 8·4 | 5·1 | 9·0 |
| 10·0 | | 10·4 | 38·0 | |
| 10·2 | | 10·4 | 59·1 | |
| 10·4 | | 13·4 | 45·6 | |
| 10·1 | | 13·9 | 26·9 | |
| 10·1 | | 14·4 | 6·2 | |
| 10·4 | | 18·4 | 33·5 | G |
| 9·6 | | 24·4 | 19·2 | |
| 10·0 | | 26·4 | 37·4 | |
| 9·8 | | 29·2 | 58·9 | |
| 9·6 | | 29·9 | 26·6 | |
| 9·5 | | 31·9 | 57·3 | |
| 9·6 | | 32·4 | 32·5 | G |
| 9·8 | | 32·4 | 48·1 | |
| 9·6 | | 36·9 | 40·8 | |
| 10·2 | | 37·4 | 34·6 | |
| 10·1 | | 44·4 | 49·4 | |
| 9·6 | | 46·4 | 25·0 | |
| 8·6 | | 51·7 | 1·5 | 9·0 |
| 10·2 | | 54·9 | 22·1 | |
| 9·5 | | 58·9 | 36·8 | |
| 10·2 | | 59·5 | 2·6 | |
| 9·0 | | 59·9 | 33·6 | |
| 10·4 | | 59·9 | 5·4 | |
| 9·8 | 11 | 2·2 | 1·0 | |
| 10·4 | | 3·9 | 3·1 | |
| 10·4 | | 6·4 | 4·0 | |
| 10·2 | | 7·9 | 2·4 | |
| 10·1 | | 12·4 | 41·1 | |
| 9·5 | | 12·4 | 53·4 | |
| 10·4 | | 13·4 | 46·6 | |
| 10·4 | | 20·4 | 53·8 | |

## 7921—7980.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 26·4 | 35·3 | |
| 10·0 | | 26·4 | 27·6 | |
| 10·1 | | 29·4 | 42·7 | |
| 10·0 | | 30·4 | 7·5 | |
| 10·4 | | 30·4 | 54·7 | |
| 9·6 | | 32·4 | 32·0 | |
| 9·8 | | 32·4 | 52·1 | |
| 10·4 | | 34·4 | 45·4 | |
| 8·0 | | 43·9 | 15·9 | |
| 10·4 | | 48·9 | 35·3 | |
| 10·4 | | 51·9 | 13·4 | |
| 10·4 | | 53·4 | 58·5 | |
| 10·0 | | 55·4 | 3·4 | |
| 10·4 | | 56·3 | 18·0 | |
| 9·8 | | 59·4 | 8·2 | |
| 9·8 | 12 | 0·4 | 25·1 | |
| 10·0 | | 3·4 | 21·6 | |
| 9·8 | | 22·4 | 19·6 | |
| 9·3 | | 27·9 | 53·6 | |
| 10·4 | | 31·4 | 17·2 | |
| 10·4 | | 35·4 | 2·4 | |
| 10·4 | | 37·4 | 46·3 | |
| 10·2 | | 38·4 | 26·9 | |
| 10·4 | | 38·9 | 9·9 | |
| 10·4 | | 39·4 | 2·5 | |
| 10·4 | | 43·9 | 50·3 | |
| 10·4 | | 46·4 | 24·5 | |
| 10·0 | | 46·5 | 1·0 | |
| 10·0 | | 49·9 | 6·6 | |
| 10·0 | | 50·4 | 45·1 | |
| 10·0 | | 50·9 | 18·5 | |
| 10·4 | | 53·9 | 43·9 | |
| 8·9 | 13 | 13·4 | 6·7 | 9·5 |
| 10·0 | | 25·9 | 22·9 | |
| 10·4 | | 27·4 | 42·9 | |
| 10·4 | | 27·4 | 35·2 | |
| 9·8 | | 32·4 | 7·1 | |
| 9·8 | | 33·9 | 43·3 | |
| 9·8 | | 36·4 | 41·9 | |
| 9·8 | | 37·5 | 2·9 | |
| 10·0 | | 40·4 | 11·1 | |
| 10·4 | | 43·9 | 44·1 | |
| 10·4 | | 45·4 | 10·9 | |
| 9·6 | | 46·4 | 24·0 | |
| 9·8 | | 50·4 | 29·9 | |
| 9·4 | | 53·9 | 49·3 | |
| 10·4 | | 58·4 | 12·7 | |
| 10·4 | 14 | 0·4 | 41·9 | |
| 9·8 | | 2·0 | 1·9 | |
| 10·1 | | 3·9 | 31·2 | |
| 10·4 | | 12·9 | 22·1 | |
| 10·1 | | 16·4 | 25·3 | |
| 10·4 | | 20·9 | 53·8 | |
| 9·8 | | 21·5 | 2·5 | |
| 10·2 | | 27·4 | 6·0 | |
| 10·4 | | 28·9 | 8·9 | |
| 10·4 | | 33·9 | 53·7 | |
| 9·0 | | 37·4 | 52·5 | |
| 10·1 | | 38·9 | 58·1 | |
| 10·0 | | 41·9 | 27·0 | |

## 7981—8040.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·3 | 14 | 44·4 | 9·2 | |
| 10·4 | | 45·4 | 4·9 | |
| 10·0 | | 45·9 | 48·8 | |
| 9·8 | | 52·4 | 7·8 | |
| 10·4 | | 54·4 | 37·1 | |
| 10·2 | 15 | 4·4 | 47·9 | |
| 9·8 | | 12·2 | 14·7 | |
| 10·4 | | 12·9 | 2·3 | |
| 10·4 | | 16·4 | 14·3 | |
| 10·4 | | 33·9 | 31·0 | |
| 10·4 | | 37·9 | 54·9 | |
| 10·4 | | 41·4 | 3·4 | |
| 10·4 | | 42·4 | 28·9 | |
| 10·1 | | 43·7 | 1·7 | |
| 10·1 | | 46·4 | 44·2 | |
| 10·1 | | 47·9 | 55·3 | |
| 10·0 | | 53·9 | 37·0 | |
| 9·4 | | 55·9 | 29·2 | |
| 10·4 | | 56·9 | 59·5 | |
| 10·4 | | 57·9 | 6·8 | |
| 10·4 | | 58·4 | 20·8 | |
| 9·6 | 16 | 2·4 | 54·7 | |
| 9·3 | | 2·4 | 34·3 | |
| 10·4 | | 4·4 | 59·9 | |
| 10·4 | | 13·4 | 11·6 | |
| 10·2 | | 17·9 | 35·5 | |
| 10·0 | | 18·4 | 27·5 | |
| 10·4 | | 22·9 | 3·9 | |
| 10·4 | | 24·4 | 54·5 | |
| 10·1 | | 26·9 | 38·3 | |
| 9·4 | | 28·4 | 20·1 | |
| 10·4 | | 36·4 | 41·7 | |
| 9·8 | | 36·9 | 23·9 | |
| 9·5 | | 37·6 | 46·2 | |
| 7·8 | | 42·4 | 49·9 | 7·5 Gct |
| 9·4 | | 56·4 | 19·5 | |
| 9·6 | | 58·9 | 33·5 | 9·2 |
| 9·4 | | 59·4 | 7·8 | |
| 9·8 | 17 | 2·9 | 38·2 | |
| 9·6 | | 10·9 | 24·0 | |
| 9·6 | | 10·9 | 16·7 | |
| 9·6 | | 24·7 | 39·1 | 9·0 |
| 8·7 | | 25·4 | 47·9 | 9·0 |
| 9·5 | | 27·9 | 45·1 | |
| 9·3 | | 30·4 | 24·2 | |
| 8·2 | 18 | 17·4 | 37·2 | 9·0 |
| 9·8 | | 20·4 | 59·6 | |
| 8·9 | | 23·4 | 7·7 | |
| 9·6 | | 24·9 | 10·8 | |
| 9·6 | | 30·4 | 31·1 | |
| 9·6 | | 37·9 | 44·6 | |
| 9·0 | | 41·4 | 14·7 | 8·5 |
| 9·0 | | 53·4 | 41·1 | |
| 9·5 | 19 | 16·9 | 47·0 | |
| 7·4 | | 20·4 | 28·3 | 6·5 GSctr |
| 9·5 | | 34·9 | 35·8 | |
| 9·4 | | 42·4 | 14·1 | |
| 9·2 | 20 | 5·4 | 43·1 | |
| 9·5 | | 18·2 | 23·3 | |
| 9·0 | | 19·7 | 41·4 | |

## 8041—8100.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 20 | 36·9 | 31·4 | |
| 9·5 | | 41·7 | 26·2 | |
| 9·6 | | 42·2 | 42·2 | |
| 9·8 | | 44·7 | 44·7 | |
| 9·8 | | 55·2 | 11·6 | |
| 9·2 | 21 | 5·7 | 47·1 | |
| 8·7 | | 14·2 | 25·6 | |
| 9·8 | | 48·7 | 12·8 | |
| 9·8 | | 54·7 | 53·4 | |
| 9·4 | 22 | 1·7 | 32·8 | 9·2 |
| 9·8 | | 11·2 | 9·1 | |
| 9·8 | | 32·7 | 39·8 | |
| 9·7 | | 33·1 | 0·1 | |
| 9·8 | | 48·3 | 2·2 | |
| 9·4 | 23 | 21·7 | 37·1 | |
| 9·6 | | 21·7 | 56·5 | |
| 9·4 | | 33·2 | 32·0 | |
| 9·6 | | 38·2 | 17·7 | |
| 9·8 | | 44·2 | 4·7 | |
| 9·5 | | 51·7 | 34·6 | |
| 8·9 | 24 | 4·2 | 8·2 | 9·0 |
| 9·3 | | 8·7 | 35·1 | 9·5 |
| 9·8 | | 8·7 | 15·7 | |
| 9·8 | | 17·9 | 27·4 | |
| 8·6 | | 19·7 | 10·7 | 8·5 |
| 9·4 | | 23·7 | 32·2 | |
| 9·7 | | 30·7 | 29·0 | |
| 9·8 | | 44·7 | 38·9 | |
| 7·9 | | 47·2 | 5·2 | 7·5 GScr |
| 8·6 | | 55·2 | 48·9 | 9·0 |
| 9·8 | 25 | 1·7 | 34·0 | |
| 9·8 | | 4·2 | 20·8 | |
| 9·8 | | 40·7 | 14·6 | |
| 9·5 | | 45·7 | 38·3 | |
| 9·4 | 26 | 24·5 | 27·6 | |
| 9·7 | | 26·5 | 59·0 | |
| 9·8 | | 41·0 | 57·8 | |
| 9·0 | | 46·5 | 43·0 | |
| 9·4 | | 57·0 | 44·9 | |
| 9·6 | 27 | 21·0 | 32·1 | |
| 9·7 | | 30·0 | 39·8 | |
| 9·8 | | 31·1 | 32·4 | |
| 9·8 | | 43·0 | 10·5 | |
| 9·5 | | 49·0 | 17·8 | |
| 8·2 | | 50·7 | 58·5 | 9·0 |
| 9·8 | | 51·5 | 56·3 | |
| 9·4 | 28 | 0·0 | 12·0 | |
| 8·8 | | 2·5 | 12·8 | 9·0 |
| 9·5 | | 16·0 | 25·9 | |
| 9·8 | | 16·5 | 38·1 | |
| 7·4 | | 33·5 | 59·6 | 7·5 GSt |
| 9·5 | | 39·0 | 2·3 | |
| 7·9 | 29 | 0·0 | 27·5 | 8·0 |
| 9·5 | | 1·0 | 23·3 | |
| 9·4 | | 2·0 | 48·9 | |
| 9·6 | | 5·0 | 27·0 | |
| 9·5 | | 37·0 | 14·5 | |
| 8·8 | | 41·0 | 3·2 | |
| 9·7 | | 44·5 | 11·2 | |
| 9·4 | | 44·5 | 35·3 | |



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## 8101—8160.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 30 | 1·0 | 18·2 | |
| 9·5 | | 20·8 | 59·8 | |
| 9·8 | | 25·8 | 45·7 | |
| 9·4 | | 35·0 | 20·4 | |
| 9·8 | 31 | 3·0 | 8·4 | |
| 9·7 | | 6·0 | 56·7 | |
| 9·4 | | 26·0 | 25·1 | 9·0 |
| 9·4 | 32 | 19·0 | 34·9 | |
| 9·6 | | 55·0 | 14·0 | |
| 9·8 | 33 | 28·5 | 22·3 | |
| 9·4 | | 54·5 | 36·9 | |
| 9·8 | 34 | 12·0 | 24·2 | |
| 9·3 | | 12·7 | 46·0 | |
| 9·6 | | 53·7 | 21·6 | |
| 9·8 | 35 | 3·7 | 10·3 | |
| 9·2 | | 40·2 | 31·5 | 9·5 |
| 9·3 | | 49·7 | 17·7 | |
| 8·7 | | 58·2 | 14·8 | 9·0 |
| 9·4 | 36 | 7·2 | 10·8 | |
| 8·9 | | 24·5 | 6·4 | 9·5 |
| 9·4 | | 33·2 | 20·1 | 9·5 |
| 9·7 | | 36·2 | 2·3 | |
| 7·8 | | 50·5 | 13·6 | 7·5 G |
| 9·8 | | 55·2 | 59·0 | |
| 9·8 | 37 | 5·6 | 57·7 | |
| 9·7 | | 13·7 | 42·8 | |
| 9·4 | | 31·2 | 15·1 | |
| 9·5 | | 40·2 | 32·1 | |
| 9·5 | | 45·7 | 12·2 | |
| 9·3 | | 46·2 | 44·3 | |
| 9·6 | 38 | 16·7 | 21·9 | |
| 9·2 | 39 | 0·2 | 13·6 | |
| 9·8 | | 6·2 | 39·3 | |
| 8·8 | | 16·7 | 21·8 | 8·5 |
| 9·4 | | 29·7 | 44·4 | |
| 9·8 | | 45·2 | 24·4 | 8·5 |
| 9·8 | | 54·7 | 22·0 | |
| 9·4 | 40 | 11·2 | 19·3 | |
| 9·7 | | 19·2 | 55·6 | |
| 9·8 | | 25·7 | 3·1 | |
| 9·8 | | 35·7 | 51·7 | |
| 9·8 | | 44·7 | 22·6 | |
| 9·2 | | 46·7 | 30·9 | |
| 9·4 | | 51·7 | 15·1 | |
| 9·8 | 41 | 11·5 | 38·2 | |
| 9·3 | | 22·2 | 38·3 | |
| 9·4 | | 24·7 | 31·0 | 9·0 |
| 9·5 | | 26·2 | 38·3 | |
| 7·4 | | 36·2 | 21·6 | 7·5 GS |
| 8·8 | | 41·2 | 2·8 | |
| 8·3 | | 59·7 | 37·4 | 7·5 G |
| 8·6 | 42 | 0·0 | 33·4 | 9·0 |
| 9·4 | | 21·5 | 9·2 | |
| 9·4 | | 32·0 | 17·1 | 9·0 G |
| 9·4 | | 54·5 | 39·2 | |
| 8·8 | 43 | 11·5 | 43·6 | 8·5 G |
| 7·5 | | 24·5 | 41·4 | 6·5 GS |
| 9·8 | | 28·0 | 35·4 | |
| 9·4 | | 47·0 | 41·4 | 9·5 |
| 9·8 | | 56·5 | 34·9 | |

## 8161—8220.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 44 | 0·5 | 36·1 | |
| 9·3 | | 12·5 | 50·2 | 9·0 |
| 9·0 | | 18·0 | 12·3 | |
| 9·7 | | 20·0 | 30·3 | |
| 9·3 | | 25·5 | 26·6 | 9·0 |
| 9·3 | | 27·5 | 49·8 | |
| 9·4 | | 27·5 | 21·9 | |
| 8·9 | | 34·0 | 30·3 | |
| 9·8 | | 39·5 | 40·8 | |
| 9·8 | | 52·5 | 50·7 | |
| 9·7 | 45 | 26·5 | 6·1 | |
| 9·5 | | 26·5 | 2·8 | |
| 9·4 | | 28·0 | 21·0 | |
| 9·8 | | 56·5 | 33·2 | |
| 9·4 | 46 | 5·2 | 57·9 | |
| 8·6 | | 13·0 | 10·3 | 9·0 |
| 9·5 | | 21·5 | 48·2 | |
| 9·6 | | 36·5 | 28·4 | |
| 9·4 | | 41·5 | 34·1 | 9·5 |
| 9·0 | | 46·0 | 41·6 | 9·0 |
| 8·6 | | 56·0 | 55·2 | |
| 9·8 | 47 | 20·5 | 4·0 | |
| 7·8 | | 31·0 | 33·9 | 7·6 GS |
| 10·1 | | 33·3 | 55·0 | |
| 7·6 | | 34·1 | 35·2 | 7·5 GS |
| 9·3 | | 49·3 | 3·6 | |
| 10·1 | 48 | 0·8 | 45·8 | |
| 9·8 | | 6·8 | 41·2 | G |
| 10·1 | | 8·0 | 1·0 | |
| 9·5 | | 9·1 | 12·4 | 9·5 |
| 10·1 | | 11·8 | 27·2 | |
| 9·6 | | 12·8 | 7·0 | |
| 10·0 | | 16·3 | 25·0 | |
| 10·1 | | 16·8 | 44·5 | |
| 9·5 | | 17·4 | 58·6 | |
| 10·1 | | 19·4 | 1·6 | |
| 9·2 | | 21·8 | 15·1 | 9·0 |
| 10·1 | | 34·3 | 2·4 | |
| 10·1 | | 38·0 | 31·1 | |
| 9·8 | | 40·8 | 28·6 | |
| 9·4 | | 45·3 | 13·2 | 9·5 |
| 9·8 | | 47·3 | 22·3 | |
| 9·1 | | 51·3 | 55·4 | 8·5 |
| 8·4 | | 55·3 | 19·5 | 8·5 G |
| 9·4 | | 58·5 | 2·6 | |
| 9·5 | 49 | 1·8 | 24·0 | |
| 8·6 | | 2·8 | 35·1 | 9·0 |
| 9·8 | | 8·3 | 44·9 | |
| 9·8 | | 10·5 | 2·2 | |
| 8·5 | | 19·4 | 38·8 | 8·3 |
| 10·0 | | 24·4 | 9·0 | |
| 10·1 | | 29·9 | 21·3 | |
| 10·1 | | 47·9 | 31·5 | |
| 10·1 | | 56·9 | 15·0 | |
| 7·4 | 50 | 1·4 | 5·6 | 7·2 GSg |
| 10·1 | | 6·2 | 17·3 | |
| 9·6 | | 9·9 | 16·2 | |
| 9·8 | | 11·9 | 48·7 | |
| 10·0 | | 17·9 | 51·4 | |
| 10·0 | | 22·9 | 15·7 | |

## 8221—8280.

| mag. | 16h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 50 | 27·9 | 55·8 | 9·5 |
| 9·6 | | 29·4 | 26·3 | |
| 9·6 | | 29·9 | 17·5 | |
| 10·0 | | 30·9 | 23·2 | |
| 9·8 | | 37·4 | 14·2 | |
| 10·1 | | 38·9 | 10·6 | |
| 10·1 | | 40·4 | 30·0 | |
| 10·1 | | 48·1 | 1·2 | |
| 10·1 | | 54·9 | 6·6 | |
| 10·1 | | 58·2 | 1·7 | |
| 9·6 | | 59·4 | 23·3 | |
| 10·1 | 51 | 17·9 | 17·9 | |
| 9·5 | | 26·9 | 35·8 | |
| 9·5 | | 30·4 | 18·1 | |
| 9·8 | | 36·9 | 50·0 | |
| 9·6 | | 42·9 | 40·9 | |
| 9·6 | | 47·4 | 1·1 | |
| 10·1 | | 49·4 | 33·8 | |
| 10·1 | | 55·4 | 50·8 | |
| 10·1 | 52 | 0·9 | 15·1 | |
| 10·0 | | 4·9 | 9·1 | |
| 10·1 | | 5·9 | 54·9 | |
| 10·0 | | 10·5 | 15·3 | |
| 9·6 | | 15·0 | 51·6 | |
| 10·1 | | 15·0 | 52·5 | |
| 9·8 | | 15·5 | 9·2 | |
| 10·1 | | 21·5 | 39·5 | |
| 10·0 | | 23·5 | 56·5 | |
| 9·1 | | 33·0 | 24·3 | |
| 9·6 | | 38·0 | 26·2 | |
| 9·4 | | 41·5 | 27·9 | |
| 10·1 | | 52·0 | 20·7 | |
| 9·8 | | 56·5 | 11·0 | |
| 10·0 | 53 | 0·5 | 31·2 | |
| 10·0 | | 5·0 | 29·9 | |
| 9·5 | | 13·5 | 41·1 | |
| 10·1 | | 14·0 | 21·4 | |
| 10·1 | | 19·5 | 25·6 | |
| 10·1 | | 19·5 | 42·2 | |
| 9·0 | | 21·0 | 22·6 | 8·7 |
| 9·6 | | 34·0 | 51·1 | |
| 9·5 | | 34·5 | 12·1 | |
| 10·1 | | 38·5 | 38·1 | |
| 10·0 | | 46·0 | 59·5 | |
| 6·6 | | 47·0 | 31·6 | 6·1 GScr |
| 9·8 | 54 | 4·0 | 53·0 | |
| 10·0 | | 4·5 | 28·0 | |
| 10·1 | | 18·5 | 37·6 | |
| 10·0 | | 29·5 | 3·1 | |
| 10·1 | | 31·5 | 26·3 | |
| 10·1 | | 36·5 | 6·8 | |
| 8·6 | | 41·0 | 53·9 | 8·2 |
| 9·8 | | 43·0 | 43·7 | |
| 10·1 | | 44·1 | 1·2 | |
| 9·4 | | 50·0 | 0·4 | |
| 10·1 | | 50·8 | 12·1 | |
| 9·4 | | 54·8 | 16·1 | 9·5 |
| 10·1 | | 57·8 | 26·6 | |
| 10·1 | 55 | 2·3 | 44·4 | |
| 8·4 | | 9·8 | 47·4 | 9·0 |

## 8281—8340.

| mag. | 16h.–17h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 55 | 11·3 | 39·8 | |
| 9·3 | | 22·3 | 50·1 | |
| 9·1 | | 22·8 | 55·1 | 9·5 |
| 9·8 | | 40·8 | 37·1 | |
| 10·1 | | 41·3 | 19·3 | |
| 9·6 | | 43·3 | 5·1 | |
| 10·1 | | 44·8 | 18·6 | |
| 10·1 | | 49·8 | 27·3 | |
| 9·6 | | 53·8 | 15·4 | |
| 9·5 | | 54·8 | 32·1 | |
| 10·1 | 56 | 1·8 | 31·0 | |
| 9·0 | | 4·8 | 41·3 | 9·0 |
| 10·1 | | 7·8 | 5·1 | |
| 10·1 | | 13·8 | 21·5 | |
| 9·6 | | 14·8 | 6·5 | |
| 9·6 | | 16·3 | 35·0 | |
| 10·0 | | 21·8 | 22·7 | |
| 10·1 | | 23·7 | 15·8 | |
| 9·6 | | 30·8 | 50·3 | |
| 9·2 | | 36·8 | 14·9 | |
| 9·3 | | 48·8 | 5·7 | |
| 9·8 | | 52·8 | 48·0 | |
| 9·6 | 57 | 7·3 | 18·4 | |
| 10·1 | | 13·3 | 37·0 | |
| 9·4 | | 14·8 | 29·5 | |
| 9·5 | | 16·3 | 23·2 | |
| 9·5 | | 16·8 | 6·9 | |
| 10·1 | | 26·8 | 42·1 | |
| 10·1 | | 33·3 | 15·5 | |
| 10·1 | | 38·3 | 29·0 | |
| 10·1 | | 43·3 | 48·9 | |
| 10·0 | | 50·3 | 32·5 | |
| 9·4 | | 50·8 | 19·1 | |
| 10·0 | 58 | 6·3 | 47·5 | |
| 9·3 | | 7·3 | 16·9 | 9·5 |
| 9·8 | | 13·8 | 4·1 | |
| 9·8 | | 15·8 | 38·0 | |
| 9·3 | | 23·3 | 19·3 | |
| 10·0 | | 28·3 | 44·1 | |
| 9·6 | | 30·8 | 3·5 | |
| 9·6 | | 31·8 | 29·9 | |
| 10·0 | | 32·8 | 29·1 | |
| 10·1 | | 39·3 | 27·9 | |
| 10·0 | | 42·3 | 22·3 | |
| 10·1 | | 52·6 | 16·1 | |
| 9·8 | 59 | 1·3 | 47·9 | |
| 10·1 | | 3·3 | 8·7 | |
| 9·8 | | 6·8 | 54·0 | |
| 10·1 | | 13·3 | 19·5 | |
| 9·6 | | 19·8 | 48·5 | |
| 9·6 | | 33·3 | 42·3 | |
| 10·0 | | 33·8 | 7·7 | |
| 10·0 | | 34·8 | 21·0 | |
| 10·0 | | 38·8 | 18·5 | |
| 10·1 | | 39·6 | 49·4 | |
| 8·4 | | 45·8 | 50·3 | 8·5 |
| 10·1 | | 46·8 | 5·0 | |
| 10·1 | | 49·8 | 40·6 | |
| 9·6 | | 53·3 | 42·1 | |
| 10·1 | 0 | 3·3 | 43·9 | |

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| 16 | 30 | 125 | 3·2 |
| | 40 | 126 | 2·9 |
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| 25 prec. | α + | δ − |
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| h m | s | ′ |
| 17 0 | 127 | 2·2 |
| 10 | 128 | 1·8 |
| 20 | 128 | 1·5 |

**8341—8400.**

| mag. | 17ʰ m | s | −57° ′ | |
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| 9·8 | 0 | 7·3 | 26·0 | |
| 8·5 | | 9·3 | 0·0 | 9·0 |
| 10·0 | | 14·8 | 31·0 | |
| 10·1 | | 15·8 | 18·2 | |
| 10·0 | | 18·9 | 11·7 | |
| 10·1 | | 23·9 | 35·2 | |
| 7·5 | | 25·9 | 51·7 | 7·0 GScr |
| 8·4 | | 39·9 | 47·5 | 8·8 |
| 10·1 | | 41·9 | 12·2 | |
| 10·1 | | 49·4 | 10·6 | |
| 10·1 | | 56·4 | 3·7 | |
| 9·8 | 1 | 1·9 | 12·0 | |
| 10·1 | | 6·9 | 36·0 | |
| 10·1 | | 16·4 | 2·3 | |
| 10·1 | | 23·4 | 43·8 | |
| 9·0 | | 23·9 | 47·7 | |
| 9·8 | | 26·4 | 13·9 | |
| 9·4 | | 40·9 | 33·0 | |
| 9·8 | | 53·4 | 49·7 | |
| 10·1 | | 54·9 | 56·1 | |
| 9·8 | | 54·9 | 44·8 | |
| 10·1 | | 59·9 | 55·1 | |
| 9·6 | 2 | 15·9 | 6·9 | |
| 9·6 | | 22·9 | 34·5 | |
| 10·0 | | 23·9 | 33·1 | |
| 10·1 | | 27·4 | 48·9 | |
| 9·8 | | 29·9 | 47·3 | |
| 10·0 | | 32·4 | 16·5 | |
| 10·1 | | 57·4 | 41·1 | |
| 10·1 | | 59·9 | 3·9 | |
| 10·1 | 3 | 5·9 | 51·1 | |
| 9·8 | | 6·9 | 51·5 | |
| 9·6 | | 23·9 | 26·5 | |
| 9·1 | | 30·4 | 7·1 | |
| 9·6 | | 32·9 | 39·8 | |
| 10·1 | | 38·9 | 36·6 | |
| 10·1 | | 40·4 | 2·4 | |
| 10·1 | | 41·4 | 4·2 | |
| 10·1 | | 45·4 | 31·4 | |
| 10·1 | | 53·4 | 28·1 | |
| 10·0 | | 55·9 | 47·5 | |
| 10·1 | 4 | 0·4 | 36·8 | |
| 10·1 | | 4·9 | 39·5 | |
| 9·8 | | 11·9 | 52·1 | |
| 10·0 | | 13·4 | 29·4 | |
| 10·0 | | 23·4 | 51·5 | |
| 9·6 | | 25·4 | 24·9 | |
| 9·6 | | 28·9 | 24·5 | |
| 10·0 | | 30·9 | 33·2 | |
| 9·5 | | 31·9 | 42·8 | |
| 7·6 | | 32·4 | 39·9 | 7·8 G |
| 9·6 | | 45·4 | 52·8 | |
| 10·1 | 5 | 5·4 | 4·2 | |
| 9·0 | | 9·9 | 21·6 | |
| 10·1 | | 32·9 | 15·9 | |
| 10·0 | | 34·9 | 34·2 | |
| 9·6 | | 52·4 | 48·6 | |
| 9·5 | | 55·9 | 8·1 | |
| 9·4 | 6 | 3·4 | 53·2 | |
| 9·6 | | 11·5 | 57·4 | |

**8401—8460.**

| mag. | 17ʰ m | s | −57° ′ | |
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| 9·3 | | 23·9 | 14·9 | |
| 9·6 | | 27·4 | 53·8 | |
| 8·8 | | 35·4 | 17·5 | |
| 9·8 | | 42·9 | 18·5 | |
| 10·0 | | 43·4 | 55·2 | |
| 10·1 | | 45·4 | 15·6 | |
| 10·1 | | 48·9 | 47·8 | |
| 10·1 | | 53·4 | 41·4 | |
| 10·1 | | 58·4 | 31·9 | |
| 9·6 | 7 | 16·0 | 15·1 | |
| 9·6 | | 22·0 | 44·5 | |
| 10·1 | | 24·5 | 36·2 | |
| 10·0 | | 30·0 | 56·4 | |
| 10·1 | | 34·6 | 37·6 | |
| 10·0 | | 40·0 | 6·3 | |
| 9·6 | | 47·5 | 54·3 | |
| 10·0 | | 49·5 | 45·5 | |
| 10·0 | | 55·0 | 15·5 | |
| 10·1 | | 58·0 | 52·3 | |
| 10·1 | 8 | 3·5 | 38·0 | |
| 10·0 | | 5·0 | 14·2 | |
| 8·0 | | 5·5 | 17·9 | 8·3 G |
| 8·6 | | 7·5 | 25·6 | 9·2 |
| 10·0 | | 9·5 | 8·3 | |
| 9·0 | | 11·5 | 30·1 | |
| 9·8 | | 13·5 | 26·4 | |
| 9·1 | | 16·0 | 25·3 | 9·2 |
| 9·6 | | 21·0 | 28·0 | |
| 10·1 | | 24·5 | 42·7 | |
| 9·8 | | 28·5 | 52·4 | |
| 10·1 | | 31·6 | 34·1 | |
| 9·8 | | 41·0 | 28·6 | 9·5 |
| 9·8 | | 51·0 | 56·8 | |
| 10·1 | | 53·6 | 49·5 | |
| 9·8 | | 54·0 | 18·5 | |
| 9·6 | | 55·5 | 9·0 | |
| 10·0 | 9 | 6·5 | 48·8 | |
| 9·6 | | 10·0 | 43·0 | |
| 10·0 | | 25·5 | 19·9 | |
| 8·6 | | 33·5 | 57·4 | 8·8 |
| 9·6 | | 35·0 | 50·3 | |
| 9·6 | | 38·1 | 57·3 | |
| 8·1 | | 43·0 | 22·3 | 8·0 |
| 9·6 | | 47·5 | 42·4 | |
| 8·4 | | 49·0 | 6·9 | 7·5 G |
| 10·1 | | 52·0 | 32·0 | |
| 10·1 | | 53·5 | 14·0 | |
| 9·6 | | 55·0 | 4·2 | |
| 9·8 | 10 | 3·5 | 22·2 | |
| 9·4 | | 3·5 | 15·2 | |
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| 9·8 | | 9·0 | 19·4 | |
| 9·4 | | 10·0 | 15·2 | |
| 9·8 | | 13·5 | 36·2 | |
| 10·1 | | 17·0 | 45·5 | |
| 9·8 | | 17·0 | 23·5 | |
| 10·1 | | 19·0 | 46·2 | |
| 9·1 | | 31·5 | 45·1 | |
| 9·8 | | 41·5 | 35·9 | |

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| 10·1 | | 57·0 | 47·3 | |
| 10·1 | 11 | 3·5 | 59·1 | |
| 9·6 | | 20·0 | 54·9 | |
| 9·5 | | 21·0 | 52·7 | |
| 10·0 | | 21·0 | 33·4 | |
| 10·1 | | 25·0 | 34·1 | |
| 9·8 | | 29·0 | 39·5 | |
| 10·1 | | 29·5 | 34·3 | |
| 10·1 | | 31·0 | 22·8 | |
| 10·1 | | 31·4 | 1·5 | |
| 9·5 | | 31·5 | 15·8 | |
| 10·0 | | 43·0 | 56·0 | |
| 10·1 | | 44·0 | 33·7 | |
| 10·1 | 12 | 0·5 | 18·7 | |
| 10·0 | | 3·5 | 5·1 | |
| 9·5 | | 5·5 | 41·6 | |
| 7·2 | | 9·0 | 52·9 | 6·5 GSct |
| 8·2 | | 10·5 | 45·1 | 8·5 |
| 9·5 | | 13·5 | 5·4 | |
| 10·0 | | 13·5 | 37·5 | |
| 10·0 | | 15·0 | 48·2 | |
| 10·1 | | 17·0 | 22·1 | |
| 9·8 | | 21·5 | 39·5 | |
| 8·1 | | 23·2 | 59·8 | 9·0 |
| 10·1 | | 26·0 | 15·3 | |
| 9·6 | | 33·5 | 36·2 | |
| 10·1 | | 35·0 | 33·9 | |
| 8·6 | | 37·5 | 24·2 | 9·5 |
| 10·1 | | 40·0 | 51·7 | |
| 9·6 | | 43·5 | 23·9 | |
| 10·0 | | 52·0 | 36·5 | |
| 9·6 | | 52·5 | 26·1 | |
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| 10·1 | | 54·5 | 58·1 | |
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| 10·1 | | 59·5 | 10·2 | |
| 9·6 | 13 | 1·5 | 48·2 | |
| 10·1 | | 17·0 | 36·8 | |
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| 10·1 | | 28·0 | 51·5 | |
| 10·1 | | 31·0 | 29·1 | |
| 10·0 | | 31·0 | 8·3 | |
| 10·1 | | 44·5 | 58·1 | |
| 9·8 | | 45·5 | 18·1 | |
| 10·1 | | 48·0 | 30·6 | |
| 10·1 | | 53·0 | 18·9 | |
| 10·1 | | 54·0 | 8·3 | |
| 9·3 | | 55·0 | 25·3 | |
| 9·2 | 14 | 4·6 | 1·0 | |
| 9·4 | | 11·0 | 45·1 | |
| 9·9 | | 11·0 | 29·1 | |
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| 9·8 | | 23·0 | 5·2 | |
| 10·0 | | 23·5 | 37·2 | |
| 9·6 | | 27·5 | 39·6 | |
| 10·1 | | 43·0 | 8·9 | |
| 10·0 | | 49·0 | 30·3 | |
| 10·0 | 15 | 10·0 | 50·0 | |

**8521—8580.**

| mag. | 17ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9·4 | 15 | 21·9 | 0·7 | |
| 10·1 | | 35·1 | 41·0 | |
| 10·1 | | 36·8 | 5·7 | |
| 10·1 | | 37·6 | 26·1 | |
| 9·5 | | 42·6 | 16·1 | |
| 9·6 | | 44·2 | 1·6 | |
| 9·3 | | 50·1 | 19·7 | |
| 10·0 | | 58·6 | 51·5 | |
| 10·0 | 16 | 1·6 | 27·1 | |
| 8·8 | | 3·1 | 3·9 | |
| 10·0 | | 8·8 | 24·3 | |
| 10·0 | | 13·6 | 29·9 | |
| 9·6 | | 19·8 | 31·9 | |
| 10·0 | | 23·1 | 29·9 | |
| 10·1 | | 25·1 | 30·9 | |
| 10·0 | | 28·6 | 50·7 | |
| 10·0 | | 31·6 | 37·0 | |
| 10·1 | | 34·8 | 30·9 | |
| 10·1 | | 37·1 | 59·7 | |
| 9·8 | | 40·1 | 32·0 | |
| 10·0 | | 45·1 | 53·2 | |
| 10·1 | | 47·6 | 39·7 | |
| 10·1 | | 54·6 | 55·7 | |
| 10·0 | | 56·6 | 54·6 | |
| 10·1 | 17 | 2·1 | 39·8 | |
| 8·0 | | 7·9 | 57·3 | |
| 10·1 | | 11·1 | 30·6 | |
| 8·8 | | 12·0 | 57·7 | |
| 10·1 | | 18·1 | 20·7 | |
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| 10·1 | | 21·8 | 32·1 | |
| 10·1 | | 25·1 | 43·8 | |
| 10·1 | | 30·8 | 0·3 | |
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| 9·3 | | 34·6 | 40·1 | |
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| 10·0 | | 51·1 | 37·9 | |
| 10·1 | | 59·1 | 45·4 | |
| 10·1 | 18 | 5·1 | 33·8 | |
| 8·6 | | 5·1 | 51·1 | 8·2 |
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| 9·5 | | 21·6 | 8·3 | |
| 10·0 | | 23·1 | 30·0 | |
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| 10·1 | | 34·1 | 42·6 | |
| 8·2 | | 35·1 | 18·1 | 8·0 |
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| 9·6 | 19 | 1·6 | 38·4 | 9·5 |
| 10·1 | | 2·1 | 57·4 | |
| 10·1 | | 5·6 | 52·6 | |
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| 9·6 | | 41·1 | 42·2 | |
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## 8581—8640.

| mag. | 17h. m s | −57° ′ | |
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| 9·2 | 19 45·7 | 3·7 | |
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| 8·4 | 20 3·1 | 23·3 | 9·0 |
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| 10·1 | 14·9 | 43·9 | |
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| 9·5 | 32·4 | 28·4 | |
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| 9·0 | 25 4·4 | 3·3 | |
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| 10·1 | 35·9 | 59·3 | |
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| 10·0 | 50·4 | 44·3 | |

## 8641—8700.

| mag. | 17h. m s | −57° ′ | |
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| 9·8 | 26 51·4 | 37·4 | |
| 9·8 | 27 1·4 | 9·8 | |
| 10·0 | 2·4 | 31·8 | |
| 10·1 | 30·4 | 6·6 | |
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| 9·8 | 57·9 | 39·7 | |
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| 9·0 | 17·9 | 30·7 | |
| 9·6 | 28·9 | 30·7 | |
| 9·6 | 30·4 | 15·3 | |
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| 10·0 | 55·7 | 59·5 | |
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| 10·1 | 29 0·4 | 44·4 | |
| 10·0 | 0·9 | 50·8 | |
| 10·0 | 2·9 | 0·9 | |
| 10·0 | 4·9 | 6·2 | |
| 9·4 | 16·9 | 42·6 | |
| 9·8 | 18·4 | 2·4 | |
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| 9·6 | 14·4 | 47·8 | |
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| 10·1 | 31 2·4 | 55·0 | |
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| 8·8 | 32 8·9 | 53·9 | 8·5 G |
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| 10·0 | 18·9 | 17·8 | |
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| 9·8 | 15·9 | 17·4 | |
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| 9·4 | 26·4 | 46·2 | |
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| 10·1 | 38·9 | 34·9 | |
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| 10·0 | 45·9 | 56·3 | |
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| 9·8 | 53·9 | 25·8 | |

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| mag. | 17h. m s | −57° ′ | |
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| 10·1 | 33 56·4 | 40·3 | |
| 10·1 | 34 4·4 | 4·9 | |
| 7·4 | 10·4 | 28·9 | 6·5 GScr |
| 9·8 | 24·4 | 47·7 | |
| 9·8 | 28·4 | 50·4 | |
| 10·0 | 34·4 | 22·0 | |
| 9·6 | 36·9 | 14·8 | |
| 9·0 | 47·4 | 56·5 | |
| 10·1 | 35 6·4 | 24·6 | |
| 8·8 | 8·9 | 45·8 | |
| 10·0 | 26·9 | 19·0 | |
| 10·1 | 28·4 | 12·5 | |
| 9·8 | 36·9 | 49·4 | |
| 9·2 | 39·9 | 19·6 | |
| 9·5 | 39·9 | 48·4 | |
| 9·4 | 45·9 | 15·9 | 9·5 |
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| 9·8 | 36 0·9 | 23·4 | |
| 9·8 | 4·9 | 38·6 | |
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| 8·6 | 52·9 | 21·0 | 8·0 G |
| 9·4 | 56·4 | 49·5 | G |
| 7·8 | 56·9 | 23·7 | 7·7 G |
| 9·8 | 59·3 | 58·7 | |
| 9·2 | 37 5·4 | 12·1 | |
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| 10·0 | 57·9 | 55·5 | |
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| 9·4 | 38 3·9 | 26·0 | |
| 9·2 | 12·9 | 40·8 | 8·2 G |
| 10·0 | 15·9 | 11·6 | |
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| 10·1 | 50·4 | 3·5 | |
| 10·0 | 56·4 | 18·8 | |
| 10·1 | 39 2·4 | 6·0 | |
| 9·8 | 6·4 | 31·9 | |
| 9·5 | 9·9 | 4·9 | |
| 10·1 | 18·4 | 19·3 | |
| 10·1 | 27·4 | 14·3 | |
| 10·1 | 31·9 | 6·7 | |
| 9·8 | 43·4 | 50·1 | |
| 10·1 | 44·9 | 44·8 | |

## 8761—8820.

| mag. | 17h. m s | −57° ′ | |
|---|---|---|---|
| 10·1 | 39 54·9 | 38·8 | |
| 10·1 | 40 26·4 | 56·3 | |
| 9·4 | 31·4 | 30·2 | |
| 9·5 | 46·4 | 29·1 | |
| 9·8 | 49·4 | 50·8 | |
| 10·0 | 41 2·9 | 37·5 | |
| 10·1 | 21·4 | 43·3 | |
| 10·1 | 39·4 | 34·0 | |
| 10·0 | 46·4 | 56·0 | |
| 10·1 | 49·9 | 17·2 | |
| 9·8 | 42 20·4 | 36·2 | |
| 10·0 | 21·4 | 7·2 | |
| 10·0 | 22·4 | 26·5 | |
| 10·0 | 24·9 | 27·3 | |
| 8·5 | 40·4 | 55·2 | |
| 9·6 | 41·4 | 49·6 | |
| 9·0 | 57·7 | 57·3 | |
| 10·1 | 43 13·4 | 29·6 | |
| 9·8 | 36·4 | 16·6 | |
| 9·2 | 51·9 | 54·2 | |
| 10·0 | 55·6 | 1·2 | |
| 9·8 | 44 2·4 | 49·5 | |
| 10·1 | 6·9 | 18·9 | |
| 10·0 | 12·4 | 22·6 | |
| 9·6 | 16·4 | 7·2 | |
| 9·6 | 22·1 | 1·2 | |
| 10·1 | 29·9 | 7·6 | |
| 10·0 | 38·9 | 20·9 | |
| 10·1 | 44·9 | 20·0 | |
| 9·8 | 45 5·9 | 33·3 | |
| 10·1 | 6·4 | 40·6 | |
| 8·0 | 23·4 | 24·1 | 8·8 |
| 10·1 | 45·4 | 49·0 | |
| 10·0 | 47·4 | 16·3 | |
| 9·4 | 55·9 | 15·8 | |
| 10·0 | 57·9 | 41·8 | |
| 10·1 | 46 0·4 | 22·8 | |
| 10·0 | 4·9 | 9·8 | |
| 10·0 | 10·9 | 44·0 | |
| 9·2 | 22·9 | 28·8 | |
| 10·1 | 31·4 | 22·9 | |
| 10·1 | 38·9 | 14·0 | |
| 8·0 | 42·9 | 38·1 | |
| 10·1 | 50·9 | 0·2 | |
| 10·0 | 59·9 | 40·8 | |
| 10·1 | 47 6·4 | 56·9 | |
| 10·1 | 16·4 | 58·6 | |
| 10·1 | 18·9 | 55·5 | |
| 8·8 | 37·9 | 46·3 | 9·0 |
| 9·4 | 39·9 | 26·9 | |
| 9·6 | 49·4 | 40·5 | |
| 9·4 | 55·7 | 1·5 | 9·5 |
| 9·0 | 58·4 | 6·0 | |
| 9·2 | 48 0·9 | 47·2 | |
| 9·8 | 4·9 | 31·2 | |
| 9·4 | 10·4 | 41·5 | |
| 9·6 | 12·4 | 25·8 | |
| 9·8 | 25·7 | 0·9 | |
| 9·5 | 28·9 | 45·6 | |
| 10·0 | 32·0 | 33·1 | |

25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 17 10 | 128 | 1·8 |
| 20 | 128 | 1·5 |
| 30 | 129 | 1·1 |
| 40 | 129 | 0·7 |
| 50 | 129 | 0·4 |



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25 prec.

| h | m | α + s | δ ′ |
|---|---|---|---|
| 17 | 40 | 129 | −0.7 |
| | 50 | 129 | −0.4 |
| 18 | 0 | 129 | 0.0 |
| | 10 | 129 | +0.4 |
| | 20 | 129 | +0.7 |

## 8821—8880.

| mag. | 17ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9.6 | 48 | 32.0 | 54.6 | |
| 9.4 | | 37.5 | 49.7 | |
| 10.1 | | 40.5 | 6.3 | |
| 10.1 | | 49.0 | 10.8 | |
| 9.6 | | 55.5 | 38.1 | |
| 10.1 | 49 | 6.5 | 56.3 | |
| 9.2 | | 11.0 | 4.4 | 9.5 |
| 9.8 | | 16.0 | 56.2 | |
| 9.4 | | 22.0 | 24.2 | |
| 9.5 | | 30.0 | 34.1 | |
| 9.8 | | 35.0 | 0.9 | |
| 10.1 | | 47.0 | 33.1 | |
| 10.0 | | 57.0 | 58.9 | |
| 9.8 | 50 | 15.0 | 22.3 | |
| 9.8 | | 15.0 | 5.8 | |
| 9.8 | | 19.0 | 43.3 | |
| 10.1 | | 19.0 | 30.0 | |
| 9.8 | | 23.5 | 18.5 | |
| 8.8 | | 35.5 | 15.7 | 9.0 |
| 10.0 | | 46.0 | 27.5 | |
| 10.1 | 51 | 18.4 | 43.1 | |
| 9.8 | | 29.9 | 2.8 | |
| 9.4 | | 55.2 | 43.3 | |
| 9.8 | | 55.4 | 35.8 | |
| 9.3 | | 57.9 | 14.0 | 9.5 |
| 9.8 | 52 | 6.7 | 1.1 | |
| 9.8 | | 6.9 | 6.7 | |
| 9.8 | | 6.9 | 19.6 | |
| 8.4 | | 22.4 | 19.3 | 9.0 |
| 9.4 | | 22.4 | 35.0 | |
| 9.8 | | 23.9 | 29.8 | |
| 9.4 | | 28.7 | 4.0 | |
| 9.2 | | 41.7 | 57.5 | |
| 9.8 | | 43.9 | 32.3 | |
| 9.0 | | 46.4 | 45.8 | |
| 9.0 | | 49.9 | 52.2 | 9.0 |
| 9.3 | | 57.4 | 19.8 | |
| 9.5 | | 58.9 | 7.7 | |
| 9.3 | 53 | 13.9 | 5.0 | |
| 9.7 | | 14.9 | 48.9 | |
| 9.3 | | 20.9 | 6.4 | |
| 9.4 | | 30.9 | 8.9 | |
| 9.8 | | 31.4 | 15.0 | |
| 9.4 | | 31.4 | 15.5 | |
| 9.5 | | 47.4 | 53.1 | |
| 9.4 | | 48.4 | 45.3 | |
| 9.7 | | 52.4 | 27.9 | |
| 9.8 | | 55.4 | 30.4 | |
| 9.3 | 54 | 23.9 | 18.0 | |
| 9.3 | | 24.9 | 41.4 | |
| 9.3 | | 38.9 | 13.9 | |
| 9.7 | | 52.4 | 25.1 | |
| 9.8 | 55 | 9.9 | 8.1 | |
| 9.8 | | 36.4 | 3.7 | |
| 9.8 | | 36.9 | 39.3 | |
| 9.5 | | 45.1 | 47.6 | |
| 9.8 | | 49.1 | 25.3 | |
| 9.7 | 56 | 10.7 | 0.1 | |
| 9.7 | | 19.6 | 49.3 | |
| 9.6 | | 23.6 | 6.9 | |

## 8881—8940.

| mag. | 17ʰ–18ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9.5 | 56 | 24.1 | 3.7 | |
| 9.3 | | 28.1 | 33.8 | |
| 9.7 | | 30.1 | 25.0 | |
| 9.3 | | 35.1 | 20.4 | |
| 9.7 | | 35.6 | 48.7 | |
| 9.3 | 57 | 40.1 | 51.0 | |
| 9.8 | | 45.1 | 31.8 | |
| 9.5 | 58 | 11.6 | 44.6 | |
| 9.6 | | 13.6 | 14.0 | |
| 9.3 | | 18.6 | 35.6 | 9.0 |
| 8.5 | | 24.1 | 47.8 | 8.0 |
| 9.4 | | 25.1 | 51.4 | |
| 9.8 | | 32.1 | 33.7 | |
| 9.4 | | 57.1 | 22.1 | |
| 9.3 | 59 | 2.6 | 6.0 | |
| 9.8 | | 7.1 | 47.6 | |
| 9.5 | | 12.1 | 20.6 | |
| 9.5 | | 18.6 | 13.8 | |
| 9.8 | | 20.1 | 54.9 | |
| 9.8 | | 22.6 | 25.6 | |
| 9.8 | | 23.1 | 45.0 | |
| 9.8 | | 26.1 | 51.4 | |
| 9.3 | | 35.1 | 36.4 | |
| 9.8 | | 46.1 | 24.9 | |
| 9.8 | | 48.6 | 40.9 | |
| 9.6 | | 50.6 | 34.2 | |
| 9.8 | | 54.1 | 33.1 | |
| 9.5 | | 54.6 | 16.0 | |
| 9.6 | | 55.1 | 16.7 | |
| 9.8 | 0 | 4.3 | 9.5 | |
| 9.8 | | 12.3 | 22.0 | |
| 9.8 | | 15.1 | 42.4 | |
| 9.6 | | 29.8 | 15.8 | |
| 9.5 | | 37.3 | 54.8 | |
| 9.8 | | 43.3 | 6.2 | |
| 9.8 | | 49.8 | 20.3 | |
| 9.6 | 1 | 1.3 | 13.4 | |
| 9.6 | | 5.8 | 27.7 | |
| 9.5 | | 7.3 | 37.2 | |
| 9.8 | | 10.3 | 32.0 | |
| 9.0 | | 10.8 | 53.9 | |
| 9.6 | | 18.3 | 23.1 | |
| 9.7 | | 32.3 | 57.2 | |
| 9.8 | | 40.3 | 30.4 | |
| 9.3 | | 43.3 | 24.3 | |
| 9.8 | 2 | 0.3 | 4.2 | |
| 9.5 | | 4.8 | 48.5 | |
| 9.1 | | 5.3 | 6.0 | |
| 9.7 | | 10.3 | 3.8 | |
| 9.8 | | 12.1 | 56.9 | |
| 9.0 | | 19.3 | 55.1 | 9.5 |
| 9.8 | | 26.3 | 30.2 | |
| 9.8 | | 27.3 | 14.9 | |
| 9.4 | 3 | 37.3 | 45.7 | |
| 9.8 | | 42.8 | 42.7 | |
| 9.4 | | 57.8 | 37.0 | |
| 9.6 | | 59.3 | 36.8 | |
| 9.3 | 4 | 0.3 | 9.1 | |
| 9.0 | | 3.0 | 0.7 | |
| 8.0 | | 17.8 | 52.8 | 7.5 GSg |

## 8941—9000.

| mag. | 18ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9.6 | 4 | 18.3 | 42.0 | |
| 9.3 | | 27.8 | 51.9 | G |
| 9.5 | | 35.3 | 6.2 | |
| 8.8 | 5 | 7.1 | 26.6 | 9.2 |
| 9.2 | | 14.6 | 42.9 | |
| 9.8 | | 14.6 | 15.8 | |
| 9.8 | | 23.1 | 28.1 | |
| 9.7 | | 32.6 | 27.9 | |
| 9.8 | | 33.1 | 31.9 | |
| 9.8 | | 35.6 | 28.7 | |
| 9.8 | | 35.6 | 7.5 | |
| 7.5 | | 42.1 | 28.7 | 7.1 GS |
| 9.3 | | 45.6 | 46.8 | |
| 9.8 | | 47.9 | 34.6 | |
| 9.8 | 6 | 14.1 | 48.6 | |
| 9.8 | | 30.1 | 45.3 | |
| 9.7 | | 42.1 | 15.9 | |
| 9.8 | 7 | 25.6 | 13.5 | |
| 9.7 | | 36.1 | 11.9 | |
| 9.8 | | 46.1 | 9.0 | |
| 9.4 | 8 | 1.6 | 21.3 | |
| 9.6 | | 8.6 | 27.9 | |
| 9.6 | | 11.6 | 13.8 | |
| 9.7 | | 16.6 | 3.0 | |
| 9.5 | | 21.1 | 22.4 | |
| 9.5 | | 24.1 | 58.4 | |
| 9.8 | | 28.6 | 39.4 | |
| 9.8 | | 35.6 | 12.0 | |
| 8.9 | | 36.6 | 55.6 | 9.0 |
| 9.7 | | 41.6 | 21.8 | |
| 9.7 | | 46.6 | 20.2 | |
| 9.4 | | 59.6 | 44.9 | |
| 9.7 | 9 | 3.1 | 29.8 | |
| 9.4 | | 14.1 | 26.8 | |
| 9.8 | | 15.6 | 13.6 | |
| 9.6 | | 19.6 | 56.1 | |
| 9.8 | | 31.6 | 22.0 | |
| 9.7 | | 43.1 | 52.1 | |
| 9.4 | | 51.6 | 25.6 | |
| 9.8 | | 51.6 | 1.8 | |
| 9.8 | | 52.1 | 57.5 | |
| 9.7 | 10 | 12.0 | 52.6 | |
| 9.8 | | 15.0 | 29.8 | |
| 9.4 | | 32.5 | 55.6 | |
| 9.6 | | 33.5 | 39.0 | |
| 9.8 | | 37.5 | 34.7 | |
| 9.8 | | 38.4 | 33.9 | |
| 9.6 | | 38.5 | 35.9 | |
| 9.8 | | 43.4 | 8.0 | |
| 9.8 | | 53.5 | 22.6 | |
| 8.0 | | 56.5 | 2.1 | GS |
| 9.7 | 11 | 8.0 | 57.2 | |
| 9.6 | | 14.5 | 3.9 | |
| 9.7 | | 33.5 | 7.1 | |
| 8.5 | | 36.0 | 24.0 | 8.5 |
| 9.8 | | 36.5 | 44.4 | |
| 9.7 | | 37.5 | 6.0 | |
| 8.9 | | 39.5 | 32.8 | 8.5 |
| 9.8 | | 43.5 | 30.7 | |
| 9.5 | | 48.5 | 16.0 | |

## 9001—9060.

| mag. | 18ʰ m | s | −57° ′ | |
|---|---|---|---|---|
| 9.6 | 11 | 52.0 | 46.6 | |
| 9.8 | 12 | 10.0 | 35.2 | |
| 9.6 | | 11.0 | 4.6 | |
| 9.7 | | 24.0 | 44.0 | |
| 9.7 | | 24.5 | 53.7 | |
| 9.8 | | 30.0 | 45.6 | |
| 9.8 | | 43.5 | 14.8 | |
| 9.8 | | 46.4 | 7.9 | |
| 9.3 | | 50.5 | 12.6 | |
| 9.6 | 13 | 2.0 | 40.1 | |
| 9.7 | | 17.5 | 32.2 | |
| 9.3 | | 22.0 | 37.4 | |
| 9.8 | | 23.5 | 12.2 | |
| 9.6 | | 27.0 | 55.0 | |
| 9.5 | | 29.5 | 25.8 | |
| 9.8 | | 48.5 | 56.9 | |
| 9.4 | 14 | 1.5 | 38.5 | |
| 9.8 | | 2.0 | 5.8 | |
| 8.5 | | 19.5 | 25.0 | 8.5 |
| 9.8 | | 30.5 | 30.2 | |
| 9.8 | | 32.0 | 8.1 | |
| 7.4 | | 34.0 | 9.3 | 7.0 GSgt |
| 9.7 | 15 | 0.0 | 42.8 | |
| 9.8 | | 4.6 | 48.7 | |
| 9.8 | | 9.6 | 26.7 | |
| 9.6 | | 31.1 | 51.2 | |
| 9.5 | | 32.7 | 0.7 | |
| 9.2 | | 33.6 | 5.4 | |
| 9.7 | | 37.6 | 35.7 | |
| 9.8 | | 40.1 | 39.8 | |
| 9.6 | | 41.1 | 18.7 | |
| 9.8 | | 48.6 | 14.7 | |
| 9.7 | | 49.6 | 48.2 | |
| 9.8 | | 55.1 | 12.6 | |
| 9.8 | 16 | 6.1 | 49.3 | |
| 9.6 | | 7.2 | 27.9 | |
| 9.4 | | 10.1 | 1.4 | |
| 9.6 | | 22.1 | 24.9 | |
| 9.7 | | 28.1 | 10.1 | |
| 9.8 | | 31.1 | 51.5 | |
| 8.4 | | 46.1 | 5.8 | 8.5 |
| 9.8 | | 52.6 | 13.9 | |
| 9.3 | | 53.6 | 47.8 | |
| 9.0 | 17 | 0.1 | 38.0 | |
| 9.8 | | 2.1 | 40.0 | |
| 9.3 | | 7.6 | 6.4 | |
| 9.8 | | 10.1 | 50.0 | |
| 9.4 | | 22.6 | 40.4 | |
| 9.6 | | 32.1 | 26.8 | |
| 9.7 | | 39.6 | 56.4 | |
| 9.8 | | 46.1 | 49.0 | |
| 9.8 | 18 | 3.6 | 42.8 | |
| 9.0 | | 4.6 | 8.0 | |
| 8.4 | | 11.1 | 12.8 | G |
| 9.1 | | 17.6 | 25.2 | |
| 9.6 | | 19.6 | 50.6 | |
| 9.8 | | 37.6 | 5.9 | |
| 9.6 | | 48.1 | 21.5 | |
| 9.8 | | 49.6 | 16.8 | |
| 9.7 | | 52.2 | 53.6 | |



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## 9061—9120.

| mag. | 18h m | s | −57° ′ | |
|---|---|---|---|---|
| 8·4 | 18 | 53·6 | 35·7 | 8·8 |
| 9·7 | 19 | 6·1 | 51·5 | |
| 7·2 | | 11·1 | 35·7 | 6·0 GSt |
| 9·6 | | 27·1 | 59·3 | |
| 9·3 | | 35·1 | 13·5 | |
| 9·4 | | 41·2 | 32·5 | |
| 9·4 | | 45·2 | 34·1 | |
| 9·8 | | 58·2 | 5·9 | |
| 9·8 | 20 | 19·2 | 20·0 | |
| 9·8 | | 23·2 | 18·6 | |
| 9·8 | | 30·2 | 17·5 | |
| 9·3 | | 32·2 | 13·7 | |
| 9·2 | | 39·7 | 6·4 | |
| 7·6 | | 52·7 | 3·8 | 7·5 GS |
| 9·8 | 21 | 7·2 | 36·6 | |
| 9·6 | | 8·7 | 21·0 | |
| 9·8 | | 13·7 | 5·0 | |
| 9·8 | | 28·2 | 51·8 | |
| 9·8 | | 28·7 | 25·7 | |
| 9·8 | | 30·2 | 52·5 | |
| 9·4 | | 36·2 | 34·9 | |
| 9·8 | | 40·2 | 38·4 | |
| 9·8 | | 42·2 | 14·0 | |
| 8·1 | | 46·2 | 34·2 | 8·5 |
| 9·4 | | 57·2 | 26·0 | |
| 9·8 | | 59·7 | 27·2 | |
| 9·6 | 22 | 3·7 | 5·7 | |
| 9·6 | | 7·4 | 57·0 | |
| 9·3 | | 7·7 | 32·8 | |
| 9·8 | | 14·7 | 18·3 | |
| 9·6 | | 20·2 | 19·7 | |
| 9·7 | | 32·7 | 43·2 | |
| 9·4 | | 53·7 | 25·5 | |
| 9·8 | | 56·2 | 50·4 | |
| 9·6 | 23 | 2·2 | 5·3 | |
| 9·8 | | 13·1 | 48·9 | |
| 9·8 | | 20·7 | 26·5 | |
| 9·4 | | 32·2 | 44·9 | |
| 9·6 | | 35·7 | 22·5 | |
| 10·0 | | 44·3 | 31·1 | |
| 10·0 | | 58·8 | 16·1 | |
| 9·5 | 24 | 10·0 | 45·1 | |
| 9·8 | | 26·8 | 37·8 | |
| 9·6 | | 28·8 | 14·5 | |
| 9·2 | | 40·0 | 48·3 | |
| 9·1 | | 41·8 | 2·7 | |
| 9·2 | 25 | 30·3 | 50·3 | |
| 10·0 | | 39·3 | 49·6 | |
| 9·6 | | 46·3 | 56·3 | |
| 9·9 | | 48·8 | 8·3 | |
| 8·6 | | 53·8 | 13·4 | 9·0 |
| 9·2 | 26 | 24·3 | 33·6 | |
| 9·9 | 27 | 28·3 | 43·1 | |
| 9·6 | | 45·4 | 25·6 | |
| 10·0 | | 46·3 | 43·0 | |
| 8·6 | | 51·8 | 32·7 | 8·2 |
| 9·8 | 28 | 3·3 | 31·1 | |
| 9·2 | | 12·8 | 52·8 | |
| 9·4 | | 13·8 | 30·9 | |
| 9·6 | | 23·3 | 24·0 | |

## 9121—9180.

| mag. | 18h m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 28 | 23·4 | 15·1 | |
| 9·9 | | 24·8 | 23·3 | |
| 10·0 | | 30·3 | 9·8 | |
| 10·0 | | 31·8 | 34·9 | |
| 8·7 | | 32·3 | 16·5 | 8·5 |
| 9·0 | | 38·8 | 30·1 | |
| 9·5 | | 51·8 | 51·1 | |
| 9·8 | 29 | 1·3 | 46·1 | |
| 10·0 | | 8·3 | 36·5 | |
| 9·9 | | 20·3 | 28·8 | |
| 10·0 | | 26·3 | 47·9 | |
| 9·4 | | 35·8 | 4·2 | |
| 9·6 | | 53·8 | 44·9 | |
| 10·0 | 30 | 10·3 | 10·3 | |
| 9·6 | | 12·3 | 54·2 | |
| 9·9 | | 17·3 | 40·9 | |
| 9·4 | | 22·8 | 13·9 | |
| 10·0 | | 32·3 | 55·1 | |
| 10·0 | | 32·8 | 33·5 | |
| 9·6 | | 36·8 | 5·9 | |
| 9·8 | | 38·8 | 32·7 | |
| 9·9 | | 43·8 | 14·9 | |
| 9·4 | | 48·3 | 54·3 | |
| 9·8 | | 49·3 | 35·9 | |
| 9·0 | | 50·8 | 34·4 | |
| 9·6 | | 55·4 | 42·4 | |
| 9·4 | | 58·3 | 55·6 | |
| 9·9 | | 59·8 | 20·3 | |
| 10·0 | 31 | 5·3 | 55·9 | |
| 9·9 | | 8·8 | 12·5 | |
| 10·0 | | 16·8 | 4·6 | |
| 9·4 | | 28·8 | 18·7 | |
| 9·5 | | 31·8 | 52·9 | |
| 9·8 | | 32·3 | 5·5 | |
| 9·5 | | 36·3 | 48·5 | |
| 10·0 | | 42·3 | 19·3 | |
| 10·0 | | 43·8 | 27·3 | |
| 10·0 | | 59·8 | 15·5 | |
| 10·0 | 32 | 1·8 | 21·3 | |
| 10·0 | | 3·3 | 8·8 | |
| 9·6 | | 9·3 | 24·8 | |
| 9·8 | | 14·8 | 23·0 | |
| 9·6 | | 25·1 | 1·2 | |
| 9·9 | | 25·3 | 11·2 | |
| 8·7 | | 27·3 | 36·8 | 9·0 |
| 10·0 | | 32·3 | 2·7 | |
| 8·8 | | 39·8 | 18·1 | |
| 9·9 | 33 | 4·8 | 57·1 | |
| 9·9 | | 13·3 | 54·1 | |
| 9·2 | | 16·3 | 22·5 | |
| 10·0 | | 23·4 | 4·4 | |
| 9·8 | | 35·3 | 48·4 | |
| 10·0 | | 44·8 | 16·3 | |
| 9·4 | 34 | 5·8 | 51·2 | |
| 10·0 | | 22·8 | 21·9 | |
| 10·0 | | 30·3 | 13·0 | |
| 9·6 | | 32·3 | 32·6 | |
| 10·0 | | 32·3 | 23·2 | |
| 9·9 | | 46·8 | 58·6 | |
| 7·9 | | 48·1 | 0·1 | 6·5 GS |

## 9181—9240.

| mag. | 18h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 34 | 53·8 | 33·7 | |
| 8·4 | 35 | 13·8 | 42·4 | 8·5 |
| 9·6 | | 16·1 | 0·0 | |
| 9·5 | | 16·6 | 2·9 | |
| 10·0 | | 24·3 | 55·5 | |
| 8·8 | | 33·8 | 12·1 | |
| 9·4 | 36 | 8·3 | 24·2 | |
| 9·8 | | 13·8 | 18·9 | |
| 10·0 | | 21·8 | 15·9 | |
| 9·4 | | 23·3 | 1·6 | |
| 10·0 | | 29·8 | 12·1 | |
| 10·0 | | 42·3 | 24·2 | |
| 9·9 | | 43·3 | 7·3 | |
| 9·9 | | 44·3 | 41·5 | |
| 9·2 | 37 | 0·3 | 45·8 | 8·5 |
| 9·0 | | 6·8 | 21·2 | 9·0 |
| 9·4 | | 24·3 | 17·1 | |
| 8·8 | | 26·3 | 48·1 | 9·0 |
| 10·0 | | 27·2 | 37·2 | |
| 9·4 | | 38·3 | 38·6 | |
| 9·6 | | 40·8 | 27·4 | |
| 10·0 | | 43·3 | 24·1 | |
| 9·6 | | 57·8 | 39·6 | |
| 8·9 | 38 | 21·8 | 55·5 | |
| 9·8 | | 23·3 | 53·8 | |
| 8·7 | | 26·3 | 27·9 | 9·0 |
| 9·6 | | 30·8 | 51·5 | |
| 9·2 | | 42·8 | 41·8 | |
| 8·1 | | 42·8 | 40·8 | |
| 8·8 | | 44·8 | 22·5 | 9·5 |
| 9·0 | | 45·8 | 18·2 | |
| 8·5 | 39 | 1·8 | 5·3 | |
| 10·0 | | 10·8 | 30·6 | |
| 10·0 | | 23·8 | 41·9 | |
| 9·9 | | 26·8 | 43·8 | |
| 9·8 | | 27·8 | 25·2 | |
| 9·1 | | 43·8 | 24·0 | |
| 10·0 | 40 | 8·8 | 49·1 | |
| 9·6 | | 17·3 | 30·9 | |
| 10·0 | | 26·3 | 23·8 | |
| 9·8 | | 56·8 | 34·9 | |
| 10·0 | 41 | 6·3 | 32·4 | |
| 9·6 | | 16·3 | 52·0 | |
| 10·0 | | 16·3 | 4·0 | |
| 10·0 | | 18·3 | 18·3 | |
| 9·4 | | 32·3 | 59·5 | |
| 9·2 | | 33·8 | 15·5 | |
| 7·9 | | 48·8 | 20·2 | |
| 9·9 | 42 | 12·9 | 0·9 | |
| 10·0 | | 14·8 | 52·0 | |
| 10·0 | | 16·3 | 18·3 | |
| 9·2 | | 23·3 | 5·7 | |
| 9·9 | | 26·3 | 4·1 | |
| 8·9 | | 28·8 | 45·4 | |
| 9·6 | | 29·3 | 5·1 | |
| 8·9 | | 45·8 | 36·0 | |
| 9·4 | | 50·8 | 42·1 | |
| 9·8 | | 59·8 | 53·9 | |
| 9·4 | 43 | 2·3 | 19·9 | |
| 9·5 | | 36·8 | 40·0 | |

## 9241—9300.

| mag. | 18h m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 43 | 37·8 | 18·8 | |
| 10·0 | | 46·3 | 50·1 | |
| 9·4 | | 48·3 | 45·0 | |
| 9·2 | | 50·8 | 16·7 | |
| 9·2 | 44 | 36·3 | 18·0 | |
| 9·9 | | 46·8 | 8·2 | |
| 9·2 | | 50·8 | 43·6 | |
| 9·6 | | 56·3 | 21·2 | |
| 10·0 | 45 | 0·3 | 5·2 | |
| 9·6 | | 8·3 | 37·4 | |
| 9·2 | | 14·8 | 15·4 | |
| 9·9 | | 19·3 | 13·0 | |
| 9·8 | | 27·8 | 47·3 | |
| 9·9 | | 38·8 | 10·7 | |
| 9·5 | | 47·3 | 36·5 | |
| 9·6 | | 50·3 | 32·5 | |
| 10·0 | | 51·8 | 26·0 | |
| 9·4 | | 52·3 | 53·1 | |
| 9·8 | | 59·8 | 49·8 | |
| 9·6 | 46 | 16·3 | 4·7 | |
| 10·0 | | 21·3 | 20·3 | |
| 9·9 | | 29·5 | 1·9 | |
| 9·9 | | 29·8 | 37·9 | |
| 9·1 | | 47·8 | 4·7 | |
| 9·2 | | 48·5 | 1·5 | |
| 9·4 | | 58·3 | 38·8 | |
| 9·2 | 47 | 5·5 | 58·7 | |
| 9·4 | | 12·3 | 32·0 | |
| 10·0 | | 13·3 | 13·1 | |
| 10·0 | | 20·3 | 58·9 | |
| 9·4 | | 22·1 | 57·3 | |
| 9·9 | | 26·3 | 22·2 | |
| 8·7 | | 34·3 | 25·1 | |
| 10·0 | | 35·3 | 16·7 | |
| 10·0 | | 42·3 | 12·0 | |
| 10·0 | 48 | 0·3 | 31·0 | |
| 9·4 | | 2·3 | 20·7 | |
| 8·8 | | 3·8 | 4·4 | 9·0 |
| 9·8 | | 5·3 | 39·6 | |
| 9·2 | | 15·3 | 35·3 | |
| 10·0 | | 26·3 | 36·8 | |
| 9·9 | | 26·8 | 16·5 | |
| 9·8 | | 34·8 | 42·0 | |
| 9·8 | | 50·8 | 28·8 | |
| 9·8 | 49 | 13·8 | 25·3 | |
| 10·0 | | 23·8 | 5·2 | |
| 10·0 | | 50·3 | 43·7 | |
| 9·8 | 50 | 33·8 | 34·1 | |
| 9·8 | | 38·8 | 52·8 | |
| 8·8 | 51 | 20·3 | 37·7 | 9·0 |
| 8·2 | | 25·3 | 8·2 | 8·0 G |
| 9·4 | | 38·8 | 39·5 | |
| 8·2 | 52 | 16·0 | 58·2 | 8·5 G |
| 9·2 | | 33·8 | 20·7 | |
| 7·4 | | 38·3 | 10·0 | 7·5 GSg |
| 9·4 | | 49·8 | 35·1 | |
| 8·6 | 53 | 0·8 | 51·6 | |
| 9·8 | | 2·5 | 1·0 | |
| 9·8 | | 8·3 | 7·1 | |
| 9·6 | | 12·3 | 18·2 | |

| h | m | 25 prec. α + s | δ + |
|---|---|---|---|
| 18 | 10 | 129 | 0·4 |
| | 20 | 129 | 0·7 |
| | 30 | 129 | 1·1 |
| | 40 | 128 | 1·5 |
| | 50 | 128 | 1·8 |
| 19 | 0 | 127 | 2·2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 50 | 128 | 1·8 |
| 19 | 0 | 127 | 2·2 |
| | 10 | 127 | 2·5 |
| | 20 | 126 | 2·9 |
| | 30 | 125 | 3·2 |
| | 40 | 124 | 3·5 |
| | 50 | 123 | 3·9 |

**9301—9360.**

| mag. | 18h.–19h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 53 | 19·5 | 58·6 | 8·8 G |
| 10·0 | | 21·8 | 27·9 | |
| 9·6 | | 59·3 | 36·4 | |
| 9·5 | 54 | 3·3 | 33·8 | |
| 9·6 | | 32·8 | 40·3 | |
| 9·9 | | 57·3 | 51·7 | |
| 9·2 | 55 | 13·6 | 47·8 | |
| 10·0 | | 19·3 | 43·8 | |
| 8·8 | | 28·8 | 27·7 | 8·5 |
| 9·6 | | 31·8 | 50·8 | |
| 9·6 | | 34·3 | 49·0 | |
| 9·6 | | 43·4 | 12·9 | |
| 9·5 | | 44·3 | 8·8 | |
| 7·7 | 56 | 1·3 | 17·7 | 8·0 G |
| 9·4 | | 4·9 | 1·8 | |
| 9·8 | | 12·3 | 49·9 | |
| 9·8 | | 16·4 | 42·6 | |
| 10·2 | | 18·9 | 25·1 | |
| 10·3 | | 24·7 | 22·0 | |
| 9·4 | | 40·4 | 29·1 | 9·0 |
| 10·2 | 57 | 8·9 | 21·6 | |
| 9·6 | | 18·9 | 23·4 | |
| 9·8 | 58 | 21·4 | 38·8 | |
| 9·6 | | 25·9 | 28·8 | |
| 10·3 | | 28·9 | 8·1 | |
| 10·3 | | 31·9 | 16·0 | |
| 10·3 | | 44·4 | 5·5 | |
| 10·3 | | 56·4 | 3·9 | |
| 9·4 | 59 | 13·4 | 33·8 | |
| 9·8 | | 55·4 | 44·1 | |
| 10·2 | | 55·4 | 55·1 | |
| 9·8 | 0 | 38·4 | 3·0 | |
| 9·6 | | 47·4 | 11·7 | |
| 10·3 | | 48·1 | 0·1 | |
| 9·4 | | 53·9 | 27·0 | |
| 10·0 | 1 | 6·9 | 59·8 | |
| 9·6 | | 36·4 | 17·9 | |
| 10·3 | 2 | 1·9 | 12·9 | |
| 10·2 | | 7·9 | 32·6 | |
| 10·2 | | 24·4 | 46·9 | |
| 10·2 | | 31·9 | 12·0 | |
| 10·3 | 3 | 11·4 | 46·4 | |
| 8·0 | | 20·9 | 49·9 | 8·2 |
| 10·2 | | 25·4 | 26·3 | |
| 10·3 | | 31·9 | 20·1 | |
| 10·2 | 4 | 26·4 | 27·4 | |
| 10·0 | | 36·9 | 6·0 | |
| 10·3 | 5 | 5·4 | 11·8 | |
| 10·2 | | 19·4 | 47·1 | |
| 10·3 | | 48·9 | 35·5 | |
| 9·2 | 6 | 9·4 | 23·0 | |
| 9·4 | | 11·4 | 32·9 | |
| 10·3 | | 19·4 | 47·2 | |
| 9·4 | | 19·7 | 1·7 | |
| 9·8 | | 28·9 | 33·0 | |
| 9·8 | | 55·4 | 45·2 | |
| 10·3 | 7 | 5·9 | 44·7 | |
| 10·3 | | 13·4 | 38·8 | |
| 10·3 | 8 | 15·3 | 54·9 | |
| 9·2 | | 25·8 | 3·9 | |

**9361—9420.**

| mag. | 19h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·3 | 8 | 45·3 | 59·9 | |
| 10·3 | 9 | 22·3 | 24·9 | |
| 9·6 | | 29·3 | 58·3 | |
| 9·2 | | 53·8 | 30·6 | |
| 10·2 | 10 | 2·3 | 52·0 | |
| 10·0 | | 7·8 | 28·3 | |
| 9·4 | | 42·3 | 17·9 | |
| 10·3 | | 43·8 | 8·9 | |
| 9·6 | 11 | 17·3 | 19·6 | |
| 9·2 | | 19·8 | 7·9 | |
| 10·0 | | 22·3 | 36·2 | |
| 10·3 | | 30·3 | 39·5 | |
| 10·3 | | 31·7 | 0·9 | |
| 10·0 | | 35·3 | 21·3 | |
| 9·6 | 12 | 13·8 | 42·1 | 10·0 |
| 9·6 | | 30·8 | 36·4 | |
| 10·0 | | 31·8 | 59·0 | |
| 10·2 | | 38·3 | 20·1 | |
| 9·2 | 13 | 3·8 | 12·0 | |
| 9·4 | | 4·8 | 33·9 | 9·0 |
| 9·4 | | 15·3 | 5·2 | |
| 10·2 | | 40·3 | 42·6 | |
| 8·7 | | 47·3 | 51·5 | 8·8 |
| 9·6 | | 52·3 | 20·8 | |
| 8·8 | 14 | 8·3 | 43·8 | 9·2 |
| 9·8 | | 12·8 | 47·0 | |
| 10·3 | | 22·8 | 37·0 | |
| 10·3 | | 35·8 | 13·0 | G |
| 10·3 | | 41·1 | 2·2 | |
| 7·8 | | 42·3 | 13·2 | 7·5 G |
| 9·2 | | 46·8 | 36·8 | 8·7 |
| 9·1 | 15 | 10·3 | 22·8 | 9·0 |
| 8·9 | | 21·1 | 0·3 | 9·0 |
| 10·2 | | 48·3 | 58·6 | |
| 10·3 | | 51·3 | 38·3 | |
| 9·6 | 16 | 2·3 | 15·2 | |
| 8·6 | | 8·3 | 9·9 | 7·5 G |
| 10·2 | | 38·8 | 2·9 | |
| 9·4 | | 46·6 | 0·1 | |
| 10·0 | | 59·8 | 30·5 | |
| 10·3 | 17 | 1·8 | 5·9 | |
| 10·3 | | 5·3 | 43·7 | |
| 10·3 | 18 | 12·3 | 42·9 | |
| 9·6 | | 12·8 | 45·9 | |
| 8·9 | | 20·3 | 45·8 | 9·5 |
| 10·2 | | 47·3 | 8·4 | |
| 9·2 | | 56·8 | 46·5 | |
| 10·0 | 19 | 30·3 | 22·0 | |
| 10·3 | | 46·3 | 27·8 | |
| 9·2 | 20 | 39·3 | 39·0 | 9·2 |
| 10·0 | | 44·3 | 24·9 | |
| 10·0 | | 58·8 | 29·0 | |
| 9·4 | 21 | 2·3 | 25·8 | 9·5 |
| 10·0 | | 3·8 | 40·2 | |
| 10·3 | | 17·3 | 56·5 | |
| 9·4 | | 19·8 | 21·8 | |
| 10·0 | | 20·3 | 8·2 | |
| 9·6 | | 30·3 | 47·2 | |
| 9·4 | 22 | 8·3 | 55·6 | |
| 10·2 | | 10·3 | 43·1 | |

**9421—9480.**

| mag. | 19h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·1 | 22 | 23·3 | 53·0 | 9·0 |
| 10·2 | | 37·8 | 48·6 | |
| 10·0 | | 49·3 | 47·5 | |
| 10·3 | 23 | 32·3 | 30·3 | |
| 10·2 | | 49·8 | 35·2 | |
| 10·3 | 25 | 13·6 | 22·1 | |
| 9·2 | | 14·3 | 26·4 | |
| 10·3 | | 26·3 | 16·8 | |
| 10·0 | | 52·3 | 23·9 | |
| 10·2 | | 52·3 | 5·7 | |
| 9·1 | | 59·1 | 2·9 | 9·0 |
| 10·3 | 26 | 18·3 | 45·5 | |
| 9·8 | | 39·3 | 59·6 | |
| 9·8 | | 47·3 | 54·8 | |
| 9·4 | | 50·3 | 10·9 | |
| 9·4 | 27 | 9·4 | 30·2 | |
| 10·3 | | 28·6 | 36·1 | |
| 8·7 | | 36·3 | 21·5 | 8·5 |
| 9·2 | | 38·8 | 41·2 | 9·5 G |
| 10·0 | | 39·6 | 40·4 | |
| 9·8 | 28 | 6·3 | 0·5 | |
| 10·3 | | 8·8 | 47·5 | |
| 9·8 | | 41·0 | 2·3 | |
| 9·6 | | 51·5 | 49·2 | |
| 9·6 | | 52·9 | 1·6 | |
| 10·4 | 29 | 0·0 | 10·1 | |
| 10·4 | | 41·0 | 24·1 | |
| 10·4 | | 41·0 | 53·0 | |
| 10·4 | | 42·5 | 20·8 | |
| 9·8 | 30 | 32·0 | 25·3 | |
| 10·4 | | 37·0 | 39·1 | |
| 10·4 | 31 | 22·5 | 27·4 | |
| 10·0 | | 22·5 | 41·2 | |
| 10·2 | | 27·5 | 43·4 | |
| 8·2 | | 58·5 | 25·5 | 8·0 |
| 10·2 | 32 | 14·5 | 27·8 | |
| 9·8 | | 15·0 | 27·6 | |
| 9·8 | | 48·0 | 28·5 | |
| 10·4 | | 51·0 | 25·1 | |
| 10·2 | | 55·5 | 35·1 | |
| 10·4 | 33 | 21·0 | 6·1 | |
| 8·5 | | 25·5 | 2·3 | 9·0 G |
| 10·4 | | 27·5 | 41·6 | |
| 10·4 | | 53·0 | 28·0 | |
| 9·6 | | 53·5 | 31·2 | |
| 10·4 | 34 | 0·0 | 6·8 | |
| 9·6 | | 2·2 | 58·5 | |
| 10·4 | | 17·5 | 48·5 | |
| 8·9 | | 19·5 | 20·9 | 9·0 |
| 10·0 | | 31·5 | 29·7 | |
| 10·4 | | 54·5 | 40·0 | |
| 10·4 | 35 | 21·5 | 2·8 | |
| 7·8 | | 31·0 | 50·5 | 8·0 G |
| 10·2 | | 31·5 | 45·8 | |
| 10·4 | | 42·5 | 40·4 | |
| 9·8 | | 45·3 | 2·7 | |
| 10·4 | | 58·8 | 1·6 | |
| 10·4 | 36 | 8·5 | 9·9 | |
| 10·0 | | 17·0 | 28·0 | |
| 10·4 | | 28·0 | 8·8 | |

**9481—9540.**

| mag. | 19h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 36 | 42·5 | 5·0 | |
| 10·4 | | 43·0 | 27·6 | |
| 10·2 | | 46·0 | 25·0 | |
| 10·2 | | 57·5 | 45·0 | |
| 10·4 | 37 | 0·5 | 49·5 | |
| 9·8 | | 3·0 | 37·8 | 9·5 G |
| 10·4 | | 9·5 | 10·2 | |
| 9·8 | | 11·0 | 50·2 | |
| 10·4 | 38 | 4·0 | 54·4 | |
| 9·2 | | 5·0 | 39·5 | |
| 9·6 | | 19·0 | 43·6 | |
| 9·6 | | 30·0 | 12·4 | |
| 9·8 | | 33·5 | 21·9 | |
| 10·4 | | 36·5 | 33·4 | |
| 10·4 | | 43·5 | 4·7 | |
| 9·4 | 39 | 26·0 | 36·7 | |
| 10·2 | | 31·5 | 5·7 | |
| 10·4 | | 35·0 | 10·6 | |
| 9·8 | | 37·0 | 34·7 | |
| 9·0 | | 38·0 | 31·7 | 9·0 |
| 9·1 | 40 | 4·0 | 33·3 | 9·0 |
| 10·4 | | 10·0 | 55·8 | |
| 10·4 | | 15·0 | 13·9 | |
| 8·9 | | 31·0 | 32·2 | 8·5 |
| 8·8 | 41 | 38·0 | 15·4 | |
| 8·4 | | 38·7 | 58·7 | 8·5 G |
| 9·8 | | 44·0 | 46·0 | |
| 8·0 | | 53·0 | 1·9 | 8·0 GS |
| 10·0 | | 54·5 | 26·1 | |
| 10·4 | 42 | 0·5 | 4·5 | |
| 10·0 | | 7·0 | 24·0 | |
| 10·4 | | 9·0 | 55·5 | |
| 10·2 | | 22·0 | 18·5 | |
| 9·6 | | 27·5 | 8·5 | |
| 10·4 | | 33·0 | 31·7 | |
| 10·4 | | 40·0 | 19·9 | |
| 10·4 | | 42·0 | 10·1 | |
| 10·4 | | 43·0 | 47·1 | |
| 10·4 | | 46·0 | 9·1 | |
| 9·8 | | 56·5 | 40·7 | |
| 8·0 | 43 | 8·5 | 24·4 | 8·0 G |
| 10·4 | | 9·0 | 19·6 | |
| 9·4 | | 33·5 | 30·0 | |
| 10·0 | | 38·1 | 0·4 | |
| 10·2 | | 52·7 | 52·6 | |
| 10·0 | 44 | 0·7 | 6·6 | |
| 9·6 | | 0·7 | 5·2 | |
| 10·2 | | 1·2 | 8·4 | |
| 9·0 | | 3·2 | 51·0 | 9·0 |
| 10·0 | | 3·7 | 8·8 | |
| 10·0 | | 6·7 | 44·6 | |
| 8·8 | | 28·2 | 45·0 | 9·5 |
| 8·3 | | 34·7 | 53·2 | 8·0 |
| 8·0 | | 49·7 | 10·6 | 8·5 G |
| 10·0 | 45 | 25·7 | 22·7 | |
| 9·6 | | 35·2 | 50·2 | |
| 10·0 | | 35·8 | 34·0 | |
| 9·2 | | 41·2 | 44·7 | 9·0 |
| 10·4 | | 48·2 | 20·0 | |
| 10·4 | 46 | 2·8 | 59·1 | |

## 9541—9600.

| mag. | 19h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.4 | 46 | 9.2 | 24.4 | |
| 9.6 | | 9.7 | 39.0 | |
| 9.6 | | 19.2 | 48.5 | |
| 10.2 | | 36.7 | 26.2 | |
| 10.4 | | 40.8 | 55.1 | |
| 10.4 | | 41.7 | 1.8 | |
| 10.4 | | 53.7 | 55.0 | |
| 9.4 | | 57.2 | 24.0 | |
| 9.8 | 47 | 23.7 | 54.6 | |
| 10.4 | | 25.2 | 50.1 | |
| 10.4 | | 27.7 | 58.2 | |
| 8.6 | | 35.2 | 4.4 | 8.5 |
| 10.4 | | 43.2 | 31.8 | |
| 10.4 | 48 | 1.8 | 52.0 | |
| 9.1 | | 6.7 | 44.9 | |
| 10.4 | | 11.7 | 22.0 | |
| 10.4 | | 35.7 | 37.0 | |
| 10.4 | | 35.7 | 24.9 | |
| 9.6 | | 42.2 | 46.2 | |
| 8.8 | | 49.7 | 46.2 | |
| 10.4 | | 51.7 | 58.0 | |
| 10.0 | 49 | 7.2 | 18.2 | |
| 10.4 | | 9.7 | 48.6 | |
| 9.8 | | 11.7 | 6.4 | |
| 9.6 | | 19.7 | 23.9 | |
| 10.4 | | 21.7 | 18.1 | |
| 9.0 | | 31.7 | 12.0 | |
| 10.0 | | 44.7 | 17.4 | |
| 9.6 | 50 | 20.7 | 9.2 | |
| 9.0 | | 26.7 | 10.5 | |
| 10.4 | | 29.2 | 4.0 | |
| 9.2 | | 42.2 | 36.0 | |
| 10.0 | 51 | 3.2 | 14.8 | |
| 8.9 | | 9.7 | 44.6 | |
| 10.4 | | 40.2 | 32.2 | |
| 9.8 | | 44.2 | 4.3 | |
| 10.4 | | 59.2 | 12.8 | |
| 10.2 | 52 | 21.7 | 17.5 | |
| 9.6 | | 29.7 | 15.3 | |
| 9.8 | | 53.7 | 30.7 | |
| 10.0 | | 56.7 | 27.3 | |
| 9.8 | | 58.2 | 4.6 | |
| 10.4 | 53 | 2.7 | 1.9 | |
| 8.6 | | 21.7 | 3.5 | 9.5 |
| 10.4 | | 37.6 | 0.7 | |
| 10.4 | | 42.2 | 50.7 | |
| 8.9 | | 54.2 | 9.0 | 9.0 |
| 9.4 | 54 | 10.2 | 36.4 | |
| 10.4 | | 19.7 | 57.6 | |
| 10.4 | | 31.2 | 21.4 | |
| 9.8 | | 52.7 | 29.3 | |
| 10.4 | 55 | 11.2 | 15.9 | |
| 9.4 | | 17.7 | 35.6 | |
| 9.8 | | 19.7 | 45.0 | |
| 9.8 | | 19.7 | 23.8 | |
| 8.2 | | 29.4 | 58.0 | 9.0 |
| 10.0 | | 31.7 | 35.6 | |
| 10.4 | | 33.2 | 34.5 | |
| 10.4 | | 35.7 | 29.3 | |
| 10.4 | | 37.7 | 21.5 | |

## 9601—9660.

| mag. | 19h.–20h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10.4 | 56 | 7.2 | 8.7 | |
| 10.2 | | 27.2 | 30.3 | |
| 9.6 | | 31.2 | 31.4 | |
| 10.0 | | 52.2 | 33.6 | |
| 10.0 | | 59.2 | 32.4 | |
| 10.4 | 57 | 17.2 | 3.0 | |
| 10.4 | | 22.2 | 30.0 | |
| 10.4 | | 37.2 | 50.3 | |
| 10.0 | | 49.7 | 18.1 | |
| 9.4 | | 53.9 | 1.1 | 9.5 |
| 10.4 | 58 | 14.2 | 18.7 | |
| 10.4 | | 24.7 | 33.2 | |
| 10.4 | | 30.2 | 54.8 | |
| 10.0 | | 36.7 | 40.1 | |
| 10.4 | | 57.2 | 41.9 | |
| 10.4 | 59 | 29.7 | 17.8 | |
| 10.0 | | 34.9 | 0.2 | |
| 10.4 | | 42.7 | 56.9 | |
| 10.4 | | 58.4 | 1.8 | |
| 10.4 | 0 | 3.2 | 30.5 | |
| 10.4 | | 32.2 | 50.5 | |
| 7.2 | | 58.5 | 53.2 | 6.5 GSct |
| 9.7 | 1 | 12.5 | 54.4 | |
| 9.4 | 2 | 11.0 | 18.0 | 10.0 |
| 9.7 | | 28.4 | 44.8 | |
| 9.7 | | 38.5 | 53.0 | |
| 8.4 | | 55.0 | 12.9 | 8.8 G |
| 8.6 | 3 | 0.0 | 50.8 | |
| 9.4 | | 17.5 | 49.9 | |
| 9.3 | | 17.5 | 51.0 | |
| 9.7 | | 35.0 | 49.3 | |
| 9.7 | 4 | 2.0 | 21.1 | |
| 9.4 | | 2.0 | 36.5 | |
| 9.3 | | 52.0 | 4.2 | |
| 7.5 | | 53.5 | 20.8 | 7.4 GS |
| 8.6 | 5 | 5.0 | 12.6 | 8.5 |
| 9.3 | | 9.5 | 42.7 | |
| 9.4 | | 35.0 | 54.0 | |
| 9.3 | | 42.5 | 9.1 | |
| 9.0 | 6 | 3.0 | 3.8 | |
| 9.7 | | 12.0 | 7.8 | |
| 9.4 | | 17.5 | 5.6 | |
| 9.4 | | 24.5 | 1.4 | |
| 9.4 | | 35.5 | 12.5 | |
| 9.2 | 7 | 7.5 | 13.6 | |
| 9.6 | | 12.0 | 15.2 | |
| 9.4 | 8 | 41.5 | 33.9 | |
| 9.3 | | 53.5 | 20.9 | |
| 9.6 | 9 | 13.5 | 27.8 | |
| 9.4 | | 19.0 | 52.7 | |
| 9.7 | | 22.0 | 30.1 | |
| 9.2 | | 26.0 | 58.0 | |
| 9.7 | 10 | 6.5 | 15.8 | |
| 9.3 | | 12.0 | 28.5 | |
| 9.2 | | 19.5 | 25.1 | |
| 9.7 | | 52.5 | 7.6 | |
| 9.6 | | 56.0 | 52.0 | |
| 9.6 | 11 | 0.0 | 47.3 | |
| 9.4 | | 1.0 | 56.7 | |
| 9.7 | | 31.0 | 6.3 | |

## 9661—9720.

| mag. | 20h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.4 | 11 | 56.5 | 6.1 | |
| 9.4 | 12 | 20.0 | 26.2 | |
| 9.7 | | 35.5 | 40.2 | |
| 9.2 | 13 | 3.0 | 32.2 | 9.5 |
| 9.0 | | 18.5 | 30.2 | 10.0 |
| 9.2 | | 22.0 | 31.6 | 9.5 |
| 9.7 | | 42.0 | 51.1 | |
| 9.7 | | 50.5 | 2.8 | |
| 9.6 | 14 | 2.0 | 22.4 | |
| 9.3 | | 18.0 | 35.1 | |
| 9.7 | | 31.0 | 44.9 | |
| 9.7 | | 46.0 | 2.4 | |
| 9.2 | 15 | 42.5 | 33.0 | |
| 4.0 | | 45.0 | 8.1 | 2.0 GStrλ |
| 9.7 | | 48.5 | 28.7 | |
| 9.2 | | 57.5 | 27.5 | |
| 9.2 | 16 | 14.5 | 7.5 | 9.5 |
| 9.2 | | 18.0 | 10.6 | 9.5 |
| 9.7 | | 43.5 | 3.7 | |
| 9.7 | 17 | 4.0 | 7.1 | |
| 9.2 | | 12.5 | 33.0 | |
| 9.7 | | 16.5 | 16.7 | |
| 9.6 | | 27.0 | 47.4 | |
| 9.2 | | 51.0 | 6.2 | |
| 9.3 | 18 | 3.0 | 13.9 | |
| 9.3 | | 19.0 | 53.8 | |
| 9.7 | | 46.5 | 15.0 | |
| 9.6 | | 53.0 | 56.9 | |
| 9.7 | | 53.5 | 12.2 | |
| 9.6 | 19 | 5.5 | 27.1 | |
| 8.2 | | 15.0 | 35.2 | 8.8 |
| 9.6 | | 17.5 | 47.9 | |
| 9.6 | | 22.0 | 32.0 | |
| 9.7 | | 39.5 | 0.1 | |
| 9.6 | | 42.0 | 32.2 | |
| 9.4 | | 42.0 | 14.5 | |
| 9.4 | 20 | 21.0 | 13.7 | |
| 9.6 | 21 | 12.5 | 22.0 | |
| 9.6 | | 25.5 | 54.2 | |
| 9.3 | | 31.5 | 11.7 | |
| 9.3 | | 38.5 | 24.9 | |
| 9.6 | | 43.5 | 52.3 | |
| 9.7 | | 43.5 | 13.2 | |
| 9.3 | | 49.0 | 54.0 | |
| 9.7 | 22 | 33.5 | 27.6 | |
| 9.2 | | 46.5 | 54.2 | 9.0 |
| 9.0 | | 47.0 | 24.2 | |
| 9.0 | | 48.7 | 1.8 | |
| 9.2 | 23 | 21.0 | 43.3 | |
| 9.7 | | 40.5 | 10.1 | |
| 9.2 | 24 | 22.0 | 15.2 | |
| 9.7 | 25 | 47.0 | 27.6 | |
| 9.3 | | 48.5 | 1.6 | |
| 9.7 | | 59.0 | 47.0 | |
| 9.6 | 26 | 5.0 | 54.0 | |
| 9.6 | | 10.0 | 35.0 | |
| 9.4 | | 11.0 | 27.6 | |
| 9.7 | | 30.5 | 59.9 | |
| 9.7 | | 48.0 | 49.2 | |
| 8.6 | | 59.0 | 10.6 | |

## 9721—9780.

| mag. | 20h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9.3 | 26 | 59.5 | 45.3 | |
| 8.8 | 27 | 16.0 | 37.7 | |
| 9.7 | | 20.0 | 13.9 | |
| 9.7 | | 29.5 | 5.5 | |
| 9.6 | | 53.5 | 0.1 | |
| 9.7 | 28 | 10.0 | 32.0 | |
| 9.2 | | 58.5 | 31.8 | |
| 9.2 | 29 | 8.0 | 19.6 | |
| 9.2 | | 29.5 | 22.5 | |
| 9.2 | | 30.0 | 33.8 | |
| 9.7 | | 45.0 | 36.5 | |
| 9.6 | | 54.0 | 31.4 | |
| 9.7 | 30 | 8.0 | 28.8 | |
| 9.7 | | 13.5 | 52.6 | |
| 9.6 | | 23.5 | 1.5 | |
| 9.7 | | 24.5 | 0.5 | |
| 9.6 | | 31.2 | 19.1 | |
| 9.7 | | 55.0 | 0.5 | |
| 9.7 | 31 | 25.0 | 19.2 | |
| 9.3 | | 34.4 | 27.0 | |
| 9.3 | | 42.0 | 23.8 | |
| 9.7 | 32 | 2.0 | 43.6 | |
| 9.7 | | 23.0 | 30.6 | |
| 8.9 | | 30.0 | 14.6 | 9.5 |
| 9.6 | | 59.5 | 9.7 | |
| 9.6 | 33 | 4.0 | 53.6 | |
| 10.0 | | 8.3 | 37.6 | |
| 9.3 | | 12.8 | 46.5 | |
| 10.0 | | 23.8 | 15.3 | |
| 8.2 | 36 | 6.3 | 24.1 | 8.4 G |
| 10.0 | | 46.8 | 30.5 | |
| 9.8 | 39 | 33.3 | 47.5 | |
| 10.0 | | 47.0 | 1.7 | |
| 9.8 | | 58.8 | 2.2 | |
| 10.0 | 40 | 9.8 | 30.7 | |
| 8.4 | 41 | 10.3 | 48.6 | 8.5 |
| 9.8 | | 10.8 | 52.0 | |
| 8.4 | | 38.3 | 55.5 | 9.0 |
| 10.0 | | 45.3 | 44.0 | |
| 10.0 | 42 | 0.3 | 46.0 | |
| 10.0 | | 26.3 | 51.2 | |
| 8.8 | 43 | 9.3 | 11.1 | 8.5 |
| 10.0 | | 31.3 | 56.8 | |
| 10.0 | | 57.3 | 27.2 | |
| 10.0 | 44 | 6.3 | 50.9 | |
| 9.0 | | 51.8 | 6.4 | 9.5 |
| 9.2 | 45 | 43.6 | 31.0 | |
| 9.0 | 46 | 1.1 | 12.8 | |
| 10.0 | | 27.6 | 59.9 | |
| 10.0 | | 29.3 | 46.2 | |
| 9.8 | | 33.1 | 10.5 | |
| 10.0 | | 35.1 | 34.6 | |
| 10.0 | | 55.6 | 24.5 | |
| 10.0 | 47 | 31.1 | 31.2 | |
| 9.8 | | 38.1 | 52.2 | |
| 9.4 | 48 | 30.1 | 18.0 | |
| 9.6 | 49 | 25.6 | 38.9 | |
| 10.0 | 50 | 53.1 | 36.8 | |
| 10.0 | 51 | 42.3 | 51.2 | |
| 10.0 | | 48.6 | 51.2 | |

| | | 25 prec. α + | δ + |
|---|---|---|---|
| h | m | s | ′ |
| 19 | 40 | 124 | 3.5 |
| | 50 | 123 | 3.9 |
| 20 | 0 | 122 | 4.2 |
| | 10 | 121 | 4.5 |
| | 20 | 120 | 4.8 |
| | 30 | 118 | 5.1 |
| | 40 | 117 | 5.4 |
| | 50 | 115 | 5.6 |
| 21 | 0 | 114 | 5.9 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 20 | 50 | 115 | 5·6 |
| 21 | 0 | 114 | 5·9 |
| | 10 | 112 | 6·2 |
| | 20 | 111 | 6·4 |
| | 30 | 109 | 6·6 |
| | 40 | 107 | 6·8 |
| | 50 | 105 | 7·0 |
| 22 | 0 | 103 | 7·2 |

## 9781—9840.

| mag. | 20h.–21h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·0 | 52 | 36·1 | 45·5 | |
| 10·0 | | 47·6 | 41·7 | |
| 10·0 | 54 | 18·5 | 5·0 | |
| 10·0 | 55 | 4·0 | 57·6 | |
| 10·0 | | 17·0 | 6·0 | |
| 10·0 | | 34·0 | 35·0 | |
| 9·6 | | 34·5 | 27·4 | |
| 8·9 | 56 | 20·0 | 20·8 | 8·5 |
| 8·0 | | 34·0 | 38·2 | 8·5 G |
| 9·6 | | 39·5 | 20·3 | |
| 8·9 | 57 | 51·0 | 31·6 | 9·0 |
| 9·8 | 58 | 14·0 | 10·8 | |
| 10·0 | | 20·5 | 32·0 | |
| 10·0 | | 23·0 | 32·0 | |
| 8·2 | | 30·5 | 8·2 | GS |
| 10·0 | | 51·7 | 43·1 | |
| 9·2 | 59 | 21·5 | 17·2 | |
| 9·4 | | 33·0 | 41·1 | |
| 9·2 | 0 | 0·8 | 0·9 | |
| 8·9 | | 27·0 | 26·0 | 9·2 |
| 9·6 | | 35·5 | 31·7 | |
| 10·0 | | 43·0 | 42·8 | |
| 10·0 | | 52·7 | 56·1 | |
| 9·6 | 1 | 38·0 | 48·4 | |
| 10·0 | | 47·0 | 32·8 | |
| 10·0 | 2 | 11·2 | 55·1 | |
| 7·5 | | 15·1 | 1·5 | 7·0 GSct |
| 7·7 | | 57·7 | 43·3 | 8·5 G |
| 10·0 | 3 | 12·1 | 23·3 | |
| 9·4 | | 27·1 | 1·4 | G |
| 9·8 | 4 | 7·6 | 18·7 | |
| 10·2 | | 27·1 | 17·3 | |
| 10·0 | | 50·1 | 57·3 | |
| 10·2 | | 51·5 | 56·9 | |
| 10·2 | 5 | 2·6 | 6·8 | |
| 9·3 | 6 | 2·2 | 4·4 | G |
| 9·8 | | 33·7 | 26·1 | |
| 10·2 | 7 | 11·2 | 19·3 | |
| 10·2 | | 42·2 | 49·9 | |
| 9·4 | | 49·2 | 12·2 | |
| 10·2 | 8 | 2·2 | 7·9 | |
| 8·6 | 9 | 15·2 | 14·1 | Gk |
| 9·0 | | 19·7 | 5·0 | |
| 10·2 | | 25·2 | 22·7 | |
| 9·3 | | 29·2 | 32·9 | |
| 10·2 | | 57·7 | 31·4 | |
| 9·6 | | 59·2 | 21·9 | |
| 10·2 | 10 | 10·2 | 38·2 | |
| 9·8 | | 20·2 | 45·5 | |
| 10·2 | | 53·7 | 6·0 | |
| 9·3 | 11 | 34·2 | 52·7 | |
| 8·6 | | 57·7 | 9·0 | 9·0 G |
| 9·8 | 12 | 19·2 | 22·5 | Gk |
| 10·2 | | 31·2 | 22·0 | |
| 10·2 | | 55·7 | 55·8 | |
| 9·4 | | 59·2 | 37·9 | |
| 9·3 | 13 | 44·2 | 56·5 | |
| 10·2 | | 50·2 | 4·0 | |
| 9·6 | | 51·2 | 19·9 | G |
| 10·2 | 14 | 18·7 | 52·7 | |

## 9841—9900.

| mag. | 21h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 14 | 24·7 | 46·2 | |
| 9·2 | | 29·2 | 5·0 | |
| 10·2 | | 39·2 | 7·4 | |
| 9·6 | | 40·2 | 17·1 | |
| 9·3 | 15 | 28·7 | 22·4 | |
| 6·8 | | 32·2 | 47·3 | GSct |
| 10·2 | | 54·2 | 51·3 | |
| 10·2 | 16 | 41·3 | 29·0 | |
| 10·0 | | 41·7 | 54·1 | |
| 10·2 | | 43·2 | 9·1 | |
| 9·8 | 17 | 3·2 | 29·5 | |
| 10·2 | | 46·7 | 23·1 | |
| 10·2 | 18 | 29·7 | 26·7 | |
| 9·8 | | 31·2 | 23·4 | |
| 9·3 | | 47·2 | 40·0 | |
| 9·3 | | 53·2 | 11·2 | |
| 9·8 | 19 | 0·2 | 27·7 | |
| 10·2 | | 6·7 | 52·2 | |
| 9·2 | | 9·2 | 36·0 | |
| 10·2 | | 21·2 | 34·4 | |
| 9·3 | | 29·7 | 41·2 | 9·0 G |
| 10·0 | | 32·7 | 10·0 | |
| 9·8 | | 34·2 | 37·0 | |
| 10·2 | 20 | 8·7 | 28·1 | |
| 9·0 | | 27·2 | 53·8 | |
| 10·0 | | 39·2 | 48·7 | |
| 10·2 | | 47·2 | 4·8 | |
| 10·2 | | 55·7 | 23·1 | |
| 9·6 | 21 | 30·1 | 1·0 | |
| 8·4 | | 37·2 | 24·9 | 9·0 G |
| 10·2 | | 42·2 | 54·7 | |
| 10·2 | | 46·2 | 10·0 | |
| 8·5 | | 56·2 | 25·8 | 8·0 GSt |
| 10·2 | | 57·2 | 18·2 | |
| 9·3 | 22 | 0·2 | 42·4 | G |
| 8·3 | | 0·7 | 30·0 | 8·5 G |
| 9·8 | | 4·7 | 59·0 | |
| 10·2 | | 8·7 | 39·1 | |
| 10·2 | | 20·2 | 23·9 | |
| 10·0 | | 56·2 | 32·3 | |
| 8·0 | 23 | 5·7 | 51·1 | 9·5 G |
| 9·3 | | 18·7 | 6·1 | |
| 10·2 | | 21·2 | 15·1 | |
| 9·8 | | 45·2 | 54·1 | |
| 9·3 | 24 | 9·2 | 49·7 | |
| 9·4 | | 11·2 | 56·2 | G |
| 9·8 | | 11·2 | 45·6 | |
| 8·5 | | 33·2 | 37·9 | Gk |
| 10·2 | 25 | 15·2 | 59·9 | |
| 10·2 | | 35·2 | 38·1 | |
| 10·2 | | 38·7 | 12·4 | |
| 10·2 | | 51·2 | 46·8 | |
| 10·2 | | 59·2 | 57·8 | |
| 9·2 | 26 | 0·2 | 47·4 | |
| 10·0 | | 7·7 | 46·8 | |
| 10·0 | | 9·2 | 39·0 | |
| 9·8 | | 10·7 | 46·3 | |
| 9·8 | | 12·2 | 56·0 | G |
| 9·4 | | 18·7 | 37·1 | |
| 9·8 | | 38·7 | 10·0 | |

## 9901—9960.

| mag. | 21h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·2 | 26 | 39·2 | 9·3 | |
| 9·8 | | 39·7 | 43·5 | |
| 8·5 | | 43·2 | 42·7 | 8·5 |
| 10·2 | 27 | 12·7 | 5·0 | |
| 10·2 | | 21·2 | 19·8 | |
| 9·8 | | 21·2 | 7·7 | |
| 10·2 | | 23·7 | 25·3 | |
| 10·2 | | 31·2 | 37·7 | |
| 10·2 | | 39·2 | 25·5 | |
| 10·0 | | 54·2 | 19·9 | |
| 9·3 | 28 | 29·7 | 9·1 | |
| 10·2 | | 32·4 | 2·1 | |
| 9·3 | | 51·7 | 56·9 | |
| 10·2 | | 51·7 | 2·7 | |
| 9·3 | | 59·2 | 16·3 | |
| 9·4 | 29 | 11·2 | 55·1 | |
| 10·2 | | 31·2 | 17·5 | |
| 9·3 | | 52·7 | 38·4 | |
| 9·0 | | 57·2 | 17·0 | |
| 9·2 | 30 | 36·2 | 59·9 | |
| 9·6 | | 39·2 | 48·3 | |
| 9·4 | | 41·2 | 26·3 | |
| 9·3 | 31 | 10·7 | 33·1 | 9·5 |
| 8·6 | | 10·7 | 47·6 | 9·5 GS |
| 9·8 | | 19·2 | 29·6 | |
| 9·0 | | 28·7 | 16·5 | |
| 9·8 | | 32·2 | 14·1 | |
| 10·2 | | 34·2 | 27·2 | |
| 9·3 | | 34·2 | 15·5 | |
| 10·2 | | 42·7 | 29·1 | |
| 10·2 | | 54·2 | 49·1 | |
| 9·6 | 32 | 52·7 | 2·3 | |
| 10·0 | | 58·7 | 20·1 | |
| 9·4 | 33 | 15·2 | 27·0 | |
| 9·8 | | 40·7 | 55·1 | |
| 9·0 | | 42·7 | 21·2 | 9·5 |
| 9·8 | 34 | 16·2 | 14·1 | |
| 10·2 | | 41·2 | 3·0 | |
| 7·5 | | 49·7 | 56·2 | 7·5 GSt |
| 6·6 | 35 | 5·2 | 53·6 | 6·0 GStr |
| 6·9 | | 7·1 | 51·0 | 7·0 GSt |
| 9·6 | | 47·7 | 36·3 | |
| 10·2 | | 49·7 | 3·4 | |
| 9·0 | | 57·5 | 59·8 | |
| 9·0 | 36 | 32·6 | 45·8 | |
| 9·2 | | 42·6 | 42·4 | |
| 9·8 | | 53·6 | 57·9 | |
| 9·8 | 37 | 10·1 | 44·6 | |
| 9·0 | | 16·1 | 27·1 | 9·5 |
| 9·8 | | 18·3 | 2·6 | |
| 8·9 | 38 | 0·1 | 1·8 | 9·0 |
| 9·4 | | 7·6 | 19·4 | |
| 9·4 | | 23·1 | 8·7 | |
| 9·3 | | 44·3 | 9·4 | |
| 9·3 | | 54·8 | 16·1 | |
| 9·4 | 39 | 16·8 | 51·3 | |
| 9·6 | | 26·8 | 15·1 | |
| 9·8 | | 35·8 | 50·9 | |
| 9·8 | | 42·8 | 15·0 | |
| 9·0 | 40 | 8·8 | 33·4 | |

## 9961—10020.

| mag. | 21h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 40 | 37·8 | 10·5 | |
| 9·6 | | 51·8 | 34·7 | |
| 9·6 | | 54·8 | 21·3 | |
| 9·8 | 41 | 24·3 | 5·9 | |
| 8·9 | | 50·8 | 21·8 | |
| 9·5 | | 59·3 | 31·1 | |
| 9·4 | 42 | 7·8 | 9·8 | |
| 9·2 | | 11·3 | 39·1 | |
| 9·8 | | 17·8 | 28·8 | |
| 9·8 | | 41·3 | 17·8 | |
| 9·2 | | 43·3 | 36·0 | |
| 9·8 | | 49·2 | 17·4 | |
| 9·6 | 43 | 9·3 | 25·1 | |
| 9·8 | | 10·3 | 17·2 | |
| 9·4 | | 37·8 | 22·4 | |
| 8·2 | 44 | 1·3 | 55·2 | 7·5 GS |
| 8·7 | | 9·3 | 13·0 | 8·0 GS |
| 9·8 | | 10·3 | 54·5 | |
| 9·5 | | 25·3 | 28·4 | |
| 9·4 | 45 | 2·8 | 8·2 | |
| 9·4 | | 5·3 | 28·6 | |
| 9·8 | | 41·8 | 39·6 | |
| 9·3 | | 55·8 | 55·8 | |
| 9·8 | 46 | 4·8 | 16·9 | |
| 9·0 | | 9·3 | 40·9 | |
| 9·8 | | 22·8 | 53·2 | |
| 9·5 | | 39·0 | 0·2 | |
| 9·8 | | 43·3 | 20·4 | |
| 9·5 | | 59·3 | 15·6 | |
| 9·2 | 47 | 4·8 | 57·8 | |
| 9·2 | | 5·3 | 4·4 | |
| 9·6 | | 11·3 | 50·8 | |
| 9·8 | | 15·3 | 25·2 | |
| 9·8 | | 29·3 | 36·8 | |
| 9·8 | | 29·3 | 20·0 | |
| 9·8 | | 43·3 | 30·2 | |
| 9·3 | | 49·8 | 9·0 | |
| 9·4 | | 54·8 | 50·2 | |
| 9·8 | 48 | 51·3 | 8·0 | |
| 9·0 | 49 | 9·5 | 1·8 | 8·8 |
| 9·8 | | 19·8 | 22·0 | |
| 8·4 | | 26·8 | 17·8 | 7·5 GS |
| 9·2 | | 30·8 | 49·0 | |
| 9·6 | | 34·8 | 40·3 | |
| 9·8 | | 37·3 | 17·0 | |
| 9·8 | 50 | 37·8 | 31·5 | |
| 9·8 | | 49·3 | 5·0 | |
| 7·8 | 52 | 18·3 | 4·1 | 8·5 G |
| 9·5 | | 18·8 | 10·8 | |
| 9·8 | 53 | 0·8 | 24·0 | |
| 9·8 | | 16·3 | 46·1 | |
| 9·4 | | 33·3 | 53·0 | |
| 9·6 | | 47·3 | 51·2 | |
| 9·0 | | 48·8 | 53·4 | |
| 6·7 | | 53·3 | 18·4 | 5·5 GSgt |
| 9·3 | 54 | 2·3 | 11·0 | |
| 9·3 | | 12·8 | 52·0 | G |
| 9·3 | | 12·8 | 6·0 | |
| 9·8 | | 30·8 | 27·0 | |
| 9·4 | 55 | 5·8 | 7·7 | |

### 10021—10080.

| mag. | 21h.—22h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 25·8 | 39·8 | |
| 9·2 | | 46·8 | 47·0 | G |
| 9·8 | 56 | 2·8 | 55·4 | |
| 9·8 | | 4·3 | 56·1 | |
| 9·5 | | 45·3 | 11·2 | |
| 9·4 | | 56·8 | 18·1 | |
| 8·0 | 57 | 27·8 | 4·6 | 8·2 G |
| 9·8 | | 41·3 | 2·8 | |
| 9·0 | | 50·3 | 54·7 | |
| 9·2 | | 58·3 | 30·3 | |
| 9·8 | 58 | 0·8 | 22·1 | |
| 9·8 | | 7·8 | 9·0 | |
| 9·8 | | 25·8 | 14·0 | |
| 9·6 | | 30·8 | 37·6 | |
| 9·2 | | 32·3 | 31·4 | |
| 9·8 | | 52·3 | 50·0 | |
| 9·0 | | 56·3 | 15·4 | G |
| 8·4 | 59 | 9·3 | 27·4 | 8·5 G |
| 9·8 | | 11·8 | 10·4 | |
| 9·8 | | 53·8 | 42·9 | |
| 9·5 | | 56·8 | 43·2 | |
| 7·6 | 0 | 14·3 | 2·7 | 8·0 GS |
| 8·8 | | 25·3 | 14·3 | |
| 9·6 | | 31·8 | 14·3 | |
| 9·3 | | 49·2 | 0·1 | |
| 9·5 | | 54·8 | 35·0 | |
| 9·8 | | 59·8 | 40·7 | |
| 9·3 | 1 | 8·3 | 23·5 | |
| 9·8 | | 8·3 | 42·5 | |
| 9·0 | | 24·8 | 49·9 | |
| 9·3 | | 24·8 | 11·1 | |
| 8·6 | | 40·8 | 36·3 | 9·0 |
| 9·5 | 2 | 4·8 | 3·4 | |
| 9·0 | | 28·3 | 10·7 | |
| 9·0 | | 31·8 | 21·7 | |
| 9·2 | | 45·8 | 51·5 | |
| 8·8 | | 54·2 | 1·9 | 9·0 |
| 9·8 | 3 | 1·8 | 32·3 | |
| 8·6 | | 17·3 | 52·6 | |
| 9·8 | | 20·8 | 27·9 | |
| 9·8 | | 21·8 | 48·9 | |
| 9·8 | 4 | 4·3 | 3·9 | |
| 9·8 | | 13·3 | 24·3 | |
| 9·8 | | 15·3 | 21·9 | |
| 9·2 | | 21·3 | 53·9 | 9·0 |
| 9·2 | | 25·7 | 1·7 | |
| 9·8 | | 30·3 | 4·9 | |
| 9·8 | 5 | 16·8 | 15·5 | |
| 9·3 | | 26·3 | 24·9 | |
| 8·7 | | 37·8 | 50·1 | 7·5 G |
| 9·8 | 6 | 0·3 | 29·1 | |
| 8·8 | 7 | 8·8 | 29·1 | 9·0 |
| 9·5 | | 15·3 | 13·9 | |
| 9·6 | | 39·3 | 58·7 | |
| 9·8 | | 43·8 | 51·3 | |
| 9·3 | 8 | 3·8 | 16·9 | |
| 9·8 | | 32·6 | 0·4 | |
| 9·5 | | 51·3 | 7·4 | |
| 9·8 | 9 | 13·3 | 4·0 | |
| 9·4 | 12 | 27·3 | 36·4 | |

### 10081—10140.

| mag. | 22h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 13 | 40·3 | 37·8 | |
| 10·4 | 14 | 14·3 | 40·1 | |
| 10·4 | | 52·3 | 18·2 | |
| 10·4 | 15 | 16·8 | 8·2 | |
| 9·4 | 16 | 39·8 | 27·0 | 9·5 G |
| 9·4 | 17 | 2·8 | 54·2 | |
| 10·4 | | 45·3 | 2·8 | |
| 9·4 | 18 | 41·3 | 16·1 | 9·0 |
| 10·4 | 19 | 2·2 | 26·0 | |
| 9·2 | | 14·3 | 23·0 | |
| 10·4 | | 37·3 | 5·9 | |
| 8·2 | | 43·8 | 17·8 | 8·5 |
| 8·6 | 20 | 11·3 | 8·9 | 8·5 |
| 8·9 | 21 | 3·3 | 30·4 | 9·2 |
| 10·2 | | 19·8 | 30·2 | |
| 10·4 | | 36·3 | 48·7 | |
| 9·4 | 22 | 46·8 | 32·0 | |
| 10·4 | | 52·2 | 44·2 | |
| 9·2 | 23 | 30·7 | 57·2 | |
| 10·4 | 24 | 11·3 | 18·1 | |
| 9·4 | | 55·8 | 57·0 | 9·5 |
| 10·4 | 25 | 16·3 | 21·1 | |
| 10·4 | | 58·8 | 10·5 | |
| 9·6 | 26 | 27·3 | 22·1 | |
| 10·4 | | 48·8 | 3·7 | |
| 9·6 | 27 | 56·8 | 42·6 | |
| 9·6 | 28 | 12·3 | 50·6 | |
| 9·6 | 29 | 30·3 | 8·5 | |
| 10·4 | 30 | 3·3 | 14·0 | |
| 10·4 | | 7·8 | 22·1 | |
| 9·2 | | 36·3 | 9·0 | |
| 9·6 | 31 | 11·3 | 4·1 | |
| 9·8 | | 22·3 | 40·5 | |
| 10·2 | | 54·3 | 3·1 | |
| 9·8 | 32 | 5·8 | 25·4 | |
| 10·4 | | 8·3 | 34·0 | |
| 9·2 | | 28·3 | 14·2 | |
| 9·0 | | 52·3 | 45·1 | 8·0 |
| 9·4 | 33 | 5·3 | 11·9 | |
| 7·9 | | 19·8 | 40·7 | 7·2 GS |
| 8·8 | | 38·3 | 31·1 | |
| 8·6 | 34 | 12·3 | 41·6 | 8·2 G |
| 10·4 | | 12·7 | 34·4 | |
| 10·0 | | 29·3 | 41·9 | |
| 10·0 | | 34·3 | 48·9 | |
| 9·0 | | 46·8 | 1·3 | |
| 10·4 | 35 | 22·3 | 23·4 | |
| 9·6 | | 28·3 | 10·9 | |
| 10·0 | | 34·8 | 21·2 | |
| 9·4 | | 57·3 | 25·9 | |
| 9·4 | 36 | 50·8 | 41·0 | |
| 10·0 | | 53·8 | 29·9 | |
| 9·6 | | 53·8 | 41·5 | |
| 7·6 | | 58·3 | 28·9 | 7·5 GS |
| 8·2 | 37 | 7·8 | 44·7 | 7·5 G |
| 8·2 | | 8·3 | 20·9 | 8·5 G |
| 10·4 | | 52·3 | 24·8 | |
| 9·0 | 38 | 39·8 | 11·5 | 9·5 |
| 8·9 | | 48·7 | 15·3 | 9·0 G |
| 10·4 | 39 | 0·7 | 24·0 | |

### 10141—10200.

| mag. | 22h.—23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·6 | 39 | 52·9 | 2·5 | |
| 8·2 | | 55·7 | 47·0 | 8·5 |
| 8·4 | 40 | 1·2 | 44·8 | 8·5 |
| 10·2 | | 12·2 | 2·4 | |
| 9·2 | | 25·2 | 38·9 | 9·0 |
| 9·8 | 41 | 23·8 | 48·0 | |
| 9·4 | | 24·2 | 36·0 | |
| 10·0 | 42 | 1·2 | 32·3 | |
| 10·4 | | 14·2 | 46·9 | |
| 9·0 | | 45·2 | 9·4 | |
| 9·2 | | 45·2 | 7·6 | |
| 9·4 | 43 | 11·7 | 50·5 | |
| 7·7 | | 22·2 | 8·3 | 8·0 |
| 10·4 | | 45·2 | 5·3 | |
| 9·2 | | 46·2 | 49·4 | |
| 9·6 | | 56·7 | 9·2 | |
| 10·0 | | 58·2 | 42·4 | |
| 9·8 | 44 | 2·0 | 41·0 | |
| 10·2 | | 50·5 | 47·8 | |
| 10·4 | 45 | 11·6 | 44·9 | |
| 10·4 | | 48·0 | 48·5 | |
| 9·8 | | 54·0 | 53·4 | |
| 9·6 | 46 | 16·5 | 31·2 | |
| 10·4 | 48 | 56·5 | 32·2 | |
| 10·4 | 49 | 38·5 | 56·2 | |
| 6·7 | | 43·5 | 32·6 | 7·5 GS |
| 9·8 | | 48·2 | 25·7 | |
| 9·6 | 50 | 28·2 | 24·4 | |
| 10·4 | 51 | 13·2 | 5·4 | |
| 8·0 | | 13·2 | 26·4 | 8·2 GS |
| 9·4 | | 37·7 | 59·0 | 8·0 |
| 8·6 | 52 | 30·7 | 19·8 | 9·0 G |
| 10·2 | | 44·2 | 50·9 | |
| 8·6 | 53 | 20·2 | 49·2 | 8·5 |
| 9·4 | | 40·2 | 19·0 | |
| 10·4 | 54 | 0·7 | 29·0 | |
| 8·5 | | 2·7 | 57·6 | 8·0 G |
| 10·0 | | 7·7 | 9·7 | |
| 10·4 | | 27·7 | 43·3 | |
| 10·2 | 55 | 26·2 | 26·6 | |
| 9·8 | | 38·7 | 31·5 | |
| 8·6 | | 45·7 | 31·0 | 8·0 |
| 7·2 | 56 | 1·2 | 10·2 | GS |
| 9·4 | | 3·7 | 46·1 | |
| 9·4 | | 40·2 | 41·5 | |
| 10·4 | | 51·2 | 22·8 | |
| 9·4 | | 53·2 | 1·0 | |
| 10·4 | 57 | 2·2 | 35·1 | |
| 10·4 | | 26·2 | 55·4 | |
| 10·4 | | 39·7 | 27·5 | |
| 10·4 | 58 | 14·2 | 44·3 | |
| 10·2 | | 15·7 | 45·2 | |
| 9·8 | | 35·7 | 0·7 | |
| 10·2 | 59 | 10·2 | 22·4 | |
| 9·8 | | 21·7 | 30·3 | |
| 10·4 | | 29·2 | 18·0 | |
| 9·2 | | 30·7 | 11·2 | |
| 10·4 | | 46·2 | 44·5 | |
| 8·8 | 0 | 20·2 | 39·5 | |
| 9·6 | | 39·2 | 48·1 | |

### 10201—10260.

| mag. | 23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 9·8 | 0 | 57·7 | 45·9 | |
| 9·8 | 1 | 0·2 | 29·7 | |
| 9·6 | | 14·7 | 48·6 | |
| 10·2 | | 31·7 | 51·0 | |
| 9·8 | | 36·2 | 2·7 | |
| 9·8 | 2 | 15·7 | 22·5 | |
| 10·4 | | 44·2 | 57·5 | |
| 10·4 | | 56·2 | 43·5 | |
| 10·4 | 3 | 6·7 | 44·0 | |
| 9·4 | | 20·7 | 27·1 | |
| 10·4 | | 21·7 | 53·3 | |
| 9·8 | | 35·7 | 25·2 | |
| 9·2 | | 56·7 | 9·3 | |
| 8·6 | 4 | 20·2 | 27·9 | |
| 10·4 | | 31·7 | 22·5 | |
| 9·6 | | 33·2 | 3·3 | |
| 9·2 | | 58·7 | 33·7 | |
| 9·8 | 5 | 10·7 | 45·3 | |
| 9·0 | | 12·7 | 44·5 | 9·0 |
| 10·4 | | 30·2 | 3·9 | |
| 10·4 | | 50·2 | 46·3 | |
| 10·4 | | 56·0 | 55·0 | |
| 10·4 | 6 | 2·2 | 33·7 | |
| 9·8 | | 2·7 | 35·9 | |
| 8·8 | | 4·7 | 48·8 | |
| 9·8 | | 39·7 | 46·7 | |
| 10·4 | | 40·7 | 6·7 | |
| 8·2 | 7 | 8·7 | 55·0 | 8·0 G |
| 8·5 | | 13·2 | 51·1 | 9·0 |
| 9·8 | | 40·7 | 54·1 | 9·5 |
| 10·2 | | 43·2 | 57·9 | |
| 7·8 | | 49·2 | 24·7 | 8·0 GS |
| 10·4 | | 57·2 | 20·9 | |
| 6·4 | 8 | 4·7 | 22·3 | 6·5 GScgt |
| 9·8 | | 25·5 | 0·7 | |
| 8·8 | | 52·2 | 5·1 | |
| 10·0 | 9 | 31·7 | 9·3 | |
| 10·4 | 10 | 18·2 | 30·3 | |
| 10·4 | | 22·2 | 51·9 | |
| 9·2 | | 54·2 | 35·1 | |
| 10·4 | 11 | 0·2 | 22·6 | |
| 10·4 | | 32·3 | 7·9 | |
| 10·0 | | 49·9 | 12·7 | |
| 10·2 | 12 | 7·4 | 28·5 | |
| 10·2 | | 38·4 | 38·7 | |
| 9·0 | | 40·4 | 38·9 | |
| 10·2 | 13 | 3·2 | 34·3 | |
| 9·1 | | 4·9 | 5·7 | |
| 10·2 | | 20·4 | 39·9 | |
| 9·2 | | 27·4 | 2·2 | |
| 9·1 | | 39·4 | 29·4 | |
| 9·6 | 14 | 1·9 | 23·7 | |
| 10·2 | | 23·9 | 25·9 | |
| 9·8 | | 30·9 | 5·9 | |
| 9·4 | | 35·4 | 53·9 | |
| 9·8 | 15 | 5·9 | 38·6 | |
| 8·6 | | 29·9 | 50·8 | 9·0 G |
| 10·2 | | 42·9 | 2·7 | |
| 8·5 | 16 | 11·9 | 11·7 | |
| 9·8 | | 35·9 | 52·7 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 50 | 105 | 7·0 |
| 22 | 0 | 103 | 7·2 |
| | 10 | 101 | 7·4 |
| | 20 | 99 | 7·6 |
| | 30 | 97 | 7·7 |
| | 40 | 95 | 7·9 |
| | 50 | 93 | 8·0 |
| 23 | 0 | 90 | 8·1 |
| | 10 | 88 | 8·2 |
| | 20 | 86 | 8·2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 10 | 88 | 8·2 |
| | 20 | 86 | 8·2 |
| | 30 | 84 | 8·3 |
| | 40 | 81 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

## 10261—10302.

| mag. | 23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 16 | 47·4 | 5·9 | |
| 9·6 | 17 | 9·9 | 16·9 | |
| 9·8 | | 10·9 | 52·5 | |
| 9·4 | | 22·4 | 14·0 | |
| 9·4 | | 46·9 | 55·8 | |
| 10·0 | | 47·9 | 5·1 | |
| 10·0 | | 49·4 | 16·5 | |
| 6·6 | 18 | 10·9 | 32·0 | 6·0 GSct |
| 10·2 | | 13·7 | 45·4 | |
| 9·8 | | 36·2 | 55·7 | |
| 9·4 | | 38·7 | 51·0 | |
| 9·6 | 19 | 0·2 | 54·2 | |
| 10·2 | | 6·2 | 30·8 | |
| 10·2 | | 39·7 | 32·8 | |
| 9·2 | | 49·7 | 14·2 | |
| 10·0 | 20 | 45·2 | 52·6 | |
| 7·1 | 21 | 9·2 | 7·4 | 7·0 GS |
| 10·2 | | 24·7 | 56·2 | |
| 8·0 | | 46·2 | 34·0 | 8·3 |
| 10·2 | 22 | 7·7 | 5·5 | |
| 8·8 | | 13·2 | 9·8 | |
| 8·8 | | 39·1 | 57·4 | |
| 10·2 | | 52·2 | 5·3 | |
| 10·2 | 23 | 4·7 | 59·4 | |
| 9·6 | | 27·2 | 49·0 | |
| 10·2 | | 55·2 | 37·9 | |
| 9·0 | 24 | 17·2 | 7·7 | |
| 8·8 | 25 | 12·3 | 59·9 | |
| 10·2 | | 13·2 | 27·2 | |
| 10·2 | | 22·7 | 17·2 | |
| 10·2 | | 50·2 | 0·4 | |
| 7·7 | 26 | 27·7 | 43·1 | 8·0 GS |
| 7·4 | | 30·7 | 44·6 | 7·0 GS |
| 8·5 | | 39·7 | 29·6 | 8·8 G |
| 10·2 | 27 | 2·7 | 58·2 | |
| 9·2 | | 20·2 | 27·0 | |
| 6·9 | 28 | 6·2 | 30·8 | 6·8 GSctr |
| 10·2 | | 21·2 | 39·6 | |
| 9·0 | 29 | 39·2 | 45·2 | |
| 10·2 | | 46·2 | 12·4 | |
| 8·8 | | 51·5 | 23·6 | 9·0 |
| 9·4 | 30 | 1·5 | 10·5 | |

## 10303—10344.

| mag. | 23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 30 | 18·5 | 32·8 | |
| 10·2 | | 23·0 | 7·9 | |
| 8·0 | 31 | 20·5 | 8·6 | 7·5 GS |
| 8·6 | | 25·5 | 31·6 | 9·0 |
| 10·2 | 32 | 9·0 | 23·2 | |
| 10·2 | | 17·5 | 1·6 | |
| 10·2 | | 28·5 | 24·0 | |
| 8·8 | | 32·5 | 40·7 | |
| 10·2 | | 42·0 | 23·9 | |
| 9·1 | | 48·0 | 12·7 | |
| 9·2 | | 48·5 | 42·6 | |
| 9·0 | 33 | 6·7 | 59·7 | 9·0 |
| 8·4 | | 10·0 | 26·1 | 8·8 |
| 9·8 | | 20·5 | 52·4 | |
| 10·0 | | 27·0 | 13·4 | |
| 10·2 | | 28·0 | 12·9 | |
| 10·0 | | 53·0 | 8·2 | |
| 9·6 | | 56·0 | 56·3 | |
| 7·1 | 34 | 2·0 | 6·7 | 7·5 GSr |
| 9·4 | | 14·1 | 1·9 | |
| 10·2 | | 19·0 | 27·5 | |
| 9·8 | | 32·5 | 37·3 | |
| 9·1 | | 56·5 | 23·8 | 9·0 |
| 10·2 | 35 | 13·5 | 34·5 | |
| 8·1 | | 21·5 | 4·4 | 8·0 GS |
| 10·0 | | 33·0 | 36·9 | |
| 8·6 | | 50·0 | 47·5 | |
| 9·8 | 36 | 12·0 | 32·2 | |
| 10·0 | | 15·0 | 38·7 | |
| 10·2 | | 20·0 | 20·4 | |
| 10·2 | | 37·0 | 49·9 | |
| 10·2 | | 46·5 | 48·6 | |
| 9·0 | 37 | 13·0 | 43·4 | |
| 10·2 | | 26·0 | 54·8 | |
| 10·2 | | 37·0 | 1·7 | |
| 9·4 | | 57·5 | 53·4 | |
| 9·8 | 38 | 0·0 | 9·4 | |
| 9·4 | | 25·5 | 8·8 | |
| 10·2 | | 36·7 | 29·9 | |
| 9·0 | | 48·0 | 58·4 | |
| 8·6 | 39 | 10·0 | 17·7 | |
| 9·4 | 40 | 11·5 | 11·5 | |

## 10345—10386.

| mag. | 23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 10·2 | 40 | 16·5 | 33·6 | |
| 10·2 | | 18·5 | 35·4 | |
| 9·6 | | 20·5 | 40·0 | |
| 9·8 | | 28·5 | 47·7 | |
| 9·0 | | 38·0 | 42·8 | |
| 9·6 | 41 | 7·0 | 45·8 | |
| 9·0 | | 16·5 | 53·0 | |
| 9·2 | | 16·5 | 34·6 | |
| 10·2 | | 19·0 | 31·4 | |
| 9·4 | | 49·5 | 34·3 | |
| 10·2 | | 57·0 | 5·0 | |
| 9·4 | | 57·0 | 11·2 | |
| 10·2 | 42 | 26·5 | 14·4 | |
| 9·6 | | 42·5 | 41·8 | |
| 10·2 | | 51·5 | 7·8 | |
| 8·2 | 43 | 6·5 | 5·2 | 8·0 |
| 10·0 | | 28·0 | 21·9 | |
| 9·8 | | 42·3 | 24·0 | |
| 9·6 | | 42·3 | 23·6 | |
| 9·6 | 44 | 6·5 | 30·9 | |
| 9·6 | | 17·3 | 40·9 | |
| 10·2 | | 40·1 | 26·9 | |
| 9·8 | | 47·8 | 33·0 | |
| 10·6 | | 50·8 | 48·1 | |
| 11·0 | 45 | 0·1 | 41·1 | |
| 11·0 | | 2·7 | 27·9 | |
| 11·0 | | 19·5 | 41·6 | |
| 7·8 | | 51·1 | 20·3 | 8·5 |
| 8·6 | | 59·1 | 42·3 | |
| 8·0 | 46 | 16·1 | 28·2 | 8·5 GS |
| 9·0 | | 43·1 | 48·2 | |
| 10·2 | 47 | 19·6 | 49·7 | |
| 11·0 | | 45·1 | 23·3 | |
| 11·0 | | 47·6 | 20·9 | |
| 11·0 | | 56·6 | 28·9 | |
| 10·4 | 48 | 30·6 | 6·1 | |
| 10·6 | 49 | 15·1 | 7·4 | |
| 11·0 | | 52·1 | 27·0 | |
| 7·4 | 50 | 11·6 | 50·6 | GSct |
| 10·6 | 51 | 5·1 | 56·9 | |
| 10·2 | | 11·6 | 0·7 | |
| 7·4 | | 41·6 | 53·6 | 7·5 GS |

## 10387—10427.

| mag. | 23h. m | s | −57° ′ | |
|---|---|---|---|---|
| 11·0 | 51 | 51·1 | 28·5 | |
| 10·2 | | 56·6 | 47·6 | |
| 6·8 | 52 | 1·6 | 58·7 | 7·0 GSt |
| 11·0 | | 16·6 | 36·9 | |
| 8·6 | | 19·6 | 41·7 | 9·5 G |
| 11·0 | | 25·6 | 21·5 | |
| 7·8 | | 35·1 | 16·2 | 7·0 GS |
| 10·0 | | 45·6 | 15·2 | |
| 11·0 | | 50·6 | 41·8 | |
| 10·6 | | 52·6 | 43·9 | |
| 11·0 | 53 | 16·6 | 0·9 | |
| 10·6 | | 49·6 | 50·0 | |
| 10·2 | | 52·1 | 17·7 | |
| 10·4 | 54 | 6·0 | 31·6 | |
| 10·2 | | 18·5 | 19·7 | |
| 11·0 | | 23·0 | 31·7 | |
| 10·4 | | 37·5 | 24·9 | |
| 9·6 | 55 | 22·5 | 56·4 | |
| 8·4 | | 40·0 | 12·7 | 9·0 |
| 10·4 | | 51·5 | 0·7 | |
| 9·0 | 56 | 4·0 | 35·7 | |
| 10·0 | | 8·0 | 39·0 | |
| 10·6 | | 11·0 | 3·0 | |
| 11·0 | | 14·0 | 18·8 | |
| 8·6 | | 18·0 | 28·7 | 9·5 |
| 11·0 | | 22·0 | 40·4 | |
| 11·0 | | 28·5 | 25·8 | |
| 11·0 | | 31·0 | 44·5 | |
| 11·0 | | 37·5 | 42·8 | |
| 10·4 | | 41·5 | 42·9 | |
| 10·4 | | 52·0 | 42·9 | |
| 11·0 | | 58·0 | 34·9 | |
| 9·8 | 57 | 0·5 | 32·7 | |
| 11·0 | | 12·5 | 37·0 | |
| 7·6 | | 15·5 | 51·7 | 8·5 |
| 9·4 | | 45·5 | 5·9 | |
| 9·4 | 58 | 0·5 | 41·0 | |
| 8·0 | | 21·5 | 32·2 | 7·8 GSt |
| 8·8 | | 50·0 | 23·4 | |
| 7·0 | 59 | 0·0 | 39·1 | 6·8 GSctr |
| 11·0 | | 25·5 | 31·4 | |



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# ZONE—58°.

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 72 | 8·3 |
| | 30 | 70 | 8·3 |
| | 40 | 67 | 8·2 |
| | 50 | 65 | 8·2 |
| 1 | 0 | 63 | 8·1 |
| | 10 | 60 | 8·0 |
| | 20 | 58 | 7·9 |
| | 30 | 56 | 7·7 |
| | 40 | 54 | 7·6 |
| | 50 | 52 | 7·4 |
| 2 | 0 | 50 | 7·2 |

1—45.

| mag. | 0h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 0 | 19·0 | 5·0 | |
| 9·5 | | 46·0 | 4·9 | |
| 9·4 | 1 | 50·0 | 33·5 | |
| 9·7 | 3 | 54·0 | 13·5 | |
| 8·4 | 4 | 0·0 | 12·6 | |
| 9·7 | | 15·0 | 24·6 | |
| 8·2 | | 34·0 | 11·0 | |
| 9·0 | 5 | 21·0 | 10·0 | |
| 9·2 | 6 | 7·0 | 12·0 | |
| 7·3 | | 40·0 | 36·5 | 7·5 GS |
| 9·5 | | 44·0 | 3·2 | |
| 9·7 | 9 | 0·0 | 31·9 | |
| 10·4† | | 30·6 | 2·6 | |
| 8·2 | 10 | 50·0 | 50·8 | 8·0 |
| 9·7 | 12 | 7·0 | 37·8 | |
| 9·6 | | 10·0 | 21·6 | |
| 9·5 | | 13·0 | 26·0 | |
| 9·6 | | 19·0 | 37·1 | |
| 9·3 | | 42·0 | 39·0 | |
| 9·5 | 16 | 20·0 | 34·4 | |
| 9·7 | | 35·0 | 56·0 | |
| 9·7 | 17 | 5·0 | 8·4 | |
| 9·0 | 18 | 47·0 | 42·2 | 9·5 |
| 9·7 | 19 | 10·5 | 33·0 | |
| 9·0 | | 17·0 | 57·5 | 9·0 |
| 9·6 | 20 | 10·0 | 57·0 | |
| 9·6 | | 27·2 | 17·1 | |
| 9·5 | | 28·5 | 14·0 | |
| 9·6 | 24 | 19·2 | 18·1 | |
| 8·6 | 28 | 15·5 | 53·4 | 7·5 G |
| 9·0 | | 55·0 | 37·9 | |
| 9·4 | 29 | 50·5 | 15·6 | |
| 8·3 | 30 | 44·0 | 53·7 | 8·0 G |
| 9·4 | | 47·5 | 20·3 | |
| 9·5 | 31 | 56·2 | 30·7 | |
| 9·5 | 32 | 15·0 | 44·9 | 9·0 |
| 9·4 | | 39·5 | 48·2 | 9·5 |
| 9·6 | | 48·0 | 37·5 | |
| 6·7 | 33 | 29·0 | 39·2 | 6·5 GS |
| 9·4 | | 49·0 | 32·1 | 9·5 |
| 9·6 | 34 | 28·8 | 59·3 | |
| 4·3 | 37 | 42·5 | 8·9 | 5·0 GStrλ |
| 9·5 | | 45·0 | 35·1 | |
| 10·2† | 38 | 8·7 | 2·8 | |
| 9·4 | 40 | 7·5 | 37·3 | 9·0 G |

46—90.

| mag. | 0h.–1h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·5 | 40 | 49·2 | 57·1 | 9·0 |
| 7·6 | | 51·0 | 36·5 | 7·0 GS |
| 8·2 | 41 | 2·5 | 43·8 | 7·5 G |
| 8·8 | 43 | 40·5 | 7·3 | 9·0 |
| 9·5 | | 50·5 | 44·3 | |
| 8·2 | 44 | 27·0 | 4·2 | 7·0 GS |
| 9·5 | | 55·0 | 50·3 | |
| 9·0 | 45 | 15·6 | 0·8 | 9·0 |
| 9·4 | 48 | 28·0 | 13·1 | 9·5 G |
| 8·0 | | 49·5 | 5·1 | 7·0 GS |
| 8·5 | 51 | 0·5 | 15·8 | 8·5 |
| 9·9 | 52 | 27·0 | 52·9 | |
| 7·8 | | 44·0 | 22·5 | 8·0 G |
| 9·9 | 53 | 18·0 | 55·5 | |
| 9·4 | | 49·5 | 13·5 | |
| 10·4† | 54 | 9·7 | 2·8 | |
| 9·2 | | 37·5 | 22·3 | |
| 10·2 | | 39·0 | 41·0 | |
| 9·4 | 55 | 29·5 | 23·4 | 9·0 G |
| 8·2 | 57 | 12·5 | 0·9 | 8·5 |
| 10·4 | | 22·0 | 38·8 | |
| 10·2 | 58 | 36·6 | 1·1 | |
| 10·2 | | 39·0 | 54·5 | |
| 10·2 | | 40·0 | 49·9 | |
| 9·9 | | 54·5 | 44·7 | |
| 7·4 | 0 | 2·5 | 27·8 | 8·0 G |
| 10·4 | | 9·0 | 4·6 | |
| 9·4 | | 35·0 | 33·9 | |
| 9·4 | 2 | 17·0 | 31·0 | |
| 10·4 | | 30·0 | 16·7 | |
| 10·2 | 3 | 5·0 | 9·1 | |
| 9·9 | | 26·0 | 13·8 | |
| 9·6 | | 40·0 | 25·9 | |
| 10·4 | | 55·5 | 23·0 | |
| 9·0 | 4 | 29·7 | 57·9 | |
| 6·6 | 5 | 1·0 | 21·2 | 6·5 GSct |
| 9·8 | | 9·0 | 48·9 | |
| 10·4 | | 16·0 | 24·8 | |
| 8·2 | 7 | 17·0 | 1·7 | 9·0 |
| 9·2 | | 40·0 | 2·0 | 9·5 |
| 10·2 | 9 | 27·0 | 17·8 | |
| 8·6 | | 39·5 | 2·7 | 7·8 GSg |
| 10·2 | | 56·0 | 19·8 | |
| 9·9 | 10 | 4·0 | 7·8 | |
| 9·4 | | 15·0 | 41·3 | |

91—135.

| mag. | 1h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 10 | 43·5 | 51·8 | |
| 10·2 | 13 | 7·0 | 11·1 | |
| 10·4 | 14 | 23·0 | 8·1 | |
| 9·9 | | 52·5 | 56·9 | |
| 7·2 | 15 | 0·8 | 0·4 | 7·0 GS |
| 10·4 | | 6·0 | 55·8 | |
| 10·4† | | 22·5 | 1·5 | |
| 9·4 | 17 | 1·5 | 38·2 | |
| 10·4 | | 55·5 | 41·3 | |
| 10·2 | 18 | 24·0 | 33·0 | |
| 8·8 | | 27·0 | 7·9 | 8·5 G |
| 10·2 | | 52·5 | 20·1 | |
| 10·0 | 20 | 34·5 | 51·2 | |
| 9·9 | 21 | 18·5 | 15·2 | |
| 9·9 | | 36·0 | 15·8 | |
| 9·9 | | 53·5 | 9·8 | |
| 10·4 | 22 | 50·5 | 39·8 | |
| 9·2 | 23 | 14·5 | 25·8 | |
| 10·0 | | 40·5 | 27·2 | |
| 9·8 | 24 | 39·5 | 40·8 | |
| 10·0 | | 50·0 | 7·4 | |
| 10·0 | 25 | 11·0 | 21·6 | |
| 10·2 | 27 | 55·5 | 52·2 | |
| 9·2 | 28 | 22·5 | 51·0 | |
| 9·4 | | 24·5 | 21·5 | 9·5 |
| 8·2 | | 45·7 | 13·1 | 8·0 G |
| 9·9 | 29 | 5·2 | 22·6 | |
| 9·9 | | 15·9 | 13·1 | |
| 10·6 | | 21·1 | 33·3 | |
| 8·4 | | 22·8 | 58·6 | 8·5 G |
| 9·9 | 30 | 15·1 | 46·5 | |
| 10·2 | | 29·6 | 46·0 | |
| 6·5 | | 33·6 | 46·6 | 6·0 GSt |
| 8·6 | 31 | 32·2 | 9·5 | 9·0 |
| 9·8 | | 51·9 | 0·2 | |
| 7·2 | 32 | 10·5 | 54·6 | 6·5 GSct |
| 9·5 | | 36·9 | 21·4 | |
| 10·2 | 33 | 32·6 | 1·5 | |
| 9·7 | | 33·9 | 15·8 | |
| 10·2 | 34 | 57·9 | 5·9 | |
| 9·7 | | 58·1 | 39·9 | |
| 10·6 | 35 | 22·9 | 18·5 | |
| 8·5 | | 26·2 | 59·4 | 9·0 |
| 10·2 | | 44·1 | 58·2 | |
| 10·6 | 37 | 51·6 | 50·4 | |

136—180.

| mag. | 1h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·6 | 37 | 57·4 | 12·7 | |
| 9·7 | 38 | 31·4 | 16·9 | |
| 8·9 | | 44·2 | 38·0 | |
| 9·2 | 39 | 1·4 | 18·9 | 9·0 |
| 10·2 | | 28·9 | 6·6 | |
| 9·2 | 40 | 20·1 | 34·7 | |
| 10·2 | | 40·6 | 59·5 | |
| 10·2 | | 47·3 | 2·4 | |
| 10·4 | | 47·9 | 26·2 | |
| 10·2 | 41 | 4·9 | 22·0 | |
| 9·8 | | 5·1 | 58·8 | |
| 9·2 | | 21·4 | 19·8 | |
| 9·6 | | 27·6 | 50·5 | |
| 10·2 | | 38·6 | 31·0 | |
| 10·4 | 43 | 14·1 | 44·4 | |
| 9·2 | | 35·9 | 9·5 | |
| 10·4 | 44 | 40·9 | 2·6 | |
| 10·0 | | 45·1 | 30·3 | |
| 9·7 | 45 | 22·6 | 32·2 | |
| 9·9 | | 35·9 | 29·6 | |
| 9·9 | | 45·1 | 50·7 | |
| 9·0 | 46 | 32·1 | 54·6 | 9·0 G |
| 10·0 | | 34·9 | 24·8 | |
| 9·9 | 47 | 28·4 | 10·6 | |
| 9·7 | | 50·4 | 24·9 | |
| 10·6 | 48 | 6·9 | 24·0 | |
| 9·9 | | 8·1 | 36·2 | |
| 10·4 | 49 | 16·6 | 52·0 | |
| 10·6 | | 38·4 | 16·1 | |
| 9·9 | | 41·9 | 10·9 | |
| 8·1 | | 50·1 | 31·9 | 7·5 GSg |
| 10·6 | 50 | 7·6 | 24·9 | |
| 10·4 | | 24·4 | 13·2 | |
| 10·6 | | 31·4 | 32·3 | |
| 10·6 | | 31·6 | 32·1 | |
| 9·9 | | 42·6 | 50·5 | |
| 8·0 | | 58·8 | 57·9 | 8·5 |
| 10·4 | 51 | 8·1 | 59·5 | |
| 10·6 | | 25·1 | 51·8 | |
| 10·6 | | 26·1 | 51·6 | |
| 10·6 | | 31·9 | 13·2 | |
| 10·2 | 52 | 32·4 | 29·1 | |
| 9·7 | 54 | 21·1 | 54·3 | |
| 10·6 | | 49·1 | 48·2 | |
| 10·6 | 55 | 42·4 | 28·6 | |



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25 prec.

| m | | α + s | δ + ′ |
|---|---|---|---|
| 1 | 50 | 52 | 7·4 |
| 2 | 0 | 50 | 7·2 |
| | 10 | 48 | 7·0 |
| | 20 | 46 | 6·8 |
| | 30 | 44 | 6·6 |
| | 40 | 42 | 6·4 |
| | 50 | 40 | 6·2 |
| 3 | 0 | 38 | 5·9 |
| | 10 | 37 | 5·6 |
| | 20 | 35 | 5·4 |
| | 30 | 34 | 5·1 |
| | 40 | 32 | 4·8 |
| | 50 | 31 | 4·5 |
| 4 | 0 | 30 | 4·2 |
| | 10 | 28 | 3·9 |
| | 20 | 27 | 3·5 |
| | 30 | 26 | 3·2 |
| | 40 | 26 | 2·9 |
| | 50 | 25 | 2·5 |

## 181—240.

| mag. | 1h.—2h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·9 | 56 | 11·9 | 15·2 | |
| 8·2 | 57 | 42·9 | 17·4 | 8·0 G |
| 9·0 | 58 | 17·4 | 11·2 | 9·5 |
| 7·9 | | 31·9 | 11·9 | 8·0 |
| 10·2 | | 44·4 | 1·6 | |
| 9·6 | | 51·4 | 0·4 | |
| 9·8 | | 54·9 | 10·9 | |
| 10·6 | 59 | 10·1 | 43·5 | |
| 9·5 | | 35·9 | 17·8 | |
| 9·5 | | 51·4 | 18·3 | |
| 7·2 | 0 | 26·1 | 56·6 | 7·5 GSt |
| 8·2 | 1 | 23·3 | 44·4 | |
| 9·0 | | 54·6 | 39·0 | |
| 9·4 | 2 | 26·9 | 0·2 | |
| 9·9 | 3 | 24·9 | 27·8 | |
| 8·9 | | 45·6 | 56·3 | 9·0 |
| 9·9 | 4 | 39·6 | 48·6 | |
| 10·6 | 6 | 47·9 | 29·8 | |
| 8·9 | 7 | 19·8 | 36·3 | |
| 9·4 | 13 | 27·0 | 41·7 | |
| 8·3 | 14 | 18·5 | 23·9 | 8·5 |
| 10·0† | 16 | 11·0 | 0·9 | |
| 8·9 | | 22·0 | 25·5 | 8·5 G |
| 8·3 | 17 | 15·5 | 15·5 | 8·0 G |
| 8·6 | | 53·5 | 40·3 | 8·5 |
| 9·4 | | 57·5 | 35·9 | |
| 8·8 | 19 | 50·5 | 45·0 | |
| 9·4 | 21 | 35·0 | 32·0 | |
| 8·6 | | 49·5 | 44·7 | |
| 9·6 | | 49·5 | 23·4 | |
| 9·4 | 23 | 40·0 | 14·5 | |
| 9·4 | | 44·0 | 52·0 | |
| 8·8 | 24 | 2·0 | 35·3 | 9·5 |
| 7·5 | | 15·0 | 41·9 | 7·5 GS |
| 8·4 | | 21·0 | 12·7 | |
| 9·6 | 25 | 51·0 | 21·6 | 9·5 G |
| 7·9 | 26 | 33·5 | 21·9 | 7·0 GSg |
| 9·2 | 29 | 11·5 | 56·4 | |
| 9·0 | | 17·0 | 26·4 | |
| 9·2 | 31 | 32·0 | 28·2 | |
| 8·6 | 33 | 20·5 | 28·2 | |
| 9·6 | 34 | 58·5 | 29·9 | |
| 9·6 | 35 | 30·5 | 43·6 | |
| 8·6 | 36 | 27·5 | 12·2 | 8·0 G |
| 7·9 | 37 | 13·5 | 40·2 | 8·0 G |
| 8·9 | 41 | 5·8 | 1·2 | |
| 8·9 | | 20·8 | 29·1 | |
| 9·6 | | 42·0 | 45·9 | |
| 9·6 | | 44·0 | 49·3 | |
| 8·8 | | 54·2 | 57·6 | |
| 8·6 | | 55·7 | 15·1 | |
| 9·0 | 42 | 11·7 | 13·9 | |
| 9·6 | 43 | 15·5 | 48·6 | |
| 9·0 | | 18·3 | 45·1 | 9·0 |
| 9·4 | 44 | 1·5 | 48·1 | 9·0 G |
| 8·2 | | 48·0 | 11·1 | 8·2 G |
| 9·7 | | 58·5 | 52·8 | |
| 8·9 | 45 | 44·0 | 20·2 | 8·2 G |
| 9·6 | 46 | 8·0 | 31·0 | |
| 9·6 | 47 | 4·5 | 14·5 | 9·0 |

## 241—300.

| mag. | 2h.—3h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·2 | 47 | 52·0 | 28·1 | 9·5 |
| 9·7 | 49 | 30·5 | 13·1 | |
| 9·1 | | 42·0 | 29·9 | |
| 9·7 | 51 | 28·0 | 41·3 | |
| 9·7 | 52 | 31·5 | 35·6 | |
| 9·2 | 53 | 22·5 | 51·5 | 9·0 G |
| 9·7 | | 52·5 | 15·6 | |
| 8·5 | 54 | 34·5 | 3·5 | |
| 9·6 | 55 | 15·0 | 44·1 | |
| 8·4 | | 40·5 | 16·1 | 9·0 |
| 8·3 | 56 | 47·5 | 44·1 | 8·5 G |
| 8·9 | | 54·5 | 8·1 | |
| 9·0 | 57 | 0·0 | 42·1 | 9·0 G |
| 9·1 | 59 | 31·5 | 20·2 | 8·5 G |
| 9·0 | 0 | 12·7 | 1·0 | |
| 9·6 | | 21·5 | 22·2 | |
| 8·6 | 1 | 21·0 | 53·3 | |
| 9·7 | | 47·5 | 15·7 | |
| 9·6 | 2 | 2·5 | 7·6 | |
| 9·7 | | 5·7 | 2·1 | |
| 9·1 | | 53·5 | 25·0 | |
| 9·7 | 3 | 8·0 | 17·8 | |
| 9·5 | 5 | 56·5 | 25·8 | |
| 9·0 | 6 | 13·5 | 34·2 | |
| 6·9 | 7 | 31·5 | 17·0 | 7·0 GSct |
| 8·7 | | 42·0 | 10·3 | 8·5 |
| 10·8† | 8 | 59·5 | 2·4 | |
| 9·9 | 9 | 7·5 | 4·8 | |
| 9·0 | | 7·5 | 10·3 | |
| 9·2 | | 20·0 | 10·3 | |
| 8·3 | | 57·5 | 18·0 | 9·0 |
| 9·6 | 10 | 0·5 | 5·4 | |
| 9·4 | 11 | 26·5 | 24·9 | |
| 8·5 | 12 | 30·0 | 17·0 | |
| 7·8 | 15 | 53·5 | 26·1 | 7·5 GS |
| 9·8 | 17 | 38·5 | 34·2 | |
| 9·8 | 18 | 44·7 | 14·4 | |
| 8·8 | 19 | 50·7 | 17·4 | |
| 9·8 | 20 | 30·5 | 30·3 | |
| 9·8 | | 49·5 | 7·1 | |
| 9·8 | 22 | 54·5 | 6·1 | |
| 9·8 | 23 | 38·0 | 2·1 | |
| 8·1 | 24 | 18·5 | 45·6 | 8·0 |
| 9·8 | 25 | 21·8 | 2·1 | |
| 7·3 | | 24·0 | 18·8 | 7·5 GS |
| 9·4 | 26 | 39·5 | 43·2 | |
| 8·8 | 27 | 5·5 | 13·8 | 9·0 |
| 8·8 | | 50·5 | 33·3 | |
| 9·8 | 28 | 16·5 | 38·5 | |
| 9·4 | | 18·5 | 43·5 | |
| 8·5 | | 54·5 | 48·7 | 9·0 |
| 8·0 | | 55·5 | 31·3 | 8·5 |
| 8·8 | 29 | 13·5 | 13·1 | |
| 8·5 | 30 | 18·0 | 21·8 | 9·0 G |
| 8·0 | | 48·0 | 23·6 | 8·5 S |
| 9·4 | 31 | 1·0 | 2·4 | |
| 9·6 | | 18·6 | 3·0 | |
| 9·0 | | 51·0 | 8·2 | 8·5 G |
| 7·4 | 32 | 19·0 | 13·7 | 7·5 GS |
| 8·8 | 33 | 39·0 | 29·9 | |

## 301—360.

| mag. | 3h.—4h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 33 | 53·0 | 36·6 | |
| 9·4 | 34 | 2·5 | 16·9 | |
| 9·8 | | 29·0 | 20·3 | |
| 8·4 | 35 | 31·6 | 3·0 | 8·5 |
| 9·8 | 36 | 38·0 | 41·0 | |
| 8·2 | 37 | 13·0 | 25·1 | |
| 8·2 | 39 | 9·0 | 23·7 | 8·5 |
| 9·0 | | 47·0 | 48·8 | |
| 9·8 | 40 | 22·0 | 5·3 | |
| 9·4 | 41 | 13·0 | 20·3 | |
| 8·8 | 44 | 42·5 | 27·6 | |
| 9·8 | | 53·0 | 9·2 | |
| 8·0 | 45 | 1·6 | 0·9 | 8·5 GS |
| 9·2 | | 9·0 | 4·7 | 9·5 |
| 8·6 | | 31·0 | 36·1 | 8·5 G |
| 8·8 | 46 | 5·0 | 23·1 | |
| 9·8 | | 40·0 | 49·1 | |
| 9·4 | 47 | 40·5 | 43·9 | |
| 9·2 | 48 | 51·5 | 11·2 | 9·0 G |
| 8·6 | | 52·2 | 57·0 | 8·5 |
| 9·8 | 50 | 51·5 | 9·2 | |
| 10·0† | 51 | 9·4 | 0·7 | |
| 9·2 | | 39·5 | 36·1 | |
| 9·6 | | 56·7 | 56·7 | |
| 8·8 | 52 | 8·0 | 18·2 | 9·0 |
| 8·4 | | 11·0 | 5·4 | 9·0 |
| 8·8 | | 20·0 | 34·1 | |
| 8·9 | | 20·0 | 45·1 | 8·5 G |
| 9·5 | 53 | 4·5 | 11·1 | |
| 9·0 | 54 | 9·0 | 50·9 | 8·5 |
| 9·6 | | 43·5 | 13·1 | |
| 9·8 | 55 | 43·5 | 24·8 | |
| 9·4 | 56 | 33·5 | 41·1 | |
| 9·8 | 57 | 12·5 | 19·2 | 9·5 |
| 9·8 | 58 | 11·5 | 46·4 | |
| 9·2 | | 29·0 | 42·9 | |
| 9·6 | 59 | 35·5 | 49·5 | |
| 9·8 | 0 | 43·0 | 58·1 | |
| 10·0 | | 51·5 | 52·6 | |
| 8·8 | 2 | 22·5 | 31·0 | |
| 9·2 | | 27·0 | 29·9 | |
| 9·9 | | 48·5 | 13·0 | |
| 9·8 | | 50·0 | 13·0 | |
| 7·2 | 3 | 7·5 | 49·0 | 8·5 GS |
| 9·6 | 4 | 23·0 | 18·0 | |
| 8·6 | 5 | 30·0 | 51·4 | GS |
| 8·6 | 6 | 22·5 | 49·0 | |
| 9·8 | 7 | 8·7 | 0·8 | 9·5 |
| 8·8 | | 10·5 | 54·0 | |
| 9·0 | | 53·5 | 6·3 | |
| 9·2 | 8 | 49·0 | 26·0 | 9·5 |
| 9·4 | 9 | 30·5 | 21·0 | |
| 8·4 | | 55·5 | 7·6 | 9·0 |
| 9·8 | 10 | 19·0 | 56·3 | |
| 9·9 | | 43·0 | 25·2 | |
| 9·8 | | 59·0 | 54·0 | |
| 9·8 | 11 | 0·5 | 31·1 | |
| 6·8 | | 15·0 | 20·2 | 7·5 GSct |
| 8·7 | 12 | 4·5 | 3·5 | 8·5 |
| 9·2 | | 21·5 | 25·2 | |

## 361—420.

| mag. | 4h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 12 | 41·5 | 27·0 | |
| 9·5 | | 45·0 | 46·0 | |
| 9·8 | 13 | 47·5 | 34·0 | |
| 9·1 | | 52·0 | 36·4 | |
| 9·8 | 14 | 7·0 | 30·0 | |
| 8·7 | | 58·0 | 7·4 | |
| 9·9 | 15 | 4·5 | 54·5 | |
| 8·8 | | 21·5 | 27·8 | |
| 9·6 | | 34·5 | 9·2 | |
| 9·1 | | 40·0 | 52·2 | 9·0 |
| 8·7 | 16 | 15·0 | 43·0 | 8·5 |
| 9·8 | | 59·0 | 2·0 | |
| 9·2 | 17 | 19·5 | 14·5 | |
| 9·6 | 18 | 30·7 | 58·7 | |
| 9·8 | 19 | 9·0 | 24·0 | |
| 10·0 | 20 | 20·0 | 0·0 | |
| 9·6 | | 27·0 | 33·0 | |
| 9·2 | | 59·0 | 37·3 | |
| 9·6 | 22 | 28·0 | 24·0 | |
| 9·2 | 23 | 0·0 | 2·0 | 9·0 |
| 9·4 | | 7·5 | 6·8 | |
| 9·8 | 24 | 20·5 | 20·0 | |
| 9·6 | | 47·0 | 22·6 | |
| 9·9 | | 48·0 | 58·6 | |
| 9·5 | 25 | 0·5 | 32·0 | |
| 9·1 | | 0·5 | 14·0 | |
| 9·2 | | 57·0 | 38·0 | |
| 9·8 | 27 | 4·5 | 23·0 | |
| 9·9 | | 18·5 | 38·3 | |
| 9·0 | 28 | 18·5 | 26·8 | |
| 9·1 | | 34·3 | 53·9 | |
| 9·8 | | 40·5 | 55·5 | |
| 8·8 | 29 | 2·5 | 44·9 | 9·0 |
| 9·2 | 30 | 11·0 | 10·6 | |
| 9·1 | | 17·0 | 0·7 | |
| 8·8 | | 24·5 | 55·1 | 8·0 G |
| 9·2 | 31 | 5·0 | 40·7 | |
| 9·7† | | 31·6 | 0·7 | |
| 9·2† | | 33·1 | 0·7 | |
| 9·4 | | 54·0 | 17·8 | |
| 8·8 | 32 | 21·7 | 29·8 | |
| 9·0 | | 33·5 | 51·1 | |
| 8·8 | | 34·0 | 52·0 | 9·0 |
| 9·8 | | 41·5 | 40·8 | |
| 9·8 | | 48·5 | 46·0 | |
| 9·8 | 33 | 51·5 | 19·7 | |
| 9·8 | 35 | 20·5 | 17·9 | |
| 9·8 | | 23·0 | 57·0 | |
| 8·8 | | 44·0 | 41·3 | |
| 7·8 | | 57·0 | 26·9 | 7·0 GS |
| 8·9 | 36 | 33·5 | 42·1 | |
| 9·6 | | 44·0 | 13·8 | |
| 9·6 | 37 | 18·5 | 17·5 | |
| 8·5 | 39 | 42·0 | 15·4 | 8·0 |
| 9·6 | 40 | 8·0 | 41·6 | |
| 9·8 | | 25·0 | 47·6 | |
| 9·2 | | 49·5 | 33·1 | |
| 9·8 | 41 | 31·5 | 4·7 | |
| 8·8 | | 33·5 | 47·1 | 9·0 |
| 9·8 | | 45·0 | 48·5 | |

### 421—480.

| mag. | 4h.–5h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·7 | 42 | 10·0 | 52·8 | 8·0 |
| 9·8 | | 13·5 | 46·9 | |
| 9·8 | | 42·5 | 31·4 | |
| 9·2 | 45 | 18·5 | 17·8 | |
| 8·7 | | 43·5 | 34·8 | |
| 9·0 | 46 | 2·5 | 57·3 | |
| 9·2 | | 13·5 | 5·4 | |
| 9·8 | | 25·5 | 52·9 | |
| 9·5 | 47 | 43·0 | 28·9 | |
| 8·9 | 48 | 5·5 | 44·1 | 8·0 G |
| 9·2 | | 26·5 | 21·4 | |
| 9·8 | | 51·5 | 16·0 | |
| 9·2 | | 53·0 | 30·3 | |
| 9·8 | 49 | 35·0 | 28·7 | |
| 9·8 | 50 | 13·3 | 59·0 | |
| 8·8 | | 28·5 | 2·1 | 8·5 G |
| 6·6 | 52 | 50·5 | 44·8 | 6·5 GSct |
| 9·8 | 53 | 53·0 | 49·6 | |
| 8·9 | | 59·0 | 39·4 | |
| 7·2 | 55 | 2·0 | 15·9 | 7·5 GSt |
| 7·4 | | 53·0 | 9·5 | 8·0 GSt |
| 8·2 | | 58·5 | 23·8 | 7·5 GSt |
| 9·4 | 56 | 17·0 | 53·9 | |
| 9·8 | | 40·5 | 18·3 | |
| 9·6 | | 51·0 | 8·7 | |
| 9·4 | 57 | 5·5 | 51·1 | |
| 9·4 | | 24·0 | 29·4 | |
| 9·0 | | 37·0 | 25·2 | |
| 9·4 | | 40·0 | 50·4 | |
| 8·4 | | 55·5 | 40·8 | GSt |
| 9·8 | 58 | 25·0 | 5·1 | |
| 8·6 | 59 | 34·5 | 41·8 | 8·5 GSt |
| 9·8 | 0 | 1·5 | 5·0 | |
| 9·2 | 1 | 20·0 | 41·9 | 9·5 |
| 8·9 | | 23·0 | 16·6 | |
| 8·0 | | 30·0 | 37·2 | 8·5 GSt |
| 9·5 | 2 | 44·5 | 48·2 | |
| 9·5 | 3 | 58·5 | 41·8 | |
| 8·5 | 4 | 6·0 | 21·9 | 8·0 G |
| 9·8 | | 18·5 | 21·3 | |
| 9·8 | | 19·3 | 31·5 | |
| 9·7 | | 21·5 | 18·6 | |
| 9·1 | | 50·0 | 53·7 | |
| 9·6 | 5 | 57·3 | 1·1 | |
| 9·4 | 6 | 18·5 | 57·8 | |
| 9·4 | | 41·7 | 28·2 | |
| 9·7 | | 59·5 | 6·5 | |
| 9·2 | 7 | 1·0 | 45·8 | |
| 9·4 | | 18·5 | 28·6 | |
| 9·6 | | 32·5 | 25·2 | |
| 9·6 | | 39·5 | 28·0 | |
| 9·6 | | 42·5 | 29·5 | |
| 9·6 | 8 | 18·5 | 50·4 | |
| 8·4 | | 27·5 | 38·3 | 9·0 |
| 9·8 | | 38·0 | 10·0 | |
| 9·4 | 9 | 54·5 | 54·5 | |
| 9·6 | 10 | 52·5 | 2·1 | |
| 9·1 | 11 | 4·5 | 50·2 | |
| 8·1 | | 25·5 | 42·0 | 9·0 |
| 8·9 | | 29·5 | 17·4 | |

### 481—540.

| mag. | 5h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 12 | 24·5 | 21·9 | |
| 9·8 | 13 | 41·5 | 36·0 | |
| 9·5 | | 48·0 | 59·2 | |
| 8·9 | | 50·0 | 51·2 | |
| 9·1 | 14 | 7·0 | 38·7 | |
| 9·4 | 15 | 48·7 | 57·9 | |
| 8·9 | 17 | 3·0 | 53·9 | |
| 9·7 | | 31·5 | 49·4 | |
| 9·4 | | 57·5 | 42·1 | |
| 9·7 | 18 | 22·5 | 5·0 | |
| 9·4 | | 43·5 | 49·9 | |
| 9·6 | | 57·5 | 43·1 | |
| 8·8 | 19 | 15·5 | 13·7 | 8·5 S |
| 9·4 | | 59·5 | 29·6 | |
| 9·8 | 20 | 3·5 | 30·2 | |
| 9·7 | | 4·5 | 37·4 | |
| 9·8 | | 30·5 | 7·9 | |
| 9·4 | | 59·5 | 26·5 | |
| 9·6 | 21 | 40·5 | 4·4 | |
| 8·8 | | 45·0 | 5·9 | 9·5 |
| 8·8 | | 54·5 | 32·9 | |
| 8·1 | 22 | 2·0 | 12·4 | 8·0 GS |
| 9·4 | | 7·5 | 28·7 | |
| 9·4 | | 13·5 | 19·5 | |
| 9·8 | | 25·0 | 16·3 | |
| 8·0 | | 53·0 | 16·7 | 8·0 GS |
| 9·5 | 23 | 21·0 | 11·5 | |
| 9·7 | | 33·5 | 52·2 | |
| 7·3 | 24 | 10·0 | 40·0 | 8·0 GSg |
| 8·4 | | 43·5 | 20·5 | |
| 9·4 | | 53·0 | 49·2 | |
| 8·8 | 25 | 1·5 | 38·0 | |
| 9·6 | | 3·5 | 20·0 | |
| 9·6 | | 13·5 | 46·3 | |
| 9·7 | 26 | 26·5 | 22·9 | |
| 8·7 | | 30·5 | 20·8 | 8·0 |
| 8·9 | | 32·0 | 28·2 | 8·5 |
| 9·4 | 27 | 48·5 | 43·0 | |
| 8·8 | 28 | 17·5 | 38·2 | 9·0 |
| 9·6 | | 48·5 | 37·9 | |
| 9·4 | 30 | 8·0 | 20·8 | |
| 9·6 | | 49·0 | 31·0 | |
| 9·6 | 31 | 23·0 | 51·1 | |
| 9·6 | 32 | 1·5 | 22·2 | |
| 9·2 | | 48·5 | 22·8 | |
| 7·8 | 33 | 13·0 | 57·0 | 7·0 GSg |
| 9·6 | | 49·0 | 49·5 | |
| 9·4 | | 56·0 | 29·9 | |
| 9·6 | 34 | 17·5 | 42·9 | |
| 9·4 | | 56·5 | 56·8 | |
| 9·8 | 35 | 3·5 | 17·9 | |
| 9·6 | | 33·0 | 34·8 | |
| 9·2 | | 47·5 | 23·8 | |
| 9·1 | | 50·0 | 51·3 | |
| 8·5 | 36 | 43·5 | 20·4 | |
| 9·0 | 37 | 29·5 | 9·8 | |
| 9·2 | 38 | 9·0 | 21·6 | |
| 9·2 | | 30·5 | 10·9 | |
| 9·6 | | 52·0 | 57·9 | |
| 9·6 | 39 | 13·5 | 21·1 | |

### 541—600.

| mag. | 5h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·5 | 39 | 20·5 | 33·7 | 8·0 G |
| 9·2 | | 39·5 | 1·9 | |
| 9·7 | 40 | 23·5 | 8·4 | |
| 9·2 | | 51·5 | 37·4 | |
| 9·9 | | 52·5 | 39·0 | |
| 9·7 | | 56·5 | 48·3 | |
| 9·4 | 41 | 21·0 | 48·9 | |
| 10·0 | 42 | 19·5 | 39·5 | |
| 10·0 | | 22·5 | 5·0 | |
| 10·0 | | 28·5 | 4·6 | |
| 9·1 | | 28·5 | 19·7 | |
| 9·9 | | 50·0 | 18·7 | |
| 9·6 | 43 | 5·5 | 11·9 | |
| 10·0 | | 13·5 | 7·3 | |
| 9·9 | | 34·5 | 29·9 | |
| 9·8 | | 38·5 | 9·8 | |
| 10·0 | 44 | 14·5 | 31·1 | |
| 9·4 | | 20·5 | 31·9 | |
| 10·0 | | 21·5 | 9·9 | |
| 8·5 | | 28·0 | 49·2 | 8·8 |
| 9·9 | | 28·5 | 9·3 | |
| 9·9 | | 44·0 | 51·3 | |
| 9·6 | | 58·5 | 21·1 | |
| 9·2 | 45 | 2·3 | 9·8 | |
| 9·2 | | 2·5 | 14·1 | |
| 9·5 | | 3·5 | 50·3 | |
| 9·1 | | 10·5 | 8·9 | |
| 9·7 | | 15·0 | 17·8 | |
| 9·5 | | 55·5 | 21·2 | |
| 10·0 | 46 | 4·5 | 19·1 | |
| 9·6 | | 29·0 | 21·3 | |
| 9·8 | | 39·5 | 5·3 | |
| 9·2 | 47 | 28·5 | 42·3 | 8·8 |
| 10·0 | | 32·3 | 28·4 | |
| 10·0 | | 43·5 | 47·3 | |
| 9·3 | | 45·0 | 5·4 | |
| 9·7 | 48 | 5·9 | 0·2 | |
| 10·0 | | 32·0 | 54·9 | |
| 9·4 | | 41·5 | 20·9 | |
| 10·0 | 49 | 38·3 | 47·3 | |
| 9·0 | | 46·0 | 45·3 | 9·5 |
| 10·0 | | 51·0 | 39·0 | |
| 9·4 | | 55·0 | 28·2 | |
| 10·0 | 50 | 2·9 | 0·7 | |
| 9·7 | | 9·5 | 47·5 | |
| 9·6 | | 32·5 | 59·1 | |
| 9·8 | | 38·5 | 14·0 | |
| 9·7 | 51 | 20·0 | 52·3 | |
| 9·8 | | 27·3 | 35·7 | |
| 10·0 | | 37·5 | 19·5 | |
| 9·7 | | 38·5 | 39·3 | |
| 10·0 | 52 | 33·5 | 59·1 | |
| 8·4 | 53 | 3·0 | 10·1 | 9·0 |
| 9·5 | | 39·0 | 33·1 | |
| 10·0 | 54 | 43·5 | 41·5 | |
| 9·8 | 55 | 9·0 | 52·1 | |
| 9·4 | 56 | 1·5 | 25·1 | |
| 10·0 | | 10·5 | 33·9 | |
| 10·0 | | 40·0 | 16·9 | |
| 8·2 | 57 | 5·0 | 16·6 | 9·5 |

### 601—660.

| mag. | 5h.–6h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·3 | 58 | 0·5 | 17·6 | |
| 7·1 | | 40·5 | 6·5 | 7·0 GSct |
| 10·0 | | 41·5 | 35·0 | |
| 9·9 | | 45·0 | 33·1 | |
| 10·0 | | 59·5 | 7·3 | |
| 9·9 | 59 | 29·5 | 11·3 | |
| 9·6 | | 59·0 | 29·0 | |
| 9·8 | 0 | 20·0 | 24·9 | |
| 8·5 | | 20·0 | 12·9 | |
| 10·0 | | 56·5 | 6·3 | |
| 9·8 | 1 | 54·0 | 9·0 | |
| 9·7 | | 58·0 | 53·0 | |
| 10·0 | 2 | 12·0 | 36·1 | |
| 9·3 | | 13·0 | 11·1 | |
| 8·8 | | 50·0 | 11·7 | 9·0 |
| 8·4 | 3 | 13·0 | 48·9 | 9·0 |
| 10·0 | 4 | 8·0 | 28·6 | |
| 8·6 | | 39·0 | 56·1 | |
| 8·8 | | 50·0 | 45·9 | |
| 9·5 | | 50·7 | 2·0 | 9·5 |
| 10·0 | 5 | 13·5 | 17·1 | |
| 9·4 | | 19·5 | 47·1 | |
| 8·5 | | 35·0 | 45·1 | |
| 10·0 | | 42·5 | 45·1 | |
| 10·0 | 6 | 11·5 | 12·4 | |
| 10·0 | | 17·5 | 13·1 | |
| 9·1 | | 18·5 | 29·4 | 9·5 |
| 8·9 | | 24·0 | 57·1 | 9·5 |
| 9·0 | | 42·5 | 27·8 | |
| 10·0 | 7 | 0·0 | 33·6 | |
| 10·0 | | 18·5 | 48·9 | |
| 9·8 | | 19·0 | 49·4 | |
| 9·2 | 8 | 5·0 | 24·3 | |
| 9·9 | | 25·5 | 16·0 | |
| 9·8 | | 28·5 | 9·0 | |
| 9·6 | | 31·0 | 3·5 | G |
| 8·2 | | 48·5 | 49·5 | 8·0 |
| 9·6 | 9 | 10·0 | 28·0 | |
| 8·6 | | 14·5 | 15·5 | |
| 9·6 | | 29·5 | 19·5 | |
| 9·1 | | 39·5 | 57·0 | |
| 10·0 | 10 | 8·5 | 20·1 | |
| 8·3 | | 10·0 | 56·4 | |
| 10·0 | | 12·0 | 6·1 | |
| 9·7 | | 37·5 | 4·1 | |
| 10·0 | | 53·5 | 50·5 | |
| 9·6 | 11 | 4·5 | 39·0 | |
| 10·0 | | 21·0 | 55·4 | |
| 9·2 | | 37·5 | 37·1 | |
| 9·0 | | 54·5 | 35·5 | |
| 8·4 | | 59·0 | 47·3 | |
| 9·7 | 12 | 7·5 | 38·5 | |
| 9·0 | | 35·0 | 34·5 | |
| 9·9 | 13 | 12·0 | 54·1 | |
| 9·5 | | 41·0 | 46·0 | |
| 9·4 | | 42·5 | 17·1 | |
| 10·0 | 14 | 17·0 | 50·1 | |
| 10·0 | | 29·5 | 41·9 | |
| 9·5 | | 33·5 | 54·3 | |
| 10·0 | 15 | 7·0 | 53·1 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 40 | 26 | 2·9 |
| | 50 | 25 | 2·5 |
| 5 | 0 | 24 | 2·2 |
| | 10 | 24 | 1·8 |
| | 20 | 23 | 1·5 |
| | 30 | 23 | 1·1 |
| | 40 | 22 | 0·7 |
| | 50 | 22 | 0·4 |
| 6 | 0 | 22 | 0·0 |
| | | | − |
| | 10 | 22 | 0·4 |
| | 20 | 22 | 0·7 |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 6 | 10 | 22 | 0.4 |
| | 20 | 22 | 0.7 |
| | 30 | 23 | 1.1 |
| | 40 | 23 | 1.5 |
| | 50 | 24 | 1.8 |
| 7 | 0 | 24 | 2.2 |
| | 10 | 25 | 2.5 |
| | 20 | 26 | 2.9 |

### 661—720.

| mag. | 6h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8.2 | 15 | 18.5 | 7.1 | |
| 8.6 | | 24.5 | 20.1 | 8.5 |
| 10.0 | | 33.0 | 54.6 | |
| 8.9 | | 44.5 | 28.4 | 8.5 |
| 9.2 | | 51.5 | 0.9 | |
| 8.3 | | 58.5 | 45.5 | 8.5. |
| 10.0 | 16 | 31.5 | 39.2 | |
| 10.0 | | 53.5 | 44.1 | |
| 10.0 | | 55.8 | 44.1 | |
| 9.0 | 17 | 15.0 | 0.1 | |
| 10.1 | | 20.5 | 36.4 | |
| 8.9 | | 22.2 | 33.9 | 9.0 |
| 10.0 | | 50.5 | 40.7 | |
| 9.9 | 18 | 9.2 | 14.4 | |
| 10.0 | | 14.5 | 28.1 | |
| 9.0 | | 18.2 | 13.6 | 9.5 |
| 10.0 | | 19.5 | 35.5 | |
| 9.2 | | 52.5 | 44.9 | |
| 8.0 | 19 | 2.8 | 17.5 | 8.5 G |
| 9.6 | | 17.0 | 59.3 | |
| 10.0 | | 23.0 | 53.9 | |
| 9.4 | | 38.5 | 4.5 | 9.0 |
| 9.5 | 20 | 4.5 | 56.3 | |
| 9.5 | | 7.5 | 26.5 | |
| 9.8 | | 8.0 | 24.9 | |
| 9.8 | | 30.5 | 56.7 | |
| 10.0 | 21 | 12.5 | 57.9 | |
| 9.9 | | 19.5 | 56.1 | |
| 10.1 | | 32.0 | 39.0 | |
| 8.6 | | 38.0 | 6.8 | 9.0 |
| 10.0 | | 41.0 | 1.6 | |
| 6.9 | | 53.5 | 28.5 | 77.0 GSct |
| 9.5 | 22 | 27.5 | 25.7 | |
| 9.4 | | 49.5 | 55.2 | |
| 10.1 | 23 | 7.0 | 32.3 | |
| 10.0 | | 25.5 | 10.2 | |
| 9.9 | | 33.0 | 47.5 | |
| 8.8 | | 35.0 | 32.8 | 8.8 |
| 10.1 | | 58.5 | 46.9 | |
| 9.6 | 24 | 4.0 | 20.6 | |
| 10.0 | | 14.0 | 43.0 | |
| 9.5 | | 14.5 | 52.4 | |
| 9.9 | | 22.0 | 24.0 | |
| 9.2 | | 34.5 | 53.8 | |
| 8.0 | | 48.0 | 8.8 | 8.0 G |
| 9.4 | | 52.5 | 45.3 | |
| 8.4 | | 54.7 | 56.7 | |
| 8.9 | 25 | 59.0 | 3.9 | 8.5 |
| 9.1 | 26 | 4.0 | 19.2 | 9.0 |
| 10.0 | | 7.0 | 47.0 | |
| 10.0 | | 24.6 | 15.9 | |
| 8.7 | | 29.5 | 16.2 | 8.5 |
| 9.2 | | 48.0 | 37.2 | |
| 8.7 | | 58.0 | 19.6 | 9.0 |
| 10.0 | 27 | 1.5 | 3.2 | |
| 10.0 | | 18.5 | 24.6 | |
| 9.5 | 28 | 1.5 | 42.0 | G |
| 8.1 | 29 | 15.5 | 55.0 | 7.8 G |
| 10.1 | | 33.5 | 58.0 | |
| 8.8 | | 41.0 | 32.2 | 9.2 |

### 721—780.

| mag. | 6h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.0 | 29 | 56.0 | 21.6 | |
| 5.4 | 30 | 6.0 | 39.8 | 6.0 GSct |
| 9.5 | | 13.0 | 6.2 | |
| 9.5 | | 16.5 | 2.0 | |
| 10.1 | | 22.0 | 11.0 | |
| 9.6 | | 33.0 | 52.2 | |
| 9.7 | | 39.0 | 36.2 | 9.5 |
| 9.2 | 31 | 9.5 | 56.8 | |
| 10.0 | | 18.5 | 34.3 | |
| 9.5 | | 46.5 | 32.9 | 10.0 |
| 9.5 | | 47.0 | 8.5 | |
| 10.0 | 32 | 15.5 | 11.4 | |
| 9.9 | | 31.0 | 58.5 | |
| 10.1 | | 37.5 | 2.1 | |
| 9.5 | | 38.0 | 42.3 | |
| 10.0 | | 46.5 | 8.5 | |
| 10.0 | | 50.5 | 8.9 | |
| 9.1 | 33 | 28.0 | 12.9 | |
| 9.0 | | 36.0 | 59.0 | 8.2 |
| 8.7 | | 37.5 | 6.5 | |
| 8.6 | | 58.8 | 2.7 | |
| 7.6 | 34 | 44.0 | 18.1 | 8.5 |
| 9.6 | 35 | 3.0 | 21.1 | |
| 7.8 | | 29.0 | 4.5 | 8.0 GSg |
| 10.0 | | 48.5 | 3.5 | |
| 8.0 | 36 | 29.5 | 13.6 | 8.0 GSg |
| 10.0 | | 29.5 | 14.7 | |
| 7.9 | 37 | 6.5 | 43.3 | Gt |
| 9.6 | | 30.5 | 20.7 | |
| 9.8 | 38 | 28.0 | 4.9 | |
| 8.9 | 39 | 15.0 | 6.8 | 8.8 |
| 10.0 | | 18.5 | 14.8 | |
| 9.8 | | 27.0 | 37.6 | |
| 10.0 | | 35.0 | 4.5 | |
| 9.8 | | 41.5 | 39.0 | |
| 9.5 | | 49.0 | 58.0 | |
| 10.0 | 40 | 6.5 | 37.7 | |
| 9.6 | | 7.5 | 6.3 | |
| 8.4 | | 21.0 | 3.6 | 9.5 |
| 9.2 | | 24.5 | 35.8 | |
| 10.0 | | 28.0 | 21.7 | |
| 8.6 | | 56.0 | 21.4 | 8.5 GSg |
| 10.0 | 41 | 17.5 | 55.0 | |
| 10.0 | | 47.0 | 28.6 | |
| 9.2 | 42 | 2.0 | 35.9 | 9.5 |
| 10.0 | | 20.5 | 15.8 | |
| 8.4 | | 40.5 | 44.2 | 9.5 |
| 9.1 | 43 | 15.0 | 4.0 | |
| 9.5 | | 18.5 | 56.1 | |
| 9.7 | | 29.5 | 52.7 | |
| 10.0 | | 35.0 | 40.6 | |
| 10.0 | | 44.0 | 13.8 | |
| 9.5 | | 56.5 | 42.4 | |
| 9.4 | | 59.0 | 45.7 | 9.0 |
| 10.0 | | 59.5 | 42.9 | 10.0 |
| 8.5 | 44 | 42.0 | 31.0 | 8.5 Gg |
| 10.0 | 45 | 29.5 | 12.3 | |
| 9.5 | | 58.5 | 7.7 | |
| 7.9 | 46 | 38.0 | 19.5 | 8.2 GSgt |
| 9.5 | 47 | 19.0 | 4.7 | |

### 781—840.

| mag. | 6h.—7h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.4 | 47 | 28.0 | 5.7 | |
| 10.1 | | 42.0 | 11.6 | |
| 9.4 | 48 | 1.5 | 50.3 | 9.0 |
| 9.9 | | 22.0 | 7.1 | |
| 9.5 | | 29.0 | 36.6 | |
| 9.9 | | 38.0 | 3.7 | |
| 10.0 | 49 | 20.5 | 58.9 | |
| 7.6 | | 33.0 | 10.6 | 8.5 Gt |
| 10.0 | | 50.0 | 29.0 | |
| 9.9 | 50 | 48.0 | 57.4 | |
| 9.5 | 51 | 20.5 | 11.9 | |
| 9.6 | | 23.0 | 26.2 | |
| 9.8 | | 31.5 | 45.9 | |
| 9.6 | 52 | 2.0 | 17.9 | |
| 9.6 | | 40.8 | 33.5 | |
| 9.3 | | 57.0 | 41.9 | |
| 8.7 | 53 | 9.5 | 46.4 | 9.0 |
| 9.4 | | 17.0 | 9.9 | |
| 9.4 | | 17.3 | 0.8 | |
| 9.1 | | 45.2 | 10.8 | |
| 8.8 | | 49.2 | 14.7 | 9.0 |
| 9.4 | 54 | 4.0 | 4.9 | |
| 9.4 | 55 | 4.2 | 59.7 | |
| 9.4 | | 42.0 | 42.5 | |
| 9.4 | 56 | 33.0 | 1.0 | |
| 9.3 | | 41.5 | 49.2 | |
| 7.8 | 57 | 3.0 | 20.5 | |
| 9.1 | | 9.0 | 36.6 | |
| 8.9 | | 9.5 | 33.2 | |
| 8.7 | | 22.0 | 26.0 | |
| 8.9 | | 26.0 | 32.7 | |
| 9.4 | | 55.5 | 54.8 | |
| 9.3 | 58 | 19.5 | 6.1 | |
| 9.1 | | 24.0 | 18.8 | |
| 9.3 | | 24.5 | 48.5 | |
| 7.9 | | 31.8 | 12.8 | 8.0 GSg |
| 9.3 | | 37.5 | 48.4 | |
| 9.4 | 59 | 4.5 | 39.4 | |
| 9.4 | | 7.5 | 43.5 | |
| 6.9 | | 8.5 | 45.9 | 6.5 GSct |
| 9.3 | | 10.0 | 41.9 | 9.0 |
| 9.4 | | 22.8 | 24.1 | |
| 9.3 | 0 | 23.0 | 52.9 | |
| 9.4 | | 59.8 | 55.9 | |
| 9.4 | 1 | 2.0 | 42.7 | |
| 6.0 | | 19.7 | 59.6 | 6.0 GSct |
| 8.9 | | 24.0 | 22.0 | |
| 9.4 | | 33.0 | 48.0 | |
| 9.1 | | 48.5 | 39.0 | 9.5 |
| 9.4 | 2 | 9.0 | 47.5 | |
| 9.4 | | 19.0 | 6.9 | |
| 9.4 | | 28.0 | 47.0 | |
| 9.4 | | 33.8 | 6.8 | |
| 9.4 | | 34.0 | 7.3 | |
| 7.9 | | 34.5 | 38.3 | 8.2 G |
| 9.4 | | 44.0 | 4.4 | |
| 9.3 | | 55.5 | 34.3 | 9.0 G |
| 9.4 | 3 | 16.5 | 22.1 | |
| 9.3 | | 45.5 | 41.2 | |
| 9.3 | 4 | 4.0 | 12.8 | |

### 841—900.

| mag. | 7h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8.9 | 4 | 11.0 | 17.1 | |
| 9.4 | | 14.0 | 15.7 | |
| 9.4 | | 25.5 | 6.2 | |
| 9.4 | | 25.5 | 35.3 | |
| 9.4 | | 30.0 | 58.2 | |
| 9.4 | | 30.5 | 58.6 | |
| 8.9 | | 32.5 | 54.5 | |
| 8.7 | | 43.0 | 11.0 | 9.0 G |
| 9.4 | | 58.5 | 0.5 | |
| 9.2 | 5 | 29.0 | 56.1 | |
| 9.4 | | 59.8 | 0.5 | |
| 7.9 | 6 | 21.5 | 10.2 | 8.0 GSg |
| 9.4 | | 45.0 | 14.0 | |
| 9.3 | 7 | 2.0 | 52.9 | |
| 8.8 | | 8.0 | 53.2 | 9.0 |
| 9.3 | | 36.5 | 1.1 | |
| 9.4 | | 54.0 | 54.0 | |
| 9.4 | | 55.0 | 44.4 | |
| 9.3 | | 59.0 | 51.2 | |
| 8.6 | 8 | 10.0 | 47.0 | 8.2 |
| 9.0 | | 21.5 | 32.5 | |
| 8.4 | | 49.0 | 39.0 | 8.0 |
| 9.4 | | 55.0 | 45.5 | |
| 9.0 | 9 | 8.0 | 11.4 | |
| 9.4 | | 8.8 | 11.2 | |
| 9.3 | | 44.0 | 34.9 | |
| 8.2 | | 49.0 | 38.3 | 8.2 |
| 9.4 | 10 | 0.5 | 48.5 | |
| 8.1 | | 12.0 | 11.5 | 8.0 |
| 8.7 | | 28.0 | 1.5 | 9.0 |
| 8.8 | | 48.5 | 16.3 | |
| 9.4 | | 48.5 | 52.3 | |
| 9.3 | | 50.5 | 38.5 | |
| 9.4 | | 53.5 | 13.7 | |
| 9.4 | | 58.3 | 16.1 | |
| 9.4 | 11 | 8.3 | 44.6 | |
| 9.1 | | 35.0 | 10.7 | |
| 9.2 | 12 | 0.0 | 36.2 | |
| 9.1 | | 4.0 | 29.0 | |
| 9.3 | | 18.5 | 1.9 | |
| 9.4 | | 32.5 | 9.2 | |
| 9.4 | | 38.3 | 55.8 | |
| 8.7 | | 39.0 | 56.0 | 8.5 |
| 9.3 | | 54.5 | 29.9 | |
| 7.4 | 13 | 23.0 | 19.3 | 7.0 GSct |
| 9.4 | | 29.0 | 49.1 | |
| 8.6 | | 36.5 | 35.0 | 7.5 GSt |
| 9.4 | 14 | 17.0 | 58.4 | |
| 9.4 | | 28.5 | 57.0 | |
| 9.2 | | 44.0 | 4.3 | |
| 9.4 | | 48.5 | 22.0 | |
| 9.4 | 15 | 23.5 | 3.5 | |
| 8.7 | | 51.0 | 46.0 | 9.0 |
| 8.7 | 16 | 12.0 | 40.0 | 9.5 |
| 9.4 | 17 | 9.0 | 31.4 | |
| 9.4 | | 32.0 | 49.0 | |
| 8.4 | 18 | 18.5 | 55.9 | 8.7 |
| 9.3 | | 19.0 | 15.2 | |
| 7.5 | | 32.0 | 26.1 | 8.0 GSt |
| 8.6 | | 42.0 | 12.0 | |

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## 901—960.

| mag. | 7h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 18 | 52·5 | 6·9 | |
| 9·4 | 19 | 14·5 | 34·4 | 9·0 |
| 9·3 | | 26·0 | 12·7 | |
| 9·1 | 20 | 4·5 | 46·8 | |
| 9·0 | | 12·0 | 29·6 | 8·7 |
| 9·4 | | 28·3 | 1·5 | |
| 8·0 | | 43·5 | 40·2 | 8·2 Gt |
| 9·4 | 21 | 18·0 | 27·0 | |
| 7·4 | 22 | 0·0 | 15·0 | 7·0 GSt |
| 9·3 | 23 | 19·5 | 16·4 | |
| 9·1 | | 22·5 | 49·6 | |
| 8·8 | | 41·5 | 47·4 | |
| 9·0 | 25 | 0·5 | 44·6 | 9·0 |
| 9·4 | | 9·0 | 50·2 | |
| 9·4 | | 41·5 | 14·7 | 9·0 |
| 8·4 | 26 | 10·5 | 16·6 | 8·5 |
| 8·2 | | 22·5 | 8·9 | 8·8 |
| 9·1 | | 38·0 | 35·9 | |
| 9·0 | 27 | 33·5 | 28·9 | |
| 9·4 | | 38·0 | 4·7 | |
| 9·4 | | 45·0 | 37·9 | |
| 9·4 | | 57·0 | 19·9 | |
| 9·4 | 28 | 2·0 | 16·6 | |
| 9·7 | | 35·0 | 16·5 | |
| 9·0 | | 35·5 | 11·1 | 8·5 |
| 9·2 | | 39·5 | 56·8 | |
| 9·7 | | 45·5 | 16·0 | |
| 9·3 | | 59·5 | 29·0 | |
| 9·6 | 29 | 19·3 | 13·0 | |
| 9·7 | | 38·0 | 32·9 | |
| 9·7 | | 55·0 | 47·5 | |
| 9·5 | 30 | 19·0 | 55·3 | |
| 9·2 | | 31·2 | 50·3 | |
| 9·4 | | 44·0 | 45·5 | |
| 8·4 | 31 | 20·5 | 55·5 | 7·5 GSct |
| 9·7 | | 55·5 | 29·8 | |
| 9·7 | 32 | 0·0 | 40·9 | |
| 9·4 | | 2·5 | 32·9 | |
| 9·1 | | 9·5 | 3·1 | 9·5 |
| 8·8 | | 29·5 | 22·7 | 8·3 |
| 9·7 | | 39·5 | 40·0 | |
| 9·6 | | 45·5 | 15·5 | |
| 9·1 | | 46·0 | 56·9 | |
| 9·6 | | 49·5 | 19·7 | |
| 9·4 | 33 | 36·5 | 29·9 | |
| 9·6 | | 38·5 | 13·9 | |
| 8·2 | 34 | 15·5 | 5·8 | 8·0 GSg |
| 9·7 | | 25·5 | 48·9 | |
| 9·5 | | 42·5 | 6·9 | |
| 8·7 | 35 | 27·0 | 39·3 | |
| 9·7 | | 28·5 | 27·8 | |
| 9·0 | | 45·5 | 25·5 | |
| 9·4 | 36 | 10·5 | 12·9 | |
| 8·4 | | 18·5 | 20·5 | 9·5 |
| 9·6 | | 27·5 | 16·6 | |
| 9·6 | | 53·0 | 27·4 | |
| 9·5 | 37 | 47·5 | 47·8 | |
| 8·3 | | 55·5 | 56·2 | 8·2 |
| 9·3 | | 56·0 | 24·5 | |
| 9·0 | 38 | 13·5 | 2·9 | |

## 961—1020.

| mag. | 7h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·5 | 38 | 18·5 | 43·9 | |
| 9·3 | | 32·5 | 0·5 | |
| 7·6 | | 36·0 | 34·6 | 8·0 GSg |
| 9·1 | 39 | 19·0 | 22·6 | |
| 9·4 | | 31·5 | 26·8 | |
| 9·3 | | 35·0 | 36·5 | |
| 6·4 | | 53·0 | 19·9 | 6·5 GSgt |
| 8·8 | | 59·0 | 17·1 | |
| 7·5 | 40 | 4·0 | 22·3 | 7·0 GScgt |
| 9·4 | | 15·5 | 19·5 | |
| 9·1 | | 30·0 | 52·0 | 9·0 |
| 9·6 | | 32·0 | 12·9 | |
| 9·7 | | 32·0 | 52·1 | |
| 8·5 | | 43·0 | 21·0 | 9·0 |
| 8·8 | 41 | 3·0 | 12·5 | 9·0 |
| 9·6 | | 15·0 | 35·1 | |
| 8·6 | | 32·0 | 10·0 | 8·3 |
| 9·4 | | 40·0 | 7·7 | |
| 9·4 | | 43·0 | 37·2 | |
| 8·5 | | 54·5 | 9·9 | 7·8 G |
| 9·3 | | 59·0 | 21·3 | G |
| 9·4 | 42 | 24·0 | 13·9 | |
| 9·4 | | 34·5 | 39·3 | |
| 8·2 | | 44·0 | 39·0 | 8·5 |
| 9·6 | | 54·0 | 46·4 | |
| 8·1 | 43 | 15·0 | 38·9 | 7·8 GSg |
| 8·9 | | 29·0 | 17·5 | |
| 9·0 | | 38·0 | 28·5 | |
| 9·3 | | 39·0 | 59·5 | |
| 7·8 | 44 | 11·5 | 46·9 | 7·5 GSg |
| 10·2† | | 33·9 | 1·9 | |
| 7·6 | | 38·0 | 35·8 | 8·0 GScg |
| 8·6 | | 54·0 | 45·9 | 9·0 |
| 8·8 | | 58·0 | 46·0 | 9·5 |
| 9·6 | 45 | 4·0 | 44·5 | |
| 9·6 | | 23·0 | 16·5 | |
| 9·2 | | 24·0 | 51·0 | 9·5 |
| 8·3 | | 25·0 | 13·2 | |
| 9·1 | | 35·5 | 1·9 | |
| 9·1 | | 37·0 | 28·0 | |
| 9·6 | | 42·5 | 27·8 | |
| 9·7 | | 42·5 | 29·6 | |
| 8·8 | | 59·0 | 24·4 | |
| 9·6 | 46 | 5·5 | 44·8 | |
| 9·3 | | 28·5 | 7·2 | |
| 9·7 | | 33·5 | 33·3 | |
| 9·5 | | 36·5 | 3·0 | |
| 8·2 | 47 | 37·5 | 15·9 | 9·5 |
| 9·4 | | 38·5 | 18·3 | |
| 9·4 | 48 | 30·5 | 16·0 | |
| 9·0 | | 41·0 | 51·6 | |
| 8·6 | 49 | 22·0 | 19·9 | |
| 8·8 | | 41·5 | 40·5 | |
| 9·2 | 50 | 28·0 | 18·6 | |
| 9·1 | | 37·0 | 40·9 | |
| 9·7 | | 39·0 | 47·2 | |
| 9·7 | 51 | 47·0 | 5·0 | |
| 7·8 | | 48·0 | 14·5 | 8·0 |
| 8·2 | 52 | 13·0 | 24·1 | 8·0 |
| 9·7 | | 29·0 | 24·5 | |

## 1021—1080.

| mag. | 7h.–8h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·8 | 52 | 37·0 | 16·0 | 9·0 |
| 9·2 | | 48·0 | 16·6 | |
| 9·3 | | 58·0 | 9·9 | 9·0 |
| 9·6 | 53 | 22·0 | 57·0 | |
| 9·0 | | 31·5 | 27·9 | 9·5 |
| 9·4 | | 39·5 | 53·9 | |
| 8·6 | 54 | 19·5 | 45·4 | |
| 7·7 | | 29·5 | 47·4 | 7·0 G |
| 8·8 | | 31·5 | 54·9 | |
| 9·7 | 56 | 18·5 | 52·4 | |
| 9·0 | 57 | 26·5 | 51·9 | 9·0 |
| 9·7 | | 32·5 | 58·8 | |
| 9·7 | 58 | 2·0 | 40·1 | |
| 8·4 | | 7·5 | 31·2 | |
| 9·7 | | 20·5 | 22·8 | |
| 9·0 | | 24·0 | 29·4 | |
| 9·7 | | 43·5 | 53·7 | |
| 9·6 | 59 | 13·5 | 45·8 | |
| 9·2 | | 14·5 | 55·4 | |
| 9·4 | | 20·0 | 3·3 | |
| 9·4 | | 32·5 | 1·7 | |
| 9·7 | 0 | 55·5 | 5·5 | |
| 10·2† | 1 | 35·8 | 0·2 | |
| 9·4 | | 52·0 | 54·0 | 9·5 |
| 8·6 | 2 | 27·2 | 0·2 | 8·0 |
| 9·6 | | 38·5 | 17·7 | |
| 10·2† | | 39·8 | 0·6 | |
| 8·6 | | 48·5 | 53·2 | 9·0 |
| 9·7 | 3 | 9·5 | 16·3 | |
| 9·7 | | 10·0 | 35·8 | |
| 10·2† | | 38·3 | 2·1 | |
| 9·6 | 4 | 13·5 | 22·1 | |
| 9·2 | | 38·2 | 7·3 | |
| 9·2 | | 41·2 | 50·0 | |
| 9·4 | | 45·5 | 9·7 | |
| 9·4 | | 47·2 | 13·7 | |
| 9·2 | | 59·5 | 20·2 | |
| 9·6 | 5 | 10·2 | 0·4 | |
| 9·4 | | 14·0 | 25·1 | |
| 9·6 | | 18·2 | 2·0 | |
| 9·6 | | 50·2 | 1·2 | |
| 8·9 | 6 | 5·0 | 51·9 | |
| 8·4 | | 16·5 | 14·9 | 8·5 |
| 9·4 | | 17·2 | 14·4 | 9·5 |
| 9·2 | | 42·5 | 56·8 | |
| 9·6 | 7 | 0·5 | 28·4 | |
| 9·6 | | 25·0 | 14·3 | |
| 9·6 | | 33·0 | 40·5 | |
| 9·5 | 8 | 17·0 | 16·8 | |
| 9·6 | | 23·0 | 7·7 | |
| 9·1 | | 37·0 | 9·8 | |
| 9·5 | | 52·5 | 57·4 | |
| 9·5 | | 52·7 | 56·9 | |
| 8·2 | 9 | 7·5 | 52·7 | 8·0 G |
| 9·1 | | 40·0 | 11·4 | 9·5 |
| 9·4 | | 50·5 | 38·3 | |
| 9·1 | 10 | 4·5 | 36·9 | 10·0 |
| 9·6 | | 44·0 | 4·0 | |
| 9·2 | | 47·5 | 20·0 | |
| 8·4 | 11 | 11·0 | 14·3 | 9·0 |

## 1081—1140.

| mag. | 8h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 11 | 28·5 | 51·9 | |
| 8·4 | | 30·0 | 10·2 | 9·0 |
| 9·6 | | 40·5 | 14·7 | |
| 9·1 | 12 | 10·0 | 26·9 | G |
| 9·3 | | 16·0 | 47·6 | |
| 9·6 | | 40·0 | 16·3 | |
| 9·2 | | 59·8 | 57·0 | |
| 9·5 | 13 | 11·0 | 41·3 | |
| 9·2 | | 19·0 | 46·6 | |
| 9·5 | | 22·5 | 3·0 | |
| 9·6 | | 44·0 | 32·4 | |
| 9·5 | | 54·0 | 12·1 | |
| 7·1 | 14 | 56·0 | 18·5 | 7·0 GSg |
| 9·6 | 15 | 14·0 | 47·5 | |
| 7·2 | | 21·5 | 46·4 | 7·0 GSct |
| 8·8 | | 24·5 | 47·1 | 9·5 G |
| 8·8 | 16 | 19·0 | 19·2 | 9·5 |
| 9·2 | | 20·0 | 14·2 | 9·0 |
| 9·4 | | 45·5 | 52·5 | |
| 8·3 | 17 | 3·5 | 29·8 | 9·0 |
| 9·6 | 18 | 28·3 | 56·9 | |
| 8·1 | 19 | 16·0 | 19·3 | 8·5 |
| 9·5 | | 39·5 | 26·3 | |
| 8·8 | | 45·0 | 23·9 | 9·0 |
| 9·2 | | 49·0 | 19·2 | 9·5 |
| 9·6 | | 49·5 | 37·6 | |
| 9·2 | | 54·0 | 9·0 | 9·0 |
| 9·6 | 20 | 29·0 | 6·6 | 9·5 |
| 9·6 | | 42·0 | 48·7 | |
| 9·1 | 21 | 4·0 | 4·0 | |
| 9·6 | | 5·5 | 3·2 | |
| 9·6 | | 23·0 | 19·0 | |
| 9·6 | | 29·5 | 9·0 | |
| 9·6 | | 41·0 | 16·8 | |
| 9·6 | | 58·5 | 44·0 | |
| 9·2 | 22 | 0·0 | 42·6 | |
| 8·5 | | 8·5 | 1·0 | |
| 9·6 | | 29·5 | 14·0 | |
| 8·7 | | 43·5 | 14·7 | |
| 9·2 | | 59·5 | 32·4 | |
| 9·2 | 23 | 3·5 | 49·6 | 9·0 |
| 9·5 | | 19·5 | 3·8 | |
| 9·5 | | 20·5 | 39·0 | |
| 9·2 | | 27·5 | 21·3 | |
| 9·6 | | 29·5 | 33·8 | |
| 9·6 | | 51·3 | 48·0 | |
| 9·6 | 24 | 0·3 | 48·8 | |
| 9·0 | | 4·5 | 49·2 | |
| 9·2 | | 6·0 | 56·0 | 9·0 |
| 9·0 | | 7·0 | 10·8 | |
| 9·6 | | 12·0 | 2·9 | |
| 9·4 | | 50·3 | 0·0 | |
| 8·8 | | 51·5 | 51·0 | 9·0 |
| 9·0 | 26 | 15·5 | 13·8 | |
| 9·6 | 27 | 8·5 | 27·8 | |
| 10·0† | | 32·2 | 1·0 | |
| 9·1 | | 43·0 | 47·6 | 9·0 |
| 9·6 | | 52·5 | 1·8 | |
| 9·6 | | 53·0 | 27·3 | |
| 8·9 | 28 | 9·5 | 52·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 10 | 25 | 2·5 |
| | 20 | 26 | 2·9 |
| | 30 | 26 | 3·2 |
| | 40 | 27 | 3·5 |
| | 50 | 28 | 3·9 |
| 8 | 0 | 30 | 4·2 |
| | 10 | 31 | 4·5 |
| | 20 | 32 | 4·8 |
| | 30 | 34 | 5·1 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 8 | 20 | 32 | 4·8 |
| | 30 | 34 | 5·1 |
| | 40 | 35 | 5·4 |
| | 50 | 37 | 5·6 |
| 9 | 0 | 38 | 5·9 |
| | 10 | 40 | 6·2 |

## 1141—1200.

| mag. | 8h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 28 | 20·5 | 12·3 | |
| 9·1 | | 29·5 | 21·2 | |
| 7·7 | | 33·0 | 48·2 | 9·0 |
| 9·0 | | 39·5 | 34·0 | |
| 9·6 | | 45·0 | 14·0 | |
| 9·6 | | 58·5 | 33·2 | |
| 9·6 | 29 | 16·0 | 33·2 | |
| 9·6 | | 18·5 | 38·0 | |
| 8·4 | | 53·0 | 9·0 | |
| 9·5 | 30 | 5·0 | 26·7 | |
| 9·2 | | 39·0 | 42·2 | |
| 9·2 | | 45·0 | 35·6 | |
| 7·8 | 32 | 3·0 | 21·8 | 8·0 GSg |
| 9·2 | | 31·5 | 11·5 | |
| 9·4 | | 45·0 | 23·0 | |
| 9·2 | 33 | 9·0 | 17·0 | |
| 9·4 | | 25·0 | 10·6 | |
| 9·6 | | 50·0 | 19·2 | |
| 9·1 | 34 | 8·0 | 15·9 | |
| 9·5 | | 21·8 | 9·7 | |
| 9·0 | | 34·8 | 2·5 | |
| 9·2 | | 39·0 | 43·9 | |
| 9·6 | | 50·5 | 15·2 | |
| 9·6 | | 58·5 | 12·8 | |
| 9·3 | 35 | 29·5 | 27·2 | 9·0 |
| 9·4 | 36 | 18·0 | 8·0 | |
| 8·6 | | 24·0 | 25·1 | 9·0 |
| 8·8 | | 27·5 | 26·2 | 9·0 |
| 9·6 | | 39·0 | 22·0 | |
| 9·0 | | 46·0 | 38·7 | |
| 9·6 | 37 | 22·0 | 42·4 | |
| 9·5 | 38 | 5·0 | 55·8 | |
| 9·3 | | 8·8 | 8·4 | |
| 10·0† | | 10·2 | 0·1 | |
| 8·8 | | 24·5 | 21·0 | |
| 9·6 | | 29·0 | 37·0 | |
| 8·8 | | 47·0 | 37·6 | |
| 9·6 | 39 | 0·0 | 59·0 | |
| 9·7† | | 8·7 | 0·7 | |
| 9·5 | | 23·5 | 58·8 | 8·5 |
| 9·5 | | 24·5 | 21·9 | |
| 9·0 | | 25·5 | 5·1 | |
| 9·2 | | 39·6 | 3·0 | 9·5 |
| 10·0† | | 46·2 | 2·7 | |
| 9·6 | 40 | 20·0 | 0·7 | |
| 9·6 | | 24·5 | 31·4 | |
| 10·0† | | 37·8 | 2·1 | |
| 9·0 | | 40·0 | 3·4 | |
| 9·6 | | 47·5 | 52·6 | |
| 9·2 | | 48·5 | 55·9 | 9·0 |
| 8·9 | | 58·5 | 16·8 | |
| 9·9 | 41 | 7·5 | 27·6 | |
| 9·6 | | 9·0 | 8·6 | |
| 10·0 | | 15·2 | 58·8 | |
| 9·9 | | 19·5 | 5·4 | |
| 9·8 | | 30·5 | 10·7 | |
| 8·6 | | 39·0 | 34·6 | 8·5 |
| 9·8 | | 40·5 | 8·5 | |
| 10·0 | | 43·7 | 10·6 | |
| 9·5 | | 45·5 | 51·9 | |

## 1201—1260.

| mag. | 8h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·3 | 42 | 2·8 | 16·8 | |
| 6·6 | | 6·5 | 16·0 | 7·5 GSctr |
| 10·0 | | 7·5 | 15·1 | |
| 9·7 | | 9·2 | 20·5 | |
| 10·0 | | 11·5 | 52·1 | |
| 9·9 | | 17·0 | 0·0 | |
| 10·0 | | 20·0 | 46·0 | |
| 9·2 | | 28·7 | 0·1 | 8·5 |
| 9·4 | | 40·5 | 44·1 | |
| 9·6 | | 44·5 | 26·1 | |
| 9·4 | | 59·0 | 28·1 | |
| 9·0 | 43 | 15·5 | 4·8 | |
| 9·9 | | 18·5 | 51·9 | |
| 9·4 | | 38·0 | 7·0 | |
| 9·3 | | 43·2 | 10·3 | |
| 9·6 | | 45·5 | 27·8 | |
| 9·2 | 44 | 0·2 | 11·6 | |
| 9·9 | | 9·5 | 44·1 | |
| 9·8 | | 22·5 | 2·5 | |
| 10·0 | | 29·0 | 38·9 | |
| 8·1 | | 30·6 | 1·6 | |
| 10·0 | | 35·0 | 51·7 | |
| 9·9 | | 40·0 | 3·0 | |
| 9·6 | 45 | 3·0 | 55·2 | |
| 9·6 | | 9·0 | 45·4 | |
| 9·8 | | 28·5 | 3·9 | |
| 9·3 | | 30·0 | 24·1 | |
| 9·9 | | 35·5 | 42·5 | |
| 10·0 | | 45·0 | 52·9 | |
| 10·0 | 46 | 3·0 | 24·0 | |
| 9·9 | | 20·5 | 55·9 | |
| 10·0 | | 26·5 | 6·4 | |
| 10·0 | | 33·9 | 58·0 | |
| 9·9 | | 36·5 | 18·6 | |
| 9·4 | | 37·5 | 59·8 | 9·5 |
| 9·9 | | 45·0 | 49·6 | |
| 9·8 | | 50·5 | 23·6 | |
| 9·8 | | 52·5 | 34·9 | |
| 9·6 | 47 | 7·0 | 6·1 | |
| 9·9 | | 15·0 | 6·9 | |
| 9·8 | | 17·0 | 10·6 | |
| 9·5 | | 22·5 | 25·1 | 9·0 |
| 9·2 | | 53·5 | 19·0 | |
| 9·8 | | 55·0 | 56·6 | |
| 9·7 | | 59·0 | 37·0 | |
| 10·0 | 48 | 4·0 | 18·9 | |
| 8·8 | | 10·0 | 27·6 | 9·0 |
| 10·0 | | 15·0 | 46·6 | |
| 9·9 | | 29·0 | 13·0 | |
| 9·1 | | 30·0 | 34·8 | 8·5 |
| 9·2 | | 30·5 | 15·3 | |
| 9·6 | 49 | 22·0 | 9·9 | |
| 10·0 | | 24·3 | 59·1 | |
| 10·0 | | 29·0 | 29·0 | |
| 9·8 | | 30·5 | 4·6 | |
| 9·8 | | 32·0 | 21·9 | |
| 10·0 | | 38·5 | 28·0 | |
| 8·8 | | 44·0 | 2·7 | 8·5 |
| 9·8 | | 50·5 | 32·6 | |
| 10·0 | | 52·0 | 0·4 | |

## 1261—1320.

| mag. | 8h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 50 | 3·0 | 50·3 | |
| 10·0 | | 14·5 | 10·4 | |
| 9·2 | | 18·0 | 32·8 | 8·5 |
| 9·3 | | 19·0 | 25·7 | |
| 10·0 | | 19·0 | 6·7 | |
| 9·3 | | 25·0 | 47·6 | |
| 9·8 | | 26·0 | 50·7 | |
| 10·0 | | 37·5 | 49·5 | |
| 9·9 | | 48·0 | 6·3 | |
| 9·8 | | 49·5 | 1·1 | |
| 9·9 | | 50·5 | 16·6 | |
| 9·9 | | 53·0 | 40·3 | |
| 9·9 | | 57·5 | 49·9 | |
| 9·1 | 51 | 4·0 | 42·5 | |
| 10·0 | | 12·0 | 35·7 | |
| 10·0 | | 12·0 | 35·5 | |
| 10·0 | | 32·0 | 17·6 | |
| 10·0 | | 32·5 | 18·5 | |
| 10·0 | | 42·5 | 43·5 | |
| 9·9 | | 44·0 | 45·7 | |
| 9·3 | | 48·0 | 24·5 | |
| 9·8 | | 49·0 | 59·9 | |
| 9·6 | | 49·5 | 33·1 | |
| 9·8 | | 53·5 | 56·9 | |
| 8·3 | 52 | 5·0 | 12·7 | 8·5 |
| 9·7 | | 9·0 | 24·5 | |
| 9·7 | | 20·5 | 21·1 | |
| 10·0 | | 25·0 | 34·0 | |
| 9·8 | | 31·5 | 36·4 | |
| 10·0 | | 44·0 | 57·9 | |
| 10·0 | | 49·0 | 2·6 | |
| 8·7 | | 51·2 | 56·7 | 8·5 |
| 10·0 | | 53·7 | 36·0 | |
| 10·0 | | 55·5 | 3·6 | |
| 9·3 | | 57·5 | 59·3 | 10·0 |
| 9·9 | 53 | 12·5 | 29·0 | |
| 10·0 | | 25·0 | 21·1 | |
| 9·5 | | 42·5 | 46·5 | |
| 10·0 | | 49·5 | 24·6 | |
| 10·0 | | 50·7 | 19·5 | |
| 4·8 | | 55·0 | 44·7 | 5·3 GSgtr |
| 10·0 | | 57·7 | 55·5 | |
| 8·8 | | 59·0 | 39·1 | |
| 9·9 | 54 | 3·5 | 36·9 | |
| 10·0 | | 5·0 | 46·4 | |
| 8·0 | | 8·0 | 6·2 | |
| 9·2 | | 11·5 | 4·7 | |
| 10·0 | | 33·0 | 24·5 | |
| 9·6 | | 34·0 | 56·5 | 9·2 |
| 9·4 | | 39·0 | 11·9 | |
| 9·8 | | 41·7 | 22·0 | |
| 9·8 | | 44·0 | 14·5 | |
| 9·9 | | 45·5 | 58·8 | |
| 9·5 | | 47·0 | 18·7 | |
| 9·8 | | 49·5 | 17·4 | |
| 10·0 | 55 | 3·0 | 27·6 | |
| 10·0 | | 9·5 | 59·2 | |
| 10·1 | | 10·0 | 4·7 | |
| 7·9 | | 13·0 | 42·5 | 8·0 Gg |
| 9·9 | | 18·7 | 44·0 | 9·5 |

## 1321—1380.

| mag. | 8h.—9h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 48·5 | 38·8 | |
| 9·9 | | 50·5 | 33·6 | |
| 9·7 | | 53·0 | 46·9 | |
| 9·8 | 56 | 18·0 | 25·8 | |
| 10·0 | | 19·0 | 47·1 | |
| 8·5 | | 19·0 | 15·2 | 8·0 G |
| 5·8 | | 19·5 | 36·2 | 5·5 GSgtr |
| 8·4 | | 25·5 | 59·3 | 8·8 |
| 9·6 | | 28·0 | 4·3 | |
| 10·0 | | 28·0 | 20·9 | |
| 10·0 | | 29·5 | 17·9 | |
| 9·8 | | 30·0 | 30·6 | |
| 8·2 | | 30·0 | 33·1 | 8·0 GSg |
| 9·6 | | 43·0 | 54·9 | |
| 9·6 | | 59·0 | 32·5 | |
| 8·6 | | 59·0 | 10·8 | 8·5 |
| 10·0 | 57 | 0·0 | 6·6 | |
| 9·5 | | 5·5 | 39·3 | |
| 9·6 | | 7·0 | 10·0 | |
| 10·0 | | 19·0 | 12·0 | |
| 10·0 | | 23·0 | 35·8 | |
| 10·0 | | 36·0 | 8·1 | |
| 9·9 | | 44·0 | 36·0 | |
| 9·9 | | 46·0 | 53·3 | |
| 10·0 | | 50·5 | 55·1 | |
| 10·0 | | 59·0 | 15·6 | |
| 9·9 | | 59·5 | 35·2 | |
| 10·0 | 58 | 19·0 | 8·3 | |
| 8·9 | | 30·0 | 53·4 | |
| 10·0 | | 35·0 | 11·6 | |
| 10·0 | | 39·0 | 10·1 | |
| 9·8 | | 45·5 | 28·8 | |
| 9·7 | | 56·0 | 52·6 | |
| 10·0 | | 59·0 | 44·4 | |
| 9·9 | 59 | 3·0 | 31·1 | |
| 9·4 | | 3·5 | 59·0 | |
| 9·3 | | 8·0 | 22·1 | |
| 10·0 | | 23·5 | 49·8 | |
| 9·8 | | 24·0 | 21·8 | |
| 9·9 | | 25·5 | 14·9 | |
| 9·5 | | 29·5 | 15·3 | |
| 9·7 | | 33·0 | 33·5 | |
| 10·0 | | 38·0 | 35·8 | |
| 9·7 | | 38·0 | 32·3 | |
| 9·6 | | 38·5 | 10·6 | |
| 9·6 | | 41·0 | 14·6 | |
| 10·0 | | 43·0 | 33·9 | |
| 10·0 | 0 | 5·0 | 59·4 | |
| 9·2 | | 5·2 | 59·0 | |
| 8·2 | 1 | 11·5 | 39·5 | |
| 9·0 | | 18·0 | 19·0 | 8·5 |
| 10·0 | | 20·0 | 36·8 | |
| 10·0 | | 25·5 | 15·7 | |
| 9·7 | | 39·0 | 50·8 | |
| 10·0 | | 45·0 | 20·5 | |
| 8·6 | | 50·0 | 16·0 | 9·0 |
| 9·5 | 2 | 5·5 | 5·0 | |
| 8·9 | | 13·5 | 8·0 | |
| 8·3 | | 14·0 | 25·6 | 8·5 |
| 9·6 | | 28·0 | 45·7 | 9·0 |



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### 1381—1440.

| mag. | 9h. m s | −58° ′ | |
|---|---|---|---|
| 9.4 | 2 29.0 | 5.9 | |
| 9.8 | 41.0 | 27.7 | |
| 9.5 | 43.0 | 25.8 | |
| 9.2 | 3 7.5 | 10.7 | |
| 8.6 | 8.5 | 34.0 | 8.5 |
| 7.6 | 10.5 | 42.2 | 8.5 GSt |
| 8.9 | 38.0 | 15.1 | |
| 9.6 | 45.0 | 21.7 | |
| 8.3 | 49.0 | 9.2 | 8.5 |
| 7.8 | 4 11.0 | 38.7 | 8.0 GSt |
| 10.0 | 18.5 | 54.4 | |
| 10.0 | 25.0 | 10.3 | |
| 7.8 | 27.5 | 40.7 | 7.5 GSt |
| 10.0 | 28.0 | 9.0 | |
| 9.8 | 44.5 | 56.4 | |
| 8.9 | 45.0 | 31.3 | |
| 10.0 | 58.5 | 18.7 | |
| 9.8 | 5 14.0 | 43.8 | |
| 9.6 | 24.0 | 11.7 | |
| 10.0 | 24.0 | 52.2 | |
| 9.6 | 25.0 | 32.1 | |
| 10.0 | 39.0 | 8.7 | |
| 9.6 | 53.0 | 46.4 | |
| 7.8 | 6 1.5 | 45.7 | 7.5 GSt |
| 10.0 | 13.5 | 45.1 | |
| 9.5 | 13.5 | 30.5 | |
| 10.0 | 14.5 | 11.5 | |
| 10.0 | 15.0 | 24.7 | |
| 9.6† | 23.1 | 2.0 | |
| 9.9 | 26.0 | 16.0 | |
| 10.0 | 28.0 | 34.2 | |
| 9.6 | 39.0 | 6.6 | |
| 10.0 | 51.5 | 5.1 | |
| 10.0 | 52.0 | 48.5 | |
| 9.9 | 7 0.0 | 8.8 | |
| 9.8 | 12.7 | 58.9 | |
| 9.9 | 16.0 | 8.6 | |
| 9.8 | 21.5 | 59.7 | |
| 4.2 | 40.0 | 27.3 | 4.0 GSct |
| 8.8 | 49.0 | 42.0 | 9.5 |
| 9.4 | 49.0 | 45.4 | |
| 8.2 | 8 28.5 | 10.5 | 8.5 |
| 7.9 | 32.5 | 16.8 | 8.0 |
| 8.9 | 40.0 | 21.4 | |
| 9.8 | 49.0 | 55.8 | |
| 9.8 | 59.0 | 19.8 | |
| 10.0 | 9 16.0 | 56.2 | |
| 9.9 | 16.5 | 24.6 | |
| 9.6 | 26.0 | 34.7 | |
| 9.2 | 28.0 | 8.4 | 8.5 |
| 10.0 | 35.0 | 30.5 | |
| 6.8 | 39.0 | 53.9 | 6.2 GSgt |
| 9.7 | 10 3.5 | 28.1 | |
| 9.6 | 15.0 | 42.2 | |
| 9.6 | 15.5 | 45.1 | |
| 9.2 | 51.5 | 23.4 | |
| 9.8 | 57.0 | 51.9 | |
| 9.8 | 59.5 | 31.1 | |
| 9.3 | 11 4.0 | 18.5 | |
| 9.6 | 15.5 | 16.7 | |

### 1441—1500.

| mag. | 9h. m s | −58° ′ | |
|---|---|---|---|
| 10.0 | 11 28.0 | 35.3 | |
| 10.0 | 32.0 | 15.0 | |
| 10.0 | 32.0 | 36.8 | |
| 9.9 | 32.4 | 0.6 | |
| 8.9 | 39.0 | 20.3 | 9.5 |
| 9.6 | 54.0 | 18.1 | 9.0 |
| 9.9 | 55.0 | 27.5 | |
| 9.6 | 57.5 | 39.9 | |
| 10.0 | 12 4.5 | 16.0 | |
| 8.6 | 12.0 | 21.4 | 9.0 |
| 9.7 | 19.6 | 0.7 | |
| 9.6 | 20.5 | 35.7 | |
| 9.6 | 21.0 | 9.3 | |
| 10.0 | 31.0 | 42.8 | |
| 9.8 | 55.0 | 15.9 | 9.5 |
| 8.6 | 58.0 | 42.7 | 9.5 |
| 8.8 | 59.0 | 15.8 | |
| 9.0 | 59.0 | 16.2 | |
| 8.9 | 13 4.0 | 33.7 | 9.0 |
| 9.8 | 19.2 | 57.8 | 9.0 |
| 9.6 | 21.0 | 10.9 | |
| 10.0 | 23.5 | 54.5 | |
| 9.8 | 24.5 | 37.8 | 9.5 |
| 9.6 | 34.5 | 14.0 | |
| 4.0 | 43.5 | 44.9 | 3.0 GSctλ |
| 8.6 | 51.0 | 32.0 | 9.0 |
| 10.0 | 58.5 | 35.8 | |
| 10.0 | 59.0 | 36.8 | |
| 8.1 | 59.0 | 12.4 | |
| 10.0 | 14 1.0 | 46.2 | |
| 9.6 | 6.9 | 0.9 | |
| 9.2 | 11.0 | 4.3 | |
| 10.0 | 39.5 | 4.5 | |
| 9.0 | 40.0 | 45.9 | 9.0 |
| 9.8 | 45.5 | 18.7 | |
| 10.0 | 51.5 | 58.0 | |
| 9.4 | 58.5 | 53.9 | |
| 10.0 | 15 4.0 | 16.7 | |
| 10.0 | 19.5 | 26.2 | |
| 9.0 | 34.5 | 51.2 | |
| 9.3 | 38.0 | 27.5 | |
| 7.6 | 54.0 | 24.0 | 7.5 G |
| 10.0 | 55.0 | 6.2 | |
| 9.6 | 16 20.0 | 3.0 | |
| 9.0 | 23.0 | 56.8 | 8.5 |
| 10.0 | 28.0 | 55.6 | 9.0 |
| 8.4 | 31.0 | 41.3 | 8.5 |
| 8.6 | 41.0 | 24.3 | 8.0 |
| 10.0 | 42.0 | 2.8 | |
| 9.9 | 59.2 | 4.8 | |
| 10.0 | 17 7.3 | 20.8 | |
| 9.2 | 19.8 | 20.8 | 8.0 |
| 9.8 | 39.8 | 8.8 | |
| 9.6 | 49.0 | 9.0 | 9.0 |
| 9.6 | 50.7 | 55.2 | 9.0 |
| 9.8 | 59.5 | 26.9 | |
| 9.1 | 18 6.7 | 18.8 | |
| 9.8 | 7.0 | 22.8 | |
| 9.5 | 7.5 | 13.6 | |
| 9.8 | 37.2 | 42.8 | |

### 1501—1560.

| mag. | 9h. m s | −58° ′ | |
|---|---|---|---|
| 8.3 | 18 51.5 | 12.0 | 8.5 |
| 9.0 | 52.2 | 2.9 | 9.5 |
| 9.8 | 59.5 | 54.2 | 10.0 |
| 9.8 | 19 0.2 | 13.9 | 9.5 |
| 9.6 | 2.5 | 42.8 | |
| 9.6 | 8.5 | 49.9 | |
| 8.4 | 16.5 | 1.6 | 9.0 |
| 9.5 | 52.5 | 28.1 | |
| 9.8 | 20 6.5 | 59.2 | |
| 9.6 | 19.7 | 15.8 | |
| 9.2 | 39.5 | 25.3 | |
| 9.7 | 46.5 | 5.2 | |
| 8.0 | 21 8.0 | 8.9 | 8.0 |
| 8.7 | 24.5 | 39.3 | 9.5 |
| 9.2 | 22 29.0 | 40.1 | 9.0 |
| 9.8 | 43.5 | 12.7 | |
| 9.8 | 46.5 | 59.3 | 9.5 |
| 9.6 | 54.0 | 46.8 | |
| 9.6 | 23 7.0 | 41.2 | |
| 9.4 | 7.5 | 31.8 | |
| 9.7 | 14.7 | 27.4 | |
| 9.8 | 29.0 | 34.8 | |
| 8.7 | 29.5 | 27.7 | 9.5 |
| 9.2 | 30.0 | 12.7 | 8.5 |
| 9.7 | 32.5 | 30.3 | |
| 9.1 | 36.0 | 49.5 | |
| 9.8 | 42.5 | 57.1 | |
| 9.8 | 48.5 | 50.8 | |
| 9.7 | 49.5 | 24.2 | |
| 7.9 | 59.5 | 23.2 | 8.5 |
| 9.1 | 24 21.0 | 5.5 | 9.0 |
| 8.4 | 22.2 | 1.5 | 9.5 |
| 9.4 | 39.5 | 9.8 | |
| 9.8 | 52.5 | 36.5 | |
| 9.8 | 53.5 | 27.8 | |
| 8.6 | 56.5 | 36.1 | |
| 9.7 | 58.7 | 47.6 | |
| 8.9 | 25 2.0 | 56.6 | 8.8 |
| 10.4† | 11.2 | 0.3 | |
| 8.6 | 15.5 | 1.4 | |
| 8.9 | 19.5 | 2.6 | |
| 9.2 | 19.5 | 48.1 | |
| 8.9 | 26.0 | 57.2 | 9.0 |
| 9.6 | 35.5 | 24.2 | |
| 8.9 | 53.5 | 40.9 | 8.5 |
| 8.8 | 26 18.5 | 19.2 | |
| 9.5 | 28.2 | 57.8 | |
| 9.8 | 29.5 | 16.8 | |
| 9.8 | 29.5 | 50.1 | |
| 9.8 | 34.5 | 58.6 | |
| 8.6 | 39.5 | 0.6 | 10.0 |
| 9.8 | 46.0 | 5.6 | |
| 9.5 | 48.5 | 8.8 | |
| 9.4 | 59.0 | 28.2 | |
| 9.2 | 27 7.0 | 9.6 | 9.0 |
| 9.4 | 18.5 | 16.8 | |
| 9.4 | 21.0 | 16.2 | 8.8 |
| 9.8 | 22.5 | 6.0 | |
| 9.8 | 28.0 | 6.0 | |
| 9.6 | 29.5 | 58.9 | 9.5 |

### 1561—1620.

| mag. | 9h. m s | −58° ′ | |
|---|---|---|---|
| 9.5 | 27 44.5 | 51.8 | 9.5 |
| 9.4 | 28 9.2 | 57.6 | |
| 9.5 | 33.5 | 54.3 | |
| 9.8 | 35.5 | 8.9 | |
| 9.6 | 36.5 | 30.2 | |
| 9.2 | 48.5 | 31.8 | |
| 9.6 | 50.0 | 17.9 | 9.0 |
| 9.8 | 56.5 | 53.8 | |
| 9.6 | 29 4.0 | 18.4 | |
| 9.2 | 14.5 | 47.9 | 8.5 |
| 9.6 | 15.0 | 34.5 | |
| 9.2 | 30 3.5 | 53.3 | 10.0 |
| 9.6 | 19.0 | 3.1 | |
| 9.4 | 24.0 | 3.0 | |
| 9.4 | 24.0 | 31.9 | |
| 4.7 | 48.5 | 40.3 | 5.0 GScgt |
| 9.8 | 58.5 | 1.1 | |
| 8.6 | 31 3.6 | 1.8 | 9.0 |
| 8.9 | 19.5 | 29.2 | 9.5 |
| 9.4 | 46.0 | 38.8 | 8.5 S |
| 9.8 | 55.5 | 39.3 | 9.0 |
| 9.6 | 32 8.5 | 10.1 | |
| 8.9 | 9.5 | 55.0 | 9.0 G |
| 9.7 | 35.5 | 23.9 | |
| 9.4 | 44.5 | 51.2 | |
| 9.8 | 49.5 | 49.4 | |
| 9.8 | 33 13.0 | 58.0 | |
| 9.1 | 28.5 | 42.4 | |
| 9.8 | 30.5 | 59.8 | |
| 8.3 | 39.0 | 28.3 | 9.0 |
| 9.0 | 39.5 | 7.2 | |
| 9.0 | 34 8.0 | 8.0 | |
| 8.0 | 20.5 | 50.3 | 8.0 |
| 9.1 | 22.5 | 23.8 | |
| 9.6 | 24.5 | 13.8 | 10.0 |
| 8.8 | 28.2 | 53.6 | 9.0 |
| 9.6 | 41.5 | 42.0 | |
| 10.2† | 44.7 | 0.9 | |
| 7.7 | 50.0 | 36.8 | 7.5 GSg |
| 9.6 | 35 14.0 | 5.0 | |
| 9.3 | 28.5 | 51.0 | |
| 9.2 | 46.0 | 44.9 | |
| 9.4 | 51.0 | 32.6 | 9.0 |
| 9.3 | 36 8.0 | 42.0 | Gg |
| 9.2 | 8.5 | 16.0 | |
| 7.8 | 9.0 | 43.1 | 8.0 GSg |
| 9.7 | 18.5 | 31.1 | 79.5 |
| 9.3 | 18.5 | 59.1 | |
| 9.2 | 35.0 | 7.0 | |
| 9.8 | 59.5 | 34.9 | 9.0 |
| 8.2 | 37 14.0 | 28.2 | 7.5 G |
| 8.8 | 24.5 | 34.1 | 8.0 Gg |
| 8.6 | 26.0 | 38.6 | |
| 9.4 | 28.5 | 50.5 | 9.0 |
| 9.1 | 58.0 | 34.5 | |
| 9.8 | 38 8.2 | 19.3 | 9.5 |
| 9.8 | 10.0 | 17.8 | |
| 9.8 | 18.0 | 47.1 | |
| 9.0 | 48.2 | 58.4 | 8.2 |
| 9.8 | 53.5 | 23.3 | |

25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 9 0 | 38 | 5.9 |
| 10 | 40 | 6.2 |
| 20 | 42 | 6.4 |
| 30 | 44 | 6.6 |
| 40 | 46 | 6.8 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 9 | 30 | 44 | 6·6 |
| | 40 | 46 | 6·8 |
| | 50 | 48 | 7·0 |
| 10 | 0 | 50 | 7·2 |

**1621—1680.**

| mag. | 9h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 38 | 54·0 | 51·6 | |
| 9·3 | | 58·0 | 38·8 | |
| 8·9 | | 59·5 | 0·9 | |
| 9·8 | 39 | 25·5 | 1·7 | |
| 8·8 | | 48·0 | 4·9 | |
| 8·6 | | 59·5 | 36·7 | 8·5 |
| 9·8 | 40 | 24·0 | 23·9 | |
| 9·3 | | 25·5 | 50·3 | |
| 8·6 | | 30·5 | 36·2 | 9·0 |
| 9·8 | | 31·0 | 3·7 | |
| 9·8 | | 40·5 | 18·0 | |
| 9·8 | | 51·0 | 1·9 | |
| 9·8 | 41 | 6·0 | 51·5 | |
| 9·8 | | 11·0 | 3·2 | |
| 8·1 | | 26·0 | 53·9 | 7·8 Gg |
| 8·8 | | 34·5 | 9·9 | 10·0 |
| 9·6 | | 46·0 | 44·5 | |
| 8·2 | | 56·5 | 53·5 | 9·0 |
| 9·8 | 42 | 6·0 | 9·9 | 10·0 |
| 7·2 | | 6·0 | 13·2 | 7·0 GSct |
| 8·8 | | 9·5 | 25·1 | 8·0 G |
| 9·8 | | 10·0 | 33·3 | |
| 8·7 | | 10·5 | 10·0 | 9·0 |
| 8·2 | | 11·5 | 28·1 | 7·5 GSt |
| 9·2 | | 32·5 | 2·5 | 9·5 |
| 7·1 | | 38·0 | 46·4 | 7·0 GSg |
| 9·5 | | 39·5 | 23·9 | |
| 9·0 | 43 | 1·0 | 53·9 | |
| 9·4 | | 16·5 | 46·9 | |
| 9·5 | 44 | 9·5 | 17·4 | |
| 9·2 | | 16·5 | 4·9 | |
| 9·8 | | 29·0 | 2·8 | |
| 9·8 | | 30·3 | 32·9 | 9·0 |
| 9·7 | | 32·5 | 52·3 | |
| 9·8 | | 34·5 | 47·2 | |
| 9·2 | | 35·0 | 3·5 | |
| 9·7 | | 36·3 | 0·8 | |
| 8·9 | | 38·0 | 5·9 | |
| 9·8 | | 53·0 | 46·8 | |
| 8·5 | 45 | 9·5 | 11·6 | 9·0 |
| 9·7 | | 15·0 | 32·3 | |
| 10·4† | | 17·0 | 0·5 | |
| 9·8 | | 28·5 | 7·3 | |
| 9·8 | | 29·5 | 47·9 | |
| 9·8 | | 33·0 | 23·9 | |
| 9·8 | | 35·0 | 17·2 | |
| 7·7 | | 58·5 | 13·7 | 8·0 G |
| 8·6 | 46 | 26·0 | 52·9 | 8·0 GS |
| 9·8 | | 40·5 | 16·3 | |
| 9·7 | | 41·0 | 27·2 | |
| 9·8 | | 49·0 | 32·3 | |
| 8·8 | 47 | 16·5 | 46·0 | 9·0 |
| 7·5 | | 18·0 | 50·3 | 6·5 GSct |
| 9·8 | | 21·0 | 45·7 | |
| 9·6 | | 23·5 | 54·8 | |
| 9·4 | | 27·0 | 33·3 | 8·5 G |
| 9·4 | | 40·0 | 50·8 | |
| 8·4 | | 43·5 | 41·8 | 9·0 |
| 8·8 | 48 | 11·5 | 15·2 | 8·2 |
| 9·3 | | 25·5 | 45·7 | |

**1681—1740.**

| mag. | 9h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 48 | 28·5 | 0·4 | |
| 9·8 | | 44·5 | 43·7 | |
| 9·2 | 49 | 8·0 | 46·4 | |
| 8·5 | | 15·5 | 3·8 | 8·5 |
| 10·4† | | 31·5 | 2·1 | |
| 9·4 | | 34·0 | 41·8 | |
| 9·5 | | 57·0 | 14·2 | |
| 9·8 | | 59·8 | 33·2 | |
| 9·8 | 50 | 9·0 | 12·7 | 10·0 |
| 9·6 | | 10·5 | 47·1 | |
| 9·8 | | 22·0 | 16·8 | |
| 9·6 | | 23·5 | 11·1 | 9·5 |
| 8·5 | | 31·5 | 1·2 | |
| 9·3 | | 35·5 | 39·6 | 9·5 |
| 9·2 | | 40·5 | 9·1 | 9·0 |
| 9·8 | | 49·5 | 2·6 | 9·0 |
| 8·6 | | 50·0 | 40·6 | 9·0 |
| 9·8 | | 50·5 | 53·8 | 9·0 |
| 8·4 | | 51·5 | 27·6 | 8·5 GSt |
| 8·9 | | 53·5 | 6·3 | 9·5 |
| 9·6 | | 58·0 | 14·8 | |
| 9·7 | 51 | 19·5 | 55·9 | |
| 8·9 | | 22·5 | 9·9 | |
| 9·6 | | 24·5 | 7·9 | |
| 9·4 | | 25·5 | 34·0 | |
| 9·7 | | 26·0 | 5·8 | |
| 7·9 | | 32·0 | 9·0 | 8·0 GSt |
| 9·7 | | 34·5 | 2·5 | |
| 7·7 | | 42·0 | 30·8 | 7·5 GSt |
| 9·6 | | 53·5 | 50·8 | |
| 9·8 | | 58·0 | 33·2 | |
| 9·7 | 52 | 2·0 | 50·8 | |
| 8·6 | | 32·0 | 19·9 | 9·0 |
| 8·5 | | 44·5 | 12·9 | 8·5 |
| 9·6 | | 46·5 | 21·0 | 9·0 |
| 9·8 | | 51·5 | 14·9 | |
| 9·8 | 53 | 1·5 | 54·9 | |
| 9·8 | | 5·5 | 49·9 | |
| 9·6 | | 7·0 | 28·9 | 9·0 |
| 9·8 | | 10·5 | 20·3 | |
| 9·8 | | 14·0 | 2·2 | |
| 9·9 | | 16·5 | 11·5 | |
| 10·0 | | 21·7 | 57·5 | |
| 10·0 | | 22·0 | 59·1 | |
| 9·9 | | 25·5 | 28·3 | |
| 10·0 | | 26·0 | 35·9 | |
| 9·8 | | 30·5 | 36·7 | |
| 9·8 | | 30·5 | 34·1 | |
| 10·0 | | 34·0 | 48·9 | |
| 9·8 | | 34·5 | 9·5 | |
| 10·0 | | 34·5 | 52·0 | |
| 9·3 | | 40·7 | 46·2 | |
| 10·0 | | 44·5 | 41·0 | |
| 9·2 | | 49·0 | 26·8 | |
| 9·8 | | 53·5 | 55·0 | |
| 9·8 | | 55·5 | 3·0 | |
| 9·2 | | 56·5 | 38·9 | |
| 8·8 | | 56·5 | 29·4 | 8·5 |
| 8·4 | 54 | 1·5 | 15·9 | 7·5 G |
| 9·9 | | 3·5 | 4·7 | |

**1741—1800.**

| mag. | 9h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 54 | 4·5 | 51·0 | |
| 9·6 | | 9·7 | 27·0 | |
| 10·0 | | 11·0 | 55·3 | |
| 9·7 | | 13·0 | 45·1 | |
| 9·9 | | 14·0 | 24·9 | |
| 10·0 | | 15·5 | 6·1 | |
| 10·0 | | 20·0 | 48·0 | |
| 9·8 | | 29·5 | 48·6 | |
| 9·7 | | 35·0 | 19·4 | |
| 8·8 | | 40·7 | 9·7 | 9·2 |
| 10·0 | | 41·5 | 22·3 | |
| 10·0 | | 42·0 | 6·8 | |
| 9·9 | | 49·5 | 10·6 | |
| 10·0 | | 50·5 | 22·8 | |
| 10·0 | | 58·0 | 51·9 | |
| 9·6 | 55 | 0·7 | 4·6 | |
| 10·0 | | 3·0 | 19·0 | |
| 10·0 | | 4·5 | 22·0 | |
| 10·0 | | 6·5 | 8·3 | |
| 9·6 | | 17·7 | 32·9 | |
| 10·0 | | 18·0 | 35·5 | |
| 10·0 | | 36·5 | 22·2 | |
| 8·8 | | 38·0 | 8·1 | 9·5 G |
| 10·0 | | 39·0 | 21·5 | |
| 9·2 | | 41·5 | 40·2 | 9·5 |
| 8·6 | | 42·5 | 40·4 | 8·5 |
| 10·0 | | 44·5 | 18·0 | |
| 9·2 | | 47·0 | 3·4 | 9·0 |
| 10·0 | | 53·5 | 17·6 | |
| 10·0 | | 54·5 | 44·2 | |
| 10·0 | | 56·5 | 13·4 | |
| 10·0 | 56 | 0·0 | 27·5 | |
| 9·1 | | 3·5 | 31·0 | |
| 10·0 | | 5·5 | 6·7 | |
| 9·8 | | 5·5 | 49·4 | |
| 10·0 | | 9·5 | 47·7 | |
| 9·8 | | 11·0 | 25·6 | |
| 8·8 | | 13·8 | 57·1 | |
| 8·4 | | 14·0 | 24·4 | 8·5 G |
| 10·0 | | 16·5 | 54·2 | |
| 8·8 | | 20·5 | 10·7 | 8·5 G |
| 10·0 | | 21·5 | 6·4 | |
| 9·6 | | 23·0 | 24·7 | |
| 9·9 | | 25·5 | 39·1 | |
| 9·8 | | 26·0 | 8·3 | |
| 10·0 | | 36·0 | 49·6 | |
| 9·8 | | 36·5 | 5·0 | |
| 10·0 | | 36·5 | 47·0 | |
| 10·0 | | 36·5 | 20·4 | |
| 10·0 | | 38·0 | 45·1 | |
| 10·0 | | 38·5 | 13·4 | |
| 10·0 | | 41·5 | 58·0 | |
| 8·9 | | 48·0 | 8·2 | 9·0 |
| 9·4 | | 48·3 | 58·9 | |
| 9·9 | | 50·0 | 29·8 | |
| 9·0 | | 55·5 | 49·2 | |
| 9·3 | | 58·0 | 11·3 | |
| 10·0 | 57 | 4·5 | 56·7 | |
| 8·6 | | 10·5 | 22·9 | 9·0 |
| 9·6 | | 13·5 | 23·3 | |

**1801—1860.**

| mag. | 9h.—10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 57 | 19·5 | 48·0 | |
| 10·0 | | 21·5 | 3·7 | |
| 9·9 | | 22·0 | 24·3 | 9·0 |
| 10·0 | | 22·5 | 48·0 | |
| 9·4 | | 25·5 | 24·0 | 9·5 |
| 9·4 | | 29·0 | 25·0 | 9·5 |
| 9·9 | | 29·5 | 6·7 | |
| 9·4 | | 34·5 | 42·0 | |
| 10·0 | | 35·0 | 34·2 | |
| 9·5 | | 35·5 | 48·0 | |
| 9·2 | | 41·5 | 0·7 | 9·0 |
| 10·0 | | 47·5 | 15·3 | |
| 10·0 | | 50·0 | 6·9 | |
| 9·2 | | 50·5 | 3·0 | 9·0 |
| 10·0 | | 53·0 | 30·5 | |
| 9·2 | 58 | 3·5 | 4·3 | |
| 10·0 | | 6·0 | 45·0 | |
| 9·8 | | 6·5 | 25·0 | |
| 10·0 | | 11·0 | 52·5 | |
| 9·5 | | 12·5 | 6·0 | 10·0 |
| 10·0 | | 12·5 | 23·9 | |
| 9·8 | | 19·0 | 38·9 | |
| 9·7 | | 28·0 | 37·9 | ? |
| 10·0 | | 30·0 | 21·0 | |
| 9·5 | | 33·0 | 1·0 | |
| 10·0 | | 40·0 | 28·0 | |
| 9·9 | | 42·0 | 14·0 | |
| 10·0 | | 43·0 | 29·7 | |
| 10·0 | | 45·0 | 31·1 | |
| 9·8 | | 45·0 | 41·0 | |
| 8·6 | | 45·5 | 40·6 | |
| 8·5 | | 46·5 | 13·5 | 9·0 Gt |
| 10·0 | | 48·0 | 28·5 | |
| 9·5 | | 53·0 | 46·7 | |
| 10·0 | | 54·5 | 21·0 | |
| 10·0 | | 55·0 | 29·0 | |
| 9·2 | | 55·0 | 23·6 | |
| 9·5 | | 55·5 | 40·3 | |
| 8·4 | | 55·8 | 0·7 | 8·5 G |
| 9·9 | | 59·5 | 5·0 | |
| 10·0 | 59 | 2·5 | 36·2 | |
| 9·6 | | 3·5 | 20·0 | |
| 10·0 | | 8·5 | 9·2 | |
| 10·0 | | 11·0 | 6·7 | |
| 9·6 | | 11·5 | 27·6 | |
| 10·0 | | 12·0 | 42·9 | |
| 9·8 | | 13·5 | 20·5 | |
| 8·8 | | 14·0 | 15·9 | 9·2 |
| 10·0 | | 15·0 | 20·9 | |
| 10·0 | | 15·5 | 50·4 | |
| 9·8 | | 15·5 | 51·4 | |
| 9·9 | | 29·0 | 20·3 | |
| 10·0 | | 36·5 | 23·9 | |
| 10·0 | | 39·5 | 39·5 | |
| 10·0 | | 41·0 | 34·1 | |
| 8·2 | | 49·5 | 53·2 | 8·8 |
| 10·0 | | 54·5 | 11·2 | |
| 9·7 | | 56·0 | 47·2 | |
| 9·8 | 0 | 0·0 | 37·0 | 9·5 |
| 8·6 | | 2·0 | 46·4 | 9·0 |



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## 1861—1920.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 0 | 2.0 | 9.9 | |
| 10.0 | | 11.0 | 24.1 | |
| 10.0 | | 13.2 | 58.9 | |
| 8.4 | | 14.5 | 37.0 | 8.5 |
| 9.0 | | 19.5 | 3.5 | 9.5 |
| 9.5 | | 19.5 | 46.0 | |
| 9.9 | | 22.5 | 26.0 | |
| 10.0 | | 29.5 | 32.1 | |
| 10.0 | | 33.5 | 18.8 | |
| 9.2 | | 35.5 | 16.2 | |
| 8.8 | | 35.5 | 4.0 | 9.5 |
| 9.9 | | 39.5 | 33.0 | |
| 10.0 | | 41.5 | 50.2 | |
| 10.0 | | 45.5 | 44.1 | |
| 9.6 | | 45.5 | 42.7 | |
| 9.8 | | 46.0 | 34.0 | |
| 9.5 | | 52.0 | 26.9 | |
| 9.3 | | 54.5 | 5.3 | 9.0 G |
| 9.4 | | 54.5 | 26.0 | |
| 9.8 | | 55.0 | 12.6 | |
| 10.0 | 1 | 0.0 | 36.3 | |
| 9.8 | | 0.0 | 14.8 | |
| 10.0 | | 5.5 | 0.7 | |
| 10.0 | | 8.0 | 5.2 | |
| 10.0 | | 9.0 | 0.8 | |
| 9.1 | | 9.5 | 7.9 | 9.8 |
| 9.7 | | 11.0 | 1.1 | |
| 10.0 | | 12.5 | 52.7 | |
| 9.5 | | 17.0 | 26.8 | |
| 10.0 | | 19.5 | 27.3 | |
| 10.0 | | 28.0 | 23.8 | |
| 9.2 | | 29.5 | 27.1 | 9.0 |
| 10.0 | | 34.0 | 56.6 | |
| 10.0 | | 35.5 | 56.0 | |
| 9.5 | | 38.5 | 10.9 | |
| 9.5 | | 42.0 | 31.4 | 8.5 |
| 9.8 | | 42.5 | 47.5 | |
| 9.8 | | 43.0 | 47.9 | |
| 9.3 | | 45.0 | 51.4 | |
| 10.0 | | 52.5 | 35.2 | |
| 9.8 | 2 | 8.0 | 3.0 | |
| 10.0 | | 11.5 | 23.7 | |
| 9.8 | | 13.0 | 11.1 | |
| 10.0 | | 16.0 | 36.3 | |
| 10.0 | | 18.0 | 18.0 | |
| 10.0 | | 23.5 | 34.6 | |
| 10.0 | | 26.5 | 53.7 | |
| 10.0 | | 30.0 | 44.1 | |
| 9.0 | | 34.0 | 3.9 | |
| 10.0 | | 36.5 | 52.1 | |
| 9.2 | | 46.0 | 38.4 | |
| 9.0 | | 46.0 | 15.8 | 9.5 |
| 10.0 | | 49.0 | 21.3 | |
| 9.5 | | 50.0 | 20.4 | |
| 10.0 | | 53.5 | 54.3 | |
| 9.2 | 3 | 0.0 | 11.8 | 10.0 |
| 10.0 | | 0.0 | 55.6 | |
| 8.8 | | 3.0 | 47.1 | 9.0 |
| 9.8 | | 4.0 | 57.5 | |
| 10.0 | | 11.0 | 10.2 | |

## 1921—1980.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8.6 | 3 | 14.5 | 38.4 | 8.5 |
| 8.8 | | 19.5 | 26.7 | 9.0 |
| 8.8 | | 20.0 | 27.0 | 9.0 |
| 10.0 | | 21.0 | 38.3 | |
| 10.0 | | 32.5 | 38.3 | |
| 10.0 | | 39.5 | 8.5 | |
| 10.0 | | 45.0 | 11.0 | |
| 9.7 | | 50.5 | 19.4 | |
| 10.0 | | 55.5 | 15.1 | |
| 9.6 | | 56.0 | 54.2 | |
| 9.4 | 4 | 5.0 | 42.9 | 9.5 |
| 10.0 | | 10.0 | 41.8 | |
| 8.8 | | 15.0 | 37.7 | 9.5 |
| 9.7 | | 15.5 | 47.1 | |
| 10.0 | | 19.5 | 22.1 | |
| 10.0 | | 22.0 | 32.9 | |
| 8.8 | | 28.0 | 48.7 | 9.5 |
| 9.6 | | 29.1 | 2.6 | |
| 10.0 | | 38.5 | 41.9 | |
| 10.0 | | 41.0 | 0.1 | |
| 10.0 | | 43.5 | 22.4 | |
| 10.0 | | 49.5 | 32.3 | |
| 10.0 | | 49.5 | 36.8 | |
| 10.0 | | 49.5 | 28.6 | |
| 10.0 | | 55.0 | 39.9 | |
| 9.4 | | 55.5 | 28.1 | |
| 10.0 | 5 | 3.5 | 16.1 | |
| 9.3 | | 5.0 | 37.7 | |
| 9.6 | | 8.5 | 2.0 | |
| 10.0 | | 13.1 | 2.7 | |
| 10.0 | | 16.0 | 48.2 | |
| 10.0 | | 21.0 | 27.0 | |
| 9.4 | | 32.5 | 17.4 | |
| 10.0 | | 35.5 | 8.6 | |
| 9.5 | | 42.0 | 32.1 | |
| 9.8 | | 44.5 | 52.4 | |
| 9.8 | | 48.5 | 23.5 | |
| 10.0 | | 49.5 | 30.1 | |
| 10.0 | 6 | 0.5 | 11.5 | |
| 8.8 | | 1.5 | 35.4 | 9.0 |
| 10.0 | | 4.0 | 17.1 | |
| 10.0 | | 5.0 | 45.3 | |
| 9.8 | | 5.5 | 16.9 | |
| 9.5 | | 10.5 | 41.6 | |
| 10.0 | | 15.0 | 41.2 | |
| 9.9 | | 40.0 | 47.1 | |
| 7.7 | | 41.0 | 32.2 | 9.5 G |
| 10.0 | | 43.7 | 7.0 | |
| 10.0 | | 54.7 | 6.1 | |
| 9.9 | 7 | 0.5 | 33.5 | 9.5 G |
| 9.3 | | 0.5 | 54.5 | |
| 10.5† | | 5.2 | 0.9 | |
| 10.0 | | 5.5 | 18.3 | |
| 9.1 | | 10.5 | 27.1 | 9.0 |
| 9.6 | | 11.0 | 5.5 | |
| 10.0 | | 13.0 | 54.7 | |
| 9.8 | | 13.5 | 17.0 | |
| 9.5 | | 15.7 | 21.0 | |
| 8.2 | | 19.5 | 12.8 | 6.8 GSc |
| 8.9 | | 28.0 | 13.3 | |

## 1981—2040.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 7 | 30.5 | 32.0 | |
| 8.9 | | 32.0 | 13.5 | 9.5 |
| 10.0 | | 33.5 | 59.9 | |
| 8.1 | | 33.5 | 32.3 | 8.0 G |
| 8.6 | | 42.0 | 20.2 | 8.5 G |
| 9.7 | | 45.5 | 5.6 | |
| 10.0 | | 45.5 | 6.1 | |
| 8.4 | | 56.0 | 59.2 | 8.0 S |
| 9.7 | 8 | 2.0 | 33.9 | |
| 10.5† | | 3.7 | 1.9 | |
| 10.0 | | 17.0 | 39.2 | |
| 9.2 | | 20.5 | 20.5 | |
| 10.0 | | 21.5 | 3.6 | |
| 10.0 | | 24.5 | 41.2 | |
| 10.0 | | 30.5 | 20.9 | |
| 10.0 | | 33.0 | 50.2 | |
| 10.0 | | 33.5 | 17.1 | |
| 10.0 | | 36.0 | 4.2 | |
| 9.9 | | 39.5 | 53.1 | |
| 10.0 | | 40.5 | 37.7 | |
| 10.0 | | 41.0 | 10.9 | |
| 10.0 | | 41.5 | 15.1 | |
| 10.0 | | 42.5 | 8.9 | |
| 9.9 | | 43.0 | 23.6 | |
| 9.8 | | 43.5 | 39.3 | |
| 10.0 | | 48.0 | 12.9 | |
| 10.0 | | 49.5 | 18.9 | |
| 10.0 | | 59.5 | 34.7 | |
| 9.9 | 9 | 1.0 | 41.7 | |
| 8.6 | | 3.5 | 36.1 | 9.0 |
| 9.1 | | 5.0 | 34.6 | |
| 10.5† | | 5.7 | 1.6 | |
| 9.8 | | 9.5 | 9.7 | |
| 9.2 | | 12.5 | 46.7 | |
| 10.0 | | 20.0 | 43.9 | |
| 10.0 | | 22.0 | 39.1 | |
| 10.0 | | 30.5 | 44.0 | |
| 9.5 | | 38.5 | 18.9 | |
| 9.5 | | 51.5 | 40.8 | |
| 9.5 | | 53.5 | 44.3 | 9.0 |
| 9.2 | 10 | 5.0 | 47.2 | 9.5 |
| 10.0 | | 13.0 | 45.1 | |
| 10.0 | | 15.0 | 44.8 | |
| 10.0 | | 19.0 | 43.1 | |
| 9.5 | | 25.0 | 12.5 | |
| 10.0 | | 39.0 | 50.6 | |
| 10.0 | | 43.0 | 38.5 | |
| 10.0 | | 43.5 | 32.1 | |
| 10.0 | | 50.0 | 58.0 | |
| 10.0 | | 52.0 | 8.0 | |
| 8.9 | | 53.5 | 8.8 | 9.5 |
| 10.0 | | 54.0 | 12.6 | |
| 9.1 | 11 | 1.0 | 7.0 | 9.0 |
| 9.5 | | 2.7 | 59.1 | |
| 10.0 | | 4.0 | 2.4 | |
| 10.0 | | 4.0 | 49.1 | |
| 9.8 | | 4.5 | 30.9 | |
| 9.4 | | 9.7 | 57.1 | 9.0 |
| 10.0 | | 10.0 | 19.0 | |
| 10.0 | | 11.0 | 46.8 | |

## 2041—2100.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.9 | 11 | 19.0 | 28.1 | |
| 10.0 | | 22.0 | 54.4 | |
| 10.0 | | 49.0 | 34.9 | |
| 9.9 | | 55.0 | 26.0 | |
| 10.0 | 12 | 3.5 | 24.1 | |
| 10.0 | | 6.0 | 19.0 | |
| 10.0 | | 6.2 | 0.3 | |
| 10.5† | | 9.5 | 0.9 | |
| 8.4 | | 15.5 | 13.5 | 9.0 |
| 10.0 | | 19.0 | 28.0 | |
| 10.0 | | 20.0 | 59.1 | |
| 10.0 | | 20.9 | 1.7 | |
| 10.0 | | 25.5 | 27.1 | |
| 10.0 | | 33.5 | 15.9 | |
| 8.6 | | 41.0 | 0.6 | 8.5 |
| 9.8 | | 48.5 | 53.1 | |
| 10.0 | | 53.5 | 41.5 | |
| 10.0 | | 54.5 | 4.3 | |
| 10.0 | | 59.5 | 25.8 | |
| 10.0 | 13 | 3.0 | 14.0 | |
| 10.0 | | 4.0 | 31.2 | |
| 10.0 | | 9.5 | 34.0 | |
| 8.4 | | 13.0 | 8.2 | 9.0 |
| 10.5† | | 14.2 | 2.0 | |
| 8.5 | | 17.5 | 43.6 | 8.5 |
| 10.0 | | 19.5 | 50.4 | |
| 10.0 | | 20.0 | 32.9 | |
| 10.0 | | 35.5 | 13.6 | |
| 8.9 | | 37.5 | 52.6 | 9.5 |
| 10.0 | | 38.5 | 15.7 | |
| 9.6 | | 39.0 | 45.7 | |
| 10.0 | | 42.5 | 13.1 | |
| 9.8 | | 44.2 | 2.3 | |
| 9.3 | | 46.0 | 2.1 | |
| 10.0 | | 52.0 | 17.0 | |
| 9.7 | | 55.0 | 42.4 | |
| 9.3 | 14 | 0.5 | 41.8 | |
| 9.5 | | 1.0 | 50.9 | |
| 10.0 | | 3.5 | 48.5 | |
| 10.0 | | 9.5 | 1.9 | |
| 9.8 | | 12.5 | 40.0 | |
| 10.0 | | 13.5 | 33.1 | |
| 10.0 | | 21.0 | 38.3 | |
| 10.0 | | 28.0 | 42.9 | |
| 10.0 | | 32.0 | 26.4 | |
| 10.0 | | 32.5 | 26.1 | |
| 10.0 | | 38.5 | 12.1 | |
| 8.7 | | 44.0 | 58.0 | 9.0 |
| 9.8 | | 54.0 | 5.0 | |
| 9.5 | | 55.0 | 40.1 | |
| 9.5 | | 58.0 | 54.2 | 9.5 |
| 10.0 | | 59.0 | 23.3 | |
| 10.0 | 15 | 8.0 | 7.4 | |
| 9.3 | | 9.0 | 43.2 | |
| 6.8 | | 16.0 | 31.1 | GSg |
| 10.0 | | 23.0 | 20.7 | |
| 10.0 | | 23.0 | 42.1 | |
| 9.2 | | 27.5 | 27.2 | |
| 8.0 | | 33.5 | 47.4 | |
| 10.0 | | 38.5 | 52.9 | |

25 prec.

| | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 10 | 0 | 50 | 7.2 |
| | 10 | 52 | 7.4 |
| | 20 | 54 | 7.6 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 10 | 52 | 7.4 |
| | 20 | 54 | 7.6 |
| | 30 | 56 | 7.7 |
| | 40 | 58 | 7.9 |

## 2101—2160.

| mag. | 10h. m s | −58° ′ | |
|---|---|---|---|
| 9.4 | 15 39.0 | 23.1 | |
| 10.0 | 40.0 | 8.9 | |
| 10.0 | 44.0 | 39.4 | |
| 9.5 | 48.0 | 18.1 | |
| 10.0 | 49.0 | 8.8 | |
| 9.8 | 49.0 | 39.0 | |
| 8.6 | 51.5 | 55.2 | 8.5 G |
| 10.0 | 52.0 | 53.9 | |
| 10.0 | 56.0 | 44.9 | |
| 9.6 | 58.0 | 12.1 | |
| 10.0 | 16 4.0 | 14.2 | |
| 10.0 | 18.0 | 6.3 | |
| 10.5† | 18.8 | 0.6 | |
| 9.5 | 25.0 | 6.9 | |
| 9.6 | 25.0 | 10.8 | |
| 9.5 | 26.0 | 47.0 | 9.0 |
| 9.7 | 30.0 | 7.0 | |
| 9.8 | 32.0 | 45.0 | |
| 8.9 | 33.0 | 45.5 | |
| 9.6 | 43.0 | 32.8 | |
| 9.8 | 52.0 | 40.7 | |
| 10.0 | 58.0 | 28.0 | |
| 10.0 | 59.0 | 6.0 | |
| 10.5† | 17 1.7 | 2.0 | |
| 9.7 | 3.0 | 4.5 | |
| 10.0 | 4.0 | 32.0 | |
| 9.8 | 4.5 | 6.8 | 9.5 |
| 10.0 | 8.0 | 13.4 | |
| 10.0 | 9.5 | 46.1 | |
| 10.0 | 19.0 | 28.3 | |
| 10.0 | 23.5 | 59.9 | |
| 10.0 | 28.0 | 30.8 | |
| 10.0 | 28.5 | 34.7 | |
| 10.0 | 30.0 | 13.2 | |
| 10.0 | 31.0 | 43.0 | |
| 8.1 | 34.0 | 9.1 | 8.0 |
| 10.0 | 37.0 | 12.5 | |
| 9.5 | 52.5 | 7.0 | |
| 10.0 | 53.5 | 12.8 | |
| 10.0 | 55.0 | 5.9 | |
| 10.0 | 18 8.0 | 13.2 | ? |
| 10.0 | 9.0 | 21.5 | |
| 9.3 | 13.0 | 53.3 | |
| 10.0 | 20.5 | 36.3 | |
| 8.5 | 28.3 | 59.7 | 8.8 S |
| 10.0 | 31.0 | 26.0 | |
| 9.9 | 32.0 | 39.0 | |
| 9.2 | 33.0 | 7.9 | |
| 10.0 | 33.0 | 8.5 | |
| 10.0 | 34.5 | 24.2 | |
| 9.4 | 39.0 | 23.3 | |
| 10.0 | 47.5 | 20.3 | |
| 10.0 | 48.5 | 23.0 | |
| 9.9 | 53.0 | 54.1 | 9.0 |
| 9.8 | 53.5 | 44.7 | |
| 8.5 | 55.5 | 21.9 | 8.5 |
| 8.4 | 19 5.0 | 1.6 | |
| 10.0 | 9.1 | 37.6 | |
| 8.3 | 14.5 | 34.4 | 7.0 GSt |
| 10.0 | 17.0 | 16.7 | |

## 2161—2220.

| mag. | 10h. m s | −58° ′ | |
|---|---|---|---|
| 10.0 | 19 17.5 | 35.0 | |
| 8.7 | 23.0 | 17.3 | 8.5 |
| 8.4 | 28.0 | 52.9 | 8.5 GSt |
| 10.0 | 33.0 | 55.7 | |
| 10.0 | 55.0 | 58.6 | |
| 9.4 | 58.0 | 46.2 | |
| 8.9 | 59.0 | 11.9 | 8.5 |
| 10.0 | 59.0 | 43.2 | |
| 10.0 | 20 1.0 | 31.8 | |
| 10.0 | 5.1 | 25.5 | |
| 10.0 | 5.5 | 38.8 | |
| 9.8 | 17.5 | 22.5 | |
| 10.0 | 22.0 | 6.5 | G |
| 10.0 | 30.0 | 27.8 | |
| 10.4† | 30.2 | 1.0 | |
| 9.9 | 33.0 | 10.3 | |
| 9.9 | 33.0 | 13.6 | |
| 9.5 | 40.5 | 39.0 | |
| 10.4† | 41.2 | 0.6 | |
| 10.0 | 43.0 | 1.3 | |
| 10.5† | 43.2 | 0.0 | |
| 7.2 | 45.0 | 14.3 | 7.0 GSt |
| 9.4 | 50.0 | 12.5 | |
| 9.9 | 51.5 | 7.1 | |
| 9.1 | 53.0 | 15.4 | 8.5 |
| 10.0 | 53.0 | 1.0 | |
| 10.0 | 59.5 | 25.3 | |
| 10.0 | 59.8 | 1.0 | |
| 10.0 | 21 3.5 | 8.3 | |
| 10.0 | 9.0 | 18.0 | |
| 9.6 | 15.0 | 17.8 | |
| 9.8 | 15.0 | 38.4 | |
| 9.5 | 19.0 | 9.7 | |
| 9.8 | 20.0 | 9.0 | |
| 9.6 | 27.5 | 21.6 | |
| 9.3 | 29.0 | 37.1 | |
| 10.5† | 29.2 | 0.6 | |
| 9.6 | 32.5 | 7.0 | |
| 10.0 | 34.1 | 4.4 | |
| 9.8 | 35.0 | 51.0 | |
| 9.3 | 39.0 | 5.6 | |
| 9.8 | 48.0 | 53.0 | 9.5 |
| 9.7 | 53.0 | 12.7 | |
| 9.3 | 56.5 | 49.1 | 9.5 |
| 9.2 | 58.0 | 0.4 | |
| 10.0 | 22 6.0 | 16.0 | |
| 9.9 | 7.5 | 57.8 | 10.0 |
| 9.2 | 10.0 | 11.4 | |
| 10.4† | 10.7 | 0.2 | |
| 9.4 | 11.5 | 15.0 | |
| 10.0 | 14.0 | 36.0 | |
| 10.0 | 16.0 | 5.4 | |
| 10.0 | 29.0 | 32.5 | |
| 9.6 | 36.5 | 9.1 | |
| 10.0 | 41.5 | 40.4 | |
| 10.0 | 42.1 | 33.9 | |
| 10.0 | 43.0 | 36.0 | |
| 10.0 | 45.5 | 37.2 | |
| 9.3 | 47.5 | 32.8 | 9.0 |
| 10.0 | 51.0 | 1.7 | |

## 2221—2280.

| mag. | 10h. m s | −58° ′ | |
|---|---|---|---|
| 9.9 | 22 52.0 | 54.5 | |
| 10.0 | 23 2.5 | 15.9 | |
| 10.0 | 3.5 | 23.0 | |
| 9.8 | 5.5 | 28.0 | |
| 8.8 | 9.5 | 38.9 | |
| 9.8 | 14.5 | 45.5 | |
| 4.8 | 17.5 | 6.3 | 5.0 GSctr |
| 10.0 | 21.5 | 12.3 | |
| 8.9 | 23.5 | 43.0 | |
| 9.8 | 26.0 | 19.5 | |
| 10.0 | 28.1 | 1.6 | |
| 8.8 | 39.5 | 35.2 | 9.0 |
| 8.8 | 40.5 | 39.5 | |
| 9.1 | 43.5 | 42.7 | 8.5 G |
| 10.0 | 43.5 | 8.6 | |
| 8.6 | 56.5 | 12.8 | 8.0 |
| 10.0 | 58.5 | 6.6 | |
| 9.6 | 24 3.5 | 17.9 | |
| 9.8 | 9.0 | 9.0 | |
| 9.2 | 9.5 | 20.7 | |
| 10.0 | 11.0 | 22.9 | |
| 10.0 | 13.5 | 22.9 | |
| 9.2 | 21.5 | 9.1 | 9.0 |
| 10.0 | 30.5 | 49.1 | |
| 8.4 | 33.5 | 58.3 | 8.0 GSt |
| 10.0 | 35.5 | 40.7 | |
| 8.8 | 36.0 | 31.9 | 9.0 |
| 10.0 | 42.0 | 45.8 | |
| 10.0 | 44.0 | 28.8 | |
| 9.1 | 50.5 | 35.0 | 9.5 |
| 9.8 | 25 0.0 | 37.1 | |
| 9.8 | 3.5 | 27.7 | |
| 9.5 | 5.5 | 33.0 | |
| 10.0 | 8.5 | 37.5 | |
| 10.0 | 8.5 | 19.8 | |
| 10.0 | 11.0 | 38.9 | |
| 10.0 | 23.5 | 6.0 | |
| 9.9 | 24.5 | 52.0 | 9.0 |
| 9.6 | 25.5 | 8.7 | |
| 10.0 | 25.5 | 40.9 | |
| 9.4 | 33.5 | 15.9 | |
| 10.0 | 39.5 | 21.9 | |
| 8.6 | 43.5 | 22.7 | 9.0 |
| 9.6 | 43.5 | 17.9 | |
| 10.0 | 48.5 | 20.4 | |
| 10.0 | 52.5 | 11.9 | |
| 9.6 | 26 0.5 | 3.0 | 9.5 |
| 8.0 | 24.5 | 4.0 | 8.5 GS |
| 8.8 | 27.0 | 36.6 | |
| 10.0 | 34.5 | 47.7 | |
| 10.0 | 39.0 | 49.9 | |
| 9.0 | 48.5 | 39.4 | |
| 9.0 | 50.5 | 52.9 | 9.5 |
| 10.0 | 27 12.5 | 4.6 | |
| 10.0 | 13.5 | 25.4 | |
| 9.5 | 15.2 | 55.4 | |
| 10.0 | 15.5 | 40.7 | |
| 10.0 | 32.0 | 27.0 | |
| 9.4 | 44.0 | 5.7 | |
| 8.8 | 46.0 | 57.8 | 8.5 G |

## 2281—2340.

| mag. | 10h. m s | −58° ′ | |
|---|---|---|---|
| 9.7 | 27 46.5 | 5.1 | |
| 9.2 | 50.5 | 35.0 | |
| 10.0 | 59.5 | 14.6 | 9.5 |
| 10.0 | 28 0.5 | 16.0 | 9.5 |
| 6.8 | 7.0 | 1.5 | 7.0 GSgt |
| 10.0 | 10.5 | 28.0 | |
| 10.0 | 18.5 | 49.7 | |
| 10.0 | 20.5 | 40.5 | |
| 10.0 | 28.5 | 55.9 | |
| 10.0 | 30.5 | 33.3 | |
| 10.0 | 38.5 | 37.6 | |
| 10.0 | 38.5 | 14.4 | |
| 10.0 | 40.5 | 9.0 | |
| 10.0 | 45.5 | 23.2 | |
| 8.2 | 48.5 | 46.5 | 7.5 GSt |
| 9.8 | 55.0 | 33.9 | |
| 9.8 | 55.5 | 26.0 | |
| 9.6 | 58.5 | 22.7 | |
| 10.0 | 59.0 | 56.7 | |
| 10.0 | 29 0.5 | 50.9 | |
| 9.2 | 3.5 | 48.0 | |
| 9.6 | 9.5 | 12.8 | |
| 10.0 | 10.0 | 48.9 | |
| 9.6 | 10.0 | 38.8 | |
| 10.0 | 12.5 | 19.1 | |
| 9.5 | 13.5 | 48.2 | |
| 9.8 | 22.0 | 53.8 | |
| 9.0 | 25.5 | 28.2 | |
| 9.9 | 28.5 | 49.2 | |
| 8.9 | 29.5 | 21.9 | |
| 9.4 | 29.5 | 9.6 | |
| 9.7 | 30.0 | 50.1 | |
| 9.8 | 33.5 | 7.1 | |
| 9.9 | 39.5 | 18.1 | |
| 9.4 | 41.0 | 13.6 | |
| 9.7 | 43.0 | 52.6 | |
| 9.7 | 43.5 | 16.6 | |
| 9.8 | 47.5 | 17.7 | |
| 9.4 | 50.0 | 3.8 | |
| 9.8 | 50.5 | 55.2 | |
| 9.4 | 52.5 | 35.5 | |
| 9.6 | 59.5 | 44.8 | |
| 8.8 | 30 1.0 | 26.5 | 9.5 |
| 9.4 | 2.5 | 31.6 | |
| 9.8 | 3.0 | 18.2 | |
| 9.8 | 8.0 | 50.1 | |
| 9.4 | 11.0 | 50.0 | |
| 9.8 | 14.0 | 5.2 | |
| 9.8 | 19.5 | 38.1 | |
| 9.2 | 22.4 | 0.8 | |
| 9.7 | 28.5 | 48.2 | |
| 9.8 | 29.5 | 40.2 | |
| 9.9 | 29.5 | 38.4 | |
| 9.5 | 32.5 | 52.9 | |
| 9.6 | 33.0 | 53.0 | |
| 9.9 | 33.5 | 37.4 | |
| 9.0 | 39.5 | 57.3 | |
| 9.0 | 39.9 | 59.5 | |
| 9.7 | 44.0 | 8.2 | |
| 9.6 | 44.0 | 34.0 | |



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### 2341—2400.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 30 | 45·0 | 36·2 | |
| 9·1 | | 52·5 | 9·5 | |
| 9·8 | | 52·5 | 52·2 | |
| 9·8 | | 54·5 | 53·4 | |
| 9·8 | | 55·0 | 4·2 | |
| 9·9 | | 58·0 | 14·8 | |
| 9·8 | 31 | 3·5 | 45·1 | |
| 9·0 | | 4·7 | 57·3 | |
| 8·6 | | 6·0 | 22·3 | 9·5 |
| 9·8 | | 8·5 | 6·2 | |
| 9·7 | | 9·5 | 8·8 | |
| 9·9 | | 10·5 | 12·6 | |
| 9·9 | | 11·0 | 16·3 | |
| 9·8 | | 11·0 | 54·6 | |
| 9·7 | | 12·5 | 5·2 | |
| 9·8 | | 14·5 | 33·4 | |
| 9·8 | | 14·5 | 18·2 | |
| 9·7 | | 18·0 | 15·9 | |
| 9·8 | | 18·5 | 40·0 | |
| 9·1 | | 19·5 | 28·9 | |
| 9·4 | | 19·5 | 45·7 | |
| 9·7 | | 20·5 | 4·8 | |
| 9·4 | | 22·5 | 53·8 | |
| 9·9 | | 23·0 | 51·2 | |
| 9·6 | | 29·5 | 31·7 | |
| 9·5 | | 32·0 | 30·5 | |
| 9·6 | | 34·5 | 44·2 | |
| 9·1 | | 35·5 | 10·1 | |
| 9·8 | | 38·0 | 4·5 | |
| 8·7 | | 39·5 | 23·2 | 8·5 G |
| 7·3 | | 39·5 | 55·0 | 5·8 GSct |
| 8·7 | | 40·5 | 18·2 | 9·2 |
| 9·8 | | 41·0 | 39·2 | |
| 9·7 | | 42·2 | 57·8 | |
| 9·7 | | 43·0 | 43·8 | |
| 9·8 | | 48·5 | 58·3 | |
| 9·7 | | 49·0 | 48·2 | |
| 9·8 | | 49·5 | 55·2 | |
| 9·8 | | 49·5 | 38·2 | |
| 7·1 | | 50·0 | 32·5 | 7·0 GSt |
| 9·6 | | 50·5 | 32·1 | |
| 9·0 | | 51·5 | 11·4 | |
| 9·8 | | 53·0 | 46·7 | |
| 9·7 | | 53·5 | 26·8 | |
| 9·8 | | 54·0 | 50·2 | |
| 8·3 | | 56·0 | 42·4 | 8·5 G |
| 8·0 | | 56·8 | 31·1 | 7·8 GSt |
| 8·4 | | 59·5 | 39·6 | 8·0 |
| 9·0 | 32 | 1·0 | 31·5 | |
| 9·6 | | 3·0 | 29·4 | |
| 9·7 | | 5·0 | 53·4 | |
| 9·6 | | 10·0 | 18·1 | |
| 9·6 | | 10·5 | 18·8 | |
| 9·7 | | 11·0 | 21·8 | |
| 9·4 | | 14·0 | 37·0 | |
| 9·6 | | 14·0 | 9·1 | |
| 9·7 | | 16·0 | 16·2 | |
| 9·6 | | 19·0 | 14·2 | |
| 9·2 | | 19·0 | 40·1 | |
| 8·4 | | 20·0 | 19·0 | 9·0 G |

### 2401—2460.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 32 | 22·5 | 27·2 | |
| 9·6 | | 28·2 | 2·0 | |
| 9·6 | | 29·0 | 6·4 | |
| 8·7 | | 32·0 | 35·3 | 9·0 |
| 9·4 | | 32·0 | 3·4 | |
| 8·2 | | 38·0 | 31·8 | 8·8 |
| 9·7 | | 38·0 | 57·5 | |
| 9·5 | | 38·5 | 14·2 | |
| 9·8 | | 39·0 | 56·2 | |
| 9·4 | | 39·0 | 40·2 | |
| 6·0 | | 41·0 | 5·2 | 6·5 GScgt |
| 9·7 | | 42·5 | 56·8 | |
| 8·8 | | 45·0 | 27·8 | 9·0 |
| 9·7 | | 47·0 | 49·8 | |
| 9·6 | | 48·5 | 28·2 | |
| 9·7 | | 48·5 | 56·2 | |
| 9·0 | | 52·0 | 39·2 | |
| 9·0 | | 56·0 | 28·9 | 9·0 |
| 9·6 | | 57·0 | 51·3 | |
| 9·4 | | 58·5 | 20·1 | |
| 9·0 | | 59·5 | 27·2 | |
| 9·7 | 33 | 0·0 | 1·3 | |
| 8·9 | | 0·5 | 50·8 | |
| 9·0 | | 0·5 | 18·8 | |
| 9·8 | | 1·5 | 6·6 | |
| 9·2 | | 3·0 | 47·6 | |
| 9·2 | | 5·0 | 28·2 | |
| 9·8 | | 8·0 | 41·6 | |
| 9·9 | | 9·0 | 26·0 | |
| 9·8 | | 10·0 | 5·2 | |
| 8·8 | | 13·5 | 45·2 | 9·0 |
| 9·0 | | 18·0 | 46·2 | 9·0 |
| 9·7 | | 19·0 | 33·8 | |
| 8·1 | | 19·0 | 25·4 | 8·0 G |
| 9·3 | | 19·0 | 7·7 | |
| 9·6 | | 24·0 | 29·8 | |
| 9·5 | | 24·0 | 38·4 | |
| 9·6 | | 24·5 | 7·8 | |
| 9·7 | | 25·0 | 25·0 | |
| 9·0 | | 29·0 | 30·6 | |
| 9·0 | | 29·0 | 29·0 | |
| 9·7 | | 29·0 | 31·2 | |
| 8·8 | | 33·0 | 14·7 | |
| 9·4 | | 35·5 | 7·0 | 9·5 |
| 9·8 | | 36·0 | 45·1 | |
| 9·5 | | 36·0 | 53·2 | |
| 9·7 | | 39·0 | 31·8 | |
| 9·7 | | 39·0 | 53·2 | |
| 9·8 | | 39·0 | 6·4 | |
| 9·8 | | 41·0 | 39·7 | |
| 9·2 | | 43·0 | 30·6 | |
| 9·6 | | 44·0 | 31·3 | |
| 9·8 | | 45·0 | 48·2 | |
| 9·7 | | 48·0 | 7·8 | |
| 9·4 | | 49·0 | 42·3 | |
| 9·6 | | 50·0 | 37·2 | |
| 8·4 | | 52·0 | 28·3 | 8·8 |
| 9·9 | | 54·0 | 30·2 | |
| 9·2 | | 58·5 | 21·0 | |
| 7·3 | 34 | 0·0 | 31·8 | 5·2 GSt |

### 2461—2520.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·7 | 34 | 0·0 | 4·5 | 9·5 |
| 7·1 | | 0·0 | 36·6 | 7·0 GSt |
| 9·6 | | 1·5 | 31·2 | |
| 9·8 | | 2·5 | 32·4 | |
| 9·7 | | 3·0 | 20·8 | |
| 9·7 | | 3·0 | 25·2 | |
| 9·9 | | 3·0 | 6·2 | |
| 9·6 | | 5·0 | 14·2 | |
| 9·8 | | 8·0 | 3·2 | |
| 9·8 | | 9·5 | 23·1 | |
| 8·1 | | 12·5 | 37·0 | 7·8 GSt |
| 9·9 | | 13·0 | 51·4 | |
| 9·9 | | 13·0 | 36·5 | |
| 8·4 | | 13·5 | 10·0 | 6·8 GScgt |
| 8·6 | | 15·5 | 9·9 | 9·0 Gg |
| 9·8 | | 18·5 | 8·0 | |
| 9·8 | | 19·0 | 32·3 | |
| 8·8 | | 19·0 | 7·1 | 9·5 |
| 9·8 | | 21·0 | 23·1 | |
| 9·7 | | 23·0 | 54·9 | |
| 9·7 | | 25·0 | 45·9 | |
| 9·8 | | 25·0 | 11·8 | |
| 9·8 | | 26·5 | 43·2 | |
| 9·9 | | 29·0 | 30·6 | |
| 9·9 | | 34·5 | 42·4 | |
| 9·4 | | 39·0 | 56·2 | |
| 9·8 | | 40·5 | 7·8 | |
| 9·4 | | 42·5 | 8·4 | |
| 9·8 | | 45·0 | 41·2 | |
| 9·6 | | 49·0 | 49·4 | |
| 9·5 | | 49·0 | 13·9 | G |
| 9·4 | | 50·0 | 14·2 | |
| 9·8 | | 50·5 | 27·0 | |
| 9·9 | | 52·5 | 15·1 | |
| 9·8 | | 54·0 | 24·8 | |
| 9·4 | | 54·0 | 45·0 | |
| 9·8 | | 54·0 | 50·2 | |
| 9·7 | | 57·0 | 41·2 | |
| 9·6 | | 57·5 | 7·6 | |
| 9·8 | | 57·5 | 45·1 | |
| 9·6 | | 58·0 | 24·8 | |
| 9·8 | 35 | 1·0 | 10·0 | |
| 9·6 | | 3·0 | 10·1 | |
| 8·6 | | 3·0 | 19·9 | 9·0 |
| 9·7 | | 7·0 | 31·2 | |
| 9·6 | | 7·0 | 39·8 | 9·5 G |
| 9·6 | | 8·0 | 53·5 | |
| 9·3 | | 9·2 | 59·5 | G |
| 9·6 | | 10·0 | 21·8 | |
| 9·8 | | 11·5 | 58·1 | |
| 9·9 | | 15·0 | 44·1 | |
| 9·2 | | 15·5 | 44·2 | |
| 9·4 | | 22·0 | 26·4 | |
| 9·2 | | 24·5 | 20·4 | |
| 9·1 | | 26·0 | 45·4 | |
| 9·8 | | 26·0 | 4·7 | |
| 9·0 | | 27·5 | 5·6 | |
| 9·8 | | 34·0 | 51·8 | |
| 8·6 | | 36·5 | 17·8 | 9·8 G |
| 9·8 | | 44·0 | 22·2 | |

### 2521—2580.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 35 | 44·0 | 43·8 | |
| 9·6 | | 44·5 | 55·3 | G |
| 9·4 | | 47·5 | 53·4 | G |
| 8·7 | | 48·5 | 53·4 | 8·3 GSt |
| 9·9 | | 53·0 | 44·7 | |
| 9·9 | | 57·5 | 55·6 | |
| 9·9 | | 58·0 | 14·1 | G |
| 9·9 | | 59·5 | 2·2 | |
| 9·6 | | 59·5 | 3·5 | |
| 9·9 | 36 | 3·5 | 33·8 | |
| 9·9 | | 3·5 | 34·6 | |
| 9·7 | | 8·5 | 42·0 | |
| 9·0 | | 8·5 | 14·2 | 8·6 |
| 9·8 | | 8·5 | 25·7 | |
| 9·9 | | 13·5 | 12·7 | |
| 9·7 | | 14·5 | 41·3 | |
| 9·9 | | 18·5 | 22·2 | |
| 8·2 | | 20·5 | 35·6 | 8·0 GS |
| 9·6 | | 21·5 | 44·4 | |
| 8·5 | | 24·0 | 29·8 | 8·5 |
| 9·6 | | 29·5 | 26·2 | |
| 9·2 | | 34·5 | 30·1 | |
| 8·8 | | 37·0 | 46·6 | G |
| 9·9 | | 38·5 | 11·6 | |
| 9·0 | | 42·0 | 25·2 | 9·0 |
| 8·8 | | 48·5 | 7·2 | 8·8 |
| 9·9 | | 59·5 | 11·8 | |
| 9·2 | | 59·5 | 28·5 | 8·5 |
| 9·7 | 37 | 2·0 | 46·8 | |
| 9·7 | | 2·5 | 41·2 | |
| 9·7 | | 4·0 | 46·7 | |
| 9·0 | | 5·0 | 27·2 | |
| 9·0 | | 7·5 | 37·0 | G |
| 9·8 | | 8·5 | 21·5 | |
| 9·1 | | 9·5 | 28·4 | |
| 9·9 | | 10·0 | 19·4 | |
| 9·8 | | 11·5 | 26·2 | |
| 9·8 | | 16·0 | 24·0 | |
| 9·6 | | 18·5 | 16·2 | |
| 9·2 | | 18·5 | 54·2 | 8·6 G |
| 8·9 | | 19·5 | 40·5 | 9·0 G |
| 9·7 | | 21·0 | 59·2 | G |
| 9·2 | | 22·5 | 29·2 | |
| 9·0 | | 23·5 | 50·8 | G |
| 8·8 | | 23·5 | 30·4 | |
| 9·7 | | 24·5 | 44·1 | G |
| 8·8 | | 26·5 | 28·9 | G |
| 9·8 | | 27·5 | 3·7 | |
| 9·9 | | 27·7 | 53·6 | G |
| 8·8 | | 30·0 | 31·0 | |
| 9·6 | | 32·5 | 18·2 | |
| 9·8 | | 34·5 | 22·2 | |
| 8·8 | | 35·0 | 30·2 | G |
| 8·8 | | 36·0 | 0·3 | 9·0 |
| 8·7 | | 44·0 | 56·2 | 9·0 G |
| 9·6 | | 44·5 | 34·2 | |
| 9·8 | | 47·5 | 55·6 | |
| 9·5 | | 47·5 | 5·5 | |
| 9·0 | | 49·5 | 49·0 | G |
| 9·4 | | 50·5 | 14·8 | G |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 10 | 30 | 56 | 7·7 |
| | 40 | 58 | 7·9 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 56 | 7·7 |
| | 40 | 58 | 7·9 |
| | 50 | 60 | 8·0 |

## 2581—2640.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 5·7 | 37 | 50·5 | 33·6 | 6·5 *G*S*g*ct |
| 9·4 | | 53·5 | 27·7 | |
| 9·8 | | 54·5 | 42·2 | |
| 9·7 | | 57·5 | 23·2 | |
| 9·8 | | 58·5 | 25·6 | |
| 9·2 | 38 | 1·5 | 46·2 | *G* |
| 9·2 | | 2·0 | 26·4 | |
| 8·9 | | 2·5 | 27·7 | |
| 9·8 | | 7·0 | 45·2 | |
| 9·4 | | 9·5 | 25·6 | |
| 9·2 | | 11·5 | 41·1 | *G* |
| 8·8 | | 13·0 | 25·5 | 9·5 |
| 9·6 | | 22·0 | 8·3 | |
| 9·0 | | 25·5 | 31·1 | |
| 9·8 | | 31·0 | 16·2 | |
| 10·2 | | 31·5 | 2·3 | |
| 9·4 | | 32·0 | 15·5 | 10·0 |
| 8·7 | | 36·5 | 15·3 | 9·5 |
| 9·6 | | 37·5 | 17·9 | |
| 9·8 | | 38·0 | 28·3 | |
| 9·2 | | 38·3 | 58·3 | *G* |
| 8·3 | | 38·5 | 26·7 | 9·0 |
| 9·8 | | 39·5 | 30·3 | |
| 9·2 | | 41·0 | 50·2 | |
| 9·2 | | 44·5 | 56·1 | *G* |
| 9·9 | | 50·5 | 26·9 | |
| 9·6 | | 52·0 | 31·3 | |
| 9·7 | | 52·5 | 56·5 | *G* |
| 9·8 | | 55·5 | 8·2 | |
| 10·1† | | 55·5 | 1·9 | |
| 9·2 | | 57·5 | 53·6 | 9·5 *G* |
| 8·2 | | 58·0 | 26·7 | 8·5 |
| 9·7 | | 58·0 | 35·9 | |
| 9·7 | | 58·5 | 54·3 | *G* |
| 9·7 | | 59·5 | 36·7 | |
| 9·9 | 39 | 3·0 | 39·1 | |
| 8·4 | | 3·5 | 53·6 | 9·0 *G* |
| 8·4 | | 6·5 | 53·6 | 7·5 *G*S*g*t : |
| 9·8 | | 8·5 | 54·2 | |
| 9·2 | | 9·5 | 53·2 | 9·5 *G* |
| 9·8 | | 9·5 | 56·2 | |
| 9·8 | | 9·5 | 24·2 | |
| 9·2 | | 9·5 | 46·3 | *G* |
| 9·2 | | 10·0 | 29·6 | |
| 9·8 | | 11·5 | 56·4 | |
| 9·8 | | 11·5 | 45·2 | |
| 9·5 | | 12·0 | 50·3 | |
| 9·0 | | 15·0 | 26·8 | 9·5 *G* |
| 9·9 | | 16·0 | 55·8 | |
| 9·8 | | 18·5 | 50·7 | |
| 7·8 | | 18·5 | 55·3 | 7·2 *G*Sgt |
| 9·7 | | 19·5 | 46·3 | *G* |
| 9·9 | | 22·0 | 54·8 | |
| 9·6 | | 25·5 | 40·9 | |
| 9·8 | | 26·0 | 21·3 | |
| 9·8 | | 27·5 | 46·1 | |
| 8·8 | | 28·5 | 37·5 | *GS* |
| 9·8 | | 29·5 | 47·6 | |
| 9·6 | | 31·0 | 47·3 | *G* |
| 9·7 | | 34·0 | 51·3 | |

## 2641—2700.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 39 | 34·5 | 48·9 | |
| 9·8 | | 35·0 | 53·9 | |
| 9·7 | | 38·5 | 21·2 | |
| 9·4 | | 38·5 | 40·6 | |
| 9·4 | | 39·5 | 53·0 | *G* |
| 9·8 | | 39·5 | 46·7 | |
| 9·8 | | 39·5 | 42·0 | |
| 9·9 | | 40·2 | 59·3 | |
| 9·0 | | 40·7 | 58·1 | *G* |
| 9·9 | | 41·5 | 22·2 | |
| 9·6 | | 43·5 | 0·7 | |
| 8·6 | | 47·5 | 53·4 | *G* |
| 9·5 | | 49·5 | 43·0 | |
| 9·7 | | 50·0 | 9·2 | |
| 9·7 | | 51·0 | 43·0 | |
| 9·1 | | 51·5 | 43·6 | |
| 9·6 | | 51·5 | 42·3 | |
| 9·7 | | 51·5 | 16·2 | |
| 8·2 | | 52·0 | 42·0 | *G* : |
| 9·8 | | 52·5 | 53·2 | |
| 7·7 | | 54·0 | 54·6 | 7·8 *G*Sg |
| 9·9 | | 55·5 | 42·3 | G |
| 9·8 | | 56·0 | 45·4 | *G* |
| 9·9 | 40 | 1·5 | 7·2 | |
| 9·2 | | 2·0 | 54·1 | 9·5 *G* |
| 9·7 | | 2·5 | 48·4 | |
| 9·9 | | 4·5 | 58·6 | |
| 9·5 | | 5·0 | 53·7 | |
| 9·7 | | 7·0 | 51·5 | |
| 9·6 | | 11·5 | 38·8 | |
| 9·8 | | 12·5 | 40·2 | |
| 9·9 | | 18·5 | 3·9 | |
| 9·8 | | 23·5 | 15·3 | |
| 8·9 | | 25·5 | 44·2 | *G* |
| 9·0 | | 28·5 | 37·7 | 9·5 *G* |
| 9·9 | | 29·0 | 40·1 | |
| 9·9 | | 31·5 | 58·2 | |
| 9·8 | | 42·5 | 24·4 | |
| 8·9 | | 48·5 | 43·9 | *G* |
| 7·6 | | 52·0 | 45·1 | 7·5 *G*S*g*t |
| 9·0 | | 52·8 | 1·4 | 9·8 |
| 9·8 | | 57·5 | 46·2 | |
| 9·0 | | 58·5 | 49·9 | 7·5 *G*S*gg*t |
| 9·8 | | 58·5 | 53·3 | |
| 9·9 | | 59·0 | 49·7 | |
| 9·9 | | 59·5 | 8·5 | |
| 9·7 | 41 | 3·5 | 3·4 | |
| 9·7 | | 8·0 | 27·8 | *G* |
| 9·4 | | 12·0 | 54·3 | *G* |
| 9·3 | | 14·0 | 54·2 | *G* |
| 9·8 | | 15·5 | 11·7 | |
| 8·0 | | 19·5 | 39·6 | 7·8 *G*St |
| 9·6 | | 23·0 | 52·9 | |
| 9·6 | | 27·5 | 53·5 | |
| 8·4 | | 31·5 | 47·3 | 8·5 *G* |
| 9·7 | | 38·5 | 7·7 | |
| 9·2 | | 43·0 | 57·6 | *G* |
| 9·2 | | 44·5 | 52·9 | 8·5 *G* |
| 9·6 | | 45·0 | 44·3 | |
| 9·9 | | 45·5 | 52·6 | |

## 2701—2760.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 41 | 58·5 | 48·5 | |
| 9·4 | 42 | 3·5 | 8·3 | 9·5 |
| 9·7 | | 7·5 | 22·8 | |
| 9·8 | | 9·0 | 27·3 | |
| 9·6 | | 22·5 | 32·2 | |
| 9·6 | | 24·5 | 48·1 | |
| 9·9 | | 26·5 | 9·3 | |
| 9·2 | | 30·0 | 33·3 | 9·5 |
| 9·7 | | 33·5 | 49·3 | |
| 9·7 | | 34·0 | 47·4 | *G* |
| 9·8 | | 35·0 | 58·3 | |
| 9·1 | | 35·0 | 32·1 | |
| 9·9 | | 41·5 | 2·9 | |
| 9·2 | | 46·0 | 6·3 | |
| 8·6 | | 50·5 | 54·9 | 9·0 *G*p |
| 9·7 | | 50·5 | 19·7 | |
| 8·5 | | 58·5 | 2·5 | 9·5 |
| 9·9 | | 58·5 | 48·8 | |
| 9·8 | | 59·5 | 16·9 | |
| 9·0 | | 59·5 | 25·9 | *G* |
| 9·8 | 43 | 1·5 | 29·3 | |
| 8·3 | | 7·5 | 59·6 | 8·5 *G*gp |
| 9·8 | | 12·0 | 11·3 | |
| 9·9 | | 12·5 | 38·2 | |
| 9·8 | | 13·5 | 9·1 | |
| 9·7 | | 15·1 | 1·3 | |
| 9·6 | | 16·5 | 37·8 | |
| 9·8 | | 18·5 | 53·3 | |
| 9·6 | | 18·5 | 41·6 | |
| 9·7 | | 18·5 | 19·8 | |
| 9·7 | | 23·5 | 45·5 | |
| 9·3 | | 26·0 | 29·1 | |
| 9·0 | | 28·5 | 33·3 | 8·8 *G* |
| 8·7 | | 28·5 | 52·9 | 8·0 *G* |
| 9·6 | | 30·5 | 45·3 | |
| 9·6 | | 31·0 | 59·3 | |
| 9·9 | | 31·5 | 50·6 | |
| 9·1 | | 32·5 | 49·4 | *G* |
| 9·7 | | 41·0 | 2·6 | |
| 9·7 | | 42·5 | 41·9 | |
| 9·6 | | 42·5 | 33·6 | |
| 9·9 | | 43·0 | 50·3 | |
| 9·4 | | 43·5 | 54·2 | 9·0 *G* |
| 9·3 | | 48·2 | 0·9 | |
| 9·8 | | 50·5 | 57·3 | *G* |
| 9·9 | | 54·5 | 13·3 | |
| 8·0 | | 59·0 | 47·3 | 8·0 *G*tp |
| 9·4 | 44 | 0·0 | 25·3 | |
| 9·2 | | 4·0 | 7·9 | 8·5 |
| 9·0 | | 5·0 | 14·2 | 9·0 |
| 9·8 | | 8·5 | 6·4 | |
| 9·9 | | 13·0 | 7·3 | |
| 9·9 | | 14·5 | 58·5 | |
| 9·0 | | 27·5 | 7·4 | 9·5 |
| 5·9 | | 27·0 | 39·8 | 6·7 *G*St |
| 9·4 | | 28·5 | 31·5 | |
| 9·9 | | 29·0 | 37·1 | |
| 9·7 | | 30·0 | 52·5 | |
| 9·6 | | 32·0 | 52·8 | |
| 9·9 | | 38·5 | 17·3 | |

## 2761—2820.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 44 | 39·5 | 12·1 | |
| 9·9 | | 58·5 | 53·3 | *G* |
| 9·5 | 45 | 1·0 | 10·1 | |
| 9·4 | | 2·0 | 38·6 | |
| 9·9 | | 2·5 | 52·5 | *G* |
| 9·9 | | 5·5 | 58·2 | |
| 9·9 | | 8·0 | 17·3 | |
| 9·6 | | 8·5 | 46·5 | *G* |
| 8·5 | | 12·5 | 53·3 | 9·0 *G* |
| 9·7 | | 13·0 | 0·5 | |
| 9·8 | | 15·0 | 39·1 | |
| 9·7 | | 15·4 | 0·9 | |
| 9·3 | | 17·5 | 36·7 | |
| 9·8 | | 19·5 | 48·6 | |
| 9·8 | | 20·5 | 22·1 | |
| 8·9 | | 22·5 | 13·8 | |
| 9·8 | | 31·5 | 25·0 | |
| 9·7 | | 34·5 | 17·5 | |
| 8·5 | | 42·5 | 33·1 | 8·5 *G* |
| 9·6 | | 45·0 | 1·2 | |
| 9·0 | | 48·5 | 40·3 | 9·0 |
| 9·2 | | 49·5 | 55·3 | |
| 9·4 | | 54·5 | 28·7 | |
| 9·5 | | 59·5 | 22·5 | |
| 9·3 | | 59·5 | 15·5 | 9·2 |
| 9·7 | 46 | 5·0 | 57·6 | |
| 9·7 | | 7·0 | 5·6 | |
| 9·8 | | 11·5 | 38·2 | |
| 8·8 | | 13·5 | 28·1 | |
| 9·2 | | 16·5 | 30·3 | |
| 9·8 | | 18·2 | 2·3 | |
| 9·8 | | 25·0 | 13·2 | |
| 9·8 | | 28·5 | 31·3 | |
| 9·9 | | 31·5 | 29·9 | |
| 8·2 | | 32·0 | 29·3 | 8·0 *G* |
| 9·7 | | 35·0 | 28·3 | |
| 9·7 | | 37·5 | 43·3 | 9·5 |
| 9·7 | | 37·5 | 52·0 | |
| 9·3 | | 38·5 | 32·7 | |
| 9·7 | | 39·0 | 3·9 | |
| 8·7 | | 52·5 | 18·7 | *G* . |
| 9·5 | | 55·5 | 27·6 | |
| 8·4 | 47 | 4·5 | 2·2 | 8·5 *G* |
| 9·7 | | 9·5 | 3·8 | |
| 9·2 | | 15·5 | 24·4 | 9·0 |
| 9·7 | | 17·5 | 11·0 | |
| 9·8 | | 18·0 | 14·2 | |
| 9·8 | | 19·5 | 57·1 | |
| 7·9 | | 21·0 | 5·0 | 8·0 *G* |
| 9·7 | | 24·5 | 35·2 | |
| 9·7 | | 28·5 | 41·2 | |
| 8·4 | | 28·5 | 32·7 | 8·5 *G* |
| 8·8 | | 29·0 | 25·3 | 9·0 *G* |
| 9·7 | | 31·5 | 28·2 | |
| 9·8 | | 31·8 | 16·6 | |
| 8·4 | | 35·0 | 31·0 | 8·5 *G* |
| 8·7 | | 37·8 | 45·1 | 9·0 |
| 9·9 | | 39·5 | 16·4 | |
| 9·1 | | 42·5 | 48·0 | |
| 9·9 | | 44·5 | 49·6 | |



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## 2821—2880.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.2 | 47 | 50.0 | 1.4 | |
| 9.2 | | 57.5 | 5.8 | |
| 9.8 | | 59.5 | 5.9 | |
| 9.1 | 48 | 1.5 | 52.0 | 9.5 |
| 9.5 | | 1.5 | 28.6 | |
| 8.7 | | 4.0 | 50.3 | 9.0 G |
| 9.2 | | 8.5 | 34.4 | |
| 8.8 | | 9.5 | 43.0 | |
| 9.8 | | 11.5 | 37.0 | |
| 6.4 | | 18.5 | 13.8 | 7.0 GStr |
| 9.4 | | 20.1 | 56.8 | |
| 9.8 | | 22.0 | 14.4 | |
| 9.8 | | 22.8 | 20.7 | |
| 5.6 | | 24.5 | 11.2 | 4.0 GStr |
| 9.9 | | 26.5 | 48.2 | |
| 8.9 | | 28.0 | 10.2 | 7.8 Gp |
| 9.8 | | 28.5 | 12.5 | |
| 9.8 | | 34.5 | 10.0 | |
| 9.6 | | 34.5 | 47.3 | |
| 9.9 | | 34.5 | 47.2 | |
| 9.9 | | 38.0 | 10.8 | |
| 9.9 | | 38.0 | 57.2 | |
| 9.8 | | 38.5 | 19.0 | |
| 8.6 | | 38.5 | 7.0 | 8.5 G |
| 9.8 | | 44.0 | 50.8 | |
| 8.4 | | 45.0 | 43.0 | 9.0 G |
| 9.0 | | 48.0 | 6.4 | 9.5 G |
| 8.7 | | 52.5 | 55.0 | 9.2 |
| 9.3 | | 53.0 | 21.0 | |
| 9.5 | | 53.5 | 24.4 | |
| 9.9 | 49 | 7.0 | 24.4 | |
| 9.9 | | 13.5 | 3.2 | |
| 9.0 | | 18.5 | 26.5 | |
| 9.8 | | 24.0 | 23.1 | |
| 9.9 | | 24.5 | 21.1 | |
| 8.8 | | 30.5 | 8.1 | 9.2 G |
| 8.8 | | 33.0 | 14.3 | 9.4 |
| 9.4 | | 49.5 | 42.9 | |
| 9.2 | | 52.0 | 3.2 | G |
| 9.6 | | 53.0 | 26.8 | |
| 9.8 | | 54.0 | 17.2 | |
| 9.8 | | 58.0 | 6.6 | |
| 9.0 | | 59.0 | 10.2 | G |
| 9.8 | 50 | 19.8 | 3.2 | |
| 9.6 | | 20.0 | 38.4 | |
| 9.7 | | 20.5 | 8.0 | |
| 9.4 | | 24.8 | 39.9 | |
| 8.9 | | 30.5 | 35.0 | 9.0 |
| 9.7 | | 34.0 | 48.2 | |
| 9.4 | | 36.2 | 59.2 | 9.5 |
| 9.6 | | 39.5 | 28.8 | |
| 9.4 | | 54.0 | 3.1 | G |
| 8.6 | | 58.5 | 51.4 | 8.5 |
| 9.4 | 51 | 3.0 | 15.2 | |
| 9.4 | | 4.0 | 41.2 | |
| 9.4 | | 5.0 | 17.2 | |
| 9.4 | | 20.0 | 33.4 | |
| 9.4 | | 21.5 | 1.7 | G |
| 8.8 | | 27.5 | 11.0 | 9.5 G |
| 9.8 | | 31.0 | 15.4 | 9.8 |

## 2881—2940.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.9 | 51 | 42.0 | 53.2 | |
| 9.8 | | 44.5 | 4.2 | |
| 9.8 | | 52.5 | 22.3 | |
| 9.8 | | 55.0 | 17.9 | 10.0 |
| 9.8 | 52 | 8.5 | 34.2 | |
| 8.9 | | 11.5 | 25.8 | 9.5 |
| 9.8 | | 13.5 | 47.9 | |
| 9.8 | | 17.0 | 53.8 | |
| 9.4 | | 18.5 | 21.0 | |
| 9.8 | | 26.5 | 54.2 | G |
| 8.3 | | 31.5 | 3.3 | 9.0 G |
| 9.1 | | 34.5 | 56.7 | |
| 9.0 | | 36.5 | 1.9 | 9.0 G |
| 9.3 | | 42.5 | 0.8 | 10.0 G |
| 9.8 | | 49.5 | 34.2 | |
| 9.2 | | 59.5 | 28.8 | 9.0 |
| 9.8 | 53 | 2.5 | 43.3 | |
| 9.8 | | 6.7 | 1.0 | |
| 9.0 | | 8.5 | 26.0 | |
| 9.8 | | 17.5 | 52.7 | G |
| 9.8 | | 24.0 | 36.7 | |
| 9.4 | | 24.5 | 20.6 | |
| 9.9 | | 33.5 | 48.2 | |
| 9.9 | | 38.5 | 41.1 | |
| 9.9 | | 42.5 | 22.1 | |
| 9.5 | | 55.5 | 46.4 | |
| 7.8 | | 58.0 | 29.8 | 8.0 Gtp |
| 9.8 | | 59.5 | 45.2 | |
| 7.9 | 54 | 3.0 | 43.6 | 8.5 |
| 9.3 | | 3.5 | 33.8 | |
| 9.8 | | 6.0 | 9.2 | |
| 9.8 | | 6.5 | 19.2 | |
| 9.9 | | 10.0 | 55.2 | |
| 9.9 | | 12.5 | 54.4 | |
| 9.8 | | 22.0 | 8.0 | G |
| 8.4 | | 23.5 | 57.5 | 9.0 G |
| 9.7 | | 42.0 | 14.3 | |
| 8.4 | | 44.0 | 54.3 | 9.0 G |
| 9.8 | | 44.5 | 21.6 | |
| 9.8 | | 50.0 | 13.8 | |
| 9.4 | | 52.5 | 35.8 | |
| 8.8 | | 58.0 | 41.8 | 8.5 |
| 8.2 | | 58.5 | 12.8 | 8.5 G |
| 9.8 | 55 | 8.0 | 44.1 | |
| 9.9 | | 11.0 | 43.2 | |
| 7.8 | | 13.0 | 18.7 | 8.3 GSt |
| 9.6 | | 18.5 | 45.2 | |
| 9.8 | | 21.5 | 34.2 | |
| 9.8 | | 28.5 | 47.2 | |
| 9.4 | | 36.5 | 15.0 | G |
| 9.0 | | 39.5 | 30.4 | G |
| 9.4 | | 40.0 | 50.0 | 9.5 G |
| 8.8 | | 40.0 | 19.3 | 9.2 G |
| 9.8 | | 40.0 | 4.7 | |
| 9.4 | | 45.0 | 9.4 | |
| 9.9 | 56 | 2.0 | 22.2 | |
| 8.8 | | 3.0 | 28.6 | 9.0 G |
| 9.7 | | 4.5 | 8.3 | G |
| 9.9 | | 9.0 | 21.3 | |
| 9.4 | | 23.0 | 22.0 | |

## 2941—3000.

| mag. | 10h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.9 | 56 | 24.5 | 41.2 | |
| 9.3 | | 25.0 | 24.2 | |
| 9.6 | | 28.5 | 9.3 | |
| 9.8 | | 41.0 | 33.2 | |
| 8.6 | | 47.0 | 42.2 | 8.5 |
| 9.9 | | 49.0 | 1.0 | G |
| 9.8 | | 50.0 | 54.2 | |
| 9.3 | | 58.0 | 9.8 | |
| 8.7 | | 58.5 | 7.2 | 9.5 G |
| 9.6 | 57 | 0.5 | 2.2 | G |
| 9.2 | | 11.0 | 48.4 | 9.5 G |
| 9.6 | | 11.5 | 47.3 | 9.0 G |
| 8.6 | | 12.0 | 5.3 | 8.5 G |
| 9.6 | | 16.5 | 4.2 | |
| 9.8 | | 17.5 | 46.6 | |
| 9.3 | | 18.0 | 42.0 | |
| 9.9 | | 21.0 | 0.7 | G |
| 9.8 | | 22.5 | 35.2 | |
| 9.9 | | 22.5 | 3.8 | |
| 9.9 | | 23.5 | 59.6 | |
| 9.5 | | 24.5 | 20.6 | |
| 9.4 | | 28.0 | 46.4 | |
| 8.8 | | 31.0 | 8.8 | 9.0 G |
| 9.2 | | 31.5 | 14.2 | |
| 9.8 | | 31.5 | 52.0 | |
| 9.9 | | 33.5 | 12.2 | |
| 9.9 | | 35.5 | 58.0 | |
| 8.6 | | 37.5 | 1.9 | 8.5 Gp |
| 9.4 | | 38.5 | 38.6 | |
| 9.7 | | 39.5 | 5.8 | |
| 9.8 | | 42.0 | 3.2 | |
| 9.8 | | 42.5 | 14.2 | |
| 9.8 | | 44.0 | 5.8 | |
| 9.8 | | 49.0 | 56.2 | G |
| 8.2 | | 52.0 | 26.2 | 8.0 Gp |
| 9.9 | | 52.5 | 42.0 | |
| 9.0 | | 54.0 | 52.2 | 9.5 G |
| 8.7 | | 58.5 | 27.3 | 9.0 G |
| 8.8 | | 59.0 | 13.2 | 9.2 G |
| 9.6 | 58 | 2.5 | 19.4 | |
| 8.9 | | 4.5 | 21.5 | |
| 9.6 | | 4.5 | 24.4 | 9.2 G |
| 9.4 | | 6.5 | 5.2 | |
| 9.5 | | 8.0 | 18.6 | |
| 9.6 | | 9.5 | 49.8 | |
| 8.9 | | 14.5 | 6.8 | 9.5 |
| 8.9 | | 17.0 | 5.0 | |
| 9.8 | | 17.5 | 47.0 | |
| 9.8 | | 17.5 | 33.4 | |
| 8.8 | | 19.5 | 31.8 | |
| 9.9 | | 21.5 | 0.1 | |
| 8.2 | | 28.0 | 45.6 | 8.0 G |
| 8.7 | | 29.5 | 7.0 | 9.5 G |
| 9.2 | | 31.5 | 59.6 | 9.0 |
| 7.8 | | 38.5 | 5.6 | 8.5 Gtp |
| 9.2 | | 39.0 | 21.4 | |
| 9.5 | | 40.0 | 15.6 | |
| 9.8 | | 41.0 | 7.4 | |
| 8.9 | | 42.0 | 11.2 | 9.5 G |
| 8.9 | | 47.0 | 12.0 | 9.0 |

## 3001—3060.

| mag. | 10h.—11h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6 | 58 | 48.5 | 55.8 | |
| 9.2 | | 52.5 | 10.2 | |
| 8.4 | | 57.5 | 3.4 | 8.5 G |
| 9.8 | 59 | 0.0 | 8.4 | |
| 8.0 | | 3.5 | 5.8 | 9.0 G |
| 9.4 | | 8.0 | 14.6 | |
| 9.5 | | 8.5 | 3.2 | |
| 9.9 | | 9.0 | 19.8 | |
| 9.7 | | 9.5 | 6.2 | |
| 9.9 | | 10.5 | 35.8 | |
| 9.2 | | 14.5 | 11.2 | |
| 9.2 | | 14.5 | 43.0 | |
| 9.8 | | 16.5 | 28.4 | |
| 8.4 | | 18.1 | 1.3 | G |
| 9.2 | | 19.5 | 8.2 | |
| 8.4 | | 19.5 | 5.0 | 8.5 G |
| 9.1 | | 20.5 | 3.4 | |
| 9.8 | | 22.0 | 53.2 | |
| 8.5 | | 22.5 | 0.7 | G |
| 9.0 | | 23.0 | 9.1 | |
| 9.8 | | 24.0 | 46.2 | |
| 9.8 | | 25.5 | 6.2 | |
| 9.8 | | 26.0 | 27.2 | |
| 9.8 | | 27.0 | 16.8 | |
| 9.8 | | 27.5 | 6.6 | |
| 9.8 | | 28.0 | 51.9 | |
| 8.8 | | 28.5 | 1.4 | G |
| 8.3 | | 28.9 | 1.9 | 9.0 G |
| 9.8 | | 29.0 | 18.0 | |
| 9.7 | | 31.5 | 45.5 | |
| 9.0 | | 33.5 | 2.8 | Gp |
| 9.8 | | 33.5 | 22.2 | |
| 9.7 | | 34.0 | 18.2 | |
| 9.7 | | 34.5 | 6.6 | |
| 9.8 | | 34.5 | 54.4 | |
| 9.0 | | 38.5 | 2.9 | G |
| 8.2 | | 39.0 | 4.6 | G |
| 8.4 | | 42.0 | 7.2 | 9.0 G |
| 8.1 | | 42.5 | 20.6 | 8.5 G |
| 8.8 | | 43.5 | 7.8 | |
| 9.2 | | 43.5 | 9.4 | |
| 9.6 | | 44.5 | 5.0 | |
| 8.7 | | 46.0 | 2.0 | |
| 8.8 | | 46.7 | 0.8 | G |
| 9.8 | | 49.5 | 14.2 | |
| 8.8 | | 49.7 | 59.3 | 9.0 G |
| 9.9 | | 51.0 | 18.9 | |
| 8.6 | | 51.5 | 20.4 | 9.0 G |
| 8.7 | | 52.0 | 6.3 | G |
| 8.9 | | 52.0 | 11.2 | |
| 9.5 | | 56.0 | 11.4 | |
| 9.8 | | 57.0 | 37.6 | |
| 8.8 | | 58.0 | 10.2 | |
| 9.6 | | 58.5 | 4.2 | |
| 8.7 | | 59.0 | 24.4 | 9.0 G |
| 8.4 | | 59.5 | 6.6 | |
| 8.8 | 0 | 1.5 | 5.9 | G |
| 8.9 | | 2.2 | 0.2 | |
| 9.8 | | 2.5 | 8.7 | |
| 9.4 | | 4.5 | 21.8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 58 | 7.9 |
| | 50 | 60 | 8.0 |
| 11 | 0 | 63 | 8.1 |
| | 10 | 65 | 8.2 |





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25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 11 | 0 | 63 | 8·1 |
| | 10 | 65 | 8·2 |

## 3061—3120.

| mag. | 11h. m s | −58° ′ | |
|---|---|---|---|
| 9·9 | 0 4·5 | 18·2 | |
| 9·8 | 5·5 | 58·2 | |
| 9·6 | 7·5 | 10·2 | |
| 9·8 | 8·0 | 22·2 | |
| 9·4 | 10·0 | 14·8 | |
| 8·7 | 15·5 | 3·4 | *G* |
| 9·9 | 17·0 | 14·2 | |
| 9·8 | 18·2 | 0·2 | |
| 8·6 | 19·0 | 5·8 | *G* |
| 9·2 | 20·5 | 5·3 | *G* |
| 9·2 | 21·0 | 5·0 | |
| 9·8 | 22·5 | 6·9 | |
| 8·8 | 23·5 | 3·4 | *G* |
| 9·9 | 24·0 | 3·6 | |
| 8·3 | 25·5 | 9·7 | |
| 9·6 | 25·5 | 17·1 | |
| 8·7 | 28·5 | 0·1 | 9·0 *G* |
| 9·8 | 30·5 | 59·5 | |
| 8·7 | 31·0 | 9·3 | |
| 8·9 | 32·2 | 1·9 | |
| 8·6 | 32·5 | 3·3 | *G* |
| 9·6 | 33·5 | 36·5 | |
| 8·6 | 34·5 | 39·1 | 8·7 *G* |
| 9·8 | 35·5 | 10·1 | |
| 8·8 | 37·5 | 0·1 | |
| 9·3 | 38·5 | 8·5 | |
| 8·8 | 39·0 | 1·1 | *G* |
| 9·7 | 39·5 | 45·9 | |
| 9·3 | 40·5 | 3·7 | *G* |
| 8·6 | 41·0 | 3·1 | 8·5 *G*p |
| 9·9 | 42·5 | 12·7 | |
| 8·6 | 46·9 | 0·9 | 8·5 *G* |
| 9·7 | 47·0 | 31·8 | |
| 9·4 | 48·5 | 0·4 | |
| 9·8 | 49·5 | 11·6 | |
| 7·9 | 49·5 | 33·9 | 8·0 *G* |
| 8·3 | 50·5 | 13·1 | 8·7 *G* |
| 9·6 | 51·5 | 21·5 | |
| 8·4 | 52·7 | 1·3 | *G* |
| 9·6 | 54·0 | 4·4 | |
| 9·7 | 54·0 | 5·4 | |
| 8·3 | 54·5 | 3·9 | 9·0 *G* |
| 8·1 | 55·5 | 10·1 | 8·3 *G* |
| 8·6 | 56·0 | 8·1 | *G* |
| 9·8 | 58·5 | 6·4 | |
| 9·2 | 1 2·5 | 4·3 | *G* |
| 8·8 | 5·5 | 1·2 | *G* |
| 8·8 | 8·5 | 58·0 | *G* |
| 9·5 | 8·5 | 0·4 | *G* |
| 8·6 | 9·0 | 5·2 | *G* |
| 9·7 | 9·7 | 1·9 | |
| 8·2 | 10·5 | 0·1 | 7·5 *G*Sct |
| 9·3 | 11·0 | 22·7 | |
| 8·6 | 11·0 | 7·9 | *G* |
| 9·7 | 12·5 | 40·9 | |
| 9·0 | 14·5 | 53·6 | 9·0 *G* |
| 9·6 | 14·5 | 37·9 | |
| 9·9 | 17·0 | 10·1 | |
| 9·2 | 17·5 | 14·7 | 9·5 *G* |
| 7·7 | 18·0 | 4·1 | |

## 3121—3180.

| mag. | 11h. m s | −58° ′ | |
|---|---|---|---|
| 9·7 | 1 18·5 | 51·5 | |
| 9·9 | 18·5 | 26·0 | |
| 8·8 | 19·5 | 11·1 | |
| 8·7 | 22·5 | 24·3 | |
| 9·4 | 24·5 | 7·7 | |
| 9·8 | 26·5 | 31·1 | |
| 9·8 | 28·5 | 7·1 | |
| 8·4 | 31·5 | 4·1 | *G* |
| 9·8 | 31·5 | 53·2 | *G* |
| 9·8 | 32·5 | 12·5 | |
| 8·4 | 32·7 | 2·0 | *G* |
| 7·4 | 36·0 | 7·1 | 8·0 *G* |
| 9·0 | 36·5 | 5·7 | |
| 9·4 | 39·0 | 8·8 | |
| 9·4 | 39·0 | 44·0 | |
| 9·5 | 42·0 | 5·1 | |
| 9·7 | 42·0 | 6·5 | |
| 9·1 | 43·0 | 9·3 | |
| 9·1 | 43·0 | 2·1 | *G* |
| 8·5 | 43·2 | 59·5 | 8·5 *G* |
| 9·8 | 45·0 | 42·1 | |
| 9·3 | 45·5 | 5·7 | *G* |
| 9·6 | 48·5 | 4·8 | *G* |
| 8·2 | 49·5 | 2·5 | 8·5 *G* |
| 9·0 | 52·5 | 8·3 | |
| 9·5 | 53·0 | 5·1 | *G* |
| 8·2 | 53·5 | 13·9 | 8·2 *G* |
| 9·8 | 55·0 | 10·7 | |
| 9·3 | 55·0 | 39·4 | |
| 9·2 | 59·0 | 1·9 | *G* |
| 9·5 | 59·0 | 0·3 | |
| 9·7 | 59·0 | 10·0 | |
| 9·6 | 2 1·0 | 17·6 | |
| 9·8 | 3·0 | 7·7 | |
| 9·0 | 7·0 | 25·4 | |
| 9·8 | 13·0 | 31·3 | |
| 9·2 | 15·5 | 0·3 | |
| 9·4 | 19·0 | 32·3 | |
| 8·4 | 19·0 | 27·5 | |
| 9·2 | 19·5 | 6·9 | *G* |
| 8·2 | 23·0 | 4·9 | 8·5 *G* |
| 9·9 | 25·7 | 2·3 | |
| 8·4 | 26·0 | 59·8 | 8·0 *G* |
| 9·8 | 26·0 | 11·7 | |
| 9·7 | 28·0 | 53·8 | |
| 9·4 | 28·5 | 12·2 | |
| 9·7 | 30·0 | 11·1 | |
| 9·0 | 31·0 | 16·5 | |
| 9·8 | 32·0 | 3·7 | |
| 9·2 | 32·0 | 9·1 | *G* |
| 9·8 | 33·0 | 13·1 | |
| 9·6 | 38·0 | 23·1 | |
| 9·6 | 38·5 | 33·1 | |
| 8·6 | 40·0 | 10·3 | 9·0 *G* |
| 8·9 | 46·5 | 19·4 | 9·5 *G* |
| 9·6 | 50·0 | 47·9 | |
| 9·4 | 50·0 | 3·3 | *G* |
| 8·6 | 55·5 | 15·9 | 8·8 *G* |
| 9·8 | 57·0 | 9·7 | |
| 9·7 | 58·5 | 1·1 | |

## 3181—3240.

| mag. | 11h. m s | −58° ′ | |
|---|---|---|---|
| 9·0 | 3 3·5 | 52·8 | 9·5 |
| 9·8 | 3·5 | 0·3 | |
| 8·6 | 5·0 | 9·1 | 8·8 *G* |
| 8·2 | 6·0 | 44·1 | 8·0 *G* |
| 9·7 | 6·5 | 37·1 | |
| 8·3 | 9·0 | 12·7 | 8·0 *G* |
| 9·2 | 12·3 | 0·3 | *G* |
| 9·3 | 13·0 | 15·1 | |
| 6·2 | 14·0 | 17·8 | 4·9 *G*Sct |
| 9·9 | 14·5 | 22·3 | |
| 9·8 | 20·5 | 1·3 | |
| 9·8 | 21·8 | 0·5 | |
| 9·4 | 22·2 | 2·2 | |
| 9·8 | 23·5 | 7·8 | |
| 9·8 | 25·0 | 6·9 | |
| 9·4 | 29·0 | 49·2 | |
| 9·4 | 30·0 | 10·3 | *G* |
| 8·6 | 32·5 | 9·1 | 9·0 *G* |
| 8·7 | 39·0 | 16·9 | 9·0 *G* |
| 9·2 | 40·0 | 38·3 | |
| 9·6 | 40·5 | 48·6 | |
| 9·6 | 48·5 | 35·1 | |
| 8·1 | 50·0 | 2·9 | 8·5 *G* |
| 9·7 | 4 0·0 | 23·7 | |
| 9·7 | 3·0 | 25·9 | |
| 9·8 | 3·5 | 42·1 | |
| 9·7 | 4·5 | 52·7 | |
| 9·9 | 5·5 | 47·1 | |
| 9·4 | 8·5 | 23·4 | |
| 9·4 | 9·0 | 35·3 | |
| 8·8 | 10·5 | 30·5 | |
| 9·8 | 13·5 | 29·0 | |
| 9·7 | 13·5 | 4·3 | |
| 9·6 | 15·0 | 25·9 | |
| 9·7 | 19·0 | 50·8 | |
| 7·7 | 19·0 | 9·7 | 7·3 *G*St |
| 9·6 | 20·5 | 10·3 | |
| 9·8 | 20·5 | 6·1 | |
| 8·5 | 23·0 | 1·6 | 9·0 *G* |
| 9·8 | 23·5 | 41·2 | |
| 9·7 | 24·0 | 18·1 | |
| 9·4 | 24·0 | 2·1 | |
| 9·7 | 25·0 | 26·4 | |
| 9·8 | 35·0 | 22·4 | |
| 9·8 | 39·0 | 24·1 | |
| 9·6 | 39·5 | 42·7 | |
| 9·8 | 40·5 | 0·7 | |
| 8·7 | 41·5 | 10·7 | 9·5 *G* |
| 8·4 | 48·0 | 48·3 | 8·8 *G* |
| 9·7 | 48·5 | 5·1 | |
| 8·3 | 56·0 | 50·1 | 8·5 *G* |
| 8·4 | 56·5 | 51·6 | 8·8 *G* |
| 9·0 | 58·5 | 14·5 | |
| 9·9 | 5 0·0 | 20·5 | |
| 9·8 | 5·5 | 20·5 | |
| 9·4 | 9·0 | 21·1 | *G* |
| 9·4 | 10·5 | 21·1 | *G* |
| 9·5 | 12·0 | 20·7 | |
| 9·7 | 19·0 | 40·8 | |
| 9·5 | 20·0 | 29·0 | 8·8 *G* |

## 3241—3300.

| mag. | 11h. m s | −58° ′ | |
|---|---|---|---|
| 9·2 | 5 22·0 | 22·1 | 9·5 *G* |
| 9·0 | 28·0 | 30·9 | 9·5 *G* |
| 9·0 | 29·0 | 54·3 | 9·5 |
| 9·0 | 33·0 | 52·1 | 9·0 |
| 9·1 | 33·0 | 13·8 | |
| 10·0 | 41·8 | 1·6 | |
| 9·6 | 45·0 | 38·3 | |
| 10·0 | 47·5 | 32·8 | |
| 10·0 | 48·0 | 30·2 | |
| 10·0 | 49·0 | 35·6 | |
| 9·6 | 56·0 | 4·7 | |
| 10·0 | 6 1·0 | 40·4 | |
| 8·5 | 4·5 | 40·1 | 8·5 *G* |
| 9·6 | 5·0 | 14·2 | |
| 9·0 | 6·0 | 32·9 | 8·2 G |
| 9·9 | 8·0 | 46·9 | |
| 10·0 | 8·0 | 7·0 | |
| 9·5 | 10·2 | 4·5 | |
| 8·8 | 12·2 | 8·6 | |
| 9·4 | 17·7 | 48·9 | |
| 8·3 | 18·5 | 42·9 | 8·2 G |
| 8·9 | 19·7 | 35·1 | 10·0 |
| 9·8 | 24·5 | 16·1 | |
| 9·4 | 29·2 | 7·9 | |
| 10·0 | 34·5 | 37·8 | |
| 9·8 | 35·0 | 37·0 | |
| 10·0 | 38·0 | 42·8 | |
| 8·4 | 42·0 | 7·6 | |
| 9·5 | 42·2 | 13·1 | |
| 9·4 | 42·7 | 58·8 | |
| 9·6 | 43·5 | 6·7 | |
| 10·0 | 46·0 | 9·9 | |
| 10·0 | 46·0 | 9·0 | |
| 9·3 | 47·2 | 13·1 | |
| 9·8 | 47·5 | 43·6 | |
| 10·0 | 47·5 | 4·0 | |
| 9·6 | 49·2 | 10·3 | |
| 10·0 | 52·0 | 14·0 | |
| 8·4 | 54·5 | 16·7 | 9·0 G |
| 9·6 | 55·0 | 21·8 | |
| 10·0 | 7 2·0 | 20·8 | |
| 9·6 | 2·5 | 32·0 | |
| 9·9 | 2·5 | 6·0 | |
| 10·0 | 6·0 | 45·0 | |
| 9·7 | 7·5 | 23·9 | |
| 8·9 | 8·0 | 10·3 | |
| 10·0 | 25·5 | 54·0 | |
| 9·3 | 25·5 | 43·6 | 9·0 |
| 9·6 | 26·0 | 15·8 | |
| 10·0 | 28·0 | 1·9 | |
| 9·8 | 29·0 | 10·4 | |
| 10·0 | 33·5 | 21·0 | |
| 8·6 | 34·0 | 4·6 | |
| 9·6 | 35·5 | 13·1 | |
| 9·2 | 35·5 | 26·6 | |
| 9·7 | 37·0 | 50·4 | |
| 9·6 | 37·0 | 13·1 | |
| 9·6 | 37·5 | 10·8 | |
| 8·5 | 37·5 | 13·1 | 9·0 G |
| 9·2 | 37·5 | 19·0 | |



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**3301—3360.**

| mag. | 11h. m s | − 58° ′ | |
|---|---|---|---|
| 8·6 | 7 41·5 | 25·1 | |
| 9·8 | 42·0 | 11·2 | |
| 9·1 | 46·5 | 12·2 | |
| 10·0 | 46·5 | 11·2 | |
| 9·8 | 47·5 | 24·9 | |
| 9·6 | 47·5 | 27·0 | |
| 8·7 | 48·7 | 57·8 | 9·0 |
| 10·0 | 52·0 | 9·0 | |
| 9·3 | 53·0 | 32·0 | |
| 9·5 | 53·5 | 11·0 | |
| 9·7 | 55·5 | 21·9 | |
| 10·0 | 8 0·0 | 13·1 | |
| 9·2 | 2·5 | 14·8 | |
| 8·7 | 5·5 | 14·0 | 8·5 G |
| 6·4 | 6·0 | 56·4 | 6·5 GStr |
| 10·0 | 12·0 | 42·0 | |
| 9·6 | 14·5 | 42·0 | |
| 9·9 | 17·5 | 21·0 | |
| 9·2 | 24·0 | 21·4 | |
| 9·0 | 25·5 | 28·2 | |
| 9·5 | 26·0 | 29·8 | |
| 10·0 | 27·5 | 24·0 | |
| 9·3 | 32·0 | 15·2 | |
| 9·7 | 32·5 | 7·4 | |
| 10·0 | 33·0 | 40·0 | |
| 10·0 | 33·0 | 31·2 | |
| 9·0 | 35·5 | 32·0 | |
| 9·5 | 36·5 | 38·7 | |
| 9·5 | 37·5 | 9·0 | |
| 10·0 | 43·0 | 49·8 | |
| 10·0 | 44·0 | 9·7 | |
| 10·0 | 45·5 | 7·7 | |
| 10·0 | 47·0 | 10·0 | |
| 9·1 | 47·0 | 11·0 | |
| 9·5 | 47·5 | 31·4 | |
| 10·0 | 47·5 | 51·2 | |
| 10·0 | 48·0 | 22·0 | |
| 10·0 | 49·0 | 34·8 | |
| 10·0 | 50·3 | 58·0 | |
| 8·8 | 51·5 | 33·0 | 9·0 S |
| 9·9 | 54·0 | 25·2 | |
| 10·0 | 56·5 | 12·0 | |
| 9·8 | 58·2 | 0·0 | |
| 9·5 | 9 0·2 | 0·6 | |
| 10·0 | 1·0 | 15·8 | |
| 8·6 | 1·5 | 10·9 | 9·0 G |
| 10·0 | 3·0 | 50·9 | |
| 9·3 | 3·2 | 25·2 | |
| 10·0 | 5·2 | 46·1 | |
| 9·6 | 5·5 | 28·8 | |
| 8·4 | 5·5 | 20·7 | 8·8 |
| 9·7 | 7·0 | 44·8 | |
| 10·0 | 7·2 | 26·0 | |
| 9·5 | 7·5 | 16·0 | |
| 8·7 | 10·0 | 41·8 | 9·0 S |
| 10·0 | 13·2 | 26·0 | |
| 8·6 | 14·5 | 9·4 | 9·0 G |
| 10·0 | 15·5 | 26·4 | |
| 9·3 | 18·0 | 8·8 | |
| 9·5 | 20·0 | 14·6 | |

**3361—3420.**

| mag. | 11h. m s | − 58° ′ | |
|---|---|---|---|
| 9·3 | 9 22·0 | 33·0 | |
| 10·0 | 23·0 | 15·0 | |
| 9·6 | 23·5 | 50·0 | |
| 9·9 | 24·0 | 26·0 | |
| 9·9 | 25·5 | 40·0 | |
| 8·4 | 27·5 | 29·6 | 9·0 S |
| 10·0 | 31·5 | 46·6 | |
| 9·1 | 33·0 | 5·8 | |
| 9·2 | 34·5 | 23·0 | |
| 9·6 | 37·2 | 2·6 | |
| 9·7 | 44·5 | 22·8 | |
| 8·6 | 45·5 | 44·0 | 9·0 S |
| 9·0 | 46·5 | 54·0 | 9·5 |
| 9·8 | 48·0 | 44·8 | |
| 9·6 | 49·0 | 55·0 | |
| 9·9 | 53·5 | 30·6 | |
| 9·4 | 54·2 | 2·0 | |
| 10·0 | 55·5 | 24·2 | |
| 10·0 | 56·0 | 4·4 | |
| 10·0 | 57·5 | 15·9 | |
| 10·0 | 57·5 | 10·0 | |
| 10·0 | 58·5 | 14·0 | |
| 10·0 | 10 15·3 | 57·9 | |
| 9·5 | 15·5 | 58·6 | |
| 9·8 | 16·0 | 26·2 | |
| 10·0 | 17·5 | 52·2 | |
| 10·0 | 19·5 | 7·0 | |
| 8·4 | 19·5 | 12·4 | 8·4 G |
| 9·1 | 20·5 | 29·0 | |
| 10·0 | 25·5 | 38·0 | |
| 9·7 | 30·0 | 40·0 | |
| 10·0 | 31·5 | 7·0 | |
| 10·0 | 32·5 | 28·2 | |
| 9·6 | 34·5 | 33·0 | |
| 10·0 | 35·5 | 52·0 | |
| 10·0 | 37·5 | 22·8 | |
| 10·0 | 44·0 | 12·0 | |
| 9·9 | 45·5 | 15·3 | |
| 9·4 | 47·5 | 42·4 | |
| 10·0 | 48·5 | 22·2 | |
| 9·4 | 54·5 | 59·4 | 8·5 |
| 9·4 | 56·0 | 54·0 | 9·0 |
| 10·0 | 58·0 | 13·6 | |
| 10·0 | 11 4·5 | 42·0 | |
| 9·7 | 6·0 | 18·0 | |
| 9·3 | 16·0 | 54·2 | |
| 9·1 | 17·5 | 9·5 | |
| 9·7 | 21·5 | 31·0 | |
| 9·8 | 21·5 | 17·8 | |
| 9·8 | 24·5 | 13·4 | |
| 9·9 | 25·2 | 37·1 | |
| 9·1 | 33·0 | 23·0 | 8·0 G |
| 10·0 | 34·2 | 5·4 | |
| 10·0 | 36·0 | 54·6 | 9·2 |
| 9·3 | 37·5 | 52·0 | |
| 10·0 | 38·0 | 52·6 | |
| 8·6 | 43·5 | 44·3 | 9·0 |
| 9·9 | 45·5 | 41·8 | |
| 10·0 | 45·5 | 41·3 | |
| 10·0 | 45·5 | 56·0 | 9·5 |

**3421—3480.**

| mag. | 11h. m s | − 58° ′ | |
|---|---|---|---|
| 9·8 | 11 47·5 | 9·2 | |
| 9·5 | 54·5 | 24·0 | |
| 8·9 | 57·5 | 31·8 | |
| 7·3 | 57·5 | 25·4 | 7·2 GSg |
| 9·7 | 12 0·5 | 37·1 | |
| 9·6 | 0·5 | 45·0 | |
| 10·0 | 9·5 | 9·6 | |
| 9·6 | 11·0 | 8·2 | |
| 8·7 | 17·5 | 26·2 | 8·5 |
| 10·0 | 17·5 | 53·4 | |
| 7·3 | 17·5 | 31·4 | 7·5 GSg |
| 9·8 | 23·5 | 54·0 | |
| 7·5 | 24·5 | 33·2 | 7·5 GSg |
| 10·0 | 31·0 | 19·4 | |
| 10·0 | 35·0 | 19·0 | |
| 8·6 | 35·0 | 12·2 | |
| 9·6 | 37·0 | 53·0 | |
| 10·0 | 45·5 | 46·4 | |
| 10·0 | 45·5 | 24·0 | |
| 9·9 | 47·5 | 30·2 | |
| 8·6 | 50·5 | 33·0 | 9·0 |
| 9·9 | 55·2 | 19·7 | |
| 9·6 | 57·5 | 35·0 | |
| 10·0 | 13 5·0 | 34·4 | |
| 9·5 | 6·0 | 48·9 | 9·0 |
| 9·4 | 8·0 | 8·8 | |
| 8·6 | 13·0 | 32·1 | 9·0 |
| 10·0 | 16·5 | 17·6 | |
| 9·3 | 17·0 | 52·6 | |
| 10·0 | 21·2 | 23·1 | |
| 9·9 | 21·5 | 28·6 | |
| 8·2 | 25·0 | 20·4 | 9·0 |
| 9·4 | 25·0 | 32·8 | |
| 10·0 | 27·0 | 29·6 | |
| 10·0 | 28·2 | 32·4 | |
| 9·9 | 28·5 | 8·7 | |
| 9·3 | 31·0 | 41·7 | 9·5 |
| 10·0 | 37·0 | 15·7 | |
| 9·9 | 41·0 | 53·1 | |
| 9·8 | 49·0 | 54·0 | |
| 9·6 | 53·0 | 17·4 | |
| 10·0 | 54·2 | 41·2 | |
| 10·0 | 56·8 | 57·5 | |
| 8·2 | 58·0 | 9·0 | 8·8 |
| 10·0 | 14 2·5 | 13·5 | |
| 9·9 | 7·2 | 2·0 | |
| 8·6 | 13·5 | 5·8 | |
| 9·5 | 14·5 | 45·0 | |
| 9·9 | 15·0 | 15·2 | |
| 10·0 | 17·0 | 9·1 | |
| 8·6 | 20·0 | 3·9 | |
| 10·0 | 24·0 | 39·0 | |
| 10·0 | 24·0 | 54·0 | |
| 9·6 | 26·5 | 50·4 | |
| 7·8 | 27·0 | 30·2 | 7·8 GSt |
| 10·0 | 29·2 | 42·5 | |
| 8·2 | 30·5 | 53·1 | 8·8 |
| 9·7 | 35·0 | 9·0 | |
| 9·4 | 41·0 | 48·0 | 9·2 |
| 10·0 | 41·5 | 46·4 | |

**3481—3540.**

| mag. | 11h. m s | − 58° ′ | |
|---|---|---|---|
| 10·0 | 14 41·5 | 30·8 | |
| 10·0 | 45·5 | 48·4 | |
| 10·0 | 56·2 | 21·0 | |
| 10·0 | 57·2 | 41·9 | |
| 9·8 | 57·2 | 23·3 | |
| 9·2 | 15 1·0 | 10·8 | |
| 9·2 | 1·5 | 41·5 | |
| 9·2 | 5·0 | 55·1 | |
| 10·0 | 5·0 | 2·2 | |
| 9·3 | 5·2 | 32·2 | |
| 9·7 | 7·0 | 41·0 | |
| 10·0 | 11·0 | 7·8 | |
| 10·0 | 15·0 | 10·5 | |
| 9·5 | 22·5 | 53·8 | |
| 10·0 | 24·0 | 45·4 | |
| 8·1 | 24·5 | 1·3 | |
| 9·6 | 27·0 | 16·5 | |
| 10·0 | 31·0 | 5·7 | |
| 9·9 | 31·0 | 29·6 | |
| 10·0 | 35·0 | 5·2 | |
| 9·5 | 35·0 | 5·0 | |
| 10·0 | 39·5 | 32·0 | |
| 9·4 | 40·5 | 37·0 | |
| 9·9 | 43·0 | 38·5 | |
| 9·5 | 45·0 | 20·0 | |
| 10·0 | 45·2 | 29·0 | |
| 9·9 | 49·0 | 7·0 | |
| 10·0 | 50·0 | 42·6 | |
| 10·0 | 50·5 | 13·0 | |
| 8·7 | 51·0 | 34·0 | 8·2 G |
| 9·6 | 52·5 | 42·0 | |
| 8·6 | 59·5 | 38·8 | 9·2 |
| 10·0 | 16 1·0 | 29·5 | |
| 9·8 | 1·0 | 11·8 | |
| 9·4 | 4·5 | 7·0 | |
| 9·6 | 8·0 | 55·0 | |
| 10·0 | 10·0 | 10·6 | |
| 9·8 | 11·5 | 13·8 | |
| 9·5 | 16·0 | 41·0 | |
| 10·0 | 17·0 | 13·9 | |
| 9·7 | 17·5 | 24·3 | |
| 10·0 | 23·5 | 34·2 | |
| 10·0 | 26·0 | 34·2 | |
| 10·0 | 32·0 | 14·9 | |
| 9·6 | 32·5 | 3·8 | |
| 9·8 | 43·5 | 56·4 | |
| 9·4 | 44·0 | 36·4 | |
| 8·9 | 45·5 | 55·6 | 9·5 |
| 10·0 | 46·0 | 39·0 | |
| 9·1 | 51·5 | 55·5 | 9·2 |
| 10·0 | 53·5 | 40·0 | |
| 10·0 | 55·0 | 38·2 | |
| 9·6 | 55·5 | 15·6 | |
| 8·4 | 17 1·0 | 16·0 | 9·0 |
| 9·8 | 6·5 | 23·9 | |
| 9·4 | 6·5 | 7·8 | |
| 9·5 | 11·0 | 13·2 | 9·0 |
| 8·2 | 11·0 | 18·3 | 8·5 G |
| 9·6 | 11·0 | 24·6 | |
| 8·8 | 14·0 | 40·6 | |

**25 prec.**

| h m | α + s | δ − |
|---|---|---|
| 11 0 | 63 | 8·1 |
| 10 | 65 | 8·2 |
| 20 | 67 | 8·2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 65 | 8·2 |
| | 20 | 67 | 8·2 |
| | 30 | 70 | 8·3 |
| | 40 | 72 | 8·3 |

## 3541—3600.

| mag. | 11ʰ m | s | –58° ′ | |
|---|---|---|---|---|
| 10·0 | 17 | 15·0 | 39·0 | |
| 10·0 | | 16·5 | 49·0 | |
| 10·0 | | 19·3 | 2·0 | |
| 8·6 | | 20·5 | 37·6 | 8·5 |
| 9·9 | | 23·0 | 39·8 | |
| 9·5 | | 30·5 | 16·0 | |
| 10·0 | | 30·5 | 5·0 | |
| 8·7 | | 33·5 | 52·6 | 9·3 |
| 10·0 | | 34·5 | 54·0 | |
| 8·4 | | 40·5 | 6·1 | 7·5 GSt |
| 9·0 | | 41·0 | 54·0 | 9·0 |
| 10·0 | | 42·0 | 21·8 | |
| 10·0 | | 43·5 | 7·0 | |
| 10·0 | | 46·5 | 23·4 | |
| 9·2 | | 46·5 | 15·6 | |
| 10·0 | | 50·5 | 55·5 | |
| 8·0 | | 54·5 | 23·8 | 8·5 G |
| 10·0 | | 56·5 | 30·2 | |
| 10·0 | | 56·5 | 37·0 | |
| 9·5 | | 59·0 | 33·6 | |
| 9·5 | 18 | 0·5 | 13·4 | |
| 10·0 | | 6·5 | 25·1 | |
| 10·0 | | 6·5 | 20·0 | |
| 10·0 | | 14·5 | 22·8 | |
| 10·0 | | 15·5 | 57·6 | |
| 8·2 | | 16·0 | 37·0 | 8·5 |
| 8·6 | | 16·0 | 48·3 | 9·0 |
| 8·8 | | 24·0 | 14·0 | 9·5 |
| 10·0 | | 30·0 | 20·4 | |
| 10·0 | | 34·0 | 30·7 | |
| 9·5 | | 34·5 | 31·0 | |
| 9·4 | | 39·5 | 30·9 | |
| 9·5 | | 39·5 | 47·0 | |
| 9·4 | | 42·0 | 31·2 | 9·0 |
| 8·4 | | 44·5 | 36·0 | 9·0 G |
| 10·0 | | 44·5 | 46·4 | |
| 10·0 | | 44·5 | 9·8 | |
| 9·9 | | 55·5 | 55·0 | |
| 9·9 | 19 | 6·0 | 21·0 | |
| 10·0 | | 8·0 | 46·0 | |
| 10·0 | | 8·5 | 14·6 | |
| 9·5 | | 10·0 | 15·8 | |
| 9·1 | | 11·5 | 24·7 | |
| 9·7 | | 13·5 | 43·7 | |
| 10·0 | | 16·0 | 58·3 | |
| 10·0 | | 22·0 | 7·0 | |
| 8·5 | | 23·7 | 58·0 | 8·0 |
| 10·0 | | 24·0 | 29·4 | |
| 10·0 | | 25·0 | 30·4 | |
| 10·0 | | 26·0 | 29·0 | |
| 9·5 | | 27·0 | 42·0 | |
| 10·0 | | 28·0 | 12·2 | |
| 10·0 | | 28·3 | 57·0 | |
| 9·8 | | 35·0 | 43·8 | |
| 9·0 | | 40·0 | 5·8 | 9·0 |
| 10·0 | | 52·5 | 50·6 | |
| 9·3 | 20 | 2·0 | 56·1 | |
| 10·0 | | 2·5 | 2·0 | |
| 9·8 | | 4·0 | 10·0 | |
| 9·5 | | 4·0 | 13·8 | |

## 3601—3660.

| mag. | 11ʰ m | s | –58° ′ | |
|---|---|---|---|---|
| 9·6 | 20 | 8·5 | 39·0 | |
| 9·5 | | 12·0 | 41·0 | |
| 9·1 | | 12·5 | 54·4 | 9·0 |
| 10·0 | | 13·5 | 3·4 | |
| 7·6 | | 22·0 | 40·0 | 8·0 Gt |
| 10·0 | | 24·0 | 41·0 | |
| 10·0 | | 25·5 | 17·0 | 10·0 |
| 9·5 | | 25·5 | 57·6 | |
| 9·4 | | 34·0 | 16·1 | 9·5 |
| 10·0 | | 35·5 | 19·8 | |
| 10·0 | | 39·5 | 39·9 | |
| 10·0 | | 40·5 | 50·0 | |
| 8·8 | | 44·0 | 35·8 | 8·0 |
| 9·6 | | 46·0 | 33·0 | |
| 8·9 | | 51·5 | 11·4 | 10·0 |
| 9·3 | | 52·0 | 4·2 | |
| 9·0 | | 52·5 | 44·0 | 9·5 |
| 10·0 | | 54·0 | 0·7 | |
| 10·0 | | 54·0 | 51·0 | |
| 8·2 | | 56·0 | 45·0 | 8·5 G |
| 9·8 | | 56·5 | 25·3 | |
| 8·6 | | 58·3 | 58·0 | 9·0 |
| 10·0 | | 59·0 | 32·0 | |
| 10·0 | 21 | 0·0 | 28·8 | |
| 9·6 | | 4·0 | 12·0 | |
| 9·8 | | 4·5 | 9·1 | |
| 10·0 | | 8·5 | 11·2 | 10·0 |
| 9·4 | | 14·0 | 20·1 | |
| 10·0 | | 16·0 | 30·0 | |
| 9·3 | | 19·0 | 15·4 | |
| 8·8 | | 32·0 | 34·2 | 9·5 |
| 10·0 | | 34·0 | 19·0 | |
| 9·1 | | 34·5 | 19·2 | 8·8 |
| 9·6 | | 34·7 | 57·2 | 9·5 |
| 10·0 | | 43·5 | 5·9 | |
| 10·0 | | 44·0 | 4·0 | |
| 9·8 | | 46·0 | 35·0 | |
| 10·0 | | 48·0 | 0·8 | |
| 9·6 | | 48·0 | 45·4 | |
| 9·6 | | 50·5 | 42·8 | |
| 9·6 | | 55·5 | 37·8 | |
| 10·0 | 22 | 5·5 | 18·4 | |
| 9·6 | | 7·5 | 31·0 | |
| 10·0 | | 13·5 | 20·0 | |
| 9·5 | | 27·5 | 21·4 | |
| 10·0 | | 31·0 | 13·8 | |
| 10·0 | | 31·0 | 3·6 | |
| 9·1 | | 33·5 | 22·0 | 9·5 |
| 9·0 | | 34·5 | 7·4 | |
| 9·6 | | 38·5 | 12·8 | |
| 10·0 | | 44·0 | 51·0 | |
| 10·0 | | 44·5 | 17·0 | |
| 9·6 | | 44·5 | 48·0 | |
| 9·6 | | 54·5 | 8·4 | |
| 9·7 | | 56·5 | 39·1 | |
| 9·7 | 23 | 0·5 | 44·2 | |
| 10·0 | | 4·5 | 43·8 | |
| 9·9 | | 6·5 | 15·0 | |
| 9·8 | | 13·5 | 42·3 | |
| 9·6 | | 16·5 | 48·0 | |

## 3661—3720.

| mag. | 11ʰ m | s | –58° ′ | |
|---|---|---|---|---|
| 7·6 | 23 | 20·5 | 6·3 | GSt |
| 9·1 | | 20·5 | 3·1 | |
| 10·0 | | 41·0 | 49·0 | |
| 9·4 | | 54·5 | 49·3 | |
| 10·0 | | 57·5 | 1·9 | |
| 9·8 | | 58·0 | 34·5 | 9·5 |
| 10·0 | | 59·5 | 52·0 | |
| 9·6 | 24 | 16·0 | 19·0 | 9·5 |
| 10·0 | | 21·5 | 57·8 | |
| 10·0 | | 23·5 | 58·3 | |
| 10·0 | | 25·5 | 17·0 | |
| 9·5 | | 36·5 | 26·0 | 9·8 |
| 9·6 | | 36·5 | 28·9 | 9·2 |
| 10·0 | | 41·0 | 24·0 | |
| 8·7 | | 41·3 | 56·3 | 8·0 G |
| 9·3 | | 51·8 | 57·0 | |
| 8·0 | 25 | 0·0 | 7·3 | 8·0 GSt |
| 9·6 | | 1·5 | 46·4 | |
| 10·0 | | 4·0 | 45·0 | |
| 10·0 | | 4·5 | 47·6 | |
| 10·0 | | 10·0 | 4·1 | |
| 9·8 | | 10·0 | 28·0 | |
| 8·6 | | 21·5 | 8·8 | 8·8 |
| 10·0 | | 23·5 | 33·8 | |
| 9·8 | | 23·5 | 37·2 | ? |
| 9·9 | | 34·0 | 16·1 | |
| 10·0 | | 37·5 | 6·1 | |
| 8·9 | | 44·0 | 59·0 | 9·5 |
| 9·5 | | 46·5 | 27·0 | |
| 9·4 | | 49·5 | 37·2 | |
| 10·0 | | 59·0 | 53·8 | |
| 7·2 | 26 | 0·0 | 45·1 | 5·0 GStr |
| 6·4 | | 2·0 | 49·5 | 5·5 GSgr |
| 10·0 | | 3·0 | 36·6 | |
| 9·1 | | 14·0 | 41·4 | |
| 9·5 | | 30·0 | 23·0 | 9·0 |
| 9·9 | | 33·0 | 20·5 | |
| 10·0 | | 33·5 | 56·0 | |
| 10·0 | | 57·5 | 45·0 | |
| 9·6 | 27 | 0·0 | 38·3 | |
| 10·0 | | 3·0 | 43·4 | |
| 10·0 | | 10·0 | 48·0 | |
| 9·7 | | 30·0 | 28·0 | |
| 9·5 | | 34·0 | 20·0 | 10·0 |
| 9·8 | | 36·0 | 22·0 | |
| 9·1 | | 42·5 | 48·0 | |
| 10·0 | | 45·0 | 4·0 | |
| 9·8 | | 47·0 | 14·6 | |
| 8·9 | 28 | 1·5 | 0·1 | 9·0 |
| 9·6 | | 3·0 | 29·5 | |
| 10·0 | | 10·0 | 26·6 | |
| 8·8 | | 10·5 | 26·0 | 9·0 |
| 9·0 | | 12·5 | 52·1 | 9·0 |
| 10·0 | | 13·5 | 35·4 | |
| 10·0 | | 14·0 | 22·6 | |
| 9·6 | | 15·5 | 52·0 | 10·0 |
| 7·6 | | 18·3 | 59·6 | 8·0 GSt |
| 9·9 | | 33·0 | 5·4 | |
| 9·8 | | 39·5 | 5·2 | |
| 8·8 | | 44·0 | 27·8 | 9·2 |

## 3721—3780.

| mag. | 11ʰ m | s | –58° ′ | |
|---|---|---|---|---|
| 9·7 | 28 | 46·0 | 39·8 | |
| 9·7 | | 52·0 | 41·0 | |
| 9·6 | | 54·0 | 40·6 | |
| 9·6 | | 54·0 | 21·6 | |
| 9·6 | | 54·0 | 15·0 | |
| 9·2 | | 56·0 | 16·3 | 8·5 |
| 8·6 | 29 | 0·0 | 27·0 | 9·0 |
| 10·0 | | 2·5 | 52·0 | |
| 9·8 | | 22·5 | 21·6 | |
| 9·8 | | 24·5 | 44·0 | |
| 10·0 | | 39·5 | 55·8 | |
| 10·0 | | 44·0 | 48·0 | |
| 9·6 | | 49·5 | 25·0 | |
| 10·0 | | 50·5 | 29·0 | |
| 9·4 | | 50·5 | 34·6 | |
| 10·0 | | 52·5 | 46·0 | |
| 10·0 | 30 | 4·5 | 36·0 | |
| 10·0 | | 14·5 | 45·0 | |
| 10·0 | | 19·0 | 55·8 | |
| 10·0 | | 33·0 | 54·3 | |
| 9·0 | | 34·0 | 44·3 | 8·2 |
| 8·9 | | 40·0 | 13·6 | 9·5 |
| 10·0 | | 44·0 | 7·0 | |
| 9·4 | | 44·0 | 11·8 | |
| 9·3 | | 52·0 | 45·0 | |
| 8·8 | | 56·0 | 16·2 | 9·0 |
| 9·8 | | 56·0 | 48·0 | 9·5 |
| 8·7 | | 56·0 | 40·0 | 9·3 |
| 9·8 | 31 | 10·5 | 8·8 | 9·2 |
| 9·8 | | 13·5 | 35·0 | |
| 9·2 | | 18·0 | 32·0 | |
| 10·0 | | 30·0 | 47·8 | |
| 10·0 | | 38·5 | 7·0 | |
| 9·7 | | 41·0 | 24·0 | |
| 9·9 | | 41·5 | 27·0 | |
| 9·c | | 43·5 | 34·0 | |
| 9·4 | | 44·0 | 1·0 | |
| 9·2 | | 45·5 | 49·9 | 10·0 |
| 9·5 | | 47·5 | 31·8 | |
| 10·0 | | 48·5 | 6·0 | |
| 10·0 | | 50·5 | 5·4 | |
| 10·0 | | 52·8 | 57·9 | |
| 9·7 | 32 | 7·5 | 49·0 | |
| 9·9 | | 10·5 | 40·2 | |
| 9·9 | | 11·0 | 1·9 | |
| 9·9 | | 13·5 | 19·0 | 9·5 |
| 9·5 | | 25·5 | 20·2 | |
| 9·8 | | 30·0 | 16·0 | 9·2 |
| 9·1 | | 32·5 | 50·2 | 8·5 |
| 10·0 | | 42·0 | 13·7 | |
| 9·4 | | 54·5 | 41·0 | |
| 8·9 | 33 | 10·5 | 7·0 | |
| 10·0 | | 15·5 | 46·9 | |
| 9·1 | | 29·5 | 40·5 | 9·0 |
| 10·0 | | 45·5 | 28·9 | |
| 9·8 | 34 | 3·5 | 15·9 | |
| 9·6 | | 7·5 | 10·9 | |
| 8·0 | | 9·0 | 18·5 | 7·5 G |
| 10·0 | | 9·5 | 11·4 | |
| 10·0 | | 9·5 | 17·7 | |

### 3781—3840.

| mag. | 11h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 34 | 12·5 | 18·9 | |
| 9·7 | | 22·0 | 23·1 | |
| 9·9 | | 32·3 | 57·1 | |
| 10·0 | | 42·0 | 37·9 | |
| 9·4 | 35 | 0·3 | 57·5 | 10·0 |
| 10·0 | | 0·5 | 26·0 | |
| 9·2 | | 10·0 | 25·9 | |
| 10·0 | | 15·5 | 49·9 | |
| 10·0 | | 25·5 | 38·5 | |
| 9·6 | | 32·0 | 13·9 | |
| 8·7 | | 43·0 | 2·8 | 8·5 G |
| 10·0 | | 46·5 | 38·9 | |
| 9·9 | | 52·5 | 52·9 | |
| 9·9 | | 53·5 | 4·9 | 9·5 |
| 9·1 | | 53·5 | 25·9 | 8·2 |
| 10·0 | 36 | 4·7 | 59·0 | |
| 10·0 | | 7·5 | 39·9 | |
| 9·7 | | 13·0 | 16·3 | |
| 9·0 | | 15·5 | 33·9 | 9·0 |
| 9·4 | | 29·5 | 24·9 | |
| 9·1 | | 40·0 | 53·6 | 9·8 |
| 9·1 | | 41·0 | 50·9 | 9·0 |
| 9·7 | | 41·5 | 26·9 | |
| 9·9 | | 45·5 | 20·5 | |
| 9·6 | | 45·5 | 24·5 | |
| 9·8 | | 45·5 | 31·6 | 9·5 |
| 9·4 | | 46·5 | 33·6 | 9·0 |
| 10·0 | | 54·0 | 12·5 | |
| 9·2 | 37 | 22·5 | 11·7 | |
| 10·0 | | 29·5 | 20·6 | |
| 9·8 | | 29·5 | 51·1 | |
| 9·5 | | 39·0 | 38·9 | |
| 9·8 | | 44·5 | 54·1 | 9·2 |
| 10·0 | | 45·5 | 23·9 | |
| 10·0 | | 46·0 | 19·1 | |
| 10·0 | 38 | 23·5 | 39·5 | |
| 10·0 | | 26·0 | 32·5 | |
| 10·0 | | 29·0 | 41·2 | |
| 10·0 | | 33·0 | 35·3 | |
| 9·5 | | 33·0 | 39·9 | |
| 8·0 | | 45·5 | 39·5 | 8·5 |
| 9·6 | | 48·5 | 21·3 | 9·5 |
| 8·0 | | 48·8 | 0·6 | 8·0 G |
| 10·0 | 39 | 3·0 | 28·7 | |
| 10·0 | | 5·0 | 16·7 | |
| 9·7 | | 5·5 | 43·9 | |
| 10·0 | | 6·5 | 16·7 | |
| 10·0 | | 8·0 | 33·5 | |
| 10·0 | | 13·5 | 26·9 | |
| 9·8 | | 45·5 | 53·9 | |
| 9·5 | | 46·0 | 7·1 | 9·0 |
| 9·4 | | 49·5 | 55·6 | 10·0 |
| 9·4 | | 53·5 | 32·3 | 9·0 |
| 9·8 | | 55·5 | 4·5 | 9·0 |
| 10·0 | 40 | 2·0 | 47·2 | |
| 9·7 | | 13·5 | 23·9 | |
| 10·0 | | 26·5 | 35·6 | |
| 10·0 | | 33·5 | 42·8 | |
| 9·8 | | 40·0 | 42·9 | |
| 9·8 | | 45·5 | 1·9 | |

### 3841—3900.

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|---|---|---|---|---|
| 10·0 | 40 | 46·5 | 36·1 | |
| 10·0 | | 56·0 | 14·9 | |
| 8·4 | 41 | 2·5 | 21·7 | 9·2 |
| 9·2 | | 5·5 | 54·9 | 9·5 |
| 9·5 | | 5·5 | 30·9 | 9·5 |
| 10·0 | | 20·8 | 49·9 | |
| 10·0 | | 21·0 | 27·9 | |
| 10·0 | | 24·8 | 20·1 | 9·5 |
| 10·0 | | 30·5 | 58·8 | |
| 10·0 | | 31·3 | 57·9 | |
| 10·0 | | 32·0 | 50·1 | |
| 10·0 | | 35·7 | 54·9 | |
| 10·0 | | 39·0 | 32·5 | |
| 9·8 | | 46·2 | 53·7 | 10·0 |
| 9·6 | | 50·2 | 36·1 | |
| 9·1 | 42 | 2·3 | 43·4 | |
| 9·9 | | 9·5 | 53·9 | |
| 9·4 | | 11·7 | 8·9 | |
| 9·8 | | 18·0 | 12·4 | |
| 9·0 | | 20·5 | 31·9 | 9·8 |
| 9·4 | | 20·7 | 36·9 | |
| 9·6 | | 27·8 | 59·2 | |
| 9·8 | | 51·5 | 39·1 | |
| 10·0 | | 55·2 | 19·4 | |
| 9·2 | 43 | 3·0 | 15·6 | |
| 10·2 | | 28·5 | 37·2 | |
| 9·9 | | 35·0 | 5·0 | |
| 8·5 | | 37·5 | 34·5 | 9·0 |
| 9·9 | | 40·5 | 5·3 | |
| 10·2 | | 56·0 | 41·1 | |
| 10·0 | | 58·0 | 16·2 | |
| 9·4 | | 58·5 | 45·8 | |
| 9·5 | | 59·3 | 1·6 | |
| 9·6 | 44 | 1·0 | 51·9 | 9·3 |
| 8·5 | | 3·0 | 39·4 | 9·0 |
| 9·7 | | 18·0 | 46·0 | |
| 8·7 | | 20·0 | 4·3 | 9·0 |
| 10·2 | | 23·8 | 58·1 | |
| 9·6 | | 26·0 | 51·0 | 9·2 |
| 10·2 | 45 | 9·8 | 57·4 | |
| 10·2 | | 14·5 | 58·9 | |
| 9·7 | | 20·5 | 37·3 | |
| 10·2 | | 24·0 | 10·9 | |
| 10·0 | | 31·0 | 30·7 | |
| 10·2 | | 42·0 | 28·4 | |
| 9·8 | | 42·5 | 24·9 | |
| 9·4 | | 44·5 | 48·0 | 10·0 |
| 9·8 | | 52·5 | 16·9 | |
| 9·8 | | 55·5 | 5·9 | |
| 8·5 | | 59·0 | 21·3 | 8·5 |
| 9·1 | 46 | 0·5 | 28·6 | |
| 9·0 | | 11·5 | 53·5 | |
| 10·2 | | 14·0 | 33·1 | |
| 10·2 | | 21·0 | 45·9 | |
| 9·6 | | 34·0 | 57·1 | |
| 9·2 | | 39·5 | 12·7 | |
| 9·0 | | 41·5 | 52·4 | 9·5 |
| 10·0 | | 51·5 | 35·9 | |
| 9·6 | | 53·5 | 47·9 | |
| 9·5 | 47 | 0·0 | 36·9 | 9·0 |

### 3901—3960.

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|---|---|---|---|---|
| 10·2 | 47 | 1·8 | 59·0 | |
| 9·9 | | 3·5 | 27·2 | |
| 9·8 | | 23·0 | 11·9 | |
| 9·7 | | 24·5 | 47·0 | |
| 9·2 | | 29·0 | 37·1 | |
| 10·2 | | 33·5 | 28·0 | |
| 10·2 | | 43·0 | 9·2 | |
| 8·8 | | 43·0 | 51·0 | 9·5 |
| 9·8 | | 43·0 | 52·8 | |
| 9·8 | | 45·5 | 32·1 | |
| 9·2 | | 55·0 | 50·8 | |
| 9·4 | | 58·5 | 36·1 | 9·0 |
| 10·2 | 48 | 1·0 | 4·7 | 9·0 |
| 10·2 | | 7·0 | 35·4 | |
| 10·2 | | 7·0 | 45·7 | |
| 10·2 | | 14·5 | 39·8 | |
| 9·8 | | 20·5 | 16·9 | |
| 9·5 | | 30·5 | 43·8 | |
| 9·7 | | 34·5 | 42·7 | |
| 9·4 | | 34·5 | 44·3 | |
| 9·8 | | 34·8 | 2·4 | |
| 9·1 | | 38·0 | 26·0 | |
| 8·9 | | 42·5 | 30·6 | 9·0 |
| 9·8§ | | 48·0 | 33·5 | 9·0 |
| 10·0 | | 56·0 | 10·9 | |
| 9·8 | | 57·0 | 4·0 | 9·5 |
| 9·1 | 49 | 1·5 | 26·6 | |
| 9·6 | | 13·0 | 43·9 | |
| 10·0 | | 16·5 | 50·9 | |
| 10·2 | | 17·5 | 36·9 | |
| 9·5 | | 17·5 | 55·5 | 9·5 |
| 10·2 | | 19·5 | 37·8 | |
| 10·2 | | 21·5 | 5·9 | |
| 9·9 | | 48·0 | 51·0 | |
| 9·0 | | 49·0 | 34·4 | 9·5 |
| 9·4 | | 58·0 | 22·3 | |
| 9·5 | 50 | 3·0 | 52·9 | |
| 10·0 | | 9·5 | 41·9 | |
| 8·4 | | 10·5 | 7·5 | 8·8 G |
| 10·0 | | 10·5 | 21·8 | |
| 9·2 | | 12·5 | 42·7 | 9·5 |
| 9·6 | | 23·0 | 10·0 | |
| 9·6 | | 42·0 | 30·2 | |
| 10·2 | | 53·0 | 50·5 | |
| 10·0 | | 59·0 | 26·8 | |
| 10·0 | 51 | 3·0 | 4·7 | |
| 9·6 | | 4·5 | 3·2 | |
| 10·2 | | 21·0 | 24·6 | |
| 9·0 | | 21·5 | 52·1 | 9·3 |
| 10·2 | | 23·0 | 37·9 | |
| 10·0 | | 23·0 | 7·0 | |
| 8·9 | | 28·5 | 55·1 | |
| 10·2 | | 30·5 | 6·9 | |
| 9·9 | | 30·5 | 48·7 | |
| 10·2 | | 45·0 | 48·0 | |
| 10·0 | | 48·6 | 1·9 | |
| 10·2 | | 49·0 | 54·5 | |
| 8·0 | | 49·0 | 53·8 | 8·0 |
| 9·8 | | 49·5 | 7·9 | |
| 10·2 | | 50·5 | 25·9 | |

### 3961—4020.

| mag. | 11h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·9 | 51 | 52·5 | 51·0 | |
| 10·0 | | 53·0 | 17·4 | |
| 10·2 | 52 | 0·0 | 0·9 | |
| 9·0 | | 0·5 | 35·7 | 9·5 |
| 10·2 | | 0·5 | 43·5 | |
| 9·4 | | 0·5 | 44·1 | |
| 10·2 | | 6·0 | 42·8 | |
| 10·2 | | 8·0 | 26·6 | |
| 9·9 | | 12·0 | 32·3 | |
| 9·3 | | 14·0 | 55·6 | 9·5 |
| 10·0 | | 18·2 | 47·6 | |
| 10·2 | | 19·2 | 54·5 | |
| 10·2 | | 20·0 | 52·9 | |
| 9·5 | | 21·0 | 55·2 | 8·8 |
| 9·5 | | 21·5 | 21·6 | |
| 9·8 | | 23·5 | 19·6 | |
| 10·0 | | 26·0 | 37·1 | |
| 8·4 | | 29·8 | 57·1 | 9·0 |
| 10·2 | | 30·2 | 33·8 | |
| 10·2 | | 30·2 | 35·5 | |
| 10·2 | | 30·2 | 16·9 | |
| 9·6 | | 30·5 | 28·9 | |
| 10·2 | | 31·2 | 35·9 | |
| 9·4 | | 33·0 | 48·9 | |
| 10·2 | | 33·2 | 45·6 | |
| 10·0 | | 34·2 | 38·7 | |
| 10·2 | | 37·5 | 58·3 | |
| 9·6 | | 43·5 | 32·9 | |
| 9·5 | | 58·5 | 14·9 | |
| 10·0 | | 59·0 | 56·6 | |
| 9·9 | | 59·0 | 28·2 | |
| 10·2 | 53 | 12·5 | 2·1 | |
| 9·2 | | 18·5 | 17·9 | |
| 9·2 | | 22·5 | 29·8 | |
| 9·0 | | 24·5 | 56·9 | 9·5 |
| 10·2 | | 29·0 | 11·6 | |
| 8·9 | | 31·5 | 42·8 | |
| 9·2 | | 42·5 | 11·6 | 9·5 |
| 9·9 | | 43·0 | 43·0 | |
| 9·4 | | 46·0 | 55·4 | |
| 9·6 | | 47·2 | 6·4 | |
| 9·2 | | 49·0 | 42·9 | |
| 10·0 | | 50·2 | 17·5 | |
| 10·2 | 54 | 3·0 | 0·9 | |
| 9·6 | | 6·5 | 31·9 | |
| 9·7 | | 9·0 | 42·4 | |
| 9·7 | | 10·5 | 8·9 | |
| 9·6 | | 21·5 | 52·2 | |
| 10·0 | | 26·5 | 15·3 | |
| 9·6 | | 30·0 | 4·2 | 9·5 |
| 10·2 | | 38·0 | 38·4 | |
| 10·2 | | 40·0 | 9·7 | |
| 8·7 | | 40·5 | 53·8 | 9·2 |
| 9·8 | | 40·5 | 56·8 | 9·5 |
| 9·6 | | 42·5 | 50·2 | 9·5 |
| 10·2 | | 53·2 | 53·9 | |
| 10·2 | 55 | 1·5 | 4·0 | |
| 10·0 | | 2·0 | 39·5 | |
| 9·5 | | 3·0 | 9·1 | 9·5 |
| 8·8 | | 4·5 | 12·8 | 9·0 G |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 11 | 30 | 70 | 8·3 |
| | 40 | 72 | 8·3 |
| | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |

§ Missing on Check Plate. The Star is variable = W Centauri.

| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |

## 4021—4080.

| mag. | 11h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 55 | 7·5 | 27·7 | |
| 10·2 | | 17·5 | 34·4 | |
| 9·7 | | 21·0 | 34·0 | |
| 9·4 | | 32·0 | 56·1 | 9·5 |
| 9·6 | | 33·5 | 41·2 | |
| 9·7 | | 43·0 | 39·8 | |
| 9·8 | | 45·0 | 13·3 | |
| 10·0 | | 50·2 | 49·7 | |
| 9·0 | | 54·5 | 30·1 | 9·5 |
| 10·0 | 56 | 1·5 | 44·4 | |
| 10·2 | | 11·0 | 49·7 | |
| 9·8 | | 11·5 | 8·7 | |
| 8·9 | | 12·0 | 38·3 | 9·5 G |
| 9·9 | | 13·0 | 36·0 | |
| 10·2 | | 24·5 | 45·1 | |
| 9·5 | | 38·5 | 44·6 | |
| 10·0 | | 39·0 | 16·6 | |
| 10·0 | | 44·7 | 59·5 | |
| 9·0 | | 48·3 | 58·1 | 9·5 |
| 10·2 | | 51·5 | 53·3 | |
| 9·9 | | 57·5 | 52·9 | |
| 10·0 | 57 | 16·3 | 0·7 | |
| 9·8 | | 18·5 | 19·5 | |
| 9·0 | | 19·4 | 3·0 | 9·0 |
| 10·0 | | 20·5 | 36·9 | |
| 9·6 | | 26·0 | 50·7 | |
| 10·0 | | 31·0 | 53·5 | |
| 8·5 | | 34·8 | 1·7 | 9·0 |
| 9·4 | | 41·5 | 40·6 | |
| 10·2 | | 42·0 | 2·9 | |
| 9·9 | | 43·0 | 22·7 | |
| 10·2 | | 53·0 | 16·9 | |
| 10·2 | | 57·5 | 17·9 | |
| 10·0 | | 58·0 | 3·1 | |
| 10·2 | 58 | 3·0 | 21·6 | |
| 10·2 | | 10·5 | 31·6 | |
| 9·4 | | 11·8 | 0·3 | |
| 6·8 | | 20·0 | 33·3 | 7·0 GSgt |
| 9·3 | | 20·5 | 53·2 | |
| 9·4 | | 24·0 | 10·2 | |
| 9·7 | | 26·5 | 9·9 | |
| 10·2 | | 28·5 | 5·7 | |
| 9·3 | | 29·1 | 2·2 | |
| 9·5 | | 31·5 | 55·1 | |
| 10·2 | | 36·5 | 8·9 | |
| 10·2 | | 43·0 | 44·8 | |
| 9·6 | | 46·5 | 46·8 | 9·0 |
| 10·2 | | 47·5 | 45·6 | |
| 9·3 | | 47·5 | 42·3 | |
| 9·6 | | 59·5 | 40·9 | 9·0 |
| 9·1 | 59 | 3·0 | 39·2 | |
| 9·4 | | 4·0 | 15·9 | |
| 10·2 | | 6·0 | 10·2 | |
| 10·2 | | 10·2 | 0·1 | |
| 8·7 | | 17·5 | 26·0 | 9·0 |
| 10·2 | | 33·0 | 36·9 | |
| 10·2 | | 42·5 | 38·9 | |
| 9·4 | | 50·5 | 18·9 | |
| 8·0 | | 51·5 | 26·8 | 8·0 Gg |
| 8·7 | | 54·5 | 4·0 | 9·0 |

## 4081—4140.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 0 | 1·0 | 3·5 | |
| 10·2 | | 8·0 | 42·5 | |
| 9·8 | | 20·0 | 18·3 | |
| 10·2 | | 23·5 | 58·6 | |
| 8·4 | | 25·0 | 53·7 | 9·0 |
| 9·8 | | 32·0 | 43·0 | |
| 8·6 | | 32·0 | 59·9 | 8·8 |
| 9·3 | | 35·5 | 49·7 | |
| 9·8 | | 42·5 | 36·0 | |
| 10·2 | | 51·0 | 15·9 | |
| 10·2 | 1 | 9·0 | 28·9 | |
| 10·2 | | 14·5 | 48·0 | |
| 9·4 | | 21·0 | 38·3 | |
| 8·1 | | 22·0 | 35·8 | 8·5 G |
| 8·4 | | 31·5 | 3·4 | 8·8 |
| 10·2 | | 34·0 | 41·5 | |
| 9·9 | | 36·5 | 44·6 | |
| 9·1 | | 40·0 | 33·9 | |
| 9·7 | | 40·5 | 42·6 | |
| 9·6 | | 41·5 | 36·9 | |
| 10·2 | | 57·5 | 21·0 | |
| 9·2 | 2 | 5·0 | 59·8 | |
| 9·7 | | 5·5 | 35·8 | |
| 8·6 | | 8·5 | 47·4 | 9·0 |
| 10·0 | | 11·5 | 59·9 | |
| 9·9 | | 12·0 | 22·3 | |
| 9·7 | | 18·0 | 9·6 | |
| 9·8 | | 34·0 | 46·5 | |
| 10·2 | | 39·5 | 12·9 | |
| 10·2 | | 41·5 | 52·2 | |
| 9·0 | | 44·3 | 0·9 | 9·0 |
| 10·2 | | 47·3 | 57·2 | |
| 10·2 | | 48·0 | 17·2 | |
| 10·0 | 3 | 11·0 | 12·9 | 9·5 |
| 10·2 | | 11·5 | 5·7 | |
| 10·2 | | 14·5 | 55·8 | |
| 10·0 | | 15·5 | 32·8 | |
| 10·2 | | 19·0 | 14·0 | |
| 8·9 | | 20·0 | 16·7 | 9·5 |
| 9·2 | | 21·5 | 55·8 | 10·0 |
| 9·0 | | 21·5 | 32·0 | |
| 9·1 | | 25·0 | 15·4 | 9·5 |
| 10·2 | | 25·0 | 51·7 | |
| 9·2 | | 26·0 | 48·8 | |
| 9·4 | | 30·0 | 33·3 | |
| 9·6 | | 30·5 | 7·0 | |
| 9·8 | | 35·0 | 48·2 | |
| 10·0 | | 41·0 | 43·0 | |
| 10·0 | | 41·5 | 50·0 | |
| 9·7 | | 43·0 | 50·0 | |
| 9·3 | 4 | 2·0 | 45·9 | |
| 9·8 | | 8·0 | 48·2 | |
| 8·8 | | 11·5 | 7·2 | 9·5 |
| 10·0 | | 12·5 | 50·3 | |
| 8·4 | | 13·5 | 34·9 | 8·0 |
| 10·0 | | 20·5 | 34·0 | |
| 9·0 | | 23·5 | 51·6 | 9·0 |
| 9·8 | | 25·5 | 36·7 | |
| 10·0 | | 28·0 | 44·7 | |
| 10·0 | | 31·0 | 29·4 | |

## 4141—4200.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 4 | 36·5 | 54·7 | |
| 9·0 | | 45·0 | 40·1 | |
| 10·2 | | 49·0 | 55·2 | |
| 10·2 | | 55·5 | 35·7 | |
| 9·4 | | 57·5 | 7·2 | |
| 10·2 | | 58·0 | 41·0 | |
| 8·9 | | 59·0 | 2·7 | 9·0 |
| 9·9 | 5 | 2·0 | 8·3 | |
| 10·2 | | 7·5 | 49·0 | |
| 9·6 | | 15·0 | 20·0 | |
| 8·8 | | 24·5 | 5·3 | 8·7 |
| 10·0 | | 24·5 | 16·8 | |
| 8·6 | | 29·5 | 19·2 | 9·0 |
| 10·2 | | 33·0 | 16·6 | |
| 8·7 | | 35·0 | 44·8 | 9·0 |
| 8·4 | | 36·5 | 7·4 | 9·0 |
| 10·0 | | 39·0 | 13·7 | |
| 10·0 | | 43·5 | 7·1 | 9·7 |
| 8·6 | | 47·5 | 49·1 | 8·0 G |
| 9·7 | | 49·5 | 55·0 | |
| 9·0 | 6 | 6·5 | 43·4 | 9·0 |
| 10·0 | | 8·0 | 10·6 | |
| 9·6 | | 10·5 | 56·0 | 10·0 |
| 8·4 | | 17·0 | 57·7 | 7·5 GSt |
| 9·0 | | 22·5 | 58·1 | 8·7 S |
| 9·8 | | 31·5 | 35·1 | |
| 9·1 | | 39·0 | 38·8 | |
| 9·8 | | 56·0 | 10·4 | |
| 10·2 | | 57·0 | 18·5 | |
| 10·2 | 7 | 1·0 | 4·8 | |
| 10·2 | | 5·5 | 53·8 | |
| 10·0 | | 18·0 | 4·2 | |
| 10·2 | | 21·5 | 27·1 | |
| 7·8 | | 25·5 | 42·1 | G |
| 10·0 | | 31·0 | 8·2 | |
| 8·6 | | 37·0 | 7·5 | 9·0 |
| 7·8 | | 38·0 | 10·9 | 8·5 GSt |
| 10·2 | | 38·5 | 12·9 | |
| 10·0 | | 42·5 | 36·8 | |
| 10·0 | | 42·5 | 14·0 | |
| 10·2 | | 49·5 | 9·3 | |
| 9·8 | 8 | 2·0 | 2·0 | |
| 9·4 | | 4·5 | 8·3 | 9·5 |
| 9·4 | | 5·5 | 57·9 | |
| 9·7 | | 10·5 | 29·1 | |
| 9·7 | | 15·0 | 53·2 | |
| 9·6 | | 16·0 | 49·1 | |
| 10·2 | | 18·5 | 45·0 | |
| 3·7 | | 30·0 | 3·3 | 3·2 GStrλ |
| 10·2 | | 40·5 | 52·5 | |
| 9·6 | | 49·0 | 30·3 | 9·5 |
| 8·6 | | 55·0 | 29·1 | 8·5 G |
| 10·0 | | 55·0 | 34·2 | |
| 9·1 | 9 | 29·0 | 13·5 | |
| 8·7 | | 40·5 | 4·9 | 9·5 |
| 10·2 | | 53·5 | 33·9 | |
| 8·7 | | 55·0 | 19·9 | 9·5 |
| 10·2 | 10 | 10·5 | 21·9 | |
| 10·2 | | 16·5 | 44·3 | |
| 9·2 | | 20·5 | 42·9 | |

## 4201—4260.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 10 | 21·5 | 18·9 | |
| 9·0 | 11 | 2·0 | 11·5 | 9·0 |
| 10·2 | | 24·0 | 58·7 | |
| 8·2 | | 44·5 | 55·8 | 9·0 |
| 9·9 | | 55·0 | 21·7 | |
| 8·9 | | 58·5 | 4·3 | |
| 10·2 | 12 | 7·5 | 21·6 | |
| 10·2 | | 18·0 | 57·8 | |
| 10·0 | | 20·0 | 45·8 | |
| 10·0 | | 22·0 | 41·9 | |
| 9·8 | | 28·0 | 9·9 | |
| 8·3 | | 38·0 | 35·7 | 9·0 |
| 8·8 | | 38·5 | 41·2 | |
| 10·2 | | 51·0 | 47·0 | |
| 9·6 | 13 | 7·0 | 24·4 | |
| 9·2 | | 7·0 | 33·9 | |
| 9·3 | | 9·5 | 47·3 | |
| 9·9 | | 31·5 | 36·8 | |
| 10·2 | | 33·5 | 22·8 | |
| 9·8 | | 33·5 | 35·9 | |
| 9·9 | | 39·0 | 44·2 | |
| 9·8 | | 39·5 | 39·5 | |
| 10·2 | | 59·5 | 22·5 | |
| 9·6 | 14 | 6·5 | 40·3 | |
| 9·6 | | 7·0 | 32·0 | |
| 8·2 | | 7·0 | 24·3 | 9·2 |
| 10·0 | | 8·5 | 16·9 | |
| 10·2 | | 11·5 | 55·7 | |
| 10·2 | | 13·5 | 36·7 | |
| 8·9 | | 18·5 | 8·2 | 9·0 |
| 10·2 | | 23·0 | 56·9 | |
| 10·2 | | 31·5 | 33·6 | |
| 10·0 | | 31·5 | 29·7 | |
| 10·0 | | 35·5 | 49·5 | |
| 10·0 | | 54·0 | 49·9 | |
| 10·0 | 15 | 0·0 | 28·9 | |
| 10·2 | | 2·0 | 15·9 | |
| 9·0 | | 16·0 | 31·5 | 9·0 |
| 8·9 | | 18·0 | 12·4 | |
| 10·2 | | 24·0 | 4·2 | |
| 10·2 | | 35·5 | 0·2 | |
| 9·2 | | 51·0 | 43·4 | |
| 10·2 | | 54·0 | 27·7 | |
| 10·2 | 16 | 2·5 | 56·7 | |
| 8·6 | | 4·0 | 55·7 | 8·8 |
| 9·8 | | 10·0 | 26·8 | |
| 9·5 | | 12·5 | 58·2 | |
| 10·2 | | 14·5 | 41·0 | |
| 10·2 | | 15·5 | 51·7 | |
| 10·2 | | 20·5 | 12·9 | |
| 9·8 | | 33·5 | 28·9 | |
| 9·8 | | 33·5 | 31·9 | |
| 9·8 | | 42·5 | 11·9 | |
| 8·6 | | 47·0 | 50·8 | 8·5 |
| 9·7 | | 48·5 | 46·0 | |
| 10·0 | 17 | 3·0 | 28·3 | |
| 9·2 | | 6·5 | 18·8 | |
| 10·2 | | 7·8 | 0·6 | |
| 10·2 | | 12·0 | 17·6 | |
| 10·1 | | 12·8 | 11·1 | |



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## 4261—4320.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 17 | 29·5 | 40·2 | |
| 8·6 | | 30·0 | 17·0 | 9·0 |
| 8·5 | | 42·7 | 6·2 | 8·0 |
| 9·2 | | 47·7 | 14·7 | 8·5 |
| 10·1 | 18 | 13·5 | 26·3 | |
| 9·2 | | 18·5 | 58·2 | |
| 9·1 | | 23·0 | 5·7 | 9·5 |
| 10·1 | | 26·8 | 0·7 | |
| 10·2 | | 27·7 | 34·1 | |
| 10·0 | | 28·0 | 9·5 | |
| 10·2 | | 33·5 | 10·3 | |
| 9·8 | | 49·0 | 3·0 | |
| 10·1 | | 54·0 | 48·6 | |
| 9·8 | | 54·5 | 9·0 | |
| 10·2 | 19 | 24·0 | 44·8 | |
| 10·2 | | 29·0 | 29·0 | |
| 9·7 | | 42·5 | 52·0 | |
| 9·7 | | 49·5 | 51·3 | 10·0 |
| 10·0 | | 51·0 | 53·3 | |
| 9·4 | | 54·0 | 47·3 | |
| 10·4 | | 55·0 | 35·9 | |
| 10·2 | 20 | 6·8 | 35·1 | |
| 9·7 | | 7·5 | 47·6 | |
| 10·2 | | 9·0 | 13·8 | |
| 9·8 | | 13·0 | 1·5 | |
| 9·4 | | 24·0 | 4·3 | |
| 10·1 | | 25·5 | 48·4 | |
| 9·5 | | 32·0 | 0·7 | |
| 8·3 | | 36·5 | 18·0 | 6·5 GS |
| 9·6 | | 58·0 | 10·7 | |
| 9·4 | 21 | 4·0 | 34·3 | |
| 9·7 | | 4·5 | 13·0 | |
| 10·1 | | 5·5 | 21·3 | |
| 9·7 | | 6·0 | 30·5 | 9·5 |
| 9·4 | | 7·0 | 6·3 | |
| 10·2 | | 16·5 | 35·6 | |
| 10·2 | | 20·0 | 49·3 | |
| 10·2 | | 20·0 | 47·8 | |
| 9·6 | | 26·5 | 14·3 | |
| 9·8 | | 28·5 | 24·3 | |
| 9·8 | | 28·5 | 28·3 | |
| 10·2 | | 33·0 | 27·8 | |
| 10·2 | | 36·0 | 59·8 | |
| 8·7 | | 42·0 | 8·7 | 9·0 |
| 10·2 | | 45·5 | 23·2 | |
| 10·1 | | 47·0 | 36·5 | |
| 9·8 | | 49·0 | 18·5 | |
| 9·6 | | 50·5 | 36·8 | 9·5 |
| 10·0 | | 53·0 | 37·4 | |
| 9·6 | | 58·0 | 20·6 | 9·0 |
| 10·2 | | 58·5 | 58·3 | |
| 10·2 | 22 | 1·0 | 2·9 | |
| 8·5 | | 2·6 | 2·8 | 8·5 |
| 10·2 | | 3·3 | 58·4 | |
| 10·1 | | 3·8 | 30·1 | |
| 9·7 | | 6·5 | 56·9 | |
| 10·2 | | 10·5 | 51·2 | |
| 9·6 | | 14·3 | 1·5 | |
| 9·6 | | 18·8 | 0·2 | |
| 9·8 | | 27·5 | 13·4 | |

## 4321—4380.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·1 | 22 | 30·5 | 30·9 | |
| 10·1 | | 33·0 | 22·3 | |
| 9·6 | | 36·0 | 47·7 | 8·5 |
| 8·3 | | 38·5 | 23·6 | 8·0 GS |
| 9·5 | | 46·5 | 46·7 | |
| 9·8 | | 49·5 | 19·9 | 8·0 GSt |
| 8·7 | | 55·0 | 4·9 | 9·0 |
| 9·5 | | 55·5 | 10·6 | |
| 10·2 | 23 | 0·0 | 47·6 | |
| 9·4 | | 14·0 | 15·1 | |
| 10·2 | | 16·8 | 3·0 | |
| 9·9 | | 42·5 | 46·7 | |
| 10·2 | | 44·5 | 32·2 | |
| 10·2 | | 45·0 | 39·7 | |
| 8·7 | 24 | 8·0 | 51·0 | 8·5 |
| 9·6 | | 13·5 | 2·0 | |
| 10·2 | | 17·0 | 41·7 | |
| 9·5 | | 22·5 | 18·3 | |
| 10·2 | | 26·0 | 41·7 | |
| 9·2 | | 27·0 | 34·8 | |
| 9·1 | | 37·0 | 31·1 | 9·5 |
| 9·7 | | 38·5 | 46·9 | |
| 9·4 | | 40·0 | 6·8 | |
| 7·1 | | 43·0 | 43·9 | 6·0 GSt |
| 10·2 | | 56·0 | 37·2 | |
| 10·2 | 25 | 0·0 | 40·0 | |
| 9·8 | | 15·5 | 49·4 | |
| 10·2 | | 16·0 | 24·4 | |
| 9·4 | | 17·0 | 17·4 | |
| 9·6 | | 18·0 | 23·7 | |
| 9·4 | | 22·0 | 13·4 | |
| 10·2 | | 23·5 | 11·1 | |
| 10·2 | | 40·0 | 41·2 | |
| 9·7 | | 43·5 | 55·4 | |
| 8·6 | | 57·5 | 45·2 | 9·0 |
| 9·6 | | 58·0 | 37·0 | |
| 9·8 | | 58·0 | 46·0 | |
| 10·0 | 26 | 18·0 | 50·5 | |
| 10·0 | | 21·5 | 53·4 | |
| 10·2 | | 26·5 | 59·4 | |
| 9·2 | | 31·0 | 43·3 | 10·0 |
| 9·3 | | 36·5 | 46·2 | |
| 9·2 | | 39·0 | 25·3 | |
| 10·2 | | 39·5 | 20·3 | |
| 10·2 | | 46·0 | 51·3 | |
| 9·9 | | 48·5 | 2·4 | |
| 10·1 | 27 | 0·0 | 27·7 | |
| 8·8 | | 3·0 | 34·1 | 9·0 |
| 9·6 | | 3·5 | 23·9 | |
| 10·0 | | 6·0 | 13·9 | |
| 9·4 | | 6·0 | 10·4 | |
| 9·1 | | 8·3 | 57·2 | 9·2 |
| 9·0 | | 18·4 | 1·7 | 9·5 |
| 10·2 | | 23·0 | 52·2 | |
| 9·8 | | 24·0 | 54·1 | 9·5 G |
| 10·2 | | 52·0 | 55·3 | |
| 10·2 | 28 | 2·0 | 54·4 | |
| 8·6 | | 3·0 | 41·0 | 9·5 |
| 10·2 | | 3·5 | 9·8 | |
| 9·8 | | 6·0 | 53·9 | |

## 4381—4440.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 28 | 24·0 | 27·3 | |
| 9·9 | | 24·5 | 47·4 | |
| 9·5 | | 25·0 | 53·5 | |
| 9·8 | | 42·5 | 46·9 | 10·0 |
| 10·1 | | 44·0 | 41·3 | |
| 9·4 | | 46·0 | 53·7 | |
| 9·6 | | 50·5 | 50·6 | |
| 10·1 | | 58·0 | 17·2 | |
| 10·2 | 29 | 1·5 | 4·0 | |
| 10·1 | | 6·0 | 0·5 | |
| 9·9 | | 6·5 | 12·3 | |
| 9·9 | | 8·0 | 37·2 | |
| 10·2 | | 15·5 | 33·3 | |
| 9·2 | | 22·0 | 7·0 | 9·5 |
| 10·1 | | 34·5 | 47·7 | |
| 10·2 | | 44·5 | 33·2 | |
| 10·0 | | 46·0 | 48·4 | |
| 9·6 | | 46·8 | 26·5 | |
| 10·0 | | 48·7 | 57·9 | |
| 9·7 | | 49·0 | 17·3 | |
| 9·5 | | 49·5 | 5·6 | 9·5 |
| 8·8 | | 51·0 | 49·2 | 9·2 |
| 9·8 | | 55·0 | 56·3 | |
| 9·3 | | 59·0 | 57·1 | 9·5 |
| 9·8 | | 59·2 | 58·4 | |
| 10·2 | 30 | 19·0 | 36·8 | |
| 9·9 | | 27·5 | 51·1 | |
| 10·2 | | 56·0 | 49·3 | |
| 8·9 | 31 | 12·5 | 35·8 | |
| 9·7 | | 14·5 | 50·4 | |
| 10·2 | | 16·0 | 59·3 | |
| 9·8 | | 16·5 | 33·6 | |
| 10·2 | | 20·5 | 9·1 | |
| 10·2 | | 33·0 | 37·4 | |
| 10·2 | | 33·0 | 28·1 | |
| 10·2 | | 42·0 | 27·2 | |
| 9·5 | | 45·0 | 57·3 | |
| 10·2 | | 53·0 | 50·8 | G |
| 10·0 | | 59·5 | 26·9 | |
| 9·7 | 32 | 19·0 | 49·0 | |
| 10·2 | | 32·5 | 27·0 | |
| 10·2 | | 42·5 | 4·0 | |
| 10·1 | | 49·0 | 26·3 | |
| 10·1 | | 50·0 | 55·3 | |
| 10·2 | | 52·5 | 27·4 | |
| 8·6 | | 53·0 | 54·0 | 8·9 G |
| 10·1 | 33 | 1·0 | 25·8 | |
| 10·0 | | 5·8 | 9·2 | 9·5 |
| 10·2 | | 7·5 | 38·7 | |
| 9·6 | | 30·0 | 3·6 | 9·0 |
| 9·3 | | 35·0 | 15·0 | |
| 9·4 | | 35·0 | 4·4 | 10·0 |
| 9·7 | | 39·5 | 45·1 | |
| 9·4 | | 41·5 | 57·4 | |
| 9·3 | | 42·0 | 15·0 | 9·5 |
| 9·1 | | 59·5 | 7·5 | 9·5 |
| 10·0 | 34 | 20·5 | 22·1 | |
| 9·0 | | 22·0 | 14·2 | 9·5 |
| 9·5 | | 41·5 | 35·4 | |
| 9·8 | | 45·0 | 27·3 | |

## 4441—4500.

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 34 | 45·0 | 48·3 | 10·0 |
| 10·2 | | 49·5 | 48·5 | |
| 10·2 | 35 | 5·8 | 17·0 | |
| 9·3 | | 13·0 | 16·3 | 9·0 G |
| 10·1 | | 15·8 | 20·9 | |
| 10·2 | | 16·0 | 52·6 | |
| 10·1 | | 25·0 | 53·2 | |
| 9·2 | | 39·0 | 10·1 | 9·5 |
| 10·2 | | 43·8 | 0·1 | |
| 9·5 | | 45·0 | 39·3 | |
| 10·2 | | 57·5 | 5·4 | |
| 10·1 | 36 | 2·0 | 43·1 | |
| 8·3 | | 17·0 | 13·1 | 7·2 GSt |
| 9·8 | | 22·0 | 13·1 | |
| 8·6 | | 22·0 | 38·3 | 9·0 |
| 9·7 | | 25·0 | 24·2 | 9·0 |
| 9·9 | | 30·5 | 34·5 | |
| 8·8 | | 40·5 | 39·0 | 9·5 |
| 9·4 | | 55·0 | 33·1 | |
| 9·3 | | 58·0 | 18·2 | 9·5 |
| 10·2 | 37 | 0·5 | 14·1 | |
| 10·2 | | 2·8 | 42·4 | |
| 9·8 | | 12·5 | 14·2 | |
| 9·4 | | 12·5 | 11·3 | 9·5 G |
| 10·2 | | 12·8 | 25·7 | |
| 8·6 | | 13·0 | 21·3 | 8·8 G |
| 10·0 | | 19·5 | 11·1 | |
| 9·3 | | 23·5 | 28·4 | |
| 10·0 | | 27·0 | 59·4 | |
| 9·4 | | 36·0 | 33·6 | |
| 9·6 | | 40·5 | 15·6 | 9·5 |
| 9·4 | | 48·5 | 44·2 | |
| 10·2 | | 52·5 | 16·2 | |
| 9·2 | | 55·5 | 57·2 | |
| 10·1 | | 56·0 | 32·2 | |
| 10·2 | 38 | 1·0 | 3·0 | |
| 9·4 | | 3·0 | 52·7 | |
| 10·2 | | 4·5 | 38·2 | |
| 10·2 | | 26·0 | 34·4 | |
| 10·2 | | 28·0 | 21·6 | |
| 9·8 | | 33·0 | 36·0 | |
| 10·2 | | 34·5 | 6·0 | |
| 10·2 | | 43·5 | 44·2 | |
| 10·1 | | 45·5 | 44·0 | |
| 10·2 | | 46·4 | 2·4 | |
| 10·2 | | 48·0 | 14·3 | |
| 10·0 | | 55·5 | 15·4 | |
| 9·4 | | 59·5 | 51·2 | |
| 9·3 | 39 | 4·0 | 51·0 | |
| 8·8 | | 6·5 | 26·4 | 8·7 |
| 10·0 | | 6·8 | 41·4 | |
| 9·5 | | 7·0 | 53·5 | |
| 9·8 | | 7·8 | 49·1 | |
| 9·0 | | 19·5 | 40·1 | 9·5 |
| 9·5 | | 21·0 | 40·9 | |
| 9·7 | | 24·5 | 0·8 | |
| 9·7 | | 26·0 | 16·4 | |
| 9·4 | | 32·0 | 40·2 | |
| 9·2 | | 35·5 | 38·4 | |
| 10·2 | | 38·8 | 13·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |
| | 30 | 84 | 8·3 |
| | 40 | 86 | 8·2 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | |
| 12 | 30 | 84 | 8·3 |
| | 40 | 86 | 8·2 |
| | 50 | 89 | 8·2 |
| 13 | 0 | 91 | 8·1 |
| | 10 | 93 | 8·0 |

**4501—4560.**

| mag. | 12h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·2 | 39 | 39·0 | 34·6 | |
| 10·2 | | 45·5 | 34·2 | |
| 10·2 | | 46·0 | 52·3 | |
| 8·8 | | 49·5 | 50·4 | 9·5 |
| 9·1 | | 52·0 | 28·7 | |
| 10·2 | 40 | 7·0 | 45·7 | |
| 10·0 | | 17·0 | 54·4 | |
| 10·1 | | 25·5 | 44·3 | |
| 9·4 | | 30·8 | 42·0 | 9·0 |
| 9·0 | | 31·0 | 24·1 | |
| 10·0 | | 34·0 | 53·2 | |
| 9·3 | | 38·0 | 41·3 | |
| 10·0 | | 44·0 | 25·7 | |
| 7·5 | | 44·5 | 54·7 | 8·3 GSt |
| 10·2 | | 49·0 | 41·3 | |
| 9·8 | | 53·0 | 42·8 | |
| 10·2 | 41 | 1·0 | 33·4 | |
| 10·2 | | 5·0 | 13·6 | |
| 10·2 | | 8·5 | 25·0 | |
| 9·4 | | 8·5 | 24·3 | |
| 9·3 | | 21·5 | 11·2 | 9·0 |
| 10·2 | | 28·0 | 50·1 | |
| 9·9 | | 28·5 | 33·3 | |
| 10·1 | | 48·0 | 51·7 | |
| 10·2 | | 52·5 | 58·1 | |
| 10·2 | | 53·5 | 52·6 | |
| 10·2 | | 55·0 | 36·4 | |
| 10·2 | | 56·0 | 27·5 | |
| 8·7 | 42 | 18·0 | 12·3 | 8·2 |
| 10·2 | | 18·5 | 39·1 | |
| 8·8 | | 27·0 | 18·9 | 8·5 |
| 9·2 | | 28·5 | 11·5 | 9·0 |
| 10·2 | | 34·5 | 8·9 | |
| 10·1 | | 36·0 | 42·4 | |
| 10·1 | | 47·0 | 29·8 | |
| 10·1 | | 53·3 | 52·0 | |
| 9·7 | | 54·0 | 39·3 | |
| 10·2 | | 56·0 | 39·9 | |
| 10·1 | | 56·5 | 19·5 | |
| 9·6 | 43 | 0·5 | 8·7 | |
| 10·0 | | 14·5 | 31·6 | |
| 10·2 | | 19·0 | 12·9 | |
| 10·2 | | 19·5 | 4·8 | |
| 10·2 | | 22·5 | 11·9 | |
| 9·5 | | 22·5 | 51·5 | |
| 10·1 | | 30·0 | 6·2 | |
| 10·0 | | 39·5 | 42·6 | |
| 10·1 | | 39·5 | 3·3 | |
| 10·2 | | 42·5 | 1·5 | |
| 7·9 | | 55·5 | 23·4 | 8·5 G |
| 8·7 | | 56·5 | 5·3 | |
| 9·4 | | 59·0 | 51·4 | |
| 10·2 | 44 | 5·0 | 54·1 | |
| 10·2 | | 7·5 | 16·2 | |
| 8·4 | | 14·5 | 36·0 | 8·5 G |
| 10·2 | | 18·0 | 36·5 | |
| 10·0 | | 22·0 | 7·9 | |
| 9·8 | | 31·0 | 7·3 | |
| 9·9 | | 31·0 | 40·9 | |
| 9·1 | | 36·5 | 30·1 | |

**4561—4620.**

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|---|---|---|---|---|
| 9·4 | 44 | 41·2 | 58·4 | 8·8 |
| 9·2 | | 53·0 | 18·6 | |
| 9·5 | | 55·5 | 17·0 | |
| 10·2 | | 59·0 | 27·4 | |
| 10·2 | 45 | 3·0 | 3·4 | |
| 9·6 | | 3·3 | 23·1 | |
| 8·3 | | 4·5 | 4·2 | 8·2 |
| 10·2 | | 6·5 | 23·4 | |
| 8·8 | | 18·0 | 33·7 | 9·0 |
| 9·8 | | 18·0 | 55·8 | |
| 9·6 | | 22·5 | 25·3 | |
| 10·2 | | 51·0 | 25·1 | |
| 10·2 | | 51·0 | 5·4 | |
| 10·1 | | 54·0 | 56·4 | |
| 10·1 | 46 | 2·5 | 29·8 | |
| 9·1 | | 5·5 | 21·3 | 8·2 |
| 10·0 | | 16·5 | 26·2 | |
| 9·3 | | 22·0 | 39·0 | 9·0 |
| 9·4 | | 39·5 | 12·2 | |
| 9·8 | | 39·5 | 30·5 | |
| 9·4 | | 45·5 | 32·7 | |
| 10·2 | | 54·5 | 32·4 | |
| 9·2 | 47 | 2·5 | 37·4 | |
| 5·1 | | 13·0 | 28·0 | 5·5 GSr |
| 9·8 | | 17·0 | 51·4 | |
| 10·2 | | 22·0 | 13·4 | |
| 10·2 | | 23·0 | 14·6 | |
| 10·0 | | 30·5 | 33·5 | 10·0 |
| 8·7 | | 43·5 | 20·3 | 9·0 G |
| 9·3 | | 45·5 | 6·5 | 9·0 |
| 10·0 | | 48·0 | 14·6 | |
| 10·2 | | 54·5 | 7·3 | |
| 9·0 | 48 | 11·5 | 20·4 | 9·5 |
| 9·6 | | 15·0 | 20·3 | |
| 10·2 | | 20·0 | 53·9 | |
| 10·2 | | 25·0 | 32·0 | |
| 9·4 | | 38·5 | 42·1 | |
| 9·4 | | 49·0 | 36·9 | |
| 9·2 | | 52·5 | 10·9 | 9·5 |
| 10·2 | | 58·5 | 2·7 | |
| 8·7 | 49 | 5·0 | 49·0 | 9·0 |
| 9·8 | | 5·5 | 13·3 | |
| 10·1 | | 5·8 | 55·8 | |
| 9·4 | | 10·5 | 32·0 | |
| 9·7 | | 20·5 | 42·0 | 9·0 |
| 9·8 | | 24·0 | 24·5 | |
| 8·6 | | 33·0 | 21·3 | 9·1 |
| 9·5 | | 38·0 | 20·7 | |
| 10·2 | | 40·0 | 18·4 | |
| 10·2 | | 55·0 | 38·3 | |
| 10·2 | 50 | 3·0 | 39·2 | |
| 8·8 | | 14·0 | 28·3 | |
| 10·2 | | 30·8 | 24·8 | |
| 9·8 | | 31·5 | 56·3 | |
| 8·5 | | 33·0 | 24·4 | 9·0 |
| 8·8 | | 49·0 | 10·0 | 9·0 |
| 8·8 | | 55·5 | 34·4 | |
| 9·7 | 51 | 5·0 | 14·2 | |
| 10·2 | | 18·0 | 50·2 | |
| 9·6 | | 21·5 | 7·9 | |

**4621—4680.**

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|---|---|---|---|---|
| 9·0 | 51 | 24·0 | 9·6 | 9·5 |
| 10·2 | | 25·0 | 46·2 | |
| 9·8 | | 39·0 | 19·8 | |
| 9·8 | | 55·0 | 16·4 | |
| 9·4 | 52 | 5·3 | 59·4 | |
| 9·5 | | 6·5 | 52·3 | |
| 9·7 | | 9·5 | 13·4 | |
| 9·5 | | 17·5 | 7·3 | |
| 9·2 | | 23·5 | 55·4 | |
| 10·2 | | 24·0 | 57·1 | |
| 10·2 | | 35·0 | 21·7 | |
| 10·2 | | 37·5 | 55·1 | |
| 9·8 | | 40·0 | 55·1 | |
| 10·2 | | 44·5 | 4·1 | |
| 9·2 | | 49·0 | 12·2 | 8·0 G |
| 8·6 | | 54·0 | 16·4 | 8·5 |
| 9·8 | | 56·0 | 36·3 | |
| 8·6 | | 56·5 | 4·8 | 9·0 |
| 8·8 | 53 | 2·0 | 54·3 | |
| 9·3 | | 13·0 | 55·3 | |
| 9·4 | | 17·7 | 2·8 | 9·0 |
| 9·1 | | 31·5 | 4·1 | |
| 9·0 | | 42·0 | 47·1 | 9·5 |
| 9·2 | | 46·0 | 50·0 | |
| 10·1 | | 53·0 | 53·4 | |
| 9·5 | | 56·2 | 4·1 | 9·5 |
| 9·7 | 54 | 7·0 | 7·3 | |
| 10·1 | | 7·5 | 3·3 | |
| 9·8 | | 8·0 | 25·6 | |
| 9·2 | | 12·7 | 28·4 | |
| 9·8 | | 15·5 | 55·6 | |
| 9·8 | | 31·8 | 59·4 | |
| 9·8 | | 33·0 | 31·4 | |
| 9·9 | | 36·5 | 42·6 | |
| 9·4 | | 52·5 | 43·9 | |
| 10·0 | 55 | 8·0 | 2·2 | |
| 10·1 | | 10·5 | 1·5 | |
| 9·1 | | 15·5 | 26·2 | 9·0 |
| 8·5 | | 29·2 | 56·3 | 8·5 |
| 8·5 | | 45·0 | 55·7 | 8·5 |
| 8·9 | | 52·5 | 31·9 | |
| 10·0 | | 55·0 | 2·8 | |
| 9·2 | | 58·0 | 19·5 | |
| 10·0 | 56 | 9·5 | 53·6 | |
| 10·0 | | 15·5 | 27·4 | |
| 9·6 | | 16·0 | 16·8 | |
| 9·7 | | 17·0 | 46·4 | |
| 8·4 | | 19·0 | 18·0 | 8·2 G |
| 9·1 | | 20·0 | 51·4 | 9·5 |
| 10·1 | | 29·0 | 30·6 | |
| 9·3 | | 38·5 | 7·7 | |
| 10·0 | | 41·2 | 27·6 | |
| 10·1 | 57 | 1·5 | 27·1 | |
| 10·1 | | 17·5 | 47·2 | |
| 9·9 | | 22·5 | 10·5 | |
| 9·2 | | 31·5 | 59·4 | 8·8 G |
| 9·2 | | 35·0 | 24·8 | |
| 10·1 | | 41·0 | 31·8 | |
| 9·2 | | 52·0 | 36·6 | 9·5 |
| 9·6 | | 59·0 | 47·6 | |

**4681—4740.**

| mag. | 12h.–13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·1 | 58 | 1·0 | 28·8 | |
| 9·0 | | 46·0 | 30·2 | 9·5 |
| 8·5 | | 49·5 | 55·4 | |
| 9·8 | | 52·5 | 11·0 | |
| 9·6 | | 55·5 | 25·9 | |
| 9·8 | | 58·5 | 26·6 | |
| 9·0 | 59 | 6·0 | 56·8 | 9·5 |
| 8·2 | | 8·5 | 46·4 | 8·0 GS |
| 10·1 | | 19·5 | 57·8 | |
| 9·8 | | 20·0 | 42·4 | 9·0 |
| 8·4 | | 24·5 | 8·2 | 7·8 GS |
| 10·1 | | 25·0 | 25·4 | |
| 10·0 | | 28·0 | 41·7 | |
| 9·0 | | 28·0 | 5·6 | 9·5 |
| 10·1 | | 29·2 | 41·7 | |
| 9·6 | | 35·0 | 3·4 | |
| 10·0 | | 40·0 | 11·3 | |
| 10·0 | | 45·5 | 17·3 | |
| 8·8 | | 56·0 | 11·4 | 9·5 |
| 9·6 | | 59·5 | 23·8 | |
| 10·0 | 0 | 12·0 | 47·5 | |
| 9·6 | | 12·0 | 50·6 | |
| 10·1 | | 30·0 | 14·1 | |
| 10·0 | | 41·2 | 22·4 | |
| 9·8 | | 55·5 | 33·1 | |
| 9·6 | 1 | 14·0 | 58·6 | |
| 8·9 | | 16·8 | 58·4 | 9·0 |
| 9·9 | | 27·9 | 0·4 | |
| 9·4 | | 28·0 | 10·4 | |
| 9·7 | | 28·0 | 8·9 | |
| 10·1 | | 37·2 | 53·8 | |
| 9·9 | | 42·5 | 40·0 | |
| 8·9 | | 49·0 | 4·6 | 9·0 |
| 9·8 | | 57·0 | 53·7 | |
| 9·8 | 2 | 0·0 | 7·2 | |
| 9·8 | | 9·2 | 0·8 | |
| 9·0 | | 16·5 | 31·2 | |
| 10·1 | | 16·5 | 34·2 | |
| 9·8 | | 25·5 | 0·7 | |
| 9·1 | | 39·0 | 28·4 | |
| 9·6 | | 48·5 | 12·8 | |
| 9·1 | 3 | 25·0 | 2·6 | 9·5 |
| 8·1 | | 35·5 | 54·6 | 8·0 G |
| 10·1 | | 37·2 | 4·7 | |
| 8·6 | | 43·5 | 0·8 | 8·8 |
| 9·8 | | 45·5 | 44·0 | |
| 8·6 | | 58·5 | 31·4 | 9·0 |
| 9·2 | 4 | 24·5 | 10·9 | 9·0 |
| 9·8 | | 27·5 | 15·5 | |
| 10·1 | | 37·5 | 11·9 | |
| 9·8 | | 40·0 | 52·6 | |
| 10·0 | | 43·0 | 8·1 | |
| 9·2 | | 43·0 | 54·6 | t |
| 10·1 | 5 | 28·5 | 14·3 | |
| 10·1 | | 28·5 | 22·2 | |
| 9·8 | | 30·0 | 51·6 | |
| 9·8 | | 32·0 | 35·6 | |
| 7·7 | 6 | 27·5 | 1·4 | 6·5 GSt |
| 8·4 | | 28·5 | 7·3 | 8·5 |
| 6·1 | | 30·5 | 26·0 | 6·0 GSctr |



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### 4741—4800.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·9 | 6 | 31·3 | 42·5 | 9·5 |
| 10·1 | | 33·0 | 51·2 | |
| 9·7 | | 33·6 | 41·5 | 9·5 |
| 10·1 | | 38·5 | 12·2 | |
| 9·4 | | 40·0 | 14·5 | |
| 9·8 | | 42·5 | 49·8 | |
| 9·0 | 7 | 2·0 | 9·8 | 9·5 |
| 9·8 | | 5·0 | 34·8 | |
| 10·1 | | 12·2 | 15·9 | |
| 9·9 | | 20·2 | 20·6 | |
| 9·6 | | 34·0 | 54·8 | |
| 9·4 | | 39·5 | 6·3 | |
| 9·3 | | 45·5 | 7·7 | |
| 9·8 | 8 | 3·0 | 7·0 | |
| 9·9 | | 6·5 | 48·7 | |
| 9·4 | | 9·0 | 54·3 | |
| 10·1 | | 10·2 | 11·2 | 9·5 |
| 10·0 | | 15·2 | 29·5 | |
| 10·1 | | 19·2 | 37·9 | |
| 9·8 | | 21·5 | 15·8 | |
| 10·1 | | 26·2 | 18·9 | |
| 9·8 | | 31·2 | 31·4 | |
| 8·4 | | 32·2 | 13·3 | 9·2 |
| 8·4 | | 32·5 | 28·4 | 9·0 |
| 9·0 | | 37·5 | 18·7 | |
| 9·9 | | 42·0 | 3·5 | |
| 10·1 | | 52·0 | 59·8 | |
| 9·8 | 9 | 0·0 | 24·6 | |
| 10·1 | | 22·5 | 24·6 | |
| 9·0 | | 23·0 | 6·0 | 9·5 |
| 8·5 | | 33·5 | 8·0 | 9·5 |
| 9·8 | | 41·5 | 37·6 | |
| 10·0 | | 52·2 | 34·2 | |
| 10·1 | | 55·5 | 7·6 | |
| 9·8 | 10 | 1·3 | 1·6 | |
| 10·1 | | 11·0 | 3·8 | |
| 9·8 | | 23·0 | 50·0 | |
| 9·2 | | 25·0 | 57·4 | 9·5 |
| 9·8 | | 27·0 | 36·6 | |
| 10·1 | | 47·5 | 16·7 | |
| 10·1 | | 48·0 | 19·0 | |
| 8·8 | | 49·0 | 21·0 | 9·5 |
| 10·0 | | 50·0 | 5·6 | |
| 10·0 | | 50·2 | 34·2 | |
| 10·0 | | 51·0 | 44·0 | |
| 10·1 | | 52·0 | 38·8 | |
| 10·1 | | 55·0 | 0·6 | |
| 10·1 | | 56·5 | 13·6 | |
| 9·0 | | 59·0 | 40·8 | |
| 8·1 | | 59·0 | 33·7 | 9·0 G |
| 10·1 | 11 | 1·0 | 14·1 | |
| 9·9 | | 6·0 | 54·9 | |
| 9·0 | | 6·0 | 16·1 | 9·0 |
| 9·2 | | 9·5 | 32·0 | |
| 10·0 | | 14·0 | 24·6 | |
| 9·8 | | 21·0 | 0·8 | |
| 9·6 | | 21·5 | 13·8 | |
| 8·3 | | 25·5 | 48·7 | 8·5 |
| 10·1 | | 33·3 | 48·4 | |
| 9·7 | | 33·5 | 25·4 | |

### 4801—4860.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·9 | 11 | 35·0 | 6·2 | 9·0 |
| 10·0 | | 37·0 | 7·0 | |
| 8·4 | | 37·0 | 35·0 | 8·0 Gt |
| 10·1 | | 45·5 | 17·9 | |
| 10·1 | | 52·5 | 10·6 | |
| 10·1 | 12 | 1·6 | 0·8 | |
| 9·4 | | 2·5 | 56·8 | 9·2 |
| 9·0 | | 3·5 | 41·3 | |
| 8·8 | | 12·0 | 46·8 | |
| 9·8 | | 18·5 | 49·8 | |
| 9·4 | | 25·5 | 22·9 | |
| 9·8 | | 28·0 | 54·0 | |
| 9·8 | | 30·5 | 57·1 | |
| 10·1 | | 35·5 | 24·5 | |
| 10·1 | | 38·0 | 0·6 | |
| 9·7 | | 43·3 | 20·0 | |
| 9·0 | | 55·0 | 30·5 | |
| 10·1 | 13 | 3·0 | 14·5 | |
| 10·1 | | 7·5 | 16·8 | |
| 9·6 | | 8·0 | 8·8 | |
| 9·0 | | 17·0 | 3·6 | |
| 10·1 | | 44·5 | 57·4 | |
| 9·2 | | 51·5 | 36·9 | |
| 10·1 | | 57·0 | 11·0 | |
| 9·8 | 14 | 6·8 | 0·4 | |
| 9·2 | | 16·5 | 33·8 | 9·5 |
| 10·1 | | 17·0 | 6·9 | |
| 10·1 | | 20·5 | 6·6 | |
| 10·1 | | 22·8 | 26·7 | |
| 10·1 | | 37·5 | 13·0 | |
| 10·1 | | 47·0 | 13·0 | |
| 10·1 | | 47·8 | 27·9 | |
| 9·6 | 15 | 13·5 | 34·3 | |
| 9·4 | | 16·0 | 55·8 | |
| 8·8 | | 16·5 | 19·8 | 9·2 G |
| 10·1 | | 26·5 | 5·0 | |
| 9·5 | | 33·5 | 38·1 | |
| 10·1 | | 50·5 | 40·9 | |
| 10·0 | | 50·5 | 37·2 | |
| 9·8 | | 50·8 | 25·6 | |
| 10·1 | | 52·0 | 20·8 | 9·5 |
| 9·2 | | 53·0 | 15·8 | 8·8 |
| 8·4 | 16 | 1·5 | 51·0 | |
| 9·0 | | 6·5 | 41·3 | |
| 9·0 | | 13·5 | 23·6 | 9·5 |
| 9·6 | | 20·0 | 13·8 | 9·5 |
| 10·1 | | 30·0 | 21·0 | |
| 8·4 | | 33·0 | 10·1 | 9·0 |
| 10·1 | | 42·5 | 54·8 | |
| 10·0 | | 42·8 | 26·2 | |
| 10·0 | | 46·0 | 7·9 | |
| 9·5 | | 53·5 | 50·7 | |
| 10·1 | | 53·5 | 19·3 | |
| 9·0 | | 53·5 | 34·2 | |
| 10·1 | | 59·5 | 5·4 | |
| 10·0 | 17 | 4·5 | 29·7 | |
| 10·1 | | 12·8 | 40·2 | |
| 8·4 | | 13·0 | 15·8 | 9·0 |
| 9·8 | | 20·7 | 0·4 | |
| 9·7 | | 20·8 | 50·5 | |

### 4861—4920.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 17 | 27·5 | 19·4 | |
| 8·8 | | 29·0 | 3·8 | 9·5 |
| 9·9 | 18 | 2·0 | 13·3 | |
| 9·8 | | 4·5 | 49·7 | |
| 10·1 | | 9·5 | 27·1 | |
| 10·1 | | 22·5 | 22·6 | |
| 8·9 | | 28·0 | 39·8 | |
| 10·1 | | 28·5 | 21·8 | |
| 8·8 | | 31·0 | 14·9 | 9·5 |
| 9·2 | | 34·5 | 28·2 | |
| 9·1 | | 42·0 | 16·8 | 9·0 |
| 10·0 | | 49·5 | 38·6 | |
| 9·8 | | 57·5 | 21·9 | |
| 8·8 | | 59·0 | 41·0 | |
| 10·1 | 19 | 1·0 | 25·3 | |
| 9·8 | | 1·0 | 10·7 | |
| 8·9 | | 3·5 | 35·6 | |
| 8·9 | | 7·5 | 49·2 | 9·0 |
| 8·8 | | 9·0 | 59·1 | 10·0 |
| 9·4 | | 26·0 | 22·1 | |
| 8·9 | | 28·0 | 29·9 | |
| 10·1 | | 34·5 | 58·2 | |
| 9·8 | | 39·0 | 18·7 | |
| 9·8 | | 39·0 | 8·9 | |
| 10·1 | | 40·0 | 24·0 | |
| 9·2 | | 52·5 | 15·3 | |
| 9·2 | 20 | 11·0 | 6·5 | |
| 9·6 | | 13·0 | 27·1 | |
| 8·1 | | 16·5 | 52·9 | 8·0 GSr |
| 10·1 | | 22·2 | 1·9 | |
| 9·0 | | 42·0 | 43·2 | |
| 10·1 | | 45·5 | 29·6 | |
| 8·9 | | 49·5 | 11·6 | 9·0 |
| 8·1 | 21 | 0·5 | 17·5 | 8·5 |
| 9·7 | | 0·7 | 1·6 | |
| 9·8 | | 6·0 | 23·8 | |
| 10·1 | | 11·5 | 29·9 | |
| 8·9 | | 17·5 | 23·6 | |
| 10·1 | | 20·5 | 48·5 | |
| 10·1 | | 21·5 | 22·1 | |
| 10·1 | | 25·0 | 9·8 | |
| 8·7 | | 42·5 | 44·9 | |
| 10·1 | | 50·0 | 20·5 | |
| 9·1 | | 52·5 | 53·4 | 9·8 |
| 10·1 | | 59·5 | 2·0 | |
| 9·5 | 22 | 0·0 | 19·8 | 10·0 |
| 9·8 | | 2·5 | 27·9 | |
| 8·4 | | 21·0 | 45·5 | |
| 7·9 | | 21·5 | 1·2 | 7·5 GSt |
| 9·0 | | 25·0 | 18·5 | 9·0 G |
| 10·0 | | 26·5 | 57·2 | |
| 9·3 | | 30·5 | 54·9 | |
| 10·1 | | 49·5 | 24·5 | |
| 9·0 | | 51·5 | 22·3 | 9·5 |
| 8·9 | | 52·0 | 3·5 | 9·5 |
| 9·3 | | 56·5 | 3·7 | 9·5 |
| 9·8 | | 59·5 | 54·9 | 9·5 |
| 10·1 | | 59·5 | 24·9 | |
| 10·1 | 23 | 2·0 | 22·9 | |
| 8·8 | | 8·5 | 9·8 | 8·5 |

### 4921—4980.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·1 | 23 | 21·5 | 47·4 | |
| 9·8 | | 36·0 | 15·2 | |
| 9·3 | | 42·5 | 16·9 | |
| 9·3 | | 47·5 | 0·4 | |
| 10·1 | | 49·5 | 41·1 | |
| 9·2 | 24 | 2·0 | 20·2 | G |
| 10·1 | | 4·0 | 20·5 | |
| 9·6 | | 27·0 | 39·7 | |
| 8·4 | | 43·0 | 35·8 | 9·5 |
| 9·7 | 25 | 5·0 | 40·9 | |
| 9·7 | | 8·0 | 48·1 | |
| 8·9 | | 8·0 | 54·5 | |
| 9·7 | | 18·5 | 8·8 | |
| 8·6 | | 25·5 | 31·1 | 9·5 |
| 10·1 | | 32·5 | 6·9 | |
| 10·0 | | 33·5 | 29·8 | |
| 10·1 | | 46·5 | 8·0 | |
| 9·7 | | 51·0 | 43·0 | |
| 8·6 | | 57·5 | 17·1 | 9·0 |
| 10·1 | | 58·0 | 35·8 | |
| 10·1 | 26 | 1·0 | 37·3 | |
| 9·0 | | 2·0 | 52·1 | 9·0 G |
| 8·1 | | 18·5 | 51·9 | 8·0 GSt |
| 10·0 | | 19·0 | 27·1 | |
| 9·0 | | 21·0 | 23·5 | |
| 10·0 | | 23·0 | 35·9 | |
| 10·1 | | 27·0 | 1·1 | |
| 9·0 | | 29·5 | 34·3 | |
| 10·0 | | 44·5 | 42·0 | |
| 8·1 | | 53·0 | 9·7 | 8·5 |
| 10·0 | | 53·5 | 33·3 | |
| 9·2 | | 57·0 | 6·4 | |
| 9·4 | 27 | 3·5 | 35·3 | |
| 9·6 | | 8·0 | 9·4 | |
| 10·1 | | 22·0 | 2·0 | |
| 8·4 | | 40·5 | 10·4 | 9·0 |
| 9·2 | | 41·0 | 32·7 | 8·5 |
| 9·3 | | 59·5 | 58·0 | |
| 9·7 | 28 | 0·5 | 51·4 | |
| 10·1 | | 0·5 | 24·0 | |
| 9·8 | | 3·5 | 26·2 | |
| 9·7 | | 11·0 | 51·1 | |
| 9·1 | | 13·5 | 59·5 | |
| 9·4 | | 17·0 | 50·4 | 9·5 |
| 10·1 | | 20·0 | 31·0 | |
| 10·1 | | 24·0 | 15·7 | |
| 9·1 | | 24·0 | 18·0 | 9·0 |
| 10·1 | | 25·0 | 45·0 | |
| 9·6 | | 28·5 | 44·8 | |
| 10·1 | | 36·0 | 26·7 | |
| 10·1 | | 38·5 | 49·8 | |
| 10·0 | | 50·0 | 42·8 | |
| 9·2 | | 54·0 | 30·9 | |
| 9·2 | | 55·0 | 20·0 | |
| 9·8 | 29 | 2·5 | 55·7 | |
| 9·1 | | 7·0 | 56·4 | |
| 10·1 | | 13·5 | 27·8 | |
| 9·4 | | 20·5 | 46·0 | |
| 9·4 | | 24·0 | 54·8 | |
| 8·9 | | 24·3 | 19·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 0 | 91 | 8·1 |
| | 10 | 93 | 8·0 |
| | 20 | 95 | 7·9 |
| | 30 | 98 | 7·7 |



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| 25 prec. | α + | δ − |
|---|---|---|
| h m | s | ′ |
| 13 20 | 95 | 7.9 |
| 30 | 98 | 7.7 |
| 40 | 100 | 7.6 |
| 50 | 102 | 7.4 |

## 4981—5040.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.4 | 29 | 27.7 | 26.9 | |
| 8.8 | | 39.7 | 46.2 | 9.5 |
| 9.6r | | 40.3 | 42.8 | |
| 10.0 | | 41.0 | 43.9 | |
| 9.4 | | 42.5 | 14.1 | |
| 10.0 | 30 | 11.0 | 17.5 | |
| 9.1 | | 11.8 | 6.7 | |
| 10.0 | | 13.3 | 3.7 | |
| 10.0 | | 19.5 | 41.5 | |
| 9.4 | | 21.5 | 4.3 | |
| 10.0 | | 22.5 | 19.6 | |
| 10.0 | | 29.0 | 25.2 | |
| 10.1 | | 33.3 | 45.6 | |
| 9.3 | | 33.3 | 11.7 | |
| 10.0 | | 35.5 | 25.2 | |
| 10.0 | | 36.5 | 7.7 | |
| 8.9 | | 39.0 | 8.9 | |
| 10.1 | | 41.5 | 0.8 | |
| 10.1 | | 48.5 | 56.1 | |
| 10.0 | | 51.5 | 27.9 | |
| 10.1 | 31 | 0.5 | 50.6 | |
| 10.0 | | 1.0 | 21.3 | |
| 10.0 | | 1.0 | 12.9 | |
| 9.3 | | 2.0 | 48.9 | |
| 10.0 | | 9.0 | 44.9 | |
| 9.0 | | 12.5 | 50.1 | 10.0 |
| 9.5 | | 16.5 | 18.3 | |
| 10.1 | | 18.3 | 30.9 | |
| 10.1 | | 18.5 | 11.9 | |
| 9.8 | | 21.0 | 7.1 | |
| 8.8 | | 22.0 | 4.7 | |
| 10.1 | | 24.5 | 9.9 | |
| 10.0 | | 25.0 | 34.9 | |
| 9.6 | | 25.0 | 32.4 | |
| 10.1 | | 31.0 | 39.8 | |
| 9.8 | | 41.3 | 47.8 | |
| 9.6 | | 45.0 | 39.7 | |
| 9.6 | 32 | 4.5 | 31.2 | |
| 10.0 | | 8.5 | 21.7 | |
| 10.0 | | 11.0 | 50.9 | |
| 9.7 | | 15.9 | 1.3 | |
| 9.2 | | 16.0 | 22.6 | |
| 10.1 | | 18.5 | 38.3 | |
| 9.4 | | 20.5 | 29.1 | |
| 9.6 | | 25.0 | 11.0 | |
| 9.0 | | 27.5 | 43.5 | 9.5 |
| 9.4 | | 28.5 | 10.3 | |
| 9.9 | | 32.5 | 42.9 | |
| 9.0 | | 36.0 | 37.9 | 9.5 |
| 9.4 | | 38.5 | 57.2 | |
| 9.6 | | 38.5 | 51.9 | |
| 9.8 | | 40.5 | 39.4 | |
| 10.0 | | 42.5 | 46.0 | |
| 10.0 | | 45.5 | 1.0 | |
| 9.6 | | 47.5 | 54.1 | |
| 9.6 | | 49.5 | 14.7 | |
| 9.4 | | 51.0 | 48.5 | |
| 7.9 | | 52.0 | 35.6 | 8.5 G |
| 10.0 | | 54.5 | 8.5 | |
| 10.1 | | 55.5 | 43.4 | |

## 5041—5100.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 32 | 57.5 | 45.2 | |
| 9.7 | | 58.0 | 34.5 | |
| 10.1 | 33 | 0.0 | 22.7 | |
| 9.4 | | 0.5 | 34.6 | |
| 9.9 | | 2.5 | 51.6 | |
| 9.6 | | 5.0 | 35.9 | |
| 10.1 | | 9.5 | 53.2 | |
| 10.1 | | 27.0 | 2.5 | |
| 9.2 | | 30.5 | 23.4 | |
| 10.1 | | 33.0 | 51.9 | |
| 10.0 | | 40.5 | 23.9 | |
| 8.7 | | 40.5 | 33.2 | 9.0 |
| 9.7 | | 41.0 | 42.5 | |
| 10.0 | | 41.5 | 27.2 | |
| 8.9 | | 42.5 | 2.9 | 9.0 |
| 9.0 | | 42.5 | 32.5 | 9.5 |
| 10.0 | | 42.5 | 14.5 | |
| 9.8 | | 44.0 | 10.9 | |
| 6.6 | | 44.0 | 9.3 | 6.0 GSc |
| 9.7 | | 48.5 | 12.8 | |
| 9.6 | | 49.0 | 11.9 | |
| 9.6 | | 51.0 | 17.7 | |
| 9.0 | | 56.5 | 19.1 | |
| 10.1 | | 57.5 | 46.8 | |
| 10.1 | 34 | 1.5 | 17.7 | |
| 9.0 | | 6.0 | 20.3 | 8.5 |
| 10.1 | | 16.0 | 20.5 | |
| 8.6 | | 29.5 | 22.2 | 8.5 G |
| 9.8 | | 37.5 | 39.2 | |
| 9.0 | | 39.5 | 18.8 | 9.5 |
| 9.9 | | 40.5 | 2.6 | |
| 9.8 | | 41.0 | 13.1 | |
| 10.0 | | 44.0 | 35.5 | |
| 8.8 | | 47.5 | 16.9 | |
| 10.1 | | 48.5 | 35.4 | |
| 10.1 | 35 | 3.5 | 38.8 | |
| 10.1 | | 4.0 | 49.7 | |
| 9.8 | | 6.5 | 18.9 | |
| 9.0 | | 6.7 | 1.0 | |
| 9.1 | | 7.5 | 29.5 | |
| 10.0 | | 9.0 | 58.6 | |
| 9.7 | | 10.5 | 42.9 | |
| 10.1 | | 13.5 | 53.2 | |
| 9.8 | | 16.0 | 17.7 | |
| 9.6 | | 16.5 | 6.5 | |
| 10.0 | | 20.5 | 8.3 | |
| 8.6 | | 21.5 | 25.6 | 9.5 |
| 10.0 | | 21.5 | 40.2 | |
| 9.5 | | 23.5 | 27.3 | |
| 10.1 | | 24.0 | 32.3 | |
| 9.6 | | 30.0 | 18.5 | |
| 7.4 | | 37.0 | 36.5 | 8.0 GSt |
| 10.0 | | 39.5 | 20.0 | |
| 8.4 | | 41.0 | 36.3 | 8.5 GSt |
| 10.1 | | 42.5 | 17.1 | |
| 10.0 | | 42.5 | 8.0 | |
| 9.8 | | 46.0 | 38.7 | |
| 10.0 | | 46.0 | 10.5 | |
| 10.0 | | 46.5 | 3.9 | |
| 9.4 | | 55.5 | 43.4 | |

## 5101—5160.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 35 | 57.5 | 41.5 | |
| 9.5 | 36 | 0.0 | 25.9 | |
| 10.0 | | 3.0 | 58.1 | |
| 9.4 | | 3.0 | 23.9 | |
| 9.4 | | 5.5 | 51.1 | |
| 9.0 | | 13.5 | 11.7 | |
| 10.0 | | 21.0 | 45.9 | |
| 10.0 | | 21.0 | 37.9 | |
| 10.0 | | 21.0 | 3.8 | |
| 10.0 | | 25.0 | 40.0 | |
| 9.4 | | 28.0 | 50.1 | |
| 10.0 | | 28.0 | 25.0 | |
| 10.0 | | 33.5 | 37.9 | |
| 10.0 | | 35.0 | 35.6 | |
| 9.4 | | 39.0 | 38.9 | |
| 10.0 | | 39.0 | 53.5 | |
| 9.7 | | 41.0 | 39.9 | |
| 10.0 | | 42.0 | 11.9 | |
| 9.3 | | 44.0 | 5.2 | |
| 8.6 | | 50.0 | 19.9 | 9.0 |
| 9.3 | | 51.5 | 31.9 | |
| 10.0 | | 53.0 | 32.3 | |
| 10.1 | | 57.0 | 26.8 | |
| 10.1 | | 58.0 | 59.8 | |
| 8.8 | | 59.5 | 23.7 | 9.5 |
| 10.1 | 37 | 0.0 | 26.3 | |
| 10.0 | | 3.5 | 11.2 | |
| 10.1 | | 7.5 | 58.9 | |
| 9.6 | | 9.5 | 41.9 | |
| 9.0 | | 11.5 | 11.9 | |
| 9.4 | | 15.0 | 1.2 | |
| 9.6 | | 18.0 | 20.9 | 9.5 |
| 10.0 | | 21.0 | 24.7 | |
| 10.1 | | 26.5 | 21.5 | |
| 10.0 | | 28.5 | 41.9 | |
| 9.4 | | 31.0 | 33.9 | |
| 10.1 | | 32.0 | 27.5 | |
| 9.4 | | 36.5 | 28.5 | |
| 10.0 | | 41.0 | 32.2 | |
| 9.1 | | 48.0 | 15.9 | |
| 9.1 | | 48.5 | 29.4 | |
| 10.1 | | 49.0 | 41.3 | |
| 10.0 | | 51.5 | 21.7 | |
| 10.0 | | 54.0 | 4.3 | |
| 9.6 | | 59.0 | 43.9 | |
| 10.0 | 38 | 7.5 | 42.7 | |
| 9.9 | | 12.0 | 46.6 | |
| 10.0 | | 13.5 | 34.9 | |
| 9.0 | | 14.5 | 33.9 | |
| 9.6 | | 15.0 | 9.3 | |
| 9.1 | | 15.8 | 2.2 | |
| 9.6 | | 24.5 | 28.7 | |
| 10.0 | | 24.5 | 42.3 | |
| 10.0 | | 30.5 | 42.3 | |
| 10.0 | | 34.0 | 17.6 | |
| 9.6 | | 36.0 | 25.1 | |
| 9.6 | | 39.5 | 35.9 | |
| 8.8 | | 41.5 | 47.7 | 9.5 |
| 10.1 | | 41.5 | 16.9 | |
| 9.7 | | 47.0 | 23.5 | |

## 5161—5220.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6 | 38 | 50.0 | 31.9 | |
| 9.7 | | 50.5 | 23.5 | |
| 9.5 | | 54.5 | 28.9 | |
| 9.6 | | 55.5 | 50.3 | |
| 9.0 | | 59.5 | 13.9 | |
| 9.6 | 39 | 0.5 | 24.1 | |
| 9.7 | | 4.0 | 4.9 | |
| 9.6 | | 9.0 | 10.5 | |
| 9.3 | | 27.0 | 58.5 | 9.2 |
| 9.6 | | 29.0 | 23.7 | |
| 9.6 | | 29.5 | 21.5 | |
| 9.8 | | 29.5 | 17.3 | |
| 10.1 | | 34.0 | 27.9 | |
| 9.8 | | 37.0 | 46.5 | |
| 8.8 | | 48.5 | 2.7 | |
| 9.8 | | 48.5 | 5.1 | |
| 10.1 | | 50.0 | 43.3 | |
| 9.2 | | 55.5 | 10.3 | |
| 10.0 | | 56.0 | 28.3 | |
| 10.0 | | 57.0 | 8.6 | |
| 9.7 | | 57.5 | 47.9 | |
| 10.1 | 40 | 2.0 | 23.3 | |
| 10.0 | | 3.0 | 2.0 | |
| 9.2 | | 6.5 | 4.9 | |
| 7.9 | | 12.0 | 52.3 | 8.0 GS |
| 9.6 | | 18.0 | 54.2 | |
| 8.6 | | 19.5 | 9.9 | 9.0 G |
| 9.5 | | 20.0 | 40.9 | |
| 10.0 | | 35.0 | 2.5 | |
| 10.0 | | 41.5 | 7.1 | |
| 9.9 | | 45.5 | 22.3 | |
| 10.0 | | 46.0 | 42.1 | |
| 9.7 | | 51.5 | 21.5 | |
| 10.0 | 41 | 0.0 | 52.2 | |
| 9.3 | | 6.0 | 2.3 | |
| 10.1 | | 26.0 | 6.9 | |
| 8.7 | | 29.5 | 55.9 | 9.5 |
| 10.1 | | 34.0 | 14.7 | |
| 10.1 | | 34.0 | 53.3 | |
| 10.0 | | 40.5 | 6.5 | |
| 10.1 | | 42.0 | 29.6 | |
| 9.6 | | 50.5 | 8.3 | |
| 10.0 | | 58.5 | 9.9 | |
| 8.9 | 42 | 1.5 | 47.5 | |
| 8.2 | | 2.0 | 44.7 | 9.0 |
| 10.1 | | 3.0 | 28.9 | |
| 9.0 | | 7.5 | 51.0 | |
| 9.0 | | 8.5 | 25.6 | 8.5 |
| 10.0 | | 12.5 | 33.5 | |
| 10.0 | | 12.5 | 28.9 | |
| 9.6 | | 12.5 | 27.0 | |
| 8.9 | | 13.5 | 15.9 | |
| 9.3 | | 21.5 | 25.0 | 9.5 |
| 10.1 | | 30.0 | 53.9 | |
| 9.6 | | 31.0 | 31.5 | |
| 10.0 | | 32.0 | 15.9 | |
| 10.1 | | 36.5 | 11.5 | |
| 9.7 | | 41.5 | 22.8 | |
| 10.0 | | 58.5 | 2.1 | |
| 10.0 | 43 | 3.0 | 25.0 | |



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## 5221—5280.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6 | 43 | 5.0 | 41.1 | |
| 8.9 | | 7.5 | 26.3 | |
| 10.1 | | 9.0 | 23.6 | |
| 9.4 | | 16.0 | 7.5 | |
| 10.0 | | 16.5 | 51.6 | |
| 10.1 | | 20.5 | 11.7 | |
| 9.1 | | 26.0 | 42.9 | |
| 10.0 | | 34.0 | 43.1 | |
| 9.6 | | 34.0 | 27.6 | |
| 10.0 | | 37.0 | 22.9 | |
| 10.0 | | 37.5 | 18.7 | |
| 10.0 | | 38.0 | 37.1 | |
| 10.0 | | 49.0 | 20.8 | |
| 10.0 | | 51.0 | 20.9 | |
| 10.1 | | 58.5 | 53.9 | |
| 9.6 | 44 | 1.0 | 6.9 | |
| 10.1 | | 8.5 | 57.7 | |
| 9.8 | | 8.5 | 47.9 | |
| 9.4 | | 10.5 | 29.5 | 10.0 |
| 7.9 | | 15.0 | 28.5 | 8.0 |
| 9.9 | | 27.0 | 5.5 | |
| 10.1 | | 28.0 | 6.9 | |
| 9.7 | | 30.0 | 49.5 | |
| 9.1 | | 31.5 | 4.7 | |
| 10.1 | | 38.0 | 42.9 | |
| 10.0 | | 41.5 | 38.5 | |
| 9.4 | | 51.5 | 32.3 | |
| 10.1 | | 54.0 | 41.9 | |
| 10.1 | | 58.5 | 40.9 | |
| 10.1 | 45 | 1.0 | 52.0 | |
| 10.0 | | 5.5 | 28.8 | |
| 9.7 | | 16.0 | 47.9 | |
| 10.1 | | 22.5 | 10.9 | |
| 10.0 | | 25.0 | 17.6 | |
| 9.6 | | 29.5 | 25.3 | |
| 9.6 | | 34.5 | 13.3 | |
| 10.0 | | 40.0 | 56.7 | |
| 10.0 | | 48.0 | 7.5 | |
| 9.5 | | 52.0 | 6.3 | |
| 10.1 | | [illegible]4.5 | 55.7 | |
| 9.8 | | 54.5 | 4.2 | |
| 9.2 | 46 | 5.0 | 33.7 | |
| 10.0 | | 14.0 | 47.7 | |
| 9.4 | | 15.5 | 45.3 | |
| 9.3 | | 16.5 | 40.9 | 9.5 |
| 9.6 | | 17.0 | 28.7 | |
| 9.4 | | 19.5 | 9.9 | |
| 10.1 | | 22.0 | 45.2 | |
| 10.1 | | 31.5 | 11.1 | |
| 9.2 | | 34.0 | 41.5 | |
| 9.9 | | 36.0 | 3.7 | |
| 10.0 | | 39.5 | 56.9 | |
| 9.7 | | 45.0 | 48.9 | |
| 9.0 | | 50.2 | 1.3 | |
| 10.1 | | 54.5 | 16.0 | |
| 8.9 | | 59.0 | 6.8 | |
| 9.8 | | 59.0 | 50.8 | |
| 9.6 | 47 | 1.5 | 15.9 | |
| 10.0 | | 5.0 | 10.5 | |
| 10.0 | | 9.5 | 9.9 | |

## 5281—5340.

| mag. | 13h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.5 | 47 | 18.5 | 10.7 | 9.0 |
| 8.0 | | 18.5 | 45.3 | 8.5 |
| 10.1 | | 30.5 | 8.9 | |
| 10.1 | | 34.0 | 27.9 | |
| 10.1 | | 34.5 | 39.9 | |
| 10.1 | | 34.5 | 41.2 | |
| 9.6 | | 42.5 | 28.1 | |
| 9.0 | 48 | 3.5 | 17.9 | 9.5 |
| 9.1 | | 5.0 | 15.9 | |
| 8.7 | | 15.0 | 12.5 | 9.5 |
| 9.1 | | 29.5 | 30.5 | |
| 10.1 | | 38.5 | 11.5 | |
| 10.1 | | 38.5 | 9.1 | |
| 10.0 | | 48.5 | 20.3 | |
| 9.6 | | 51.5 | 52.0 | |
| 10.0 | | 52.5 | 5.9 | |
| 9.6 | | 57.5 | 43.0 | |
| 9.6 | 49 | 11.5 | 22.5 | |
| 9.6 | | 21.5 | 3.9 | |
| 10.1 | | 33.5 | 32.8 | |
| 10.1 | | 35.5 | 18.7 | |
| 10.0 | | 50.0 | 55.2 | |
| 9.0 | | 51.5 | 7.7 | |
| 9.8 | | 52.5 | 20.9 | |
| 10.0 | 50 | 1.5 | 39.5 | |
| 9.4 | | 20.0 | 46.7 | |
| 10.1 | | 44.0 | 11.9 | |
| 10.1 | | 45.7 | 0.7 | |
| 9.1 | | 47.0 | 25.5 | |
| 10.1 | | 48.0 | 57.7 | |
| 10.1 | | 48.5 | 3.8 | |
| 9.8 | | 58.0 | 44.3 | |
| 9.4 | 51 | 0.0 | 44.6 | |
| 9.7 | | 2.7 | 2.9 | |
| 9.5 | | 8.5 | 41.0 | 9.5 |
| 9.6 | | 10.0 | 8.9 | |
| 9.6 | | 18.5 | 45.7 | |
| 8.8 | | 20.5 | 26.0 | |
| 9.0 | | 27.9 | 56.9 | |
| 9.7 | | 40.0 | 12.9 | |
| 10.1 | | 55.5 | 3.9 | |
| 9.4 | 52 | 0.5 | 0.5 | |
| 10.0 | | 21.0 | 42.7 | |
| 9.2 | | 23.5 | 52.4 | |
| 10.0 | | 50.5 | 5.9 | |
| 10.0 | 53 | 8.5 | 14.8 | |
| 10.1 | | 9.5 | 41.5 | |
| 10.0 | | 12.0 | 11.3 | 10.0 |
| 9.7 | | 19.5 | 45.9 | |
| 10.1 | | 24.5 | 9.9 | |
| 10.0 | | 25.5 | 25.9 | |
| 9.6 | | 28.0 | 38.4 | |
| 9.7 | | 50.0 | 40.9 | |
| 9.3 | 54 | 15.0 | 57.7 | |
| 8.4 | | 28.0 | 20.6 | 8.9 |
| 8.8 | | 34.0 | 38.3 | |
| 10.1 | | 51.0 | 47.9 | |
| 10.1 | 55 | 1.5 | 32.0 | |
| 9.8 | | 7.5 | 9.9 | |
| 8.6 | | 8.5 | 51.5 | 9.3 |

## 5341—5400.

| mag. | 13h.–14h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 55 | 15.0 | 0.2 | |
| 9.9 | | 24.5 | 7.7 | |
| 9.6 | | 30.5 | 6.2 | |
| 10.1 | | 35.2 | 39.2 | |
| 9.9 | | 39.5 | 16.3 | |
| 9.6 | | 45.5 | 5.5 | |
| 8.8 | | 59.5 | 17.3 | 10.0 |
| 9.6 | 56 | 7.5 | 6.7 | |
| 10.0 | | 9.5 | 50.7 | |
| 10.1 | | 11.5 | 12.9 | |
| 10.1 | | 21.5 | 47.9 | |
| 9.6 | | 45.0 | 2.3 | 9.0 |
| 10.0 | | 57.0 | 58.3 | |
| 10.0 | | 58.6 | 0.1 | |
| 10.1 | 57 | 3.5 | 46.9 | |
| 9.9 | | 12.0 | 45.9 | |
| 9.0 | | 15.0 | 41.6 | |
| 9.6 | | 31.0 | 28.7 | |
| 10.0 | | 33.0 | 46.7 | |
| 9.0 | | 38.0 | 53.4 | 8.9 |
| 9.3 | 58 | 1.5 | 13.7 | |
| 9.4 | | 1.5 | 0.7 | |
| 10.1 | | 6.5 | 1.5 | |
| 9.7 | | 7.0 | 59.8 | |
| 10.0 | | 10.0 | 53.1 | |
| 9.8 | | 18.0 | 8.3 | |
| 8.6 | | 31.5 | 54.7 | 9.2 |
| 8.6 | | 31.5 | 30.0 | 9.5 |
| 9.9 | | 48.5 | 9.1 | |
| 9.0 | | 55.0 | 36.7 | 9.2 |
| 10.0 | 59 | 21.0 | 42.3 | |
| 8.3 | | 21.5 | 3.3 | 9.0 |
| 10.1 | | 21.5 | 10.0 | |
| 9.7 | | 22.0 | 30.3 | |
| 9.8 | | 29.0 | 30.9 | |
| 10.0 | | 34.0 | 47.9 | |
| 9.4 | | 41.0 | 28.9 | 9.2 |
| 10.1 | | 45.5 | 47.9 | |
| 8.8 | | 49.5 | 20.7 | 9.2 |
| 9.5 | 0 | 1.5 | 11.1 | |
| 10.1 | | 4.0 | 56.9 | |
| 9.5 | | 5.5 | 55.9 | |
| 7.0 | | 8.5 | 40.7 | 6.8 GSt |
| 9.2 | | 11.0 | 34.5 | 9.0 |
| 9.0 | | 13.5 | 9.9 | 8.2 |
| 8.7 | | 25.0 | 2.9 | 8.8 |
| 10.0 | | 42.0 | 3.5 | |
| 8.8 | | 51.5 | 1.5 | 9.8 |
| 10.0 | | 51.5 | 37.3 | |
| 10.1 | | 54.0 | 35.9 | |
| 9.2 | 1 | 11.5 | 39.6 | |
| 9.4 | | 46.0 | 13.1 | |
| 9.6 | | 46.5 | 6.5 | |
| 10.1 | | 53.0 | 51.1 | 10.0 |
| 10.0 | | 59.5 | 27.1 | |
| 9.6 | | 59.5 | 12.9 | |
| 8.8 | 2 | 21.0 | 4.1 | 10.0 |
| 10.0 | | 25.0 | 49.9 | |
| 9.9 | | 25.0 | 10.3 | |
| 10.0 | | 39.0 | 33.2 | |

## 5401—5460.

| mag. | 14h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.8 | 3 | 0.7 | 0.9 | |
| 9.7 | | 3.5 | 24.5 | |
| 8.8 | | 5.5 | 42.5 | 9.0 |
| 9.7 | | 21.0 | 8.9 | |
| 10.0 | | 23.5 | 24.3 | |
| 9.3 | | 26.5 | 11.3 | |
| 10.0 | | 40.5 | 2.5 | |
| 9.1 | | 43.0 | 1.4 | 9.2 |
| 10.1 | | 51.5 | 28.9 | |
| 10.1 | | 53.5 | 15.7 | |
| 8.2 | | 56.5 | 47.9 | 8.0 G |
| 9.1 | 4 | 4.0 | 13.3 | |
| 10.1 | | 14.0 | 50.5 | |
| 9.1 | | 16.5 | 12.3 | |
| 10.1 | | 20.0 | 10.7 | |
| 9.0 | | 22.0 | 46.9 | 9.0 |
| 9.2 | | 26.0 | 33.0 | |
| 9.0 | | 47.0 | 17.5 | 9.0 |
| 10.1 | | 47.0 | 31.7 | |
| 8.0 | | 49.2 | 46.5 | 8.2 |
| 8.4 | | 52.5 | 8.5 | 9.0 |
| 8.6 | | 57.7 | 5.9 | 8.2 |
| 10.1 | 5 | 13.0 | 51.7 | |
| 10.1 | | 17.2 | 55.0 | |
| 9.7 | | 21.5 | 3.7 | |
| 10.2 | | 37.0 | 58.0 | |
| 10.0 | | 49.5 | 3.9 | |
| 9.8 | | 59.7 | 9.1 | |
| 10.2 | 6 | 6.8 | 16.4 | |
| 8.7 | | 21.5 | 14.0 | 9.8 |
| 8.5 | | 24.8 | 11.7 | 8.5 |
| 9.7 | | 29.5 | 29.2 | |
| 9.0 | | 34.2 | 1.1 | |
| 10.2 | | 44.5 | 22.8 | |
| 9.6 | | 49.0 | 23.8 | |
| 10.3 | | 57.0 | 32.8 | |
| 10.2 | | 57.0 | 40.2 | |
| 10.3 | 7 | 1.0 | 34.8 | |
| 10.2 | | 11.5 | 33.1 | |
| 9.3 | | 22.0 | 12.4 | 9.3 |
| 9.7 | | 36.5 | 21.8 | |
| 10.3 | | 58.0 | 4.8 | |
| 10.2 | 8 | 13.0 | 30.4 | |
| 10.2 | | 22.5 | 43.6 | |
| 9.4 | | 34.0 | 17.4 | |
| 9.9 | | 36.8 | 58.9 | 9.5 |
| 10.2 | | 37.5 | 26.4 | |
| 9.6 | | 46.0 | 32.8 | |
| 10.3 | 9 | 0.5 | 15.2 | |
| 10.2 | | 10.0 | 24.4 | |
| 9.7 | | 11.0 | 23.0 | |
| 10.3 | | 14.5 | 21.8 | |
| 9.7 | | 23.5 | 18.2 | |
| 10.2 | | 25.5 | 24.4 | |
| 9.3 | | 30.0 | 22.8 | |
| 9.2 | | 33.0 | 5.8 | |
| 10.2 | | 44.5 | 20.8 | |
| 9.7 | | 48.0 | 55.1 | |
| 9.3 | | 48.0 | 33.8 | |
| 9.4 | | 48.0 | 40.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 40 | 100 | 7.6 |
| | 50 | 102 | 7.4 |
| 14 | 0 | 104 | 7.2 |
| | 10 | 106 | 7.0 |



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25 prec.

| h m | a + s | δ − ' |
|---|---|---|
| 14 0 | 104 | 7.2 |
| 10 | 106 | 7.0 |
| 20 | 108 | 6.8 |
| 30 | 110 | 6.6 |
| 40 | 112 | 6.4 |

**5461—5520.**

| mag. | 14h. m s | −58° ' | |
|---|---|---|---|
| 10.2 | 9 49.0 | 40.8 | |
| 10.2 | 49.5 | 7.8 | |
| 9.7 | 50.5 | 41.2 | |
| 7.6 | 58.0 | 6.4 | 7.5 GSt |
| 8.0 | 58.0 | 23.4 | 8.0 |
| 9.0 | 10 4.0 | 12.8 | 9.5 |
| 8.0 | 13.5 | 46.5 | 7.5 GSt |
| 10.3 | 35.5 | 33.4 | |
| 10.2 | 38.5 | 58.8 | |
| 10.3 | 47.5 | 12.4 | |
| 10.2 | 53.5 | 46.9 | |
| 9.7 | 58.0 | 9.0 | |
| 10.2 | 11 0.0 | 17.6 | |
| 10.2 | 0.5 | 29.1 | |
| 10.3 | 3.5 | 8.1 | |
| 10.2 | 6.5 | 9.4 | |
| 10.0 | 10.0 | 26.5 | |
| 9.7 | 19.5 | 14.7 | |
| 10.0 | 20.5 | 52.4 | |
| 10.2 | 20.5 | 34.8 | |
| 8.6 | 20.5 | 37.2 | 8.0 |
| 9.6 | 26.5 | 9.4 | |
| 10.3 | 30.5 | 8.4 | |
| 8.5 | 32.5 | 52.2 | 9.0 |
| 10.2 | 39.5 | 30.8 | |
| 10.3 | 40.5 | 29.2 | |
| 9.2 | 41.0 | 32.7 | |
| 9.0 | 41.5 | 34.2 | 9.5 |
| 9.7 | 47.0 | 51.3 | |
| 8.2 | 53.0 | 19.8 | 8.7 |
| 10.3 | 12 0.0 | 51.1 | |
| 10.3 | 8.5 | 19.4 | |
| 9.8 | 33.0 | 36.6 | |
| 9.4 | 38.0 | 18.8 | |
| 8.9 | 40.5 | 14.8 | 9.2 |
| 9.0 | 52.5 | 24.6 | |
| 8.6 | 58.0 | 22.4 | 9.0 |
| 10.3 | 13 12.5 | 9.9 | |
| 9.6 | 17.0 | 34.1 | |
| 10.2 | 25.0 | 29.7 | |
| 9.6 | 36.0 | 11.3 | |
| 10.3 | 43.0 | 48.8 | |
| 10.2 | 44.0 | 9.8 | |
| 10.2 | 47.5 | 25.8 | |
| 9.8 | 47.5 | 59.6 | |
| 10.3 | 14 7.5 | 9.9 | |
| 9.5 | 9.5 | 22.8 | |
| 10.3 | 11.0 | 32.2 | |
| 9.6 | 20.5 | 22.8 | |
| 10.0 | 21.5 | 30.2 | |
| 10.3 | 28.0 | 54.4 | |
| 10.2 | 31.0 | 0.8 | |
| 10.2 | 41.0 | 0.3 | |
| 9.8 | 48.5 | 40.8 | |
| 8.9 | 49.0 | 50.8 | 9.0 |
| 10.3 | 15 10.0 | 21.5 | |
| 9.9 | 26.0 | 27.6 | |
| 9.7 | 30.5 | 48.4 | |
| 8.9 | 43.0 | 16.8 | |
| 8.9 | 48.0 | 41.6 | 9.5 |

**5521—5580.**

| mag. | 14h. m s | −58° ' | |
|---|---|---|---|
| 10.2 | 16 0.0 | 30.8 | |
| 10.3 | 1.5 | 42.8 | |
| 9.0 | 7.9 | 1.8 | |
| 9.2 | 18.0 | 47.3 | 8.5 G |
| 10.3 | 28.0 | 1.6 | |
| 9.7 | 32.0 | 39.6 | |
| 10.0 | 38.5 | 38.8 | |
| 9.8 | 48.5 | 5.8 | |
| 8.9 | 53.5 | 15.8 | 9.0 |
| 9.9 | 56.5 | 54.2 | |
| 10.3 | 58.0 | 58.4 | |
| 10.3 | 17 7.0 | 55.8 | |
| 9.8 | 9.5 | 13.8 | |
| 9.8 | 20.0 | 41.8 | |
| 9.6 | 30.5 | 28.0 | |
| 9.8 | 38.0 | 49.8 | |
| 9.3 | 40.5 | 32.8 | 9.0 |
| 8.5 | 53.0 | 40.1 | 7.5 GSt |
| 8.9 | 58.0 | 37.2 | |
| 10.2 | 18 30.0 | 39.9 | |
| 9.9 | 47.0 | 24.6 | |
| 8.9 | 50.5 | 54.6 | 9.5 |
| 10.3 | 51.0 | 32.9 | |
| 10.2 | 19 9.0 | 45.1 | |
| 10.0 | 9.5 | 6.6 | |
| 9.7 | 14.5 | 42.8 | G |
| 9.6 | 19.5 | 40.9 | |
| 10.2 | 33.0 | 47.0 | |
| 6.8 | 37.0 | 38.0 | 7.0 GSctr |
| 8.7 | 38.5 | 21.9 | 9.5 |
| 9.0 | 55.0 | 25.6 | |
| 9.7 | 20 7.5 | 54.3 | |
| 9.7 | 24.5 | 8.0 | |
| 10.2 | 29.0 | 32.9 | |
| 10.0 | 30.5 | 14.9 | |
| 10.2 | 38.5 | 18.2 | |
| 9.3 | 40.5 | 41.8 | |
| 10.0 | 45.0 | 16.3 | |
| 9.8 | 50.0 | 2.2 | |
| 10.3 | 52.5 | 19.9 | |
| 10.2 | 21 8.0 | 30.3 | |
| 10.2 | 11.5 | 37.3 | |
| 9.7 | 22.0 | 44.5 | |
| 9.8 | 28.5 | 36.0 | |
| 10.0 | 39.5 | 5.4 | |
| 10.0 | 40.5 | 20.4 | |
| 10.2 | 43.0 | 2.4 | |
| 10.2 | 45.0 | 25.0 | 9.5 |
| 10.3 | 47.0 | 15.8 | |
| 10.3 | 49.0 | 30.1 | |
| 9.2 | 54.5 | 6.9 | 9.0 |
| 10.2 | 56.0 | 15.3 | |
| 10.3 | 22 8.0 | 33.9 | |
| 9.9 | 14.0 | 36.5 | |
| 10.2 | 24.5 | 35.4 | |
| 8.6 | 38.5 | 19.9 | 9.0 |
| 9.8 | 40.5 | 54.2 | |
| 9.3 | 51.5 | 8.8 | |
| 10.0 | 54.5 | 16.9 | |
| 10.2 | 56.5 | 44.8 | |

**5581—5640.**

| mag. | 14h. m s | −58° ' | |
|---|---|---|---|
| 8.6 | 23 15.5 | 33.3 | |
| 9.5 | 17.5 | 31.8 | |
| 9.0 | 21.5 | 3.3 | 9.5 |
| 10.0 | 37.5 | 5.2 | |
| 10.2 | 44.0 | 10.6 | |
| 9.0 | 48.0 | 57.0 | |
| 9.2 | 58.5 | 25.9 | |
| 10.2 | 24 0.0 | 41.8 | |
| 8.8 | 0.5 | 6.8 | |
| 9.7 | 3.0 | 46.9 | |
| 9.0 | 5.7 | 0.3 | |
| 9.4 | 14.8 | 58.0 | |
| 10.2 | 21.0 | 25.2 | |
| 7.7 | 27.5 | 15.9 | 7.5 Gt |
| 9.7 | 29.5 | 23.9 | |
| 9.5 | 33.0 | 10.6 | 9.0 |
| 9.4 | 36.0 | 2.8 | |
| 10.2 | 36.5 | 39.9 | |
| 9.8 | 57.0 | 25.5 | |
| 10.0 | 57.5 | 45.7 | |
| 10.2 | 25 13.0 | 22.6 | |
| 10.3 | 24.5 | 8.3 | |
| 10.2 | 34.1 | 1.3 | |
| 9.0 | 40.0 | 4.7 | |
| 8.9 | 57.5 | 17.3 | |
| 9.2 | 26 3.3 | 59.3 | |
| 9.9 | 15.0 | 36.9 | |
| 9.9 | 16.0 | 51.0 | |
| 10.2 | 25.5 | 27.0 | |
| 10.0 | 30.3 | 59.4 | |
| 8.7 | 31.4 | 2.6 | |
| 10.0 | 32.0 | 38.9 | |
| 9.5 | 40.5 | 55.1 | 9.0 |
| 9.4 | 45.0 | 39.3 | |
| 8.9 | 45.0 | 34.0 | |
| 9.0 | 48.0 | 34.3 | |
| 8.4 | 48.5 | 53.2 | 9.0 |
| 10.3 | 59.0 | 18.0 | |
| 10.3 | 27 17.5 | 55.5 | |
| 8.5 | 18.5 | 44.5 | 9.0 |
| 9.0 | 29.5 | 51.9 | 8.5 |
| 10.3 | 30.5 | 28.4 | |
| 10.0 | 34.5 | 22.4 | |
| 9.6 | 38.5 | 11.6 | |
| 9.8 | 41.3 | 57.6 | |
| 10.2 | 50.5 | 25.4 | |
| 10.2 | 28 4.0 | 37.7 | |
| 10.2 | 4.5 | 43.5 | |
| 10.2 | 20.5 | 10.1 | |
| 10.3 | 27.5 | 52.7 | |
| 10.2 | 48.0 | 22.5 | |
| 9.0 | 49.5 | 36.9 | |
| 9.8 | 58.5 | 54.0 | 9.5 |
| 10.3 | 29 4.0 | 47.9 | |
| 10.3 | 17.0 | 13.1 | |
| 10.2 | 23.5 | 8.9 | |
| 10.3 | 32.0 | 49.3 | |
| 10.3 | 33.0 | 4.3 | |
| 10.2 | 37.0 | 55.4 | |
| 8.8 | 37.5 | 36.9 | 8.5 G |

**5641—5700.**

| mag. | 14h. m s | −58° ' | |
|---|---|---|---|
| 8.9 | 29 39.0 | 34.7 | 9.0 |
| 9.8 | 40.9 | 1.8 | |
| 9.9 | 44.5 | 58.8 | |
| 7.4 | 44.5 | 35.6 | 7.0 GSt |
| 10.0 | 54.5 | 14.9 | |
| 10.0 | 55.0 | 48.0 | |
| 10.0 | 30 1.0 | 57.0 | |
| 10.2 | 5.5 | 43.3 | |
| 10.2 | 16.0 | 6.6 | |
| 10.2 | 19.5 | 14.7 | |
| 10.2 | 20.5 | 35.4 | 9.0 |
| 9.7 | 35.0 | 8.7 | |
| 9.0 | 35.5 | 53.1 | |
| 9.6 | 49.5 | 14.9 | |
| 10.3 | 50.5 | 56.1 | |
| 9.8 | 53.5 | 26.2 | |
| 10.0 | 55.0 | 46.1 | |
| 10.2 | 31 0.5 | 15.2 | |
| 10.2 | 10.5 | 4.1 | |
| 8.7 | 15.0 | 47.2 | |
| 8.0 | 18.4 | 0.9 | 8.5 |
| 10.3 | 20.0 | 36.9 | |
| 10.0 | 21.0 | 32.2 | |
| 9.8 | 28.0 | 25.1 | |
| 9.5 | 30.0 | 15.0 | |
| 10.2 | 58.5 | 51.0 | |
| 8.7 | 32 5.5 | 45.4 | |
| 8.7 | 9.0 | 35.4 | 9.5 |
| 10.3 | 11.0 | 28.1 | |
| 10.2 | 14.5 | 48.3 | |
| 9.8 | 25.0 | 37.7 | |
| 7.2 | 39.0 | 4.7 | 6.5 GSt |
| 9.0 | 42.5 | 31.1 | |
| 10.3 | 33 12.5 | 30.4 | |
| 10.2 | 14.0 | 39.2 | |
| 9.2 | 21.0 | 55.6 | |
| 9.0 | 22.0 | 31.9 | |
| 10.2 | 26.5 | 38.2 | |
| 10.3 | 28.0 | 12.4 | |
| 9.6 | 35.5 | 48.3 | |
| 10.2 | 41.0 | 26.8 | |
| 9.7 | 48.5 | 6.9 | |
| 9.0 | 49.0 | 52.6 | |
| 10.3 | 34 22.0 | 58.1 | |
| 9.5 | 26.5 | 7.9 | |
| 8.0 | 30.0 | 15.5 | 8.5 |
| 10.2 | 49.0 | 7.0 | |
| 10.3 | 50.0 | 57.0 | |
| 10.2 | 54.0 | 57.1 | |
| 10.3 | 55.0 | 16.9 | |
| 9.7 | 55.5 | 34.5 | |
| 8.9 | 59.0 | 30.7 | |
| 10.3 | 35 1.0 | 29.5 | |
| 9.9 | 10.0 | 48.1 | |
| 10.2 | 27.0 | 53.2 | |
| 8.6 | 29.5 | 22.3 | |
| 9.8 | 36.0 | 57.8 | |
| 10.2 | 36.5 | 45.0 | |
| 9.4 | 45.0 | 25.7 | |
| 10.0 | 36 18.0 | 36.9 | |



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### 5701—5760.

| mag. | 14h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 36 | 19·5 | 8·3 | |
| 10·0 | | 30·5 | 26·6 | |
| 9·2 | | 37·0 | 44·1 | 9·5 |
| 9·7 | | 41·5 | 50·1 | |
| 10·3 | | 56·5 | 27·0 | |
| 10·3 | 37 | 25·5 | 58·0 | |
| 10·2 | | 51·0 | 39·0 | |
| 10·3 | | 55·5 | 59·3 | |
| 9·3 | 38 | 10·0 | 38·1 | 8·0 G |
| 9·4 | | 16·5 | 20·0 | |
| 10·2 | | 33·0 | 39·5 | |
| 10·3 | | 39·5 | 30·0 | |
| 9·6 | | 40·5 | 40·1 | 9·0 |
| 8·7 | | 48·5 | 2·8 | 7·5 G |
| 9·6 | | 49·5 | 39·8 | 8·5 |
| 10·3 | 39 | 11·0 | 52·3 | |
| 9·8 | | 14·0 | 24·0 | |
| 9·0 | | 34·5 | 7·9 | 8·5 |
| 8·5 | | 47·0 | 53·0 | 7·0 GSt |
| 10·0 | | 49·0 | 2·7 | |
| 9·0 | | 50·5 | 53·4 | 10·0 G |
| 8·9 | | 57·5 | 55·4 | 8·5 G |
| 10·3 | | 58·0 | 10·3 | |
| 8·6 | 40 | 7·5 | 36·3 | GS |
| 8·8 | | 35·5 | 48·5 | 8·5 |
| 8·3 | | 50·0 | 27·2 | |
| 9·4 | 41 | 2·0 | 46·0 | |
| 9·4 | | 15·3 | 23·0 | |
| 9·9 | | 31·5 | 34·7 | |
| 9·6 | | 37·0 | 54·8 | |
| 8·9 | | 51·1 | 58·9 | 7·0 GS |
| 9·4 | | 54·3 | 6·3 | |
| 9·9 | | 59·5 | 46·6 | |
| 9·5 | 42 | 43·5 | 53·5 | |
| 9·6 | 43 | 40·5 | 38·6 | |
| 9·4 | | 42·7 | 0·9 | |
| 9·7 | | 45·0 | 28·9 | |
| 9·9 | | 57·5 | 32·3 | |
| 9·9 | | 57·5 | 23·5 | |
| 9·2 | 44 | 20·5 | 31·9 | |
| 9·7 | | 33·0 | 0·1 | |
| 8·5 | | 39·5 | 23·6 | 8·5 |
| 9·4 | | 43·5 | 0·5 | |
| 9·5 | | 47·0 | 11·3 | |
| 9·4 | 45 | 9·0 | 20·9 | |
| 9·4 | | 13·0 | 19·9 | |
| 9·5 | | 14·0 | 5·6 | |
| 9·2 | | 17·0 | 3·2 | 9·0 |
| 9·7 | | 27·5 | 26·1 | |
| 9·9 | | 36·0 | 40·7 | |
| 9·9 | | 37·5 | 34·7 | |
| 9·4 | | 41·0 | 55·9 | |
| 9·5 | | 54·0 | 36·7 | |
| 9·9 | | 58·0 | 13·2 | |
| 9·7 | 46 | 8·0 | 42·3 | |
| 8·8 | | 8·0 | 19·8 | |
| 9·7 | | 15·5 | 22·9 | |
| 9·9 | | 41·0 | 38·1 | |
| 9·9 | | 47·0 | 37·3 | |
| 9·9 | | 59·0 | 18·3 | |

### 5761—5820.

| mag. | 14h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·0 | 47 | 5·0 | 25·3 | |
| 9·5 | | 21·5 | 15·9 | |
| 9·9 | | 41·5 | 5·5 | |
| 9·4 | | 49·0 | 50·5 | 8·5 |
| 9·2 | | 57·0 | 2·6 | |
| 9·9 | 48 | 1·0 | 4·9 | |
| 8·8 | | 1·5 | 41·7 | 9·0 |
| 9·4 | | 24·0 | 46·1 | |
| 9·8 | | 42·0 | 58·8 | |
| 9·6 | 49 | 6·5 | 32·4 | |
| 9·4 | | 37·0 | 3·5 | |
| 9·5 | | 41·5 | 35·9 | |
| 9·4 | 50 | 10·0 | 26·4 | |
| 9·7 | | 10·5 | 13·9 | |
| 9·4 | | 18·0 | 57·3 | |
| 9·0 | | 22·0 | 37·3 | |
| 8·6 | | 36·5 | 26·1 | 9·0 |
| 8·9 | | 38·0 | 25·9 | 9·5 |
| 9·9 | | 38·0 | 7·7 | |
| 9·9 | | 43·0 | 30·2 | |
| 9·9 | 51 | 32·5 | 45·9 | |
| 9·6 | | 37·5 | 4·9 | |
| 9·4 | | 59·5 | 27·9 | |
| 9·9 | 52 | 2·0 | 58·9 | |
| 9·6 | | 4·0 | 37·9 | |
| 9·8 | | 5·0 | 38·7 | |
| 9·6 | | 7·0 | 57·1 | |
| 9·7 | | 28·0 | 13·5 | |
| 9·2 | | 43·7 | 59·9 | |
| 9·9 | | 49·0 | 47·9 | |
| 9·2 | 53 | 29·0 | 4·3 | |
| 9·2 | | 39·0 | 12·3 | |
| 9·8 | | 49·5 | 2·0 | |
| 9·9 | 54 | 3·0 | 43·4 | |
| 9·6 | | 18·5 | 44·9 | |
| 9·6 | | 38·0 | 17·5 | |
| 9·0 | | 47·5 | 42·9 | |
| 9·2 | 55 | 4·0 | 5·3 | |
| 9·9 | | 5·0 | 50·9 | |
| 9·9 | | 14·0 | 46·0 | |
| 9·4 | | 16·5 | 3·7 | |
| 9·6 | | 17·0 | 45·3 | |
| 9·4 | | 59·8 | 57·8 | |
| 9·9 | 56 | 17·0 | 9·9 | |
| 9·6 | | 17·0 | 10·9 | |
| 9·0 | | 24·0 | 31·3 | |
| 9·7 | | 53·5 | 55·9 | |
| 9·7 | 57 | 23·5 | 9·9 | |
| 9·4 | | 30·5 | 28·9 | |
| 9·2 | | 37·0 | 46·9 | |
| 9·5 | | 37·5 | 19·5 | |
| 9·7 | | 50·0 | 53·7 | |
| 9·8 | | 58·0 | 46·7 | |
| 9·8 | 58 | 4·0 | 50·5 | |
| 8·8 | | 4·0 | 54·2 | 8·8 |
| 9·7 | | 12·5 | 4·8 | |
| 9·2 | | 16·5 | 3·9 | |
| 9·2 | | 23·0 | 15·9 | |
| 9·6 | | 26·0 | 32·2 | |
| 8·3 | | 35·5 | 13·0 | 8·5 |

### 5821—5880.

| mag. | 14h.–15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·2 | 58 | 44·0 | 12·8 | 8·5 |
| 9·8 | | 57·5 | 39·0 | |
| 9·9 | 59 | 5·5 | 3·8 | |
| 9·4 | | 8·5 | 5·6 | |
| 8·2 | | 11·0 | 39·4 | 7·0 GSt |
| 9·0 | | 15·5 | 7·6 | 9·5 |
| 9·9 | | 21·5 | 55·4 | |
| 9·7 | | 26·5 | 33·0 | |
| 9·2 | | 30·5 | 20·0 | |
| 9·9 | | 34·0 | 55·3 | |
| 9·7 | | 36·0 | 4·3 | |
| 8·8 | 0 | 3·5 | 47·3 | |
| 9·0 | | 30·5 | 36·2 | |
| 9·9 | | 52·8 | 1·8 | |
| 9·4 | 1 | 16·5 | 56·0 | |
| 9·4 | | 17·0 | 16·0 | |
| 9·8 | | 27·0 | 58·1 | |
| 8·9 | | 29·5 | 23·6 | 9·5 |
| 9·2 | | 31·0 | 55·2 | 9·0 |
| 9·2 | | 32·0 | 55·0 | |
| 8·6 | | 49·0 | 56·6 | 8·8 |
| 9·4 | | 53·0 | 41·0 | |
| 9·5 | 2 | 21·0 | 9·2 | |
| 9·7 | | 37·0 | 27·1 | |
| 9·6 | | 41·5 | 11·2 | |
| 9·4 | | 42·0 | 48·4 | |
| 9·5 | | 50·5 | 35·4 | |
| 9·5 | | 57·5 | 4·4 | |
| 9·4 | 3 | 2·0 | 47·0 | |
| 9·6 | | 14·5 | 26·6 | |
| 8·9 | | 24·0 | 22·1 | |
| 9·9 | | 29·0 | 40·2 | |
| 9·0 | | 44·5 | 44·0 | |
| 9·4 | 4 | 13·5 | 8·2 | |
| 9·0 | | 17·0 | 9·0 | |
| 9·2 | | 24·0 | 47·4 | |
| 9·6 | | 33·0 | 51·0 | |
| 9·0 | | 36·5 | 3·0 | 9·0 |
| 9·2 | | 43·5 | 9·0 | |
| 9·9 | 5 | 22·0 | 27·4 | |
| 9·0 | | 24·5 | 28·4 | |
| 8·8 | | 28·0 | 15·7 | 9·0 |
| 9·4 | | 30·5 | 6·3 | |
| 9·9 | | 31·5 | 45·9 | |
| 9·9 | | 34·0 | 43·6 | |
| 8·1 | | 36·5 | 36·2 | 8·0 G |
| 9·8 | | 38·0 | 43·3 | |
| 9·9 | | 45·0 | 3·8 | |
| 9·6 | | 47·5 | 56·0 | |
| 8·4 | 6 | 0·5 | 44·8 | 9·0 |
| 9·9 | | 8·0 | 53·0 | |
| 9·6 | 7 | 39·0 | 31·4 | |
| 9·4 | | 40·0 | 15·8 | |
| 9·1 | | 43·5 | 35·2 | |
| 5·2 | | 43·5 | 19·9 | 5·0 GSct |
| 9·8 | | 52·0 | 22·1 | |
| 9·7 | 8 | 7·5 | 45·9 | |
| 8·6 | | 12·0 | 11·5 | 9·0 |
| 9·6 | | 25·5 | 58·5 | |
| 8·6 | | 34·0 | 13·8 | 9·0 |

### 5881—5940.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·9 | 8 | 40·0 | 56·6 | 8·5 |
| 9·9 | 9 | 12·5 | 35·0 | |
| 9·8 | | 14·5 | 57·5 | |
| 9·9 | | 24·5 | 26·1 | |
| 9·2 | | 40·5 | 25·9 | |
| 9·2 | | 52·5 | 49·7 | |
| 9·5 | | 53·5 | 16·3 | |
| 9·6 | 10 | 2·5 | 11·9 | |
| 9·7 | | 23·5 | 24·7 | |
| 9·9 | | 32·0 | 12·9 | |
| 9·2 | | 45·5 | 53·5 | |
| 9·4 | 11 | 23·5 | 53·3 | |
| 9·9 | | 30·2 | 58·8 | |
| 9·5 | | 43·5 | 1·4 | |
| 9·4 | 12 | 5·0 | 8·7 | |
| 8·2 | | 19·5 | 24·1 | 7·5 G |
| 8·4 | | 25·5 | 41·6 | 7·0 GS |
| 8·9 | | 30·5 | 24·5 | |
| 9·9 | | 42·0 | 26·9 | |
| 7·8 | | 42·5 | 42·7 | 7·5 GSc |
| 7·8 | | 50·0 | 41·3 | 7·5 GS |
| 9·9 | | 52·5 | 45·5 | |
| 9·9 | | 57·5 | 37·7 | |
| 9·2 | 13 | 4·5 | 23·9 | |
| 9·9 | | 8·5 | 38·7 | |
| 9·5 | | 19·0 | 59·9 | |
| 9·2 | | 19·5 | 34·6 | |
| 5·3 | | 24·5 | 52·1 | 5·0 GSctr |
| 9·8 | | 30·5 | 49·2 | 9·0 |
| 8·9 | | 41·5 | 40·9 | 8·5 |
| 9·4 | | 54·5 | 7·9 | |
| 9·9 | 14 | 14·0 | 33·9 | |
| 9·7 | | 31·5 | 42·1 | |
| 9·8 | | 35·5 | 57·6 | |
| 9·5 | | 42·0 | 3·9 | |
| 9·7 | | 58·0 | 54·9 | |
| 9·4 | 15 | 4·5 | 58·5 | |
| 9·2 | | 23·8 | 59·8 | |
| 8·9 | | 39·0 | 46·3 | 8·5 |
| 9·2 | 16 | 4·5 | 10·3 | 9·0 |
| 8·3 | | 21·7 | 59·1 | 9·0 |
| 9·9 | | 25·5 | 20·1 | |
| 9·2 | | 30·0 | 50·7 | |
| 9·8 | | 33·8 | 0·9 | |
| 9·9 | | 54·0 | 23·9 | |
| 9·9 | 17 | 1·0 | 8·5 | |
| 8·8 | | 14·5 | 31·6 | |
| 8·8 | | 16·0 | 31·1 | |
| 9·2 | | 18·8 | 39·7 | |
| 9·2 | | 24·8 | 11·2 | |
| 9·0 | | 26·8 | 30·8 | |
| 9·2 | | 34·2 | 20·9 | |
| 10·1 | | 36·7 | 3·7 | |
| 9·1 | | 43·2 | 7·1 | |
| 9·7 | | 48·1 | 42·9 | |
| 9·8 | | 51·7 | 35·3 | |
| 9·6 | | 53·1 | 17·9 | |
| 9·7 | 18 | 9·0 | 51·1 | |
| 9·7 | | 9·7 | 48·9 | |
| 9·6 | | 9·7 | 46·8 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 14 | 30 | 110 | 6·6 |
| | 40 | 112 | 6·4 |
| | 50 | 114 | 6·2 |
| 15 | 0 | 115 | 5·9 |
| | 10 | 117 | 5·6 |
| | 20 | 119 | 5·4 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 10 | 117 | 5.6 |
| | 20 | 119 | 5.4 |
| | 30 | 120 | 5.1 |
| | 40 | 121 | 4.8 |

## 5941—6000.

| mag. | 15h m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 18 | 20.0 | 31.2 | |
| 10.0 | | 21.5 | 31.0 | |
| 8.0 | | 21.8 | 4.1 | 8.0 G |
| 10.0 | | 27.0 | 50.5 | |
| 9.6 | | 32.3 | 14.8 | |
| 9.7 | | 37.4 | 58.6 | |
| 8.8 | | 40.3 | 4.4 | 8.5 |
| 9.9 | | 41.9 | 59.2 | |
| 9.8 | | 50.5 | 36.2 | |
| 9.6 | | 56.1 | 5.5 | |
| 8.6 | | 57.0 | 45.0 | |
| 10.0 | 19 | 0.0 | 42.0 | |
| 9.7 | | 0.5 | 38.8 | |
| 9.7 | | 5.6 | 16.2 | |
| 9.2 | | 7.5 | 41.1 | |
| 9.5 | | 8.5 | 50.5 | |
| 10.1 | | 19.5 | 50.0 | |
| 9.7 | | 24.1 | 27.9 | |
| 10.1 | | 25.0 | 54.2 | |
| 10.0 | | 42.1 | 28.7 | |
| 9.8 | | 46.6 | 16.8 | |
| 9.6 | | 49.6 | 8.6 | |
| 9.6 | | 50.0 | 38.2 | |
| 10.1 | | 50.0 | 31.8 | |
| 9.1 | | 55.6 | 18.8 | |
| 10.1 | | 57.6 | 58.3 | |
| 9.8 | | 59.5 | 38.5 | |
| 9.4 | 20 | 1.0 | 32.0 | |
| 9.3 | | 3.6 | 5.1 | |
| 10.0 | | 8.5 | 54.3 | |
| 9.9 | | 10.1 | 5.0 | |
| 9.9 | | 10.2 | 59.8 | |
| 9.8 | | 11.0 | 40.3 | |
| 9.8 | | 18.0 | 51.4 | |
| 9.7 | | 20.5 | 55.8 | |
| 8.4 | | 25.4 | 39.9 | 8.0 |
| 10.0 | | 27.9 | 40.7 | |
| 9.8 | | 32.0 | 8.2 | |
| 9.8 | | 36.0 | 25.2 | |
| 9.6 | | 39.0 | 5.5 | |
| 9.4 | | 39.5 | 10.4 | |
| 9.8 | | 39.9 | 32.2 | |
| 9.2 | | 44.5 | 59.9 | |
| 10.1 | | 51.5 | 25.1 | |
| 8.6 | 21 | 5.9 | 50.3 | 8.2 |
| 10.1 | | 8.0 | 17.3 | |
| 9.8 | | 9.9 | 39.7 | |
| 10.0 | | 17.5 | 11.9 | |
| 9.7 | | 17.5 | 9.7 | |
| 10.0 | | 19.0 | 1.5 | |
| 9.2 | | 20.0 | 3.5 | |
| 10.1 | | 21.0 | 46.0 | |
| 9.2 | | 38.0 | 7.5 | |
| 9.4 | | 44.4 | 57.3 | |
| 9.7 | | 46.0 | 14.6 | |
| 8.9 | | 46.9 | 35.8 | |
| 9.1 | | 50.9 | 49.1 | 8.2 |
| 9.6 | | 54.9 | 56.7 | |
| 9.8 | | 56.0 | 27.4 | |
| 10.0 | 22 | 4.4 | 33.2 | |

## 6001—6060.

| mag. | 15h m | s | −58° ′ | |
|---|---|---|---|---|
| 9.8 | 22 | 8.9 | 55.2 | |
| 9.3 | | 10.5 | 8.5 | |
| 9.4 | | 15.5 | 18.8 | |
| 9.8 | | 18.9 | 31.0 | |
| 9.6 | | 21.5 | 10.1 | |
| 9.2 | | 22.6 | 57.4 | 9.0 |
| 10.0 | | 25.4 | 32.8 | |
| 9.8 | | 27.9 | 34.8 | |
| 9.7 | | 37.6 | 56.3 | |
| 9.2 | | 38.0 | 25.6 | |
| 9.9 | | 44.4 | 41.9 | |
| 9.8 | | 44.9 | 34.0 | |
| 10.0 | | 45.0 | 24.2 | |
| 9.6 | | 46.9 | 6.4 | 8.2 |
| 9.4 | | 48.8 | 31.0 | |
| 9.8 | | 49.4 | 29.4 | |
| 10.0 | | 51.3 | 53.6 | |
| 9.9 | | 53.8 | 42.7 | |
| 9.1 | 23 | 0.4 | 13.9 | |
| 10.1 | | 5.9 | 5.2 | |
| 9.9 | | 12.9 | 23.7 | |
| 10.0 | | 15.3 | 55.8 | |
| 10.0 | | 16.4 | 26.8 | |
| 9.8 | | 18.4 | 13.4 | |
| 10.1 | | 22.4 | 13.9 | |
| 9.7 | | 24.4 | 13.2 | |
| 10.0 | | 30.8 | 32.5 | |
| 9.5 | | 31.3 | 55.5 | |
| 10.0 | | 32.4 | 21.6 | |
| 9.7 | | 33.8 | 34.4 | |
| 9.4 | | 35.4 | 14.5 | |
| 9.6 | | 44.6 | 15.0 | |
| 9.4 | | 47.8 | 40.0 | |
| 8.6 | | 52.6 | 5.7 | 8.5 |
| 10.0 | | 53.8 | 46.7 | |
| 9.6 | | 54.3 | 36.5 | |
| 9.0 | | 54.3 | 39.5 | |
| 10.0 | | 54.6 | 26.1 | |
| 9.4 | | 56.8 | 48.8 | |
| 9.6 | | 58.8 | 40.2 | |
| 9.7 | 24 | 11.3 | 30.4 | |
| 9.8 | | 15.9 | 25.5 | |
| 9.8 | | 17.3 | 50.9 | |
| 9.4 | | 19.7 | 3.1 | 9.0 |
| 9.6 | | 22.3 | 53.4 | |
| 9.6 | | 22.4 | 11.2 | |
| 9.6 | | 23.4 | 10.6 | |
| 9.5 | | 27.9 | 8.1 | |
| 9.9 | | 31.4 | 24.3 | |
| 10.1 | | 37.9 | 7.5 | |
| 10.0 | | 41.3 | 52.7 | |
| 10.1 | | 41.8 | 30.6 | |
| 9.6 | | 41.9 | 17.5 | |
| 10.1 | | 44.2 | 46.4 | |
| 10.1 | | 45.7 | 43.9 | |
| 10.1 | | 47.5 | 59.6 | |
| 8.6 | | 51.8 | 10.0 | 8.5 |
| 10.1 | | 56.8 | 0.3 | |
| 10.1 | | 58.3 | 16.1 | |
| 9.8 | | 59.8 | 18.9 | |

## 6061—6120.

| mag. | 15h m | s | −58° ′ | |
|---|---|---|---|---|
| 9.2 | 25 | 8.2 | 53.0 | 9.0 |
| 10.1 | | 9.1 | 45.6 | |
| 9.8 | | 10.3 | 20.0 | |
| 9.9 | | 14.8 | 14.6 | |
| 10.0 | | 16.3 | 14.0 | |
| 10.1 | | 16.8 | 58.3 | |
| 10.0 | | 19.1 | 44.8 | |
| 9.8 | | 23.8 | 17.8 | |
| 10.1 | | 24.7 | 54.0 | |
| 10.0 | | 26.2 | 48.9 | |
| 9.9 | | 28.3 | 57.4 | |
| 10.0 | | 28.4 | 21.1 | |
| 9.9 | | 32.2 | 53.1 | |
| 8.0 | | 33.8 | 26.4 | 8.0 Gp |
| 9.7 | | 39.7 | 48.8 | |
| 10.0 | | 46.7 | 41.0 | |
| 9.6 | | 48.8 | 26.7 | |
| 10.0 | | 57.2 | 53.7 | |
| 10.1 | | 57.3 | 15.9 | |
| 10.1 | 26 | 2.2 | 43.6 | |
| 10.0 | | 5.2 | 44.3 | |
| 9.1 | | 10.3 | 22.7 | 9.0 |
| 9.8 | | 13.2 | 51.1 | |
| 10.1 | | 15.7 | 52.2 | |
| 9.8 | | 26.7 | 54.7 | |
| 10.0 | | 27.8 | 17.9 | |
| 9.6 | | 30.3 | 5.5 | |
| 9.4 | | 35.7 | 54.6 | |
| 8.6 | | 41.8 | 9.4 | 9.0 |
| 9.8 | | 43.7 | 43.4 | |
| 10.0 | | 44.2 | 31.9 | |
| 9.8 | | 45.3 | 28.6 | |
| 9.0 | | 49.8 | 15.8 | |
| 9.6 | | 56.7 | 6.0 | |
| 9.4 | | 57.1 | 54.8 | |
| 10.1 | 27 | 1.7 | 14.4 | |
| 9.8 | | 3.2 | 7.5 | |
| 9.9 | | 10.2 | 27.0 | |
| 9.6 | | 17.2 | 8.5 | |
| 10.1 | | 17.7 | 0.7 | |
| 9.9 | | 21.4 | 15.7 | |
| 10.1 | | 24.2 | 16.2 | |
| 9.9 | | 26.2 | 1.0 | |
| 9.9 | | 29.2 | 18.9 | |
| 8.2 | | 31.7 | 22.2 | 8.0 G |
| 9.2 | | 37.7 | 6.4 | |
| 9.2 | | 41.7 | 6.0 | 9.0 |
| 9.4 | | 43.2 | 59.1 | |
| 9.6 | | 47.7 | 7.1 | |
| 8.7 | | 50.5 | 59.4 | 8.5 |
| 10.1 | | 52.7 | 28.8 | |
| 9.8 | | 55.7 | 24.6 | |
| 9.7 | | 59.2 | 18.8 | |
| 10.0 | 28 | 1.1 | 33.0 | |
| 9.5 | | 10.2 | 6.1 | |
| 9.1 | | 16.2 | 19.3 | |
| 9.3 | | 17.1 | 32.7 | |
| 10.0 | | 19.6 | 38.3 | |
| 10.1 | | 27.1 | 36.7 | |
| 9.2 | | 34.7 | 21.7 | 8.0 G |

## 6121—6180.

| mag. | 15h m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 28 | 35.1 | 52.0 | |
| 10.0 | | 43.6 | 53.8 | |
| 10.1 | | 48.7 | 21.8 | |
| 9.8 | | 54.2 | 4.1 | |
| 10.0 | | 55.2 | 21.8 | |
| 10.0 | 29 | 9.2 | 9.9 | |
| 8.9 | | 10.1 | 47.6 | 9.0 |
| 9.6 | | 15.6 | 31.0 | |
| 9.2 | | 26.2 | 19.1 | |
| 9.6 | | 26.7 | 14.8 | |
| 10.0 | | 37.2 | 22.0 | |
| 8.8 | | 41.5 | 43.6 | 9.0 |
| 9.4 | | 43.0 | 43.1 | |
| 10.1 | | 48.6 | 4.0 | |
| 10.1 | | 54.0 | 33.6 | |
| 10.1 | | 54.0 | 56.6 | |
| 9.7 | 30 | 8.1 | 20.7 | |
| 10.0 | | 12.6 | 3.3 | |
| 8.9 | | 14.0 | 43.5 | 8.5 G |
| 10.0 | | 24.0 | 38.5 | |
| 10.1 | | 28.5 | 44.0 | |
| 10.1 | | 44.6 | 6.7 | |
| 9.6 | | 47.0 | 37.9 | |
| 10.1 | | 59.0 | 31.5 | |
| 8.8 | 31 | 0.5 | 45.3 | 9.0 |
| 9.9 | | 1.1 | 28.3 | |
| 9.8 | | 4.6 | 27.0 | |
| 10.0 | | 8.5 | 54.2 | |
| 9.8 | | 9.1 | 8.2 | |
| 9.8 | | 12.1 | 22.3 | |
| 9.7 | | 13.6 | 11.6 | |
| 9.8 | | 14.1 | 13.7 | |
| 9.9 | | 16.1 | 11.9 | |
| 8.3 | | 18.6 | 21.9 | 9.0 |
| 9.0 | | 22.1 | 21.3 | 8.5 |
| 9.3 | | 31.6 | 7.1 | |
| 10.0 | | 32.6 | 23.0 | |
| 9.8 | | 34.6 | 9.5 | |
| 10.0 | | 36.5 | 46.6 | |
| 9.6 | | 37.5 | 46.2 | |
| 10.0 | | 40.6 | 6.3 | |
| 9.9 | | 41.1 | 21.5 | |
| 9.4 | | 44.0 | 54.7 | |
| 9.6 | | 44.5 | 49.1 | |
| 10.0 | | 47.0 | 39.1 | |
| 9.4 | | 47.6 | 18.3 | |
| 9.3 | | 51.6 | 3.6 | |
| 9.2 | | 52.5 | 24.2 | |
| 9.6 | | 56.9 | 40.5 | |
| 9.5 | 32 | 4.9 | 30.3 | |
| 10.1 | | 5.5 | 9.3 | |
| 10.0 | | 6.9 | 41.2 | |
| 10.0 | | 21.6 | 32.1 | |
| 9.9 | | 21.6 | 48.3 | |
| 9.5 | | 25.0 | 1.0 | |
| 9.8 | | 28.6 | 45.1 | |
| 9.8 | | 31.5 | 15.2 | |
| 9.6 | | 32.0 | 11.2 | |
| 9.6 | | 40.9 | 32.4 | |
| 9.3 | | 41.0 | 12.8 | |



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## 6181—6240.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·1 | 32 | 41·0 | 19·8 | |
| 10·1 | | 42·9 | 38·4 | |
| 8·5 | | 45·0 | 29·1 | 9·0 |
| 9·3 | | 47·0 | 11·8 | |
| 9·8 | | 51·0 | 26·7 | |
| 9·8 | | 52·5 | 21·4 | |
| 10·0 | | 52·5 | 2·4 | |
| 9·6 | | 54·4 | 40·7 | |
| 10·1 | | 54·5 | 17·6 | |
| 9·8 | | 54·5 | 28·2 | |
| 9·8 | | 54·9 | 55·8 | |
| 9·8 | | 55·8 | 32·9 | |
| 10·1 | 33 | 3·5 | 13·7 | |
| 9·5 | | 15·0 | 20·6 | |
| 9·5 | | 15·9 | 44·5 | |
| 9·6 | | 17·9 | 32·9 | |
| 9·7 | | 18·0 | 9·2 | |
| 9·8 | | 18·4 | 51·3 | |
| 9·2 | | 18·9 | 39·3 | |
| 8·2 | | 19·0 | 24·6 | 8·0 |
| 9·8 | | 20·0 | 25·6 | |
| 9·2 | | 21·5 | 8·1 | |
| 9·8 | | 22·9 | 34·1 | |
| 9·2 | | 26·9 | 57·2 | |
| 10·1 | | 27·4 | 31·9 | |
| 10·0 | | 29·5 | 3·4 | |
| 10·1 | | 30·6 | 32·3 | |
| 10·1 | | 31·9 | 51·1 | |
| 9·8 | | 41·1 | 58·8 | |
| 10·1 | | 42·9 | 58·3 | |
| 10·1 | | 43·4 | 58·8 | |
| 10·1 | | 43·8 | 44·0 | |
| 10·1 | | 45·5 | 22·3 | |
| 9·5 | | 47·4 | 32·8 | |
| 9·8 | | 49·0 | 27·3 | |
| 9·6 | | 54·6 | 58·6 | |
| 10·0 | | 54·9 | 40·6 | |
| 8·7 | | 57·4 | 35·2 | |
| 9·6 | | 57·9 | 42·6 | |
| 10·1 | | 59·9 | 55·0 | |
| 9·8 | 34 | 1·0 | 11·9 | |
| 10·1 | | 2·0 | 21·7 | |
| 9·7 | | 2·9 | 35·2 | |
| 10·0 | | 5·0 | 19·1 | |
| 10·0 | | 5·4 | 54·1 | |
| 10·0 | | 6·4 | 50·6 | |
| 9·3 | | 9·0 | 6·8 | |
| 9·8 | | 9·2 | 21·4 | |
| 10·1 | | 13·9 | 45·0 | |
| 9·9 | | 15·5 | 16·5 | |
| 9·5 | | 18·5 | 22·5 | |
| 9·4 | | 20·0 | 19·6 | |
| 10·1 | | 24·0 | 18·8 | |
| 9·7 | | 26·6 | 59·8 | |
| 9·7 | | 26·9 | 41·0 | |
| 9·8 | | 28·4 | 43·2 | |
| 9·2 | | 31·4 | 48·4 | 8·5 |
| 9·8 | | 34·0 | 26·6 | |
| 9·7 | | 38·9 | 42·8 | |
| 10·1 | | 40·9 | 39·6 | |

## 6241—6300.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 34 | 41·5 | 23·8 | |
| 10·1 | | 43·9 | 32·8 | |
| 8·0 | | 49·4 | 43·4 | 7·5 GS |
| 9·7 | | 49·4 | 44·2 | |
| 9·2 | | 51·5 | 13·8 | |
| 9·2 | | 57·5 | 24·7 | |
| 9·9 | 35 | 2·0 | 7·9 | |
| 10·0 | | 2·0 | 0·6 | |
| 10·0 | | 2·5 | 0·1 | |
| 8·2 | | 5·5 | 17·0 | GS |
| 10·1 | | 8·4 | 37·1 | |
| 8·4 | | 8·5 | 17·4 | GS |
| 9·6 | | 9·9 | 33·7 | |
| 9·6 | | 9·9 | 39·3 | |
| 9·2 | | 11·4 | 51·5 | 9·0 |
| 9·8 | | 11·5 | 28·8 | |
| 9·6 | | 14·4 | 57·7 | 9·5 |
| 9·7 | | 16·5 | 28·4 | |
| 9·9 | | 18·4 | 38·9 | |
| 10·1 | | 23·9 | 40·5 | |
| 10·0 | | 24·9 | 37·4 | |
| 9·8 | | 25·0 | 11·7 | |
| 9·3 | | 26·4 | 55·2 | 8·8 |
| 9·2 | | 26·5 | 18·0 | |
| 10·1 | | 30·1 | 39·0 | |
| 9·9 | | 31·9 | 52·1 | |
| 9·9 | | 33·4 | 30·6 | |
| 9·8 | | 35·5 | 22·1 | |
| 10·1 | | 37·9 | 35·6 | |
| 10·0 | | 38·5 | 1·8 | |
| 9·9 | | 40·0 | 14·6 | |
| 9·8 | | 40·9 | 32·9 | |
| 9·6 | | 41·9 | 41·0 | |
| 9·8 | | 42·0 | 16·8 | |
| 8·5 | | 46·9 | 38·9 | 8·5 |
| 9·9 | | 48·5 | 17·5 | |
| 9·0 | | 52·4 | 33·3 | |
| 9·6 | | 57·6 | 59·6 | |
| 9·6 | 36 | 0·0 | 24·6 | |
| 9·6 | | 0·9 | 36·7 | |
| 9·8 | | 2·9 | 35·3 | |
| 9·8 | | 11·4 | 37·3 | |
| 9·3 | | 12·4 | 39·1 | |
| 10·0 | | 23·5 | 23·8 | |
| 9·8 | | 28·5 | 12·2 | |
| 9·9 | | 29·0 | 26·4 | |
| 10·1 | | 38·5 | 20·1 | |
| 9·8 | | 38·9 | 51·3 | |
| 9·5 | | 47·9 | 31·0 | 9·5 |
| 9·8 | | 51·0 | 20·6 | |
| 10·1 | | 58·5 | 26·6 | |
| 9·8 | 37 | 4·4 | 35·8 | |
| 10·0 | | 5·5 | 7·4 | |
| 10·1 | | 11·4 | 56·0 | |
| 9·8 | | 12·9 | 47·0 | |
| 10·0 | | 14·9 | 56·3 | |
| 9·3 | | 15·5 | 21·4 | |
| 8·5 | | 15·9 | 47·0 | 8·0 GS |
| 9·0 | | 18·4 | 31·7 | 9·0 |
| 10·1 | | 19·5 | 15·8 | |

## 6301—6360.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·9 | 37 | 21·0 | 27·8 | |
| 10·0 | | 24·3 | 16·2 | |
| 9·6 | | 24·4 | 39·8 | |
| 9·7 | | 24·8 | 0·1 | |
| 9·0 | | 36·9 | 48·9 | |
| 10·1 | | 38·5 | 25·0 | |
| 9·4 | | 40·9 | 44·7 | |
| 10·0 | | 41·5 | 29·8 | |
| 8·9 | | 47·8 | 0·4 | |
| 9·6 | | 47·9 | 53·6 | |
| 10·0 | | 54·3 | 28·6 | |
| 9·2 | | 56·4 | 51·2 | 9·0 |
| 10·0 | | 56·4 | 41·6 | |
| 9·9 | | 57·0 | 11·5 | |
| 9·8 | | 57·9 | 42·9 | |
| 9·9 | | 59·9 | 50·5 | |
| 9·7 | 38 | 1·0 | 5·3 | |
| 9·6 | | 10·4 | 56·1 | |
| 9·8 | | 14·4 | 42·6 | |
| 9·8 | | 15·5 | 26·9 | |
| 9·8 | | 17·5 | 13·7 | |
| 9·8 | | 20·4 | 59·1 | |
| 9·8 | | 22·6 | 56·7 | |
| 8·0 | | 31·0 | 27·9 | 8·0 G |
| 9·9 | | 31·4 | 38·7 | |
| 9·9 | | 37·4 | 35·7 | |
| 10·0 | | 38·3 | 28·3 | |
| 9·8 | | 42·5 | 0·3 | |
| 9·6 | | 49·0 | 3·9 | |
| 9·2 | | 49·9 | 37·5 | 9·0 |
| 10·0 | | 50·5 | 22·2 | |
| 9·8 | | 54·0 | 10·0 | |
| 10·1 | | 54·5 | 23·7 | |
| 9·7 | | 58·9 | 36·3 | |
| 9·1 | | 59·9 | 47·2 | |
| 10·1 | 39 | 3·9 | 48·9 | |
| 9·8 | | 7·9 | 50·3 | |
| 9·5 | | 7·9 | 44·2 | |
| 9·2 | | 9·0 | 24·4 | |
| 10·1 | | 11·0 | 30·0 | |
| 10·0 | | 16·9 | 48·4 | |
| 9·8 | | 22·5 | 11·2 | |
| 9·2 | | 23·9 | 37·6 | |
| 9·2 | | 24·5 | 8·6 | |
| 9·6 | | 27·5 | 29·0 | |
| 9·6 | | 32·5 | 20·6 | |
| 10·0 | | 34·5 | 25·9 | |
| 9·6 | | 39·0 | 8·3 | |
| 9·3 | | 41·0 | 3·5 | |
| 9·3 | | 42·4 | 49·1 | |
| 9·8 | | 53·4 | 55·4 | |
| 10·1 | | 58·9 | 40·1 | |
| 9·4 | 40 | 4·0 | 26·5 | |
| 10·1 | | 4·4 | 49·7 | |
| 10·1 | | 6·6 | 58·9 | |
| 10·0 | | 10·4 | 36·3 | |
| 8·5 | | 11·5 | 6·9 | 7·5 G |
| 10·1 | | 14·2 | 24·9 | |
| 9·9 | | 14·5 | 2·6 | |
| 9·7 | | 15·0 | 7·6 | |

## 6361—6420.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 40 | 15·5 | 3·1 | |
| 10·1 | | 17·2 | 21·8 | |
| 9·8 | | 20·5 | 22·3 | |
| 10·1 | | 24·5 | 21·0 | |
| 9·5 | | 24·5 | 4·8 | |
| 9·7 | | 24·9 | 48·9 | |
| 8·9 | | 27·5 | 20·2 | |
| 8·9 | | 28·4 | 33·3 | |
| 9·6 | | 31·4 | 35·2 | |
| 9·8 | | 33·9 | 47·7 | |
| 9·8 | | 39·5 | 29·8 | |
| 9·6 | | 42·9 | 42·4 | |
| 9·6 | | 44·9 | 56·6 | |
| 10·1 | | 47·6 | 58·2 | |
| 9·0 | | 50·5 | 30·4 | |
| 8·4 | | 52·5 | 5·5 | 8·5 |
| 10·1 | | 52·9 | 31·0 | |
| 9·8 | | 59·9 | 52·9 | |
| 10·0 | 41 | 1·0 | 19·5 | |
| 9·9 | | 1·5 | 26·1 | |
| 9·8 | | 2·0 | 13·7 | |
| 9·8 | | 7·4 | 49·7 | |
| 9·8 | | 8·5 | 26·1 | |
| 9·6 | | 8·9 | 30·5 | |
| 9·7 | | 9·4 | 53·4 | |
| 9·3 | | 10·0 | 10·5 | |
| 10·1 | | 13·5 | 7·1 | |
| 9·6 | | 22·0 | 8·2 | |
| 9·8 | | 27·1 | 57·8 | |
| 9·5 | | 31·0 | 29·2 | |
| 9·8 | | 31·0 | 7·5 | |
| 8·7 | | 34·5 | 0·2 | 9·0 |
| 9·6 | | 35·0 | 2·6 | |
| 9·4 | | 46·5 | 20·0 | |
| 10·0 | | 47·0 | 7·7 | |
| 9·6 | | 48·8 | 0·2 | 9·0 |
| 9·8 | | 56·9 | 53·8 | |
| 9·8 | 42 | 8·9 | 46·2 | |
| 10·0 | | 9·9 | 34·9 | |
| 9·8 | | 10·9 | 37·8 | |
| 10·0 | | 17·5 | 5·3 | |
| 9·8 | | 21·9 | 41·9 | |
| 9·6 | | 22·0 | 22·3 | |
| 9·8 | | 23·4 | 46·9 | |
| 9·7 | | 31·0 | 12·3 | |
| 9·9 | | 38·5 | 19·9 | |
| 8·0 | | 39·9 | 40·7 | 7·5 GSt |
| 9·8 | | 39·9 | 56·7 | |
| 9·9 | | 41·1 | 59·4 | |
| 9·8 | | 41·4 | 54·3 | |
| 9·2 | | 52·3 | 40·8 | 8·5 |
| 9·6 | | 57·9 | 25·3 | |
| 8·9 | | 59·8 | 41·0 | 9·0 |
| 10·1 | 43 | 6·9 | 36·8 | |
| 9·2 | | 8·4 | 6·7 | |
| 9·8 | | 19·3 | 52·2 | |
| 10·1 | | 22·4 | 23·9 | |
| 9·6 | | 24·3 | 35·5 | |
| 9·6 | | 33·3 | 35·8 | |
| 9·8 | | 37·3 | 32·3 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 15 | 30 | 120 | 5·1 |
| | 40 | 121 | 4·8 |
| | 50 | 123 | 4·5 |

25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 15 | 40 | 121 | 4·8 |
| | 50 | 123 | 4·5 |
| 16 | 0 | 124 | 4·2 |

## 6421—6480.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 43 | 39·3 | 44·7 | |
| 9·6 | | 39·8 | 35·1 | |
| 10·0 | | 45·4 | 26·7 | |
| 9·8 | | 45·4 | 10·3 | |
| 9·8 | | 45·8 | 50·0 | |
| 9·8 | | 48·9 | 24·4 | |
| 9·7 | | 54·9 | 30·2 | |
| 9·2 | | 56·4 | 16·5 | |
| 10·1 | | 56·9 | 0·5 | |
| 9·5 | | 57·3 | 55·7 | 9·5 |
| 9·1 | | 57·3 | 32·7 | 8·0 G |
| 9·8 | | 58·6 | 57·6 | |
| 9·8 | 44 | 0·9 | 25·7 | |
| 9·9 | | 1·3 | 42·7 | |
| 10·0 | | 13·4 | 21·9 | |
| 9·9 | | 18·4 | 17·2 | |
| 9·8 | | 18·8 | 46·5 | |
| 10·1 | | 20·4 | 27·6 | |
| 9·2 | | 20·9 | 0·3 | 8·5 |
| 10·0 | | 24·3 | 34·9 | |
| 10·0 | | 24·9 | 3·6 | |
| 9·9 | | 25·9 | 4·5 | |
| 8·6 | | 33·9 | 34·3 | 8·0 G |
| 10·0 | | 34·3 | 33·2 | |
| 9·3 | | 41·4 | 10·2 | |
| 10·0 | | 42·4 | 16·6 | |
| 10·0 | | 50·8 | 51·9 | |
| 9·8 | 45 | 3·4 | 16·5 | |
| 8·9 | | 4·9 | 51·1 | |
| 9·8 | | 5·9 | 14·4 | |
| 10·0 | | 14·7 | 42·3 | |
| 9·8 | | 14·9 | 10·2 | |
| 8·6 | | 23·2 | 40·4 | 8·5 |
| 10·0 | | 23·8 | 0·1 | |
| 10·1 | | 24·2 | 41·7 | |
| 9·5 | | 25·8 | 29·0 | |
| 9·7 | | 26·2 | 35·1 | |
| 9·8 | | 29·1 | 0·0 | |
| 9·6 | | 29·2 | 34·4 | |
| 9·9 | | 29·3 | 13·8 | |
| 9·8 | | 29·7 | 35·9 | |
| 9·6 | | 32·7 | 58·7 | |
| 9·8 | | 34·3 | 20·8 | |
| 8·3 | | 41·3 | 18·6 | 8·0 G |
| 9·9 | | 45·8 | 27·7 | |
| 9·6 | | 49·2 | 43·1 | 8·5 |
| 9·8 | | 55·3 | 27·7 | |
| 9·6 | | 57·7 | 34·0 | |
| 10·0 | | 58·8 | 6·9 | |
| 9·8 | 46 | 3·2 | 55·0 | |
| 9·6 | | 9·2 | 38·1 | |
| 10·0 | | 9·8 | 25·2 | |
| 10·0 | | 10·2 | 51·5 | |
| 9·8 | | 11·2 | 45·1 | |
| 9·7 | | 18·2 | 49·6 | |
| 9·8 | | 20·2 | 46·5 | |
| 10·1 | | 22·8 | 3·9 | |
| 10·1 | | 27·3 | 19·0 | |
| 9·6 | | 29·5 | 57·7 | 9·2 |
| 9·8 | | 31·7 | 45·1 | |

## 6481—6540.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·5 | 46 | 32·3 | 34·9 | |
| 10·1 | | 32·7 | 38·3 | |
| 10·4† | | 33·4 | 2·3 | |
| 9·8 | | 34·8 | 2·8 | |
| 9·5 | | 34·8 | 17·2 | |
| 9·4 | | 35·8 | 13·9 | |
| 9·6 | | 35·8 | 20·4 | |
| 9·8 | | 36·3 | 22·2 | |
| 10·1 | | 36·7 | 44·1 | |
| 10·0 | | 37·3 | 19·4 | |
| 10·1 | | 38·8 | 37·5 | |
| 10·1 | | 39·8 | 37·6 | |
| 10·0 | | 40·3 | 56·6 | |
| 9·8 | | 49·3 | 12·5 | |
| 9·7 | | 52·3 | 27·0 | |
| 9·6 | | 52·8 | 46·2 | |
| 9·8 | | 57·2 | 26·1 | |
| 9·6 | | 58·2 | 18·7 | |
| 9·8 | 47 | 2·7 | 7·0 | |
| 9·0 | | 5·7 | 16·4 | |
| 9·8 | | 6·2 | 4·4 | |
| 8·8 | | 6·2 | 58·2 | 9·2 |
| 9·7 | | 8·1 | 41·5 | |
| 9·8 | | 9·7 | 28·3 | |
| 9·8 | | 10·1 | 44·9 | |
| 9·5 | | 14·2 | 23·7 | |
| 10·1 | | 18·7 | 2·6 | |
| 9·1 | | 23·3 | 1·3 | |
| 10·0 | | 30·6 | 53·9 | |
| 9·2 | | 37·0 | 34·2 | |
| 10·0 | | 38·1 | 50·7 | |
| 9·0 | | 39·2 | 19·1 | |
| 10·0 | | 39·2 | 21·8 | |
| 10·1 | | 47·1 | 35·7 | |
| 8·6 | | 49·6 | 39·4 | G |
| 10·0 | | 50·0 | 57·6 | |
| 9·5 | | 50·7 | 14·2 | |
| 10·1 | | 52·0 | 0·7 | |
| 9·6 | | 57·2 | 16·0 | |
| 9·9 | 48 | 2·7 | 25·9 | |
| 9·8 | | 2·7 | 21·7 | |
| 9·8 | | 9·1 | 47·4 | |
| 10·1 | | 11·6 | 41·0 | |
| 9·6 | | 12·2 | 14·9 | |
| 9·6 | | 22·7 | 13·4 | |
| 9·6 | | 22·7 | 9·7 | |
| 9·3 | | 23·2 | 14·4 | |
| 9·0 | | 24·7 | 4·8 | 9·0 |
| 10·1 | | 31·7 | 29·2 | |
| 9·8 | | 34·4 | 53·8 | |
| 8·6 | | 43·1 | 55·4 | 8·5 |
| 9·2 | | 45·2 | 58·6 | 9·0 |
| 9·4 | | 47·2 | 15·1 | |
| 9·6 | | 49·1 | 43·8 | |
| 9·6 | | 51·6 | 37·8 | |
| 10·0 | | 57·0 | 33·3 | |
| 9·9 | | 58·0 | 36·4 | |
| 9·6 | 49 | 1·0 | 34·0 | |
| 9·8 | | 1·0 | 52·3 | |
| 10·1 | | 1·6 | 2·4 | |

## 6541—6600.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·4† | 49 | 2·9 | 2·2 | |
| 9·9 | | 3·0 | 53·6 | |
| 7·8 | | 6·6 | 21·7 | 7·5 GS |
| 8·9 | | 6·6 | 22·3 | |
| 9·9 | | 9·0 | 53·3 | |
| 10·0 | | 12·1 | 10·2 | |
| 10·0 | | 14·0 | 47·4 | |
| 9·8 | | 14·6 | 20·0 | |
| 9·8 | | 20·0 | 45·8 | |
| 9·5 | | 23·0 | 44·2 | |
| 9·5 | | 29·0 | 38·8 | |
| 9·4 | | 30·5 | 45·3 | |
| 9·2 | | 31·5 | 49·4 | |
| 10·1 | | 31·5 | 51·8 | |
| 10·1 | | 48·5 | 53·3 | |
| 9·6 | | 55·0 | 37·5 | |
| 10·1 | | 57·0 | 46·3 | |
| 9·5 | | 58·0 | 47·7 | |
| 9·6 | | 58·5 | 51·6 | |
| 10·0 | 50 | 0·6 | 9·4 | |
| 9·8 | | 9·5 | 55·3 | |
| 9·8 | | 13·5 | 33·3 | |
| 8·6 | | 22·2 | 59·8 | 9·0 |
| 9·6 | | 28·0 | 58·1 | |
| 9·9 | | 33·0 | 51·5 | |
| 10·0 | | 35·8 | 8·8 | |
| 10·0 | | 38·0 | 46·0 | |
| 8·8 | | 38·1 | 3·3 | |
| 10·1 | | 39·6 | 22·2 | |
| 9·4 | | 44·6 | 15·6 | |
| 9·4 | | 47·1 | 5·0 | |
| 9·6 | | 55·0 | 54·2 | 9·5 |
| 9·6 | | 55·6 | 27·5 | |
| 10·1 | 51 | 3·1 | 4·2 | |
| 10·1 | | 4·8 | 23·0 | |
| 9·5 | | 10·0 | 12·4 | |
| 10·4† | | 24·4 | 2·8 | |
| 9·2 | | 28·8 | 56·3 | |
| 9·6 | | 29·0 | 13·7 | |
| 9·5 | | 29·9 | 35·0 | |
| 9·8 | | 37·9 | 46·0 | |
| 10·1 | 52 | 0·0 | 1·9 | |
| 10·1 | | 3·3 | 27·3 | |
| 9·6 | | 10·0 | 21·5 | |
| 9·8 | | 13·9 | 54·5 | |
| 10·1 | | 18·4 | 36·6 | |
| 9·4 | | 31·5 | 15·0 | |
| 10·0 | | 38·4 | 33·5 | |
| 10·1 | | 40·5 | 27·0 | |
| 10·4† | | 45·4 | 2·0 | |
| 9·4 | | 45·9 | 54·9 | |
| 10·1 | | 47·7 | 45·4 | |
| 8·6 | | 50·9 | 47·6 | 9·0 |
| 9·0 | | 53·0 | 17·1 | |
| 9·2 | | 56·0 | 28·9 | |
| 10·1 | | 59·7 | 35·5 | |
| 9·8 | 53 | 0·5 | 28·0 | |
| 9·2 | | 16·9 | 36·5 | |
| 9·6 | | 19·4 | 40·5 | |
| 9·6 | | 19·5 | 10·1 | |

## 6601—6660.

| mag. | 15h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 53 | 33·9 | 52·8 | |
| 9·8 | | 37·4 | 38·0 | |
| 10·0 | | 39·0 | 10·4 | |
| 7·9 | | 41·4 | 49·5 | 7·0 GS |
| 10·0 | | 42·4 | 33·3 | |
| 9·6 | | 43·7 | 51·2 | |
| 9·8 | | 49·9 | 57·4 | |
| 9·8 | | 50·4 | 45·5 | |
| 9·1 | | 56·6 | 34·2 | |
| 10·0 | | 57·5 | 17·8 | |
| 8·9 | | 58·1 | 51·1 | 9·0 |
| 9·8 | 54 | 2·9 | 36·5 | |
| 8·9 | | 10·7 | 48·8 | 9·2 |
| 9·8 | | 13·3 | 28·2 | |
| 10·0 | | 16·9 | 49·5 | |
| 8·1 | | 18·7 | 5·0 | 8·0 G |
| 10·1 | | 21·0 | 23·0 | |
| 10·0 | | 24·1 | 0·0 | |
| 9·2 | | 29·3 | 48·1 | 9·0 |
| 9·8 | | 34·3 | 47·6 | |
| 9·9 | | 36·4 | 27·5 | |
| 9·9 | | 38·3 | 55·2 | |
| 10·1 | | 39·8 | 56·8 | |
| 10·0 | | 55·4 | 9·0 | |
| 9·1 | | 57·7 | 38·9 | |
| 9·8 | 55 | 0·9 | 20·4 | |
| 8·6 | | 1·9 | 51·9 | 8·8 |
| 9·4 | | 8·5 | 53·8 | 9·0 |
| 9·4 | | 51·5 | 37·7 | 9·5 |
| 10·0 | | 56·5 | 37·5 | |
| 9·6 | | 57·0 | 6·2 | |
| 9·3 | | 57·5 | 27·8 | 9·0 |
| 9·4 | 56 | 0·5 | 19·0 | |
| 9·8 | | 0·5 | 8·0 | |
| 9·3 | | 37·5 | 59·1 | |
| 10·0 | | 38·5 | 34·2 | |
| 9·3 | | 55·0 | 4·2 | |
| 9·6 | 57 | 3·0 | 48·3 | |
| 10·0 | | 18·5 | 11·0 | |
| 9·2 | | 29·5 | 40·2 | 8·5 |
| 9·0 | | 36·5 | 3·1 | 9·5 |
| 7·4 | | 40·5 | 37·7 | 7·0 GS |
| 8·6 | | 49·5 | 24·3 | |
| 10·0 | | 59·5 | 48·7 | |
| 10·0 | 58 | 5·5 | 39·2 | |
| 9·0 | | 8·0 | 5·2 | 9·0 |
| 9·8 | | 25·5 | 48·6 | |
| 8·8 | | 29·0 | 19·7 | |
| 10·0 | | 37·5 | 30·2 | |
| 8·9 | 59 | 0·0 | 10·1 | 9·0 |
| 8·8 | | 1·0 | 56·2 | 9·5 |
| 10·0 | | 2·0 | 19·0 | |
| 9·2 | | 12·5 | 17·0 | |
| 10·0 | | 34·5 | 11·2 | |
| 9·8 | | 36·5 | 12·7 | |
| 10·0 | | 41·0 | 30·2 | |
| 10·0 | | 45·5 | 32·5 | |
| 10·0† | | 47·9 | 1·3 | |
| 8·7 | | 49·0 | 41·2 | 9·0 |
| 10·0 | | 59·5 | 23·6 | |



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### 6661—6720.

| mag. | 16h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8.5 | 0 | 19.5 | 26.2 | |
| 10.0 | | 32.5 | 33.4 | |
| 9.4 | | 33.7 | 59.0 | |
| 9.2 | | 39.5 | 34.2 | |
| 10.0 | | 41.5 | 25.0 | |
| 10.0 | | 47.5 | 4.3 | |
| 9.5 | | 54.0 | 15.8 | |
| 9.6 | 1 | 9.0 | 32.0 | |
| 10.0 | | 11.5 | 47.3 | |
| 9.8 | | 15.5 | 26.3 | |
| 10.1† | | 25.9 | 0.4 | |
| 10.0 | | 30.0 | 54.0 | |
| 9.6 | | 44.0 | 9.2 | |
| 9.3 | | 44.5 | 14.2 | |
| 10.0 | | 58.5 | 37.0 | |
| 10.0 | 2 | 0.5 | 52.2 | |
| 10.0 | | 4.0 | 10.0 | |
| 10.0 | | 7.5 | 11.4 | |
| 10.4† | | 7.8 | 1.3 | |
| 10.0 | | 9.0 | 31.6 | |
| 9.6 | | 13.5 | 33.9 | |
| 10.0 | | 17.0 | 24.2 | |
| 10.0 | | 18.5 | 36.8 | |
| 9.8 | | 23.0 | 53.9 | |
| 10.0 | | 25.0 | 18.3 | |
| 10.0 | | 29.0 | 17.3 | |
| 10.0 | | 29.2 | 1.9 | |
| 9.6 | | 33.0 | 22.0 | |
| 9.6 | | 35.0 | 8.8 | |
| 10.0 | | 41.5 | 51.2 | |
| 9.8 | | 42.5 | 48.2 | |
| 9.0 | | 47.5 | 26.4 | 9.5 |
| 8.8 | 3 | 12.0 | 49.4 | 8.5 |
| 10.0 | | 13.5 | 39.6 | |
| 10.0 | | 21.5 | 4.2 | |
| 8.8 | | 34.5 | 32.4 | 8.5 |
| 9.0 | | 45.5 | 43.4 | |
| 9.6 | | 58.0 | 3.2 | |
| 10.0 | | 58.5 | 32.9 | |
| 9.4 | 4 | 1.5 | 23.1 | 9.0 |
| 9.8 | | 35.0 | 11.2 | |
| 9.1 | | 41.0 | 36.6 | |
| 9.5 | | 47.0 | 32.4 | |
| 9.8 | | 49.5 | 13.8 | |
| 10.0 | | 49.7 | 1.2 | |
| 10.0 | 5 | 14.5 | 59.3 | |
| 9.8 | | 19.0 | 38.3 | |
| 10.0 | | 27.5 | 28.0 | |
| 10.0 | | 30.5 | 50.8 | |
| 8.4 | | 33.0 | 5.8 | 9.0 |
| 10.4† | | 50.4 | 0.1 | |
| 10.0 | | 58.5 | 39.0 | |
| 9.8 | 6 | 0.5 | 7.2 | |
| 10.0 | | 9.5 | 38.2 | |
| 9.6 | | 15.0 | 37.3 | |
| 10.0 | | 26.5 | 0.2 | |
| 10.0 | | 41.0 | 27.2 | |
| 10.0 | | 46.0 | 19.2 | |
| 10.4† | | 48.4 | 2.9 | |
| 9.5 | | 49.5 | 42.0 | |

### 6721—6780.

| mag. | 16h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 6 | 51.5 | 19.2 | |
| 8.9 | | 57.0 | 4.7 | 9.0 |
| 9.1 | 7 | 1.0 | 8.6 | |
| 9.8 | | 13.0 | 14.9 | |
| 9.6 | | 18.5 | 24.1 | |
| 10.0 | | 20.5 | 23.1 | |
| 9.4 | | 30.5 | 48.3 | |
| 10.0 | | 30.7 | 59.7 | |
| 9.6 | | 44.5 | 39.1 | |
| 8.8 | | 46.0 | 35.1 | |
| 10.0 | | 51.5 | 43.0 | |
| 10.0 | | 59.5 | 29.5 | |
| 8.2 | 8 | 2.5 | 4.7 | 7.5 GScr |
| 9.4 | | 8.5 | 40.0 | |
| 10.0 | | 12.5 | 47.5 | |
| 10.0 | | 28.0 | 47.1 | |
| 10.0 | | 28.0 | 29.2 | |
| 8.8 | | 33.0 | 17.8 | |
| 9.0 | | 52.5 | 6.7 | |
| 9.4 | | 54.0 | 58.9 | 9.0 |
| 9.2 | | 54.0 | 19.0 | |
| 8.6 | 9 | 12.5 | 45.5 | |
| 10.0 | | 15.0 | 14.0 | |
| 10.0 | | 27.0 | 1.4 | |
| 10.1† | | 32.4 | 0.9 | |
| 10.0 | | 38.0 | 10.5 | |
| 10.0 | | 56.5 | 28.1 | |
| 8.1 | 10 | 1.5 | 9.1 | |
| 9.0 | | 4.0 | 15.8 | |
| 10.0 | | 5.0 | 7.3 | |
| 10.0 | | 6.5 | 39.6 | |
| 9.8 | | 7.5 | 20.1 | |
| 9.8 | | 26.0 | 3.5 | |
| 9.2 | | 31.0 | 24.9 | |
| 10.0 | | 34.2 | 1.0 | |
| 10.0 | | 41.0 | 23.7 | |
| 8.9 | | 46.5 | 12.1 | |
| 9.8 | 11 | 1.0 | 34.5 | |
| 8.7 | | 2.5 | 5.0 | 9.0 |
| 9.4 | | 23.5 | 24.1 | |
| 9.6 | | 27.0 | 25.7 | |
| 9.2 | | 28.0 | 45.1 | |
| 9.1 | | 29.2 | 57.8 | |
| 10.4† | | 35.9 | 2.2 | |
| 9.8 | | 40.0 | 33.7 | |
| 9.0 | 12 | 9.5 | 20.5 | |
| 10.0 | | 11.0 | 16.9 | |
| 10.0 | | 34.0 | 12.7 | 9.5 |
| 10.1 | | 47.5 | 27.7 | |
| 10.1 | | 52.5 | 28.1 | |
| 10.0 | | 54.0 | 10.7 | |
| 10.0 | | 59.0 | 12.3 | |
| 9.4 | 13 | 2.5 | 35.3 | 9.5 |
| 9.0 | | 4.0 | 36.7 | 9.0 |
| 9.3 | | 21.2 | 0.9 | |
| 10.0 | | 21.5 | 5.3 | |
| 7.6 | | 32.5 | 18.3 | 7.5 GSr |
| 9.0 | | 35.5 | 20.7 | |
| 10.1† | | 44.4 | 1.9 | |
| 10.0 | 14 | 27.5 | 19.5 | |

### 6781—6840.

| mag. | 16h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.4 | 14 | 30.5 | 3.1 | |
| 9.4 | | 31.0 | 16.1 | |
| 9.6 | | 42.5 | 59.7 | |
| 10.4† | | 56.4 | 0.5 | |
| 10.2† | | 57.9 | 1.7 | |
| 9.8 | 15 | 10.2 | 59.6 | |
| 9.8 | | 15.0 | 16.1 | |
| 10.0 | | 34.5 | 36.3 | |
| 10.0 | | 41.5 | 23.1 | |
| 10.0 | 16 | 2.5 | 14.9 | |
| 10.0 | | 26.5 | 58.2 | |
| 10.0 | | 38.5 | 13.0 | |
| 9.0 | | 41.5 | 15.5 | |
| 10.0 | | 46.0 | 16.1 | |
| 10.0 | | 50.5 | 59.1 | |
| 8.8 | 17 | 8.0 | 53.7 | |
| 9.2 | | 20.7 | 0.4 | |
| 9.1 | | 23.0 | 31.1 | |
| 10.0 | | 31.5 | 55.2 | |
| 6.2 | | 43.0 | 18.7 | 6.0 GStr |
| 8.9 | | 45.0 | 23.4 | 9.0 |
| 9.3 | | 49.5 | 0.6 | |
| 9.8 | | 49.5 | 51.1 | |
| 10.0 | 18 | 18.5 | 30.7 | |
| 10.0 | | 45.5 | 4.1 | |
| 10.0 | | 47.5 | 39.0 | |
| 10.0 | 19 | 4.5 | 41.1 | |
| 9.4 | | 12.0 | 11.2 | |
| 8.5 | | 13.0 | 0.1 | 9.5 |
| 10.0 | | 22.5 | 28.1 | |
| 10.0 | | 35.5 | 27.7 | |
| 10.0 | | 36.5 | 24.1 | |
| 9.3 | | 36.5 | 23.1 | |
| 8.9 | | 40.5 | 54.2 | |
| 9.1 | 20 | 10.5 | 41.9 | |
| 10.0 | | 10.5 | 39.1 | |
| 9.6 | | 23.0 | 29.3 | 9.5 |
| 9.8 | | 26.5 | 33.5 | |
| 8.5 | | 29.5 | 31.0 | 9.0 |
| 9.8 | | 44.5 | 24.5 | |
| 9.6 | | 58.0 | 30.1 | 9.0 |
| 10.0 | 21 | 19.5 | 59.4 | |
| 9.1 | | 23.0 | 21.3 | |
| 8.5 | | 57.5 | 39.5 | 8.5 |
| 9.1 | | 59.5 | 48.9 | |
| 8.5 | 22 | 3.0 | 15.5 | 9.0 |
| 9.3 | | 23.0 | 20.0 | 9.0 |
| 10.0 | | 33.0 | 8.0 | |
| 8.8 | | 54.7 | 58.0 | |
| 8.6 | 23 | 13.0 | 47.2 | |
| 9.6 | | 19.0 | 12.2 | |
| 9.6 | | 27.5 | 3.1 | |
| 10.0 | | 31.5 | 26.2 | |
| 10.0 | | 51.5 | 55.3 | |
| 8.7 | 24 | 5.7 | 58.0 | 9.2 |
| 8.5 | | 26.5 | 35.0 | 9.0 |
| 8.9 | 25 | 13.0 | 34.6 | |
| 10.0 | | 25.5 | 24.4 | |
| 9.4 | 26 | 17.5 | 11.4 | |
| 10.0 | | 30.0 | 14.4 | |

### 6841—6900.

| mag. | 16h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10.0 | 27 | 2.3 | 2.4 | |
| 8.8 | | 5.5 | 57.0 | 9.0 |
| 9.3 | | 6.5 | 12.5 | |
| 7.7 | | 22.0 | 22.3 | 8.0 |
| 10.0 | | 50.5 | 21.8 | |
| 10.0 | 28 | 27.5 | 29.5 | |
| 10.0 | | 29.0 | 53.0 | |
| 10.0 | | 32.5 | 5.0 | |
| 10.0 | | 33.5 | 6.0 | |
| 9.8 | | 42.0 | 0.1 | |
| 10.0 | | 45.0 | 0.0 | |
| 9.1 | | 53.5 | 45.2 | |
| 10.0 | 29 | 0.5 | 19.8 | |
| 8.8 | | 16.5 | 3.8 | 9.0 |
| 9.4 | | 17.0 | 7.7 | |
| 10.0 | | 33.0 | 43.2 | |
| 10.0 | | 35.8 | 56.2 | |
| 10.0 | | 41.2 | 11.1 | |
| 9.8 | | 49.5 | 52.9 | |
| 9.0 | | 51.0 | 28.4 | |
| 9.2 | | 52.0 | 7.9 | |
| 8.4 | | 53.5 | 50.1 | 9.0 |
| 9.1 | | 56.0 | 33.7 | |
| 7.6 | 30 | 14.0 | 37.1 | 7.5 GSc |
| 9.1 | | 14.2 | 21.0 | |
| 9.8 | | 15.0 | 38.0 | |
| 9.8 | | 24.0 | 44.1 | |
| 9.7 | | 34.0 | 28.8 | |
| 9.3 | | 50.0 | 11.2 | |
| 8.8 | 31 | 9.5 | 51.5 | 9.0 |
| 8.8 | | 50.5 | 38.4 | |
| 9.6 | 32 | 2.5 | 43.9 | |
| 8.1 | | 2.5 | 42.3 | 8.5 |
| 9.6 | | 6.5 | 16.9 | 9.0 |
| 7.6 | | 27.5 | 13.5 | 8.0 |
| 8.2 | | 32.0 | 57.9 | 9.0 |
| 9.8 | | 42.5 | 5.9 | |
| 9.8 | 33 | 4.5 | 14.3 | |
| 8.1 | | 36.0 | 19.4 | 8.2 |
| 9.8 | | 45.5 | 32.0 | |
| 8.8 | | 57.5 | 30.1 | |
| 8.3 | 34 | 12.5 | 14.5 | 9.0 |
| 8.5 | | 16.5 | 11.6 | 9.0 |
| 8.6 | | 48.5 | 4.5 | |
| 8.4 | | 49.0 | 39.9 | 9.5 |
| 9.8 | | 49.5 | 36.6 | |
| 9.2 | | 52.5 | 36.5 | |
| 9.6 | | 59.0 | 17.3 | |
| 5.7 | 35 | 41.5 | 16.0 | 6.0 GSc |
| 8.8 | | 54.5 | 48.4 | 8.5 |
| 9.2 | 36 | 20.0 | 12.9 | |
| 9.0 | | 36.5 | 44.9 | 8.5 |
| 5.9 | | 42.0 | 6.5 | 6.0 GSct |
| 9.7 | | 44.0 | 27.1 | |
| 9.8 | 37 | 3.0 | 26.8 | |
| 9.8 | | 4.5 | 27.3 | |
| 9.2 | | 11.0 | 18.2 | |
| 9.1 | | 12.5 | 28.7 | |
| 8.7 | | 13.0 | 0.0 | 8.5 |
| 9.4 | | 41.0 | 58.7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 124 | 4.2 |
| | 10 | 125 | 3.9 |
| | 20 | 126 | 3.5 |
| | 30 | 127 | 3.2 |
| | 40 | 128 | 2.9 |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 16 | 30 | 127 | 3·2 |
| | 40 | 128 | 2·9 |
| | 50 | 129 | 2·5 |
| 17 | 0 | 129 | 2·2 |
| | 10 | 130 | 1·8 |
| | 20 | 131 | 1·5 |

## 6901—6960.

| mag. | 16h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 37 | 57·0 | 19·0 | |
| 9·0 | 38 | 0·5 | 5·4 | |
| 9·3 | | 1·5 | 24·8 | |
| 9·0 | | 41·5 | 7·8 | |
| 9·8 | | 53·0 | 25·4 | |
| 6·2 | 39 | 0·0 | 49·0 | 4·0 GSct |
| 9·7 | | 26·0 | 56·0 | |
| 9·0 | | 30·5 | 22·9 | |
| 8·5 | | 38·5 | 38·9 | 8·8 |
| 9·8 | | 39·0 | 5·1 | |
| 8·0 | 40 | 14·5 | 13·5 | 8·5 |
| 9·4 | | 41·5 | 34·6 | |
| 9·7 | | 51·5 | 25·1 | |
| 9·2 | | 55·0 | 10·0 | |
| 9·2 | 41 | 24·5 | 38·5 | |
| 9·3 | | 45·5 | 31·6 | |
| 9·4 | 42 | 0·0 | 6·5 | |
| 8·7 | | 11·0 | 44·6 | |
| 8·6 | | 22·5 | 14·4 | 8·5 |
| 9·6 | | 23·5 | 58·0 | |
| 9·7 | 43 | 0·1 | 25·0 | |
| 8·2 | | 36·8 | 2·2 | 8·5 |
| 9·0 | | 37·0 | 46·9 | |
| 8·6 | | 52·0 | 42·0 | 9·5 |
| 9·0 | | 57·0 | 35·0 | |
| 9·3 | 44 | 11·0 | 28·4 | |
| 9·8 | | 18·0 | 50·8 | |
| 9·8 | | 27·5 | 20·0 | |
| 9·7 | | 32·0 | 16·0 | |
| 9·6 | | 40·0 | 48·0 | |
| 8·4 | 45 | 2·0 | 37·1 | 9·0 |
| 9·4 | | 4·5 | 37·9 | |
| 9·4 | | 32·5 | 35·0 | |
| 9·2 | | 56·5 | 17·8 | |
| 9·2 | 46 | 8·0 | 27·7 | 9·0 |
| 9·6 | | 13·5 | 24·0 | 9·5 |
| 9·2 | | 27·0 | 19·4 | |
| 7·9 | | 28·0 | 30·5 | 8·5 G |
| 9·6 | | 30·0 | 32·9 | 9·0 |
| 9·6 | | 30·0 | 38·7 | |
| 9·2 | | 38·5 | 43·4 | |
| 9·6 | | 57·5 | 3·2 | |
| 9·7 | 47 | 10·0 | 55·9 | |
| 8·5 | | 15·5 | 25·8 | 8·5 GS |
| 7·8 | | 19·0 | 47·4 | 8·0 GS |
| 9·7 | | 38·5 | 31·9 | |
| 10·1† | | 40·8 | 2·3 | |
| 9·6 | | 53·0 | 54·1 | |
| 9·8 | 48 | 1·0 | 54·6 | |
| 8·2 | | 3·5 | 17·0 | |
| 9·8 | | 6·5 | 55·0 | |
| 9·8 | | 9·5 | 37·7 | |
| 9·8 | | 19·5 | 24·1 | |
| 9·8 | | 27·0 | 36·8 | |
| 9·7 | 49 | 3·0 | 58·1 | |
| 9·6 | | 9·5 | 57·3 | |
| 9·2 | | 18·0 | 49·0 | 8·0 |
| 9·0 | | 42·0 | 44·9 | |
| 8·4 | 50 | 7·0 | 5·6 | |
| 7·0 | | 19·0 | 39·4 | 7·0 G |

## 6961—7020.

| mag. | 16h.–17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·4 | 50 | 28·0 | 47·2 | |
| 9·6 | | 33·0 | 44·0 | |
| 9·2 | | 35·5 | 53·0 | |
| 6·0 | | 58·0 | 46·1 | 6·5 GS |
| 7·2 | 51 | 2·5 | 51·4 | 7·5 GSt |
| 7·9 | | 5·5 | 50·1 | 8·5 G |
| 8·8 | | 9·0 | 12·0 | |
| 9·4 | | 16·0 | 58·7 | |
| 8·8 | | 17·0 | 6·6 | |
| 9·8 | | 38·5 | 39·0 | |
| 9·6 | | 47·0 | 5·9 | |
| 8·4 | | 52·0 | 43·0 | 9·0 |
| 9·7 | 52 | 8·0 | 38·0 | |
| 9·8 | | 19·0 | 39·4 | |
| 7·8 | | 21·0 | 21·5 | 7·5 GS |
| 8·6 | | 27·5 | 33·0 | |
| 9·7 | | 28·0 | 35·8 | |
| 9·7 | | 36·0 | 22·8 | |
| 9·6 | | 49·0 | 22·8 | |
| 9·8 | 53 | 13·0 | 15·1 | |
| 8·8 | | 30·0 | 50·3 | 8·5 |
| 9·7 | | 57·5 | 6·5 | |
| 9·7 | | 59·0 | 44·5 | |
| 8·8 | 54 | 0·0 | 33·6 | |
| 7·5 | | 2·5 | 45·7 | 8·5 G |
| 9·6 | | 3·0 | 27·5 | |
| 10·1† | | 7·5 | 1·1 | |
| 9·3 | | 30·0 | 30·3 | |
| 10·1† | | 46·5 | 2·6 | |
| 9·3 | 55 | 33·5 | 51·3 | |
| 8·9 | | 40·5 | 2·5 | 9·0 |
| 9·4 | | 42·5 | 53·0 | |
| 9·6 | | 45·0 | 28·4 | |
| 10·0† | 56 | 4·8 | 2·8 | |
| 9·7 | | 7·5 | 33·4 | |
| 9·8 | | 21·5 | 20·3 | |
| 9·7 | 57 | 3·0 | 53·3 | |
| 8·4 | | 4·5 | 1·1 | |
| 9·4 | | 15·5 | 49·0 | |
| 8·8 | | 35·7 | 58·4 | |
| 9·0 | 58 | 1·0 | 50·7 | |
| 9·8† | | 8·3 | 1·1 | |
| 9·7 | | 39·0 | 38·1 | |
| 8·8 | | 41·0 | 0·0 | |
| 9·7 | 59 | 2·0 | 26·8 | |
| 8·5 | | 47·5 | 33·5 | 9·0 |
| 9·0 | 0 | 12·5 | 51·7 | |
| 9·7 | | 43·5 | 19·8 | |
| 7·0 | | 53·0 | 39·3 | 8·0 GS |
| 9·0 | 1 | 2·5 | 55·4 | |
| 8·5 | | 42·5 | 17·9 | 9·0 |
| 8·4 | 2 | 4·7 | 0·9 | |
| 9·2 | | 10·0 | 45·1 | 7·5 G |
| 7·0 | | 10·5 | 26·2 | 7·0 GSt |
| 9·2 | | 14·5 | 28·0 | |
| 9·6 | | 18·0 | 0·4 | |
| 9·8 | | 21·0 | 40·1 | |
| 9·6† | | 23·4 | 2·5 | |
| 9·4 | | 31·5 | 39·0 | |
| 9·2 | | 34·5 | 15·4 | |

## 7021—7080.

| mag. | 17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·3 | 2 | 55·0 | 12·9 | |
| 8·8 | 3 | 8·5 | 59·8 | |
| 9·3 | | 32·0 | 26·9 | |
| 9·7 | | 50·5 | 34·5 | |
| 10·1† | | 59·4 | 2·0 | |
| 8·9 | 4 | 29·2 | 15·7 | |
| 8·5 | 5 | 5·5 | 7·1 | 9·0 |
| 9·1 | | 13·7 | 35·6 | |
| 9·6 | | 14·9 | 38·5 | |
| 9·5 | | 17·0 | 35·2 | |
| 10·0 | | 20·4 | 57·3 | |
| 9·0 | | 35·3 | 2·1 | 9·5 |
| 9·8 | | 49·9 | 43·5 | |
| 9·8 | | 52·9 | 33·9 | |
| 10·0 | 6 | 1·8 | 9·8 | |
| 9·9 | | 8·5 | 20·1 | |
| 8·8 | | 11·5 | 17·1 | |
| 9·6 | | 11·8 | 20·2 | |
| 9·2 | | 14·7 | 35·6 | |
| 9·6 | | 19·4 | 35·3 | |
| 8·4 | | 20·9 | 53·8 | |
| 9·8 | | 21·8 | 29·7 | |
| 10·0 | | 26·2 | 2·1 | |
| 9·5 | | 37·4 | 56·8 | |
| 9·9 | | 43·0 | 5·9 | |
| 10·0 | | 49·0 | 15·3 | |
| 9·6 | 7 | 0·4 | 39·1 | |
| 9·6 | | 4·4 | 41·9 | |
| 9·6 | | 5·0 | 12·0 | |
| 9·6 | | 6·9 | 40·3 | |
| 8·7 | | 8·0 | 2·0 | 8·5 |
| 9·6 | | 23·0 | 22·5 | |
| 10·0 | | 31·9 | 37·3 | |
| 9·8 | | 47·5 | 23·2 | |
| 9·4 | | 54·5 | 7·1 | |
| 10·0 | 8 | 2·8 | 28·0 | |
| 9·4 | | 4·4 | 35·5 | |
| 9·3 | | 10·0 | 14·7 | |
| 8·8 | | 11·8 | 52·4 | 9·0 |
| 9·2 | | 13·9 | 26·2 | |
| 10·0 | | 14·3 | 34·8 | |
| 9·8 | | 23·9 | 20·3 | |
| 9·6 | | 50·8 | 43·9 | |
| 9·0 | | 51·9 | 28·0 | |
| 9·4 | | 57·3 | 59·7 | |
| 9·8 | 9 | 22·8 | 30·4 | |
| 9·6 | | 36·4 | 23·9 | |
| 9·1 | | 52·9 | 9·0 | |
| 9·0 | | 53·3 | 39·0 | |
| 9·4 | 10 | 11·8 | 35·1 | |
| 9·4 | | 13·4 | 29·6 | |
| 9·6 | | 25·8 | 42·8 | |
| 10·0 | | 27·8 | 53·0 | |
| 10·0 | | 41·3 | 58·3 | |
| 9·9 | | 52·3 | 55·7 | |
| 9·9 | 11 | 7·9 | 26·0 | |
| 9·4 | | 10·3 | 54·1 | |
| 9·3 | | 11·3 | 54·1 | |
| 9·2 | | 13·8 | 46·3 | |
| 9·0 | | 26·4 | 14·3 | |

## 7081—7140.

| mag. | 17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 11 | 28·8 | 45·6 | |
| 9·6 | | 28·9 | 22·7 | |
| 9·6 | | 29·3 | 40·8 | |
| 9·6 | | 29·8 | 52·5 | |
| 9·8 | | 42·8 | 37·5 | |
| 7·5 | | 57·9 | 20·5 | 7·0 GS |
| 9·2 | 12 | 2·9 | 16·1 | |
| 10·0 | | 17·4 | 13·7 | |
| 10·0 | | 18·4 | 0·5 | |
| 9·8 | | 18·8 | 33·4 | |
| 9·6 | | 25·3 | 49·0 | |
| 10·0† | | 26·7 | 0·6 | |
| 9·6 | | 43·4 | 8·3 | |
| 10·0 | | 43·8 | 54·4 | |
| 9·4 | | 48·3 | 48·1 | |
| 9·0 | | 49·3 | 56·9 | |
| 8·7 | | 49·8 | 53·8 | |
| 9·6 | | 50·4 | 16·0 | |
| 7·0 | | 50·8 | 32·2 | 7·0 GS |
| 10·0 | 13 | 1·4 | 20·9 | |
| 9·8 | | 13·3 | 35·0 | |
| 9·6 | | 17·1 | 39·8 | |
| 9·4 | | 17·1 | 42·9 | |
| 9·8 | | 32·1 | 1·6 | |
| 10·1† | | 33·5 | 1·1 | |
| 10·0 | | 38·7 | 2·6 | |
| 9·9 | | 39·6 | 29·9 | |
| 9·6 | 14 | 3·1 | 36·4 | |
| 9·6 | | 4·1 | 51·5 | |
| 9·8 | | 4·6 | 30·6 | |
| 8·3 | | 23·6 | 56·1 | 8·0 G |
| 9·6 | | 33·6 | 55·5 | |
| 9·9 | | 36·2 | 18·8 | |
| 9·8 | | 39·7 | 16·5 | |
| 9·6 | | 40·1 | 49·6 | |
| 9·0 | | 43·7 | 17·3 | |
| 9·8 | | 44·2 | 4·4 | |
| 9·3 | | 46·2 | 12·8 | |
| 9·6 | | 48·1 | 44·7 | |
| 9·8 | | 48·6 | 54·3 | |
| 9·9 | | 54·7 | 21·2 | |
| 10·0 | 15 | 1·9 | 2·4 | |
| 10·0 | | 10·2 | 29·4 | |
| 10·0 | | 13·1 | 37·7 | |
| 9·8 | | 19·7 | 10·3 | |
| 8·8 | | 32·2 | 28·5 | |
| 9·0 | | 41·2 | 21·2 | |
| 8·9 | | 42·6 | 53·4 | 8·2 |
| 9·9 | | 46·2 | 21·3 | |
| 10·0 | | 57·1 | 34·9 | |
| 9·6 | 16 | 0·1 | 55·4 | 10·0 |
| 9·8 | | 9·7 | 12·7 | |
| 9·9 | | 9·7 | 0·9 | |
| 9·2 | | 28·1 | 46·4 | |
| 9·8 | | 35·1 | 47·0 | |
| 9·6 | 17 | 21·2 | 15·6 | |
| 9·6 | | 26·6 | 53·4 | |
| 9·0 | | 46·9 | 0·0 | |
| 9·5 | | 51·2 | 25·2 | |
| 9·5 | | 58·1 | 47·9 | |



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### 7141—7200.

| mag. | 17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·4 | 18 | 4·1 | 55·3 | 7·5 GSt |
| 9·8 | | 9·1 | 43·8 | |
| 9·8 | | 41·7 | 25·1 | |
| 10·0 | | 48·2 | 22·8 | |
| 9·8 | | 58·1 | 32·9 | |
| 9·9 | 19 | 3·6 | 38·5 | |
| 9·6 | | 10·9 | 6·4 | |
| 10·0 | | 25·4 | 19·8 | |
| 9·9 | | 52·3 | 35·3 | |
| 10·0 | | 57·3 | 36·9 | |
| 8·9 | 20 | 2·7 | 2·0 | 10·0 |
| 9·3 | | 4·9 | 1·8 | |
| 10·0 | | 8·8 | 58·4 | |
| 9·6 | | 12·4 | 16·2 | |
| 9·8 | | 13·8 | 34·3 | |
| 9·6 | | 16·3 | 30·6 | |
| 10·0 | | 29·3 | 37·0 | |
| 9·6 | | 34·4 | 24·4 | |
| 10·0 | | 50·9 | 13·7 | |
| 8·6 | 21 | 4·9 | 29·8 | |
| 10·0 | | 9·8 | 55·8 | |
| 9·8 | | 10·9 | 27·7 | |
| 9·6 | | 27·3 | 40·5 | |
| 10·0 | | 28·4 | 19·7 | |
| 9·4 | | 30·4 | 18·1 | |
| 9·9 | | 49·4 | 29·3 | |
| 9·6 | | 57·4 | 8·3 | |
| 9·6 | 22 | 0·4 | 6·0 | |
| 9·8 | | 0·4 | 24·9 | |
| 7·5 | | 17·9 | 27·6 | 7·8 GS |
| 9·5 | | 26·9 | 21·1 | |
| 9·8 | | 31·4 | 26·3 | |
| 9·8 | | 41·9 | 4·0 | |
| 9·5 | | 50·9 | 29·1 | |
| 9·8 | 23 | 11·9 | 18·6 | |
| 8·5 | | 19·9 | 26·1 | 8·8 |
| 10·0 | | 22·9 | 11·9 | |
| 9·1 | | 23·4 | 3·2 | |
| 10·0 | | 58·8 | 48·8 | |
| 10·1† | 24 | 12·0 | 2·2 | |
| 10·0 | | 13·3 | 55·8 | |
| 9·6 | | 14·9 | 11·5 | |
| 9·6 | | 26·9 | 14·3 | |
| 10·0 | | 29·3 | 36·1 | |
| 9·8 | | 37·3 | 30·2 | |
| 9·8 | | 45·9 | 40·9 | |
| 9·1 | | 47·8 | 54·2 | |
| 9·2 | | 48·5 | 16·9 | |
| 10·0 | | 56·0 | 19·9 | |
| 9·8 | 25 | 0·4 | 44·2 | |
| 9·6 | | 0·7 | 58·1 | |
| 9·6 | | 9·0 | 29·9 | |
| 7·8 | | 10·9 | 49·6 | 8·5 G |
| 9·6 | | 25·4 | 33·4 | |
| 8·4 | | 29·5 | 16·6 | 8·0 |
| 10·0 | | 49·5 | 14·8 | |
| 9·2 | 26 | 1·0 | 20·8 | |
| 9·0 | | 39·5 | 23·2 | |
| 9·9 | | 49·0 | 0·8 | |
| 8·7 | | 50·5 | 14·9 | 9·5 G |

### 7201—7260.

| mag. | 17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·1 | 26 | 53·6 | 57·8 | |
| 10·0 | 27 | 0·5 | 4·1 | |
| 9·2 | | 18·9 | 37·9 | |
| 10·0 | | 21·0 | 7·1 | |
| 9·2 | | 21·9 | 52·6 | |
| 9·6 | | 28·9 | 34·4 | |
| 10·0 | | 41·0 | 2·8 | |
| 9·4 | | 48·4 | 49·2 | |
| 9·1 | | 50·9 | 41·8 | |
| 8·7 | | 59·4 | 42·8 | |
| 9·8 | 28 | 8·9 | 54·2 | |
| 8·8 | | 13·0 | 4·3 | |
| 9·0 | | 13·5 | 9·4 | |
| 9·6 | | 21·9 | 49·4 | |
| 9·4 | | 37·9 | 39·1 | |
| 9·4 | | 48·0 | 8·3 | |
| 9·4 | | 48·5 | 17·4 | |
| 9·6 | | 54·4 | 40·9 | |
| 9·5 | | 57·0 | 17·8 | |
| 9·8 | 29 | 0·5 | 28·1 | |
| 9·9 | | 27·0 | 24·5 | |
| 9·8 | | 36·0 | 23·0 | |
| 9·8 | | 39·5 | 23·1 | |
| 9·2 | | 56·9 | 55·9 | 9·5 |
| 10·0 | 30 | 1·0 | 3·0 | |
| 10·0 | | 27·5 | 12·1 | |
| 10·0 | | 32·0 | 18·2 | |
| 9·5 | | 57·4 | 59·3 | |
| 8·6 | | 57·7 | 44·9 | G |
| 8·6 | 31 | 19·8 | 25·6 | |
| 9·4 | | 20·2 | 51·3 | |
| 9·8 | | 24·7 | 34·3 | |
| 8·6 | | 45·8 | 0·9 | |
| 9·4 | | 51·7 | 30·6 | |
| 10·0 | | 59·3 | 12·0 | |
| 10·0 | 32 | 24·8 | 8·8 | |
| 10·0 | | 36·8 | 9·8 | |
| 9·8 | | 42·7 | 30·4 | |
| 9·9 | 33 | 1·7 | 35·0 | |
| 8·8 | | 17·3 | 3·6 | 8·5 |
| 10·0 | | 23·7 | 39·7 | |
| 9·9 | | 40·8 | 7·8 | |
| 9·5 | | 56·7 | 54·2 | |
| 10·0 | 34 | 2·8 | 28·3 | |
| 9·1 | | 3·8 | 17·5 | |
| 9·9 | | 27·8 | 4·3 | |
| 8·4 | | 44·2 | 55·1 | |
| 9·8 | 35 | 13·8 | 7·4 | |
| 9·1 | | 14·3 | 15·9 | |
| 9·4 | | 18·7 | 42·9 | |
| 9·8 | | 19·2 | 56·0 | |
| 10·0 | | 32·2 | 45·3 | |
| 7·4 | | 59·8 | 8·4 | 7·5 GS |
| 9·8 | 36 | 5·8 | 59·5 | |
| 9·4 | | 24·7 | 38·4 | |
| 9·8 | | 34·8 | 16·0 | |
| 9·8 | | 39·7 | 41·4 | |
| 9·6 | | 39·8 | 9·9 | |
| 9·8 | 37 | 6·7 | 30·5 | |
| 9·8 | | 7·7 | 55·9 | |

### 7261—7320.

| mag. | 17h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·2 | 37 | 11·8 | 12·4 | |
| 9·9 | | 17·8 | 6·4 | |
| 9·2 | | 45·8 | 22·7 | |
| 9·8 | | 53·1 | 28·2 | |
| 9·9 | 38 | 6·2 | 58·5 | |
| 9·0 | | 31·8 | 2·3 | |
| 10·0 | | 53·5 | 54·4 | |
| 10·0 | 39 | 5·6 | 0·2 | |
| 9·1 | | 6·5 | 48·6 | |
| 10·0 | | 17·5 | 49·1 | |
| 9·4 | | 46·6 | 7·5 | 9·0 |
| 9·4 | | 50·6 | 22·6 | |
| 9·5 | | 53·0 | 35·1 | |
| 10·0 | 40 | 3·6 | 25·8 | |
| 9·8 | | 13·0 | 50·5 | |
| 10·0 | | 15·0 | 54·0 | |
| 9·8 | | 28·8 | 17·2 | |
| 10·1† | | 29·6 | 1·7 | |
| 9·6 | 41 | 17·3 | 45·4 | |
| 9·3 | | 20·0 | 44·1 | |
| 8·9 | | 29·6 | 27·0 | 9·5 |
| 9·5 | | 29·6 | 10·0 | |
| 9·2 | | 47·8 | 24·6 | 9·2 |
| 9·4 | 42 | 2·3 | 13·3 | |
| 8·8 | | 3·1 | 0·5 | |
| 7·7 | | 10·5 | 49·6 | 8·0 |
| 9·8 | | 59·5 | 32·1 | |
| 7·8 | 43 | 0·8 | 14·2 | GS |
| 7·0 | | 26·5 | 52·7 | 8·0 |
| 9·8 | | 44·0 | 45·7 | |
| 9·8 | 44 | 20·5 | 59·1 | |
| 9·4 | | 30·5 | 51·4 | |
| 9·0 | 45 | 17·5 | 40·4 | |
| 9·2 | | 57·5 | 30·1 | |
| 9·6 | 46 | 18·5 | 28·1 | |
| 9·8 | | 23·5 | 31·7 | |
| 9·8 | | 28·5 | 27·0 | |
| 9·2 | 47 | 17·5 | 53·2 | 9·2 |
| 9·8 | | 21·0 | 29·0 | |
| 9·0 | | 22·5 | 48·2 | |
| 9·8 | | 43·0 | 18·4 | |
| 8·4 | | 48·0 | 38·0 | 8·0 GS |
| 9·2 | | 52·5 | 22·3 | |
| 9·0 | 48 | 3·0 | 3·8 | |
| 10·0† | | 54·5 | 0·1 | |
| 8·8 | 49 | 22·0 | 44·6 | |
| 9·8 | | 38·0 | 14·5 | |
| 9·4 | | 56·0 | 56·1 | |
| 9·8 | | 59·0 | 30·8 | |
| 8·8 | 50 | 1·5 | 26·5 | 8·2 |
| 9·1 | | 22·0 | 4·9 | |
| 9·0 | | 37·3 | 2·2 | |
| 9·8 | | 37·5 | 19·5 | |
| 9·5 | | 54·5 | 42·3 | |
| 9·0 | 51 | 14·5 | 48·6 | |
| 9·8 | | 20·5 | 16·7 | |
| 8·4 | | 41·5 | 21·7 | 9·0 |
| 8·3 | | 41·5 | 12·3 | 9·0 |
| 8·7 | 52 | 1·5 | 59·0 | |
| 8·5 | | 10·5 | 55·7 | |

### 7321—7380.

| mag. | 17h.—18h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·2 | 52 | 15·0 | 22·2 | |
| 8·4 | | 42·5 | 17·8 | 8·8 |
| 8·2 | | 44·5 | 37·3 | 8·5 |
| 9·6 | 53 | 0·0 | 10·1 | |
| 9·4 | | 3·0 | 14·1 | |
| 9·8† | | 28·9 | 1·3 | |
| 9·8 | | 39·0 | 31·7 | |
| 9·6 | | 46·0 | 31·0 | |
| 9·8 | | 50·0 | 12·1 | |
| 8·8 | 54 | 14·0 | 37·0 | |
| 9·6 | | 28·5 | 38·2 | |
| 9·8 | | 36·5 | 10·3 | |
| 6·3 | 55 | 32·0 | 34·4 | 7·0 GSct |
| 9·8 | 56 | 8·5 | 53·1 | |
| 8·8 | | 16·5 | 55·0 | |
| 9·4 | | 42·0 | 40·7 | |
| 8·0 | 57 | 41·0 | 33·8 | 8·5 |
| 9·0 | | 42·0 | 44·5 | |
| 9·8 | 58 | 1·5 | 11·1 | |
| 9·8 | | 6·0 | 28·4 | 9·0 |
| 9·8 | | 22·5 | 3·1 | |
| 9·8 | | 34·0 | 6·4 | |
| 9·8 | | 50·5 | 33·1 | |
| 9·1 | 59 | 6·0 | 7·6 | |
| 8·0 | | 7·2 | 59·0 | 8·5 |
| 9·2 | | 20·5 | 33·9 | |
| 9·0 | 0 | 8·5 | 31·0 | 9·0 |
| 9·8 | | 9·0 | 23·8 | |
| 8·4 | 1 | 1·5 | 12·5 | 7·5 GS |
| 9·2 | | 6·5 | 19·7 | 9·0 |
| 9·5 | | 19·5 | 50·2 | |
| 9·2 | | 20·0 | 18·0 | 9·0 |
| 8·5 | | 28·0 | 39·1 | |
| 9·8 | 3 | 19·0 | 20·4 | |
| 8·2 | | 21·0 | 43·9 | 8·0 |
| 9·8 | | 35·5 | 6·2 | |
| 9·1 | 4 | 13·5 | 8·4 | |
| 9·2 | | 15·0 | 14·1 | |
| 9·8 | | 16·0 | 51·0 | |
| 8·4 | | 24·5 | 4·2 | 8·7 |
| 9·8 | | 29·5 | 22·2 | 9·5 |
| 8·8 | | 38·0 | 13·0 | 9·0 |
| 9·0 | 5 | 43·5 | 43·1 | |
| 9·8 | | 51·5 | 31·0 | |
| 7·8 | 6 | 20·0 | 13·2 | 8·5 |
| 8·2 | | 53·0 | 13·3 | 8·5 G |
| 8·8 | 7 | 7·5 | 56·9 | 8·5 |
| 9·0 | | 26·0 | 34·2 | |
| 8·4 | 8 | 9·8 | 0·3 | 9·0 |
| 9·8 | | 17·0 | 46·1 | |
| 8·8 | | 19·5 | 47·6 | 8·0 |
| 9·6 | | 19·5 | 22·2 | |
| 9·8 | | 46·5 | 43·7 | |
| 9·0 | 10 | 38·5 | 55·8 | |
| 9·8 | | 55·0 | 30·4 | |
| 8·4 | | 56·5 | 53·1 | 8·0 |
| 9·6 | 11 | 32·5 | 51·2 | |
| 9·2 | | 37·5 | 8·0 | |
| 9·2 | 12 | 14·0 | 56·4 | |
| 9·5 | | 23·0 | 28·0 | 8·2 |

### 25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 10 | 130 | 1·8 |
| | 20 | 131 | 1·5 |
| | 30 | 131 | 1·1 |
| | 40 | 131 | 0·7 |
| | 50 | 131 | 0·4 |
| 18 | 0 | 131 | 0·0 |
| | | | + |
| | 10 | 131 | 0·4 |
| | 20 | 131 | 0·7 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | + |
| h | m | s | ′ |
| 18 | 10 | 131 | 0.4 |
| | 20 | 131 | 0.7 |
| | 30 | 131 | 1.1 |
| | 40 | 131 | 1.5 |
| | 50 | 130 | 1.8 |
| 19 | 0 | 129 | 2.2 |
| | 10 | 129 | 2.5 |
| | 20 | 128 | 2.9 |
| | 30 | 127 | 3.2 |

## 7381—7440.

| mag. | 18h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6 | 12 | 57.0 | 49.1 | |
| 9.1 | 13 | 18.0 | 34.6 | 8.0 |
| 9.1 | 14 | 40.5 | 48.3 | 9.0 |
| 9.8 | | 41.5 | 49.1 | 9.0 |
| 9.8 | 15 | 42.5 | 12.2 | |
| 8.6 | 17 | 26.5 | 21.1 | 8.5 |
| 9.8 | | 30.3 | 23.3 | |
| 9.6 | | 40.5 | 46.6 | |
| 9.8 | 18 | 6.8 | 56.9 | |
| 8.8 | | 10.8 | 7.6 | |
| 8.6 | | 13.5 | 32.0 | 8.2 G |
| 10.0 | | 30.1 | 20.1 | |
| 9.6 | | 59.0 | 34.9 | |
| 10.0 | 19 | 1.6 | 8.8 | |
| 9.1 | | 2.8 | 9.9 | |
| 9.0 | | 10.5 | 37.9 | 9.5 |
| 10.0 | | 13.0 | 51.9 | |
| 9.6 | | 15.0 | 37.3 | |
| 9.6 | | 17.1 | 20.0 | |
| 9.6 | | 20.1 | 20.1 | |
| 10.0 | | 24.1 | 8.1 | |
| 10.0 | | 55.5 | 46.4 | |
| 9.3 | | 56.1 | 19.6 | |
| 8.8 | | 58.3 | 40.1 | 8.5 |
| 9.8 | 20 | 3.6 | 14.0 | |
| 9.3 | | 6.5 | 45.3 | |
| 9.8 | | 12.1 | 24.9 | |
| 9.6 | | 36.0 | 56.9 | |
| 9.8 | | 43.1 | 10.9 | |
| 9.9 | | 56.1 | 14.4 | |
| 8.8 | 21 | 5.1 | 12.6 | 8.0 |
| 8.8 | | 31.6 | 24.3 | |
| 8.6 | | 51.6 | 7.1 | 9.0 |
| 10.0 | | 52.0 | 43.1 | |
| 9.8 | | 53.0 | 35.1 | |
| 9.4 | | 57.6 | 3.8 | |
| 9.8 | 22 | 7.6 | 25.0 | |
| 7.0 | | 31.5 | 47.4 | 7.0 GScgt |
| 9.8 | | 42.2 | 59.7 | |
| 9.8 | 23 | 4.5 | 47.0 | |
| 9.4 | | 7.6 | 6.4 | |
| 9.4 | | 20.5 | 37.8 | |
| 9.1 | | 25.6 | 4.9 | 8.5 G |
| 9.6 | | 30.0 | 57.2 | |
| 9.8† | | 32.2 | 0.4 | |
| 8.6 | | 33.1 | 24.9 | |
| 9.8 | | 43.1 | 24.9 | |
| 8.6 | | 54.6 | 8.3 | 9.0 |
| 10.0 | 24 | 1.0 | 48.5 | |
| 9.1 | | 2.6 | 8.1 | 9.0 |
| 9.6 | | 33.1 | 16.1 | |
| 9.4 | | 34.1 | 10.6 | |
| 9.3 | | 43.0 | 51.6 | |
| 9.9† | | 47.8 | 1.3 | |
| 8.5 | 25 | 4.0 | 39.0 | 8.8 G |
| 9.8 | | 57.0 | 32.0 | |
| 8.1 | | 59.5 | 40.9 | 7.5 GSt |
| 10.0† | 26 | 0.3 | 1.7 | |
| 9.6 | | 23.1 | 12.5 | |
| 9.8 | | 33.5 | 39.5 | |

## 7441—7500.

| mag. | 18h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.8 | 26 | 53.1 | 8.2 | |
| 9.3 | | 59.6 | 18.3 | |
| 10.0† | 27 | 16.3 | 0.7 | |
| 10.0 | | 21.5 | 30.7 | |
| 9.8 | | 36.0 | 32.7 | |
| 9.4 | | 45.1 | 20.5 | |
| 9.2 | | 46.1 | 11.8 | |
| 9.4 | | 54.5 | 36.1 | |
| 9.6 | 28 | 2.5 | 31.9 | |
| 9.8 | | 10.8 | 57.0 | |
| 9.4 | | 13.6 | 22.9 | |
| 9.6 | | 32.0 | 47.8 | |
| 9.6 | | 36.1 | 18.9 | |
| 9.8 | | 39.5 | 44.7 | |
| 7.6 | | 50.1 | 58.4 | 7.0 GS |
| 10.0 | | 58.5 | 55.5 | |
| 9.8 | 29 | 8.5 | 54.7 | |
| 7.8 | | 23.5 | 53.2 | 7.0 GS |
| 10.0 | | 32.1 | 1.5 | |
| 9.3 | | 36.0 | 36.4 | |
| 9.4 | | 49.0 | 53.8 | |
| 9.4 | | 52.6 | 15.0 | |
| 9.1 | 30 | 23.6 | 17.0 | |
| 10.0 | | 33.1 | 5.3 | |
| 9.8 | | 44.1 | 25.6 | |
| 9.4 | | 48.0 | 52.2 | |
| 10.0 | 31 | 0.5 | 53.2 | |
| 9.2 | | 11.6 | 25.2 | |
| 10.0 | | 31.5 | 47.6 | |
| 9.2 | | 32.6 | 2.7 | |
| 9.3 | | 44.6 | 12.6 | |
| 9.4 | 32 | 7.5 | 35.8 | |
| 8.8 | | 39.0 | 58.0 | |
| 9.8 | | 44.5 | 32.1 | |
| 10.0 | 33 | 0.0 | 51.1 | |
| 10.0 | | 1.0 | 36.0 | |
| 9.8 | | 18.0 | 52.5 | |
| 10.0 | | 33.0 | 47.8 | |
| 9.3 | | 39.0 | 38.9 | |
| 9.6 | 34 | 6.5 | 38.3 | |
| 10.0 | | 32.1 | 5.5 | |
| 9.6 | | 51.5 | 50.9 | |
| 9.2 | | 58.6 | 16.1 | |
| 10.0 | 35 | 19.1 | 58.9 | |
| 8.4 | | 21.5 | 38.2 | 8.8 |
| 10.0 | | 51.6 | 3.8 | |
| 8.8 | 36 | 13.0 | 43.7 | 9.0 |
| 9.3 | | 19.5 | 50.8 | 9.0 |
| 8.8 | | 41.1 | 5.0 | |
| 9.8 | | 51.1 | 20.1 | |
| 8.8 | | 52.1 | 10.7 | |
| 9.6 | 37 | 0.0 | 35.7 | |
| 9.8 | | 26.6 | 2.9 | |
| 9.6 | | 42.6 | 3.9 | |
| 10.0 | | 44.5 | 31.9 | |
| 10.0 | 38 | 2.0 | 53.4 | |
| 9.0 | | 5.6 | 6.3 | |
| 9.3 | | 15.0 | 38.2 | |
| 9.1 | | 35.0 | 41.8 | |
| 10.0 | | 56.7 | 3.2 | |

## 7501—7560.

| mag. | 18h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6 | 39 | 6.1 | 27.3 | |
| 9.4 | | 32.1 | 25.9 | |
| 8.4 | | 42.5 | 50.8 | 8.5 |
| 9.4 | 40 | 0.5 | 42.3 | 8.8 |
| 8.8 | | 5.7 | 59.1 | 9.0 |
| 9.3 | | 6.1 | 21.2 | |
| 9.4 | | 24.0 | 55.2 | |
| 9.8 | | 49.1 | 12.6 | |
| 10.0 | 41 | 2.1 | 10.6 | |
| 7.9 | | 10.1 | 4.5 | 8.0 G |
| 9.1 | | 11.6 | 4.1 | G |
| 9.3 | | 15.6 | 29.7 | |
| 9.4 | | 31.0 | 50.3 | |
| 10.0 | | 45.6 | 4.4 | |
| 9.3 | 42 | 19.5 | 59.8 | 8.5 |
| 9.3 | | 32.1 | 16.0 | |
| 9.8 | | 53.1 | 15.4 | |
| 8.6 | | 58.0 | 49.0 | |
| 9.2 | 43 | 45.0 | 44.5 | |
| 9.6 | 44 | 18.2 | 37.1 | |
| 9.6 | | 32.8 | 16.4 | |
| 9.4 | | 36.2 | 40.9 | |
| 9.0 | | 38.8 | 24.1 | 9.0 |
| 9.6 | | 39.8 | 18.1 | |
| 9.8 | | 42.7 | 31.4 | |
| 9.6 | | 49.8 | 10.1 | |
| 7.9 | | 55.8 | 23.5 | 8.0 G |
| 9.1 | 45 | 1.3 | 3.6 | |
| 8.4 | | 21.7 | 44.9 | |
| 9.4 | | 44.7 | 39.5 | |
| 9.6 | | 48.7 | 38.6 | |
| 8.4 | | 58.7 | 51.0 | |
| 10.0 | 46 | 13.8 | 16.6 | |
| 9.2 | | 47.2 | 37.5 | |
| 9.6 | | 52.7 | 50.3 | |
| 9.4 | 47 | 11.2 | 53.5 | 9.0 |
| 9.2 | | 29.2 | 58.1 | 8.5 |
| 10.0 | 48 | 14.8 | 17.6 | |
| 9.8 | | 39.7 | 40.4 | |
| 9.6 | | 39.7 | 55.6 | |
| 10.0 | | 52.7 | 45.9 | |
| 10.0 | 49 | 3.3 | 23.8 | |
| 10.0 | | 5.8 | 27.7 | |
| 7.9 | | 6.8 | 8.5 | 7.5 G |
| 8.6 | | 11.3 | 29.2 | 9.0 |
| 9.6 | | 15.8 | 57.7 | |
| 9.6 | | 31.7 | 51.1 | |
| 9.6 | | 34.2 | 38.0 | |
| 9.4 | | 45.7 | 37.7 | |
| 10.0 | 50 | 0.8 | 11.9 | |
| 9.4 | | 1.7 | 32.6 | |
| 9.6 | | 29.2 | 35.2 | |
| 9.8 | 52 | 0.2 | 52.6 | |
| 9.2 | | 23.8 | 1.9 | 9.0 |
| 9.4 | | 25.2 | 38.3 | |
| 9.8 | | 32.7 | 59.1 | |
| 9.4 | | 37.8 | 25.2 | |
| 7.8 | | 38.7 | 5.9 | 7.5 GSt |
| 10.0 | | 42.8 | 27.4 | |
| 10.0 | | 43.3 | 15.9 | |

## 7561—7620.

| mag. | 18h.—19h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9.6† | 52 | 47.3 | 0.4 | |
| 9.4 | | 51.9 | 30.3 | |
| 8.4 | | 56.2 | 42.3 | |
| 7.3 | 53 | 17.6 | 8.2 | 6.5 GSt |
| 9.4 | | 34.3 | 38.8 | |
| 9.6 | | 36.2 | 37.5 | |
| 9.0 | | 38.4 | 8.6 | 9.5 |
| 8.6 | | 59.4 | 21.2 | 8.0 G |
| 7.8 | 54 | 11.4 | 28.8 | 8.0 G |
| 9.0 | | 27.8 | 39.8 | |
| 8.8 | | 39.4 | 50.9 | 9.0 |
| 10.0 | | 42.3 | 8.6 | |
| 9.4 | 55 | 10.9 | 13.3 | |
| 9.8 | | 12.8 | 0.4 | |
| 8.8 | | 19.2 | 20.2 | 9.5 |
| 9.3 | | 41.2 | 20.6 | |
| 9.3 | | 59.4 | 45.9 | |
| 9.8 | 56 | 2.2 | 31.6 | |
| 8.8 | | 20.2 | 53.0 | |
| 9.4 | | 21.7 | 23.2 | |
| 9.4 | 57 | 4.3 | 10.4 | |
| 10.0 | | 7.7 | 47.6 | |
| 9.1 | | 14.8 | 44.1 | |
| 10.0 | | 39.8 | 16.6 | |
| 9.8 | | 42.7 | 47.8 | |
| 9.4 | | 53.2 | 36.0 | |
| 9.4 | 59 | 42.0 | 25.0 | |
| 8.4 | | 58.0 | 17.0 | 8.5 |
| 9.6 | 1 | 55.0 | 3.6 | |
| 9.4 | | 59.0 | 3.7 | |
| 8.5 | 2 | 3.5 | 27.9 | 8.0 G |
| 9.2 | | 20.0 | 8.9 | 9.5 |
| 9.4 | | 30.0 | 23.0 | |
| 7.6 | 4 | 6.0 | 12.4 | 7.5 GSct |
| 9.2 | | 10.5 | 8.6 | 8.8 |
| 9.4 | | 40.2 | 0.6 | |
| 9.6 | | 58.0 | 13.4 | |
| 10.3† | 5 | 26.4 | 2.7 | |
| 9.6 | 6 | 43.0 | 28.7 | 9.2 |
| 8.8 | | 55.0 | 24.9 | 9.5 |
| 9.4 | 7 | 16.0 | 28.7 | |
| 9.6 | 8 | 11.0 | 19.2 | |
| 8.5 | | 31.3 | 56.4 | 8.2 G |
| 8.3 | 9 | 21.0 | 12.1 | |
| 10.3† | 11 | 6.3 | 0.1 | |
| 9.3 | | 53.5 | 16.9 | |
| 9.3 | 12 | 19.0 | 55.8 | |
| 9.6 | | 26.5 | 40.0 | |
| 8.6 | | 37.0 | 14.8 | |
| 9.2 | 14 | 31.5 | 36.6 | 9.0 |
| 9.0 | 15 | 5.0 | 37.6 | 8.8 G |
| 8.8 | | 6.0 | 57.0 | 8.0 |
| 10.2† | | 27.8 | 0.7 | |
| 9.6 | 16 | 39.0 | 53.4 | |
| 9.2 | 18 | 51.5 | 34.0 | |
| 9.2 | 19 | 7.0 | 14.6 | 10.0 |
| 9.0 | | 23.0 | 11.4 | 8.8 |
| 9.2 | 21 | 0.5 | 13.2 | |
| 9.4 | 22 | 18.0 | 16.9 | 9.0 |
| 9.2 | | 48.5 | 13.0 | 9.2 |

## 7621—7680.

| mag. | 19h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·0 | 23 | 19·0 | 36·3 | 9·0 |
| 8·6 | | 30·0 | 36·5 | 9·2 G |
| 9·6 | 24 | 25·0 | 29·8 | |
| 9·6 | 25 | 13·5 | 3·2 | |
| 9·6 | 26 | 46·0 | 5·0 | |
| 9·2 | | 53·0 | 42·0 | |
| 7·2 | 27 | 54·5 | 15·3 | 6·5 GSctr |
| 10·0 | 28 | 15·5 | 43·0 | |
| 9·5 | | 24·0 | 7·7 | |
| 9·1 | | 26·8 | 16·6 | 9·5 |
| 9·9 | | 32·8 | 56·5 | |
| 9·8 | | 40·9 | 59·2 | |
| 7·6 | | 59·5 | 30·6 | 7·0 GS |
| 9·4 | 29 | 11·0 | 55·2 | |
| 10·0 | | 19·0 | 28·7 | |
| 8·2 | | 19·3 | 25·9 | 8·0 GS |
| 9·4 | 30 | 0·0 | 45·0 | 8·5 |
| 9·4 | | 12·2 | 2·8 | |
| 8·1 | | 20·0 | 33·0 | 7·5 GS |
| 8·7 | | 50·0 | 32·8 | 9·0 |
| 8·6 | 31 | 24·0 | 18·2 | 9·0 |
| 10·0 | | 55·0 | 58·1 | |
| 9·5 | 32 | 31·0 | 35·7 | |
| 10·0 | | 52·0 | 43·0 | |
| 8·8 | 33 | 11·0 | 36·3 | |
| 10·0 | | 13·5 | 10·4 | |
| 9·1 | | 15·0 | 48·3 | 9·0 |
| 10·0 | | 22·0 | 39·6 | |
| 9·4 | 34 | 1·5 | 31·1 | |
| 8·8 | | 4·0 | 16·0 | |
| 9·1 | | 16·5 | 56·6 | |
| 10·0 | | 20·0 | 43·0 | |
| 8·8 | | 54·5 | 15·6 | 9·0 |
| 9·1 | 35 | 10·5 | 37·0 | |
| 9·8 | | 40·0 | 17·1 | |
| 10·0 | | 42·0 | 10·0 | |
| 10·0 | | 49·0 | 22·5 | |
| 10·0 | 36 | 31·5 | 50·0 | |
| 10·0 | | 44·0 | 8·7 | |
| 10·0 | | 46·5 | 13·2 | |
| 10·0 | | 59·5 | 2·2 | |
| 9·5 | 37 | 6·5 | 56·7 | 9·5 |
| 9·2 | | 36·8 | 1·9 | |
| 7·4 | | 53·3 | 1·7 | 8·0 GS |
| 9·4 | 38 | 10·5 | 15·6 | |
| 10·0 | | 50·0 | 28·4 | |
| 9·4 | | 57·0 | 38·4 | 9·5 |
| 8·8 | 39 | 51·2 | 58·1 | 9·0 |
| 8·0 | 40 | 53·0 | 49·0 | G |
| 9·1 | 41 | 5·0 | 14·8 | |
| 10·0 | 43 | 0·0 | 18·0 | |
| 9·6 | | 28·0 | 15·7 | |
| 9·6 | | 46·0 | 5·0 | |
| 9·6 | | 54·5 | 31·0 | |
| 9·4 | 44 | 24·0 | 52·9 | |
| 9·8 | | 52·0 | 1·5 | |
| 10·0 | 45 | 3·0 | 59·7 | |
| 10·0 | | 44·5 | 37·0 | |
| 9·4 | | 50·0 | 31·4 | |
| 10·4† | 46 | 4·7 | 0·8 | |

## 7681—7740.

| mag. | 19h.—20h. m | s | −58° ′ | |
|---|---|---|---|---|
| 10·0 | 46 | 14·5 | 26·0 | |
| 9·8 | | 15·0 | 11·5 | |
| 7·8 | | 37·0 | 15·0 | 7·0 GSct |
| 10·4† | | 42·7 | 1·6 | |
| 10·4† | | 46·7 | 1·4 | |
| 10·0 | | 50·0 | 12·0 | |
| 10·0 | 47 | 2·5 | 4·9 | |
| 10·0 | | 39·2 | 59·1 | |
| 10·0 | | 59·0 | 42·1 | |
| 9·2 | 48 | 11·5 | 4·6 | |
| 9·8 | 50 | 31·5 | 55·5 | |
| 8·0 | | 38·5 | 43·3 | 7·5 GS |
| 9·2 | 51 | 3·0 | 48·1 | 9·5 G |
| 10·0 | | 19·0 | 12·0 | |
| 8·7 | 52 | 1·0 | 49·4 | 9·5 |
| 9·6 | | 18·0 | 47·0 | 9·5 |
| 9·8 | | 22·0 | 51·4 | |
| 10·4† | | 31·7 | 0·6 | |
| 8·8 | | 39·0 | 48·1 | 8·0 G |
| 10·0 | | 50·0 | 55·3 | |
| 9·5 | | 59·5 | 23·0 | |
| 9·8 | 53 | 21·0 | 31·3 | |
| 10·0 | | 55·5 | 36·5 | |
| 10·0 | 54 | 22·0 | 33·1 | |
| 10·0 | | 33·5 | 26·1 | |
| 10·0 | | 43·8 | 1·8 | |
| 9·6 | 55 | 11·0 | 9·3 | |
| 10·0 | | 30·5 | 51·9 | |
| 8·8 | | 31·5 | 52·6 | 10·0 |
| 10·4† | 56 | 15·7 | 0·5 | |
| 10·0 | | 20·5 | 34·4 | |
| 10·0 | | 49·5 | 31·4 | |
| 9·2 | 57 | 51·5 | 11·9 | |
| 10·0 | 58 | 10·5 | 35·9 | |
| 10·0 | | 31·5 | 37·1 | |
| 9·2 | | 41·5 | 16·3 | |
| 10·2† | 59 | 22·2 | 0·9 | |
| 8·7 | | 32·5 | 22·0 | 8·5 |
| 10·4† | | 39·7 | 1·9 | |
| 9·2 | | 43·1 | 0·2 | |
| 9·8 | 0 | 4·5 | 33·0 | |
| 9·6 | | 9·0 | 48·8 | |
| 9·9 | | 36·5 | 18·9 | |
| 7·8 | 2 | 19·5 | 28·9 | 8·0 G |
| 8·4 | | 30·5 | 22·5 | 9·5 G |
| 9·5 | | 58·0 | 50·9 | |
| 9·0 | 3 | 41·2 | 22·0 | 9·5 |
| 9·2 | 4 | 7·5 | 22·3 | |
| 9·6 | | 21·5 | 39·3 | |
| 8·8 | | 36·8 | 1·3 | |
| 9·0 | 5 | 54·3 | 55·9 | 9·0 |
| 9·0 | 6 | 6·5 | 26·1 | 9·5 G |
| 10·0 | | 26·5 | 4·9 | |
| 10·0 | | 38·5 | 17·7 | |
| 9·4 | | 46·7 | 44·5 | |
| 9·7 | 7 | 11·0 | 47·9 | |
| 9·7 | | 14·0 | 31·3 | |
| 9·2 | 8 | 39·7 | 57·7 | |
| 9·7 | | 54·0 | 44·8 | |
| 9·7 | 9 | 7·0 | 21·9 | |

## 7741—7800.

| mag. | 20h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 10 | 27·5 | 21·9 | |
| 8·7 | | 33·2 | 59·9 | 8·5 |
| 9·6 | 13 | 33·5 | 38·3 | |
| 9·6 | | 38·0 | 43·2 | |
| 9·6 | 14 | 29·5 | 42·1 | |
| 8·9 | | 33·5 | 19·0 | |
| 9·2 | 15 | 10·0 | 29·5 | 8·5 G |
| 9·6 | | 10·5 | 24·4 | |
| 9·0 | | 20·0 | 39·4 | 8·5 |
| 9·3 | 16 | 22·0 | 37·5 | |
| 9·6 | | 29·5 | 30·6 | |
| 9·2 | 17 | 3·0 | 49·9 | |
| 8·8 | | 55·5 | 2·9 | 9·5 |
| 9·6 | 18 | 57·0 | 59·2 | |
| 9·0 | 19 | 27·5 | 21·8 | |
| 9·0 | 20 | 3·3 | 2·6 | 9·5 |
| 8·6 | | 17·5 | 5·9 | 9·0 |
| 8·2 | 23 | 12·5 | 31·8 | 8·0 |
| 9·4 | 24 | 25·5 | 11·7 | 10·0 |
| 9·7 | | 57·0 | 31·5 | |
| 8·4 | 25 | 1·5 | 14·2 | 9·0 |
| 9·0 | 26 | 12·0 | 12·7 | 9·5 |
| 9·6 | | 35·5 | 50·8 | |
| 8·2 | 28 | 0·5 | 18·2 | GS |
| 9·0 | | 11·0 | 45·9 | 10·0 |
| 9·6 | | 13·0 | 16·9 | |
| 9·3 | | 59·5 | 25·0 | |
| 8·9 | 29 | 0·5 | 16·7 | |
| 9·2 | 30 | 5·5 | 18·1 | |
| 9·6 | 31 | 12·5 | 32·8 | |
| 9·7 | | 37·5 | 12·0 | |
| 9·6 | 32 | 22·5 | 6·6 | |
| 9·2 | 33 | 30·0 | 9·7 | 9·5 G |
| 9·6 | 34 | 40·0 | 37·3 | |
| 9·0 | 37 | 1·5 | 34·7 | |
| 9·0 | | 6·5 | 44·9 | 9·5 G |
| 8·4 | | 23·5 | 21·1 | 8·0 G |
| 8·2 | 38 | 44·5 | 9·8 | 8·0 G |
| 9·7 | | 51·5 | 40·3 | |
| 9·0 | 39 | 22·5 | 37·9 | |
| 9·2 | | 29·5 | 20·8 | 9·0 |
| 9·6 | | 51·2 | 47·2 | |
| 9·5 | 40 | 39·0 | 47·3 | |
| 9·8 | 41 | 45·5 | 34·1 | |
| 9·5 | 42 | 6·0 | 5·9 | |
| 9·7 | 44 | 8·5 | 14·1 | |
| 9·7 | | 40·7 | 0·7 | |
| 6·2 | 45 | 1·0 | 55·5 | GSctλ |
| 9·8 | | 6·5 | 52·9 | |
| 9·5 | | 20·5 | 45·9 | |
| 8·8 | | 41·5 | 20·1 | |
| 9·5 | 46 | 19·0 | 49·9 | |
| 8·6 | | 31·0 | 2·7 | GS |
| 9·4 | | 32·0 | 38·1 | |
| 9·4 | | 34·5 | 42·0 | |
| 9·6 | 47 | 35·0 | 38·6 | |
| 8·8 | 48 | 28·2 | 59·0 | 8·5 G |
| 9·2 | 50 | 4·5 | 31·3 | 9·5 |
| 9·1 | 51 | 9·0 | 9·3 | 10·0 |
| 8·9 | | 31·5 | 43·2 | 9·0 |

## 7801—7860.

| mag. | 20h.—21h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·2 | 51 | 50·5 | 6·0 | 10·0 |
| 8·9 | 53 | 31·7 | 59·2 | 9·5 G |
| 9·2 | 54 | 13·2 | 59·0 | |
| 9·4 | 55 | 48·0 | 36·6 | |
| 8·4 | 56 | 16·5 | 13·8 | 9·0 |
| 8·7 | | 31·5 | 5·2 | 9·5 |
| 10·0† | 57 | 5·0 | 0·2 | |
| 9·8 | | 10·5 | 4·6 | |
| 8·5 | | 48·5 | 16·2 | 9·0 |
| 8·4 | 59 | 27·0 | 50·0 | 9·0 |
| 9·6 | | 34·3 | 2·4 | |
| 8·0 | | 47·0 | 22·0 | 8·0 GS |
| 9·6 | 0 | 36·0 | 46·6 | |
| 9·7 | | 46·0 | 33·8 | |
| 9·3 | 1 | 7·5 | 23·0 | |
| 8·5 | 2 | 34·0 | 8·0 | 9·0 |
| 9·7 | | 55·5 | 47·3 | |
| 9·0 | 3 | 14·0 | 8·9 | 9·0 G |
| 9·2 | | 17·5 | 51·7 | |
| 9·2 | 4 | 19·5 | 5·7 | |
| 9·7 | 5 | 13·0 | 6·0 | |
| 9·4 | | 47·5 | 33·4 | |
| 9·2 | | 56·5 | 7·0 | 8·5 |
| 9·8 | 6 | 11·5 | 14·4 | |
| 6·7 | | 17·5 | 8·8 | 6·5 GSct |
| 9·7 | | 36·0 | 51·1 | |
| 9·8 | | 44·0 | 48·9 | |
| 8·7 | 8 | 9·5 | 4·2 | 8·5 G |
| 9·5 | 10 | 2·0 | 2·2 | |
| 9·7 | | 25·0 | 40·2 | |
| 7·8 | 11 | 18·5 | 22·4 | GS |
| 8·8 | | 47·0 | 19·1 | |
| 9·2 | 12 | 46·5 | 12·7 | 10·0 |
| 9·4 | | 59·0 | 58·9 | 9·5 |
| 7·8 | 13 | 32·0 | 17·8 | 8·0 GS |
| 9·6 | | 54·3 | 58·6 | |
| 9·3 | 14 | 8·5 | 11·9 | 9·0 |
| 9·8 | | 37·5 | 57·3 | |
| 10·2† | | 52·7 | 0·6 | |
| 9·5 | 15 | 20·5 | 4·5 | |
| 8·6 | 16 | 50·0 | 37·9 | 8·5 G |
| 8·5 | | 57·0 | 29·0 | 9·0 G |
| 9·6 | 17 | 6·5 | 50·6 | |
| 9·0 | | 6·7 | 9·6 | |
| 9·6 | | 20·5 | 17·1 | |
| 10·1 | 18 | 20·0 | 0·9 | |
| 9·5 | | 46·0 | 22·0 | |
| 8·9 | 19 | 18·3 | 59·1 | |
| 10·1 | | 25·5 | 38·0 | |
| 10·1 | | 33·5 | 40·9 | |
| 10·0 | | 58·0 | 56·9 | |
| 10·1 | 20 | 23·0 | 29·3 | |
| 9·8 | | 39·5 | 49·2 | |
| 9·6 | | 50·5 | 48·1 | |
| 10·2† | 21 | 6·2 | 1·3 | |
| 9·3 | | 27·7 | 59·3 | |
| 10·1 | | 49·5 | 25·8 | |
| 9·2 | 23 | 27·0 | 42·1 | |
| 8·4 | | 36·0 | 33·3 | |
| 7·9 | 24 | 18·0 | 45·4 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 20 | 128 | 2·9 |
| | 30 | 127 | 3·2 |
| | 40 | 126 | 3·5 |
| | 50 | 125 | 3·9 |
| 20 | 0 | 124 | 4·2 |
| | 10 | 123 | 4·5 |
| | 20 | 121 | 4·8 |
| | 30 | 120 | 5·1 |
| | 40 | 119 | 5·4 |
| | 50 | 117 | 5·6 |
| 21 | 0 | 115 | 5·9 |
| | 10 | 114 | 6·2 |
| | 20 | 112 | 6·4 |
| | 30 | 110 | 6·6 |



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| h | m | 25 prec. a + (s) | δ + (′) |
|---|---|---|---|
| 21 | 20 | 112 | 6·4 |
| | 30 | 110 | 6·6 |
| | 40 | 108 | 6·8 |
| | 50 | 106 | 7·0 |
| 22 | 0 | 104 | 7·2 |
| | 10 | 102 | 7·4 |
| | 20 | 100 | 7·6 |
| | 30 | 98 | 7·7 |
| | 40 | 95 | 7·9 |
| | 50 | 93 | 8·0 |
| 23 | 0 | 91 | 8·1 |
| | 10 | 89 | 8·2 |
| | 20 | 86 | 8·2 |
| | 30 | 84 | 8·3 |
| | 40 | 82 | 8·3 |
| | 50 | 79 | 8·3 |

## 7861—7920.

| mag. | 21h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·8 | 24 | 39·5 | 34·5 | |
| 9·8 | 25 | 14·0 | 9·3 | |
| 10·0 | | 25·5 | 40·3 | |
| 10·0 | | 31·0 | 42·4 | |
| 9·4 | 26 | 32·5 | 10·9 | |
| 8·9 | | 41·5 | 12·8 | |
| 10·1 | | 48·5 | 27·0 | |
| 9·6 | 28 | 23·5 | 26·1 | 9·5 |
| 10·1 | | 43·5 | 54·1 | |
| 10·1 | 29 | 37·5 | 21·3 | 10·0 |
| 10·3§ | | 45·2 | 16·1 | G |
| 10·2† | 30 | 30·2 | 2·3 | |
| 9·8 | | 31·5 | 40·9 | |
| 10·1 | | 52·0 | 49·9 | |
| 8·0 | 31 | 4·8 | 0·2 | 7·5 GSt |
| 10·2† | | 7·5 | 1·2 | |
| 8·4 | 32 | 3·0 | 18·0 | 8·0 G |
| 9·6 | | 31·5 | 47·9 | |
| 9·2 | | 39·5 | 20·3 | |
| 8·4 | 33 | 19·5 | 10·8 | 8·5 GSt |
| 10·2† | | 29·2 | 2·8 | |
| 9·5 | | 40·5 | 57·5 | |
| 9·6 | | 47·6 | 3·0 | |
| 8·6 | | 55·0 | 45·2 | |
| 8·2 | 34 | 22·5 | 20·9 | |
| 8·4 | | 29·0 | 27·9 | Gk |
| 10·1 | | 38·5 | 48·7 | |
| 10·1 | 36 | 17·5 | 37·2 | G |
| 9·5 | 37 | 9·0 | 33·9 | |
| 10·1 | | 20·0 | 40·4 | |
| 9·2 | | 23·0 | 57·7 | |
| 9·5 | | 39·0 | 34·1 | 8·0 k |
| 9·2 | | 39·0 | 14·9 | 8·5 |
| 9·5 | | 41·5 | 48·0 | |
| 9·5 | | 50·0 | 25·8 | |
| 9·8 | 38 | 49·0 | 4·4 | 9·0 |
| 9·0 | 39 | 1·0 | 36·8 | 8·5 G |
| 9·8 | | 51·5 | 54·5 | G |
| 8·8 | 40 | 17·0 | 31·1 | |
| 10·0 | | 34·5 | 8·7 | |
| 8·0 | 41 | 27·5 | 53·0 | Gk |
| 9·2 | | 33·0 | 9·1 | |
| 9·3 | | 46·0 | 35·6 | |
| 10·1 | 43 | 2·6 | 44·8 | |
| 9·8† | | 26·8 | 0·7 | |
| 10·1 | 44 | 45·5 | 23·5 | |
| 10·0 | 45 | 22·6 | 48·9 | |
| 10·1 | | 23·5 | 22·4 | |
| 8·9 | 46 | 12·0 | 36·2 | 8·0 G |
| 9·8 | 47 | 21·5 | 44·8 | |
| 6·8 | | 26·5 | 29·4 | 6·5 GSt |
| 9·6† | | 43·8 | 1·2 | |
| 10·0 | | 58·6 | 10·9 | |
| 9·2 | 49 | 1·5 | 37·6 | |
| 9·2 | | 45·5 | 7·2 | 9·0 |
| 10·0 | 51 | 52·5 | 55·4 | |
| 10·0 | 52 | 58·3 | 43·9 | |
| 9·8 | 53 | 27·0 | 50·0 | |
| 8·4 | | 45·5 | 53·7 | 8·0 G |
| 8·8 | 54 | 58·0 | 51·2 | 7·5 G |

## 7921—7980.

| mag. | 21h.–22h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·1 | 55 | 39·0 | 34·8 | |
| 8·8 | | 53·8 | 46·5 | 8·5 |
| 9·3 | 56 | 6·5 | 21·0 | |
| 10·0 | | 19·0 | 46·4 | |
| 9·8 | 58 | 4·5 | 52·7 | |
| 9·8 | 59 | 3·0 | 28·6 | |
| 8·8 | | 40·5 | 6·0 | |
| 9·8 | 0 | 29·7 | 1·5 | |
| 9·8 | 1 | 49·0 | 4·6 | |
| 9·8 | | 53·5 | 34·8 | |
| 9·2 | 3 | 46·0 | 29·0 | 9·5 G |
| 8·8 | 5 | 49·0 | 38·0 | 9·0 |
| 10·0 | 6 | 5·5 | 11·2 | |
| 9·6 | | 29·0 | 29·7 | |
| 9·8 | 7 | 20·5 | 37·8 | |
| 8·0 | | 43·0 | 11·2 | 7·5 GS |
| 9·6 | 8 | 35·0 | 51·8 | |
| 8·2 | 9 | 0·5 | 24·2 | 8·5 |
| 9·2 | 10 | 25·0 | 6·1 | |
| 9·3 | | 32·4 | 0·1 | |
| 10·0 | 11 | 49·5 | 46·5 | |
| 7·5 | 12 | 16·0 | 8·2 | 6·5 GS |
| 9·0 | | 33·5 | 10·6 | 9·5 |
| 9·6 | | 54·0 | 40·5 | |
| 8·8 | | 57·0 | 57·7 | 9·0 G |
| 9·8 | 13 | 44·0 | 10·6 | |
| 8·0 | | 59·0 | 37·6 | 8·5 G |
| 9·8 | 15 | 19·0 | 20·1 | |
| 9·8 | | 24·5 | 15·2 | |
| 9·3 | | 34·5 | 40·6 | 9·5 G |
| 9·1 | 16 | 3·5 | 48·5 | 9·0 G |
| 9·1 | | 3·5 | 36·1 | 9·5 G |
| 8·7 | | 9·0 | 54·7 | 9·0 G |
| 6·1 | | 37·5 | 25·1 | 6·0 GSctr |
| 9·2 | | 44·5 | 50·7 | |
| 10·0 | | 47·0 | 51·2 | |
| 7·0 | 19 | 6·5 | 38·1 | 7·0 GSct |
| 8·2 | | 27·5 | 38·9 | 7·5 G |
| 8·8 | 20 | 17·5 | 20·0 | 8·0 |
| 10·0 | 21 | 30·0 | 18·3 | |
| 9·1 | 22 | 36·0 | 54·3 | |
| 10·0 | 23 | 17·5 | 8·3 | |
| 9·8 | | 20·5 | 21·0 | |
| 10·0 | | 47·0 | 23·0 | |
| 9·8 | | 55·0 | 1·8 | |
| 9·8 | 24 | 10·5 | 47·3 | |
| 9·8 | | 24·0 | 51·8 | |
| 8·8 | 25 | 0·0 | 30·0 | |
| 7·8 | | 28·0 | 51·3 | 7·5 GSt |
| 8·4 | 26 | 22·5 | 1·4 | 9·0 |
| 6·1 | 27 | 46·2 | 31·7 | 6·0 GSct |
| 9·0 | | 56·5 | 12·1 | |
| 10·0 | 28 | 18·0 | 45·9 | |
| 8·8 | 29 | 4·2 | 24·9 | 8·5 |
| 9·2 | | 33·3 | 19·4 | 9·0 |
| 8·4 | | 42·5 | 30·1 | 8·0 G |
| 9·3 | | 45·0 | 38·0 | |
| 8·6 | | 55·3 | 44·2 | 9·5 |
| 8·8 | 30 | 59·2 | 52·8 | 9·0 |
| 9·3 | 31 | 48·2 | 59·0 | |

## 7981—8040.

| mag. | 22h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·2 | 32 | 29·0 | 29·4 | |
| 8·8 | | 29·7 | 44·5 | |
| 9·4 | | 32·5 | 29·2 | |
| 6·8 | | 51·0 | 4·6 | 6·0 GSct |
| 9·4 | 33 | 25·5 | 42·7 | |
| 8·7 | 34 | 26·5 | 56·0 | 9·0 |
| 9·3 | | 52·0 | 29·9 | |
| 8·8 | 35 | 25·5 | 18·0 | |
| 8·6 | | 30·5 | 41·2 | |
| 9·4 | | 43·5 | 52·6 | |
| 8·4 | | 44·0 | 4·0 | 9·0 |
| 9·2 | 36 | 16·0 | 25·1 | |
| 7·9 | | 46·0 | 6·8 | 7·5 G |
| 9·4 | 37 | 19·0 | 35·3 | |
| 9·4 | 38 | 9·5 | 45·5 | |
| 9·3 | | 13·0 | 38·9 | |
| 8·4 | | 15·0 | 37·4 | 8·5 G |
| 9·2 | | 22·7 | 58·9 | |
| 8·9 | | 33·5 | 20·1 | |
| 8·5 | 40 | 14·0 | 55·8 | |
| 8·2 | | 32·0 | 35·0 | 9·0 |
| 9·4 | 41 | 28·5 | 47·0 | |
| 8·8 | | 41·5 | 22·0 | |
| 9·4 | 42 | 42·5 | 42·9 | |
| 9·4 | | 58·5 | 28·4 | |
| 9·0 | 43 | 3·0 | 22·4 | |
| 8·2 | | 24·0 | 38·0 | 8·0 G |
| 8·2 | | 36·0 | 13·0 | |
| 8·0 | 45 | 32·0 | 31·0 | 7·5 G |
| 9·4 | | 46·5 | 14·0 | |
| 8·9 | 46 | 1·5 | 4·0 | |
| 9·4 | | 35·5 | 38·7 | |
| 9·0 | | 49·0 | 10·8 | |
| 8·9 | | 49·5 | 33·5 | |
| 8·9 | 47 | 5·5 | 38·7 | |
| 9·3 | | 38·5 | 30·4 | |
| 8·8 | | 41·5 | 39·0 | |
| 8·2 | 48 | 43·0 | 26·7 | 9·0 |
| 9·4 | | 53·0 | 42·0 | |
| 9·3 | | 57·5 | 58·0 | |
| 8·0 | 49 | 25·0 | 4·0 | 7·0 Gcr |
| 8·9 | | 42·0 | 15·0 | |
| 9·4 | 50 | 14·0 | 48·0 | |
| 9·0 | | 22·5 | 21·7 | |
| 9·3 | | 42·5 | 46·0 | |
| 8·4 | 51 | 40·5 | 35·7 | 8·0 |
| 8·2 | | 41·5 | 32·2 | 8·5 |
| 9·3 | | 59·5 | 29·6 | 9·0 |
| 9·4 | 52 | 25·5 | 25·9 | |
| 8·8 | 53 | 31·5 | 15·0 | |
| 9·3 | | 48·0 | 16·2 | |
| 8·6 | 54 | 28·0 | 30·6 | |
| 9·2 | | 28·5 | 2·2 | |
| 8·7 | | 55·5 | 3·7 | |
| 9·4 | 56 | 19·0 | 33·9 | |
| 8·4 | | 21·0 | 4·9 | |
| 8·4 | 57 | 29·5 | 50·7 | |
| 7·8 | 58 | 50·5 | 5·0 | |
| 8·9 | | 59·5 | 11·4 | |
| 8·6 | 59 | 30·6 | 0·2 | |

## 8041—8100.

| mag. | 23h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·4 | 0 | 10·5 | 13·0 | |
| 9·4 | | 12·5 | 17·9 | |
| 8·2 | | 18·2 | 59·1 | |
| 9·2 | 1 | 2·5 | 47·9 | |
| 8·8 | | 30·0 | 45·5 | |
| 9·2 | | 48·5 | 34·1 | |
| 9·4 | | 57·0 | 5·9 | |
| 8·5 | 2 | 35·5 | 43·1 | |
| 9·3 | 3 | 48·0 | 50·3 | |
| 9·4 | 5 | 9·5 | 33·0 | |
| 8·7 | | 21·7 | 33·7 | |
| 9·4 | | 39·5 | 8·0 | |
| 9·4 | 6 | 20·0 | 17·5 | |
| 8·8 | | 42·5 | 46·6 | |
| 10·0† | 7 | 33·2 | 0·2 | |
| 9·0 | 8 | 23·0 | 39·0 | 9·5 |
| 8·2 | | 26·0 | 45·7 | 8·0 G |
| 8·6 | | 45·5 | 43·0 | 9·0 |
| 9·8† | 9 | 1·7 | 1·5 | |
| 8·8 | | 58·5 | 56·7 | |
| 9·2 | | 59·5 | 11·0 | |
| 4·5 | 10 | 6·5 | 55·2 | 4·0 GStrλ |
| 8·5 | 11 | 15·2 | 58·9 | 9·5 G |
| 7·8 | | 16·2 | 59·0 | 8·0 GSt |
| 9·1 | | 34·0 | 26·4 | |
| 8·6 | 12 | 17·5 | 48·4 | 8·5 G |
| 9·4 | 13 | 10·0 | 49·8 | |
| 7·6 | 15 | 43·0 | 18·5 | 8·0 GS |
| 8·8 | 16 | 6·5 | 24·8 | 9·5 |
| 8·5 | 17 | 35·0 | 11·2 | |
| 10·2† | 18 | 41·2 | 1·0 | |
| 8·1 | 20 | 0·5 | 0·0 | 8·0 G |
| 10·2† | | 13·2 | 1·8 | |
| 8·8 | 21 | 20·5 | 19·0 | 9·0 |
| 9·3 | 22 | 50·0 | 8·5 | |
| 8·2 | 23 | 54·0 | 48·0 | 8·5 G |
| 7·6 | 24 | 15·5 | 54·0 | 7·8 G |
| 9·6† | | 18·7 | 1·6 | |
| 10·2† | 25 | 20·2 | 1·3 | |
| 7·3 | 28 | 23·0 | 11·2 | 7·5 G |
| 9·6 | | 23·9 | 1·0 | |
| 9·6 | | 31·0 | 10·6 | |
| 9·4 | | 31·5 | 11·5 | |
| 8·8 | | 37·0 | 48·0 | 9·0 |
| 8·3 | | 50·0 | 11·5 | 9·0 G |
| 8·3 | 29 | 58·0 | 0·6 | |
| 8·0 | 30 | 26·5 | 51·7 | 7·5 G |
| 9·4 | | 31·0 | 4·3 | |
| 7·4 | 31 | 2·0 | 53·0 | 7·0 G |
| 9·1 | | 45·5 | 29·3 | 8·5 G |
| 9·3 | 32 | 19·0 | 14·3 | |
| 9·4 | 33 | 27·0 | 32·0 | |
| 7·8 | 35 | 45·5 | 10·2 | |
| 9·6 | | 46·0 | 12·7 | |
| 6·8 | | 47·5 | 39·2 | 8·0 Gcr |
| 9·8† | 37 | 51·5 | 0·4 | |
| 7·3 | 38 | 48·5 | 58·3 | 7·5 G |
| 9·5 | 41 | 56·5 | 50·0 | ? |
| 9·6 | 42 | 32·0 | 52·1 | |
| 9·5 | | 40·0 | 52·0 | |

§ Missing on measuring plate, but contained on check plate and plate No. 171, on both of which the images are somewhat denser.



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### 8101—8108.

| mag. | 23h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 42 | 43·0 | 17·6 | |
| 9·3 | | 44·0 | 50·3 | |
| 9·3 | 43 | 14·0 | 46·0 | |
| 10·2† | | 14·0 | 0·5 | |
| 9·5 | 44 | 51·0 | 45·6 | |
| 9·5 | 45 | 0·5 | 19·4 | |
| 9·5 | | 20·0 | 7·0 | |
| 11·0† | | 43·5 | 1·7 | |

### 8109—8116.

| mag. | 23h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6† | 46 | 33·0 | 58·1 | |
| 9·7 | 47 | 25·0 | 16·7 | |
| 9·7 | | 55·5 | 34·2 | |
| 9·7 | 48 | 44·5 | 14·5 | |
| 9·3 | | 47·0 | 9·0 | |
| 9·2 | 49 | 38·5 | 25·4 | |
| 9·0 | 50 | 10·0 | 21·0 | |
| 9·0 | | 12·5 | 31·0 | |

### 8117—8124.

| mag. | 23h. m | s | −58° ′ | |
|---|---|---|---|---|
| 8·7 | 50 | 32·0 | 49·8 | 7·5 G |
| 10·4† | | 40·1 | 0·3 | |
| 10·4† | 51 | 8·1 | 2·8 | |
| 9·3 | | 47·5 | 42·8 | |
| 9·1 | 52 | 27·5 | 28·8 | |
| 9·1 | 53 | 30·0 | 43·8 | |
| 9·2 | | 45·0 | 46·9 | |
| 9·6 | 54 | 34·0 | 38·0 | |

### 8125—8131.

| mag. | 23h. m | s | −58° ′ | |
|---|---|---|---|---|
| 9·6 | 56 | 6·5 | 21·8 | 9·5 G |
| 8·5 | | 20·0 | 19·8 | 8·0 Gt |
| 9·4 | | 56·5 | 55·0 | |
| 8·2 | 57 | 29·5 | 31·4 | 9·0 GSt |
| 10·0† | 58 | 1·5 | 1·4 | |
| 9·6 | 59 | 18·2 | 59·1 | |
| 9·5 | | 20·0 | 25·9 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 40 | 82 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

# ZONE—59°.

### 1—30.

| mag. | 0h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 0 | 59·5 | 6·2 | |
| 8·5 | 1 | 53·5 | 45·6 | |
| 9·7 | 2 | 16·5 | 56·1 | |
| 8·8 | | 47·7 | 58·4 | |
| 9·0 | 3 | 2·5 | 45·2 | 9·0 |
| 8·8 | 4 | 31·0 | 52·2 | 9·5 G |
| 9·5 | | 46·0 | 23·3 | |
| 8·3 | 5 | 15·5 | 36·2 | 8·0 G |
| 9·6 | | 49·5 | 8·0 | |
| 8·0 | | 51·0 | 12·9 | 8·0 GSt |
| 9·3 | 7 | 5·5 | 52·8 | |
| 9·2 | | 25·5 | 27·2 | |
| 9·5 | | 25·5 | 17·2 | |
| 9·1 | | 38·5 | 44·6 | |
| 9·3 | | 42·0 | 34·1 | |
| 9·6 | 8 | 49·5 | 38·7 | |
| 9·7 | 9 | 3·5 | 54·9 | |
| 9·3 | | 5·0 | 33·0 | |
| 8·6 | | 55·5 | 27·9 | 8·0 G |
| 9·4 | 10 | 35·0 | 44·3 | |
| 9·6 | 11 | 5·5 | 40·7 | |
| 9·6 | 12 | 25·0 | 14·4 | |
| 9·0 | | 52·0 | 49·3 | |
| 9·7 | 13 | 22·0 | 13·9 | |
| 9·6 | 14 | 39·5 | 43·0 | |
| 8·6 | 15 | 0·7 | 27·0 | 9·0 G |
| 9·2 | | 29·3 | 27·5 | |
| 9·5 | | 53·5 | 12·3 | |
| 9·1 | 16 | 29·3 | 42·8 | 9·0 |
| 8·6 | | 29·3 | 0·6 | 9·0 |

### 31—60.

| mag. | 0h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·6 | 18 | 9·3 | 31·5 | 9·0 |
| 9·5 | | 52·7 | 46·8 | |
| 9·6 | | 55·7 | 20·2 | |
| 8·6 | 19 | 30·5 | 7·8 | |
| 9·7 | | 37·0 | 3·1 | |
| 9·5 | 20 | 15·7 | 12·9 | |
| 8·3 | | 18·7 | 29·2 | 9·0 G |
| 9·6 | | 39·5 | 38·8 | 9·5 G |
| 9·4 | 21 | 2·8 | 36·0 | 9·0 G |
| 8·8 | | 20·5 | 54·1 | |
| 9·1 | | 33·8 | 38·7 | 9·0 GS |
| 9·5 | 22 | 45·5 | 52·5 | |
| 9·5 | 24 | 34·5 | 5·1 | |
| 9·5 | | 41·5 | 42·1 | |
| 9·5 | 27 | 37·5 | 29·9 | 8·0 G |
| 8·8 | 29 | 1·5 | 34·2 | |
| 9·4 | 30 | 9·5 | 19·5 | |
| 9·6 | | 58·5 | 31·9 | |
| 8·0 | 35 | 4·5 | 9·1 | 8·5 |
| 9·5 | | 7·5 | 2·9 | |
| 8·5 | | 54·5 | 58·5 | 9·0 |
| 9·0 | 36 | 57·0 | 18·6 | 8·5 |
| 9·4 | 41 | 35·3 | 1·8 | 9·5 |
| 9·6 | | 48·5 | 28·9 | |
| 9·4 | 42 | 58·5 | 43·6 | |
| 9·5 | 43 | 8·5 | 27·0 | |
| 8·6 | | 9·5 | 34·6 | |
| 9·0 | 45 | 24·0 | 45·2 | |
| 9·6 | 46 | 6·5 | 3·0 | |
| 9·0 | | 48·0 | 40·9 | 9·0 |

### 61—90.

| mag. | 0h.–1h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·2 | 52 | 3·0 | 24·0 | |
| 10·0 | | 32·0 | 22·0 | |
| 10·0 | 53 | 16·5 | 16·9 | |
| 8·6 | 54 | 0·5 | 4·8 | 8·0 G |
| 10·2 | 57 | 0·5 | 47·2 | |
| 10·2 | | 10·5 | 53·0 | |
| 9·0 | | 26·0 | 51·9 | |
| 10·2 | | 52·0 | 0·7 | |
| 10·2 | 58 | 40·5 | 7·0 | |
| 8·9 | 59 | 22·5 | 6·6 | 8·5 |
| 10·3 | 0 | 39·5 | 0·1 | |
| 9·0 | | 58·5 | 8·5 | |
| 10·0 | 1 | 50·3 | 0·0 | |
| 9·0 | 2 | 43·0 | 43·4 | 9·0 |
| 10·2 | 3 | 20·0 | 2·2 | |
| 10·2 | | 36·0 | 31·9 | |
| 10·0 | | 48·7 | 0·1 | |
| 10·4 | 4 | 1·5 | 34·5 | |
| 10·2 | | 33·5 | 37·0 | |
| 10·2 | | 40·5 | 31·0 | |
| 9·0 | | 54·5 | 28·2 | |
| 10·2 | 6 | 0·5 | 16·3 | |
| 8·8 | | 19·5 | 52·0 | 8·2 G |
| 10·3 | 7 | 35·5 | 41·2 | |
| 10·2 | | 59·5 | 55·4 | |
| 9·6 | 9 | 23·5 | 12·0 | |
| 9·9 | | 33·5 | 26·5 | |
| 10·0 | 12 | 40·5 | 51·1 | |
| 10·3 | 13 | 19·5 | 48·8 | |
| 10·0 | 15 | 11·0 | 4·2 | |

### 91—120.

| mag. | 1h. m | s | −59° ′ | |
|---|---|---|---|---|
| 7·8 | 17 | 22·5 | 46·8 | 7·5 GSc |
| 10·2 | | 23·5 | 21·0 | |
| 10·2 | | 48·0 | 15·0 | |
| 10·3 | 19 | 23·0 | 47·9 | |
| 10·2 | | 24·5 | 46·0 | |
| 9·0 | 21 | 1·5 | 59·1 | 8·5 |
| 10·0 | | 14·5 | 55·6 | |
| 9·2 | | 58·5 | 48·1 | |
| 9·0 | 22 | 56·0 | 55·1 | 9·0 |
| 9·8 | 23 | 46·0 | 38·3 | |
| 10·2 | 24 | 23·5 | 47·7 | |
| 10·2 | 26 | 33·0 | 19·3 | |
| 9·0 | | 38·0 | 21·7 | |
| 9·4 | | 46·5 | 46·2 | 9·0 |
| 8·6 | 27 | 34·0 | 1·9 | |
| 9·8 | 29 | 0·5 | 9·9 | |
| 8·5 | | 30·0 | 57·2 | 8·5 |
| 10·6 | 30 | 39·3 | 2·0 | |
| 10·2 | | 57·3 | 29·7 | |
| 7·8 | 31 | 40·5 | 34·0 | 8·5 |
| 9·2 | | 58·3 | 14·5 | |
| 10·2 | 33 | 9·5 | 38·1 | |
| 9·2 | | 27·8 | 22·0 | |
| 8·1 | 34 | 24·8 | 12·9 | 8·0 G |
| 10·6 | | 39·8 | 25·0 | |
| 9·9 | | 50·4 | 1·8 | |
| 10·2 | 35 | 15·5 | 53·7 | |
| 9·7 | | 21·5 | 56·1 | |
| 10·2 | | 22·3 | 28·0 | |
| 10·2 | | 36·3 | 26·0 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 72 | 8·3 |
| | 30 | 69 | 8·3 |
| | 40 | 67 | 8·2 |
| | 50 | 65 | 8·2 |
| 1 | 0 | 62 | 8·1 |
| | 10 | 60 | 8·0 |
| | 20 | 57 | 7·9 |
| | 30 | 55 | 7·7 |
| | 40 | 53 | 7·6 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 1 | 30 | 55 | 7·7 |
| | 40 | 53 | 7·6 |
| | 50 | 51 | 7·4 |
| 2 | 0 | 48 | 7·2 |
| | 10 | 46 | 7·0 |
| | 20 | 44 | 6·8 |
| | 30 | 42 | 6·6 |
| | 40 | 40 | 6·4 |
| | 50 | 38 | 6·2 |
| 3 | 0 | 37 | 5·9 |
| | 10 | 35 | 5·6 |
| | 20 | 33 | 5·4 |
| | 30 | 32 | 5·1 |
| | 40 | 30 | 4·8 |
| | 50 | 29 | 4·5 |
| 4 | 0 | 28 | 4·2 |
| | 10 | 26 | 3·9 |
| | 20 | 25 | 3·5 |
| | 30 | 24 | 3·2 |
| | 40 | 23 | 2·9 |

**121—180.**

| mag. | $1^{h.}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·0 | 35 | 41·0 | 50·3 | |
| 8·8 | 36 | 3·8 | 16·8 | 8·5 G |
| 9·0 | | 22·5 | 35·9 | |
| 8·5 | 37 | 11·5 | 14·5 | 8·5 G |
| 10·0 | | 33·5 | 18·0 | |
| 10·0 | | 46·7 | 51·7 | |
| 8·2 | 38 | 9·3 | 2·7 | 8·0 |
| 10·6 | | 14·3 | 10·2 | |
| 8·8 | | 28·7 | 45·4 | |
| 10·6 | | 50·2 | 35·5 | |
| 10·4 | 39 | 17·5 | 19·9 | |
| 8·6 | 40 | 17·0 | 24·0 | 8·5 G |
| 9·0 | | 37·2 | 53·3 | |
| 9·6 | 41 | 3·7 | 35·8 | |
| 10·0 | | 13·5 | 4·2 | |
| 10·0 | 42 | 9·7 | 30·5 | |
| 10·6 | | 11·3 | 25·0 | |
| 10·6 | | 59·0 | 16·3 | |
| 9·4 | 43 | 12·0 | 11·7 | |
| 9·8 | | 29·7 | 44·3 | |
| 10·0 | | 31·0 | 18·8 | |
| 10·6 | | 34·2 | 46·5 | |
| 10·0 | 44 | 2·0 | 59·7 | |
| 9·2 | 45 | 0·0 | 59·8 | |
| 10·0 | | 1·5 | 6·0 | |
| 10·2 | | 7·0 | 11·0 | |
| 9·2 | | 12·0 | 20·2 | |
| 9·5 | | 15·0 | 10·4 | |
| 8·5 | | 24·0 | 11·2 | |
| 7·7 | | 57·2 | 33·6 | 7·5 GS |
| 9·5 | 46 | 15·8 | 59·6 | |
| 9·9 | | 19·8 | 59·1 | |
| 9·2 | 47 | 14·7 | 33·3 | 8·5 |
| 8·4 | | 41·7 | 31·1 | 8·0 G |
| 10·2 | | 44·2 | 51·6 | |
| 10·6 | 48 | 10·7 | 41·2 | |
| 10·6 | | 22·5 | 24·4 | |
| 9·9 | | 44·5 | 29·3 | |
| 10·6 | | 55·2 | 56·4 | |
| 10·2 | 50 | 15·5 | 7·4 | |
| 10·2 | | 50·2 | 37·7 | |
| 10·2 | 51 | 4·2 | 56·1 | |
| 8·8 | | 6·2 | 53·2 | 9·0 |
| 9·8 | | 36·9 | 44·0 | |
| 10·4 | | 53·2 | 19·4 | |
| 10·2 | 52 | 8·9 | 57·0 | |
| 9·0 | | 19·7 | 5·0 | 9·0 G |
| 7·5 | | 24·7 | 5·0 | 7·5 GS |
| 9·8 | | 45·2 | 9·7 | |
| 9·9 | | 55·9 | 36·0 | |
| 9·9 | 53 | 14·4 | 39·8 | |
| 9·0 | | 40·9 | 57·4 | 8·5 G |
| 10·6 | | 47·4 | 50·9 | |
| 9·0 | | 55·2 | 25·2 | |
| 9·2 | 55 | 12·4 | 31·1 | |
| 10·6 | 56 | 3·4 | 47·8 | |
| 10·6 | | 21·2 | 7·6 | |
| 9·5 | 57 | 0·2 | 3·4 | |
| 10·6 | 58 | 31·2 | 2·9 | |
| 8·1 | 59 | 43·9 | 59·3 | 8·5 G |

**181—240.**

| mag. | $1^{h.}$—$2^{h.}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 10·6 | 59 | 45·9 | 0·3 | |
| 10·0 | | 48·2 | 25·4 | |
| 10·6 | 1 | 2·9 | 47·9 | |
| 10·6 | | 21·2 | 28·1 | |
| 9·7 | | 24·0 | 45·6 | |
| 8·0 | | 24·1 | 45·8 | 9·0 G |
| 10·6 | | 55·6 | 47·5 | |
| 10·4 | 2 | 24·4 | 47·7 | 9·5 |
| 10·6 | | 29·2 | 4·7 | |
| 10·0 | 3 | 2·9 | 43·1 | |
| 10·2 | | 17·7 | 14·9 | |
| 10·6 | | 37·4 | 30·9 | |
| 10·2 | 5 | 14·4 | 50·5 | |
| 10·6 | | 27·4 | 31·4 | |
| 10·6 | 6 | 48·4 | 40·5 | |
| 8·1 | 7 | 15·7 | 44·4 | 7·5 GS |
| 9·6 | | 32·2 | 59·5 | |
| 9·4 | | 52·5 | 19·7 | 9·5 |
| 8·2 | 8 | 59·5 | 52·5 | 8·5 |
| 9·2 | 9 | 13·0 | 3·3 | |
| 9·0 | 14 | 45·0 | 25·0 | |
| 8·9 | 15 | 10·5 | 47·6 | |
| 8·6 | | 52·5 | 55·4 | |
| 8·5 | 16 | 48·0 | 3·2 | |
| 8·8 | 18 | 40·0 | 44·2 | |
| 9·0 | 20 | 14·5 | 5·8 | |
| 9·6 | 21 | 19·0 | 42·9 | 9·5 |
| 9·4 | 22 | 2·5 | 44·8 | |
| 9·0 | | 54·0 | 39·0 | 9·0 G |
| 8·9 | 23 | 9·7 | 2·9 | |
| 8·8 | 24 | 27·0 | 46·7 | |
| 9·6 | 26 | 20·0 | 33·2 | |
| 8·9 | | 41·5 | 40·6 | 9·0 |
| 8·4 | 27 | 51·5 | 42·2 | 7·5 G |
| 7·8 | 28 | 3·5 | 25·4 | 8·0 |
| 8·4 | | 26·0 | 40·2 | 8·0 G |
| 8·8 | 30 | 12·5 | 14·2 | 8·5 |
| 9·2 | 31 | 5·8 | 24·8 | |
| 9·6 | | 22·5 | 54·7 | 9·0 |
| 9·2 | 32 | 36·0 | 34·6 | 9·5 |
| 9·6 | | 41·5 | 17·7 | |
| 8·8 | 33 | 15·0 | 56·8 | 9·0 |
| 8·4 | 34 | 50·0 | 33·3 | 8·5 |
| 8·4 | 35 | 49·0 | 55·1 | 9·0 |
| 9·4 | 37 | 24·5 | 9·8 | |
| 9·8 | 40 | 21·5 | 59·0 | |
| 9·0 | 41 | 29·0 | 10·4 | |
| 9·5 | | 43·5 | 27·3 | |
| 8·9 | 42 | 7·0 | 25·1 | 9·0 |
| 9·6 | | 8·5 | 16·5 | |
| 9·2 | | 17·0 | 42·6 | |
| 9·0 | | 36·5 | 55·2 | |
| 9·1 | 44 | 27·0 | 34·5 | |
| 8·9 | 45 | 13·5 | 10·1 | 9·0 |
| 8·7 | | 41·0 | 19·4 | 9·0 G |
| 9·2 | 47 | 11·0 | 14·1 | |
| 9·6 | 48 | 38·3 | 0·6 | |
| 9·7 | | 47·5 | 46·3 | |
| 9·5 | 49 | 10·5 | 23·1 | 9·0 |
| 8·9 | | 17·7 | 0·3 | 9·5 |

**241—300.**

| mag. | $2^{h.}$—$3^{h.}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 49 | 20·0 | 6·9 | |
| 9·4 | 52 | 17·0 | 39·0 | |
| 8·7 | 53 | 8·0 | 18·7 | 9·0 |
| 9·4 | | 47·0 | 7·1 | |
| 9·7 | | 56·5 | 40·9 | |
| 9·2 | 54 | 10·0 | 21·5 | |
| 9·0 | | 26·5 | 24·3 | 8·0 |
| 9·6 | 57 | 34·5 | 14·1 | |
| 9·6 | 59 | 16·5 | 23·4 | |
| 8·4 | 0 | 23·0 | 25·2 | 7·5 GS |
| 9·0 | | 27·5 | 43·6 | 8·5 |
| 9·6 | 4 | 12·5 | 26·0 | |
| 8·8 | | 46·0 | 16·1 | 8·5 |
| 8·6 | 5 | 29·5 | 51·1 | |
| 8·5 | 6 | 33·0 | 13·5 | 9·0 G |
| 9·6 | | 47·0 | 13·1 | |
| 7·7 | 7 | 11·0 | 41·7 | 8·5 G |
| 8·8 | | 28·0 | 18·1 | 9·0 |
| 9·5 | 8 | 53·0 | 48·1 | |
| 9·4 | 9 | 43·0 | 22·9 | |
| 8·7 | 10 | 0·0 | 52·9 | |
| 8·4 | 11 | 6·0 | 34·6 | 8·0 G |
| 7·6 | 12 | 1·8 | 58·7 | 7·0 GSct |
| 9·0 | | 11·0 | 39·2 | 9·5 G |
| 9·1 | 13 | 12·3 | 28·5 | 9·5 |
| 9·4 | | 45·5 | 53·1 | |
| 9·8 | 14 | 32·5 | 56·8 | ? |
| 8·5 | 19 | 19·7 | 8·8 | 7·5 G |
| 8·2 | 20 | 3·2 | 24·1 | 8·0 G |
| 9·8 | | 9·5 | 38·2 | |
| 8·6 | | 11·0 | 22·8 | 8·5 G |
| 8·4 | | 32·8 | 16·6 | 8·0 G |
| 8·2 | | 49·5 | 26·0 | 7·5 G |
| 9·8 | 21 | 9·0 | 48·6 | |
| 8·2 | 23 | 27·5 | 43·5 | 9·0 G |
| 9·0 | | 39·5 | 44·1 | G |
| 9·8 | | 57·5 | 27·3 | |
| 9·8 | 25 | 11·8 | 0·1 | ? |
| 9·8 | 27 | 42·5 | 8·1 | |
| 7·8 | | 46·3 | 0·1 | 8·5 G |
| 8·0 | 30 | 20·5 | 3·9 | |
| 9·8 | | 39·5 | 30·7 | |
| 9·4 | 32 | 57·0 | 40·8 | |
| 9·8 | 36 | 35·5 | 10·9 | |
| 9·6 | 37 | 56·5 | 4·1 | ? |
| 9·4 | 38 | 58·5 | 23·4 | |
| 9·4 | 40 | 57·5 | 24·7 | 9·0 |
| 9·8 | 41 | 42·5 | 26·2 | |
| 9·4 | 42 | 5·5 | 35·9 | |
| 9·4 | | 55·5 | 38·5 | |
| 9·2 | 44 | 22·0 | 26·4 | |
| 9·0 | 48 | 58·5 | 37·4 | |
| 8·8 | 51 | 15·5 | 47·0 | |
| 9·8 | | 48·2 | 7·1 | |
| 9·8 | 56 | 8·2 | 12·0 | |
| 9·4 | 57 | 14·9 | 1·7 | 9·0 |
| 9·1 | 58 | 9·0 | 39·4 | |
| 6·8 | | 19·2 | 0·8 | 7·0 GS |
| 9·0 | | 20·0 | 22·9 | |
| 9·1 | | 29·0 | 17·7 | |

**301—360.**

| mag. | $3^{h.}$—$4^{h.}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·9 | 58 | 32·5 | 59·6 | |
| 10·0 | 59 | 16·2 | 11·7 | |
| 9·6 | 0 | 22·5 | 49·9 | |
| 9·0 | | 37·5 | 52·7 | 8·0 GS |
| 7·4 | | 39·0 | 55·3 | 7·5 GS |
| 9·6 | | 41·0 | 13·8 | |
| 9·9 | 1 | 30·0 | 12·5 | |
| 8·5 | | 51·5 | 17·7 | 8·5 GSct |
| 9·5 | | 59·0 | 51·7 | |
| 9·6 | 5 | 9·0 | 4·6 | |
| 9·8 | | 12·0 | 5·7 | |
| 9·4 | | 14·0 | 9·9 | |
| 9·8 | 6 | 11·5 | 56·1 | |
| 9·6 | | 24·0 | 50·9 | 9·0 |
| 9·8 | 7 | 8·2 | 17·1 | |
| 9·6 | | 26·5 | 8·3 | |
| 9·5 | 8 | 48·5 | 23·6 | |
| 7·8 | 9 | 30·0 | 29·2 | 8·5 |
| 9·9 | 10 | 14·8 | 2·1 | |
| 9·6 | | 45·0 | 47·3 | |
| 8·6 | 12 | 23·0 | 24·1 | 8·8 |
| 9·4 | 13 | 2·5 | 8·7 | |
| 9·5 | 14 | 5·5 | 31·7 | 9·0 G |
| 5·4 | | 19·5 | 36·1 | 5·0 GSt |
| 9·9 | | 28·0 | 15·6 | |
| 9·8 | | 50·5 | 4·8 | |
| 9·6 | 15 | 17·0 | 25·9 | |
| 9·6 | 16 | 57·0 | 12·9 | |
| 7·1 | | 58·3 | 2·9 | 8·2 G |
| 9·4 | 17 | 12·0 | 10·7 | |
| 9·8 | | 20·5 | 53·1 | |
| 9·6 | | 29·0 | 48·8 | |
| 9·9 | 18 | 8·2 | 14·6 | |
| 9·8 | | 18·2 | 41·2 | |
| 9·2 | | 38·5 | 42·8 | |
| 9·1 | | 53·0 | 27·4 | 8·2 G |
| 9·8 | 19 | 7·5 | 53·7 | |
| 9·0 | | 39·0 | 59·1 | |
| 9·5 | | 45·5 | 17·1 | |
| 9·6 | 21 | 59·5 | 25·2 | |
| 9·5 | 22 | 52·0 | 45·1 | |
| 9·6 | | 53·0 | 3·9 | |
| 9·6 | 23 | 40·0 | 59·1 | |
| 9·8 | | 59·0 | 52·9 | |
| 9·2 | 24 | 34·0 | 3·5 | |
| 8·9 | 25 | 29·0 | 39·0 | |
| 9·8 | 26 | 19·0 | 8·7 | |
| 9·6 | | 37·0 | 59·2 | |
| 9·2 | | 47·5 | 6·2 | |
| 9·9 | 27 | 4·5 | 17·8 | |
| 9·2 | | 49·0 | 11·7 | 9·0 |
| 9·8 | 28 | 3·0 | 48·9 | |
| 9·2 | | 50·0 | 10·6 | |
| 9·6 | | 59·0 | 49·0 | |
| 9·4 | 29 | 16·0 | 28·6 | |
| 9·9 | | 19·0 | 37·9 | |
| 9·9 | | 29·8 | 41·1 | |
| 9·6 | | 39·2 | 1·7 | |
| 9·5 | | 41·2 | 26·8 | |
| 9·8 | 30 | 25·5 | 7·0 | |



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**361—420.**

| mag. | 4h.–5h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 31 | 3·5 | 23·0 | |
| 8·7 | 32 | 40·8 | 24·5 | 8·5 |
| 9·8 | 33 | 2·5 | 25·4 | |
| 9·8 | | 23·0 | 22·5 | |
| 9·6 | 34 | 10·2 | 1·4 | |
| 9·8 | | 15·5 | 42·7 | |
| 9·6 | | 31·5 | 40·6 | |
| 9·2 | 36 | 39·5 | 3·5 | 9·0 |
| 7·6 | | 51·5 | 13·4 | 8·0 GS |
| 7·1 | 38 | 14·5 | 11·3 | 7·0 GS |
| 9·8 | 41 | 1·0 | 18·6 | |
| 8·2 | | 24·5 | 1·3 | 8·0 G |
| 9·0 | | 37·0 | 55·3 | |
| 9·8 | | 54·5 | 57·8 | |
| 9·0 | 42 | 8·5 | 31·4 | |
| 5·4 | | 28·8 | 57·7 | 6·0 GSc |
| 9·2 | | 29·5 | 33·0 | |
| 9·8 | 44 | 9·0 | 40·8 | |
| 9·2 | | 33·5 | 26·8 | |
| 7·8 | 45 | 9·0 | 21·3 | 7·0 GSct |
| 9·8 | | 13·0 | 51·1 | |
| 9·4 | 46 | 28·0 | 44·8 | |
| 9·5 | 47 | 57·5 | 51·9 | |
| 8·4 | 48 | 6·0 | 0·8 | 8·0 GS |
| 9·8 | | 21·5 | 55·1 | |
| 9·2 | 49 | 5·5 | 12·7 | |
| 8·7 | | 42·0 | 12·8 | 8·5 |
| 9·5 | 50 | 6·5 | 16·1 | |
| 9·8 | | 7·5 | 52·9 | |
| 9·8 | | 14·5 | 15·6 | |
| 9·8 | | 29·5 | 20·7 | |
| 9·8 | 51 | 2·5 | 6·2 | |
| 9·2 | | 6·0 | 57·7 | |
| 9·8 | | 22·0 | 59·6 | |
| 9·8 | 52 | 47·5 | 22·1 | |
| 9·4 | | 54·0 | 29·9 | |
| 9·5 | | 56·0 | 2·3 | |
| 8·8 | 53 | 12·0 | 18·6 | 8·5 |
| 9·2 | 54 | 13·5 | 16·3 | 9·0 |
| 8·8 | | 24·0 | 17·2 | 8·5 |
| 8·9 | | 30·5 | 15·3 | 9·5 |
| 9·5 | | 42·0 | 3·5 | |
| 9·6 | | 50·0 | 7·7 | |
| 9·8 | 55 | 18·5 | 9·9 | |
| 9·8 | | 19·5 | 37·5 | |
| 9·8 | | 25·5 | 9·5 | |
| 9·8 | | 52·0 | 25·0 | |
| 9·8 | 56 | 19·5 | 42·6 | |
| 8·4 | | 38·5 | 19·0 | 8·0 |
| 8·8 | 57 | 20·5 | 41·7 | |
| 9·8 | 59 | 4·5 | 13·9 | |
| 9·8 | | 11·5 | 10·9 | |
| 9·8 | | 21·5 | 45·7 | |
| 9·6 | | 43·5 | 41·6 | |
| 9·0 | 1 | 14·0 | 15·0 | |
| 9·6 | | 58·7 | 1·3 | |
| 9·8 | 2 | 19·5 | 23·9 | |
| 9·8 | | 32·5 | 16·4 | |
| 9·8 | 3 | 51·0 | 47·5 | |
| 9·8 | 4 | 29·8 | 39·2 | |

**421—480.**

| mag. | 5h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·8 | 4 | 52·5 | 13·0 | |
| 9·7 | 5 | 13·5 | 7·5 | |
| 8·5 | | 56·5 | 38·4 | 8·5 |
| 9·6 | 6 | 18·5 | 46·6 | |
| 9·6 | | 44·5 | 27·3 | |
| 9·5 | | 48·0 | 5·1 | |
| 9·6 | 7 | 9·5 | 41·7 | ? |
| 9·7 | | 13·5 | 50·9 | |
| 9·2 | | 30·5 | 33·1 | |
| 9·6 | 8 | 45·0 | 53·1 | |
| 9·6 | | 59·5 | 10·1 | |
| 9·6 | 9 | 19·5 | 22·9 | |
| 9·4 | | 30·0 | 49·8 | |
| 9·6 | | 37·0 | 56·1 | |
| 9·6 | | 40·5 | 39·5 | |
| 8·7 | | 52·0 | 8·0 | |
| 9·8 | 10 | 2·5 | 31·8 | |
| 9·6 | | 4·0 | 32·5 | |
| 9·4 | | 17·0 | 55·2 | |
| 9·4 | | 18·5 | 38·1 | |
| 9·6 | | 18·5 | 22·4 | |
| 9·4 | | 30·3 | 3·1 | |
| 9·5 | | 50·5 | 17·3 | |
| 9·0 | 11 | 8·5 | 48·3 | |
| 9·6 | | 31·0 | 8·1 | |
| 8·2 | | 33·5 | 43·8 | 8·0 GSg |
| 9·6 | | 48·0 | 7·3 | |
| 9·6 | 12 | 4·0 | 27·0 | |
| 9·6 | | 9·0 | 42·9 | |
| 9·3 | | 36·0 | 9·1 | |
| 9·6 | 13 | 21·0 | 13·1 | |
| 9·6 | 14 | 5·0 | 20·2 | |
| 9·4 | 15 | 9·3 | 58·5 | |
| 9·6 | | 27·0 | 7·8 | |
| 9·6 | | 39·0 | 18·1 | |
| 9·7 | 16 | 52·5 | 36·7 | |
| 9·6 | | 59·5 | 21·5 | |
| 9·6 | 17 | 23·0 | 26·1 | |
| 9·0 | | 47·0 | 1·7 | |
| 9·6 | 18 | 41·0 | 42·3 | |
| 9·7 | 19 | 32·5 | 8·2 | |
| 9·4 | 20 | 31·5 | 3·3 | |
| 8·3 | 21 | 7·5 | 44·9 | 8·0 GSt |
| 9·4 | | 58·0 | 43·1 | |
| 9·7 | 22 | 22·5 | 3·9 | |
| 9·8 | | 58·5 | 57·7 | |
| 9·4 | 23 | 25·0 | 43·1 | |
| 9·8 | 24 | 1·0 | 21·6 | |
| 9·2 | | 1·0 | 21·9 | |
| 9·5 | | 9·5 | 14·0 | |
| 8·3 | | 30·0 | 17·7 | |
| 6·5 | | 30·0 | 1·1 | 5·5 GS |
| 9·2 | | 38·0 | 21·8 | |
| 9·6 | 26 | 6·0 | 27·1 | |
| 9·0 | | 30·5 | 14·7 | 8·5 |
| 9·8 | 28 | 16·5 | 32·6 | |
| 9·8 | | 42·5 | 55·1 | |
| 9·4 | | 51·5 | 57·7 | |
| 9·6 | 29 | 51·0 | 17·0 | |
| 9·6 | 30 | 19·5 | 40·1 | |

**481—540.**

| mag. | 5h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 30 | 29·0 | 17·0 | |
| 8·5 | 31 | 44·5 | 38·9 | |
| 9·6 | 33 | 7·5 | 33·1 | |
| 9·7 | | 50·5 | 11·4 | |
| 8·6 | 35 | 20·0 | 34·1 | G |
| 9·3 | | 20·5 | 43·3 | |
| 9·8 | | 21·5 | 43·1 | |
| 9·6 | | 27·0 | 26·1 | |
| 9·8 | | 47·5 | 53·7 | |
| 8·0 | 36 | 18·5 | 50·8 | |
| 6·9 | | 30·5 | 11·0 | 7·0 GS |
| 9·0 | | 47·5 | 8·5 | 9·5 |
| 9·6 | 37 | 7·5 | 55·4 | |
| 9·6 | | 12·0 | 46·1 | |
| 7·8 | | 19·5 | 1·6 | 7·5 GSg |
| 9·6 | | 51·0 | 26·0 | |
| 9·2 | 38 | 26·5 | 19·7 | 9·5 |
| 9·6 | 39 | 33·5 | 3·0 | |
| 7·8 | | 47·0 | 49·7 | 8·0 G |
| 10·0 | 40 | 25·5 | 43·2 | |
| 9·2 | 41 | 26·7 | 12·0 | |
| 9·9 | | 58·3 | 0·1 | |
| 8·9 | 42 | 29·0 | 59·9 | 9·5 |
| 9·6 | | 48·7 | 30·7 | |
| 9·6 | | 54·0 | 39·0 | |
| 10·0 | 43 | 2·5 | 57·8 | |
| 10·0 | | 4·5 | 56·8 | |
| 9·6 | | 26·2 | 36·0 | |
| 9·2 | | 37·7 | 58·6 | 9·0 |
| 9·7 | | 43·7 | 27·6 | |
| 9·3 | | 56·0 | 52·4 | 8·5 |
| 9·4 | 44 | 14·8 | 13·0 | |
| 10·0 | | 16·5 | 31·8 | |
| 10·0 | | 47·4 | 58·9 | |
| 9·6 | | 54·0 | 8·9 | |
| 9·3 | 45 | 16·5 | 3·0 | |
| 9·6 | | 22·5 | 10·1 | |
| 9·4 | 46 | 18·0 | 5·7 | |
| 10·0 | | 31·5 | 4·9 | |
| 9·8 | | 49·5 | 37·7 | |
| 9·8 | | 50·0 | 42·9 | |
| 8·6 | 48 | 3·5 | 52·4 | 8·8 |
| 9·9 | | 9·0 | 18·8 | |
| 9·0 | | 38·5 | 24·9 | |
| 9·2 | | 42·0 | 20·1 | |
| 9·9 | | 58·5 | 1·6 | |
| 10·0 | | 59·5 | 49·9 | |
| 9·8 | 49 | 4·5 | 3·2 | |
| 9·3 | | 53·7 | 58·9 | 9·0 |
| 9·8 | 50 | 0·8 | 59·0 | |
| 10·0 | | 20·0 | 10·8 | |
| 9·4 | | 29·7 | 59·9 | |
| 9·8 | | 42·5 | 20·1 | |
| 10·0 | | 58·0 | 0·0 | |
| 9·2 | 51 | 1·5 | 21·4 | ? |
| 10·0 | | 18·5 | 2·0 | |
| 10·0 | | 30·5 | 0·3 | |
| 8·2 | 52 | 33·5 | 47·5 | |
| 9·6 | | 48·5 | 8·8 | |
| 8·1 | 53 | 17·5 | 37·5 | 7·0 GS |

**541—600.**

| mag. | 5h.–6h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 53 | 28·5 | 35·2 | |
| 8·8 | | 33·0 | 55·7 | 7·5 G |
| 9·9 | | 42·0 | 58·7 | |
| 10·0 | | 59·5 | 5·5 | |
| 9·7 | 54 | 10·0 | 13·7 | |
| 8·2 | | 11·5 | 12·9 | |
| 9·6 | | 21·2 | 57·6 | |
| 9·6 | | 25·0 | 42·1 | |
| 9·7 | | 39·0 | 31·6 | |
| 9·6 | | 42·5 | 55·4 | |
| 10·0 | | 44·5 | 16·0 | |
| 8·9 | | 53·0 | 58·5 | |
| 10·0 | 55 | 3·0 | 16·4 | |
| 9·2 | | 8·0 | 25·9 | |
| 10·0 | | 27·5 | 6·1 | |
| 10·0 | 56 | 24·0 | 35·3 | |
| 9·3 | | 55·0 | 40·5 | |
| 10·0 | 57 | 43·0 | 12·0 | |
| 9·9 | | 52·5 | 22·1 | |
| 10·0 | | 57·0 | 15·1 | |
| 9·3 | 58 | 2·5 | 49·9 | |
| 8·8 | 59 | 24·5 | 28·0 | |
| 9·0 | | 35·0 | 43·3 | |
| 10·0 | | 37·8 | 0·2 | |
| 9·5 | | 42·0 | 41·6 | |
| 9·6 | | 42·5 | 9·1 | |
| 10·0 | | 50·0 | 9·9 | |
| 9·5 | 0 | 10·5 | 51·7 | |
| 9·4 | | 10·5 | 49·0 | |
| 9·6 | 1 | 19·0 | 27·8 | |
| 8·6 | | 29·5 | 35·9 | 7·5 G |
| 9·8 | | 35·0 | 17·4 | |
| 10·0 | | 40·0 | 31·9 | |
| 10·0 | | 47·0 | 5·4 | |
| 9·2 | | 57·0 | 15·8 | |
| 9·6 | 2 | 9·5 | 22·9 | |
| 10·0 | | 36·5 | 1·7 | |
| 8·2 | | 39·5 | 48·7 | 8·5 Gt |
| 9·8 | | 43·5 | 6·5 | |
| 9·1 | 3 | 3·0 | 46·9 | 9·0 |
| 9·6 | | 20·0 | 37·4 | |
| 9·2 | | 29·5 | 7·8 | 8·5 |
| 9·6 | | 55·0 | 22·6 | |
| 8·3 | 4 | 27·0 | 30·0 | |
| 8·9 | | 36·2 | 57·5 | |
| 10·0 | | 59·5 | 13·9 | |
| 10·0 | 5 | 4·5 | 16·9 | |
| 10·0 | | 23·5 | 36·3 | |
| 10·0 | 6 | 8·3 | 6·0 | |
| 10·0 | | 8·5 | 50·7 | |
| 10·0 | | 18·5 | 20·4 | |
| 8·9 | | 19·0 | 1·5 | 9·5 |
| 9·2 | | 44·5 | 20·8 | |
| 8·0 | 7 | 8·0 | 26·4 | |
| 9·4 | | 18·0 | 44·9 | |
| 7·8 | | 58·0 | 29·7 | 8·0 G |
| 9·1 | 8 | 12·5 | 46·4 | 9·0 |
| 10·0 | | 23·3 | 16·4 | |
| 10·0 | | 25·0 | 11·1 | |
| 10·0 | 9 | 0·0 | 7·1 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 30 | 24 | 3·2 |
| | 40 | 23 | 2·9 |
| | 50 | 23 | 2·5 |
| 5 | 0 | 22 | 2·2 |
| | 10 | 21 | 1·8 |
| | 20 | 21 | 1·5 |
| | 30 | 21 | 1·1 |
| | 40 | 20 | 0·7 |
| | 50 | 20 | 0·4 |
| 6 | 0 | 20 | 0·0 |
| | | | − |
| | 10 | 20 | 0·4 |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 6 | 0 | 20 | 0.0 |
| | 10 | 20 | 0.4 |
| | 20 | 20 | 0.7 |
| | 30 | 21 | 1.1 |
| | 40 | 21 | 1.5 |
| | 50 | 21 | 1.8 |
| 7 | 0 | 22 | 2.2 |
| | 10 | 23 | 2.5 |
| | 20 | 23 | 2.9 |
| | 30 | 24 | 3.2 |
| | 40 | 25 | 3.5 |

## 601—660

| mag. | 6h. m | s | −59° ′ | |
|---|---|---|---|---|
| 7.8 | 9 | 12.5 | 46.4 | 8.5 Gt |
| 10.0 | | 33.0 | 42.9 | |
| 8.4 | | 54.0 | 12.8 | |
| 9.6 | | 56.0 | 58.3 | |
| 10.0 | 10 | 13.5 | 50.0 | |
| 10.0 | | 39.5 | 43.9 | |
| 9.1 | | 41.5 | 23.4 | |
| 8.4 | | 43.5 | 44.7 | |
| 8.1 | 11 | 11.5 | 53.9 | 7.5 G |
| 8.4 | | 18.5 | 31.7 | |
| 10.0 | | 34.0 | 44.9 | |
| 9.5 | | 36.5 | 6.4 | |
| 9.4 | | 38.5 | 52.7 | 9.5 |
| 10.0 | | 41.5 | 45.9 | |
| 9.7 | 12 | 24.5 | 50.2 | |
| 9.2 | 13 | 20.0 | 40.8 | |
| 8.2 | 14 | 9.5 | 6.6 | 9.0 G |
| 8.0 | | 30.0 | 9.8 | 8.0 GSct |
| 7.4 | | 34.5 | 9.3 | 6.5 GSct |
| 9.6 | | 35.0 | 15.8 | |
| 10.0 | | 51.3 | 37.4 | |
| 10.0 | 15 | 13.8 | 26.4 | |
| 10.0 | | 17.0 | 35.2 | |
| 9.6 | | 44.5 | 19.1 | 9.5 |
| 9.9 | | 59.2 | 48.4 | |
| 10.0 | 16 | 3.0 | 2.6 | |
| 9.4 | 17 | 18.8 | 56.0 | |
| 10.0 | 18 | 19.0 | 49.2 | |
| 9.6 | | 23.5 | 57.0 | |
| 9.7 | | 28.5 | 15.8 | |
| 9.8 | | 31.2 | 19.0 | |
| 10.0 | | 31.7 | 48.5 | |
| 9.8 | | 53.5 | 32.5 | |
| 10.0 | | 57.0 | 41.7 | |
| 10.0 | 19 | 6.5 | 36.9 | |
| 10.0 | | 16.0 | 56.4 | |
| 7.6 | | 48.8 | 57.6 | 7.0 GSg |
| 9.4 | 20 | 10.0 | 12.1 | |
| 10.0 | | 44.5 | 45.2 | |
| 9.5 | 22 | 4.5 | 27.2 | |
| 8.8 | | 34.0 | 1.1 | 8.5 |
| 9.9 | | 55.0 | 20.2 | |
| 8.9 | 23 | 15.5 | 16.3 | |
| 9.6 | | 19.0 | 49.9 | |
| 10.0 | | 23.0 | 36.1 | |
| 10.0 | | 30.0 | 35.2 | |
| 10.0 | | 50.5 | 34.3 | |
| 9.8 | | 56.0 | 3.3 | |
| 9.7 | 24 | 40.0 | 6.9 | |
| 9.7 | 25 | 14.0 | 54.2 | |
| 10.0 | | 40.0 | 38.3 | |
| 9.8 | 26 | 31.5 | 32.4 | |
| 7.7 | | 36.0 | 32.0 | GSg |
| 9.7 | | 37.5 | 20.1 | |
| 9.7 | | 47.0 | 51.5 | |
| 9.8 | | 54.0 | 10.1 | |
| 9.0 | 27 | 14.7 | 59.0 | |
| 8.6 | | 17.0 | 41.2 | 7.5 G |
| 10.0 | | 40.0 | 40.8 | |
| 7.9 | | 49.0 | 40.9 | 8.0 G |

## 661—720.

| mag. | 6h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.0 | 27 | 54.0 | 17.9 | |
| 6.9 | 28 | 13.0 | 30.1 | 7.0 GScgt |
| 9.8 | | 15.5 | 55.1 | |
| 9.4 | | 26.5 | 49.2 | |
| 10.0 | 29 | 35.5 | 2.5 | |
| 9.8 | 30 | 3.5 | 47.1 | |
| 9.8 | | 11.0 | 28.0 | |
| 9.9 | | 35.5 | 29.9 | |
| 9.6 | | 39.0 | 59.1 | |
| 9.5 | | 45.0 | 22.5 | |
| 9.0 | | 57.5 | 10.0 | 8.5 |
| 9.4 | 31 | 48.0 | 2.3 | |
| 10.0 | 32 | 18.0 | 51.5 | |
| 9.6 | | 42.5 | 25.9 | |
| 9.6 | 34 | 15.5 | 9.0 | |
| 9.6 | | 29.0 | 4.7 | |
| 8.4 | | 52.5 | 6.8 | |
| 10.0 | | 56.2 | 7.0 | |
| 10.0 | 35 | 9.5 | 40.0 | |
| 10.0 | 36 | 16.5 | 40.2 | |
| 8.3 | | 19.5 | 39.6 | 8.5 |
| 9.2 | 37 | 3.0 | 23.2 | |
| 8.8 | | 10.0 | 5.9 | |
| 10.0 | | 19.0 | 45.0 | |
| 10.0 | | 24.5 | 22.4 | |
| 7.4 | 38 | 32.8 | 0.3 | 8.0 GSt |
| 8.4 | | 35.5 | 4.8 | 9.0 |
| 9.8 | 39 | 4.5 | 6.4 | |
| 10.0 | | 21.5 | 41.3 | |
| 9.8 | | 51.0 | 43.0 | |
| 8.8 | 40 | 29.5 | 30.5 | |
| 9.8 | 41 | 12.5 | 41.5 | |
| 10.0 | 42 | 44.5 | 7.0 | |
| 9.1 | | 45.5 | 8.8 | 9.0 G |
| 10.0 | | 52.0 | 18.5 | |
| 10.0 | 43 | 3.0 | 44.1 | |
| 8.4 | | 4.0 | 10.3 | 9.0 G |
| 8.2 | | 26.5 | 33.3 | 9.0 |
| 9.0 | | 34.0 | 47.5 | 8.5 |
| 10.0 | | 35.0 | 11.3 | |
| 9.5 | | 53.0 | 10.2 | |
| 10.0 | 44 | 23.5 | 0.9 | |
| 8.8 | | 52.0 | 44.0 | |
| 8.2 | 45 | 27.0 | 49.4 | 8.7 |
| 10.0 | | 50.0 | 42.2 | |
| 10.0 | | 50.0 | 42.4 | |
| 8.8 | 46 | 12.0 | 1.6 | |
| 10.0 | 47 | 31.5 | 13.9 | |
| 8.7 | | 47.5 | 42.9 | 9.0 |
| 9.6 | | 49.0 | 31.1 | |
| 10.0 | 48 | 5.0 | 14.0 | |
| 9.8 | 49 | 19.5 | 51.6 | |
| 8.8 | | 25.0 | 9.0 | 9.5 |
| 8.6 | | 44.5 | 33.4 | 8.5 |
| 9.3 | | 59.0 | 14.5 | 9.0 |
| 6.7 | 50 | 55.0 | 11.3 | 6.5 GSt |
| 8.8 | 52 | 7.0 | 53.9 | 9.0 Gt |
| 7.5 | | 10.0 | 43.3 | 8.5 GSt |
| 9.8 | | 48.5 | 50.2 | |
| 9.4 | | 48.5 | 19.9 | |

## 721—780.

| mag | 6h.—7h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.0 | 52 | 50.3 | 2.9 | |
| 9.4 | | 54.2 | 0.0 | |
| 9.3 | 53 | 29.5 | 15.0 | |
| 9.3 | | 43.5 | 19.5 | |
| 8.7 | | 44.0 | 22.1 | |
| 9.4 | | 45.5 | 27.7 | |
| 9.4 | | 50.5 | 4.6 | |
| 9.3 | 54 | 0.5 | 30.0 | |
| 9.4 | | 8.7 | 16.1 | |
| 9.3 | | 12.5 | 7.1 | |
| 9.4 | | 31.5 | 22.1 | |
| 8.0 | | 43.5 | 9.6 | 8.8 |
| 9.3 | | 59.5 | 43.1 | |
| 9.4 | 55 | 1.0 | 17.3 | |
| 9.0 | | 1.5 | 12.7 | 9.0 G |
| 9.3 | | 2.0 | 4.7 | |
| 9.4 | 56 | 46.5 | 9.4 | |
| 9.3 | 57 | 15.5 | 4.9 | |
| 9.4 | | 17.5 | 3.3 | |
| 8.8 | | 27.5 | 52.1 | 9.0 |
| 9.4 | | 49.5 | 25.2 | |
| 8.9 | 58 | 32.5 | 47.0 | 8.5 |
| 9.4 | | 35.3 | 0.3 | |
| 9.4 | | 47.5 | 19.9 | |
| 9.2 | | 59.0 | 35.1 | |
| 9.1 | 59 | 5.5 | 51.2 | |
| 9.2 | | 12.5 | 9.1 | |
| 9.2 | | 14.0 | 50.9 | |
| 9.4 | | 16.0 | 34.9 | |
| 9.4 | | 22.5 | 44.0 | |
| 9.3 | | 28.3 | 58.1 | |
| 8.5 | | 43.0 | 15.0 | 8.5 G |
| 8.2 | 0 | 10.0 | 16.5 | 7.5 G |
| 9.1 | | 24.5 | 9.9 | 9.0 |
| 9.0 | | 49.5 | 42.2 | |
| 9.2 | | 55.5 | 27.1 | |
| 9.4 | 1 | 30.5 | 40.8 | |
| 9.4 | | 40.5 | 12.1 | |
| 9.4 | 2 | 11.0 | 29.0 | |
| 9.2 | | 47.0 | 23.1 | |
| 8.8 | | 53.5 | 5.6 | |
| 9.4 | | 54.5 | 57.4 | |
| 9.0 | 3 | 17.0 | 45.1 | |
| 9.3 | | 19.5 | 29.3 | |
| 9.3 | | 23.0 | 16.2 | |
| 9.0 | | 29.0 | 12.0 | |
| 7.8 | | 34.8 | 57.9 | 8.2 GSt |
| 9.0 | 4 | 2.5 | 37.8 | |
| 9.2 | | 23.0 | 53.4 | |
| 7.8 | | 45.0 | 48.0 | 8.2 GS |
| 6.7 | 5 | 25.0 | 31.1 | 7.0 GSt |
| 9.4 | | 32.0 | 36.9 | |
| 8.9 | | 45.0 | 20.8 | 8.8 |
| 9.4 | | 58.0 | 29.0 | |
| 9.3 | 6 | 0.0 | 38.8 | |
| 9.0 | | 8.0 | 26.7 | |
| 9.0 | | 29.0 | 16.1 | |
| 9.4 | | 34.0 | 33.1 | |
| 9.4 | | 39.0 | 17.0 | |
| 9.4 | | 53.0 | 27.0 | |

## 781—840.

| mag. | 7h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.3 | 6 | 59.0 | 44.0 | |
| 9.2 | | 59.0 | 17.2 | |
| 9.0 | 7 | 9.0 | 10.1 | |
| 8.9 | | 19.0 | 48.8 | |
| 9.3 | | 32.0 | 28.8 | |
| 9.4 | | 48.0 | 52.1 | |
| 8.8 | 8 | 10.0 | 10.2 | |
| 9.0 | | 23.0 | 7.4 | |
| 9.4 | | 50.0 | 3.1 | |
| 9.4 | | 56.0 | 46.3 | |
| 9.4 | 9 | 5.0 | 32.5 | |
| 9.4 | | 32.0 | 16.1 | |
| 7.7 | 10 | 19.0 | 37.5 | 8.5 Gt |
| 9.1 | | 30.0 | 19.1 | |
| 9.1 | | 40.5 | 20.5 | |
| 9.4 | 11 | 25.2 | 58.1 | |
| 8.0 | | 30.0 | 50.6 | 8.5 |
| 8.7 | 12 | 12.0 | 53.2 | 9.0 |
| 9.3 | | 12.4 | 57.1 | |
| 9.4 | | 29.4 | 59.3 | |
| 8.7 | | 52.0 | 2.9 | 9.0 |
| 9.4 | 13 | 16.5 | 20.4 | |
| 8.9 | | 28.0 | 46.5 | |
| 8.9 | | 31.0 | 19.3 | |
| 9.1 | | 44.0 | 20.1 | |
| 9.3 | 14 | 19.0 | 4.1 | |
| 9.0 | 15 | 13.0 | 11.1 | |
| 8.7 | | 19.0 | 24.3 | |
| 7.5 | | 39.5 | 2.1 | 8.0 GSt |
| 9.4 | 16 | 3.5 | 29.8 | |
| 8.0 | | 36.5 | 30.1 | 8.2 |
| 8.9 | | 48.5 | 33.9 | |
| 9.4 | 17 | 9.0 | 4.1 | |
| 9.3 | | 11.5 | 33.6 | 9.0 |
| 9.2 | | 38.0 | 38.1 | |
| 8.8 | | 55.0 | 3.6 | 9.0 |
| 9.2 | | 59.0 | 37.3 | 9.5 |
| 9.3 | 18 | 19.5 | 15.8 | |
| 8.8 | 19 | 11.0 | 55.1 | |
| 9.1 | | 26.0 | 54.0 | |
| 9.4 | 20 | 49.0 | 12.5 | |
| 9.2 | 21 | 48.5 | 43.5 | |
| 9.4 | 22 | 4.0 | 11.5 | |
| 8.8 | 23 | 2.0 | 41.0 | |
| 9.3 | 24 | 23.0 | 11.0 | |
| 9.4 | | 49.0 | 40.0 | |
| 9.4 | | 53.0 | 23.4 | 9.5 |
| 9.2 | | 53.0 | 38.8 | |
| 8.3 | | 59.0 | 19.3 | 7.8 GSt |
| 9.2 | 25 | 54.0 | 8.0 | |
| 9.4 | 26 | 38.0 | 42.7 | |
| 9.4 | 27 | 7.5 | 24.0 | |
| 8.6 | | 38.8 | 20.0 | 9.0 |
| 8.0 | | 51.0 | 50.9 | 8.0 |
| 9.1 | 28 | 25.2 | 17.5 | 8.8 |
| 9.1 | 29 | 14.8 | 14.0 | |
| 9.3 | | 24.5 | 45.3 | |
| 9.7 | | 40.5 | 15.2 | |
| 9.7 | 30 | 0.5 | 50.9 | |
| 9.6 | | 4.5 | 13.1 | |



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### 841—900.

| mag. | 7h. m | s | − 59° ′ | |
|---|---|---|---|---|
| 9.7 | 30 | 9.5 | 4.5 | |
| 8.6 | | 9.7 | 1.1 | 9.5 |
| 9.7 | | 19.5 | 22.1 | |
| 9.7 | | 31.5 | 1.6 | |
| 9.7 | 31 | 20.5 | 11.8 | |
| 9.7 | | 23.5 | 46.9 | |
| 9.6 | 32 | 1.5 | 56.7 | |
| 9.6 | | 5.5 | 1.5 | |
| 8.0 | | 9.5 | 58.3 | 8.0 G |
| 9.3 | | 25.5 | 24.9 | |
| 9.6 | 33 | 14.2 | 24.7 | |
| 8.7 | | 19.7 | 15.5 | |
| 9.7 | | 30.0 | 1.1 | |
| 9.4 | 34 | 7.5 | 48.2 | |
| 8.4 | | 9.5 | 20.1 | 8.5 |
| 9.4 | | 23.5 | 50.5 | |
| 9.4 | | 33.5 | 14.5 | |
| 9.2 | | 39.5 | 38.5 | |
| 8.7 | | 42.0 | 18.5 | 8.8 |
| 9.6 | 35 | 3.0 | 55.0 | |
| 9.7 | | 9.5 | 4.9 | |
| 9.0 | | 48.0 | 3.6 | 9.0 |
| 9.7 | 36 | 16.5 | 22.5 | |
| 9.5 | | 46.0 | 32.1 | |
| 8.8 | | 48.5 | 56.7 | |
| 9.7 | | 49.8 | 0.9 | |
| 9.7 | 37 | 17.5 | 59.1 | |
| 9.7 | | 25.0 | 29.1 | |
| 9.7 | | 25.5 | 53.2 | |
| 8.2 | | 28.0 | 39.6 | 8.2 |
| 9.6 | 38 | 35.0 | 50.5 | |
| 9.5 | | 56.5 | 52.6 | |
| 7.6 | 39 | 14.5 | 42.4 | 7.5 GSt |
| 9.4 | | 18.0 | 27.1 | 9.0 |
| 9.7 | | 18.5 | 27.5 | |
| 9.6 | | 41.5 | 13.4 | |
| 8.4 | | 42.5 | 59.2 | 8.5 G |
| 9.7 | | 58.5 | 58.9 | |
| 9.7 | 40 | 8.8 | 58.8 | |
| 9.7 | | 12.5 | 4.9 | |
| 8.5 | | 19.0 | 8.6 | 8.5 |
| 9.7 | | 19.2 | 3.2 | |
| 7.6 | | 25.3 | 0.3 | 7.2 GSg |
| 9.7 | | 44.0 | 18.0 | |
| 9.7 | | 50.0 | 33.5 | |
| 9.6 | 41 | 7.2 | 5.0 | |
| 8.5 | | 9.0 | 31.3 | |
| 9.4 | | 9.0 | 17.1 | |
| 9.7 | | 19.5 | 17.8 | |
| 8.9 | | 45.0 | 55.5 | |
| 8.7 | | 59.0 | 43.4 | 9.5 |
| 8.8 | 42 | 24.5 | 12.1 | 8.5 |
| 9.6 | | 39.0 | 12.7 | |
| 9.4 | | 49.5 | 54.3 | |
| 9.2 | 43 | 3.5 | 2.6 | |
| 9.6 | | 45.0 | 17.5 | |
| 8.4 | 44 | 8.5 | 30.5 | 7.5 |
| 8.5 | | 9.0 | 30.3 | 8.0 |
| 9.4 | | 26.0 | 8.6 | 9.5 |
| 8.8 | 45 | 38.0 | 51.3 | |

### 901—960.

| mag. | 7h. m | s | − 59° ′ | |
|---|---|---|---|---|
| 8.2 | 45 | 54.5 | 35.5 | |
| 9.7 | 46 | 8.5 | 54.5 | |
| 9.4 | | 27.7 | 12.2 | |
| 8.3 | | 28.5 | 51.3 | 9.0 |
| 8.8 | | 30.0 | 43.1 | 9.5 |
| 9.6 | 47 | 3.7 | 9.1 | |
| 7.8 | | 8.5 | 3.5 | 7.5 Gg |
| 6.4 | | 9.0 | 58.4 | 6.0 GSct |
| 9.7 | | 27.0 | 55.1 | |
| 7.8 | | 48.0 | 44.0 | 7.0 GSg |
| 9.7 | | 58.5 | 28.1 | |
| 9.2 | 48 | 9.0 | 45.3 | |
| 8.7 | | 20.5 | 42.2 | |
| 9.2 | | 38.0 | 35.1 | |
| 9.5 | | 43.5 | 24.3 | |
| 7.2 | | 44.5 | 19.5 | 7.5 GSt |
| 8.3 | 49 | 18.5 | 20.1 | 8.5 |
| 9.7 | | 42.5 | 7.3 | 9.5 |
| 9.2 | | 43.7 | 50.1 | |
| 9.4 | | 49.5 | 56.1 | |
| 7.3 | | 59.5 | 17.4 | 7.5 GS |
| 7.6 | 50 | 8.5 | 10.2 | 7.5 Gt |
| 8.6 | | 18.0 | 35.1 | |
| 9.7 | | 18.0 | 54.4 | |
| 8.3 | | 40.5 | 30.5 | |
| 9.6 | | 41.0 | 30.3 | |
| 9.3 | | 49.5 | 43.5 | |
| 8.2 | | 50.0 | 5.3 | |
| 9.5 | | 59.0 | 57.9 | |
| 9.2 | 51 | 15.0 | 59.3 | |
| 9.4 | | 59.0 | 18.2 | |
| 8.6 | 52 | 30.5 | 34.0 | |
| 9.2 | | 33.0 | 39.2 | |
| 9.2 | | 49.5 | 31.1 | |
| 8.4 | 53 | 15.3 | 58.9 | |
| 8.4 | | 53.5 | 55.4 | |
| 8.0 | | 55.5 | 54.5 | 9.0 |
| 9.7 | 54 | 10.3 | 41.6 | |
| 9.5 | | 11.0 | 8.5 | |
| 9.2 | | 58.5 | 57.1 | |
| 9.0 | 55 | 18.0 | 29.1 | |
| 9.1 | | 24.5 | 52.1 | |
| 8.5 | | 27.3 | 57.0 | |
| 6.6 | | 29.0 | 58.1 | 6.0 GS |
| 9.4 | | 43.0 | 51.5 | |
| 8.6 | 56 | 1.5 | 5.8 | 9.5 |
| 8.0 | | 6.0 | 21.3 | |
| 8.1 | | 14.5 | 37.3 | |
| 8.8 | | 19.5 | 55.4 | |
| 8.3 | | 23.3 | 2.0 | 9.0 S |
| 8.5 | | 27.5 | 6.6 | 8.5 S |
| 9.6 | | 53.5 | 29.5 | |
| 8.5 | 57 | 12.5 | 51.3 | |
| 6.2 | | 28.0 | 51.8 | 7.0 GSct |
| 8.4 | | 36.0 | 37.3 | |
| 8.0 | 58 | 29.5 | 18.6 | 8.0 |
| 9.7 | | 54.0 | 45.7 | |
| 9.6 | 59 | 15.5 | 44.4 | |
| 9.4 | | 19.0 | 52.9 | |
| 8.9 | | 28.5 | 53.4 | |

### 961—1020.

| mag. | 7h.–8h. m | s | − 59° ′ | |
|---|---|---|---|---|
| 9.4 | 59 | 30.0 | 58.6 | |
| 9.7 | | 53.0 | 38.5 | |
| 9.5 | 0 | 0.5 | 57.3 | |
| 8.2 | | 3.0 | 32.9 | 8.0 |
| 8.3 | | 4.5 | 27.7 | 9.0 |
| 9.7 | | 19.0 | 49.1 | |
| 9.7 | | 33.0 | 37.3 | |
| 9.4 | | 43.5 | 1.8 | 9.0 |
| 8.8 | | 44.5 | 52.5 | |
| 9.7 | | 45.5 | 1.6 | |
| 8.5 | | 48.0 | 43.0 | |
| 8.8 | | 48.5 | 41.4 | |
| 8.3 | 1 | 10.5 | 47.8 | |
| 9.5 | 2 | 8.5 | 52.8 | |
| 9.4 | | 14.5 | 44.5 | |
| 9.2 | 3 | 56.5 | 7.7 | 10.0 |
| 9.7 | | 59.5 | 21.4 | |
| 9.2 | 4 | 2.0 | 47.5 | 9.0 |
| 9.7 | | 15.3 | 30.9 | |
| 7.3 | 5 | 0.0 | 4.4 | 8.0 G |
| 9.7 | | 1.3 | 12.5 | |
| 9.0 | | 8.0 | 55.6 | 8.5 |
| 7.6 | | 8.5 | 59.1 | 8.0 GSg |
| 9.7 | | 15.3 | 21.0 | |
| 9.6 | 6 | 10.0 | 36.6 | |
| 8.8 | | 11.0 | 46.1 | 9.0 |
| 9.6 | | 36.5 | 1.9 | |
| 9.6 | | 47.0 | 27.5 | |
| 9.2 | | 59.0 | 46.0 | 8.5 |
| 6.9 | 7 | 5.0 | 10.3 | 7.0 GSg |
| 9.0 | | 12.0 | 51.0 | 8.5 |
| 8.7 | | 29.5 | 4.0 | 9.5 |
| 9.6 | 8 | 43.0 | 7.6 | |
| 9.6 | | 56.0 | 45.8 | |
| 9.2 | 9 | 10.0 | 48.8 | |
| 9.6 | | 10.5 | 16.0 | |
| 8.4 | | 20.0 | 42.0 | 7.5 GS |
| 9.6 | | 42.0 | 10.0 | |
| 9.1 | | 50.0 | 56.4 | 9.5 G |
| 9.0 | | 53.0 | 39.8 | 7.5 Gt |
| 9.6 | 10 | 11.0 | 4.2 | |
| 9.6 | | 25.0 | 5.8 | |
| 9.2 | 11 | 32.5 | 14.2 | |
| 9.6 | | 54.5 | 36.0 | |
| 8.8 | | 56.5 | 53.9 | 9.0 |
| 9.0 | 12 | 0.0 | 5.8 | |
| 9.5 | | 33.7 | 25.7 | |
| 9.2 | | 36.7 | 14.5 | |
| 9.6 | | 38.5 | 13.8 | |
| 9.6 | | 51.0 | 24.0 | |
| 9.6 | | 53.0 | 39.4 | G |
| 8.9 | 13 | 20.0 | 40.2 | 7.5 GSt |
| 9.2 | | 30.0 | 19.8 | |
| 9.2 | | 43.0 | 19.7 | |
| 9.6 | | 48.4 | 59.0 | |
| 9.6 | 14 | 32.0 | 57.5 | |
| 7.3 | 15 | 41.0 | 55.4 | 7.5 GSt |
| 8.4 | | 59.5 | 55.1 | 7.5 GSt |
| 9.0 | 16 | 25.5 | 9.0 | |
| 9.1 | | 30.5 | 46.2 | |

### 1021—1080.

| mag. | 8h. m | s | − 59° ′ | |
|---|---|---|---|---|
| 8.9 | 16 | 32.5 | 48.0 | 9.0 |
| 9.4 | | 39.5 | 13.8 | |
| 7.3 | 17 | 18.0 | 42.4 | 7.5 GSt |
| 9.4 | | 20.0 | 30.0 | 9.5 G |
| 9.5 | | 32.2 | 58.0 | |
| 9.1 | | 58.5 | 34.2 | |
| 8.9 | 18 | 14.5 | 41.7 | 8.0 S |
| 8.6 | | 16.0 | 10.6 | 9.0 |
| 9.6 | 19 | 10.5 | 41.6 | |
| 8.3 | | 20.7 | 58.6 | |
| 8.8 | | 44.5 | 22.7 | 7.8 G |
| 4.4 | | 56.0 | 6.5 | 2.0 GStrλ |
| 9.2 | 20 | 16.0 | 12.0 | 8.7 |
| 9.6 | | 16.5 | 46.2 | |
| 9.6 | | 20.5 | 49.1 | |
| 8.4 | | 27.0 | 7.3 | 8.8 G |
| 8.8 | | 52.0 | 46.0 | 8.8 |
| 9.4 | 21 | 5.5 | 34.0 | |
| 8.9 | | 49.5 | 32.0 | 8.4 |
| 9.0 | 22 | 24.5 | 50.0 | 9.0 |
| 9.6 | 23 | 10.5 | 9.2 | |
| 9.3 | | 24.0 | 43.0 | 9.0 |
| 9.5 | | 42.2 | 20.8 | 9.0 |
| 8.5 | | 46.3 | 1.6 | 8.6 |
| 9.6 | 24 | 23.5 | 23.0 | |
| 8.5 | | 25.5 | 8.1 | 9.1 |
| 9.6 | 25 | 47.5 | 36.0 | |
| 8.2 | 26 | 10.0 | 42.2 | 7.5 GS |
| 8.4 | | 56.5 | 45.6 | 8.2 GS |
| 9.2 | 27 | 1.5 | 57.2 | |
| 9.6 | | 28.5 | 37.0 | |
| 9.6 | | 43.2 | 5.5 | 9.5 |
| 9.4 | 28 | 5.5 | 44.0 | 10.0 |
| 8.7 | | 8.5 | 10.0 | 9.0 |
| 9.1 | | 39.5 | 5.0 | |
| 9.5 | 29 | 25.0 | 58.0 | 9.0 |
| 9.6 | 31 | 28.0 | 49.0 | |
| 9.5 | 32 | 10.5 | 53.8 | 9.5 |
| 9.2 | | 15.5 | 54.2 | 9.5 |
| 8.1 | | 40.0 | 58.0 | 8.5 |
| 9.2 | | 54.5 | 6.6 | 9.0 |
| 9.6 | | 55.5 | 8.8 | 9.5 |
| 9.6 | 33 | 19.5 | 3.0 | 9.5 |
| 9.6 | | 59.5 | 15.6 | |
| 7.6 | 34 | 3.5 | 53.4 | 8.5 GSg |
| 9.2 | | 3.5 | 40.0 | |
| 9.6 | | 19.2 | 33.3 | |
| 9.5 | | 22.0 | 48.9 | 9.5 |
| 9.4 | 35 | 0.5 | 43.8 | |
| 9.2 | | 5.8 | 2.8 | |
| 9.4 | | 11.5 | 29.8 | 9.0 |
| 9.3 | | 16.5 | 9.7 | |
| 9.6 | | 30.5 | 31.6 | |
| 9.6 | 36 | 18.5 | 46.1 | |
| 6.8 | | 33.0 | 52.6 | 7.0 GSgt |
| 9.5 | | 44.0 | 56.8 | |
| 9.5 | 37 | 3.2 | 5.8 | 9.2 |
| 6.6 | | 12.5 | 6.2 | 7.5 GSg |
| 9.2 | | 49.0 | 58.4 | |
| 4.4 | | 50.0 | 18.8 | 5.5 GScgt |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 7 | 30 | 24 | 3.2 |
| | 40 | 25 | 3.5 |
| | 50 | 26 | 3.9 |
| 8 | 0 | 28 | 4.2 |
| | 10 | 29 | 4.5 |
| | 20 | 30 | 4.8 |
| | 30 | 32 | 5.1 |
| | 40 | 33 | 5.4 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 8 | 30 | 32 | 5·1 |
| | 40 | 33 | 5·4 |
| | 50 | 35 | 5·6 |
| 9 | 0 | 37 | 5·9 |
| | 10 | 38 | 6·2 |
| | 20 | 40 | 6·4 |

## 1081—1140.

| mag. | 8h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 37 | 54·5 | 44·0 | 9·5 |
| 9·4 | 38 | 28·5 | 34·6 | |
| 9·6 | | 34·5 | 50·6 | 9·5 |
| 8·9 | | 39·5 | 23·0 | 9·0 |
| 9·4 | | 39·5 | 48·5 | 9·0 |
| 8·8 | 39 | 6·5 | 24·5 | 8·0 |
| 9·5 | | 38·2 | 14·3 | |
| 7·4 | | 40·0 | 4·7 | 8·2 G |
| 8·8 | 40 | 0·2 | 57·8 | 9·5 |
| 9·5 | | 50·5 | 8·3 | |
| 10·0 | 41 | 3·0 | 52·0 | |
| 8·1 | | 3·2 | 8·0 | 8·7 G |
| 9·5 | | 6·7 | 54·5 | |
| 10·0 | | 7·5 | 52·1 | |
| 9·6 | | 28·5 | 40·7 | 10·0 |
| 9·7 | | 35·7 | 29·6 | |
| 9·9 | | 37·0 | 29·5 | |
| 9·8 | | 42·0 | 8·0 | |
| 9·8 | | 51·0 | 16·9 | |
| 9·4 | | 54·5 | 12·5 | 9·5 |
| 9·5 | 42 | 8·5 | 27·2 | |
| 10·0 | | 38·5 | 13·0 | |
| 9·8 | | 39·0 | 5·2 | |
| 9·6 | | 47·2 | 8·5 | 10·0 |
| 8·7 | | 49·5 | 12·9 | 9·0 |
| 9·7 | | 53·3 | 1·1 | |
| 9·6 | | 57·7 | 6·2 | |
| 9·2 | 43 | 16·0 | 45·8 | 9·0 |
| 9·9 | | 20·5 | 24·0 | |
| 10·0 | | 31·5 | 12·9 | |
| 10·0 | | 39·0 | 12·0 | |
| 10·0 | | 39·0 | 56·0 | |
| 9·8 | | 43·5 | 10·0 | |
| 9·8 | | 55·5 | 42·4 | |
| 10·0 | 44 | 21·0 | 17·8 | |
| 10·0 | | 31·5 | 18·0 | |
| 10·0 | | 35·5 | 47·0 | |
| 9·9 | | 38·0 | 6·2 | |
| 10·0 | | 39·5 | 17·5 | |
| 10·0 | | 39·5 | 16·8 | |
| 8·1 | | 46·0 | 9·5 | 8·5 G |
| 10·0 | | 49·5 | 58·8 | |
| 9·6 | | 50·8 | 0·1 | |
| 10·0 | | 53·5 | 38·8 | |
| 10·0 | 45 | 13·5 | 37·1 | |
| 10·0 | | 13·5 | 2·9 | |
| 10·0 | | 16·0 | 3·2 | |
| 8·8 | | 32·5 | 6·7 | 8·8 |
| 9·6 | | 39·5 | 18·8 | |
| 8·7 | | 43·5 | 6·0 | 9·0 |
| 9·7 | | 43·5 | 59·0 | |
| 9·6 | | 44·5 | 3·7 | |
| 9·7 | | 45·5 | 3·7 | |
| 9·8 | | 45·5 | 43·0 | |
| 8·7 | | 49·0 | 29·2 | 8·0 G |
| 9·5 | | 54·5 | 35·7 | 8·5 |
| 10·0 | | 58·5 | 17·9 | |
| 9·6 | 46 | 3·0 | 8·5 | |
| 10·0 | | 5·5 | 56·9 | |
| 9·0 | | 24·5 | 34·1 | 9·0 |

## 1141—1200.

| mag. | 8h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 46 | 36·5 | 4·2 | |
| 9·3 | | 42·5 | 23·1 | |
| 9·6 | | 49·5 | 7·2 | |
| 9·4 | | 50·5 | 17·4 | 9·0 |
| 9·9 | | 53·5 | 11·8 | |
| 9·6 | | 58·0 | 22·3 | |
| 9·7 | | 59·0 | 23·0 | |
| 10·0 | | 59·5 | 35·0 | |
| 9·7 | 47 | 8·0 | 39·6 | |
| 9·9 | | 15·0 | 17·2 | |
| 10·0 | | 50·0 | 10·9 | |
| 10·0 | | 50·0 | 10·2 | |
| 9·9 | | 57·0 | 45·9 | |
| 8·7 | 48 | 8·5 | 57·8 | 9·0 |
| 9·8 | | 9·0 | 4·9 | |
| 7·9 | | 18·7 | 1·0 | 8·0 G |
| 10·0 | | 45·5 | 53·1 | |
| 10·0 | | 48·0 | 51·2 | |
| 10·0 | | 56·5 | 46·0 | |
| 8·8 | | 59·0 | 14·5 | 9·5 |
| 10·0 | 49 | 3·0 | 17·0 | |
| 9·7 | | 4·3 | 1·6 | |
| 10·0 | | 18·8 | 1·4 | |
| 9·8 | | 20·0 | 36·1 | |
| 9·9 | | 48·0 | 30·0 | |
| 7·9 | 50 | 0·5 | 21·8 | 8·0 |
| 9·9 | | 4·0 | 4·0 | |
| 9·8 | | 10·3 | 1·5 | |
| 9·9 | | 24·5 | 19·5 | |
| 9·6 | | 32·0 | 11·1 | |
| 9·9 | | 32·5 | 35·0 | |
| 9·8 | | 48·5 | 9·8 | |
| 9·6 | | 49·0 | 28·1 | |
| 5·8 | | 56·5 | 52·7 | 6·7 GSct |
| 9·2 | 51 | 2·0 | 38·9 | 9·5 |
| 9·2 | | 11·0 | 41·1 | 8·5 |
| 9·8 | | 34·0 | 15·4 | |
| 10·0 | | 42·5 | 36·9 | |
| 9·8 | | 44·0 | 44·2 | |
| 9·8 | | 48·0 | 54·0 | |
| 8·6 | | 50·0 | 4·5 | 9·0 |
| 9·8 | | 52·5 | 44·9 | |
| 10·0 | | 58·5 | 32·1 | |
| 10·0 | | 59·0 | 2·5 | |
| 10·0 | 52 | 5·0 | 34·0 | |
| 9·8 | | 29·0 | 9·1 | |
| 10·0 | | 43·0 | 56·0 | |
| 9·9 | 53 | 23·0 | 9·8 | |
| 8·5 | | 24·5 | 59·5 | 7·5 G |
| 9·9 | | 31·5 | 24·4 | |
| 9·0 | | 34·0 | 16·7 | |
| 8·9 | | 40·0 | 50·5 | 8·5 |
| 9·9 | | 42·0 | 32·2 | |
| 8·3 | | 46·3 | 2·4 | 9·2 |
| 8·8 | | 52·0 | 25·7 | |
| 9·6 | 54 | 3·5 | 0·6 | |
| 9·3 | | 22·0 | 33·1 | |
| 9·8 | | 32·5 | 10·0 | |
| 9·8 | | 34·0 | 57·0 | |
| 9·6 | | 37·5 | 54·9 | |

## 1201—1260.

| mag. | 8h.—9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 54 | 54·0 | 9·0 | 9·5 |
| 9·3 | 55 | 8·0 | 42·7 | |
| 9·3 | | 9·5 | 39·8 | |
| 9·6 | | 18·0 | 7·3 | |
| 9·6 | | 24·5 | 10·4 | |
| 9·8 | | 32·0 | 15·0 | |
| 7·6 | | 34·0 | 15·1 | 8·2 G |
| 10·0 | | 41·5 | 16·5 | |
| 10·0 | | 50·0 | 17·7 | |
| 9·6 | 56 | 0·0 | 47·0 | 9·2 |
| 9·9 | | 0·0 | 41·9 | |
| 9·8 | | 2·0 | 38·6 | |
| 9·6 | | 11·3 | 1·8 | 8·8 |
| 9·9 | | 19·0 | 53·4 | |
| 10·0 | | 32·0 | 12·5 | |
| 9·3 | | 35·5 | 33·4 | 9·2 |
| 9·9 | | 37·0 | 10·0 | |
| 9·5 | | 49·0 | 10·0 | |
| 9·9 | | 52·0 | 9·9 | |
| 10·0 | 57 | 0·0 | 40·6 | |
| 10·0 | | 12·0 | 24·8 | |
| 9·8 | | 22·5 | 29·0 | |
| 10·0 | | 23·0 | 40·0 | |
| 8·7 | | 33·0 | 26·8 | 8·8 |
| 9·3 | | 48·0 | 35·1 | 9·5 |
| 10·0 | 58 | 5·0 | 20·4 | |
| 8·9 | | 13·5 | 49·4 | 9·0 |
| 9·8 | | 18·0 | 13·9 | |
| 9·4 | | 23·5 | 50·0 | 9·5 |
| 9·9 | | 25·0 | 26·2 | |
| 9·5 | | 28·5 | 22·2 | |
| 9·3 | 59 | 4·0 | 41·9 | 9·5 |
| 9·8 | | 5·5 | 38·4 | |
| 9·9 | | 9·5 | 21·5 | |
| 9·0 | | 19·0 | 40·1 | 9·0 |
| 10·0 | | 19·0 | 23·0 | |
| 9·9 | | 38·0 | 25·7 | |
| 9·9 | | 52·5 | 9·6 | |
| 9·3 | 0 | 1·5 | 51·0 | |
| 10·0 | | 5·0 | 26·2 | |
| 10·0 | | 19·0 | 16·9 | |
| 9·6 | | 23·5 | 46·5 | |
| 10·0 | | 32·5 | 26·7 | |
| 8·9 | | 37·5 | 56·6 | 9·5 |
| 10·0 | | 38·5 | 41·7 | |
| 9·8 | | 42·0 | 53·0 | 9·5 |
| 8·7 | | 53·5 | 32·4 | 8·8 |
| 9·4 | 1 | 1·5 | 13·8 | |
| 9·9 | | 12·5 | 22·2 | |
| 10·0 | | 14·5 | 56·2 | |
| 10·0 | | 38·5 | 55·0 | |
| 10·0 | | 38·5 | 7·2 | |
| 10·0 | | 54·5 | 20·2 | |
| 9·7 | 2 | 1·5 | 33·7 | |
| 10·0 | | 20·5 | 25·6 | |
| 9·9 | | 21·0 | 33·0 | |
| 10·0 | | 24·5 | 30·0 | |
| 9·8 | | 24·5 | 10·0 | |
| 10·0 | | 35·2 | 57·6 | |
| 8·0 | | 37·7 | 1·0 | 8·0 |

## 1261—1320.

| | mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|---|
| | 9·8 | 2 | 52·0 | 7·2 | |
| | 9·1 | 3 | 2·5 | 2·4 | 8·0 |
| | 9·3 | | 9·5 | 44·0 | 9·5 |
| | 9·3 | | 9·5 | 50·0 | 9·5 |
| | 10·0 | | 22·0 | 35·6 | |
| | 9·3 | | 32·5 | 11·3 | |
| | 9·4 | | 32·5 | 28·4 | |
| | 10·0 | | 35·0 | 27·9 | |
| | 10·0 | | 42·0 | 3·9 | |
| | 9·8 | | 43·0 | 36·5 | |
| | 9·9 | | 47·0 | 6·4 | |
| | 7·4 | | 47·5 | 45·5 | 7·5 GSt |
| | 9·9 | | 50·0 | 10·6 | |
| | 10·0 | | 57·0 | 49·2 | |
| | 9·5 | 4 | 3·0 | 0·8 | 8·8 |
| | 10·0 | | 19·0 | 59·2 | |
| | 8·8 | | 57·5 | 32·2 | 9·0 |
| | 10·0 | 5 | 2·0 | 38·8 | |
| | 8·7 | | 2·5 | 43·4 | 9·2 |
| | 9·5 | | 7·5 | 5·0 | |
| | 9·9 | | 9·0 | 55·9 | |
| | 9·9 | | 17·5 | 16·2 | |
| | 9·8 | | 21·0 | 20·1 | |
| | 9·8 | | 26·0 | 34·3 | |
| | 10·0 | | 29·3 | 2·4 | |
| | 8·6 | | 29·5 | 49·6 | 9·0 |
| | 10·0 | | 41·5 | 59·4 | |
| | 9·8 | | 48·5 | 34·9 | 9·5 |
| | 8·3 | | 53·3 | 3·0 | 8·5 |
| | 10·0 | | 58·5 | 8·6 | |
| | 10·0 | | 59·0 | 5·0 | |
| | 9·8 | 6 | 18·5 | 20·1 | |
| | 10·0 | | 23·5 | 8·5 | |
| | 8·7 | | 28·5 | 30·2 | 9·5 |
| | 9·9 | | 37·0 | 29·3 | |
| | 8·4 | | 40·2 | 59·6 | 8·0 G |
| | 9·8 | | 48·5 | 45·1 | |
| | 10·0 | | 59·0 | 18·7 | |
| | 9·8 | 7 | 0·5 | 0·9 | |
| | 9·9 | | 1·0 | 46·0 | |
| | 9·8 | | 17·5 | 42·0 | 9·5 |
| | 9·8 | | 19·5 | 11·5 | |
| | 7·6 | | 40·5 | 21·6 | 8·0 |
| | 10·0 | | 41·5 | 55·1 | |
| | 8·8 | | 47·0 | 27·3 | 9·5 |
| | 9·0 | | 52·5 | 13·4 | |
| | 7·6 | 8 | 44·5 | 47·3 | 8·0 |
| | 9·8 | | 59·0 | 13·0 | |
| | 10·0 | 9 | 4·0 | 29·9 | |
| | 10·0 | | 9·5 | 16·9 | |
| | 9·1 | | 23·5 | 31·5 | |
| | 9·4 | | 48·5 | 48·9 | |
| | 9·8 | | 53·5 | 9·2 | |
| | 9·6 | 10 | 13·0 | 11·9 | |
| | 8·3 | | 13·0 | 39·9 | 8·0 |
| | 10·0 | | 36·7 | 19·4 | |
| | 10·0 | | 41·5 | 40·6 | |
| | 9·9 | | 58·5 | 39·3 | |
| ? | 10·0 | 11 | 6·0 | 57·9 | |
| | 10·0 | | 14·5 | 3·8 | |

## 1321—1380.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·4 | 11 | 15·0 | 26·9 | 8·5 |
| 8·7 | | 27·5 | 51·9 | 9·0 |
| 9·8 | | 29·5 | 48·9 | |
| 9·3 | | 30·0 | 23·8 | 9·5 |
| 8·4 | | 33·0 | 17·2 | 8·8 |
| 9·8 | | 34·0 | 32·9 | |
| 9·4 | 12 | 2·5 | 44·8 | |
| 9·6 | | 8·5 | 40·6 | |
| 9·5 | | 13·0 | 52·9 | 9·5 |
| 10·0 | | 31·0 | 43·5 | |
| 10·0 | | 32·0 | 10·4 | |
| 10·0 | | 33·0 | 37·1 | |
| 10·0 | | 43·0 | 24·3 | |
| 9·8 | | 50·5 | 54·6 | |
| 10·0 | 13 | 28·0 | 26·0 | |
| 9·2 | | 31·5 | 45·5 | 9·0 |
| 9·9 | | 43·0 | 29·9 | |
| 8·4 | | 50·0 | 24·5 | 9·0 |
| 8·7 | | 50·0 | 22·0 | 9·5 |
| 8·6 | 14 | 9·5 | 4·1 | 8·8 |
| 9·4 | | 13·3 | 0·0 | |
| 10·0 | | 29·0 | 43·8 | |
| 10·0 | | 30·0 | 4·0 | |
| 10·0 | | 35·2 | 57·8 | |
| 10·0 | | 43·0 | 16·3 | |
| 7·8 | 15 | 3·0 | 7·3 | 8·0 GS |
| 9·4 | | 22·5 | 47·9 | 9·0 |
| 9·6 | | 45·0 | 15·0 | |
| 9·4 | | 50·0 | 17·2 | |
| 9·6 | | 53·5 | 44·0 | |
| 9·4 | | 58·5 | 16·8 | |
| 9·9 | 16 | 24·7 | 31·9 | |
| 8·0 | | 57·4 | 57·5 | 8·2 |
| 9·4 | 17 | 13·0 | 22·0 | |
| 9·3 | | 19·0 | 15·0 | |
| 9·3 | | 24·8 | 51·0 | 8·1 |
| 9·8 | | 28·8 | 18·8 | |
| 9·5 | | 33·7 | 7·7 | |
| 10·0 | | 59·0 | 33·3 | |
| 10·0 | 18 | 24·0 | 53·1 | |
| 9·7 | | 29·5 | 7·9 | |
| 9·6 | | 32·5 | 45·1 | 9·0 |
| 9·8 | | 34·0 | 27·2 | |
| 9·8 | | 44·0 | 12·5 | |
| 9·8 | | 50·0 | 1·8 | |
| 9·7 | | 52·0 | 10·8 | |
| 9·7 | | 53·7 | 6·0 | |
| 9·2 | 19 | 0·5 | 55·7 | 9·0 |
| 9·8 | | 10·0 | 32·3 | |
| 9·3 | | 25·0 | 44·2 | 9·0 |
| 9·3 | | 37·0 | 12·7 | |
| 8·1 | | 40·0 | 1·3 | 8·0 |
| 9·6 | | 50·0 | 33·7 | |
| 8·4 | 20 | 8·5 | 45·9 | 7·0 GSg |
| 9·6 | | 35·0 | 18·0 | |
| 9·8 | | 39·5 | 31·0 | |
| 9·8 | | 55·5 | 45·0 | |
| 9·7 | 21 | 13·5 | 43·9 | 9·2 |
| 9·8 | | 19·0 | 35·9 | |
| 9·8 | | 27·5 | 43·9 | |

## 1381—1440.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·4 | 21 | 33·0 | 1·7 | 9·0 |
| 9·3 | | 43·0 | 39·9 | 9·5 |
| 9·8 | 22 | 4·5 | 54·9 | |
| 8·9 | | 8·5 | 20·8 | 8·8 |
| 9·8 | | 15·5 | 52·9 | |
| 9·8 | | 20·5 | 31·3 | |
| 9·8 | | 25·5 | 44·9 | |
| 9·7 | | 33·5 | 43·0 | |
| 8·6 | | 38·5 | 12·0 | 7·5 G |
| 9·7 | | 50·0 | 44·2 | |
| 9·8 | 23 | 2·0 | 59·9 | 9·0 |
| 9·3 | | 10·0 | 9·3 | |
| 9·4 | | 12·0 | 20·9 | |
| 6·9 | | 19·0 | 2·2 | 7·0 GSt |
| 9·5 | | 29·0 | 18·1 | |
| 9·6 | | 49·5 | 0·0 | |
| 8·8 | | 54·0 | 58·9 | 9·0 |
| 8·3 | | 58·5 | 42·0 | 8·5 |
| 9·7 | 24 | 18·5 | 34·4 | |
| 9·3 | | 44·5 | 42·0 | |
| 9·8 | 25 | 8·7 | 4·5 | |
| 8·1 | | 9·5 | 27·8 | 8·0 |
| 8·8 | | 35·5 | 53·6 | 8·3 |
| 9·8 | | 36·2 | 57·2 | |
| 9·2 | | 37·0 | 3·3 | |
| 9·4 | 26 | 39·5 | 44·7 | 10·0 |
| 9·4 | 27 | 10·8 | 2·9 | |
| 8·6 | | 34·5 | 54·1 | 8·2 |
| 9·2 | | 40·0 | 21·3 | 9·2 |
| 9·2 | | 51·8 | 2·1 | 9·2 G |
| 9·7 | 28 | 2·5 | 49·3 | 9·5 |
| 9·1 | | 3·5 | 38·1 | 8·5 |
| 9·2 | | 5·5 | 28·7 | |
| 7·9 | 29 | 4·5 | 58·2 | 7·5 GSgt |
| 9·8 | | 39·5 | 18·0 | |
| 9·7 | 30 | 2·5 | 2·0 | |
| 9·3 | | 9·5 | 32·2 | 9·5 |
| 9·3 | | 13·5 | 38·7 | |
| 9·4 | | 13·8 | 56·4 | |
| 8·9 | 31 | 1·5 | 50·4 | 9·5 |
| 9·0 | | 12·0 | 13·3 | 9·5 |
| 9·5 | | 27·0 | 45·0 | |
| 9·7 | | 35·0 | 3·1 | |
| 9·3 | | 38·5 | 27·2 | |
| 9·2 | | 52·5 | 19·4 | 9·5 |
| 9·8 | 32 | 36·5 | 55·6 | |
| 9·7 | | 47·5 | 29·8 | 9·5 |
| 8·6 | | 49·0 | 25·5 | |
| 9·1 | 33 | 0·5 | 24·4 | |
| 9·3 | | 4·0 | 18·3 | |
| 8·9 | | 6·0 | 8·1 | 9·5 |
| 9·5 | | 15·0 | 58·9 | |
| 8·9 | | 44·5 | 35·3 | 9·0 |
| 7·5 | | 54·5 | 19·6 | 7·8 GSg |
| 9·6 | | 58·5 | 14·0 | 9·0 |
| 8·8 | 34 | 4·5 | 49·0 | |
| 9·8 | | 9·5 | 3·9 | |
| 9·6 | | 14·0 | 21·9 | |
| 9·8 | | 22·5 | 16·0 | |
| 9·8 | | 23·0 | 0·2 | |

## 1441—1500.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 34 | 42·0 | 29·3 | |
| 9·8 | | 43·5 | 2·9 | |
| 9·5 | | 57·5 | 42·6 | 9·5 |
| 9·8 | 35 | 3·5 | 35·1 | |
| 9·6 | | 18·5 | 48·7 | |
| 9·2 | | 34·5 | 4·8 | 8·8 |
| 9·8 | | 51·5 | 58·0 | 9·2 |
| 9·8 | 37 | 13·0 | 11·9 | |
| 9·8 | | 45·0 | 52·9 | |
| 9·8 | 38 | 13·0 | 21·9 | |
| 9·8 | | 24·5 | 15·9 | |
| 8·9 | | 29·5 | 59·0 | |
| 8·0 | | 30·8 | 0·4 | 8·5 |
| 8·7 | | 41·0 | 43·0 | 9·2 |
| 9·8 | | 51·5 | 14·7 | |
| 8·6 | | 52·0 | 31·0 | |
| 8·5 | 39 | 8·0 | 44·6 | 9·0 |
| 9·8 | | 12·5 | 48·8 | |
| 9·2 | | 19·5 | 52·1 | |
| 9·8 | | 21·0 | 53·9 | |
| 9·5 | | 21·5 | 22·2 | |
| 9·2 | | 25·5 | 33·7 | 7·5 G |
| 9·2 | | 35·0 | 23·3 | |
| 7·4 | | 36·0 | 27·3 | 8·0 |
| 8·2 | | 59·5 | 51·3 | 8·8 |
| 9·2 | 40 | 13·5 | 21·9 | |
| 9·6 | | 19·5 | 24·9 | |
| 7·8 | | 23·0 | 17·8 | 8·0 |
| 9·8 | | 32·0 | 26·9 | 9·0 |
| 9·8 | 41 | 1·0 | 1·0 | 10·0 |
| 9·2 | | 3·5 | 3·0 | 9·5 |
| 9·4 | | 4·0 | 33·5 | |
| 8·4 | | 5·0 | 25·3 | 9·0 |
| 9·1 | | 10·5 | 11·8 | |
| 9·6 | | 20·0 | 35·2 | |
| 9·2 | 42 | 42·5 | 19·1 | |
| 9·3 | | 42·5 | 35·7 | |
| 9·8 | | 59·5 | 19·4 | |
| 9·8 | 43 | 4·0 | 1·7 | |
| 8·7 | | 8·5 | 19·3 | 9·5 |
| 9·3 | | 35·5 | 15·9 | |
| 9·1 | | 41·5 | 24·7 | |
| 9·5 | | 42·5 | 32·7 | |
| 9·8 | 44 | 11·0 | 41·0 | |
| 9·8 | | 21·0 | 1·4 | |
| 9·4 | | 23·5 | 30·5 | 9·5 |
| 8·6 | | 38·0 | 36·9 | 8·5 S |
| 9·5 | | 40·5 | 6·8 | |
| 9·7 | | 49·5 | 39·9 | |
| 9·7 | | 55·0 | 47·5 | |
| 8·2 | | 59·0 | 33·0 | 8·0 GSt |
| 9·8 | 45 | 8·5 | 52·1 | |
| 9·6 | | 10·0 | 37·0 | |
| 9·8 | | 12·0 | 34·1 | |
| 9·4 | | 17·5 | 11·5 | |
| 9·8 | | 20·0 | 11·0 | |
| 9·3 | | 37·5 | 34·7 | |
| 9·3 | | 41·0 | 34·3 | 10·0 |
| 9·6 | | 49·5 | 44·2 | |
| 9·8 | | 50·5 | 14·9 | |

## 1501—1560.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·2 | 45 | 52·5 | 40·7 | 8·5 GSt |
| 9·3 | 46 | 1·0 | 40·9 | 10·0 |
| 9·4 | | 11·5 | 26·0 | |
| 9·1 | | 18·5 | 24·7 | |
| 9·0 | | 21·0 | 25·0 | 8·5 |
| 9·1 | | 21·5 | 39·1 | |
| 9·6 | | 35·3 | 49·6 | |
| 9·8 | | 36·0 | 15·3 | |
| 8·9 | | 39·0 | 49·5 | |
| 7·4 | | 52·0 | 56·6 | 7·5 GSt |
| 8·6 | 47 | 8·0 | 1·8 | 9·5 |
| 9·0 | | 12·5 | 15·0 | 9·5 |
| 9·0 | | 22·5 | 11·9 | |
| 9·6 | | 23·5 | 13·9 | 9·5 |
| 8·3 | | 33·5 | 44·9 | 9·0 |
| 8·4 | 48 | 7·5 | 50·8 | 8·5 |
| 8·5 | | 13·0 | 21·1 | 9·0 |
| 9·8 | | 36·0 | 22·4 | |
| 9·2 | | 50·0 | 38·7 | |
| 9·4 | 49 | 20·0 | 29·4 | |
| 9·3 | | 23·0 | 33·6 | |
| 9·8 | | 54·0 | 7·7 | |
| 9·6 | | 58·0 | 10·9 | 8·8 G |
| 9·2 | 50 | 2·5 | 16·0 | |
| 9·8 | | 21·0 | 15·0 | |
| 9·8 | | 51·3 | 14·9 | |
| 9·8 | | 53·3 | 8·6 | |
| 8·4 | 51 | 5·0 | 14·2 | 9·5 |
| 9·8 | | 6·0 | 4·3 | |
| 9·3 | | 20·0 | 37·1 | G |
| 9·6 | | 27·0 | 33·0 | |
| 9·1 | | 31·5 | 20·8 | |
| 9·1 | | 34·0 | 42·2 | |
| 9·8 | | 38·0 | 18·8 | |
| 9·8 | 52 | 17·5 | 45·9 | |
| 8·8 | | 30·0 | 10·4 | |
| 9·6 | | 34·0 | 2·9 | |
| 9·4 | | 57·5 | 4·1 | |
| 9·6 | 53 | 5·0 | 55·6 | |
| 9·3 | | 5·5 | 22·1 | |
| 9·8 | | 6·0 | 56·6 | 10·0 |
| 9·2 | | 7·0 | 26·3 | 9·0 |
| 9·8 | | 13·0 | 18·2 | |
| 9·6 | | 16·0 | 58·5 | |
| 9·0 | | 17·2 | 18·0 | |
| 9·8 | | 18·0 | 32·0 | |
| 10·0 | | 23·5 | 55·8 | |
| 10·0 | | 28·0 | 12·7 | |
| 9·9 | | 38·8 | 50·0 | |
| 10·0 | | 40·5 | 21·0 | |
| 8·9 | | 42·0 | 7·1 | 8·5 |
| 10·0 | | 45·0 | 2·0 | |
| 10·0 | | 51·5 | 1·6 | |
| 9·7 | | 53·8 | 42·4 | |
| 10·0 | | 53·8 | 15·0 | |
| 9·8 | 54 | 0·8 | 54·4 | |
| 9·2 | | 1·5 | 21·9 | |
| 10·0 | | 4·0 | 9·8 | |
| 9·4 | | 9·5 | 4·7 | |
| 9·4 | | 13·0 | 59·2 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 9 | 10 | 38 | 6·2 |
| | 20 | 40 | 6·4 |
| | 30 | 42 | 6·6 |
| | 40 | 44 | 6·8 |
| | 50 | 46 | 7·0 |
| 10 | 0 | 48 | 7·2 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 50 | 46 | 7·0 |
| 10 | 0 | 48 | 7·2 |

### 1561—1620.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 54 | 14·0 | 26·4 | |
| 9·8 | | 14·5 | 35·6 | |
| 9·9 | | 21·0 | 51·1 | |
| 9·8 | | 24·0 | 21·0 | |
| 8·5 | | 24·0 | 27·0 | 8·8 |
| 9·4 | | 25·8 | 18·1 | |
| 10·0 | | 36·0 | 14·9 | |
| 10·0 | | 40·5 | 15·0 | |
| 10·0 | | 41·0 | 39·1 | |
| 10·0 | | 47·5 | 37·2 | |
| 10·0 | | 47·5 | 17·9 | |
| 9·0 | | 47·8 | 29·5 | 9·5 |
| 10·0 | | 51·5 | 39·4 | |
| 9·2 | 55 | 1·8 | 31·0 | 9·5 |
| 9·2 | | 4·0 | 6·9 | 8·0 |
| 9·9 | | 7·0 | 14·5 | |
| 10·0 | | 13·0 | 17·1 | |
| 9·8 | | 22·0 | 8·0 | |
| 10·0 | | 22·5 | 42·3 | |
| 9·8 | | 23·5 | 31·6 | |
| 10·0 | | 24·0 | 19·5 | |
| 9·8 | | 29·5 | 44·1 | |
| 9·6 | | 30·0 | 2·7 | |
| 9·2 | | 32·5 | 7·9 | |
| 10·0 | | 36·0 | 44·2 | |
| 10·0 | | 40·5 | 18·1 | |
| 10·0 | | 42·0 | 4·1 | |
| 10·0 | | 44·0 | 2·7 | |
| 9·2 | | 52·5 | 35·0 | 9·0 G |
| 10·0 | | 53·5 | 41·7 | |
| 9·6 | | 54·0 | 37·1 | 7·8 G |
| 10·0 | | 54·0 | 16·0 | |
| 10·0 | | 58·0 | 16·9 | |
| 9·9 | | 59·0 | 14·0 | |
| 9·0 | | 59·5 | 48·7 | |
| 9·4 | | 59·5 | 34·4 | G |
| 10·0 | 56 | 0·0 | 50·1 | |
| 8·2 | | 3·0 | 53·9 | GSt |
| 10·0 | | 4·0 | 36·1 | |
| 9·2 | | 7·5 | 44·1 | |
| 10·0 | | 9·0 | 50·0 | |
| 10·0 | | 11·0 | 51·2 | |
| 9·8 | | 13·0 | 13·6 | |
| 9·3 | | 14·0 | 7·2 | |
| 10·0 | | 17·3 | 59·7 | |
| 9·8 | | 17·5 | 29·6 | |
| 10·0 | | 20·8 | 57·8 | |
| 9·8 | | 22·0 | 3·0 | |
| 8·7 | | 22·0 | 23·9 | 9·0 |
| 9·7 | | 22·0 | 26·3 | |
| 10·0 | | 22·0 | 41·0 | |
| 10·0 | | 23·0 | 42·1 | |
| 9·9 | | 25·0 | 59·0 | |
| 8·6 | | 30·0 | 23·5 | 9·0 G |
| 9·2 | | 31·0 | 21·9 | 9·5 |
| 8·6 | | 33·0 | 2·1 | |
| 10·0 | | 33·0 | 30·9 | G |
| 10·0 | | 34·0 | 22·4 | |
| 9·8 | | 34·0 | 29·2 | |
| 10·0 | | 34·0 | 4·6 | |

### 1621—1680.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 56 | 34·0 | 15·4 | |
| 9·9 | | 36·5 | 5·7 | |
| 10·0 | | 37·0 | 32·0 | |
| 10·0 | | 39·5 | 3·9 | |
| 9·6 | | 39·5 | 14·7 | |
| 9·8 | | 41·0 | 20·0 | |
| 9·4 | | 41·5 | 34·4 | 9·0 G |
| 10·0 | | 44·0 | 34·1 | |
| 9·4 | | 44·5 | 21·4 | |
| 9·4 | | 46·5 | 28·2 | G |
| 9·4 | | 56·5 | 18·9 | |
| 8·7 | | 56·5 | 37·6 | 8·0 GSt |
| 8·7 | | 57·5 | 22·2 | G |
| 9·6 | 57 | 0·0 | 6·4 | |
| 10·0 | | 0·5 | 29·4 | |
| 9·9 | | 1·0 | 4·0 | |
| 10·0 | | 3·5 | 18·4 | |
| 8·6 | | 4·0 | 8·0 | 8·5 |
| 9·5 | | 4·0 | 20·0 | |
| 9·7 | | 4·5 | 23·9 | |
| 9·9 | | 4·5 | 33·0 | |
| 8·8 | | 5·5 | 41·5 | 8·2 GSt |
| 8·4 | | 6·0 | 43·5 | 8·8 Gp |
| 10·0 | | 6·0 | 53·9 | |
| 10·0 | | 9·0 | 12·4 | |
| 10·0 | | 11·0 | 12·3 | |
| 10·0 | | 12·5 | 30·5 | |
| 10·0 | | 12·5 | 35·1 | |
| 9·6 | | 12·5 | 37·7 | |
| 10·0 | | 14·5 | 45·0 | |
| 9·8 | | 17·0 | 44·1 | |
| 10·0 | | 17·5 | 21·2 | |
| 9·2 | | 20·0 | 44·0 | G |
| 9·5 | | 20·0 | 51·0 | 9·0 |
| 10·0 | | 20·5 | 35·1 | |
| 10·0 | | 21·0 | 33·7 | |
| 9·6 | | 21·5 | 45·9 | |
| 9·8 | | 21·5 | 3·9 | |
| 9·5 | | 22·5 | 47·6 | |
| 9·9 | | 23·0 | 23·0 | |
| 10·0 | | 23·0 | 34·1 | |
| 9·9 | | 24·0 | 34·0 | |
| 9·2 | | 25·0 | 3·8 | 9·0 |
| 10·0 | | 26·0 | 1·4 | |
| 9·4 | | 27·5 | 34·1 | |
| 9·8 | | 28·0 | 31·1 | |
| 9·1 | | 29·5 | 28·0 | G |
| 10·0 | | 32·5 | 22·3 | |
| 10·0 | | 32·5 | 20·0 | |
| 10·0 | | 34·0 | 49·0 | |
| 8·8 | | 34·5 | 44·9 | 9·0 G |
| 8·1 | | 42·0 | 30·7 | GS |
| 9·1 | | 43·0 | 14·9 | |
| 9·6 | | 43·0 | 28·8 | |
| 9·5 | | 45·0 | 30·0 | |
| 10·0 | | 46·0 | 37·6 | |
| 9·5 | | 46·5 | 27·5 | G |
| 9·8 | | 48·0 | 47·0 | |
| 10·0 | | 49·5 | 8·0 | |
| 9·8 | | 49·5 | 27·4 | |

### 1681—1740.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 57 | 50·5 | 22·1 | |
| 10·0 | | 51·5 | 9·3 | |
| 8·5 | | 51·5 | 22·8 | 9·0 |
| 10·0 | | 54·5 | 11·0 | |
| 9·5 | | 55·5 | 24·4 | |
| 8·9 | | 57·0 | 28·5 | GS |
| 10·0 | | 57·0 | 1·5 | |
| 9·7 | | 57·5 | 17·6 | |
| 10·0 | | 57·5 | 24·7 | |
| 10·0 | | 59·0 | 23·4 | |
| 9·4 | | 59·0 | 25·0 | 9·0, |
| 9·8 | | 59·5 | 50·9 | |
| 9·4 | 58 | 0·0 | 31·9 | G |
| 9·6 | | 0·5 | 25·0 | |
| 6·8 | | 1·5 | 49·1 | 6·5 GSctr |
| 10·0 | | 2·5 | 26·1 | |
| 10·0 | | 2·5 | 19·7 | |
| 9·8 | | 3·0 | 23·6 | |
| 9·6 | | 5·5 | 21·2 | |
| 9·9 | | 6·0 | 19·2 | |
| 10·0 | | 10·5 | 16·3 | |
| 10·0 | | 12·0 | 26·7 | |
| 10·0 | | 14·0 | 21·1 | |
| 10·0 | | 14·5 | 44·0 | |
| 9·0 | | 14·5 | 33·5 | G |
| 10·0 | | 16·5 | 21·0 | |
| 10·0 | | 16·5 | 34·7 | |
| 9·2 | | 17·0 | 26·1 | |
| 9·9 | | 17·5 | 29·0 | |
| 9·4 | | 19·0 | 33·1 | G |
| 10·0 | | 19·5 | 39·0 | |
| 10·0 | | 19·5 | 27·7 | |
| 10·0 | | 19·5 | 17·2 | |
| 9·1 | | 19·5 | 24·0 | |
| 10·0 | | 21·0 | 19·5 | |
| 10·0 | | 21·0 | 33·3 | |
| 9·4 | | 21·0 | 23·7 | |
| 9·2 | | 22·0 | 24·2 | |
| 10·0 | | 22·5 | 36·5 | |
| 10·0 | | 23·5 | 4·9 | |
| 9·8 | | 26·0 | 37·1 | |
| 10·0 | | 29·5 | 26·5 | |
| 10·0 | | 29·5 | 25·0 | |
| 8·8 | | 30·0 | 16·9 | 9·0 |
| 9·4 | | 33·5 | 11·1 | |
| 10·0 | | 35·0 | 42·7 | |
| 9·1 | | 35·0 | 32·7 | G |
| 10·0 | | 35·0 | 18·3 | |
| 10·0 | | 35·5 | 26·5 | |
| 10·0 | | 36·0 | 14·2 | |
| 9·2 | | 38·0 | 21·7 | |
| 10·0 | | 39·5 | 24·0 | |
| 10·0 | | 40·0 | 25·2 | |
| 10·0 | | 40·5 | 32·9 | |
| 9·7 | | 42·5 | 36·7 | |
| 9·6 | | 43·0 | 52·9 | |
| 9·5 | | 43·0 | 53·5 | |
| 9·5 | | 44·5 | 28·9 | |
| 9·5 | | 44·5 | 14·3 | |
| 8·8 | | 46·5 | 21·2 | 8·5 G |

### 1741—1800.

| mag. | 9h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·0 | 58 | 46·5 | 14·1 | |
| 10·0 | | 53·0 | 2·9 | |
| 10·0 | | 53·5 | 21·6 | |
| 9·4 | | 54·0 | 14·3 | |
| 10·0 | | 54·0 | 27·1 | |
| 10·0 | | 54·7 | 0·1 | |
| 10·0 | | 56·5 | 25·3 | |
| 9·6 | | 56·5 | 26·0 | |
| 9·2 | | 57·0 | 38·1 | 8·5 G |
| 9·5 | | 58·0 | 28·5 | |
| 9·0 | | 59·5 | 37·4 | G |
| 7·0 | | 59·5 | 34·5 | 6·8 GSctr |
| 10·0 | 59 | 1·5 | 29·0 | |
| 9·9 | | 5·0 | 23·4 | |
| 9·6 | | 5·0 | 33·0 | G |
| 8·4 | | 5·5 | 14·2 | 8·0 |
| 10·0 | | 6·0 | 27·9 | |
| 10·0 | | 6·0 | 33·9 | |
| 10·0 | | 6·5 | 47·2 | |
| 9·6 | | 6·5 | 52·1 | |
| 10·0 | | 7·0 | 6·5 | |
| 9·6 | | 9·5 | 18·0 | |
| 10·0 | | 9·5 | 34·7 | |
| 10·0 | | 12·0 | 20·9 | G |
| 10·0 | | 12·5 | 26·8 | |
| 9·4 | | 13·5 | 14·1 | |
| 10·0 | | 14·0 | 21·5 | |
| 9·1 | | 14·0 | 44·1 | G |
| 10·0 | | 15·5 | 0·4 | |
| 9·2 | | 16·5 | 30·4 | |
| 8·9 | | 19·0 | 20·6 | 8·5 G |
| 9·4 | | 19·0 | 37·0 | |
| 10·0 | | 19·0 | 40·8 | |
| 10·0 | | 19·5 | 43·0 | |
| 10·0 | | 22·0 | 24·4 | |
| 9·7 | | 22·0 | 10·4 | |
| 9·2 | | 23·5 | 28·9 | G |
| 10·0 | | 26·5 | 12·0 | |
| 10·0 | | 27·5 | 22·2 | |
| 9·9 | | 27·5 | 34·7 | |
| 10·0 | | 28·5 | 26·4 | |
| 10·0 | | 29·0 | 28·2 | |
| 9·9 | | 29·5 | 23·9 | |
| 8·8 | | 31·0 | 36·3 | 9·0 G |
| 10·0 | | 32·5 | 24·6 | |
| 10·0 | | 32·5 | 9·0 | |
| 10·0 | | 33·5 | 14·2 | |
| 10·0 | | 34·8 | 58·7 | |
| 10·0 | | 35·5 | 59·4 | |
| 10·0 | | 36·0 | 22·1 | |
| 8·5 | | 37·5 | 35·7 | 8·2 GSt |
| 10·0 | | 38·0 | 36·8 | |
| 10·0 | | 38·0 | 34·1 | |
| 9·6 | | 39·5 | 49·0 | |
| 9·2 | | 40·5 | 27·1 | G |
| 10·0 | | 40·5 | 44·0 | |
| 9·4 | | 43·0 | 44·4 | G |
| 9·6 | | 44·5 | 43·9 | |
| 9·6 | | 46·0 | 44·2 | |
| 8·9 | | 47·0 | 15·0 | |



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### 1801—1860.

| mag. | 9h.–10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·8 | 59 | 47·8 | 59·2 | 8·7 *G*p |
| 9·2 | | 49·5 | 26·9 | |
| 10·0 | | 49·5 | 11·5 | |
| 10·0 | | 49·5 | 18·9 | |
| 10·0 | | 51·0 | 0·1 | |
| 9·1 | | 51·0 | 31·1 | *G* |
| 10·0 | | 51·5 | 32·0 | |
| 10·0 | | 52·0 | 28·2 | |
| 9·0 | | 54·0 | 32·7 | *G* |
| 9·9 | | 56·0 | 33·1 | |
| 10·0 | | 56·5 | 31·5 | |
| 10·0 | | 57·0 | 38·9 | |
| 9·2 | | 58·0 | 39·6 | 9·5 |
| 10·0 | 0 | 2·5 | 19·9 | |
| 9·7 | | 5·0 | 14·2 | |
| 8·6 | | 5·0 | 16·5 | |
| 9·8 | | 7·5 | 10·7 | |
| 9·5 | | 7·5 | 36·3 | 9·0 *G* |
| 9·9 | | 8·0 | 0·1 | |
| 10·0 | | 13·0 | 25·2 | |
| 10·0 | | 14·0 | 46·9 | |
| 9·3 | | 19·0 | 25·6 | *G* |
| 9·8 | | 20·0 | 26·5 | |
| 9·8 | | 26·5 | 24·5 | |
| 9·2 | | 27·5 | 32·0 | *G* |
| 10·0 | | 29·5 | 37·7 | |
| 10·0 | | 32·0 | 54·4 | |
| 9·5 | | 36·5 | 28·4 | |
| 9·5 | | 38·0 | 42·5 | *G* |
| 9·9 | | 38·5 | 26·5 | |
| 10·0 | | 40·5 | 14·4 | |
| 10·0 | | 41·0 | 49·2 | |
| 9·9 | | 43·5 | 41·1 | *G* |
| 10·0 | | 45·5 | 41·8 | |
| 10·0 | | 45·5 | 10·8 | |
| 10·0 | | 45·5 | 10·0 | |
| 10·0 | | 49·0 | 18·0 | |
| 10·0 | | 50·0 | 21·3 | |
| 10·0 | | 54·0 | 55·2 | |
| 9·3 | | 55·0 | 49·8 | *G* |
| 10·0 | 1 | 2·0 | 53·0 | |
| 8·8 | | 4·0 | 26·6 | 9·5 *G* |
| 9·1 | | 4·0 | 37·5 | *G* |
| 10·0 | | 6·5 | 17·9 | |
| 10·0 | | 9·5 | 26·1 | |
| 9·8 | | 12·5 | 54·8 | |
| 10·0 | | 16·5 | 12·7 | |
| 10·0 | | 18·5 | 29·7 | |
| 10·0 | | 23·0 | 53·3 | |
| 8·8 | | 28·5 | 17·9 | 9·5 |
| 9·8 | | 30·0 | 26·3 | |
| 10·0 | | 30·5 | 25·7 | |
| 9·0 | | 35·0 | 24·1 | *G* |
| 9·2 | | 41·5 | 42·5 | 9·0 *G*p |
| 9·0 | | 44·0 | 30·5 | 9·2 *G*p |
| 9·4 | | 46·5 | 53·2 | |
| 10·0 | | 48·5 | 12·2 | |
| 10·0 | | 49·0 | 36·1 | |
| 10·0 | | 50·0 | 10·7 | |
| 10·0 | | 51·0 | 16·9 | |

### 1861—1920.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·4 | 1 | 57·0 | 7·8 | 9·5 |
| 9·3 | 2 | 7·5 | 21·7 | |
| 10·0 | | 8·5 | 31·0 | |
| 10·0 | | 11·0 | 23·2 | |
| 9·6 | | 17·5 | 41·8 | 9·0 *G* |
| 10·0 | | 20·5 | 38·1 | |
| 9·6 | | 21·0 | 8·9 | |
| 10·0 | | 21·5 | 24·0 | |
| 10·0 | | 22·0 | 30·8 | |
| 9·4 | | 23·0 | 9·0 | |
| 10·0 | | 27·0 | 54·8 | |
| 10·0 | | 31·5 | 42·1 | |
| 9·8 | | 41·0 | 0·4 | |
| 10·0 | | 46·0 | 10·4 | |
| 10·0 | | 47·0 | 24·7 | |
| 10·0 | | 53·5 | 32·7 | |
| 10·0 | 3 | 0·0 | 23·1 | |
| 9·4 | | 0·5 | 17·7 | |
| 10·0 | | 3·0 | 21·4 | |
| 9·6 | | 3·0 | 24·0 | |
| 10·0 | | 4·0 | 0·2 | |
| 10·0 | | 4·5 | 36·2 | |
| 10·0 | | 7·0 | 52·8 | |
| 10·0 | | 14·0 | 11·9 | |
| 10·0 | | 19·0 | 26·9 | |
| 10·0 | | 19·0 | 27·1 | |
| 10·0 | | 22·5 | 48·6 | |
| 10·0 | | 24·0 | 48·5 | |
| 10·0 | | 26·0 | 22·5 | |
| 9·6 | | 31·0 | 43·0 | |
| 9·6 | | 33·5 | 23·3 | |
| 10·0 | | 34·0 | 31·2 | |
| 9·7 | | 47·0 | 41·0 | |
| 10·0 | | 47·5 | 7·5 | |
| 9·8 | | 48·3 | 59·8 | |
| 10·0 | | 51·5 | 27·7 | |
| 10·0 | | 52·0 | 42·0 | |
| 9·4 | | 53·0 | 17·1 | 9·5 |
| 9·9 | 4 | 0·0 | 44·0 | |
| 10·0 | | 3·0 | 8·0 | |
| 9·5 | | 3·5 | 51·7 | |
| 9·5 | | 7·5 | 15·6 | |
| 9·8 | | 8·0 | 3·7 | |
| 9·5 | | 8·5 | 7·6 | |
| 9·4 | | 16·5 | 38·5 | |
| 10·0 | | 19·5 | 34·2 | |
| 9·5 | | 21·5 | 34·4 | |
| 10·0 | | 21·5 | 29·9 | |
| 9·0 | | 26·5 | 9·9 | 10·0 |
| 9·6 | | 31·5 | 16·5 | 9·0 |
| 9·8 | | 35·5 | 48·4 | |
| 10·0 | | 36·5 | 46·9 | |
| 10·0 | | 38·5 | 46·8 | |
| 10·0 | | 41·0 | 32·1 | |
| 10·0 | | 42·5 | 20·0 | |
| 10·0 | | 46·0 | 24·6 | |
| 10·0 | | 48·5 | 32·0 | |
| 10·0 | | 58·5 | 13·9 | |
| 10·0 | 5 | 0·5 | 36·5 | |
| 10·0 | | 1·5 | 19·6 | |

### 1921—1980.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·3 | 5 | 2·0 | 24·0 | |
| 8·5 | | 3·0 | 48·1 | 8·5 GSt |
| 10·0 | | 7·5 | 18·8 | |
| 9·8 | | 8·0 | 38·3 | |
| 9·5 | | 10·0 | 24·3 | |
| 9·9 | | 15·5 | 31·0 | |
| 9·5 | | 17·5 | 47·0 | |
| 10·0 | | 18·0 | 26·0 | |
| 10·0 | | 29·5 | 26·9 | |
| 10·0 | | 36·0 | 50·5 | |
| 9·8 | | 40·5 | 23·9 | : |
| 10·0 | | 41·5 | 15·0 | |
| 8·7 | | 48·0 | 36·2 | 9·2 G |
| 10·0 | | 51·5 | 54·3 | |
| 9·1 | | 54·0 | 27·5 | |
| 9·3 | | 55·5 | 54·1 | |
| 9·1 | 6 | 1·5 | 44·8 | 9·2 |
| 10·0 | | 5·0 | 41·3 | |
| 9·5 | | 14·5 | 57·4 | |
| 9·8 | | 16·5 | 56·8 | |
| 9·8 | | 17·0 | 45·5 | |
| 10·0 | | 19·5 | 36·5 | |
| 10·0 | | 23·5 | 18·0 | |
| 9·9 | | 29·5 | 21·4 | |
| 9·3 | | 29·5 | 49·0 | |
| 9·4 | | 52·5 | 7·5 | |
| 9·2 | 7 | 6·0 | 6·5 | |
| 10·0 | | 7·0 | 38·2 | |
| 9·4 | | 9·0 | 21·0 | 9·0 |
| 9·0 | | 9·0 | 59·1 | |
| 9·5 | | 11·5 | 22·3 | |
| 9·0 | | 13·0 | 8·3 | 9·5 |
| 10·0 | | 18·5 | 13·3 | |
| 9·4 | | 21·5 | 30·0 | |
| 8·8 | | 24·0 | 16·0 | 9·5 |
| 9·4 | | 24·0 | 12·4 | |
| 9·6 | | 31·0 | 35·8 | |
| 10·0 | | 32·5 | 22·7 | |
| 10·0 | | 35·0 | 9·7 | |
| 9·5 | | 37·5 | 24·8 | 9·5 |
| 9·7 | | 38·5 | 38·4 | |
| 9·0 | | 39·0 | 28·1 | |
| 10·0 | | 42·5 | 18·4 | |
| 10·0 | | 43·5 | 23·1 | 9·5 |
| 9·9 | | 54·0 | 35·8 | |
| 9·0 | 8 | 1·5 | 30·9 | |
| 8·7 | | 4·0 | 19·7 | G |
| 10·0 | | 12·5 | 19·9 | |
| 9·6 | | 16·0 | 16·3 | : |
| 10·0 | | 23·0 | 50·0 | |
| 9·8 | | 23·5 | 4·6 | |
| 10·0 | | 42·0 | 17·1 | |
| 9·5 | | 47·0 | 20·5 | 9·5 |
| 6·4 | | 47·5 | 18·0 | 6·5 GSt |
| 10·0 | 9 | 13·5 | 37·8 | |
| 7·8 | | 28·5 | 38·6 | 8·0 |
| 10·0 | | 29·0 | 33·2 | |
| 9·9 | | 32·5 | 57·6 | |
| 10·0 | | 36·5 | 55·2 | |
| 10·0 | | 40·0 | 7·2 | |

### 1981—2040.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 9 | 42·0 | 39·7 | |
| 9·2 | | 58·5 | 9·1 | |
| 8·8 | 10 | 5·0 | 30·7 | 9·5 |
| 9·5 | | 13·0 | 27·5 | 9·5 |
| 9·6 | | 13·5 | 4·0 | |
| 10·0 | | 23·0 | 15·9 | |
| 9·1 | | 26·0 | 1·1 | 9·5 |
| 9·6 | | 29·5 | 44·6 | |
| 9·4 | | 30·0 | 14·7 | |
| 9·6 | | 37·5 | 47·7 | |
| 9·5 | | 44·0 | 42·3 | |
| 10·0 | | 48·5 | 14·5 | |
| 10·0 | | 49·5 | 9·9 | |
| 10·0 | | 57·5 | 5·0 | |
| 10·0 | 11 | 0·0 | 5·0 | |
| 9·9 | | 9·0 | 45·5 | |
| 10·0 | | 17·5 | 34·1 | |
| 10·0 | | 17·5 | 43·0 | |
| 10·0 | | 18·0 | 56·1 | |
| 10·0 | | 20·0 | 54·0 | |
| 10·0 | | 21·0 | 52·8 | |
| 9·4 | | 23·5 | 7·8 | |
| 9·0 | | 29·0 | 40·8 | |
| 9·4 | | 32·5 | 45·3 | |
| 9·8 | | 33·5 | 4·0 | |
| 10·0 | | 35·0 | 25·2 | |
| 9·2 | | 39·0 | 35·5 | 9·5 |
| 7·1 | | 47·0 | 16·8 | 7·0 GSt |
| 10·0 | | 55·0 | 45·0 | |
| 9·4 | 12 | 1·0 | 24·3 | 9·0 |
| 10·0 | | 5·5 | 7·4 | |
| 9·9 | | 7·0 | 38·6 | |
| 10·0 | | 10·8 | 1·0 | |
| 9·9 | | 17·0 | 25·5 | |
| 10·0 | | 20·5 | 33·1 | |
| 10·0 | | 45·0 | 11·7 | |
| 10·0 | | 45·5 | 45·7 | |
| 9·2 | | 49·0 | 1·8 | 9·0 |
| 10·0 | | 51·0 | 53·0 | |
| 9·6 | | 56·0 | 8·4 | |
| 10·0 | | 57·0 | 56·7 | |
| 10·0 | 13 | 7·5 | 8·8 | |
| 10·0 | | 17·0 | 14·0 | |
| 10·0 | | 19·7 | 35·8 | |
| 10·0 | | 19·7 | 38·0 | |
| 9·6 | | 21·5 | 44·8 | |
| 10·0 | | 32·5 | 0·1 | |
| 9·6 | | 33·0 | 13·2 | 9·5 |
| 9·0 | | 37·5 | 38·8 | |
| 10·0 | | 44·0 | 34·0 | |
| 10·0 | | 50·0 | 11·9 | |
| 10·0 | | 57·0 | 17·2 | |
| 10·0 | | 58·0 | 0·1 | |
| 10·0 | 14 | 0·7 | 53·6 | |
| 10·0 | | 2·5 | 26·9 | |
| 10·0 | | 5·0 | 56·9 | |
| 10·0 | | 5·0 | 56·3 | |
| 9·7 | | 15·5 | 13·5 | |
| 10·0 | | 22·0 | 13·9 | |
| 10·0 | | 23·5 | 18·2 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 9 | 50 | 46 | 7·0 |
| 10 | 0 | 48 | 7·2 |
| | 10 | 51 | 7·4 |
| | 20 | 53 | 7·6 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 10 | 10 | 51 | 7·4 |
| | 20 | 53 | 7·6 |
| | 30 | 55 | 7·7 |
| | 40 | 57 | 7·9 |

## 2041—2100.

| mag. | 10h. m s | −59° ′ | |
|---|---|---|---|
| 9·9 | 14 28·0 | 9·2 | |
| 9·9 | 28·0 | 38·0 | |
| 8·8 | 31·0 | 47·2 | 9·5 |
| 8·5 | 37·5 | 8·4 | 9·0 |
| 10·0 | 38·0 | 17·1 | |
| 10·0 | 52·0 | 11·6 | |
| 8·7 | 59·5 | 56·2 | 9·5 |
| 9·8 | 15 13·5 | 13·5 | |
| 9·2 | 23·0 | 6·4 | |
| 10·0 | 29·7 | 51·0 | |
| 10·0 | 33·0 | 43·0 | |
| 8·6 | 47·0 | 15·3 | 8·5 GSt |
| 10·0 | 48·5 | 45·1 | |
| 8·1 | 49·0 | 1·7 | 7·5 GSt |
| 9·8 | 54·0 | 41·0 | |
| 10·0 | 57·0 | 13·1 | |
| 9·6 | 59·0 | 16·5 | |
| 10·0 | 16 0·0 | 3·0 | |
| 9·2 | 3·5 | 49·5 | 8·0 |
| 9·6 | 7·5 | 2·3 | |
| 8·3 | 9·0 | 0·5 | 7·5 GS |
| 9·1 | 10·5 | 35·9 | 9·5 |
| 10·0 | 16·5 | 12·9 | |
| 10·0 | 23·0 | 6·1 | |
| 10·0 | 30·0 | 24·4 | |
| 10·0 | 33·0 | 1·0 | |
| 10·0 | 33·5 | 52·0 | |
| 10·0 | 33·5 | 39·6 | |
| 9·7 | 17 2·0 | 24·0 | |
| 10·0 | 3·5 | 16·6 | |
| 10·0 | 11·0 | 41·0 | 9·5 |
| 9·6 | 22·0 | 36·9 | |
| 10·0 | 23·2 | 0·1 | |
| 10·0 | 30·5 | 17·7 | |
| 9·8 | 37·5 | 49·5 | 9·0 |
| 10·0 | 40·5 | 59·7 | |
| 10·0 | 40·5 | 37·5 | |
| 10·0 | 42·5 | 35·0 | |
| 8·8 | 43·5 | 33·2 | |
| 7·6 | 56·0 | 7·5 | 8·8 GSt |
| 9·9 | 57·5 | 23·2 | |
| 9·9 | 18 3·5 | 15·8 | |
| 10·0 | 4·5 | 22·4 | |
| 10·0 | 30·5 | 10·6 | |
| 9·4 | 32·0 | 2·9 | |
| 9·7 | 34·0 | 44·4 | |
| 10·0 | 37·5 | 51·4 | |
| 9·5 | 49·0 | 14·4 | |
| 10·0 | 49·0 | 54·1 | |
| 9·0 | 49·5 | 31·4 | 9·0 |
| 9·0 | 19 3·0 | 4·9 | |
| 9·8 | 12·5 | 44·7 | |
| 9·5 | 18·5 | 13·1 | |
| 10·0 | 24·5 | 14·0 | |
| 10·0 | 25·0 | 46·2 | |
| 9·4 | 31·5 | 42·0 | 8·5 |
| 10·0 | 34·0 | 12·3 | |
| 9·8 | 36·0 | 25·9 | |
| 9·9 | 58·0 | 22·9 | |
| 10·0 | 20 0·5 | 7·0 | |

## 2101—2160.

| mag. | 10h. m s | −59° ′ | |
|---|---|---|---|
| 9·1 | 20 1·0 | 33·3 | 8·0 GSt |
| 10·0 | 2·0 | 21·9 | |
| 9·9 | 2·5 | 29·4 | |
| 9·5 | 3·0 | 57·8 | |
| 10·0 | 3·5 | 10·9 | |
| 9·2 | 3·5 | 19·3 | |
| 10·0 | 8·0 | 50·0 | |
| 10·0 | 11·5 | 3·8 | |
| 8·8 | 17·0 | 12·5 | 9·5 |
| 9·6 | 23·5 | 35·0 | |
| 8·6 | 23·5 | 9·4 | 9·5 |
| 10·0 | 24·0 | 43·8 | |
| 9·2 | 27·0 | 8·8 | |
| 10·0 | 36·5 | 56·3 | |
| 9·6 | 37·5 | 35·6 | |
| 9·7 | 49·0 | 12·0 | |
| 10·0 | 57·5 | 18·4 | |
| 9·2 | 58·0 | 43·8 | 9·5 |
| 10·0 | 21 3·0 | 18·3 | |
| 9·4 | 3·5 | 9·6 | |
| 9·9 | 10·5 | 43·3 | 9·5 |
| 9·8 | 13·5 | 10·2 | |
| 9·8 | 15·0 | 54·0 | |
| 9·8 | 23·0 | 15·2 | |
| 9·6 | 33·0 | 34·3 | |
| 9·0 | 37·5 | 44·4 | 9·5 |
| 9·6 | 44·0 | 19·1 | |
| 10·0 | 47·5 | 59·4 | |
| 10·0 | 53·5 | 41·5 | |
| 9·8 | 59·5 | 18·2 | 9·0 |
| 9·8 | 22 2·0 | 47·6 | 9·2 |
| 8·3 | 2·5 | 20·4 | |
| 10·0 | 13·0 | 9·7 | |
| 10·0 | 14·5 | 25·3 | |
| 10·0 | 21·5 | 2·1 | 9·0 S |
| 10·0 | 33·3 | 59·0 | |
| 9·1 | 37·0 | 21·7 | |
| 10·0 | 38·0 | 56·4 | |
| 10·0 | 40·0 | 18·8 | |
| 10·0 | 40·5 | 56·2 | |
| 10·0 | 43·0 | 32·0 | |
| 10·0 | 55·5 | 11·2 | |
| 10·0 | 56·0 | 40·3 | |
| 8·4 | 56·5 | 18·4 | 9·0 |
| 10·0 | 23 7·5 | 3·2 | |
| 9·5 | 9·5 | 14·5 | 9·0 |
| 10·0 | 12·5 | 53·0 | |
| 8·4 | 14·0 | 53·6 | 9·2 |
| 9·8 | 23·0 | 20·0 | |
| 10·0 | 23·5 | 58·6 | |
| 10·0 | 25·5 | 21·1 | |
| 10·0 | 37·0 | 50·5 | |
| 9·4 | 51·5 | 21·2 | |
| 10·0 | 55·0 | 34·1 | |
| 10·0 | 24 4·5 | 44·8 | |
| 9·8 | 12·5 | 28·7 | |
| 9·7 | 17·5 | 42·4 | |
| 10·0 | 18·0 | 22·5 | |
| 10·0 | 28·0 | 56·6 | |
| 8·1 | 30·0 | 27·5 | 8·5 |

## 2161—2220.

| mag. | 10h. m s | −59° ′ | |
|---|---|---|---|
| 9·0 | 24 32·5 | 6·9 | 9·0 |
| 10·0 | 40·0 | 5·7 | |
| 8·8 | 42·5 | 57·7 | 9·5 |
| 10·0 | 44·0 | 52·8 | |
| 10·0 | 46·5 | 19·2 | |
| 10·0 | 48·0 | 8·9 | |
| 9·4 | 48·5 | 41·5 | |
| 10·0 | 52·0 | 9·7 | |
| 9·0 | 25 4·0 | 34·1 | |
| 10·0 | 5·0 | 20·4 | |
| 9·8 | 7·5 | 41·1 | |
| 9·7 | 26·0 | 26·0 | |
| 8·6 | 27·0 | 17·0 | 9·0 |
| 9·6 | 34·5 | 47·1 | |
| 10·0 | 36·0 | 28·2 | |
| 10·0 | 42·0 | 10·5 | |
| 8·6 | 42·5 | 6·8 | 9·0 |
| 10·0 | 42·5 | 28·1 | |
| 10·0 | 46·5 | 26·0 | |
| 10·0 | 47·5 | 23·5 | |
| 9·7 | 48·0 | 11·0 | |
| 9·3 | 52·5 | 26·1 | |
| 8·7 | 52·5 | 43·4 | 9·0 |
| 10·0 | 26 3·0 | 8·0 | |
| 10·0 | 15·0 | 41·3 | 9·5 |
| 9·2 | 19·5 | 32·0 | |
| 10·0 | 21·0 | 19·4 | |
| 10·0 | 21·5 | 54·2 | |
| 9·1 | 33·0 | 13·7 | 9·5 |
| 9·6 | 34·5 | 30·0 | |
| 9·0 | 39·5 | 12·9 | 9·2 |
| 10·0 | 52·5 | 52·9 | |
| 8·9 | 27 8·0 | 38·6 | 9·5 |
| 10·0 | 8·5 | 41·3 | |
| 10·0 | 32·5 | 6·9 | |
| 10·0 | 37·5 | 47·2 | |
| 9·2 | 38·5 | 12·4 | 9·0 Gg |
| 8·1 | 52·0 | 13·4 | 8·5 Ggt |
| 10·0 | 52·5 | 33·0 | |
| 10·0 | 58·5 | 35·0 | |
| 10·0 | 28 2·5 | 44·0 | |
| 9·4 | 4·5 | 41·1 | |
| 9·5 | 7·5 | 26·1 | |
| 10·0 | 7·5 | 32·2 | |
| 10·0 | 9·0 | 43·0 | |
| 10·0 | 15·5 | 48·5 | |
| 10·0 | 17·0 | 8·9 | 9·0 G |
| 7·6 | 22·5 | 28·1 | GSt |
| 10·0 | 29·5 | 0·2 | |
| 8·2 | 30·0 | 8·2 | 8·7 Gg |
| 10·0 | 31·5 | 41·1 | |
| 8·6 | 37·0 | 7·3 | 9·0 Gg |
| 10·0 | 51·5 | 55·7 | 9·5 |
| 8·6 | 54·5 | 29·0 | 9·0 G |
| 9·6 | 29 4·0 | 15·3 | |
| 10·0 | 13·0 | 32·2 | |
| 9·7 | 13·5 | 19·0 | |
| 9·8 | 18·5 | 28·8 | |
| 9·8 | 22·5 | 29·7 | |
| 9·9 | 23·5 | 30·3 | |

## 2221—2280.

| mag. | 10h. m s | −59° ′ | |
|---|---|---|---|
| 9·9 | 29 32·0 | 21·4 | |
| 9·8 | 32·5 | 30·7 | |
| 9·6 | 33·0 | 57·7 | |
| 9·7 | 36·0 | 52·0 | |
| 9·0 | 39·7 | 10·7 | |
| 9·9 | 42·0 | 23·1 | |
| 9·6 | 44·0 | 52·2 | |
| 9·4 | 44·8 | 30·4 | |
| 9·3 | 45·3 | 23·0 | 9·0 |
| 9·9 | 52·0 | 21·3 | |
| 9·8 | 54·0 | 32·0 | |
| 9·9 | 56·5 | 47·2 | |
| 9·9 | 30 2·0 | 31·2 | |
| 9·6 | 3·0 | 6·2 | |
| 8·2 | 5·7 | 37·7 | 8·5 G |
| 8·5 | 6·0 | 15·5 | |
| 9·9 | 9·5 | 49·0 | |
| 8·9 | 12·3 | 34·2 | |
| 8·6 | 12·8 | 32·4 | G |
| 9·8 | 13·5 | 40·6 | |
| 9·8 | 14·5 | 34·7 | |
| 9·7 | 14·5 | 47·4 | |
| 9·9 | 14·5 | 52·5 | |
| 9·7 | 15·5 | 39·9 | |
| 9·9 | 17·0 | 57·0 | |
| 9·7 | 17·5 | 32·2 | |
| 9·8 | 18·0 | 41·1 | |
| 9·8 | 21·5 | 31·3 | |
| 9·6 | 25·2 | 24·7 | |
| 9·7 | 29·0 | 36·1 | |
| 9·7 | 29·5 | 23·1 | |
| 9·1 | 29·5 | 16·3 | |
| 9·7 | 30·0 | 35·1 | |
| 9·8 | 32·0 | 29·4 | |
| 9·4 | 32·3 | 31·6 | |
| 9·4 | 32·5 | 34·0 | |
| 9·4 | 35·8 | 36·4 | |
| 9·8 | 37·5 | 13·1 | |
| 9·6 | 38·0 | 27·9 | |
| 9·4 | 38·3 | 32·7 | |
| 9·7 | 39·0 | 56·2 | |
| 9·7 | 39·5 | 57·0 | |
| 9·7 | 41·0 | 12·9 | |
| 9·5 | 41·3 | 39·7 | |
| 9·6 | 42·0 | 0·1 | |
| 9·9 | 42·0 | 47·5 | |
| 9·6 | 42·7 | 31·0 | |
| 9·9 | 48·0 | 37·5 | |
| 9·9 | 53·0 | 29·0 | |
| 9·8 | 53·0 | 58·0 | |
| 9·4 | 55·5 | 28·9 | |
| 9·0 | 31 1·5 | 3·8 | |
| 9·8 | 5·0 | 45·6 | |
| 9·8 | 6·0 | 58·0 | |
| 8·7 | 6·0 | 28·3 | 9·8 |
| 9·9 | 6·5 | 30·3 | |
| 9·8 | 7·5 | 59·9 | |
| 9·7 | 8·0 | 2·6 | |
| 9·5 | 8·5 | 30·0 | |
| 9·9 | 12·5 | 58·7 | |



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### 2281—2340.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·0 | 31 | 13·5 | 29·4 | |
| 9·3 | | 14·0 | 23·6 | 8·5 |
| 9·3 | | 16·5 | 30·3 | |
| 9·6 | | 17·0 | 34·1 | |
| 9·8 | | 20·0 | 27·1 | |
| 9·8 | | 20·5 | 25·5 | |
| 9·3 | | 22·0 | 16·9 | |
| 9·8 | | 23·5 | 29·7 | |
| 9·8 | | 24·5 | 56·1 | |
| 9·6 | | 27·5 | 28·4 | |
| 9·9 | | 28·5 | 47·5 | |
| 8·0 | | 32·0 | 32·0 | 8·5 GS |
| 9·8 | | 34·0 | 26·7 | |
| 9·6 | | 36·0 | 28·2 | |
| 9·7 | | 36·0 | 48·7 | |
| 9·7 | | 38·0 | 58·9 | |
| 9·7 | | 38·5 | 2·1 | |
| 9·4 | | 43·0 | 28·2 | |
| 9·2 | | 43·0 | 58·8 | |
| 9·9 | | 45·5 | 31·3 | |
| 9·8 | | 46·0 | 52·9 | |
| 9·9 | | 50·5 | 48·4 | |
| 9·7 | | 51·5 | 40·1 | |
| 9·9 | | 52·0 | 38·7 | |
| 9·8 | | 52·0 | 52·3 | |
| 9·7 | | 53·5 | 18·1 | |
| 9·8 | | 56·0 | 10·0 | |
| 9·8 | | 56·0 | 4·2 | |
| 9·7 | | 57·0 | 34·9 | |
| 9·8 | 32 | 2·0 | 36·9 | |
| 9·8 | | 6·0 | 33·0 | |
| 9·9 | | 8·5 | 35·4 | |
| 9·9 | | 8·5 | 38·1 | |
| 9·2 | | 15·0 | 10·2 | |
| 9·8 | | 15·5 | 31·7 | |
| 9·9 | | 18·5 | 37·4 | |
| 9·8 | | 19·5 | 39·5 | |
| 9·8 | | 21·0 | 37·0 | |
| 9·7 | | 23·0 | 19·6 | |
| 9·8 | | 24·0 | 46·1 | |
| 9·0 | | 24·5 | 20·2 | |
| 9·4 | | 28·5 | 20·7 | |
| 9·9 | | 29·0 | 36·4 | |
| 9·4 | | 31·5 | 49·1 | |
| 9·3 | | 35·0 | 9·3 | |
| 9·8 | | 39·5 | 56·0 | |
| 9·7 | | 42·0 | 7·5 | |
| 9·8 | | 42·0 | 59·9 | |
| 9·8 | | 42·5 | 14·0 | |
| 9·5 | | 51·5 | 18·2 | |
| 9·2 | | 52·0 | 19·4 | |
| 9·4 | | 52·5 | 34·9 | |
| 9·8 | | 55·5 | 57·9 | |
| 8·9 | | 58·5 | 23·7 | 9·5 G |
| 9·8 | | 59·0 | 18·4 | |
| 9·8 | 33 | 2·0 | 52·2 | |
| 9·4 | | 5·0 | 28·3 | |
| 9·8 | | 5·0 | 25·0 | |
| 9·8 | | 5·0 | 26·0 | |
| 9·9 | | 5·0 | 15·2 | |

### 2341—2400.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·5 | 33 | 6·0 | 26·1 | |
| 9·6 | | 11·5 | 9·6 | |
| 9·9 | | 12·5 | 55·5 | |
| 9·9 | | 13·0 | 47·9 | |
| 8·8 | | 15·0 | 23·0 | 9·5 G |
| 9·7 | | 15·0 | 14·9 | |
| 9·6 | | 15·0 | 52·2 | |
| 9·9 | | 17·3 | 24·2 | |
| 9·4 | | 20·5 | 29·9 | 9·0 GS |
| 9·8 | | 21·5 | 13·1 | |
| 9·9 | | 23·0 | 24·0 | |
| 9·8 | | 24·0 | 8·7 | |
| 9·8 | | 25·5 | 10·0 | |
| 9·1 | | 26·0 | 7·4 | |
| 9·8 | | 28·0 | 53·9 | 8·5 G |
| 9·0 | | 28·5 | 54·0 | |
| 9·8 | | 37·0 | 42·3 | |
| 9·3 | | 38·5 | 20·3 | |
| 9·8 | | 38·5 | 54·0 | |
| 9·8 | | 41·0 | 23·9 | |
| 9·4 | | 42·5 | 27·5 | 9·5 G |
| 9·8 | | 43·0 | 45·1 | |
| 9·8 | | 50·0 | 36·2 | |
| 9·7 | | 52·0 | 31·9 | |
| 9·6 | | 52·5 | 12·2 | |
| 9·7 | | 53·0 | 19·4 | |
| 9·9 | 34 | 0·0 | 56·7 | |
| 9·4 | | 2·2 | 2·3 | |
| 9·7 | | 2·5 | 9·9 | |
| 9·8 | | 6·5 | 20·9 | |
| 9·7 | | 11·5 | 40·8 | |
| 9·7 | | 12·0 | 43·1 | |
| 9·6 | | 15·5 | 57·1 | |
| 9·4 | | 20·5 | 11·4 | |
| 9·8 | | 21·0 | 24·0 | |
| 9·8 | | 21·0 | 32·0 | |
| 9·8 | | 24·5 | 8·0 | |
| 8·4 | | 25·5 | 41·4 | 9·0 G |
| 9·8 | | 25·5 | 15·4 | |
| 9·8 | | 27·5 | 14·1 | |
| 9·6 | | 29·0 | 57·6 | |
| 9·8 | | 30·0 | 27·8 | |
| 9·8 | | 33·0 | 43·0 | |
| 9·2 | | 34·5 | 33·9 | |
| 9·7 | | 34·5 | 19·7 | |
| 9·8 | | 34·5 | 9·8 | |
| 9·7 | | 37·5 | 34·9 | |
| 9·7 | | 41·0 | 5·7 | |
| 9·6 | | 43·0 | 44·0 | |
| 9·6 | | 48·0 | 42·7 | 9·0 G |
| 9·9 | | 53·0 | 51·5 | |
| 9·9 | | 53·5 | 56·2 | |
| 9·8 | | 59·0 | 42·0 | |
| 9·3 | | 59·5 | 23·6 | |
| 9·7 | 35 | 1·0 | 58·2 | |
| 9·6 | | 1·5 | 43·9 | |
| 9·4 | | 2·2 | 0·2 | |
| 9·6 | | 3·5 | 5·8 | |
| 9·8 | | 8·0 | 49·9 | |
| 9·2 | | 12·5 | 3·3 | |

### 2401—2460.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·4 | 35 | 22·0 | 33·0 | |
| 9·4 | | 22·5 | 27·3 | |
| 9·9 | | 22·5 | 53·0 | |
| 8·2 | | 28·0 | 9·1 | 8·5 *G*p |
| 9·8 | | 28·0 | 30·1 | |
| 9·6 | | 29·5 | 16·9 | |
| 9·8 | | 31·5 | 17·9 | |
| 8·8 | | 31·5 | 50·8 | *G* |
| 8·7 | | 31·5 | 49·3 | *G* |
| 9·8 | | 34·5 | 36·3 | |
| 8·5 | | 38·0 | 18·4 | 9·5 *G*S |
| 9·8 | | 40·0 | 9·7 | |
| 9·2 | | 44·0 | 3·1 | |
| 9·8 | | 45·5 | 44·5 | |
| 9·4 | | 46·5 | 17·7 | |
| 8·5 | | 47·5 | 7·6 | 9·2 *G* |
| 9·8 | | 50·5 | 11·1 | |
| 9·8 | | 52·0 | 49·1 | |
| 9·8 | | 53·5 | 47·4 | |
| 8·8 | | 55·0 | 26·4 | *G* |
| 9·8 | | 57·5 | 40·1 | |
| 9·8 | | 57·5 | 35·9 | |
| 9·7 | 36 | 1·5 | 27·4 | *G* |
| 9·8 | | 2·0 | 19·4 | |
| 9·6 | | 2·0 | 11·0 | |
| 9·7 | | 4·5 | 10·9 | |
| 9·2 | | 4·5 | 5·5 | |
| 9·7 | | 6·0 | 10·4 | |
| 9·5 | | 6·0 | 14·5 | |
| 9·2 | | 10·0 | 3·2 | |
| 9·8 | | 11·0 | 33·0 | |
| 9·8 | | 11·5 | 38·7 | |
| 9·8 | | 12·0 | 12·7 | |
| 9·8 | | 13·5 | 51·7 | |
| 9·9 | | 15·0 | 45·2 | |
| 9·8 | | 17·5 | 44·6 | |
| 9·6 | | 18·0 | 4·5 | |
| 9·5 | | 20·0 | 38·4 | |
| 9·9 | | 20·0 | 6·2 | |
| 9·8 | | 20·0 | 52·5 | |
| 9·8 | | 20·5 | 23·7 | |
| 9·8 | | 24·2 | 58·1 | |
| 9·8 | | 24·5 | 22·0 | |
| 8·8 | | 26·5 | 48·0 | *G* |
| 9·4 | | 26·5 | 11·0 | |
| 9·9 | | 26·5 | 10·8 | |
| 7·6 | | 28·0 | 19·2 | 8·0 *G*Sgt |
| 9·9 | | 28·2 | 0·5 | *G* |
| 9·1 | | 30·5 | 44·2 | *G* |
| 6·8 | | 31·0 | 1·5 | 7·0 *G*Sgtr |
| 9·6 | | 31·0 | 18·6 | |
| 9·8 | | 32·5 | 13·8 | |
| 9·7 | | 33·5 | 56·9 | |
| 9·7 | | 36·0 | 27·3 | |
| 9·9 | | 36·0 | 1·1 | |
| 9·2 | | 37·0 | 48·6 | |
| 9·2 | | 37·5 | 51·0 | |
| 9·2 | | 44·5 | 17·8 | |
| 9·8 | | 45·5 | 4·7 | |
| 9·7 | | 46·0 | 17·6 | |

### 2461—2520.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 36 | 46·5 | 15·9 | |
| 9·7 | | 48·0 | 43·6 | |
| 8·9 | | 49·0 | 0·7 | *G* |
| 9·7 | | 50·5 | 21·0 | |
| 9·7 | | 51·0 | 11·0 | |
| 9·6 | | 54·0 | 59·5 | |
| 9·7 | 37 | 6·0 | 23·4 | *G* |
| 9·2 | | 8·2 | 2·0 | 9·2 *G* |
| 9·3 | | 9·0 | 16·6 | |
| 9·7 | | 9·0 | 16·8 | |
| 9·8 | | 11·0 | 17·0 | |
| 8·8 | | 12·0 | 10·8 | *G* |
| 9·6 | | 13·5 | 50·0 | *G* |
| 9·7 | | 13·5 | 15·9 | |
| 9·1 | | 16·5 | 47·4 | *G* |
| 8·7 | | 17·0 | 29·4 | *G* |
| 9·4 | | 19·5 | 14·0 | *G* |
| 8·4 | | 22·0 | 15·1 | *G*Sg |
| 8·9 | | 24·5 | 18·8 | |
| 9·2 | | 24·5 | 35·3 | *G* |
| 9·9 | | 25·5 | 31·3 | |
| 9·8 | | 27·0 | 16·4 | |
| 9·7 | | 29·5 | 39·6 | |
| 9·7 | | 33·0 | 50·0 | |
| 9·9 | | 35·5 | 17·9 | |
| 9·8 | | 36·5 | 33·7 | |
| 9·7 | | 37·5 | 43·7 | |
| 9·2 | | 39·5 | 49·8 | *G* |
| 9·9 | | 40·5 | 56·7 | |
| 9·8 | | 45·0 | 42·6 | |
| 9·7 | | 45·5 | 23·2 | |
| 9·4 | | 45·5 | 55·8 | |
| 9·0 | | 47·5 | 51·0 | |
| 9·8 | | 48·0 | 38·9 | |
| 9·4 | | 50·5 | 20·0 | |
| 9·0 | | 51·0 | 23·2 | |
| 9·6 | | 53·0 | 12·3 | |
| 9·9 | | 53·0 | 52·5 | |
| 8·7 | | 54·5 | 34·0 | *G* |
| 9·8 | | 55·0 | 12·7 | |
| 9·4 | | 56·5 | 45·8 | *G* |
| 8·5 | | 57·5 | 15·0 | *G*g |
| 8·7 | | 58·5 | 13·0 | *G* |
| 9·4 | 38 | 0·0 | 21·7 | |
| 8·6 | | 0·5 | 32·8 | *G* |
| 9·8 | | 1·5 | 14·3 | |
| 8·8 | | 6·0 | 23·8 | *G* |
| 9·3 | | 6·0 | 47·7 | *G* |
| 8·7 | | 8·0 | 19·0 | *G* |
| 9·6 | | 11·5 | 28·2 | |
| 9·8 | | 12·0 | 34·9 | |
| 9·8 | | 15·0 | 36·4 | |
| 9·1 | | 16·5 | 12·3 | *G* |
| 9·4 | | 18·0 | 13·4 | |
| 9·9 | | 20·5 | 11·9 | |
| 8·9 | | 21·5 | 55·0 | |
| 9·1 | | 23·0 | 22·9 | *G* |
| 8·9 | | 23·5 | 5·1 | *G* |
| 9·0 | | 28·0 | 11·9 | *G* |
| 9·6 | | 28·0 | 28·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 55 | 7·7 |
| | 40 | 57 | 7·9 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 55 | 7·7 |
| | 40 | 57 | 7·9 |
| | 50 | 60 | 8·0 |

## 2521—2580.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·3 | 38 | 29·0 | 32·7 | G |
| 8·7 | | 31·5 | 28·8 | G |
| 9·7 | | 32·0 | 7·7 | |
| 9·8 | | 32·5 | 17·4 | |
| 9·4 | | 34·5 | 33·8 | |
| 9·0 | | 39·0 | 40·7 | G |
| 8·6 | | 40·5 | 26·6 | G |
| 8·4 | | 42·5 | 39·7 | G |
| 9·1 | | 43·2 | 58·9 | |
| 9·9 | | 45·0 | 24·0 | |
| 9·8 | | 45·5 | 36·9 | |
| 7·3 | | 47·0 | 54·8 | GSt |
| 9·9 | | 52·5 | 15·9 | |
| 9·7 | | 53·5 | 32·3 | |
| 9·6 | | 54·0 | 30·7 | |
| 9·2 | | 56·5 | 9·0 | G |
| 9·3 | | 56·5 | 14·0 | G |
| 8·6 | | 57·0 | 41·0 | G |
| 9·8 | | 59·5 | 29·0 | |
| 8·8 | | 59·5 | 26·4 | |
| 9·9 | 39 | 1·5 | 21·1 | |
| 9·3 | | 2·0 | 18·0 | |
| 9·6 | | 2·0 | 29·8 | |
| 8·9 | | 2·0 | 45·2 | G |
| 8·9 | | 2·5 | 24·2 | G |
| 9·8 | | 2·5 | 22·6 | |
| 9·7 | | 3·0 | 18·0 | |
| 6·8 | | 4·5 | 27·7 | GSt |
| 9·8 | | 6·5 | 40·1 | |
| 9·4 | | 9·5 | 32·7 | |
| 9·0 | | 10·0 | 26·0 | G |
| 9·8 | | 11·0 | 42·9 | |
| 9·9 | | 11·7 | 57·3 | : |
| 8·7 | | 12·5 | 26·7 | G |
| 8·6 | | 12·5 | 25·8 | G |
| 8·3 | | 12·5 | 13·1 | Gg |
| 9·4 | | 13·0 | 43·7 | |
| 9·9 | | 14·5 | 39·8 | |
| 9·7 | | 16·5 | 21·0 | G |
| 8·4 | | 18·0 | 20·2 | G |
| 8·6 | | 22·0 | 3·9 | Gp |
| 9·2 | | 23·0 | 16·0 | G |
| 8·6 | | 23·0 | 24·0 | G |
| 9·8 | | 23·5 | 13·3 | |
| 9·9 | | 23·5 | 3·8 | G |
| 9·9 | | 25·5 | 3·5 | |
| 9·4 | | 25·5 | 4·5 | G |
| 9·2 | | 27·0 | 20·7 | G |
| 9·5 | | 28·0 | 28·4 | |
| 9·3 | | 28·0 | 29·7 | |
| 9·8 | | 33·3 | 0·1 | |
| 7·0 | | 34·0 | 20·1 | GSt |
| 9·7 | | 34·5 | 53·9 | |
| 9·1 | | 37·5 | 1·8 | |
| 8·6 | | 38·0 | 33·4 | |
| 9·6 | | 39·0 | 6·0 | G |
| 8·4 | | 39·0 | 13·8 | Gg |
| 9·8 | | 41·5 | 31·0 | |
| 9·7 | | 42·0 | 12·9 | |
| 8·4 | | 42·0 | 18·0 | |

## 2581—2640.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 39 | 42·0 | 2·4 | |
| 9·8 | | 43·5 | 13·5 | |
| 9·4 | | 43·5 | 1·1 | |
| 8·6 | | 43·5 | 5·2 | 8·8 Gp |
| 9·8 | | 43·5 | 26·3 | |
| 9·6 | | 44·0 | 57·2 | |
| 8·6 | | 45·0 | 4·9 | 8·3 Gp |
| 9·9 | | 47·5 | 20·5 | |
| 9·9 | | 48·0 | 10·4 | |
| 8·2 | | 48·0 | 26·0 | G |
| 9·7 | | 48·0 | 8·1 | |
| 9·2 | | 48·0 | 15·0 | G |
| 9·4 | | 48·5 | 21·8 | |
| 9·3 | | 49·0 | 21·5 | |
| 9·3 | | 50·5 | 9·0 | G |
| 9·8 | | 51·3 | 0·9 | |
| 9·6 | | 51·5 | 20·0 | G |
| 9·7 | | 52·0 | 2·5 | |
| 9·7 | | 52·0 | 24·0 | G |
| 8·2 | | 52·5 | 7·6 | 8·5 Gp |
| 9·8 | | 54·0 | 14·4 | |
| 8·7 | | 56·5 | 15·3 | G |
| 8·6 | | 58·5 | 4·5 | 9·0 |
| 8·9 | | 59·0 | 18·6 | |
| 9·6 | 40 | 2·0 | 16·2 | |
| 9·7 | | 4·0 | 2·1 | |
| 9·9 | | 4·5 | 12·5 | |
| 9·8 | | 4·5 | 36·9 | |
| 9·8 | | 5·5 | 35·8 | |
| 9·0 | | 5·5 | 16·6 | |
| 9·0 | | 8·0 | 16·7 | G |
| 9·6 | | 8·0 | 28·4 | |
| 9·9 | | 9·0 | 2·9 | |
| 9·7 | | 9·0 | 21·3 | |
| 9·8 | | 9·5 | 38·5 | |
| 9·9 | | 10·0 | 4·1 | |
| 9·8 | | 10·5 | 9·9 | |
| 9·9 | | 10·5 | 3·6 | |
| 9·8 | | 11·0 | 2·6 | |
| 8·4 | | 13·0 | 1·6 | 7·5 GStrλ : |
| 9·9 | | 13·0 | 57·0 | |
| 9·7 | | 13·7 | 0·8 | |
| 8·6 | | 14·5 | 0·7 | 8·8 Gg |
| 9·2 | | 15·5 | 3·7 | |
| 9·8 | | 15·5 | 4·9 | |
| 9·2 | | 15·5 | 5·9 | G |
| 9·4 | | 16·5 | 2·5 | |
| 9·2 | | 18·3 | 1·4 | G |
| 9·8 | | 18·5 | 6·8 | |
| 9·9 | | 19·5 | 3·5 | |
| 9·9 | | 19·5 | 2·8 | |
| 9·6 | | 21·0 | 1·8 | |
| 9·1 | | 21·5 | 5·5 | 9·5 G |
| 9·8 | | 21·5 | 3·3 | |
| 9·1 | | 22·0 | 5·3 | 9·5 G |
| 9·0 | | 22·0 | 4·8 | 9·0 G |
| 9·4 | | 23·5 | 57·0 | |
| 9·8 | | 24·5 | 21·5 | |
| 9·4 | | 24·5 | 18·4 | |
| 9·6 | | 25·5 | 0·6 | |

## 2641—2700.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·9 | 40 | 26·0 | 4·1 | 9·0 G |
| 9·4 | | 28·0 | 15·3 | G |
| 9·5 | | 29·0 | 31·8 | |
| 9·0 | | 30·0 | 3·3 | G |
| 9·9 | | 32·0 | 3·1 | |
| 9·8 | | 40·5 | 42·3 | |
| 9·7 | | 41·5 | 50·1 | |
| 9·0 | | 42·5 | 46·0 | G |
| 9·6 | | 43·0 | 26·9 | |
| 9·4 | | 44·5 | 18·0 | G |
| 9·8 | | 45·5 | 25·0 | |
| 9·8 | | 49·5 | 25·0 | |
| 9·5 | | 54·5 | 24·9 | |
| 9·9 | | 56·0 | 27·0 | |
| 9·4 | | 57·5 | 25·7 | |
| 9·9 | | 58·5 | 51·6 | |
| 9·8 | 41 | 2·0 | 21·0 | |
| 9·7 | | 2·5 | 9·8 | |
| 8·6 | | 2·5 | 32·0 | G |
| 9·7 | | 4·0 | 26·0 | |
| 9·8 | | 4·0 | 17·6 | |
| 9·8 | | 11·5 | 52·0 | |
| 9·8 | | 14·5 | 47·0 | |
| 9·9 | | 14·5 | 22·9 | |
| 9·4 | | 15·5 | 11·4 | G |
| 9·5 | | 15·5 | 7·9 | G |
| 9·8 | | 24·0 | 20·3 | G |
| 9·9 | | 26·0 | 0·0 | |
| 9·9 | | 28·5 | 18·4 | |
| 9·8 | | 28·5 | 25·9 | G |
| 6·7 | | 29·2 | 56·8 | 7·0 GSt |
| 8·6 | | 31·0 | 21·8 | G |
| 9·6 | | 32·0 | 13·9 | G |
| 9·7 | | 34·5 | 29·1 | |
| 9·6 | | 37·0 | 9·9 | |
| 9·9 | | 37·2 | 58·9 | |
| 9·1 | | 39·5 | 54·3 | G |
| 9·7 | | 40·0 | 40·3 | |
| 9·0 | | 41·5 | 10·4 | 10·0 G |
| 9·2 | | 42·0 | 24·7 | G |
| 9·8 | | 42·5 | 18·8 | |
| 9·2 | | 44·0 | 41·0 | G |
| 9·6 | | 47·5 | 36·9 | |
| 9·6 | | 51·5 | 42·0 | |
| 9·9 | | 56·0 | 17·4 | |
| 9·6 | 42 | 1·5 | 26·6 | G |
| 9·0 | | 2·5 | 25·1 | G |
| 9·6 | | 8·0 | 37·9 | G |
| 9·8 | | 10·0 | 35·6 | |
| 9·9 | | 14·0 | 11·3 | |
| 9·8 | | 17·5 | 30·0 | |
| 8·8 | | 17·5 | 8·0 | 9·0 G |
| 8·3 | | 18·5 | 55·0 | 8·5 G |
| 9·6 | | 19·5 | 43·2 | |
| 9·7 | | 20·5 | 21·6 | |
| 8·8 | | 21·0 | 26·2 | 9·0 Gp |
| 9·2 | | 21·0 | 32·1 | |
| 9·2 | | 22·0 | 34·0 | G |
| 9·4 | | 22·5 | 58·5 | |
| 9·6 | | 23·0 | 26·5 | |

## 2701—2760.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 23·5 | 23·0 | |
| 9·3 | | 24·5 | 26·0 | G |
| 8·8 | | 29·5 | 33·3 | G |
| 9·8 | | 31·0 | 26·3 | |
| 9·9 | | 33·5 | 0·3 | |
| 9·8 | | 37·0 | 24·7 | G |
| 9·9 | | 37·0 | 44·5 | |
| 9·4 | | 39·0 | 8·1 | G |
| 9·8 | | 40·0 | 33·8 | |
| 9·7 | | 42·5 | 38·9 | |
| 9·7 | | 45·0 | 49·9 | |
| 8·1 | | 48·7 | 57·7 | 8·0 GSt |
| 6·4 | | 50·5 | 12·9 | 7·0 GSgt |
| 9·7 | | 55·0 | 17·2 | |
| 9·8 | 43 | 4·0 | 28·4 | |
| 9·8 | | 5·0 | 29·5 | |
| 9·7 | | 5·0 | 45·5 | |
| 9·6 | | 7·5 | 43·4 | |
| 9·0 | | 8·0 | 45·7 | |
| 6·6 | | 11·5 | 15·5 | 6·5 GSgt |
| 9·8 | | 12·0 | 5·8 | |
| 9·5 | | 14·0 | 59·9 | |
| 9·6 | | 14·0 | 25·9 | |
| 9·8 | | 21·0 | 16·8 | |
| 8·9 | | 22·5 | 59·1 | 9·0 G |
| 9·7 | | 22·5 | 27·4 | |
| 9·1 | | 23·0 | 36·2 | G |
| 9·4 | | 27·5 | 10·2 | G |
| 9·6 | | 36·0 | 5·1 | G |
| 9·6 | | 40·0 | 18·1 | |
| 9·8 | | 43·7 | 59·5 | |
| 7·4 | | 44·5 | 33·7 | 7·5 Gtp |
| 9·9 | | 44·5 | 35·2 | |
| 8·8 | | 51·0 | 29·0 | G |
| 8·8 | | 54·0 | 56·0 | 9·0 G |
| 9·8 | | 56·0 | 34·0 | |
| 9·8 | | 56·0 | 1·5 | |
| 9·8 | | 56·5 | 18·5 | |
| 9·4 | 44 | 1·0 | 22·0 | |
| 8·9 | | 3·8 | 1·6 | G |
| 9·5 | | 4·0 | 9·4 | |
| 9·9 | | 4·5 | 11·2 | |
| 9·8 | | 9·5 | 8·2 | |
| 9·7 | | 12·0 | 0·4 | |
| 9·4 | | 14·0 | 13·9 | G : |
| 8·4 | | 20·0 | 31·2 | 9·0 G |
| 9·8 | | 20·0 | 7·1 | |
| 9·6 | | 21·0 | 26·0 | |
| 9·4 | | 21·0 | 36·2 | |
| 8·8 | | 22·5 | 3·7 | 8·5 G |
| 9·8 | | 23·0 | 35·3 | |
| 9·8 | | 23·5 | 15·2 | |
| 9·4 | | 25·0 | 25·0 | |
| 9·8 | | 25·5 | 0·1 | |
| 9·4 | | 25·5 | 4·0 | G |
| 9·9 | | 26·0 | 58·2 | |
| 9·8 | | 27·5 | 8·4 | |
| 9·3 | | 30·5 | 10·0 | G |
| 9·4 | | 31·5 | 21·9 | |
| 9·4 | | 31·5 | 13·2 | G |



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## 2761—2820.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8.6 | 44 | 34.0 | 38.0 | 9.0 *G*p |
| 9.8 | | 36.5 | 25.7 | |
| 9.9 | | 38.5 | 21.9 | |
| 9.6 | | 42.0 | 48.7 | |
| 9.2 | | 46.5 | 30.0 | 9.0 *G* |
| 9.9 | | 54.5 | 26.6 | |
| 9.4 | | 57.0 | 23.9 | |
| 9.5 | 45 | 3.5 | 50.0 | |
| 9.7 | | 10.0 | 0.3 | |
| 9.7 | | 16.0 | 28.4 | *G* |
| 9.7 | | 22.5 | 30.4 | |
| 8.3 | | 23.0 | 58.7 | 9.0 *G* |
| 8.8 | | 23.0 | 31.1 | 9.5 *G* |
| 9.2 | | 24.5 | 44.0 | *G* |
| 9.0 | | 31.0 | 19.1 | 7.5 *G*Sp |
| 9.8 | | 31.5 | 17.0 | |
| 9.8 | | 35.0 | 12.0 | *G* |
| 9.8 | | 37.5 | 9.9 | |
| 9.8 | | 47.5 | 28.2 | |
| 9.9 | | 48.5 | 28.0 | |
| 8.8 | | 54.0 | 25.2 | |
| 9.0 | | 58.5 | 11.5 | |
| 9.2 | 46 | 1.5 | 17.0 | |
| 7.2 | | 2.0 | 17.6 | 7.0 *G*Sgt |
| 9.8 | | 5.5 | 28.3 | |
| 8.9 | | 6.5 | 27.4 | 9.5 *G* |
| 9.7 | | 14.5 | 55.0 | |
| 9.4 | | 16.0 | 41.7 | |
| 9.7 | | 18.5 | 37.9 | |
| 9.8 | | 21.0 | 12.0 | |
| 8.0 | | 23.0 | 5.0 | 8.0 *G*tp |
| 9.7 | | 24.0 | 34.0 | |
| 9.5 | | 26.0 | 13.7 | |
| 9.6 | | 37.5 | 11.1 | |
| 9.9 | | 40.0 | 2.1 | |
| 9.2 | | 42.5 | 46.9 | |
| 9.8 | | 53.0 | 23.0 | |
| 9.7 | | 53.0 | 56.9 | |
| 9.4 | 47 | 0.3 | 2.0 | 9.5 *G* |
| 9.8 | | 7.5 | 26.0 | |
| 9.4 | | 8.5 | 49.0 | |
| 8.3 | | 12.5 | 17.4 | G |
| 9.8 | | 18.0 | 52.0 | |
| 9.4 | | 19.0 | 33.8 | |
| 9.4 | | 21.0 | 42.0 | |
| 9.5 | | 24.5 | 52.0 | |
| 8.8 | | 31.5 | 17.4 | |
| 9.4 | | 34.0 | 29.9 | |
| 9.6 | | 52.5 | 50.5 | |
| 9.4 | 48 | 3.8 | 0.5 | |
| 9.4 | | 7.0 | 22.0 | |
| 9.4 | | 11.0 | 49.8 | 9.3 G |
| 8.8 | | 22.0 | 47.0 | 9.5 G |
| 9.8 | | 24.0 | 7.2 | |
| 9.6 | | 29.0 | 11.7 | G |
| 9.6 | | 29.5 | 9.1 | |
| 9.8 | | 41.0 | 10.5 | |
| 9.3 | | 42.0 | 11.0 | |
| 9.9 | | 52.5 | 24.0 | |
| 9.8 | | 54.0 | 25.9 | |

## 2821—2880.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.9 | 49 | 7.0 | 22.2 | |
| 8.6 | | 7.5 | 41.1 | 8.0 G |
| 9.4 | | 12.0 | 21.4 | |
| 9.2 | | 14.5 | 46.1 | |
| 9.8 | | 16.5 | 48.1 | |
| 9.7 | | 26.5 | 42.3 | 9.5 |
| 9.2 | | 26.5 | 11.9 | |
| 8.7 | | 28.5 | 54.7 | 9.0 G |
| 9.5 | | 31.0 | 33.5 | |
| 9.6 | | 38.5 | 27.7 | |
| 9.8 | | 43.5 | 55.3 | |
| 9.4 | | 44.5 | 17.5 | |
| 8.9 | | 48.5 | 12.9 | |
| 9.8 | | 50.5 | 55.0 | |
| 9.5 | | 52.0 | 59.9 | |
| 9.7 | | 54.0 | 33.7 | |
| 9.9 | 50 | 1.5 | 44.2 | |
| 9.9 | | 16.0 | 4.5 | |
| 9.1 | | 17.5 | 14.0 | |
| 7.5 | | 18.0 | 51.1 | 6.8 GScgt |
| 9.8 | | 18.0 | 2.9 | |
| 9.9 | | 18.0 | 40.9 | |
| 9.9 | | 20.0 | 10.8 | |
| 9.0 | | 20.5 | 5.2 | 10.0 |
| 9.9 | | 21.0 | 41.2 | |
| 9.2 | | 23.0 | 10.8 | |
| 9.8 | | 23.5 | 38.0 | |
| 9.4 | | 31.0 | 4.5 | |
| 9.7 | | 31.0 | 26.4 | |
| 9.2 | | 40.0 | 47.1 | |
| 9.7 | | 42.0 | 3.0 | |
| 9.9 | | 52.0 | 32.6 | |
| 9.7 | | 52.0 | 32.8 | |
| 9.8 | | 54.0 | 34.2 | |
| 8.7 | | 58.0 | 43.5 | 8.6 G |
| 8.6 | 51 | 3.0 | 49.6 | 9.4 |
| 9.6 | | 4.0 | 43.2 | 8.8 G |
| 9.2 | | 4.0 | 8.2 | 9.5 |
| 8.9 | | 8.0 | 15.9 | |
| 7.6 | | 10.5 | 47.1 | 7.8 GSt |
| 9.8 | | 16.5 | 50.9 | 9.2 |
| 8.6 | | 23.0 | 21.8 | 9.0 G |
| 9.0 | | 33.0 | 51.4 | 8.8 G |
| 9.9 | | 34.5 | 55.0 | |
| 9.5 | | 38.0 | 34.4 | |
| 9.8 | | 38.0 | 35.0 | |
| 9.4 | | 38.5 | 53.0 | |
| 9.7 | | 43.0 | 37.2 | |
| 8.8 | | 46.5 | 28.0 | |
| 9.8 | | 46.5 | 15.9 | |
| 9.9 | | 47.0 | 26.0 | |
| 9.9 | 52 | 2.5 | 29.9 | |
| 8.6 | | 2.5 | 47.2 | |
| 8.9 | | 3.0 | 8.0 | 9.0 |
| 9.8 | | 6.5 | 31.0 | |
| 9.9 | | 12.0 | 28.0 | |
| 9.8 | | 14.5 | 17.5 | |
| 9.8 | | 15.0 | 48.1 | |
| 9.2 | | 18.0 | 55.3 | |
| 9.5 | | 22.5 | 26.5 | |

## 2881—2940.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.9 | 52 | 31.5 | 32.9 | |
| 9.6 | | 31.5 | 32.0 | |
| 8.9 | | 35.0 | 24.6 | 9.5 |
| 9.9 | | 37.0 | 51.9 | |
| 9.8 | | 41.0 | 58.4 | |
| 9.9 | | 41.5 | 7.8 | |
| 9.6 | | 42.0 | 53.0 | |
| 7.9 | | 44.0 | 4.0 | 7.0 *G*Sgt |
| 9.9 | | 51.5 | 47.4 | |
| 9.9 | | 52.0 | 41.6 | |
| 9.9 | | 54.5 | 35.0 | |
| 9.8 | | 58.0 | 27.0 | |
| 9.9 | 53 | 4.0 | 33.8 | |
| 9.7 | | 9.5 | 16.0 | |
| 9.8 | | 13.5 | 59.1 | |
| 9.9 | | 18.5 | 27.9 | |
| 9.9 | | 28.0 | 17.9 | |
| 9.9 | | 28.0 | 10.7 | |
| 9.0 | | 37.0 | 40.8 | |
| 8.9 | | 39.5 | 3.5 | |
| 9.6 | | 41.5 | 26.5 | |
| 9.9 | | 45.0 | 34.4 | |
| 9.8 | | 46.0 | 27.5 | |
| 9.9 | | 46.0 | 50.7 | |
| 9.3 | | 51.5 | 7.0 | |
| 8.8 | | 57.5 | 48.9 | 9.2 |
| 9.4 | 54 | 0.5 | 18.1 | 8.5 G |
| 8.4 | | 13.0 | 32.6 | 8.5 G |
| 8.5 | | 14.0 | 14.5 | 9.0 G |
| 9.2 | | 21.5 | 54.9 | |
| 8.8 | | 27.5 | 0.1 | 9.0 |
| 9.9 | | 29.0 | 2.1 | |
| 9.9 | | 31.0 | 43.8 | 9.5 |
| 8.6 | | 42.0 | 44.5 | 9.0 |
| 9.3 | | 48.5 | 4.0 | |
| 9.8 | | 50.5 | 11.0 | |
| 9.5 | | 51.0 | 57.7 | |
| 9.9 | 55 | 0.0 | 19.8 | |
| 9.9 | | 0.0 | 16.1 | |
| 8.9 | | 2.0 | 18.5 | 9.0 |
| 9.9 | | 7.5 | 37.0 | |
| 9.9 | | 7.5 | 59.6 | |
| 8.9 | | 9.5 | 40.1 | 9.0 |
| 9.5 | | 11.5 | 1.4 | |
| 9.9 | | 24.5 | 37.0 | |
| 9.2 | | 27.5 | 41.9 | 8.5 G |
| 8.3 | | 30.0 | 38.0 | 8.2 G |
| 9.8 | | 32.0 | 6.7 | |
| 8.9 | | 38.0 | 47.0 | 9.2 G |
| 9.8 | | 39.5 | 26.8 | |
| 8.6 | | 46.5 | 39.1 | 8.2 G |
| 8.4 | | 48.0 | 20.3 | |
| 9.7 | | 48.0 | 16.3 | |
| 9.0 | | 51.5 | 51.4 | |
| 9.9 | | 52.0 | 34.1 | |
| 8.7 | | 58.0 | 33.5 | 9.5 |
| 9.5 | | 58.5 | 13.1 | |
| 9.9 | | 59.0 | 12.6 | |
| 9.2 | 56 | 1.0 | 52.6 | |
| 9.8 | | 3.0 | 19.9 | |

## 2941—3000.

| mag. | 10h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.1 | 56 | 5.0 | 28.0 | |
| 8.9 | | 5.0 | 20.2 | |
| 9.4 | | 8.5 | 30.4 | |
| 9.4 | | 9.5 | 10.2 | |
| 9.6 | | 10.0 | 10.8 | |
| 9.7 | | 15.0 | 47.9 | |
| 9.4 | | 15.5 | 14.5 | |
| 9.5 | | 19.5 | 25.1 | |
| 9.9 | | 20.0 | 46.0 | |
| 9.6 | | 22.0 | 39.6 | 9.0 |
| 9.4 | | 26.5 | 6.5 | |
| 8.4 | | 36.5 | 39.2 | 8.5 G |
| 9.9 | | 38.0 | 22.2 | |
| 9.8 | | 42.0 | 15.8 | |
| 8.6 | | 43.0 | 20.4 | |
| 8.7 | | 46.5 | 14.0 | |
| 9.4 | | 48.5 | 3.7 | |
| 9.0 | 57 | 3.0 | 41.0 | 9.5 |
| 9.2 | | 4.5 | 53.1 | |
| 9.7 | | 6.5 | 29.8 | |
| 9.0 | | 10.5 | 8.1 | |
| 9.2 | | 12.5 | 41.8 | 9.2 |
| 9.8 | | 13.0 | 55.5 | |
| 8.6 | | 14.5 | 50.7 | 9.0 G |
| 9.8 | | 18.0 | 29.0 | |
| 9.6 | | 21.0 | 3.9 | |
| 9.8 | | 24.5 | 15.0 | |
| 9.0 | | 27.5 | 13.2 | |
| 9.8 | | 28.0 | 22.0 | |
| 8.9 | | 28.2 | 58.5 | |
| 9.6 | | 34.0 | 11.9 | |
| 7.6 | | 35.0 | 4.2 | 7.2 *G*Sg |
| 8.8 | | 40.0 | 9.3 | |
| 9.4 | | 40.5 | 31.9 | |
| 9.6 | | 44.0 | 30.0 | |
| 9.7 | | 48.0 | 52.4 | |
| 9.9 | | 50.5 | 41.0 | |
| 9.9 | | 50.5 | 48.9 | |
| 9.8 | | 58.5 | 42.8 | 9.0 |
| 9.4 | 58 | 1.5 | 59.5 | |
| 8.7 | | 9.0 | 55.4 | |
| 9.9 | | 18.5 | 38.0 | |
| 9.9 | | 20.5 | 33.0 | |
| 8.6 | | 22.0 | 17.2 | |
| 9.1 | | 24.5 | 19.5 | |
| 9.6 | | 30.0 | 21.2 | |
| 9.6 | | 31.5 | 45.5 | |
| 8.2 | | 35.5 | 54.3 | 8.5 |
| 9.9 | | 36.0 | 58.2 | |
| 8.7 | | 42.5 | 37.1 | |
| 9.9 | | 45.5 | 39.0 | |
| 9.7 | | 56.0 | 8.6 | |
| 9.6 | | 57.2 | 58.6 | |
| 9.8 | 59 | 8.0 | 0.4 | |
| 8.4 | | 12.5 | 8.3 | 8.5 |
| 8.2 | | 12.5 | 11.8 | 8.0 GSg |
| 9.0 | | 12.5 | 36.9 | |
| 9.0 | | 13.0 | 5.1 | 9.5 |
| 9.6 | | 15.0 | 53.0 | |
| 8.9 | | 15.5 | 45.5 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 10 | 40 | 57 | 7.9 |
| | 50 | 60 | 8.0 |
| 11 | 0 | 62 | 8.1 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 50 | 60 | 8·0 |
| 11 | 0 | 62 | 8·1 |
|  | 10 | 65 | 8·2 |

## 3001—3060.

| mag. | 10h.–11h. m s | −59° ′ | |
|---|---|---|---|
| 9·2 | 59 16·5 | 7·0 | |
| 9·4 | 19·5 | 44·6 | |
| 8·7 | 19·5 | 16·0 | S |
| 9·8 | 22·0 | 4·7 | |
| 9·8 | 23·0 | 33·6 | |
| 9·8 | 23·5 | 20·0 | |
| 9·8 | 25·5 | 38·5 | |
| 9·8 | 28·0 | 13·2 | |
| 9·8 | 34·0 | 41·5 | |
| 9·8 | 34·8 | 1·9 | |
| 9·6 | 37·0 | 15·0 | |
| 9·6 | 38·0 | 59·3 | 9·0 |
| 8·6 | 38·0 | 51·7 | 9·0 |
| 9·8 | 42·0 | 1·6 | |
| 9·4 | 42·0 | 52·1 | 9·0 |
| 9·7 | 42·5 | 0·9 | |
| 7·2 | 44·0 | 11·1 | 7·0 GSg |
| 8·3 | 48·5 | 49·5 | 9·0 |
| 7·9 | 49·3 | 2·4 | *7·8 G*Sg |
| 9·2 | 49·5 | 23·9 | |
| 9·4 | 52·0 | 47·3 | |
| 9·8 | 53·0 | 7·1 | |
| 9·9 | 54·0 | 12·6 | |
| 8·3 | 54·5 | 16·9 | 8·5 S |
| 9·9 | 54·5 | 11·9 | |
| 9·0 | 55·5 | 8·9 | |
| 9·9 | 58·0 | 2·3 | |
| 9·9 | 58·5 | 33·9 | |
| 9·9 | 0 12·5 | 33·8 | |
| 9·9 | 14·0 | 1·3 | |
| 9·4 | 17·5 | 40·9 | |
| 9·9 | 25·0 | 34·7 | |
| 9·4 | 26·2 | 1·8 | |
| 9·9 | 32·5 | 48·8 | |
| 9·7 | 38·0 | 5·8 | |
| 8·7 | 38·5 | 17·9 | 9·5 |
| 9·9 | 41·0 | 28·9 | |
| 7·2 | 51·0 | 16·4 | 7·5 GSg |
| 9·8 | 52·0 | 29·4 | |
| 9·4 | 53·0 | 21·6 | |
| 9·7 | 54·0 | 38·9 | |
| 9·0 | 1 2·0 | 57·7 | 9·0 |
| 9·9 | 6·0 | 0·9 | |
| 9·9 | 13·0 | 8·6 | |
| 8·7 | 31·8 | 2·4 | 8·8 |
| 9·1 | 32·0 | 34·0 | |
| 9·4 | 35·0 | 10·2 | |
| 9·8 | 36·0 | 7·9 | |
| 9·8 | 46·5 | 7·6 | |
| 9·2 | 46·5 | 53·2 | |
| 9·7 | 48·5 | 0·7 | |
| 8·6 | 48·5 | 6·9 | 8·8 *G* |
| 9·8 | 49·5 | 51·5 | |
| 8·5 | 53·0 | 59·6 | 9·0 |
| 9·7 | 54·5 | 50·8 | |
| 8·4 | 57·0 | 37·1 | 8·5 |
| 7·7 | 58·5 | 11·8 | 8·0 Gg |
| 8·9 | 2 2·0 | 51·9 | 9·0 |
| 8·3 | 3·0 | 8·6 | 8·5 |
| 8·8 | 3·0 | 47·1 | 9·0 |

## 3061—3120.

| mag. | 11h. m s | −59° ′ | |
|---|---|---|---|
| 9·8 | 2 5·0 | 50·9 | |
| 9·7 | 11·0 | 19·6 | |
| 9·5 | 15·0 | 53·9 | |
| 8·3 | 16·5 | 17·1 | 8·5 |
| 9·4 | 20·0 | 6·1 | 9·5 |
| 9·4 | 22·0 | 56·2 | 9·5 |
| 9·3 | 22·5 | 21·2 | |
| 9·9 | 26·5 | 59·2 | 9·0 |
| 9·4 | 33·0 | 46·5 | |
| 9·6 | 35·0 | 6·1 | |
| 9·8 | 37·0 | 49·7 | |
| 9·4 | 38·5 | 56·9 | 9·5 |
| 9·9 | 42·5 | 1·2 | |
| 9·9 | 45·5 | 48·9 | |
| 8·7 | 48·5 | 33·0 | |
| 9·9 | 52 0 | 49·1 | |
| 9·0 | 53·0 | 17·1 | |
| 8·4 | 54·5 | 34·0 | 8·5 G |
| 9·0 | 55·0 | 16·7 | |
| 9·9 | 3 3·0 | 8·2 | |
| 9·9 | 8·0 | 50·3 | |
| 9·2 | 28·5 | 28·7 | |
| 8·6 | 30·0 | 42·0 | |
| 9·3 | 32·5 | 46·7 | |
| 9·6 | 41·5 | 7·3 | |
| 8·9 | 44·0 | 31·9 | |
| 9·6 | 49·0 | 41·7 | |
| 8·8 | 53·5 | 38·7 | 9·5 |
| 9·3 | 54·5 | 21·9 | |
| 9·2 | 59·5 | 59·9 | |
| 9·7 | 4 5·0 | 38·0 | |
| 9·4 | 7·0 | 26·5 | |
| 9·6 | 11·5 | 51·8 | |
| 8·8 | 12·5 | 34·7 | 9·5 |
| 9·6 | 19·0 | 51·0 | |
| 9·0 | 25·5 | 53·4 | |
| 9·4 | 29·5 | 18·8 | |
| 9·7 | 32·5 | 54·0 | |
| 8·8 | 32·5 | 47·5 | 9·5 |
| 7·7 | 43·5 | 25·0 | 8·5 |
| 9·8 | 45·5 | 9·6 | |
| 8·0 | 48·0 | 34·2 | 8·5 G |
| 9·8 | 55·5 | 44·8 | |
| 9·3 | 5 0·5 | 26·0 | |
| 9·9 | 4·5 | 50·6 | |
| 9·5 | 5·5 | 44·9 | |
| 9·7 | 5·5 | 34·7 | |
| 9·8 | 6·0 | 17·5 | |
| 9·1 | 6·5 | 35·9 | |
| 8·9 | 9·0 | 32·9 | |
| 8·9 | 9·5 | 35·5 | |
| 9·6 | 13·0 | 32·4 | |
| 8·3 | 13·0 | 54·5 | |
| 8·7 | 13·5 | 27·9 | |
| 9·9 | 13·5 | 31·4 | |
| 7·6 | 23·5 | 42·4 | 8·0 GSt |
| 9·4 | 24·5 | 36·8 | |
| 10·0 | 25·0 | 41·6 | |
| 9·9 | 26·0 | 25·9 | |
| 9·5 | 27·7 | 42·6 | G |

## 3121—3180.

| mag. | 11h. m s | −59° ′ | |
|---|---|---|---|
| 10·0 | 5 35·5 | 44·7 | |
| 10·0 | 36·5 | 13·6 | |
| 9·9 | 37·5 | 10·0 | |
| 10·0 | 38·0 | 39·4 | |
| 10·0 | 39·5 | 33·6 | |
| 9·6 | 41·7 | 42·8 | |
| 9·4 | 43·3 | 47·9 | |
| 10·0 | 44·5 | 11·8 | |
| 8·4 | 44·8 | 37·8 | 9·0 |
| 10·0 | 46·5 | 49·9 | |
| 9·8 | 47·0 | 11·2 | |
| 9·4 | 49·0 | 54·7 | |
| 10·0 | 51·5 | 59·2 | |
| 10·0 | 51·5 | 7·9 | |
| 10·0 | 51·8 | 58·0 | |
| 10·0 | 52·5 | 40·5 | |
| 9·4 | 52·8 | 54·7 | |
| 9·5 | 53·8 | 58·8 | 9·0 |
| 9·8 | 54·5 | 41·1 | |
| 10·0 | 55·0 | 18·5 | |
| 9·6 | 56·5 | 49·0 | |
| 9·2 | 58·0 | 14·4 | |
| 10·0 | 6 1·5 | 53·5 | |
| 8·8 | 3·0 | 7·7 | 8·0 *G* |
| 10·0 | 3·5 | 50·3 | |
| 10·0 | 3·5 | 58·4 | |
| 9·8 | 6·0 | 11·8 | |
| 10·0 | 7·0 | 53·5 | |
| 10·0 | 7·5 | 58·9 | |
| 9·9 | 7·5 | 52·0 | |
| 8·8 | 7·8 | 57·4 | |
| 9·8 | 10·5 | 42·2 | |
| 10·0 | 11·5 | 37·5 | |
| 9·4 | 12·0 | 57·9 | |
| 9·4 | 12·3 | 44·1 | |
| 8·4 | 12·5 | 41·9 | 8·5 t |
| 8·7 | 12·5 | 30·4 | |
| 9·5 | 14·5 | 59·5 | |
| 9·3 | 16·5 | 48·6 | |
| 8·9 | 16·9 | 2·4 | 8·0 |
| 10·0 | 17·0 | 54·8 | |
| 10·0 | 17·0 | 50·1 | |
| 10·0 | 17·5 | 42·5 | |
| 8·2 | 18·5 | 45·9 | GSt |
| 7·3 | 19·0 | 38·0 | 7·5 GS |
| 8·4 | 19·8 | 45·0 | 8·5 G |
| 10·0 | 23·5 | 42·1 | |
| 9·9 | 25·5 | 53·6 | |
| 9·7 | 30·0 | 46·7 | |
| 9·6 | 30·8 | 55·6 | 9·0 |
| 9·4 | 32·5 | 23·7 | |
| 9·3 | 34·0 | 0·3 | |
| 10·0 | 35·5 | 46·5 | |
| 10·0 | 35·5 | 50·8 | |
| 10·0 | 39·0 | 41·9 | |
| 10·0 | 43·5 | 41·5 | |
| 10·0 | 45·0 | 35·6 | |
| 9·7 | 47·0 | 15·8 | |
| 9·8 | 48·0 | 56·8 | |
| 9·8 | 49·0 | 34·5 | |

## 3181—3240.

| mag. | 11h. m s | −59° ′ | |
|---|---|---|---|
| 10·0 | 6 50·0 | 57·2 | |
| 9·7 | 55·7 | 46·8 | |
| 10·0 | 57·0 | 47·9 | |
| 10·0 | 57·5 | 45·8 | |
| 10·0 | 57·5 | 49·6 | |
| 10·0 | 59·0 | 52·9 | |
| 10·0 | 7 2·5 | 50·2 | |
| 9·5 | 2·5 | 41·9 | 8·0 G |
| 9·6 | 4·8 | 58·4 | |
| 5·1 | 12·5 | 38·3 | 5·2 GSct |
| 9·6 | 17·0 | 19·4 | |
| 10·0 | 19·0 | 54·2 | |
| 7·6 | 20·5 | 0·0 | 7·5 G |
| 9·8 | 22·0 | 4·5 | |
| 10·0 | 27·0 | 11·8 | |
| 9·6 | 29·5 | 47·3 | 9·0 |
| 9·1 | 36·0 | 45·4 | |
| 10·0 | 36·0 | 28·8 | |
| 9·6 | 36·5 | 37·0 | |
| 9·6 | 36·5 | 27·2 | |
| 9·2 | 39·0 | 22·7 | |
| 9·6 | 40·0 | 2·1 | |
| 9·9 | 41·5 | 52·9 | |
| 9·0 | 49·5 | 57·8 | |
| 9·9 | 50·5 | 14·8 | |
| 9·8 | 54·5 | 33·5 | |
| 10·0 | 56·0 | 24·2 | |
| 10·0 | 56·5 | 24·4 | |
| 9·3 | 56·5 | 29·8 | |
| 9·7 | 58·0 | 51·5 | |
| 9·5 | 59·0 | 43·9 | |
| 9·8 | 8 5·5 | 43·7 | |
| 9·4 | 7·0 | 24·8 | 8·5 |
| 9·9 | 10·5 | 45·0 | |
| 10·0 | 13·5 | 17·2 | |
| 9·5 | 13·5 | 36·9 | |
| 9·8 | 16·0 | 21·8 | |
| 10·0 | 16·5 | 20·5 | |
| 9·9 | 20·0 | 10·4 | |
| 10·0 | 22·5 | 37·8 | |
| 9·9 | 26·5 | 53·1 | |
| 10·0 | 27·5 | 47·2 | |
| 10·0 | 30·5 | 43·7 | |
| 9·6 | 32·5 | 44·7 | |
| 10·0 | 37·5 | 45·0 | |
| 10·0 | 38·5 | 39·5 | |
| 10·0 | 38·5 | 43·5 | |
| 10·0 | 38·5 | 10·3 | |
| 10·0 | 39·5 | 12·0 | |
| 9·8 | 43·5 | 43·8 | |
| 9·5 | 44·0 | 17·6 | |
| 9·6 | 48·5 | 36·1 | |
| 10·0 | 49·0 | 19·8 | |
| 9·8 | 52·0 | 14·5 | |
| 10·0 | 55·5 | 17·1 | |
| 9·4 | 56·5 | 22·3 | |
| 10·0 | 9 0·0 | 11·1 | |
| 10·0 | 4·5 | 11·7 | |
| 10·0 | 6·5 | 20·9 | |
| 10·0 | 12·5 | 15·4 | |

**3241—3300.**

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·1 | 9 | 16·5 | 58·8 | 9·5 |
| 9·7 | | 20·0 | 41·4 | |
| 10·0 | | 26·5 | 51·4 | |
| 9·8 | | 26·5 | 34·4 | |
| 9·9 | | 27·5 | 45·2 | |
| 10·0 | | 28·5 | 53·4 | |
| 9·6 | | 29·0 | 52·7 | |
| 10·0 | | 30·0 | 41·8 | |
| 10·0 | | 31·0 | 2·8 | |
| 9·6 | | 33·5 | 30·7 | |
| 10·0 | | 35·5 | 42·2 | |
| 9·5 | | 36·5 | 10·9 | |
| 10·0 | | 36·5 | 28·8 | |
| 8·6 | | 42·0 | 26·4 | 8·5 G |
| 9·1 | | 47·5 | 20·9 | 9·5 |
| 9·9 | | 48·0 | 58·2 | |
| 9·4 | | 48·5 | 10·8 | |
| 10·0 | | 48·5 | 9·8 | |
| 8·0 | | 48·5 | 28·9 | 8·0 G |
| 9·6 | | 55·0 | 48·1 | 9·5 |
| 10·0 | | 56·0 | 19·2 | |
| 9·6 | | 59·0 | 33·7 | |
| 9·9 | | 59·5 | 41·9 | |
| 10·0 | 10 | 8·5 | 33·8 | |
| 9·0 | | 8·5 | 49·9 | 9·5 |
| 9·7 | | 13·0 | 34·5 | |
| 9·9 | | 17·5 | 33·8 | |
| 9·6 | | 18·5 | 27·9 | |
| 9·9 | | 26·5 | 25·9 | |
| 10·0 | | 27·5 | 35·4 | |
| 9·8 | | 28·0 | 38·8 | |
| 10·0 | | 30·5 | 3·8 | |
| 9·5 | | 32·5 | 22·3 | |
| 9·4 | | 34·0 | 41·8 | |
| 10·0 | | 39·5 | 5·3 | |
| 10·0 | | 40·5 | 19·7 | |
| 10·0 | | 41·8 | 56·9 | |
| 9·7 | | 42·5 | 16·4 | |
| 10·0 | | 44·0 | 14·7 | |
| 9·5 | | 46·5 | 20·5 | |
| 10·0 | | 46·5 | 18·8 | |
| 10·0 | | 48·0 | 21·1 | |
| 9·3 | | 48·5 | 20·4 | |
| 10·0 | | 48·5 | 53·1 | |
| 10·0 | | 49·0 | 18·0 | |
| 9·9 | | 56·5 | 4·6 | |
| 9·6 | | 57·0 | 0·8 | |
| 10·0 | | 58·5 | 31·5 | |
| 8·6 | 11 | 2·5 | 53·3 | 8·5 G |
| 10·0 | | 6·5 | 24·7 | |
| 10·0 | | 8·5 | 51·6 | |
| 9·4 | | 15·0 | 34·0 | |
| 10·0 | | 16·5 | 1·9 | |
| 10·0 | | 20·0 | 30·8 | |
| 10·0 | | 23·5 | 35·5 | |
| 9·5 | | 26·0 | 11·0 | |
| 9·2 | | 34·5 | 1·2 | |
| 10·0 | | 36·5 | 2·6 | |
| 9·7 | | 39·0 | 27·9 | |
| 10·0 | | 42·5 | 41·8 | |

**3301—3360.**

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 7·7 | 11 | 46·5 | 5·3 | 7·5 GSt |
| 10·0 | | 50·5 | 50·9 | |
| 10·0 | | 51·5 | 25·9 | |
| 10·0 | | 57·0 | 23·8 | |
| 10·0 | | 57·8 | 0·0 | |
| 10·0 | | 58·0 | 20·5 | |
| 8·6 | 12 | 8·5 | 44·7 | 9·0 |
| 9·5 | | 8·5 | 8·7 | |
| 10·0 | | 12·5 | 56·8 | |
| 9·8 | | 22·5 | 25·4 | |
| 9·6 | | 23·5 | 46·4 | |
| 9·9 | | 26·5 | 46·5 | |
| 9·5 | | 27·5 | 55·8 | |
| 10·0 | | 32·5 | 44·4 | |
| 10·0 | | 33·0 | 18·8 | |
| 9·8 | | 34·5 | 31·8 | |
| 9·8 | | 35·5 | 7·0 | |
| 9·2 | | 36·5 | 31·1 | 9·5 |
| 9·9 | | 38·0 | 43·5 | |
| 9·9 | | 38·5 | 8·6 | |
| 9·1 | | 38·5 | 18·7 | |
| 9·8 | | 39·5 | 42·2 | |
| 10·0 | | 45·0 | 26·8 | |
| 10·0 | | 46·5 | 40·9 | |
| 9·6 | | 46·5 | 29·9 | |
| 10·0 | | 48·5 | 16·9 | |
| 10·0 | | 48·5 | 15·6 | |
| 9·5 | | 48·5 | 41·3 | |
| 10·0 | | 51·5 | 50·6 | |
| 9·0 | | 53·5 | 54·8 | 9·5 |
| 8·8 | | 58·5 | 35·5 | 9·5 |
| 10·0 | 13 | 2·0 | 51·8 | |
| 9·8 | | 2·5 | 41·9 | |
| 8·1 | | 2·5 | 33·6 | 8·0 G |
| 9·6 | | 8·5 | 49·8 | |
| 9·7 | | 15·0 | 2·9 | |
| 9·5 | | 16·0 | 46·8 | |
| 9·8 | | 19·5 | 32·9 | |
| 9·6 | | 28·5 | 33·1 | |
| 9·8 | | 46·5 | 17·5 | |
| 9·8 | | 50·0 | 29·9 | |
| 9·8 | | 51·0 | 6·6 | |
| 10·0 | | 52·5 | 13·6 | |
| 9·7 | | 54·5 | 12·8 | |
| 10·0 | | 55·0 | 14·8 | |
| 8·7 | | 58·0 | 53·7 | 9·0 |
| 9·8 | 14 | 2·0 | 46·1 | |
| 10·0 | | 7·0 | 20·7 | |
| 9·5 | | 7·0 | 18·6 | |
| 10·0 | | 7·0 | 6·2 | |
| 10·0 | | 9·0 | 13·8 | |
| 9·8 | | 12·5 | 26·8 | |
| 10·0 | | 13·0 | 43·8 | |
| 10·0 | | 16·5 | 29·8 | |
| 9·9 | | 17·5 | 55·6 | |
| 10·0 | | 19·5 | 25·4 | |
| 9·0 | | 22·5 | 38·8 | 9·3 |
| 10·0 | | 26·5 | 47·3 | |
| 8·7 | | 27·5 | 35·2 | 8·5 G |
| 10·0 | | 28·5 | 36·0 | |

**3361—3420.**

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·5 | 14 | 31·5 | 50·6 | |
| 9·6 | | 32·5 | 21·5 | |
| 9·7 | | 33·5 | 25·5 | |
| 9·6 | | 34·8 | 1·8 | |
| 10·0 | | 44·0 | 17·4 | |
| 9·6 | | 49·0 | 18·8 | |
| 9·8 | 15 | 2·5 | 19·8 | |
| 8·5 | | 5·5 | 53·8 | 9·0 |
| 10·0 | | 9·0 | 52·5 | |
| 10·0 | | 12·5 | 6·9 | |
| 8·7 | | 12·5 | 50·4 | 9·0 |
| 10·0 | | 13·5 | 24·8 | |
| 10·0 | | 18·0 | 34·8 | |
| 8·8 | | 18·5 | 21·5 | 9·0 |
| 8·6 | | 18·5 | 49·7 | 9·0 |
| 8·0 | | 26·0 | 28·6 | 8·0 G |
| 10·0 | | 26·0 | 57·7 | |
| 9·6 | | 43·0 | 52·1 | |
| 8·8 | | 45·0 | 51·7 | 9·0 |
| 10·0 | | 45·0 | 55·8 | |
| 9·0 | | 49·0 | 6·8 | 9·5 |
| 9·6 | | 52·0 | 1·8 | |
| 9·9 | | 53·5 | 39·5 | |
| 10·0 | | 55·0 | 20·1 | |
| 10·0 | 16 | 2·0 | 49·8 | |
| 9·0 | | 5·5 | 49·2 | 9·0 |
| 9·4 | | 12·5 | 17·2 | |
| 9·5 | | 13·5 | 10·8 | |
| 8·4 | | 17·5 | 18·4 | |
| 10·0 | | 21·0 | 25·1 | |
| 9·6 | | 26·5 | 42·9 | |
| 10·0 | | 30·0 | 20·6 | |
| 9·0 | | 33·0 | 32·8 | |
| 9·6 | | 34·0 | 30·8 | |
| 10·0 | | 36·5 | 30·0 | |
| 9·0 | | 36·5 | 54·0 | |
| 9·6 | | 38·5 | 10·9 | |
| 10·0 | | 39·5 | 44·5 | |
| 9·4 | | 43·0 | 42·0 | |
| 9·2 | | 44·5 | 20·8 | |
| 9·4 | | 46·5 | 54·8 | |
| 9·9 | | 52·0 | 45·8 | |
| 10·0 | | 55·5 | 54·6 | |
| 10·0 | 17 | 11·5 | 38·9 | |
| 10·0 | | 15·0 | 1·8 | |
| 10·0 | | 17·2 | 28·9 | |
| 9·4 | | 18·5 | 3·3 | 8·5 G |
| 9·3 | | 21·5 | 4·3 | |
| 10·0 | | 24·2 | 28·7 | |
| 10·0 | | 26·5 | 5·8 | |
| 9·2 | | 29·5 | 50·0 | |
| 10·0 | | 31·0 | 15·8 | |
| 10·0 | | 35·0 | 19·6 | |
| 10·0 | | 38·5 | 53·8 | |
| 9·2 | | 45·0 | 6·8 | |
| 10·0 | | 48·5 | 51·5 | |
| 9·0 | | 49·0 | 53·5 | 9·5 |
| 9·9 | 18 | 9·0 | 47·6 | |
| 9·4 | | 24·5 | 36·8 | |
| 9·6 | | 25·0 | 8·7 | |

**3421—3480.**

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 18 | 26·5 | 5·5 | |
| 10·0 | | 32·0 | 9·5 | |
| 9·9 | | 33·0 | 6·4 | |
| 9·8 | | 36·5 | 40·0 | |
| 9·1 | | 37·0 | 13·8 | 8·5 |
| 9·8 | | 39·0 | 3·6 | |
| 9·6 | | 40·0 | 51·6 | |
| 10·0 | | 43·5 | 3·5 | |
| 10·0 | | 45·5 | 48·8 | |
| 8·2 | | 46·5 | 6·9 | 8·5 |
| 9·7 | | 47·5 | 8·5 | |
| 10·0 | | 48·0 | 9·5 | |
| 9·5 | | 49·0 | 52·0 | 8·8 |
| 10·0 | | 58·5 | 27·7 | |
| 9·2 | | 59·0 | 41·8 | |
| 9·4 | 19 | 2·0 | 9·8 | |
| 9·4 | | 2·0 | 18·4 | |
| 10·0 | | 2·5 | 56·8 | |
| 10·0 | | 4·5 | 29·4 | |
| 9·9 | | 8·5 | 44·8 | |
| 10·0 | | 11·5 | 5·8 | |
| 8·8 | | 20·5 | 12·4 | 9·5 |
| 10·0 | | 26·5 | 1·6 | |
| 10·0 | | 28·0 | 18·8 | |
| 9·9 | | 33·5 | 21·7 | |
| 10·0 | | 35·5 | 34·0 | |
| 9·6 | | 37·0 | 36·3 | |
| 10·0 | | 42·0 | 16·9 | |
| 9·6 | | 44·0 | 32·6 | |
| 9·9 | | 44·5 | 19·8 | 9·5 |
| 10·0 | | 52·0 | 23·9 | |
| 9·6 | | 52·7 | 0·4 | |
| 9·1 | | 55·5 | 25·6 | |
| 8·6 | 20 | 3·5 | 29·6 | 9·0 |
| 10·0 | | 11·0 | 26·3 | |
| 9·5 | | 15·2 | 57·1 | |
| 10·0 | | 16·0 | 37·8 | |
| 10·0 | | 26·5 | 23·8 | |
| 9·5 | | 30·5 | 17·8 | |
| 9·4 | | 32·5 | 55·5 | |
| 10·0 | | 34·0 | 39·3 | |
| 8·9 | | 38·0 | 13·6 | |
| 9·3 | | 43·5 | 1·8 | |
| 9·8 | | 43·5 | 25·8 | |
| 10·0 | | 44·5 | 59·2 | |
| 9·9 | | 45·0 | 30·6 | |
| 8·4 | | 47·0 | 45·2 | 9·0 |
| 10·0 | | 49·5 | 29·6 | |
| 10·0 | 21 | 6·5 | 29·6 | |
| 9·4 | | 19·5 | 50·0 | |
| 10·0 | | 22·5 | 35·8 | |
| 9·1 | | 25·5 | 12·9 | |
| 8·7 | | 28·0 | 56·0 | 9·0 |
| 8·6 | | 42·0 | 14·5 | |
| 10·0 | | 42·0 | 35·8 | |
| 10·0 | | 43·7 | 0·4 | |
| 10·0 | | 46·5 | 19·5 | |
| 10·0 | | 46·5 | 47·9 | |
| 9·0 | | 47·0 | 51·5 | 9·0 S |
| 10·0 | | 48·0 | 55·6 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 11 | 0 | 62 | 8·1 |
| | 10 | 65 | 8·2 |
| | 20 | 67 | 8·2 |
| | 30 | 69 | 8·3 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 11 | 20 | 67 | 8.2 |
| | 30 | 69 | 8.3 |
| | 40 | 72 | 8.3 |

## 3481—3540.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.6 | 21 | 52.0 | 27.8 | |
| 9.1 | | 56.5 | 30.9 | |
| 8.8 | 22 | 2.0 | 3.8 | 9.2 |
| 10.0 | | 3.5 | 19.1 | |
| 8.2 | | 5.0 | 48.4 | 7.5 GSt |
| 8.6 | | 8.0 | 33.3 | |
| 10.0 | | 17.0 | 57.9 | |
| 8.8 | | 18.0 | 45.6 | 9.5 |
| 9.1 | | 18.5 | 27.8 | |
| 9.8 | | 24.3 | 58.9 | |
| 10.0 | | 25.5 | 41.0 | |
| 9.9 | | 32.5 | 38.2 | |
| 9.5 | | 36.5 | 21.0 | |
| 9.8 | | 38.0 | 24.3 | |
| 10.0 | | 40.0 | 56.3 | |
| 8.4 | | 46.5 | 55.3 | 9.0 G |
| 10.0 | | 49.7 | 1.2 | |
| 9.8 | | 51.5 | 10.9 | |
| 9.4 | | 54.5 | 44.8 | 9.5 |
| 10.0 | 23 | 2.5 | 20.0 | |
| 10.0 | | 3.0 | 15.8 | |
| 9.5 | | 5.0 | 21.8 | |
| 9.2 | | 5.5 | 11.8 | |
| 10.0 | | 7.5 | 38.9 | |
| 9.9 | | 12.0 | 48.9 | |
| 9.3 | | 13.0 | 58.6 | 9.0 |
| 10.0 | | 14.0 | 3.9 | |
| 10.0 | | 14.0 | 25.9 | |
| 10.0 | | 14.0 | 33.1 | |
| 10.0 | | 16.0 | 16.2 | |
| 9.4 | | 17.2 | 56.6 | |
| 9.2 | | 18.5 | 18.6 | |
| 9.2 | | 19.0 | 46.7 | 9.5 |
| 10.0 | | 19.0 | 58.3 | |
| 9.5 | | 26.5 | 53.8 | |
| 9.7 | | 26.7 | 0.1 | |
| 10.0 | | 32.8 | 59.7 | |
| 9.3 | | 35.5 | 33.6 | |
| 9.4 | | 36.5 | 44.4 | |
| 9.3 | | 37.0 | 44.8 | |
| 9.4 | | 41.0 | 9.9 | |
| 9.1 | | 42.5 | 16.0 | |
| 10.0 | | 43.5 | 45.5 | |
| 10.0 | | 43.5 | 57.7 | |
| 10.0 | | 55.5 | 8.0 | |
| 9.2 | | 55.5 | 48.6 | 9.4 |
| 9.8 | 24 | 5.5 | 30.5 | |
| 10.0 | | 7.5 | 9.9 | |
| 9.2 | | 7.5 | 21.0 | 9.5 |
| 10.0 | | 11.5 | 12.1 | |
| 8.9 | | 21.0 | 54.7 | 9.0 |
| 9.9 | | 22.0 | 54.2 | |
| 9.9 | | 23.5 | 26.0 | |
| 9.1 | | 25.5 | 10.7 | |
| 9.9 | | 28.0 | 20.5 | |
| 9.5 | | 34.0 | 51.0 | |
| 8.4 | | 34.0 | 50.2 | 8.8 |
| 10.0 | | 35.0 | 1.6 | |
| 9.6 | | 35.5 | 1.4 | |
| 9.1 | | 38.0 | 35.5 | |

## 3541—3600.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8.6 | 24 | 43.0 | 19.9 | 8.5 G |
| 10.0 | | 45.5 | 45.9 | |
| 10.0 | | 56.0 | 3.9 | |
| 8.2 | 25 | 1.5 | 20.2 | 8.5 |
| 7.3 | | 7.5 | 37.7 | 8.0 G |
| 10.0 | | 8.0 | 52.1 | |
| 10.0 | | 17.5 | 1.3 | |
| 10.0 | | 17.5 | 29.1 | |
| 9.0 | | 17.5 | 33.7 | |
| 9.5 | | 17.5 | 10.9 | |
| 9.0 | | 21.5 | 20.6 | |
| 8.6 | | 32.0 | 23.8 | 9.0 |
| 9.8 | | 35.5 | 16.9 | |
| 10.0 | | 38.5 | 35.9 | |
| 10.0 | | 44.0 | 23.3 | |
| 8.1 | | 47.3 | 57.7 | 8.5 G |
| 10.0 | | 49.0 | 33.8 | |
| 10.0 | | 52.5 | 1.5 | |
| 9.0 | | 55.5 | 46.0 | |
| 9.5 | | 57.5 | 44.7 | |
| 9.0 | 26 | 4.0 | 50.1 | 9.5 |
| 7.2 | | 4.0 | 55.0 | 8.0 GSt |
| 9.3 | | 7.5 | 45.6 | |
| 8.2 | | 14.0 | 3.1 | 8.7 G |
| 10.0 | | 15.5 | 8.6 | |
| 10.0 | | 18.0 | 45.9 | |
| 9.8 | | 19.0 | 26.7 | |
| 9.5 | | 26.0 | 6.5 | |
| 10.0 | | 27.5 | 59.0 | |
| 10.0 | | 29.0 | 57.1 | |
| 9.8 | | 29.5 | 6.1 | |
| 9.7 | | 30.0 | 31.9 | |
| 7.3 | | 45.5 | 1.8 | 7.5 GSt |
| 10.0 | | 46.7 | 57.9 | |
| 9.4 | | 51.5 | 48.0 | |
| 10.0 | | 54.0 | 47.6 | |
| 10.0 | | 55.5 | 55.6 | |
| 10.0 | | 55.5 | 13.2 | |
| 8.6 | | 57.5 | 20.4 | |
| 9.4 | 27 | 4.0 | 54.2 | 9.0 |
| 9.2 | | 6.0 | 27.6 | |
| 9.0 | | 8.0 | 35.4 | 9.0 |
| 8.9 | | 15.0 | 9.3 | |
| 9.5 | | 19.0 | 39.0 | 9.5 |
| 10.0 | | 25.0 | 36.8 | |
| 9.6 | | 26.0 | 3.6 | 9.5 |
| 9.1 | | 27.5 | 23.0 | |
| 10.0 | | 31.0 | 30.0 | |
| 10.0 | | 39.5 | 53.7 | |
| 10.0 | | 40.0 | 51.6 | |
| 10.0 | | 42.0 | 55.2 | |
| 9.6 | | 45.5 | 3.2 | 9.5 |
| 9.7 | | 47.5 | 12.6 | |
| 10.0 | | 47.5 | 14.9 | |
| 10.0 | | 47.5 | 27.2 | |
| 10.0 | | 48.5 | 25.1 | |
| 10.0 | | 49.0 | 49.8 | |
| 10.0 | | 53.5 | 49.3 | |
| 9.8 | | 54.0 | 21.2 | |
| 9.4 | | 55.5 | 55.2 | |

## 3601—3660.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.0 | 27 | 55.5 | 22.1 | |
| 9.3 | 28 | 3.5 | 59.5 | |
| 10.0 | | 5.5 | 40.2 | |
| 9.3 | | 12.0 | 31.6 | |
| 10.0 | | 21.5 | 50.0 | : |
| 10.0 | | 25.5 | 53.7 | |
| 9.8 | | 35.5 | 11.0 | |
| 9.5 | | 45.0 | 57.8 | |
| 10.0 | | 45.5 | 5.0 | |
| 9.8 | | 51.5 | 28.0 | |
| 10.0 | | 52.0 | 27.4 | |
| 9.3 | | 57.5 | 3.8 | |
| 9.8 | | 59.0 | 19.8 | |
| 10.0 | 29 | 5.5 | 21.8 | |
| 9.9 | | 7.0 | 42.4 | |
| 10.0 | | 11.5 | 12.0 | |
| 10.0 | | 15.0 | 17.6 | |
| 10.0 | | 17.5 | 29.0 | : |
| 9.5 | | 25.5 | 44.9 | |
| 9.3 | | 33.0 | 31.7 | 9.5 |
| 10.0 | | 40.5 | 38.0 | |
| 9.9 | | 43.0 | 31.3 | 9.5 |
| 10.0 | | 43.0 | 12.8 | |
| 9.5 | | 45.0 | 33.0 | 9.5 |
| 9.8 | | 45.0 | 46.8 | |
| 10.0 | | 45.5 | 16.8 | |
| 10.0 | | 49.0 | 51.2 | |
| 9.7 | | 54.5 | 46.1 | |
| 10.0 | 30 | 1.0 | 8.8 | |
| 10.0 | | 5.5 | 14.0 | |
| 9.2 | | 5.5 | 10.7 | |
| 10.0 | | 6.0 | 48.4 | |
| 9.2 | | 11.0 | 11.0 | |
| 10.0 | | 14.0 | 55.6 | |
| 8.4 | | 21.5 | 19.2 | 8.5 G |
| 9.6 | | 31.5 | 34.3 | |
| 10.0 | | 33.5 | 45.9 | |
| 8.9 | | 35.5 | 4.8 | 9.7 |
| 9.7 | | 48.0 | 4.6 | |
| 8.4 | 31 | 1.0 | 12.7 | 9.0 |
| 9.5 | | 1.5 | 22.9 | |
| 10.0 | | 7.5 | 15.9 | |
| 10.0 | | 8.0 | 4.3 | |
| 9.6 | | 10.0 | 51.9 | |
| 10.0 | | 21.0 | 11.0 | |
| 9.6 | | 23.5 | 14.1 | |
| 9.5 | | 26.3 | 59.1 | |
| 9.8 | | 39.5 | 30.5 | |
| 7.5 | | 42.0 | 40.3 | 7.5 GSt |
| 10.0 | | 45.0 | 11.9 | |
| 10.0 | | 45.5 | 50.9 | |
| 10.0 | | 48.5 | 58.7 | |
| 10.0 | | 56.0 | 2.4 | |
| 10.0 | | 57.5 | 1.8 | |
| 9.9 | 32 | 0.5 | 45.2 | 9.5 |
| 10.0 | | 5.5 | 1.4 | |
| 9.5 | | 15.5 | 19.5 | |
| 10.0 | | 16.0 | 58.9 | |
| 9.7 | | 22.5 | 27.8 | |
| 10.0 | | 24.0 | 8.1 | |

## 3661—3720.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.1 | 32 | 24.5 | 3.5 | |
| 10.0 | | 25.0 | 1.9 | |
| 10.0 | | 27.5 | 18.7 | |
| 8.9 | | 28.5 | 57.8 | 8.0 Gg |
| 8.9 | | 29.0 | 56.1 | 9.5 |
| 8.9 | | 29.0 | 54.8 | 9.2 |
| 10.0 | | 32.5 | 3.9 | |
| 9.2 | | 33.5 | 32.6 | 9.5 |
| 9.8 | | 42.0 | 55.9 | |
| 10.0 | | 43.0 | 2.9 | |
| 10.0 | | 46.5 | 24.7 | |
| 9.5 | | 46.7 | 1.9 | |
| 9.2 | | 51.5 | 46.3 | |
| 10.0 | | 57.0 | 26.7 | |
| 9.0 | 33 | 5.0 | 11.9 | 9.5 |
| 10.0 | | 22.5 | 41.9 | |
| 9.2 | | 33.5 | 15.5 | |
| 8.7 | | 35.0 | 4.9 | 9.0 |
| 10.0 | | 36.5 | 10.7 | |
| 10.0 | | 46.5 | 2.9 | |
| 8.7 | | 48.5 | 28.8 | |
| 9.1 | | 50.0 | 41.8 | 9.5 |
| 9.7 | | 55.0 | 7.9 | |
| 10.0 | 34 | 14.0 | 17.1 | |
| 10.0 | | 15.0 | 15.6 | |
| 9.4 | | 18.0 | 21.2 | |
| 10.0 | | 18.5 | 6.6 | |
| 9.7 | | 24.7 | 3.0 | |
| 9.6 | | 28.5 | 25.1 | |
| 9.5 | | 33.3 | 59.6 | 9.0 |
| 10.0 | | 34.0 | 48.0 | |
| 8.4 | | 38.0 | 47.0 | 8.7 G |
| 9.0 | | 41.5 | 43.2 | 9.2 |
| 9.6 | | 49.0 | 18.0 | |
| 9.7 | 35 | 0.5 | 55.4 | |
| 9.8 | | 5.0 | 0.3 | |
| 8.4 | | 5.5 | 55.1 | 8.8 G |
| 10.0 | | 13.0 | 5.9 | |
| 8.4 | | 14.5 | 17.8 | 9.0 |
| 10.0 | | 21.5 | 31.0 | |
| 10.0 | | 23.5 | 35.9 | |
| 9.8 | | 24.5 | 16.1 | |
| 9.4 | | 25.5 | 15.9 | 9.0 |
| 10.0 | | 26.5 | 42.9 | |
| 10.0 | | 27.0 | 36.8 | |
| 8.5 | | 27.5 | 11.0 | 9.5 |
| 9.4 | | 27.5 | 59.1 | |
| 10.0 | | 31.5 | 36.3 | |
| 9.3 | | 31.5 | 3.7 | 9.0 |
| 10.0 | | 32.0 | 54.2 | |
| 10.0 | | 33.0 | 4.5 | |
| 10.0 | | 35.0 | 59.7 | |
| 9.8 | | 35.5 | 37.9 | |
| 8.8 | | 45.5 | 32.1 | 9.5 |
| 10.0 | | 45.5 | 58.9 | |
| 10.0 | | 45.5 | 30.0 | |
| 7.6 | | 55.5 | 32.1 | 7.5 GSt |
| 10.0 | | 56.5 | 48.8 | |
| 9.9 | 36 | 0.5 | 23.5 | |
| 10.0 | | 1.5 | 35.0 | |



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## 3721—3780.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·1 | 36 | 14·5 | 32·0 | |
| 9·6 | | 23·5 | 46·0 | |
| 10·0 | | 28·8 | 59·9 | |
| 9·6 | | 32·0 | 34·8 | |
| 8·2 | | 33·0 | 59·1 | 9·0 |
| 10·0 | | 35·5 | 29·0 | |
| 9·1 | | 37·5 | 17·0 | |
| 8·8 | | 39·5 | 43·6 | 8·0 GSt |
| 8·8 | | 49·7 | 59·1 | 9·5 |
| 10·0 | | 53·0 | 13·4 | |
| 10·0 | | 53·5 | 25·2 | |
| 8·5 | | 55·5 | 22·8 | 9·0 |
| 10·0 | 37 | 1·0 | 49·7 | |
| 8·7 | | 1·2 | 57·6 | 9·0 |
| 9·8 | | 3·0 | 52·0 | |
| 8·2 | | 4·0 | 14·8 | 8·5 |
| 10·0 | | 5·5 | 19·8 | |
| 9·2 | | 8·0 | 23·1 | |
| 9·1 | | 8·5 | 6·9 | 9·0 |
| 10·0 | | 8·5 | 20·0 | |
| 9·7 | | 8·5 | 20·7 | |
| 10·0 | | 10·5 | 47·3 | |
| 9·9 | | 13·5 | 8·9 | |
| 10·0 | | 18·0 | 16·0 | |
| 9·3 | | 20·5 | 39·1 | |
| 10·0 | | 29·0 | 15·9 | |
| 10·0 | | 30·5 | 8·1 | |
| 10·0 | | 34·0 | 14·0 | |
| 10·0 | | 34·5 | 4·9 | |
| 8·5 | | 35·5 | 26·1 | 9·0 |
| 8·8 | | 45·5 | 24·9 | 9·5 |
| 10·0 | | 52·5 | 46·1 | |
| 9·4 | | 54·0 | 43·0 | |
| 8·5 | | 55·0 | 18·7 | 9·0 |
| 8·3 | 38 | 5·5 | 46·0 | 8·5 G |
| 9·2 | | 8·5 | 56·7 | 9·0 |
| 9·7 | | 9·0 | 52·6 | |
| 10·0 | | 14·0 | 42·9 | |
| 10·0 | | 14·0 | 13·0 | |
| 9·6 | | 15·5 | 13·1 | |
| 9·5 | | 15·5 | 1·0 | |
| 10·0 | | 21·0 | 45·9 | |
| 8·8 | | 22·0 | 18·5 | |
| 10·0 | | 24·5 | 59·9 | |
| 7·4 | | 41·5 | 42·4 | 8·2 G |
| 10·0 | | 43·5 | 41·3 | 9·5 |
| 10·0 | | 46·0 | 41·3 | |
| 9·9 | | 48·5 | 42·1 | |
| 10·0 | | 54·0 | 24·5 | |
| 10·0 | | 55·5 | 32·6 | |
| 9·2 | | 59·5 | 22·0 | 9·0 |
| 9·8 | 39 | 15·0 | 45·5 | |
| 10·0 | | 18·5 | 14·1 | |
| 10·0 | | 19·5 | 0·1 | |
| 9·2 | | 29·5 | 50·2 | 9·0 |
| 10·0 | | 38·0 | 35·9 | |
| 9·8 | | 38·5 | 25·7 | |
| 9·5 | | 52·0 | 28·7 | |
| 10·0 | | 54·5 | 17·3 | |
| 8·9 | | 56·0 | 50·1 | 9·5 |

## 3781—3840.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 40 | 8·0 | 42·1 | |
| 9·8 | | 12·0 | 50·3 | |
| 10·0 | | 19·0 | 42·9 | |
| 10·0 | | 20·5 | 14·0 | |
| 9·6 | | 22·5 | 22·0 | |
| 9·4 | | 27·5 | 31·8 | 9·0 GSct |
| 10·0 | | 29·0 | 33·6 | |
| 9·6 | | 32·5 | 42·0 | |
| 9·5 | | 34·0 | 15·1 | |
| 9·3 | | 47·0 | 3·5 | 9·5 |
| 10·0 | | 47·0 | 42·1 | |
| 9·4 | | 54·0 | 47·1 | |
| 10·0 | | 54·5 | 31·8 | |
| 10·0 | | 55·0 | 42·1 | |
| 10·0 | | 58·0 | 33·1 | |
| 9·2 | | 58·5 | 51·7 | 9·5 |
| 10·0 | 41 | 2·5 | 49·8 | |
| 10·0 | | 5·0 | 44·1 | |
| 8·9 | | 7·0 | 55·1 | 9·5 |
| 9·1 | | 13·0 | 21·8 | 9·0 |
| 9·8 | | 14·8 | 33·9 | |
| 10·0 | | 15·5 | 6·3 | |
| 8·2 | | 28·5 | 55·9 | 8·2 G |
| 10·0 | | 29·5 | 30·0 | |
| 9·8 | | 32·0 | 4·1 | |
| 8·6 | | 33·0 | 25·1 | 8·5 |
| 9·6 | | 42·3 | 39·5 | |
| 9·8 | | 52·3 | 28·1 | |
| 8·2 | | 52·8 | 52·2 | 9·0 |
| 10·0 | | 53·8 | 55·3 | |
| 10·0 | | 55·0 | 31·1 | |
| 9·8 | | 55·7 | 15·9 | |
| 10·2 | 42 | 2·0 | 17·4 | |
| 10·0 | | 7·2 | 38·3 | |
| 10·0 | | 16·8 | 52·1 | |
| 10·0 | | 18·3 | 48·9 | |
| 10·2 | | 23·0 | 37·3 | |
| 9·8 | | 23·0 | 37·8 | |
| 10·0 | | 24·7 | 28·1 | |
| 9·7 | | 25·2 | 21·1 | |
| 9·9 | | 37·0 | 8·6 | |
| 9·8 | | 38·5 | 15·9 | |
| 9·9 | | 41·5 | 36·0 | |
| 9·9 | | 51·5 | 56·8 | |
| 10·0 | | 52·5 | 30·1 | |
| 9·1 | | 53·5 | 51·9 | |
| 9·7 | | 54·5 | 11·6 | |
| 9·7 | 43 | 10·5 | 27·9 | |
| 9·7 | | 10·5 | 31·5 | |
| 9·3 | | 15·5 | 56·2 | 9·5 |
| 10·2 | | 17·3 | 58·5 | |
| 9·0 | | 18·5 | 43·9 | 7·7 Gt |
| 10·0 | | 25·5 | 7·6 | |
| 10·2 | | 32·0 | 12·6 | |
| 9·2 | | 33·0 | 54·7 | |
| 9·9 | | 50·5 | 38·6 | |
| 9·1 | | 51·0 | 6·4 | |
| 9·0 | | 51·5 | 26·5 | 9·5 G |
| 9·1 | | 52·5 | 28·0 | G |
| 10·0 | | 59·5 | 36·0 | |

## 3841—3900.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 44 | 1·0 | 30·4 | |
| 10·0 | | 7·5 | 45·1 | |
| 9·4 | | 8·0 | 31·9 | |
| 9·8 | | 8·0 | 10·1 | |
| 10·2 | | 10·0 | 50·1 | |
| 9·8 | | 16·0 | 56·0 | |
| 9·8 | | 27·5 | 20·2 | |
| 9·3 | | 28·2 | 2·5 | |
| 9·7 | | 30·3 | 57·5 | |
| 9·6 | | 36·0 | 28·6 | |
| 9·2 | | 38·5 | 2·7 | |
| 9·8 | | 38·5 | 18·6 | |
| 9·7 | | 40·5 | 19·0 | |
| 9·7 | | 42·0 | 11·1 | |
| 9·8 | | 42·5 | 18·4 | |
| 9·5 | | 49·0 | 27·7 | |
| 10·2 | | 51·5 | 22·2 | |
| 8·5 | | 54·5 | 29·0 | 8·0 G |
| 10·0 | 45 | 1·5 | 12·1 | |
| 9·4 | | 3·0 | 29·1 | |
| 9·4 | | 5·5 | 28·5 | |
| 9·2 | | 8·5 | 48·2 | 9·5 |
| 10·0 | | 11·2 | 1·7 | |
| 10·2 | | 12·5 | 16·1 | |
| 9·1 | | 23·0 | 22·6 | 9·5 |
| 10·0 | | 29·5 | 31·9 | |
| 10·0 | | 40·0 | 9·9 | |
| 9·6 | | 41·5 | 54·9 | |
| 9·4 | | 41·5 | 35·8 | |
| 9·3 | | 49·5 | 17·3 | |
| 9·7 | | 49·5 | 31·2 | |
| 9·3 | | 50·5 | 49·0 | 9·5 |
| 9·6 | | 55·7 | 2·1 | |
| 9·7 | | 58·5 | 16·0 | |
| 9·0 | 46 | 1·0 | 50·1 | 9·5 |
| 9·8 | | 3·5 | 39·0 | |
| 9·7 | | 7·0 | 6·4 | |
| 10·2 | | 9·5 | 6·9 | |
| 9·3 | | 18·0 | 5·7 | |
| 10·2 | | 19·5 | 51·0 | |
| 10·0 | | 20·5 | 48·5 | |
| 10·0 | | 22·0 | 14·6 | |
| 10·2 | | 22·0 | 18·9 | |
| 9·6 | | 23·0 | 18·0 | |
| 9·4 | | 25·5 | 37·7 | |
| 10·2 | | 28·0 | 17·9 | |
| 9·0 | | 32·0 | 50·8 | 9·0 |
| 10·0 | | 33·5 | 54·1 | |
| 10·2 | | 35·0 | 59·3 | |
| 10·0 | | 38·5 | 54·1 | |
| 10·2 | | 41·5 | 45·1 | |
| 9·3 | | 44·5 | 17·9 | 9·0 |
| 8·7 | | 48·5 | 4·6 | 9·5 |
| 9·1 | | 53·5 | 41·6 | 9·5 |
| 10·2 | 47 | 0·2 | 0·8 | |
| 10·2 | | 0·5 | 22·6 | |
| 9·9 | | 2·0 | 11·7 | |
| 10·2 | | 3·0 | 3·2 | |
| 10·0 | | 5·5 | 8·0 | |
| 10·0 | | 6·0 | 18·0 | |

## 3901—3960.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·0 | 47 | 9·0 | 17·3 | |
| 10·0 | | 11·5 | 42·0 | |
| 9·8 | | 14·5 | 41·1 | |
| 10·2 | | 18·5 | 9·0 | |
| 10·2 | | 18·5 | 19·1 | |
| 10·0 | | 21·0 | 12·1 | |
| 9·7 | | 21·5 | 27·4 | |
| 10·0 | | 23·0 | 46·1 | |
| 10·0 | | 25·0 | 2·4 | |
| 8·4 | | 28·5 | 34·2 | 9·0 |
| 9·6 | | 34·5 | 53·6 | |
| 9·8 | | 34·5 | 59·0 | |
| 9·6 | | 40·0 | 13·3 | |
| 9·0 | | 50·0 | 49·1 | |
| 9·1 | | 50·5 | 18·0 | |
| 10·0 | | 50·5 | 25·1 | |
| 9·6 | | 54·5 | 32·7 | |
| 10·2 | | 55·5 | 42·3 | |
| 10·2 | 48 | 9·5 | 16·6 | |
| 9·9 | | 22·3 | 57·2 | |
| 10·2 | | 24·5 | 59·3 | |
| 8·5 | | 31·5 | 59·4 | 8·5 |
| 9·6 | | 37·3 | 57·4 | |
| 10·0 | | 38·0 | 55·1 | |
| 9·8 | | 38·5 | 32·0 | |
| 9·8 | | 42·0 | 51·2 | 9·5 |
| 10·2 | | 43·0 | 7·4 | |
| 10·2 | | 44·5 | 33·7 | |
| 9·0 | | 47·5 | 36·9 | |
| 9·8 | | 54·5 | 37·1 | |
| 10·0 | | 56·5 | 2·8 | |
| 9·8 | | 58·5 | 27·2 | |
| 9·7 | 49 | 4·5 | 15·3 | 9·0 G |
| 8·8 | | 10·0 | 43·2 | 9·0 |
| 9·0 | | 10·0 | 18·2 | 8·5 G |
| 10·0 | | 25·5 | 54·2 | 9·5 |
| 9·2 | | 28·5 | 55·9 | 9·5 |
| 10·2 | | 36·0 | 33·4 | |
| 9·3 | | 41·5 | 15·3 | |
| 9·0 | | 41·5 | 35·3 | |
| 10·0 | | 42·5 | 38·8 | |
| 8·2 | | 47·0 | 30·9 | 9·0 |
| 9·2 | | 48·5 | 49·8 | |
| 10·2 | | 49·0 | 30·0 | |
| 10·2 | | 50·0 | 17·9 | |
| 10·0 | | 51·5 | 47·8 | |
| 9·4 | | 51·5 | 53·6 | |
| 10·2 | | 56·5 | 57·1 | |
| 9·6 | | 57·5 | 33·9 | |
| 10·0 | 50 | 13·0 | 3·7 | |
| 9·8 | | 15·0 | 2·0 | |
| 9·9 | | 22·5 | 20·0 | |
| 10·0 | | 26·0 | 44·1 | |
| 10·0 | | 28·5 | 1·0 | |
| 10·2 | | 30·5 | 39·1 | |
| 9·6 | | 30·7 | 0·3 | 9·5 |
| 9·7 | | 33·5 | 28·0 | |
| 10·0 | | 35·5 | 53·2 | |
| 8·2 | | 37·5 | 7·6 | 9·0 |
| 10·0 | | 41·5 | 45·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 69 | 8·3 |
| | 40 | 72 | 8·3 |
| | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |

### 3961—4020.

| mag. | 11h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 50 | 48·0 | 7·0 | |
| 10·2 | 51 | 8·5 | 39·1 | |
| 9·6 | | 18·5 | 17·6 | |
| 8·2 | | 30·0 | 45·2 | 7·5 GSt |
| 10·2 | | 31·0 | 20·9 | |
| 9·3 | | 33·5 | 45·9 | 9·5 |
| 9·0 | | 38·0 | 23·0 | |
| 10·2 | | 41·5 | 35·1 | |
| 9·4 | | 47·5 | 37·1 | |
| 9·3 | | 50·0 | 50·0 | |
| 7·6 | 52 | 2·5 | 3·7 | 7·8 GSg |
| 8·4 | | 11·5 | 9·2 | 9·5 |
| 10·0 | | 15·0 | 59·4 | |
| 9·0 | | 20·7 | 57·6 | 9·5 |
| 9·2 | | 25·5 | 46·9 | 9·5 |
| 9·3 | | 26·0 | 16·9 | |
| 9·6 | | 27·5 | 36·8 | |
| 10·0 | | 32·0 | 20·1 | |
| 9·9 | | 49·0 | 37·9 | |
| 10·2 | | 59·0 | 59·6 | |
| 10·2 | 53 | 0·0 | 57·7 | |
| 9·2 | | 8·5 | 52·1 | |
| 9·2 | | 8·5 | 27·4 | |
| 10·2 | | 10·0 | 10·9 | |
| 10·0 | | 11·0 | 54·4 | |
| 10·2 | | 22·5 | 4·0 | |
| 10·2 | | 29·0 | 5·8 | |
| 9·0 | | 31·5 | 50·7 | 9·5 |
| 10·2 | | 38·5 | 13·1 | |
| 10·0 | | 44·0 | 49·1 | |
| 9·2 | | 50·0 | 4·1 | |
| 10·2 | 54 | 1·5 | 46·0 | |
| 10·0 | | 8·5 | 5·2 | 9·5 G |
| 9·8 | | 10·5 | 31·9 | |
| 8·9 | | 11·5 | 15·7 | 8·8 |
| 10·0 | | 16·0 | 41·9 | |
| 9·3 | | 17·0 | 39·2 | |
| 10·0 | | 20·5 | 25·4 | |
| 9·5 | | 21·0 | 52·2 | |
| 9·8 | | 23·0 | 42·1 | |
| 9·7 | | 32·0 | 10·3 | |
| 9·8 | | 34·0 | 8·1 | |
| 9·4 | | 42·0 | 55·1 | |
| 10·2 | | 54·5 | 18·2 | |
| 9·6 | | 55·0 | 45·2 | |
| 9·8 | | 57·5 | 30·1 | |
| 9·0 | 55 | 3·0 | 36·2 | |
| 9·0 | | 10·0 | 39·0 | 9·2 |
| 9·6 | | 11·0 | 17·9 | |
| 10·2 | | 11·5 | 10·7 | |
| 9·9 | | 13·0 | 49·0 | |
| 10·0 | | 13·5 | 18·4 | |
| 9·8 | | 16·0 | 15·7 | |
| 10·0 | | 18·5 | 38·0 | |
| 8·6 | | 33·0 | 17·1 | 9·5 |
| 10·0 | | 38·5 | 44·2 | |
| 10·2 | | 49·0 | 1·4 | |
| 9·6 | | 53·0 | 38·2 | |
| 8·7 | | 59·0 | 17·4 | 9·2 |
| 9·3 | 56 | 1·0 | 56·4 | |

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| 10·2 | | 3·5 | 59·3 | |
| 9·7 | | 10·5 | 17·0 | |
| 10·0 | | 14·5 | 20·0 | |
| 9·9 | | 18·0 | 22·0 | |
| 8·9 | | 25·5 | 28·8 | 9·5 |
| 9·1 | | 48·0 | 40·6 | 9·2 |
| 10·2 | 57 | 2·5 | 12·8 | |
| 10·2 | | 5·5 | 4·6 | |
| 10·2 | | 8·0 | 12·1 | |
| 9·0 | | 11·0 | 48·0 | 9·5 |
| 8·8 | | 20·0 | 3·4 | 9·0 |
| 10·0 | | 24·0 | 5·2 | |
| 9·6 | | 27·5 | 5·8 | |
| 10·0 | | 27·5 | 55·1 | |
| 9·6 | | 58·5 | 56·4 | |
| 9·4 | 58 | 9·5 | 12·0 | |
| 9·9 | | 13·5 | 46·7 | |
| 10·2 | | 19·5 | 9·1 | |
| 10·0 | | 25·0 | 32·0 | |
| 9·4 | | 25·5 | 43·9 | 9·5 |
| 9·8 | | 26·5 | 40·8 | 9·0 |
| 10·0 | | 31·0 | 51·1 | |
| 8·6 | | 31·0 | 9·7 | 9·0 G |
| 9·9 | | 32·5 | 40·2 | |
| 9·3 | | 47·0 | 19·0 | |
| 10·2 | 59 | 7·5 | 12·3 | |
| 8·6 | | 9·5 | 4·5 | 9·5 |
| 9·6 | | 24·5 | 41·1 | |
| 10·0 | | 34·2 | 0·3 | |
| 10·2 | | 47·5 | 14·1 | |
| 10·2 | | 49·0 | 50·1 | |
| 10·2 | | 59·5 | 49·6 | |
| 8·9 | 0 | 18·0 | 3·5 | 8·8 |
| 9·7 | | 19·5 | 43·7 | |
| 10·2 | | 20·5 | 55·1 | |
| 9·8 | | 21·5 | 28·9 | |
| 9·9 | | 23·5 | 18·1 | |
| 9·6 | | 30·5 | 36·2 | |
| 10·0 | | 31·0 | 57·5 | |
| 10·2 | | 33·5 | 54·8 | |
| 9·8 | | 37·0 | 49·8 | |
| 10·0 | | 38·5 | 18·1 | |
| 9·8 | | 54·5 | 15·2 | |
| 9·6 | | 56·5 | 16·2 | |
| 9·8 | 1 | 2·0 | 48·4 | |
| 9·7 | | 6·0 | 49·6 | |
| 10·2 | | 19·5 | 56·7 | |
| 9·6 | | 28·0 | 3·9 | |
| 9·2 | | 31·0 | 13·5 | |
| 9·9 | 2 | 2·0 | 15·9 | |
| 10·2 | | 11·5 | 1·2 | |
| 10·2 | | 12·5 | 20·0 | |
| 10·2 | | 14·0 | 40·1 | |
| 9·0 | | 14·0 | 13·0 | |
| 10·0 | | 21·0 | 11·2 | |
| 10·0 | | 25·0 | 7·6 | |
| 8·9 | | 43·5 | 47·9 | 9·3 |
| 10·0 | | 46·0 | 36·2 | |
| 7·2 | | 51·5 | 4·4 | 7·7 GS |

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| 9·6 | 2 | 51·5 | 6·8 | |
| 9·2 | 3 | 5·5 | 44·6 | |
| 9·2 | | 25·0 | 39·5 | |
| 9·6 | | 31·5 | 44·2 | 9·5 |
| 10·2 | | 43·5 | 5·3 | |
| 8·9 | 4 | 20·5 | 13·0 | 9·5 |
| 10·0 | | 21·0 | 31·8 | |
| 10·2 | | 45·5 | 36·0 | |
| 9·6 | 5 | 6·0 | 46·1 | 9·7 |
| 10·2 | | 28·5 | 8·1 | |
| 10·2 | | 29·0 | 7·1 | |
| 9·9 | | 34·2 | 1·9 | |
| 9·4 | | 38·0 | 54·0 | |
| 9·2 | | 39·5 | 16·2 | |
| 9·0 | | 40·5 | 38·4 | 9·5 |
| 10·2 | | 49·0 | 30·0 | |
| 7·7 | | 51·5 | 22·2 | 7·0 GSt |
| 9·6 | | 52·0 | 12·8 | |
| 10·0 | | 52·5 | 35·4 | |
| 10·2 | | 54·0 | 21·1 | |
| 10·0 | | 55·0 | 7·9 | |
| 7·7 | 6 | 8·0 | 20·7 | 8·0 GS |
| 9·9 | | 8·0 | 32·1 | |
| 9·2 | | 8·2 | 57·4 | |
| 10·2 | | 9·5 | 21·8 | |
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| 9·6 | | 23·0 | 58·0 | 9·2 |
| 9·9 | | 26·0 | 51·1 | |
| 9·2 | | 29·0 | 45·4 | |
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| 10·2 | | 32·0 | 44·2 | |
| 8·6 | | 49·0 | 59·1 | 9·0 |
| 8·8 | 7 | 0·0 | 54·0 | 9·5 |
| 10·2 | | 6·0 | 57·1 | |
| 10·2 | | 8·5 | 25·4 | |
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| 9·4 | | 31·0 | 54·4 | |
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| 10·2 | 8 | 2·0 | 37·8 | |
| 9·2 | | 4·0 | 49·3 | 9·5 |
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| 10·2 | 9 | 4·0 | 10·6 | |
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| 10·2 | | 30·0 | 2·0 | |
| 9·0 | | 31·5 | 50·1 | |
| 10·0 | | 34·5 | 49·7 | |
| 8·4 | | 35·0 | 11·2 | 8·8 |
| 10·2 | | 40·5 | 54·0 | |
| 9·0 | | 40·5 | 11·0 | 10·0 |
| 9·9 | 10 | 2·0 | 42·4 | |
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| 9·7 | 16 | 26·5 | 57·1 | |
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| 9·8 | 18 | 1·5 | 41·1 | |
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| 8·7 | | 12·5 | 20·7 | 8·0 |
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| 9·4 | | 41·0 | 24·0 | |
| 10·0 | | 41·0 | 25·3 | |
| 9·3 | | 44·5 | 6·4 | |
| 9·4 | 22 | 4·5 | 44·0 | |
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| 9·4 | | 25·0 | 5·3 | 9·5 |
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| 10·0 | | 55·5 | 33·8 | |
| 10·1 | | 57·5 | 57·8 | |

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| 10·2 | | 22·5 | 10·6 | |
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| 9·8 | | 45·7 | 28·9 | |
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| 9·8 | | 52·0 | 54·9 | |
| 9·9 | | 59·7 | 29·2 | |
| 8·8 | 24 | 3·0 | 16·9 | |
| 9·8 | | 6·0 | 50·9 | |
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| 10·2 | | 17·0 | 5·0 | |
| 9·7 | | 17·0 | 30·0 | 9·5 |
| 10·1 | | 20·5 | 59·4 | G |
| 9·6 | | 24·0 | 16·4 | |
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| 9·4 | 25 | 1·0 | 52·1 | |
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| 10·2 | | 51·2 | 54·3 | |
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| 9·2 | 26 | 41·5 | 52·3 | |
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| 9·7 | 27 | 0·5 | 34·7 | |
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| 10·0 | | 59·5 | 34·0 | |
| 8·8 | 34 | 5·5 | 38·2 | |
| 10·0 | | 7·5 | 26·1 | |
| 8·6 | | 16·0 | 6·4 | 8·4 G |
| 10·2 | | 22·5 | 55·0 | |
| 9·6 | | 26·5 | 49·5 | |
| 10·2 | | 36·0 | 10·1 | |
| 9·5 | | 43·5 | 18·9 | |
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| 10·0 | | 31·5 | 7·2 | 9·8 |
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| 10·1 | | 56·5 | 15·6 | |
| 9·7 | 36 | 6·0 | 7·0 | 9·2 |
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| 8·9 | | 26·0 | 34·1 | 9·5 |
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| 10·2 | | 8·5 | 4·1 | |
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| 10·2 | | 24·5 | 46·8 | |
| 8·1 | | 26·0 | 47·2 | 8·2 G |
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| 8·4 | | 51·0 | 23·4 | 8·0 GSt |
| 10·2 | 38 | 0·0 | 21·4 | |
| 10·2 | | 16·5 | 26·3 | |
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| 10·0 | 39 | 0·5 | 11·3 | |
| 10·2 | | 4·5 | 39·1 | |
| 10·0 | | 10·5 | 43·6 | |
| 8·7 | | 12·5 | 51·2 | 9·5 |
| 10·2 | | 12·5 | 54·4 | |
| 9·8 | | 13·5 | 42·4 | |
| 8·8 | | 17·0 | 31·1 | 9·5 |
| 10·2 | | 20·0 | 55·2 | |
| 9·2 | | 20·5 | 21·0 | 8·2 |
| 10·1 | | 22·0 | 1·0 | |
| 10·2 | | 23·0 | 59·0 | |
| 10·2 | | 38·5 | 57·7 | |
| 8·8 | | 43·0 | 43·3 | 8·2 G |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |
| | 30 | 84 | 8·3 |
| | 40 | 87 | 8·2 |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 12 | 30 | 84 | 8·3 |
| | 40 | 87 | 8·2 |
| | 50 | 89 | 8·2 |
| 13 | 0 | 91 | 8·1 |

**4441—4500.**

| mag. | 12h. m s | −59° ′ | |
|---|---|---|---|
| 9·7 | 39 43·5 | 23·3 | |
| 10·2 | 45·5 | 9·3 | |
| 10·1 | 48·5 | 53·4 | |
| 9·8 | 51·0 | 59·3 | |
| 10·1 | 56·5 | 35·0 | |
| 9·2 | 57·5 | 7·5 | |
| 9·5 | 40 3·5 | 20·0 | |
| 8·0 | 16·5 | 23·9 | 7·5 GSt |
| 8·8 | 17·0 | 28·8 | 9·0 |
| 10·0 | 21·5 | 18·8 | |
| 2·8 | 24·0 | 0·3 | 2·0 GStrλ |
| 9·7 | 32·0 | 25·4 | |
| 10·1 | 37·5 | 38·1 | |
| 10·1 | 37·5 | 6·6 | |
| 10·2 | 37·5 | 53·5 | |
| 9·5 | 38·5 | 22·0 | |
| 10·1 | 42·0 | 7·0 | |
| 9·4 | 46·0 | 21·1 | |
| 9·1 | 46·0 | 39·8 | 8·5 |
| 8·1 | 50·5 | 31·6 | 8·0 G |
| 9·7 | 52·5 | 58·5 | |
| 10·2 | 53·5 | 6·9 | |
| 9·0 | 54·5 | 41·2 | 9·0 |
| 9·6 | 58·5 | 35·0 | 9·0 |
| 9·4 | 41 1·0 | 53·5 | |
| 10·1 | 3·5 | 25·9 | |
| 10·2 | 12·5 | 41·1 | |
| 9·5 | 23·5 | 13·6 | |
| 10·2 | 26·0 | 11·5 | |
| 10·2 | 35·0 | 13·2 | |
| 9·8 | 37·0 | 51·9 | |
| 10·2 | 37·5 | 16·3 | |
| 10·2 | 43·0 | 11·5 | |
| 8·6 | 52·0 | 58·8 | 8·5 |
| 9·7 | 54·5 | 3·5 | |
| 9·5 | 42 0·0 | 54·7 | |
| 10·2 | 14·0 | 58·3 | |
| 8·8 | 17·0 | 25·9 | 9·0 |
| 9·9 | 21·5 | 41·9 | |
| 8·9 | 23·5 | 49·9 | 9·0 |
| 10·2 | 45·5 | 2·0 | |
| 9·0 | 46·5 | 19·2 | 8·0 |
| 7·5 | 49·0 | 43·1 | 7·5 GSt |
| 9·8 | 43 3·5 | 0·3 | |
| 8·6 | 5·0 | 59·0 | G |
| 10·2 | 25·5 | 58·4 | |
| 10·0 | 27·0 | 47·8 | |
| 8·6 | 34·0 | 45·9 | 9·5 |
| 9·4 | 36·0 | 55·7 | G |
| 9·5 | 38·0 | 23·8 | |
| 10·2 | 46·5 | 22·0 | |
| 9·6 | 48·2 | 58·4 | |
| 9·2 | 50·5 | 41·2 | |
| 6·9 | 55·0 | 38·9 | 6·5 GSct |
| 9·8 | 44 6·0 | 11·0 | |
| 10·2 | 12·0 | 47·4 | |
| 10·2 | 13·5 | 45·4 | |
| 8·8 | 13·5 | 49·0 | |
| 9·5 | 21·0 | 14·3 | |
| 9·8 | 22·5 | 8·2 | |

**4501—4560.**

| mag. | 12h. m s | −59° ′ | |
|---|---|---|---|
| 9·4 | 44 26·5 | 13·7 | |
| 9·0 | 28·0 | 43·4 | |
| 9·3 | 36·5 | 56·2 | |
| 8·8 | 37·0 | 52·1 | |
| 10·0 | 37·5 | 29·1 | |
| 10·2 | 39·5 | 58·5 | |
| 9·9 | 45·5 | 5·0 | |
| 9·8 | 50·5 | 19·1 | |
| 10·2 | 45 3·0 | 59·5 | |
| 9·5 | 3·5 | 17·1 | |
| 10·1 | 8·5 | 42·1 | |
| 9·4 | 10·5 | 45·1 | |
| 9·6 | 11·0 | 37·4 | |
| 10·1 | 12·5 | 34·0 | |
| 9·8 | 13·5 | 39·4 | |
| 9·2 | 27·0 | 53·0 | |
| 9·7 | 27·9 | 42·0 | G |
| 10·0 | 31·5 | 58·2 | |
| 9·2 | 32·5 | 36·3 | |
| 10·0 | 35·9 | 42·4 | |
| 9·2 | 38·5 | 1·0 | |
| 10·2 | 44·4 | 41·6 | |
| 9·4 | 44·4 | 45·2 | |
| 10·2 | 44·9 | 43·4 | |
| 10·2 | 47·9 | 43·2 | |
| 9·4 | 48·4 | 46·9 | |
| 9·4 | 52·5 | 29·6 | |
| 9·3 | 54·4 | 42·4 | G |
| 6·5 | 55·4 | 38·9 | 6·5 GSt |
| 10·2 | 57·4 | 43·0 | |
| 10·0 | 57·9 | 40·8 | |
| 9·6 | 58·9 | 41·2 | G |
| 9·9 | 58·9 | 41·6 | G |
| 10·2 | 59·0 | 35·3 | |
| 9·4 | 59·4 | 42·2 | G |
| 10·2 | 46 0·4 | 38·4 | |
| 10·0 | 0·9 | 40·0 | |
| 8·8 | 1·0 | 31·0 | |
| 10·0 | 4·4 | 40·5 | |
| 9·2 | 7·4 | 43·8 | |
| 9·8 | 7·4 | 40·2 | G |
| 9·4 | 8·9 | 43·0 | G |
| 7·8 | 10·4 | 40·7 | 7·2 Gtp |
| 9·6 | 11·9 | 42·0 | G |
| 10·2 | 12·0 | 57·0 | |
| 9·4 | 13·9 | 43·0 | G |
| 9·6 | 14·9 | 40·2 | 7·7 GS |
| 10·2 | 17·4 | 43·2 | |
| 10·1 | 17·7 | 41·7 | G |
| 9·5 | 18·9 | 37·8 | G |
| 8·0 | 19·9 | 39·2 | 8·0 Gp |
| 8·3 | 19·9 | 43·4 | 9·0 G |
| 10·0 | 20·7 | 41·4 | G |
| 10·2 | 20·9 | 44·6 | |
| 8·7 | 21·4 | 41·8 | 6·8 GSt |
| 10·0 | 22·0 | 41·1 | G |
| 9·7 | 23·7 | 42·2 | G |
| 10·0 | 25·7 | 41·2 | G |
| 10·1 | 25·7 | 42·6 | G |
| 9·7 | 26·4 | 41·8 | G |

**4561—4620.**

| mag. | 12h. m s | −59° ′ | |
|---|---|---|---|
| 10·2 | 46 26·4 | 43·1 | |
| 9·6 | 26·9 | 40·8 | |
| 9·9 | 29·9 | 45·8 | |
| 8·8 | 30·4 | 44·2 | 9·5 G |
| 9·8 | 31·4 | 42·6 | |
| 7·5 | 32·9 | 39·4 | 7·5 Gtp |
| 9·9 | 33·4 | 45·6 | 9·5 |
| 10·0 | 36·9 | 44·6 | |
| 10·2 | 40·4 | 42·4 | |
| 10·1 | 41·4 | 41·0 | |
| 10·1 | 46·9 | 41·0 | |
| 10·2 | 54·0 | 26·0 | |
| 10·2 | 47 4·0 | 5·4 | |
| 9·7 | 7·0 | 4·2 | |
| 9·4 | 17·0 | 24·0 | |
| 10·1 | 17·0 | 11·4 | |
| 9·8 | 38·0 | 43·7 | |
| 10·0 | 41·0 | 17·4 | |
| 8·7 | 53·5 | 36·6 | 9·5 G |
| 8·4 | 48 2·5 | 58·3 | G |
| 8·7 | 11·0 | 47·8 | |
| 9·5 | 14·0 | 39·2 | |
| 10·2 | 15·0 | 53·5 | |
| 9·6 | 16·0 | 41·7 | |
| 9·6 | 31·5 | 32·2 | |
| 9·6 | 37·0 | 17·2 | |
| 10·0 | 42·0 | 25·6 | |
| 10·2 | 47·0 | 46·7 | |
| 9·8 | 51·0 | 57·0 | |
| 10·1 | 52·5 | 46·7 | |
| 9·7 | 52·5 | 15·1 | |
| 9·2 | 54·5 | 15·0 | |
| 9·1 | 57·0 | 59·5 | 9·0 |
| 10·1 | 49 0·0 | 50·1 | |
| 9·7 | 7·0 | 35·7 | |
| 9·5 | 8·5 | 0·0 | |
| 9·3 | 8·5 | 4·2 | |
| 9·6 | 17·0 | 45·1 | |
| 10·2 | 26·5 | 12·1 | |
| 7·8 | 30·0 | 4·0 | 7·5 GSg |
| 8·4 | 32·5 | 27·8 | 8·0 G |
| 10·0 | 35·0 | 15·3 | |
| 10·1 | 35·5 | 57·7 | |
| 9·8 | 52·5 | 56·3 | |
| 10·1 | 50 0·0 | 4·1 | |
| 10·1 | 12·5 | 59·6 | |
| 10·2 | 16·5 | 30·0 | |
| 10·0 | 23·0 | 59·6 | |
| 9·5 | 30·5 | 59·0 | |
| 10·2 | 33·0 | 55·3 | |
| 9·2 | 33·5 | 13·2 | |
| 10·0 | 37·0 | 29·1 | |
| 10·2 | 39·0 | 43·0 | |
| 10·0 | 46·0 | 24·2 | |
| 10·0 | 47·0 | 58·5 | |
| 10·2 | 51 5·5 | 6·1 | |
| 8·9 | 7·5 | 53·5 | |
| 9·2 | 10·0 | 39·0 | 9·0 |
| 9·7 | 14·5 | 19·1 | |
| 9·6 | 15·0 | 8·0 | |

**4621—4680.**

| mag. | 12h. m s | −59° ′ | |
|---|---|---|---|
| 9·1 | 51 28·3 | 58·1 | |
| 9·9 | 29·5 | 20·0 | |
| 9·3 | 34·0 | 2·0 | 9·0 |
| 10·2 | 36·0 | 1·7 | |
| 10·0 | 37·5 | 2·7 | |
| 10·2 | 48·0 | 44·0 | |
| 10·0 | 50·0 | 46·1 | |
| 9·8 | 53·5 | 27·2 | |
| 8·8 | 54·0 | 11·3 | 9·0 |
| 8·7 | 57·5 | 8·7 | 9·2 |
| 10·1 | 58·0 | 56·9 | |
| 9·2 | 52 4·0 | 20·8 | 8·0 G |
| 9·8 | 14·0 | 43·1 | |
| 8·2 | 30·5 | 55·2 | 8·5 G |
| 10·1 | 37·0 | 48·5 | |
| 10·2 | 37·5 | 57·5 | |
| 10·0 | 37·5 | 42·0 | |
| 10·2 | 38·0 | 13·0 | |
| 9·2 | 51·0 | 0·7 | 9·5 |
| 7·5 | 56·0 | 42·0 | 7·2 GS |
| 10·1 | 53 5·0 | 12·1 | |
| 10·2 | 8·5 | 2·3 | |
| 9·3 | 14·0 | 34·2 | |
| 9·8 | 25·5 | 10·9 | |
| 10·0 | 33·0 | 20·5 | |
| 10·0 | 39·0 | 1·0 | |
| 10·1 | 40·5 | 12·9 | |
| 10·0 | 44·5 | 16·8 | |
| 9·2 | 47·2 | 11·4 | 8·5 |
| 9·7 | 51·0 | 14·9 | |
| 8·1 | 57·8 | 59·9 | 7·8 GSr |
| 10·1 | 54 0·0 | 37·9 | |
| 8·8 | 5·0 | 45·9 | 9·0 |
| 8·3 | 6·0 | 24·1 | 8·5 |
| 9·0 | 8·0 | 1·6 | 9·5 |
| 10·1 | 11·5 | 12·5 | |
| 10·1 | 12·5 | 40·3 | |
| 10·1 | 12·8 | 59·0 | |
| 9·2 | 14·5 | 40·4 | 8·5 G |
| 9·7 | 14·5 | 41·1 | |
| 10·1 | 18·5 | 20·4 | |
| 10·1 | 20·5 | 58·8 | |
| 9·8 | 23·5 | 18·1 | |
| 10·1 | 23·5 | 15·1 | |
| 9·8 | 26·0 | 31·1 | |
| 9·3 | 28·2 | 39·1 | |
| 10·1 | 37·0 | 33·5 | |
| 10·1 | 41·0 | 18·5 | |
| 9·2 | 41·5 | 39·8 | 9·5 |
| 9·6 | 51·0 | 59·9 | |
| 9·4 | 56·5 | 40·9 | 9·0 |
| 10·1 | 59·0 | 0·9 | |
| 9·6 | 55 0·0 | 51·1 | |
| 8·9 | 0·2 | 15·6 | 9·0 |
| 9·1 | 2·7 | 52·1 | |
| 9·6 | 3·0 | 31·7 | |
| 9·8 | 3·8 | 58·1 | |
| 10·1 | 5·0 | 33·9 | |
| 9·5 | 11·7 | 13·9 | |
| 9·9 | 12·0 | 16·4 | |

## 4681—4740.

| mag. | 12h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 16·7 | 16·5 | |
| 9·3 | | 22·7 | 18·1 | |
| 8·6 | | 24·5 | 19·5 | 9·0 |
| 9·4 | | 25·3 | 30·3 | |
| 9·2 | | 26·3 | 17·1 | 9·5 |
| 9·8 | | 26·5 | 51·9 | |
| 10·1 | | 32·5 | 15·9 | |
| 9·1 | | 37·3 | 37·6 | |
| 9·6 | | 38·0 | 11·9 | |
| 10·1 | | 45·0 | 16·9 | |
| 9·4 | | 50·8 | 7·1 | |
| 10·1 | | 55·5 | 41·5 | |
| 8·7 | | 55·5 | 42·5 | 9·0 |
| 9·7 | 56 | 2·0 | 45·9 | |
| 9·6 | | 7·0 | 3·1 | |
| 10·1 | | 8·0 | 8·6 | |
| 10·1 | | 8·5 | 37·9 | |
| 9·8 | | 8·5 | 26·0 | |
| 9·8 | | 25·0 | 57·1 | |
| 8·6 | | 26·5 | 30·9 | 8·0 G |
| 9·8 | | 30·5 | 52·5 | |
| 9·3 | | 34·0 | 14·5 | |
| 9·6 | | 41·5 | 25·0 | |
| 9·6 | | 41·5 | 49·9 | |
| 9·3 | | 41·5 | 16·8 | 9·0 |
| 10·1 | | 42·0 | 49·6 | |
| 9·1 | | 42·5 | 16·8 | 9·5 |
| 10·1 | | 44·0 | 6·9 | |
| 9·7 | | 50·5 | 29·7 | |
| 9·7 | | 52·0 | 12·9 | |
| 8·9 | | 53·0 | 9·1 | 9·0 |
| 9·9 | 57 | 10·0 | 30·1 | |
| 10·1 | | 11·0 | 41·5 | |
| 8·9 | | 14·5 | 25·4 | |
| 9·2 | | 16·0 | 45·5 | |
| 9·2 | | 16·0 | 32·9 | |
| 10·1 | | 18·5 | 5·3 | |
| 10·1 | | 19·5 | 26·3 | |
| 8·4 | | 31·5 | 46·1 | 8·0 GSr |
| 10·1 | | 35·5 | 1·1 | |
| 9·6 | | 36·5 | 5·1 | |
| 9·2 | | 42·5 | 13·3 | |
| 9·8 | | 43·0 | 17·3 | |
| 10·1 | 58 | 6·5 | 53·1 | |
| 9·7 | | 12·0 | 43·1 | |
| 9·0 | | 18·5 | 3·3 | 9·5 G |
| 10·1 | | 21·5 | 48·2 | |
| 10·1 | | 24·5 | 13·5 | |
| 10·1 | | 26·0 | 54·9 | |
| 10·1 | | 27·0 | 26·1 | |
| 9·5 | | 28·5 | 25·3 | |
| 10·1 | | 37·5 | 10·9 | |
| 9·2 | | 37·5 | 57·1 | |
| 10·1 | 59 | 5·5 | 12·9 | |
| 8·5 | | 11·0 | 36·5 | 8·5 G |
| 9·8 | | 21·0 | 50·8 | |
| 9·4 | | 25·5 | 10·3 | |
| 10·1 | | 30·0 | 43·1 | |
| 9·7 | | 32·0 | 11·9 | |
| 7·2 | | 42·0 | 11·5 | 6·5 GSctr |

## 4741—4800.

| mag. | 12h.–13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 59 | 42·0 | 21·0 | |
| 9·7 | | 43·0 | 23·7 | |
| 9·8 | | 43·0 | 2·9 | |
| 10·0 | | 43·2 | 59·7 | |
| 9·8 | | 46·5 | 40·7 | |
| 9·4 | | 48·5 | 36·0 | 7·5 G |
| 9·0 | | 49·8 | 59·9 | |
| 9·0 | | 56·0 | 8·7 | |
| 10·1 | | 58·5 | 48·9 | |
| 10·1 | 0 | 1·0 | 22·5 | |
| 8·9 | | 1·5 | 23·4 | |
| 9·8 | | 5·5 | 53·9 | |
| 10·1 | | 7·5 | 20·8 | |
| 10·1 | | 12·5 | 20·3 | |
| 10·1 | | 16·0 | 26·5 | |
| 8·9 | | 21·5 | 0·1 | 9·8 |
| 9·8 | | 22·5 | 16·0 | |
| 9·9 | | 22·5 | 6·6 | |
| 9·8 | | 40·5 | 47·9 | |
| 9·4 | | 46·5 | 40·7 | 8·8 G |
| 10·1 | | 49·5 | 41·0 | |
| 10·0 | | 50·0 | 54·3 | |
| 10·1 | | 51·0 | 39·6 | |
| 9·0 | | 52·5 | 14·1 | |
| 10·1 | | 55·0 | 49·0 | |
| 9·2 | | 58·0 | 0·0 | 9·5 |
| 9·6 | | 59·0 | 13·3 | |
| 9·6 | | 59·0 | 52·8 | |
| 8·4 | | 59·0 | 40·1 | 8·2 G |
| 10·1 | | 59·5 | 14·9 | |
| 10·0 | 1 | 2·5 | 25·9 | |
| 8·6 | | 10·5 | 32·9 | 9·0 G |
| 9·7 | | 17·5 | 48·9 | |
| 9·6 | | 18·0 | 11·8 | |
| 10·1 | | 18·0 | 54·9 | |
| 10·1 | | 21·5 | 48·7 | |
| 9·8 | | 25·5 | 26·3 | |
| 8·5 | | 31·0 | 38·3 | 8·0 G |
| 9·8 | | 33·5 | 31·9 | |
| 10·1 | | 36·0 | 17·9 | |
| 10·1 | | 39·5 | 34·8 | 8·8 G |
| 9·2 | | 40·5 | 54·8 | |
| 9·9 | | 50·5 | 45·9 | |
| 9·1 | 2 | 12·5 | 42·9 | 9·0 |
| 10·1 | | 15·5 | 25·1 | |
| 10·1 | | 22·0 | 40·9 | |
| 9·6 | | 32·5 | 17·5 | |
| 10·1 | | 36·0 | 19·5 | |
| 9·6 | | 41·5 | 38·3 | |
| 9·2 | | 50·5 | 51·3 | |
| 9·2 | | 51·0 | 30·3 | |
| 9·7 | | 53·5 | 8·9 | 10·0 |
| 9·4 | | 56·0 | 4·0 | |
| 10·1 | | 57·5 | 13·1 | |
| 8·4 | 3 | 4·5 | 3·6 | 8·5 |
| 8·9 | | 8·0 | 22·9 | G |
| 10·1 | | 11·5 | 26·4 | |
| 9·6 | | 12·5 | 27·0 | |
| 10·1 | | 13·0 | 50·1 | |
| 9·8 | | 13·5 | 27·5 | |

## 4801—4860.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·8 | 3 | 15·5 | 27·3 | |
| 9·9 | | 17·0 | 46·9 | |
| 10·1 | | 18·0 | 45·0 | |
| 8·5 | | 19·0 | 4·9 | 8·0 |
| 9·4 | | 25·0 | 47·1 | |
| 9·8 | | 30·5 | 43·2 | |
| 10·1 | | 38·0 | 43·8 | |
| 9·7 | | 49·5 | 43·9 | |
| 10·1 | | 52·0 | 5·9 | |
| 9·4 | 4 | 4·0 | 29·8 | |
| 8·4 | | 7·5 | 30·9 | 8·5 G |
| 9·2 | | 20·0 | 48·5 | |
| 9·6 | | 22·0 | 44·5 | |
| 10·1 | | 24·0 | 36·8 | |
| 5·1 | | 30·0 | 15·1 | 5·5 GSctr |
| 10·1 | | 32·0 | 7·1 | |
| 9·3 | | 38·0 | 31·3 | |
| 9·3 | | 39·2 | 2·0 | |
| 9·2 | | 42·0 | 37·3 | |
| 8·2 | | 44·0 | 53·7 | Gt |
| 8·8 | | 47·0 | 33·3 | |
| 10·1 | | 51·5 | 36·9 | |
| 9·6 | | 52·0 | 27·7 | |
| 9·8 | | 52·0 | 36·9 | |
| 10·1 | | 59·0 | 19·2 | |
| 9·4 | 5 | 2·5 | 21·9 | |
| 7·5 | | 8·5 | 8·9 | 6·8 GSt |
| 9·8 | | 9·5 | 35·2 | |
| 10·0 | | 12·5 | 41·5 | |
| 9·7 | | 12·5 | 7·7 | |
| 9·7 | | 13·0 | 26·7 | |
| 8·9 | | 13·0 | 16·5 | |
| 9·8 | | 20·0 | 8·2 | 9·5 |
| 9·8 | | 20·5 | 45·5 | |
| 10·1 | | 29·5 | 28·1 | |
| 9·0 | | 30·5 | 59·0 | |
| 9·3 | | 39·5 | 20·9 | |
| 10·1 | | 42·5 | 53·9 | |
| 10·1 | | 43·5 | 23·3 | |
| 9·0 | | 45·5 | 50·5 | |
| 9·7 | | 51·0 | 34·5 | |
| 9·4 | | 55·0 | 40·5 | |
| 9·8 | 6 | 10·0 | 48·5 | |
| 9·4 | | 19·0 | 22·6 | |
| 9·8 | | 32·0 | 1·8 | |
| 10·1 | | 37·0 | 29·5 | |
| 10·1 | | 54·0 | 4·7 | |
| 10·1 | 7 | 7·0 | 0·3 | |
| 10·1 | | 21·5 | 27·0 | |
| 10·1 | | 23·5 | 8·7 | |
| 10·1 | | 24·5 | 50·5 | |
| 8·4 | | 27·5 | 7·9 | 8·5 |
| 9·0 | | 34·0 | 27·9 | |
| 9·2 | | 39·0 | 27·6 | |
| 10·1 | | 42·0 | 53·8 | |
| 9·0 | | 52·0 | 27·6 | |
| 10·1 | | 55·0 | 47·3 | |
| 10·1 | | 57·5 | 32·3 | |
| 10·1 | 8 | 0·0 | 34·3 | |
| 10·1 | | 5·0 | 48·5 | |

## 4861—4920.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·1 | 8 | 5·5 | 27·9 | |
| 9·8 | | 9·5 | 39·9 | |
| 9·8 | | 10·5 | 23·9 | |
| 10·1 | | 11·5 | 2·0 | |
| 10·0 | | 12·5 | 24·9 | |
| 10·1 | | 12·5 | 2·9 | |
| 10·1 | | 19·5 | 26·2 | |
| 9·1 | | 28·5 | 5·0 | 10·0 |
| 9·6 | | 31·5 | 26·4 | |
| 9·7 | | 35·5 | 23·7 | |
| 10·1 | | 40·5 | 21·7 | |
| 10·1 | | 49·5 | 21·9 | |
| 8·8 | | 49·5 | 9·9 | |
| 10·1 | | 49·5 | 6·9 | |
| 9·8 | | 50·0 | 23·0 | |
| 9·6 | | 51·5 | 24·0 | |
| 10·1 | | 55·5 | 29·9 | |
| 8·9 | | 57·5 | 47·6 | 8·5 |
| 9·4 | 9 | 8·0 | 15·9 | |
| 10·0 | | 9·0 | 20·5 | |
| 8·4 | | 25·5 | 6·9 | 9·0 |
| 10·1 | | 33·2 | 1·5 | |
| 10·1 | | 36·5 | 14·9 | |
| 8·4 | | 47·5 | 45·2 | 8·2 |
| 9·6 | | 49·5 | 44·9 | |
| 10·0 | | 53·5 | 30·6 | |
| 10·0 | | 58·5 | 24·9 | |
| 9·2 | 10 | 8·5 | 42·8 | 9·0 G |
| 8·8 | | 10·0 | 44·2 | 7·5 G |
| 9·6 | | 30·0 | 22·9 | |
| 9·2 | | 30·0 | 5·8 | |
| 9·7 | | 39·0 | 40·0 | |
| 10·0 | | 44·5 | 15·3 | |
| 9·2 | | 48·0 | 9·0 | |
| 10·1 | | 49·0 | 29·8 | |
| 9·4 | | 57·0 | 48·8 | |
| 9·4 | 11 | 0·0 | 34·4 | |
| 8·7 | | 3·5 | 17·0 | |
| 8·8 | | 3·5 | 15·8 | |
| 9·8 | | 18·0 | 56·6 | |
| 9·9 | | 36·0 | 33·3 | |
| 8·7 | | 40·0 | 58·6 | 7·5 G |
| 9·8 | | 42·0 | 14·0 | |
| 9·9 | | 50·0 | 20·1 | |
| 9·0 | | 54·5 | 25·4 | |
| 9·8 | | 56·0 | 59·2 | |
| 9·8 | | 59·0 | 17·9 | |
| 9·6 | 12 | 3·0 | 52·0 | 9·0 |
| 9·8 | | 26·0 | 17·0 | |
| 9·3 | | 30·0 | 24·0 | |
| 10·1 | | 38·5 | 48·0 | |
| 7·2 | | 39·0 | 7·0 | 7·0 GSt |
| 9·0 | | 49·5 | 57·4 | 8·5 |
| 9·1 | | 50·0 | 20·0 | |
| 9·2 | | 52·0 | 8·8 | 8·5 |
| 9·2 | 13 | 2·5 | 25·6 | |
| 9·8 | | 8·5 | 32·2 | |
| 10·1 | | 12·0 | 6·3 | |
| 9·2 | | 14·3 | 0·9 | |
| 9·4 | | 19·0 | 50·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 50 | 89 | 8·2 |
| 13 | 0 | 91 | 8·1 |
| | 10 | 94 | 8·0 |
| | 20 | 96 | 7·9 |

| 25 prec. | | | |
|---|---|---|---|
| h m | | α + s | δ − ′ |
| 13 | 10 | 94 | 8·0 |
| | 20 | 96 | 7·9 |
| | 30 | 99 | 7·7 |
| | 40 | 101 | 7·6 |

## 4921—4980.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·1 | 13 | 22·0 | 38·0 | |
| 10·1 | | 33·5 | 28·2 | |
| 9·0 | | 35·0 | 51·9 | |
| 8·8 | | 42·5 | 7·8 | 9·5 |
| 9·8 | | 43·0 | 45·0 | |
| 7·7 | 14 | 7·5 | 31·6 | 7·0 GSt |
| 9·6 | | 16·0 | 29·0 | |
| 9·4 | | 19·5 | 10·1 | |
| 10·1 | | 21·0 | 34·0 | |
| 8·8 | | 28·0 | 38·2 | 9·0 |
| 10·1 | | 35·5 | 34·0 | |
| 9·2 | | 44·0 | 1·0 | |
| 9·0 | | 46·5 | 50·9 | |
| 9·8 | | 48·5 | 23·6 | |
| 10·1 | | 51·5 | 16·0 | |
| 9·6 | | 57·5 | 6·0 | |
| 9·1 | 15 | 11·5 | 45·0 | |
| 8·7 | | 14·0 | 34·2 | 8·0 GS |
| 9·8 | | 14·0 | 11·0 | |
| 8·8 | | 15·5 | 36·5 | 8·0 S |
| 10·1 | | 19·0 | 2·0 | |
| 10·1 | | 22·0 | 25·0 | |
| 10·0 | | 30·0 | 51·9 | |
| 10·1 | | 31·0 | 21·8 | |
| 8·4 | | 32·0 | 43·3 | 8·0 |
| 9·3 | | 32·0 | 5·4 | |
| 9·5 | | 40·0 | 7·4 | |
| 10·0 | | 42·0 | 39·3 | |
| 10·0 | | 46·5 | 30·7 | |
| 9·1 | | 50·0 | 5·6 | |
| 9·0 | | 56·0 | 9·4 | |
| 9·8 | 16 | 1·0 | 25·6 | |
| 9·8 | | 2·5 | 2·2 | |
| 9·6 | | 2·5 | 13·5 | |
| 9·2 | | 9·5 | 6·4 | |
| 9·7 | | 13·0 | 9·6 | |
| 10·1 | | 14·5 | 5·1 | |
| 10·1 | | 21·0 | 32·6 | |
| 9·3 | | 21·0 | 14·4 | |
| 10·1 | | 31·5 | 2·6 | |
| 8·6 | | 32·0 | 36·6 | 9·0 |
| 9·8 | | 33·0 | 58·0 | |
| 10·1 | | 43·0 | 15·0 | |
| 10·1 | | 43·5 | 29·0 | |
| 9·1 | | 47·5 | 21·0 | |
| 9·6 | | 50·0 | 2·5 | |
| 10·1 | | 52·5 | 54·7 | |
| 9·4 | 17 | 5·5 | 32·0 | 9·0 |
| 10·0 | | 7·0 | 48·0 | |
| 10·1 | | 19·0 | 48·8 | 9·0 |
| 8·4 | | 19·5 | 7·8 | 9·0 |
| 9·4 | | 36·5 | 28·0 | |
| 9·4 | 18 | 8·5 | 2·8 | 9·5 |
| 10·1 | | 29·0 | 21·0 | |
| 10·1 | | 48·5 | 19·0 | |
| 10·1 | | 49·0 | 12·2 | |
| 9·7 | | 57·0 | 41·0 | |
| 9·1 | 19 | 7·0 | 3·4 | |
| 10·1 | | 11·5 | 31·0 | |
| 9·9 | | 14·5 | 36·0 | |

## 4981—5040.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 19 | 22·0 | 41·4 | |
| 10·0 | | 27·5 | 27·0 | |
| 10·1 | | 27·5 | 6·8 | |
| 9·4 | | 42·0 | 35·7 | |
| 10·1 | | 49·0 | 8·0 | |
| 9·4 | | 49·0 | 36·0 | |
| 10·1 | | 55·0 | 36·0 | |
| 10·1 | | 59·5 | 8·2 | |
| 8·9 | 20 | 2·5 | 38·6 | 9·5 |
| 8·8 | | 11·0 | 42·4 | 8·2 |
| 10·1 | | 17·0 | 0·9 | |
| 10·1 | | 18·0 | 2·0 | |
| 8·5 | | 18·0 | 44·1 | 8·8 |
| 9·3 | | 19·5 | 42·4 | |
| 10·1 | | 23·0 | 9·3 | |
| 10·1 | | 23·0 | 28·0 | |
| 8·8 | | 39·0 | 18·0 | |
| 9·8 | | 42·0 | 48·0 | |
| 10·1 | | 46·0 | 3·6 | |
| 10·1 | 21 | 2·0 | 16·2 | |
| 9·2 | | 5·0 | 15·3 | |
| 10·0 | | 22·0 | 38·2 | |
| 10·1 | | 29·0 | 59·1 | |
| 10·1 | | 32·0 | 4·6 | |
| 10·1 | | 36·0 | 14·6 | |
| 10·1 | | 52·0 | 5·0 | |
| 10·1 | | 57·0 | 26·0 | |
| 10·0 | | 57·5 | 24·4 | |
| 9·1 | 22 | 11·5 | 8·1 | |
| 10·0 | | 20·0 | 42·0 | |
| 9·4 | 23 | 0·0 | 50·3 | |
| 10·0 | | 3·0 | 59·2 | |
| 10·1 | | 21·0 | 16·1 | |
| 9·1 | | 21·5 | 7·0 | |
| 10·1 | | 22·5 | 45·0 | |
| 9·4 | | 23·5 | 11·0 | |
| 9·7 | | 24·5 | 12·5 | |
| 8·4 | | 45·5 | 47·5 | 8·2 |
| 9·1 | | 54·0 | 27·9 | |
| 10·1 | | 58·5 | 19·8 | |
| 9·2 | 24 | 3·0 | 0·4 | 9·2 G |
| 10·1 | | 9·0 | 20·3 | |
| 10·1 | | 9·5 | 33·9 | |
| 9·1 | | 14·5 | 26·0 | |
| 9·2 | | 22·5 | 32·9 | |
| 9·2 | | 24·5 | 52·7 | |
| 9·6 | | 28·5 | 51·5 | |
| 10·1 | | 42·5 | 26·9 | |
| 9·9 | 25 | 3·5 | 1·9 | |
| 9·8 | | 17·5 | 36·9 | |
| 9·2 | | 26·0 | 9·3 | 9·0 |
| 10·1 | | 32·5 | 31·1 | |
| 10·1 | | 33·5 | 48·7 | |
| 8·8 | | 39·0 | 3·7 | 9·5 |
| 9·1 | | 42·5 | 59·7 | |
| 10·1 | | 56·0 | 37·5 | |
| 9·6 | 26 | 2·0 | 49·3 | |
| 10·1 | | 12·0 | 50·9 | |
| 9·0 | | 12·0 | 1·9 | |
| 9·5 | | 16·5 | 5·7 | |

## 5041—5100.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 26 | 36·0 | 27·5 | 9·5 |
| 10·1 | | 41·5 | 47·3 | |
| 8·4 | | 59·5 | 30·7 | 8·0 |
| 10·1 | 27 | 2·5 | 28·9 | G |
| 10·1 | | 13·5 | 32·4 | |
| 9·4 | | 21·0 | 9·9 | |
| 9·4 | | 21·0 | 30·9 | |
| 10·0 | | 22·5 | 59·2 | |
| 9·4 | | 32·5 | 36·0 | |
| 10·1 | | 51·5 | 53·5 | |
| 8·9 | | 54·5 | 41·1 | |
| 10·1 | 28 | 3·0 | 43·9 | |
| 9·6 | | 3·0 | 53·5 | |
| 9·7 | | 11·3 | 0·2 | |
| 9·8 | | 17·0 | 14·1 | |
| 9·1 | | 19·0 | 2·5 | |
| 9·6 | | 19·5 | 51·6 | |
| 9·4 | | 29·5 | 50·1 | |
| 9·8 | | 32·5 | 39·9 | 9·5 |
| 8·6 | | 42·7 | 0·0 | 9·0 |
| 9·7 | | 56·5 | 46·9 | |
| 10·1 | 29 | 11·0 | 24·9 | |
| 10·1 | | 23·0 | 34·4 | |
| 9·1 | | 45·0 | 18·9 | |
| 9·1 | | 47·8 | 0·9 | |
| 10·0 | | 55·0 | 46·2 | |
| 10·0 | | 56·0 | 13·9 | |
| 9·7 | 30 | 3·0 | 7·4 | |
| 10·0 | | 9·0 | 12·9 | |
| 9·6 | | 14·8 | 10·9 | |
| 8·9 | | 18·5 | 12·1 | 9·0 |
| 9·8 | | 24·0 | 40·1 | |
| ? 9·9 | | 26·3 | 2·5 | |
| 10·0 | | 29·0 | 13·7 | |
| 10·0 | | 34·0 | 14·2 | |
| 9·4 | | 43·8 | 14·6 | |
| 9·1 | | 45·0 | 37·0 | |
| 9·9 | | 56·0 | 36·8 | |
| 9·7 | 31 | 1·0 | 40·6 | |
| 9·4 | | 4·4 | 57·0 | |
| 10·1 | | 9·5 | 35·9 | |
| 9·9 | | 13·0 | 51·8 | |
| 9·2 | | 17·3 | 10·8 | |
| 10·0 | | 18·0 | 21·4 | |
| 10·1 | | 28·5 | 35·8 | |
| 9·0 | | 34·5 | 56·5 | |
| 10·0 | | 37·0 | 56·3 | |
| 9·5 | | 37·5 | 54·2 | |
| 10·0 | | 38·0 | 16·0 | |
| 10·1 | | 39·5 | 52·9 | |
| 10·0 | | 40·5 | 28·1 | |
| 9·6 | | 43·0 | 17·1 | |
| 10·0 | | 43·0 | 15·8 | |
| 8·7 | | 45·5 | 55·4 | 8·0 |
| 9·5 | | 51·5 | 54·3 | 8·8 |
| 9·2 | | 54·5 | 37·6 | 8·8 |
| 9·5 | | 59·0 | 53·9 | |
| 9·6 | 32 | 7·5 | 2·9 | |
| 8·8 | | 8·0 | 38·0 | 7·8 |
| 10·0 | | 14·5 | 12·5 | |

## 5101—5160.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 32 | 15·5 | 14·6 | |
| 9·7 | | 16·0 | 27·9 | |
| 10·0 | | 26·5 | 13·3 | |
| 10·0 | | 27·5 | 57·2 | |
| 9·6 | | 28·0 | 43·7 | 9·5 |
| 9·2 | | 31·5 | 57·9 | |
| 10·1 | | 33·5 | 22·2 | |
| 10·0 | | 34·0 | 19·0 | |
| 9·9 | | 36·5 | 53·1 | |
| 10·1 | | 44·5 | 47·8 | |
| 10·0 | | 44·5 | 49·1 | |
| 10·0 | | 48·0 | 55·8 | |
| 9·6 | | 52·5 | 31·0 | |
| 9·6 | | 58·0 | 19·6 | |
| 9·0 | | 58·0 | 24·5 | |
| 10·0 | | 58·5 | 15·3 | |
| 9·4 | 33 | 9·0 | 33·8 | |
| 9·8 | | 16·5 | 3·2 | |
| 9·2 | | 18·0 | 8·0 | 9·0 |
| 10·0 | | 28·0 | 14·0 | |
| 9·0 | | 45·5 | 40·4 | 9·5 |
| 10·0 | | 51·3 | 1·9 | |
| 10·1 | | 54·0 | 40·9 | |
| 9·3 | 34 | 7·0 | 4·1 | |
| 9·0 | | 9·5 | 9·9 | |
| 9·5 | | 13·0 | 9·4 | |
| 9·5 | | 17·7 | 0·7 | |
| 9·7 | | 26·5 | 52·8 | |
| 10·0 | | 28·0 | 51·3 | |
| 10·0 | | 28·0 | 3·9 | |
| 10·0 | | 37·5 | 32·2 | |
| 9·3 | | 38·0 | 54·9 | |
| 10·1 | | 43·5 | 17·3 | |
| 10·1 | | 49·5 | 24·9 | |
| 10·0 | | 55·0 | 7·7 | |
| 9·5 | | 59·0 | 10·1 | |
| 10·0 | 35 | 1·5 | 53·8 | |
| 9·8 | | 5·5 | 39·9 | |
| 9·9 | | 5·5 | 35·9 | |
| 10·1 | | 5·5 | 26·9 | |
| 10·0 | | 5·5 | 48·6 | 9·5 |
| 9·0 | | 12·0 | 48·0 | 9·0 |
| 9·4 | | 15·0 | 13·3 | |
| 9·4 | | 17·5 | 45·5 | |
| 10·0 | | 21·0 | 31·9 | |
| 9·4 | | 40·0 | 4·9 | |
| 10·0 | | 44·5 | 41·0 | |
| 9·5 | | 55·5 | 47·6 | |
| 9·9 | | 56·5 | 45·8 | |
| 9·7 | 36 | 0·5 | 48·9 | |
| 9·8 | | 0·5 | 35·6 | |
| 9·9 | | 1·5 | 4·1 | |
| 9·3 | | 2·0 | 15·2 | 9·8 |
| 9·5 | | 4·5 | 36·9 | |
| 10·0 | | 5·5 | 24·4 | |
| 9·5 | | 5·5 | 43·3 | |
| 8·8 | | 5·5 | 15·0 | 8·8 |
| 10·0 | | 13·5 | 38·9 | |
| 9·6 | | 17·5 | 57·1 | |
| 9·2 | | 41·0 | 57·9 | |



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## 5161—5220.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 36 | 43·5 | 35·9 | |
| 9·4 | | 48·0 | 35·3 | |
| 10·1 | | 55·0 | 27·9 | |
| 10·0 | | 57·5 | 59·8 | |
| 9·7 | 37 | 4·5 | 33·0 | |
| 9·8 | | 7·5 | 47·8 | |
| 9·6 | | 13·0 | 32·8 | |
| 9·9 | | 30·0 | 31·1 | |
| 9·9 | | 32·0 | 31·0 | |
| 9·4 | | 35·5 | 23·9 | 9·2 |
| 9·4 | | 37·5 | 25·4 | |
| 9·0 | | 38·0 | 16·1 | 9·0 |
| 8·9 | | 44·5 | 31·0 | 9·0 |
| 10·0 | | 48·0 | 5·9 | |
| 9·0 | 38 | 7·0 | 50·3 | |
| 9·4 | | 16·0 | 55·8 | 9·0 |
| 9·9 | | 27·0 | 19·8 | |
| 9·0 | | 29·5 | 28·2 | 9·2 |
| 10·1 | | 41·5 | 3·9 | |
| 9·8 | | 44·5 | 24·7 | |
| 9·6 | | 44·5 | 15·3 | 9·0 |
| 9·6 | | 53·0 | 40·9 | |
| 9·6 | | 53·5 | 18·7 | |
| 10·1 | | 55·5 | 54·0 | |
| 9·2 | | 56·5 | 4·1 | |
| 10·0 | 39 | 7·0 | 37·0 | |
| 9·4 | | 8·5 | 36·9 | 9·0 |
| 9·4 | | 15·0 | 11·3 | |
| 9·7 | | 17·5 | 48·1 | |
| 10·0 | | 22·5 | 53·9 | |
| 10·1 | | 22·5 | 54·9 | |
| 7·8 | | 23·0 | 15·0 | 8·2 |
| 9·1 | | 25·0 | 49·4 | |
| 9·0 | | 44·5 | 12·2 | 8·8 |
| 10·0 | | 47·0 | 39·9 | |
| 9·2 | | 55·5 | 50·3 | |
| 10·0 | 40 | 4·5 | 22·9 | |
| 10·0 | | 8·5 | 40·9 | |
| 9·6 | | 18·5 | 40·4 | |
| 9·6 | | 27·5 | 28·9 | |
| 10·0 | | 28·5 | 28·9 | |
| 9·9 | | 30·0 | 35·5 | |
| 8·8 | | 41·5 | 50·6 | 9·0 |
| 9·9 | | 43·5 | 29·4 | |
| 10·0 | | 50·5 | 1·3 | |
| 9·5 | | 52·0 | 1·6 | 9·2 |
| 9·7 | | 56·5 | 18·2 | |
| 8·8 | | 56·5 | 17·9 | 8·2 |
| 9·4 | 41 | 6·5 | 59·0 | |
| 10·0 | | 6·5 | 29·8 | |
| 9·4 | | 7·0 | 11·0 | |
| 10·0 | | 13·0 | 16·2 | |
| 10·0 | | 13·8 | 58·6 | |
| 10·0 | | 14·5 | 59·7 | |
| 9·1 | | 16·5 | 49·3 | |
| 9·4 | | 26·5 | 36·8 | |
| 10·0 | | 34·5 | 41·0 | |
| 10·0 | | 38·5 | 37·8 | |
| 10·0 | | 41·5 | 22·3 | |
| 10·0 | | 43·5 | 42·4 | |

## 5221—5280.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·1 | 41 | 44·5 | 23·2 | |
| 9·0 | | 45·0 | 52·7 | 9·5 |
| 9·9 | | 47·5 | 1·9 | |
| 9·3 | | 55·5 | 50·0 | |
| 8·0 | | 56·0 | 7·6 | 8·5 |
| 9·8 | | 57·5 | 5·5 | |
| 9·9 | 42 | 12·5 | 26·0 | |
| 9·6 | | 39·0 | 47·1 | 9·0 |
| 9·9 | | 39·5 | 25·8 | |
| 9·0 | | 47·5 | 17·8 | 10·0 |
| 9·7 | 43 | 2·5 | 49·7 | |
| 10·1 | | 4·5 | 2·2 | |
| 9·4 | | 4·5 | 32·0 | |
| : 9·8 | | 8·5 | 55·8 | |
| 10·1 | | 10·0 | 30·1 | |
| 10·0 | | 11·5 | 19·8 | |
| 10·0 | | 18·5 | 28·2 | |
| 9·6 | | 25·0 | 36·1 | |
| 9·0 | | 25·5 | 3·9 | 9·5 |
| 9·2 | | 28·5 | 44·0 | |
| 10·1 | | 31·5 | 44·5 | |
| 10·0 | | 33·5 | 59·2 | |
| 9·8 | | 33·5 | 22·8 | 9·2 |
| 10·0 | | 37·5 | 58·4 | |
| 10·1 | | 40·5 | 55·4 | |
| 9·6 | | 54·5 | 38·3 | |
| 9·6 | | 57·5 | 32·5 | |
| 10·1 | 44 | 4·5 | 7·3 | |
| 10·0 | | 6·5 | 33·6 | |
| 10·0 | | 11·5 | 20·2 | |
| 9·6 | | 13·0 | 16·9 | |
| 10·0 | | 23·5 | 43·8 | |
| 10·0 | | 30·5 | 29·4 | |
| 9·4 | | 31·0 | 38·0 | |
| 9·6 | | 32·5 | 10·9 | |
| 10·0 | | 34·5 | 37·0 | |
| 9·5 | | 36·5 | 23·9 | 9·5 |
| 9·2 | | 37·0 | 23·8 | 9·5 |
| 9·4 | | 37·0 | 52·4 | |
| 10·1 | | 43·5 | 13·8 | |
| 9·8 | | 48·0 | 38·9 | |
| 9·6 | | 48·5 | 2·9 | |
| 9·6 | | 55·5 | 11·8 | |
| 10·0 | | 59·0 | 45·3 | |
| 10·1 | 45 | 7·5 | 46·3 | |
| 9·9 | | 10·5 | 19·2 | |
| 9·5 | | 11·5 | 33·4 | |
| 9·4 | | 21·5 | 49·8 | 8·7 |
| 10·0 | | 28·5 | 37·3 | |
| 10·0 | | 29·5 | 54·9 | |
| 9·5 | | 32·0 | 43·2 | |
| 10·0 | | 32·5 | 17·0 | |
| 10·1 | | 52·5 | 45·3 | |
| 10·1 | | 54·5 | 16·9 | |
| 8·0 | | 56·0 | 43·5 | 8·2 |
| 9·0 | 46 | 4·5 | 37·1 | 9·2 |
| 8·6 | | 8·7 | 1·8 | 8·8 |
| 9·2 | | 12·0 | 59·8 | |
| 10·0 | | 14·5 | 30·3 | |
| 10·1 | | 15·5 | 22·6 | |

## 5281—5340.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·1 | 46 | 19·5 | 8·3 | |
| 10·0 | | 27·0 | 15·0 | |
| 10·1 | | 27·5 | 6·6 | |
| 10·1 | | 28·5 | 8·9 | |
| 10·1 | | 33·0 | 26·5 | |
| 9·6 | | 35·5 | 12·4 | |
| 10·0 | | 41·0 | 58·9 | |
| 10·1 | | 43·5 | 30·3 | |
| 8·8 | | 55·5 | 2·4 | 9·5 |
| 8·2 | 47 | 5·0 | 26·2 | 8·2 G |
| 9·8 | | 16·5 | 15·4 | |
| 9·7 | | 34·5 | 24·0 | |
| 9·9 | | 35·5 | 10·0 | |
| 10·0 | | 36·5 | 37·0 | |
| 9·4 | | 37·5 | 25·3 | |
| 9·2 | | 45·5 | 15·5 | |
| 10·0 | | 48·0 | 35·9 | |
| 10·0 | | 51·0 | 16·5 | |
| 9·0 | | 53·5 | 35·4 | |
| 10·1 | | 55·5 | 17·8 | |
| 10·1 | 48 | 4·5 | 52·8 | |
| 9·6 | | 16·0 | 25·3 | |
| 10·0 | | 41·0 | 17·9 | |
| 10·0 | | 55·5 | 2·1 | |
| 9·3 | | 56·5 | 0·6 | |
| 9·7 | 49 | 3·0 | 30·3 | |
| 9·8 | | 4·5 | 30·9 | |
| 9·5 | | 6·5 | 12·1 | 9·0 |
| 8·5 | | 16·5 | 4·8 | 8·8 G |
| 8·3 | | 18·0 | 16·3 | 9·0 |
| 10·0 | | 34·5 | 14·9 | |
| 10·0 | | 35·5 | 7·0 | |
| 10·0 | | 36·5 | 33·9 | |
| 10·0 | | 42·5 | 34·8 | |
| 10·0 | | 43·5 | 28·6 | |
| 10·1 | | 47·5 | 20·0 | |
| 10·0 | | 47·5 | 44·2 | |
| 10·1 | | 56·5 | 47·2 | |
| 10·1 | | 57·5 | 30·3 | |
| 9·8 | 50 | 11·0 | 23·5 | |
| 10·1 | | 11·5 | 40·6 | |
| 9·0 | | 25·0 | 54·8 | 9·0 |
| 10·1 | | 37·5 | 28·1 | |
| 8·0 | | 45·5 | 57·4 | 8·0 |
| 10·1 | 51 | 5·5 | 42·1 | |
| 9·0 | | 8·0 | 20·5 | |
| 10·0 | | 8·5 | 34·8 | |
| 10·0 | | 13·0 | 32·9 | |
| 9·7 | | 16·0 | 41·4 | |
| 10·0 | | 16·5 | 43·6 | |
| 8·7 | | 17·5 | 49·6 | 8·9 |
| 9·3 | | 18·5 | 19·4 | |
| 9·8 | | 24·5 | 20·4 | |
| 9·5 | | 32·0 | 5·9 | |
| 9·9 | | 34·5 | 55·8 | |
| 8·8 | | 45·3 | 0·9 | 9·5 |
| 10·0 | | 48·0 | 45·1 | |
| 8·6 | | 58·5 | 17·5 | 8·5 G |
| 10·1 | 52 | 2·5 | 43·6 | |
| 9·6 | | 4·5 | 38·9 | |

## 5341—5400.

| mag. | 13h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 52 | 12·5 | 4·4 | |
| 10·1 | | 54·0 | 50·6 | |
| 10·0 | | 55·5 | 57·8 | |
| 9·6 | | 56·5 | 8·2 | |
| 8·0 | 53 | 8·5 | 39·0 | 7·7 G |
| 9·2 | | 13·0 | 12·0 | |
| 9·8 | | 15·0 | 20·9 | |
| 9·0 | | 24·5 | 7·0 | 9·0 |
| 10·1 | | 25·5 | 2·2 | |
| 10·0 | | 26·0 | 37·9 | |
| 10·0 | | 37·0 | 58·6 | |
| 9·7 | | 48·0 | 46·9 | |
| 10·1 | 54 | 4·5 | 43·8 | |
| 8·2 | | 8·5 | 44·3 | 8·8 Gt |
| 10·1 | | 11·5 | 27·6 | |
| 8·2 | | 12·0 | 34·1 | 8·4 G |
| 10·0 | | 13·5 | 38·1 | |
| 10·1 | | 14·5 | 27·7 | |
| 8·8 | | 16·0 | 53·9 | 9·0 G |
| 9·4 | | 16·0 | 15·9 | |
| 9·6 | | 22·0 | 24·8 | |
| 9·2 | | 22·5 | 47·7 | 9·0 |
| 9·9 | | 27·5 | 16·7 | |
| 9·2 | | 53·0 | 15·5 | |
| 2·5 | | 59·5 | 46·1 | 1·0 GStrλ |
| 10·1 | 55 | 8·5 | 9·2 | |
| 9·3 | | 9·0 | 1·1 | |
| 9·1 | | 9·5 | 58·5 | |
| 10·1 | | 13·0 | 3·0 | |
| 10·1 | | 17·5 | 10·7 | |
| 9·5 | | 19·0 | 58·9 | |
| 9·6 | | 25·0 | 37·2 | |
| 9·8 | | 27·5 | 35·4 | |
| 9·2 | | 29·0 | 29·2 | |
| 10·0 | | 45·5 | 47·3 | |
| 9·2 | | 51·5 | 22·8 | |
| 10·1 | | 56·0 | 57·7 | |
| 10·1 | 56 | 4·3 | 11·4 | |
| 10·0 | | 13·3 | 11·5 | |
| 10·0 | | 13·5 | 20·6 | |
| 10·0 | | 33·5 | 3·1 | |
| 10·0 | | 48·5 | 37·8 | |
| 10·0 | | 50·5 | 38·5 | |
| 9·9 | | 53·0 | 12·9 | |
| 9·0 | | 55·0 | 51·6 | |
| 9·9 | | 57·5 | 56·9 | |
| 9·6 | 57 | 5·5 | 53·8 | |
| 9·8 | | 12·0 | 22·8 | |
| 9·4 | | 12·0 | 3·1 | |
| 9·9 | | 18·5 | 7·3 | |
| 9·9 | | 28·0 | 55·7 | |
| 10·0 | | 29·5 | 2·3 | |
| 10·1 | | 33·5 | 25·0 | |
| 9·6 | | 38·0 | 41·9 | |
| 7·1 | | 38·1 | 7·0 | 6·7 GSt |
| 9·0 | | 39·5 | 2·8 | 9·5 |
| 10·0 | | 45·0 | 7·1 | |
| 9·3 | | 49·5 | 13·5 | |
| 7·9 | | 53·0 | 9·3 | 7·8 GSt |
| 9·6 | 58 | 2·5 | 40·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 30 | 99 | 7·7 |
| | 40 | 101 | 7·6 |
| | 50 | 103 | 7·4 |
| 14 | 0 | 105 | 7·2 |



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**25 prec.**

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 13 | 50 | 103 | 7.4 |
| 14 | 0 | 105 | 7.2 |
| | 10 | 107 | 7.0 |
| | 20 | 109 | 6.8 |
| | 30 | 111 | 6.6 |

**5401—5460.**

| mag. | 13h.–14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.4 | 58 | 11.0 | 32.9 | |
| 10.1 | | 14.0 | 5.3 | |
| 9.9 | | 23.5 | 36.8 | |
| 8.0 | | 32.5 | 52.3 | 8.5 Gt |
| 9.0 | | 33.5 | 46.2 | |
| 9.5 | | 35.5 | 11.2 | |
| 10.0 | | 41.5 | 16.5 | |
| 9.8 | | 46.5 | 21.6 | |
| 10.1 | | 56.0 | 26.0 | |
| 8.5 | 59 | 13.5 | 15.7 | 9.2 |
| 10.0 | | 15.5 | 10.8 | |
| 9.6 | | 17.2 | 58.5 | |
| 9.6 | | 23.0 | 55.6 | 8.5 S |
| 9.8 | | 24.5 | 44.9 | |
| 9.2 | | 33.0 | 27.2 | |
| 10.0 | | 44.5 | 48.0 | |
| 10.1 | | 45.5 | 2.7 | |
| 9.9 | | 46.0 | 8.2 | |
| 9.9 | | 50.5 | 45.9 | |
| 8.4 | | 55.0 | 7.3 | 9.0 G |
| 10.0 | 0 | 5.5 | 15.1 | |
| 8.7 | | 6.5 | 56.6 | 8.8 S |
| 10.0 | | 9.0 | 41.4 | |
| 10.0 | | 10.5 | 7.5 | |
| 10.1 | | 12.0 | 6.9 | |
| 10.0 | | 13.5 | 14.6 | |
| 9.2 | | 16.0 | 7.7 | *8.2* G |
| 10.0 | | 27.5 | 44.8 | |
| 9.6 | | 33.5 | 44.3 | |
| 10.0 | | 44.5 | 0.6 | |
| 7.8 | | 46.7 | 59.2 | 8.5 GSt |
| 8.8 | | 56.0 | 24.8 | 9.0 |
| 10.0 | 1 | 13.5 | 39.1 | |
| 10.1 | | 14.5 | 53.6 | |
| 9.0 | | 30.0 | 17.3 | |
| 10.1 | | 35.0 | 28.2 | |
| 9.9 | | 50.5 | 43.4 | |
| 10.1 | | 52.5 | 16.4 | |
| 9.0 | | 56.5 | 37.7 | |
| 10.0 | 2 | 6.0 | 7.1 | |
| 9.6 | | 6.5 | 42.9 | |
| 10.1 | | 7.5 | 30.2 | |
| 8.4 | | 24.0 | 10.8 | 8.6 |
| 8.8 | | 39.5 | 3.4 | |
| 9.6 | | 43.0 | 3.1 | |
| 8.3 | | 43.0 | 14.6 | 8.7 |
| 9.6 | | 47.5 | 2.5 | |
| 10.1 | 3 | 8.5 | 7.8 | |
| 8.7 | | 16.5 | 12.8 | 8.7 |
| 9.7 | | 24.0 | 28.2 | |
| 8.6 | | 26.5 | 48.2 | 9.2 |
| 10.1 | | 44.0 | 52.1 | |
| 10.1 | 4 | 8.0 | 38.8 | |
| 10.1 | | 20.0 | 9.4 | |
| 9.8 | | 24.0 | 46.1 | |
| 9.8 | | 27.5 | 35.3 | |
| 9.6 | | 42.0 | 48.1 | |
| 9.8 | | 43.0 | 5.8 | 9.5 |
| 9.9 | | 44.7 | 59.2 | |
| 9.0 | | 50.0 | 38.2 | |

**5461—5520.**

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.0 | 4 | 50.0 | 37.1 | |
| 9.0 | | 52.0 | 39.6 | |
| 10.3 | | 55.0 | 4.6 | |
| 10.3 | | 56.0 | 7.2 | |
| 10.3 | 5 | 17.5 | 47.3 | |
| 9.2 | | 23.5 | 46.9 | |
| 10.2 | | 24.3 | 23.9 | |
| 10.0 | | 43.5 | 22.2 | |
| 10.3 | | 48.0 | 39.6 | |
| 10.3 | 6 | 27.5 | 45.5 | 9.5 |
| 9.2 | | 47.0 | 28.6 | |
| 10.3 | 7 | 0.5 | 30.2 | |
| 9.8 | | 14.5 | 27.6 | |
| 9.6 | | 25.0 | 38.0 | |
| 9.6 | | 31.5 | 47.9 | |
| 8.9 | | 35.5 | 19.9 | 6.5 G |
| 10.1 | | 51.0 | 15.9 | |
| 10.2 | 8 | 29.5 | 34.6 | |
| 10.2 | | 34.5 | 52.1 | |
| 9.9 | | 37.0 | 52.2 | |
| 9.5 | | 48.5 | 56.1 | |
| 10.2 | | 57.5 | 52.6 | |
| 10.2 | 9 | 2.5 | 3.9 | |
| 9.7 | | 10.5 | 51.8 | |
| 9.6 | | 10.5 | 4.6 | |
| 10.2 | | 15.5 | 39.0 | |
| 10.2 | | 18.5 | 43.8 | |
| 9.4 | | 28.5 | 19.3 | |
| 9.0 | | 28.5 | 38.2 | 10.0 |
| 10.3 | | 30.5 | 12.2 | |
| 8.6 | | 31.0 | 3.6 | 9.5 |
| 9.7 | | 37.5 | 3.2 | |
| 10.3 | | 44.0 | 59.1 | |
| 9.7 | | 51.0 | 28.2 | |
| 10.2 | 10 | 2.0 | 26.0 | |
| 10.2 | | 12.5 | 46.2 | |
| 10.0 | | 14.0 | 48.9 | |
| 9.6 | | 14.5 | 1.8 | |
| 9.6 | | 21.0 | 3.9 | |
| 9.7 | | 26.5 | 25.0 | |
| 7.6 | | 32.0 | 10.5 | 8.0 |
| 10.3 | | 34.5 | 55.4 | |
| 10.3 | | 45.0 | 59.7 | |
| 10.2 | | 46.0 | 59.8 | |
| 9.8 | | 52.0 | 25.8 | |
| 10.0 | | 59.5 | 39.8 | |
| 10.0 | 11 | 0.0 | 37.2 | |
| 10.3 | | 1.0 | 42.9 | |
| 9.8 | | 12.2 | 0.9 | |
| 9.6 | | 24.5 | 25.5 | |
| 10.3 | | 28.5 | 43.8 | |
| 9.2 | | 37.0 | 57.9 | |
| 9.8 | | 56.0 | 17.4 | |
| 10.0 | | 57.5 | 16.3 | |
| 10.2 | 12 | 2.0 | 59.7 | |
| 10.0 | | 16.0 | 12.8 | |
| 10.2 | | 29.0 | 58.5 | |
| 10.0 | | 35.0 | 27.8 | |
| 10.0 | | 37.5 | 40.9 | |
| 9.3 | | 39.5 | 51.9 | |

**5521—5580.**

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.2 | 12 | 40.0 | 32.1 | |
| 10.2 | | 41.0 | 19.3 | |
| 9.6 | | 47.0 | 40.7 | |
| 8.0 | | 57.0 | 47.7 | 8.7 |
| 10.3 | 13 | 1.0 | 3.9 | |
| 10.3 | | 7.0 | 27.9 | |
| 9.9 | | 8.0 | 25.9 | |
| 10.2 | | 9.5 | 38.1 | |
| 10.0 | | 16.5 | 42.0 | |
| 9.9 | | 19.0 | 4.0 | |
| 10.4 | | 37.0 | 33.1 | |
| 9.0 | | 58.5 | 51.5 | 9.5 |
| 10.2 | 14 | 5.0 | 5.1 | |
| 9.7 | | 24.0 | 58.6 | |
| 10.2 | | 27.5 | 1.9 | |
| 9.7 | | 31.5 | 26.7 | |
| 8.7 | | 36.0 | 38.4 | 8.0 G |
| 9.8 | | 46.5 | 33.7 | |
| 10.0 | | 47.0 | 12.2 | |
| 9.7 | | 49.0 | 17.4 | |
| 9.0 | 15 | 25.5 | 48.9 | 9.8 |
| 10.4 | | 44.0 | 15.7 | |
| 10.3 | | 48.5 | 23.0 | |
| 10.3 | | 53.5 | 32.0 | |
| 10.2 | 16 | 0.5 | 29.9 | |
| 10.3 | | 6.5 | 9.3 | |
| 10.2 | | 6.5 | 6.9 | 9.5 |
| 9.4 | | 7.5 | 18.4 | 9.0 |
| 9.8 | | 11.5 | 34.7 | |
| 9.6 | | 18.0 | 45.6 | |
| 10.3 | | 22.5 | 40.2 | |
| 9.9 | | 29.0 | 41.3 | |
| 9.8 | | 29.5 | 10.6 | 9.5 |
| 10.3 | | 33.0 | 30.4 | |
| 8.0 | | 36.0 | 55.7 | 8.5 |
| 9.8 | | 36.0 | 6.7 | |
| 10.3 | 17 | 5.5 | 19.8 | |
| 9.9 | | 5.5 | 54.5 | |
| 10.2 | | 6.5 | 16.0 | |
| 10.3 | | 9.0 | 24.7 | |
| 10.2 | | 17.5 | 37.1 | |
| 10.4 | | 18.5 | 23.4 | |
| 10.0 | | 31.0 | 5.0 | |
| 9.4 | | 39.5 | 6.6 | 10.0 |
| 9.7 | | 40.0 | 6.0 | |
| 9.9 | | 42.0 | 25.0 | |
| 10.3 | | 43.0 | 39.6 | |
| 9.4 | | 51.0 | 43.4 | 8.2 |
| 8.6 | 18 | 0.0 | 10.1 | 9.2 |
| 10.2 | | 2.5 | 9.2 | |
| 9.4 | | 6.5 | 11.9 | |
| 10.3 | | 7.0 | 45.4 | |
| 10.4 | | 13.5 | 26.8 | |
| 9.8 | | 20.0 | 6.9 | |
| 9.8 | | 26.0 | 18.3 | |
| 10.2 | | 29.5 | 17.1 | |
| 8.9 | | 35.8 | 4.0 | 9.5 |
| 8.9 | | 37.8 | 4.0 | 9.0 |
| 8.9 | | 46.5 | 3.7 | |
| 8.9 | | 48.5 | 4.3 | |

**5581—5640.**

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.5 | 18 | 49.0 | 44.0 | |
| 10.2 | | 49.5 | 34.5 | |
| 10.3 | | 49.5 | 22.9 | |
| 10.2 | | 51.5 | 47.7 | |
| 9.9 | | 57.5 | 27.3 | |
| 10.2 | | 57.5 | 2.2 | |
| 8.6 | 19 | 3.2 | 33.9 | 9.0 |
| 10.3 | | 7.0 | 30.9 | |
| 10.2 | | 11.5 | 2.1 | |
| 9.8 | | 17.5 | 42.0 | |
| 10.0 | | 22.5 | 6.6 | 8.2 G |
| 9.2 | | 28.0 | 14.4 | |
| 8.5 | | 35.0 | 58.8 | 8.0 |
| 10.0 | | 38.5 | 8.6 | |
| 9.3 | | 59.5 | 18.6 | |
| 9.8 | 20 | 6.0 | 24.9 | |
| 9.6 | | 13.0 | 48.0 | 9.0 |
| 9.7 | | 13.5 | 46.2 | |
| 10.3 | | 15.0 | 6.7 | |
| 10.2 | | 18.0 | 41.0 | |
| 10.2 | | 21.5 | 34.3 | |
| 9.0 | | 24.0 | 34.8 | 9.5 |
| 10.3 | | 30.0 | 23.6 | |
| 9.7 | | 30.0 | 4.0 | |
| 9.6 | | 33.5 | 30.2 | |
| 8.1 | | 47.0 | 12.7 | 8.5 |
| 8.3 | | 58.5 | 51.0 | 8.8 |
| 9.8 | 21 | 0.5 | 49.5 | |
| 10.2 | | 2.0 | 46.5 | |
| 9.6 | | 20.8 | 58.5 | 9.0 |
| 9.6 | | 36.3 | 58.4 | |
| 8.7 | | 37.0 | 44.9 | 9.2 |
| 10.2 | | 38.5 | 16.1 | |
| 9.0 | | 39.0 | 35.7 | |
| 10.3 | | 54.0 | 42.5 | |
| 9.6 | 22 | 4.0 | 54.0 | |
| 10.3 | | 13.0 | 51.0 | |
| 9.8 | | 18.5 | 42.7 | |
| 10.3 | | 20.0 | 46.8 | |
| 10.2 | | 30.0 | 34.3 | |
| 10.0 | | 52.5 | 17.0 | |
| 9.0 | | 59.5 | 55.3 | |
| 9.7 | 23 | 0.5 | 4.6 | 9.5 |
| 10.2 | | 5.0 | 13.2 | |
| 9.7 | | 26.0 | 3.0 | |
| 10.2 | 24 | 27.5 | 13.6 | |
| 8.6 | | 30.0 | 32.0 | 9.5 |
| 10.2 | | 36.3 | 0.6 | |
| 9.9 | | 41.0 | 19.0 | |
| 9.7 | | 41.0 | 27.1 | |
| 9.0 | | 58.0 | 51.1 | 8.8 |
| 9.6 | 25 | 3.0 | 14.7 | 9.8 |
| 8.2 | | 23.0 | 13.9 | 8.0 G |
| 8.8 | | 33.5 | 52.5 | 9.0 |
| 8.2 | | 40.5 | 50.3 | 8.5 |
| 10.2 | | 44.5 | 4.3 | |
| 9.9 | | 47.5 | 33.3 | |
| 10.3 | | 49.0 | 39.0 | |
| 9.9 | | 53.0 | 56.9 | |
| 9.9 | | 58.5 | 21.3 | |



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## 5641—5700.

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·2 | 25 | 59·0 | 5·3 | |
| 7·7 | | 59·0 | 27·8 | 7·0 GSt |
| 10·3 | 26 | 0·5 | 2·8 | |
| 9·0 | | 7·5 | 6·8 | |
| 9·2 | | 11·0 | 49·8 | 9·5 |
| 10·0 | | 32·0 | 37·3 | |
| 9·3 | | 33·0 | 7·7 | |
| 9·5 | | 34·5 | 44·8 | |
| 9·2 | | 49·5 | 14·1 | |
| 9·2 | | 50·5 | 13·0 | |
| 10·2 | | 59·0 | 39·7 | |
| 9·5 | 27 | 1·0 | 21·7 | |
| 10·0 | | 16·5 | 5·2 | |
| 10·0 | | 16·5 | 34·5 | |
| 10·0 | | 18·0 | 46·3 | |
| 9·9 | 28 | 4·0 | 39·1 | |
| 10·3 | | 6·0 | 57·3 | |
| 10·1 | | 14·0 | 50·8 | |
| 9·4 | | 16·0 | 49·6 | 9·5 G |
| 8·2 | | 16·5 | 48·4 | 9·0 G |
| 9·8 | | 18·5 | 18·6 | 9·0 G |
| 8·2 | | 25·0 | 13·0 | |
| 10·2 | | 29·5 | 7·5 | |
| 10·3 | | 30·0 | 18·0 | |
| 8·6 | | 46·0 | 35·8 | 8·5 G |
| 9·4 | 29 | 11·5 | 37·5 | 9·0 |
| 9·9 | | 11·5 | 44·8 | |
| 10·2 | | 11·5 | 30·0 | |
| 9·7 | | 16·5 | 39·8 | |
| 10·2 | | 43·5 | 9·1 | |
| 10·0 | | 49·0 | 9·7 | |
| 10·2 | | 56·0 | 20·1 | |
| 8·3 | | 57·5 | 22·5 | 9·0 |
| 9·3 | 30 | 2·5 | 30·1 | |
| 10·4 | | 15·0 | 31·0 | |
| 8·3 | | 26·3 | 2·1 | 9·5 |
| 8·8 | | 31·5 | 26·1 | 9·0 |
| 10·3 | | 32·0 | 58·1 | |
| 8·6 | | 42·0 | 23·2 | 9·0 |
| 10·0 | | 48·5 | 51·1 | |
| 8·9 | | 54·0 | 12·4 | 8·0 G |
| 8·4 | | 55·5 | 40·4 | |
| 10·3 | 31 | 5·0 | 26·1 | |
| 10·3 | | 13·5 | 29·9 | |
| 9·3 | | 15·5 | 29·1 | |
| 9·3 | | 40·5 | 24·1 | |
| 10·3 | | 59·5 | 48·8 | |
| 10·3 | 32 | 2·0 | 26·2 | |
| 10·2 | | 10·0 | 26·4 | |
| 10·3 | | 21·0 | 39·9 | |
| 10·2 | | 34·0 | 40·1 | |
| 10·3 | | 35·5 | 35·7 | |
| 9·0 | | 42·0 | 18·1 | |
| 10·3 | | 50·0 | 58·2 | |
| 9·7 | | 58·5 | 23·1 | |
| 7·9 | 33 | 28·5 | 32·5 | |
| 10·3 | | 35·5 | 25·2 | |
| 10·2 | | 42·0 | 43·1 | |
| 9·2 | | 51·0 | 18·9 | |
| 9·9 | 34 | 20·0 | 40·6 | |

## 5701—5760.

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·5 | 34 | 42·5 | 27·2 | |
| 10·2 | 35 | 21·5 | 14·1 | |
| 9·6 | | 29·5 | 18·5 | |
| 10·3 | 36 | 3·0 | 41·0 | |
| 8·9 | | 5·8 | 2·4 | 8·5 G |
| 10·3 | | 12·0 | 42·1 | |
| 10·2 | | 22·0 | 7·1 | |
| 9·9 | | 55·0 | 57·5 | |
| 8·9 | 37 | 3·5 | 14·8 | |
| 8·1 | | 7·5 | 30·0 | 8·5 |
| 9·5 | | 36·0 | 41·6 | |
| 10·2 | | 43·0 | 58·1 | |
| 9·9 | 38 | 4·5 | 4·7 | |
| 8·3 | | 14·5 | 53·8 | 9·0 |
| 10·2 | | 42·5 | 18·0 | |
| 8·8 | | 45·0 | 0·4 | |
| 8·8 | | 51·5 | 27·8 | |
| 10·3 | | 54·5 | 28·6 | |
| 8·8 | | 58·0 | 15·9 | |
| 9·8 | 39 | 21·5 | 1·3 | |
| 8·5 | | 42·0 | 22·7 | |
| 8·7 | | 50·0 | 33·1 | |
| 9·2 | | 53·5 | 0·1 | |
| 8·5 | 40 | 1·0 | 11·1 | 9·0 |
| 9·0 | | 12·5 | 53·7 | |
| 10·3 | | 14·0 | 7·1 | |
| 10·3 | | 31·5 | 15·2 | |
| 9·9 | | 45·5 | 21·4 | |
| 9·0 | | 46·5 | 43·1 | |
| 8·9 | | 50·5 | 4·1 | 8·8 |
| 10·4 | | 52·5 | 13·9 | |
| 9·7 | | 59·0 | 49·0 | |
| 9·2 | 41 | 3·5 | 40·9 | |
| 9·6 | | 14·3 | 45·9 | |
| 10·4 | | 14·5 | 47·7 | |
| 10·3 | | 22·5 | 44·3 | |
| 8·9 | | 23·5 | 9·0 | |
| 9·4 | | 41·5 | 49·8 | |
| 8·9 | 42 | 5·2 | 58·8 | 9·0 |
| 8·1 | | 21·0 | 48·9 | 8·5 |
| 8·7 | | 57·0 | 42·2 | |
| 8·6 | 43 | 17·5 | 15·2 | |
| 9·8 | | 34·0 | 42·0 | |
| 8·3 | | 39·0 | 12·0 | |
| 9·4 | 44 | 4·0 | 50·3 | |
| 8·7 | | 9·5 | 39·1 | 8·5 |
| 9·5 | | 24·0 | 6·6 | |
| 9·7 | | 46·0 | 21·1 | |
| 8·5 | 45 | 2·5 | 28·8 | 9·0 |
| 9·9 | | 38·6 | 58·9 | |
| 8·9 | | 39·0 | 51·4 | |
| 9·4 | | 53·0 | 44·6 | 9·5 |
| 7·3 | | 56·5 | 36·0 | 6·0 GSct |
| 9·7 | 46 | 9·0 | 47·4 | |
| 9·4 | | 11·0 | 5·4 | |
| 9·5 | | 23·0 | 32·8 | |
| 9·9 | | 45·2 | 58·7 | |
| 8·7 | | 48·5 | 39·3 | 9·0 |
| 9·4 | 47 | 18·0 | 50·6 | 9·5 |
| 9·8 | 48 | 17·5 | 15·4 | |

## 5761—5820.

| mag. | 14h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 48 | 31·0 | 26·6 | |
| 9·4 | | 43·5 | 9·2 | |
| 9·6 | | 54·0 | 17·9 | |
| 9·9 | 49 | 14·2 | 46·5 | |
| 9·8 | | 34·0 | 27·0 | |
| 9·4 | | 53·0 | 13·2 | |
| 9·7 | 50 | 4·5 | 37·0 | |
| 9·4 | | 12·0 | 29·2 | |
| 9·9 | | 15·0 | 39·2 | |
| 9·9 | | 18·5 | 58·0 | |
| 9·8 | | 25·5 | 55·0 | |
| 9·9 | | 34·0 | 52·4 | |
| 7·9 | 51 | 3·0 | 18·5 | 8·0 GS |
| 9·1 | | 3·5 | 49·0 | 9·0 |
| 8·9 | | 24·0 | 23·6 | 9·5 |
| 9·4 | | 27·5 | 19·8 | |
| 9·8 | | 55·0 | 29·1 | |
| 8·9 | | 56·5 | 8·3 | 9·0 |
| 9·9 | 52 | 17·5 | 58·4 | |
| 9·4 | | 27·5 | 19·2 | |
| 9·8 | | 28·0 | 2·0 | |
| 9·4 | | 37·0 | 36·9 | |
| 9·4 | | 44·0 | 49·4 | |
| 9·6 | 53 | 3·5 | 44·2 | |
| 9·6 | | 17·5 | 58·2 | |
| 9·6 | | 32·5 | 37·3 | |
| 9·4 | | 53·5 | 37·3 | |
| 9·4 | | 57·0 | 52·2 | |
| 9·2 | 54 | 3·0 | 19·2 | |
| 9·9 | | 4·5 | 47·8 | |
| 9·7 | | 12·5 | 56·0 | |
| 9·6 | | 14·2 | 36·0 | |
| 9·2 | | 21·0 | 31·0 | |
| 9·6 | | 38·0 | 19·8 | |
| 8·9 | | 46·0 | 51·7 | 10·0 |
| 9·9 | | 54·2 | 33·5 | |
| 9·4 | 55 | 3·0 | 53·5 | |
| 8·8 | | 3·0 | 18·1 | 8·5 |
| 9·9 | | 7·0 | 35·3 | |
| 9·2 | | 20·5 | 51·0 | 9·5 |
| 8·7 | | 23·0 | 58·5 | 8·5 |
| 9·6 | | 30·0 | 18·8 | |
| 9·8 | | 35·5 | 18·4 | |
| 9·9 | | 43·0 | 21·4 | |
| 9·6 | 56 | 2·0 | 54·0 | |
| 9·9 | | 14·5 | 24·0 | |
| 9·0 | | 33·0 | 19·0 | |
| 8·6 | | 41·0 | 4·4 | 8·0 |
| 9·6 | 57 | 0·5 | 29·4 | |
| 9·8 | | 5·0 | 50·1 | |
| 9·4 | | 10·0 | 50·4 | |
| 9·0 | | 19·5 | 40·8 | |
| 9·6 | | 26·5 | 26·2 | |
| 9·4 | | 29·5 | 10·0 | |
| 9·9 | | 34·0 | 27·2 | |
| 9·7 | | 37·0 | 47·9 | |
| 9·8 | | 37·0 | 4·2 | |
| 9·9 | 58 | 3·0 | 1·0 | |
| 9·8 | | 9·0 | 58·6 | |
| 9·4 | | 22·0 | 19·1 | |

## 5821—5880.

| mag. | 14h.—15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·6 | 58 | 24·5 | 29·0 | |
| 9·2 | | 28·0 | 31·3 | |
| 8·7 | | 29·0 | 27·7 | |
| 9·2 | | 31·0 | 56·2 | |
| 9·2 | | 34·0 | 4·6 | |
| 9·2 | | 43·0 | 43·8 | |
| 9·4 | | 54·5 | 39·2 | |
| 9·7 | 59 | 1·0 | 21·6 | |
| 8·6 | | 33·5 | 25·2 | |
| 9·9 | | 34·0 | 7·3 | |
| 9·9 | 0 | 7·5 | 29·8 | |
| 9·5 | | 12·0 | 27·8 | 9·0 |
| 9·9 | | 14·0 | 19·3 | |
| 9·7 | | 20·0 | 36·1 | |
| 9·9 | | 21·5 | 4·0 | |
| 9·4 | | 43·5 | 14·3 | |
| 8·3 | | 52·0 | 37·4 | 9·0 |
| 9·9 | 1 | 0·0 | 42·1 | |
| 9·4 | | 7·0 | 45·6 | 9·0 |
| 9·5 | | 7·0 | 6·3 | |
| 9·2 | | 8·5 | 43·7 | |
| 9·8 | | 16·0 | 8·2 | |
| 9·4 | | 22·2 | 59·2 | |
| 9·4 | | 49·0 | 32·1 | |
| 9·9 | | 51·0 | 26·1 | |
| 8·6 | | 53·5 | 13·3 | |
| 8·6 | | 54·0 | 16·6 | |
| 9·8 | 2 | 2·0 | 30·8 | |
| 9·7 | | 3·0 | 25·4 | |
| 8·9 | | 23·0 | 3·2 | 9·3 |
| 8·6 | | 45·5 | 37·0 | 8·0 G |
| 8·4 | | 48·5 | 55·0 | 7·5 G |
| 8·9 | 3 | 5·0 | 37·0 | |
| 9·2 | | 6·0 | 18·9 | |
| 9·1 | | 7·2 | 1·9 | 9·0 |
| 9·9 | | 23·5 | 59·9 | |
| 9·9 | | 53·5 | 48·8 | |
| 9·9 | | 57·0 | 57·6 | |
| 9·8 | 4 | 11·0 | 18·4 | |
| 9·9 | | 18·0 | 28·1 | |
| 9·9 | | 21·0 | 46·4 | |
| 9·9 | | 21·0 | 6·5 | |
| 9·9 | | 31·0 | 9·0 | |
| 9·9 | | 32·0 | 9·4 | |
| 8·6 | | 38·0 | 15·8 | 7·8 G |
| 8·6 | | 46·0 | 20·9 | *7·1* G |
| 9·4 | | 51·0 | 20·2 | 8·5 G |
| 9·8 | | 55·5 | 10·2 | |
| 8·7 | 5 | 14·0 | 32·3 | |
| 9·5 | | 19·2 | 0·8 | |
| 8·8 | | 47·0 | 45·8 | 7·8 G |
| 9·4 | 6 | 5·0 | 37·6 | |
| 9·8 | | 15·0 | 18·0 | 9·5 |
| 9·7 | | 23·0 | 15·0 | |
| 9·7 | | 31·0 | 15·4 | |
| 9·2 | | 31·5 | 11·1 | |
| 9·9 | | 48·0 | 14·8 | |
| 9·9 | | 54·0 | 11·8 | |
| 9·9 | 7 | 4·0 | 31·5 | |
| 9·9 | | 4·5 | 13·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 109 | 6·8 |
| | 30 | 111 | 6·6 |
| | 40 | 113 | 6·4 |
| | 50 | 115 | 6·2 |
| 15 | 0 | 117 | 5·9 |
| | 10 | 119 | 5·6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 117 | 5·9 |
| | 10 | 119 | 5·6 |
| | 20 | 120 | 5·4 |
| | 30 | 122 | 5·1 |

## 5881—5940.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·4 | 7 | 11·0 | 20·2 | |
| 8·6 | | 30·0 | 49·0 | 9·0 |
| 9·8 | | 45·0 | 53·0 | |
| 9·7 | | 46·0 | 6·0 | |
| 9·2 | | 54·5 | 15·9 | |
| 9·6 | | 57·0 | 33·1 | |
| 7·8 | 8 | 7·0 | 37·8 | GS |
| 9·9 | | 7·0 | 26·2 | |
| 8·2 | | 12·5 | 54·1 | |
| 9·9 | | 17·0 | 53·2 | |
| 9·4 | | 18·5 | 31·4 | |
| 9·7 | | 22·0 | 25·1 | |
| 9·4 | | 38·0 | 12·3 | |
| 9·8 | | 40·0 | 39·5 | |
| 9·7 | | 43·0 | 29·2 | |
| 9·4 | | 46·0 | 31·2 | |
| 8·4 | | 48·5 | 21·9 | |
| 9·2 | | 52·0 | 3·0 | |
| 9·7 | 9 | 7·5 | 22·0 | |
| 7·7 | | 9·5 | 40·3 | GSt |
| 9·8 | | 13·0 | 20·1 | |
| 9·5 | | 15·5 | 35·5 | |
| 7·7 | | 20·0 | 55·0 | 7·8 |
| 9·7 | | 26·5 | 58·4 | |
| 8·9 | | 38·0 | 3·2 | |
| 9·5 | | 55·0 | 51·4 | |
| 8·6 | | 55·0 | 24·4 | |
| 9·4 | | 57·5 | 44·2 | |
| 9·8 | 10 | 1·5 | 9·8 | |
| 9·9 | | 3·0 | 47·3 | |
| 9·9 | | 9·0 | 5·6 | |
| 8·8 | | 23·0 | 17·1 | 8·5 |
| 9·9 | | 27·0 | 51·3 | |
| 9·9 | | 27·5 | 20·3 | |
| 9·9 | | 34·0 | 42·6 | |
| 8·9 | | 34·0 | 5·6 | |
| 8·0 | | 35·5 | 5·2 | 7·2 GS |
| 8·7 | | 37·0 | 50·4 | |
| 9·7 | | 42·0 | 5·0 | |
| 9·9 | | 43·5 | 51·4 | |
| 9·9 | | 44·0 | 32·7 | |
| 9·9 | | 52·0 | 5·4 | |
| 9·9 | | 54·0 | 50·0 | |
| 9·4 | 11 | 5·0 | 25·9 | |
| 9·4 | | 21·0 | 9·4 | |
| 8·6 | | 30·0 | 35·7 | |
| 9·4 | | 46·0 | 6·6 | |
| 9·4 | 12 | 0·5 | 45·3 | |
| 9·1 | | 2·5 | 21·0 | |
| 9·4 | | 4·0 | 18·0 | |
| 9·9 | | 22·5 | 9·1 | |
| 8·9 | | 32·0 | 21·2 | |
| 9·9 | | 34·0 | 15·8 | |
| 9·4 | | 40·0 | 19·1 | |
| 7·8 | | 41·0 | 54·3 | 9·0 G |
| 9·4 | | 49·5 | 23·0 | |
| 9·6 | | 51·5 | 54·2 | |
| 9·4 | 13 | 1·0 | 29·0 | |
| 9·5 | | 7·5 | 18·6 | |
| 9·7 | | 13·5 | 50·4 | |

## 5941—6000.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 7·9 | 13 | 16·0 | 47·3 | 9·0 |
| 9·9 | | 16·0 | 34·6 | |
| 8·6 | | 16·5 | 10·4 | |
| 9·9 | | 17·5 | 5·2 | |
| 9·6 | | 19·5 | 0·0 | |
| 9·9 | | 24·5 | 17·9 | |
| 9·7 | | 26·5 | 44·3 | |
| 9·2 | | 37·5 | 42·4 | |
| 9·8 | | 50·0 | 46·0 | |
| 9·6 | | 52·5 | 54·4 | |
| 9·7 | | 52·5 | 5·9 | |
| 9·8 | | 56·0 | 43·2 | |
| 8·6 | 14 | 5·5 | 0·8 | 9·0 |
| 9·2 | | 23·5 | 4·3 | |
| 8·9 | | 26·0 | 33·9 | |
| 9·0 | | 28·0 | 18·2 | |
| 9·6 | | 29·5 | 17·1 | |
| 9·0 | | 33·5 | 40·3 | |
| 8·3 | | 33·5 | 41·5 | 9·5 |
| 9·8 | | 34·5 | 34·0 | |
| 9·9 | | 35·0 | 34·9 | |
| 9·9 | | 40·5 | 43·2 | |
| 9·9 | | 41·5 | 42·5 | |
| 9·6 | | 49·5 | 30·1 | |
| 9·4 | | 52·0 | 59·2 | |
| 8·5 | | 53·5 | 48·6 | 9·5 |
| 9·9 | | 58·0 | 4·4 | |
| 9·9 | 15 | 5·0 | 39·2 | |
| 9·9 | | 11·0 | 2·9 | |
| 9·9 | | 12·5 | 2·0 | |
| 9·4 | | 13·5 | 7·2 | |
| 8·9 | | 15·0 | 58·2 | |
| 9·7 | | 31·5 | 32·9 | |
| 8·8 | | 32·0 | 48·1 | |
| 9·4 | | 34·0 | 35·2 | |
| 9·9 | | 39·5 | 22·7 | |
| 9·4 | | 40·0 | 42·8 | |
| 8·9 | | 43·0 | 5·6 | |
| 9·9 | | 44·0 | 30·2 | |
| 9·5 | 16 | 1·0 | 16·2 | |
| 9·9 | | 2·5 | 35·5 | |
| 9·9 | | 7·0 | 43·1 | |
| 8·7 | | 10·0 | 22·9 | |
| 8·7 | | 37·5 | 51·2 | 9·5 |
| 9·9 | | 38·5 | 13·2 | |
| 8·6 | | 41·5 | 25·2 | 9·5 |
| 7·9 | | 45·0 | 30·4 | 9·0 G |
| 9·7 | 17 | 3·0 | 3·0 | |
| 9·7 | | 10·5 | 33·8 | |
| 9·9 | | 10·5 | 25·6 | |
| 9·6 | | 18·5 | 7·2 | |
| 9·0 | | 19·0 | 2·4 | |
| 9·8 | | 19·8 | 4·0 | |
| 10·1 | | 19·8 | 10·9 | |
| 10·0 | | 20·3 | 5·7 | |
| 10·0 | | 21·3 | 10·9 | |
| 9·7 | | 22·6 | 36·4 | |
| 10·0 | | 25·3 | 16·3 | |
| 9·8 | | 33·8 | 17·0 | |
| 9·6 | | 37·0 | 12·2 | |

## 6001—6060.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 17 | 37·2 | 42·7 | |
| 9·9 | | 43·8 | 4·4 | |
| 9·9 | | 43·8 | 24·9 | |
| 9·9 | | 46·8 | 6·8 | |
| 9·9 | | 48·4 | 58·1 | |
| 9·1 | | 58·7 | 15·5 | |
| 10·0 | 18 | 0·4 | 0·0 | |
| 9·9 | | 8·8 | 4·4 | |
| 9·9 | | 15·8 | 20·3 | |
| 9·8 | | 17·8 | 6·9 | |
| 10·1 | | 18·7 | 46·5 | |
| 8·9 | | 18·9 | 49·1 | 10·0 |
| 9·6 | | 21·3 | 10·9 | |
| 9·8 | | 28·7 | 53·8 | |
| 9·8 | | 29·7 | 54·1 | |
| 10·1 | | 35·3 | 27·4 | |
| 10·0 | | 39·3 | 26·8 | |
| 9·4 | | 43·3 | 6·9 | |
| 9·9 | | 54·2 | 31·4 | |
| 8·8 | | 56·7 | 40·3 | |
| 9·3 | | 59·4 | 59·0 | 10·0 |
| 9·6 | 19 | 3·3 | 29·8 | |
| 10·1 | | 7·8 | 12·6 | |
| 9·6 | | 12·2 | 55·2 | |
| 9·3 | | 12·2 | 40·2 | |
| 9·3 | | 12·2 | 33·9 | |
| 9·8 | | 13·7 | 21·9 | |
| 9·6 | | 15·2 | 46·9 | |
| 9·6 | | 18·8 | 14·9 | |
| 9·9 | | 18·8 | 15·2 | |
| 9·5 | | 25·8 | 23·8 | |
| 9·8 | | 27·8 | 19·4 | |
| 9·0 | | 29·8 | 16·5 | |
| 9·2 | | 30·3 | 22·9 | |
| 10·0 | | 37·7 | 48·5 | |
| 9·6 | | 38·7 | 35·9 | |
| 9·2 | | 42·3 | 8·5 | |
| 10·1 | | 44·2 | 45·5 | |
| 9·6 | | 47·2 | 51·2 | |
| 9·4 | | 52·8 | 17·9 | |
| 9·9 | | 59·2 | 41·4 | |
| 9·6 | 20 | 3·7 | 52·6 | |
| 9·2 | | 7·8 | 18·8 | |
| 10·0 | | 24·8 | 9·6 | |
| 8·8 | | 29·8 | 18·6 | |
| 8·8 | | 32·8 | 13·2 | |
| 10·1 | | 37·3 | 25·7 | |
| 10·0 | | 43·7 | 51·7 | |
| 9·9 | | 44·3 | 25·3 | |
| 9·5 | | 49·2 | 41·0 | |
| 9·9 | | 49·2 | 48·3 | |
| 9·4 | | 50·2 | 47·0 | |
| 9·5 | | 54·2 | 51·9 | |
| 8·9 | | 55·8 | 22·7 | |
| 9·8 | | 56·2 | 52·6 | |
| 9·1 | | 56·8 | 22·1 | |
| 9·9 | | 59·3 | 6·3 | |
| 9·2 | 21 | 0·8 | 23·4 | |
| 9·6 | | 0·9 | 59·7 | |
| 9·6 | | 1·1 | 58·9 | |

## 6061—6120.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 21 | 2·7 | 48·4 | |
| 9·8 | | 4·2 | 52·5 | |
| 9·9 | | 5·3 | 24·4 | |
| 10·1 | | 8·7 | 48·3 | |
| 9·4 | | 12·3 | 22·8 | |
| 10·0 | | 13·8 | 16·7 | |
| 9·6 | | 14·7 | 31·3 | |
| 10·0 | | 14·7 | 32·5 | |
| 10·0 | | 15·2 | 31·8 | |
| 10·0 | | 19·7 | 48·5 | |
| 9·7 | | 28·8 | 21·0 | |
| 10·0 | | 29·3 | 21·7 | |
| 9·8 | | 29·3 | 26·8 | |
| 9·8 | | 33·7 | 58·0 | |
| 9·8 | | 36·8 | 8·2 | |
| 10·0 | | 39·2 | 58·2 | |
| 9·4 | | 40·2 | 39·4 | |
| 10·1 | | 47·0 | 7·8 | |
| 9·4 | | 50·2 | 38·4 | |
| 9·7 | | 51·3 | 1·6 | |
| 10·1 | 22 | 1·3 | 15·4 | |
| 9·2 | | 6·2 | 44·5 | 9·0 |
| 9·3 | | 10·2 | 25·8 | |
| 9·6 | | 23·2 | 34·5 | |
| 9·8 | | 24·8 | 6·2 | |
| 10·0 | | 27·7 | 38·9 | |
| 10·1 | | 32·2 | 35·9 | |
| 9·6 | | 32·2 | 31·4 | |
| 10·0 | | 33·7 | 34·4 | |
| 9·8 | | 38·3 | 6·5 | |
| 9·2 | | 40·3 | 19·9 | |
| 9·6 | | 45·3 | 21·5 | |
| 10·0 | | 45·8 | 21·1 | |
| 10·1 | | 47·0 | 0·2 | |
| 8·8 | | 47·0 | 22·7 | |
| 9·8 | | 48·0 | 2·0 | |
| 8·9 | | 48·2 | 33·7 | 9·5 |
| 9·5 | | 50·3 | 26·1 | |
| 9·9 | | 51·0 | 29·0 | |
| 9·8 | | 51·0 | 15·4 | |
| 9·6 | | 51·3 | 24·8 | |
| 10·0 | | 53·3 | 23·0 | |
| 10·1 | | 56·3 | 2·1 | |
| 10·1 | | 57·2 | 43·3 | |
| 9·8 | | 58·8 | 29·4 | |
| 10·0 | 23 | 0·7 | 51·7 | |
| 9·2 | | 2·1 | 58·6 | |
| 9·8 | | 5·7 | 46·2 | |
| 10·1 | | 12·3 | 44·7 | |
| 9·8 | | 14·2 | 33·9 | |
| 9·8 | | 16·2 | 30·4 | |
| 9·6 | | 16·8 | 26·3 | |
| 9·7 | | 18·3 | 7·0 | |
| 10·1 | | 18·7 | 35·8 | |
| 10·1 | | 20·2 | 40·0 | |
| 10·0 | | 21·8 | 5·8 | |
| 8·9 | | 30·3 | 6·7 | 9·0 |
| 10·0 | | 32·2 | 56·5 | |
| 9·7 | | 32·8 | 5·5 | |
| 9·4 | | 34·3 | 19·2 | |



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## 6121—6180.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·5 | 23 | 34·3 | 24·8 | |
| 9·9 | | 39·8 | 27·6 | |
| 10·1 | | 43·3 | 11·1 | |
| 10·0 | | 46·8 | 7·0 | |
| 10·1 | | 58·3 | 11·9 | |
| 10·1 | | 59·7 | 48·6 | |
| 9·7 | | 59·8 | 5·6 | |
| 9·7 | 24 | 2·8 | 3·8 | |
| 10·1 | | 6·3 | 29·4 | |
| 10·1 | | 6·7 | 51·7 | |
| 9·0 | | 9·8 | 13·6 | |
| 9·3 | | 11·3 | 11·9 | |
| 9·7 | | 14·8 | 16·9 | |
| 8·4 | | 17·8 | 22·5 | 8·5 |
| 10·1 | | 18·3 | 8·9 | |
| 9·6 | | 18·8 | 21·8 | |
| 9·5 | | 19·8 | 10·6 | 9·5 |
| 9·3 | | 33·3 | 20·2 | |
| 10·1 | | 36·3 | 12·9 | |
| 9·5 | | 48·8 | 26·9 | |
| 9·6 | | 50·7 | 2·9 | |
| 10·0 | | 51·8 | 26·3 | |
| 10·1 | | 57·7 | 56·5 | |
| 10·1 | 25 | 2·8 | 21·5 | |
| 10·0 | | 7·7 | 41·7 | |
| 10·0 | | 9·7 | 43·2 | |
| 10·0 | | 19·8 | 8·8 | |
| 10·1 | | 21·8 | 5·4 | |
| 9·9 | | 30·5 | 2·0 | |
| 9·8 | | 33·7 | 53·4 | |
| 9·8 | | 37·3 | 7·9 | |
| 10·1 | | 46·7 | 50·0 | |
| 10·1 | | 48·2 | 50·3 | |
| 10·1 | | 48·7 | 44·4 | |
| 9·8 | | 52·7 | 52·1 | |
| 9·6 | | 55·3 | 18·3 | |
| 9·2 | | 55·3 | 19·9 | |
| 9·8 | | 59·0 | 0·1 | |
| 9·7 | 26 | 2·7 | 37·9 | |
| 9·4 | | 10·3 | 31·8 | |
| 9·7 | | 19·3 | 49·3 | |
| 10·0 | | 24·7 | 38·9 | |
| 10·1 | | 28·3 | 11·7 | |
| 10·0 | | 28·7 | 39·5 | |
| 10·1 | | 31·3 | 20·7 | |
| 9·9 | | 46·3 | 10·8 | |
| 9·8 | | 46·3 | 24·7 | |
| 9·6 | | 48·2 | 56·5 | |
| 9·9 | 27 | 2·2 | 48·5 | |
| 10·1 | | 2·7 | 36·1 | |
| 10·1 | | 3·8 | 21·3 | |
| 9·6 | | 19·8 | 11·7 | |
| 9·4 | | 30·2 | 45·9 | |
| 9·8 | | 30·2 | 50·1 | |
| 10·1 | | 33·3 | 25·6 | |
| 10·1 | | 39·8 | 24·3 | |
| 9·8 | | 39·8 | 20·5 | |
| 10·1 | | 40·2 | 50·5 | |
| 9·8 | | 40·7 | 47·4 | |
| 10·0 | | 47·3 | 17·1 | |

## 6181—6240.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 27 | 49·8 | 19·5 | |
| 8·0 | | 51·3 | 27·5 | 8·0 G |
| 9·2 | | 52·2 | 36·9 | |
| 10·1 | 28 | 8·7 | 34·3 | |
| 10·1 | | 8·7 | 38·9 | |
| 10·1 | | 15·3 | 2·9 | |
| 10·0 | | 22·7 | 33·9 | |
| 10·1 | | 24·7 | 56·1 | |
| 9·2 | | 27·4 | 57·8 | |
| 9·2 | | 28·7 | 52·7 | |
| 9·4 | | 29·8 | 9·0 | |
| 9·6 | | 43·3 | 3·1 | |
| 9·9 | | 44·2 | 34·9 | |
| 9·4 | | 47·3 | 29·2 | |
| 9·9 | | 53·2 | 34·9 | |
| 10·0 | | 54·2 | 39·3 | |
| 9·8 | 29 | 4·8 | 10·4 | |
| 10·0 | | 7·9 | 57·7 | |
| 9·8 | | 8·4 | 59·7 | |
| 9·8 | | 9·2 | 55·9 | |
| 10·0 | | 9·7 | 47·2 | |
| 9·2 | | 16·2 | 1·9 | |
| 9·7 | | 19·8 | 16·1 | |
| 9·2 | | 33·6 | 57·5 | |
| 9·4 | | 39·1 | 1·5 | |
| 6·8 | | 44·3 | 29·3 | 6·5 GScr |
| 10·0 | | 55·8 | 2·3 | |
| 9·4 | | 58·2 | 44·9 | |
| 10·0 | | 59·2 | 34·9 | |
| 9·8 | | 59·2 | 50·3 | |
| 10·1 | 30 | 3·9 | 0·1 | |
| 9·7 | | 26·2 | 40·5 | |
| 9·5 | | 27·8 | 57·4 | |
| 9·7 | | 29·8 | 3·5 | |
| 9·2 | | 31·3 | 18·0 | |
| 9·3 | | 33·3 | 26·0 | |
| 10·0 | | 35·7 | 48·7 | |
| 9·1 | | 43·2 | 47·4 | |
| 9·8 | | 58·3 | 5·8 | |
| 9·5 | 31 | 1·3 | 18·9 | |
| 9·7 | | 1·3 | 43·3 | |
| 10·0 | | 12·7 | 35·7 | |
| 10·0 | | 13·8 | 0·0 | |
| 9·8 | | 15·7 | 35·1 | |
| 9·8 | | 17·3 | 13·0 | |
| 9·5 | | 18·8 | 18·5 | |
| 9·8 | | 18·8 | 26·8 | |
| 9·3 | | 28·3 | 58·1 | |
| 9·2 | | 28·7 | 49·5 | 10·0 |
| 9·7 | | 29·8 | 19·7 | |
| 10·0 | | 33·5 | 31·8 | |
| 9·5 | | 36·2 | 37·9 | |
| 10·0 | | 38·2 | 46·1 | |
| 9·4 | | 39·8 | 26·0 | |
| 9·4 | | 43·4 | 0·3 | |
| 10·0 | | 49·7 | 40·5 | |
| 9·8 | | 54·7 | 49·3 | |
| 9·8 | | 58·3 | 22·1 | |
| 10·0 | 32 | 4·3 | 2·9 | |
| 10·0 | | 20·7 | 33·8 | |

## 6241—6300.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 32 | 32·8 | 10·1 | |
| 9·5 | | 32·8 | 5·0 | |
| 10·1 | | 45·7 | 36·8 | |
| 9·6 | | 50·8 | 16·7 | |
| 10·0 | | 50·8 | 4·3 | |
| 9·1 | 33 | 9·8 | 12·7 | 8·0 G |
| 9·5 | | 9·8 | 9·0 | |
| 9·5 | | 18·3 | 57·2 | |
| 10·1 | | 18·8 | 10·4 | |
| 10·0 | | 19·7 | 36·3 | |
| 10·0 | | 20·7 | 32·5 | |
| 9·2 | | 26·8 | 15·4 | |
| 10·0 | | 28·3 | 10·3 | |
| 9·3 | | 31·8 | 27·9 | |
| 9·9 | | 32·7 | 52·1 | |
| 9·6 | | 34·2 | 54·1 | |
| 7·6 | | 34·7 | 53·1 | 7·0 GS |
| 10·0 | | 37·2 | 32·3 | |
| 9·6 | | 40·2 | 30·6 | |
| 9·9 | | 42·0 | 3·8 | |
| 10·1 | | 46·3 | 1·9 | |
| 10·0 | | 49·8 | 3·4 | |
| 10·0 | | 52·3 | 3·5 | |
| 10·1 | | 57·2 | 40·1 | |
| 10·1 | 34 | 5·3 | 2·7 | |
| 10·1 | | 10·2 | 15·9 | |
| 9·8 | | 13·2 | 39·3 | |
| 8·4 | | 24·2 | 50·2 | 8·0 |
| 8·9 | | 28·2 | 34·2 | |
| 9·8 | | 28·7 | 43·5 | |
| 9·7 | | 29·2 | 39·3 | |
| 9·8 | | 34·8 | 12·9 | |
| 9·7 | | 34·8 | 24·5 | |
| 8·6 | | 39·8 | 20·9 | 9·0 |
| 10·1 | | 40·8 | 58·3 | |
| 9·9 | | 48·8 | 6·2 | |
| 10·1 | | 50·7 | 38·6 | |
| 10·1 | | 57·7 | 58·1 | |
| 10·1 | 35 | 0·3 | 7·2 | |
| 10·0 | | 9·7 | 37·5 | |
| 10·1 | | 11·8 | 12·9 | |
| 9·6 | | 12·3 | 17·1 | |
| 9·8 | | 13·2 | 46·3 | |
| 9·7 | | 15·2 | 32·8 | |
| 9·2 | | 15·3 | 2·5 | |
| 10·0 | | 16·8 | 1·1 | |
| 10·1 | | 24·2 | 59·9 | |
| 9·6 | | 24·8 | 11·9 | |
| 9·0 | | 25·2 | 43·9 | |
| 9·7 | | 27·3 | 19·7 | |
| 9·8 | | 31·3 | 20·3 | |
| 10·1 | | 38·3 | 11·4 | |
| 10·0 | | 43·7 | 47·7 | |
| 9·5 | | 53·2 | 44·5 | |
| 10·1 | | 58·2 | 51·9 | |
| 9·7 | | 59·7 | 59·7 | |
| 9·1 | 36 | 6·2 | 52·7 | |
| 9·7 | | 11·8 | 15·3 | |
| 9·6 | | 25·3 | 12·1 | |
| 9·6 | | 34·6 | 1·2 | |

## 6301—6360.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 36 | 38·7 | 49·6 | |
| 9·8 | | 40·1 | 1·9 | |
| 10·0 | | 45·2 | 44·3 | |
| 10·0 | | 46·2 | 33·1 | |
| 10·1 | | 46·2 | 38·1 | |
| 9·0 | | 48·3 | 2·8 | |
| 10·1 | | 50·0 | 13·0 | |
| 9·8 | | 59·2 | 42·1 | |
| 10·0 | | 59·8 | 22·3 | |
| 9·7 | 37 | 8·3 | 16·9 | |
| 9·7 | | 13·8 | 21·9 | |
| 10·1 | | 17·2 | 51·7 | |
| 10·1 | | 19·2 | 46·5 | |
| 9·0 | | 21·3 | 1·3 | |
| 9·9 | | 24·1 | 1·3 | |
| 9·7 | | 26·8 | 5·9 | |
| 10·1 | | 30·8 | 2·5 | |
| 10·0 | | 39·7 | 39·0 | |
| 10·1 | | 43·2 | 55·3 | |
| 9·6 | | 44·2 | 45·7 | |
| 9·6 | | 45·7 | 38·7 | |
| 9·8 | | 54·7 | 50·5 | |
| 10·1 | | 55·6 | 0·2 | |
| 10·1 | | 59·2 | 33·3 | |
| 10·0 | 38 | 1·3 | 0·8 | |
| 9·4 | | 7·2 | 43·7 | |
| 9·9 | | 7·2 | 30·0 | |
| 9·8 | | 7·3 | 1·8 | |
| 9·8 | | 16·8 | 12·3 | |
| 9·5 | | 24·8 | 14·0 | |
| 10·1 | | 30·7 | 53·5 | |
| 7·2 | | 31·1 | 58·7 | 7·5 GScr |
| 9·7 | | 31·3 | 25·0 | |
| 9·8 | | 32·1 | 56·6 | |
| 9·6 | | 32·7 | 52·7 | |
| 9·6 | | 35·7 | 59·2 | |
| 9·7 | | 39·3 | 0·4 | |
| 10·0 | | 46·2 | 34·3 | |
| 9·0 | | 46·3 | 28·3 | |
| 9·6 | | 46·3 | 8·8 | |
| 9·3 | | 52·7 | 35·0 | |
| 9·9 | | 52·7 | 44·9 | |
| 10·0 | 39 | 1·3 | 25·0 | |
| 10·1 | | 1·8 | 18·3 | |
| 8·7 | | 9·2 | 45·7 | |
| 9·8 | | 12·7 | 40·1 | |
| 9·4 | | 18·7 | 39·7 | |
| 10·1 | | 28·7 | 59·0 | |
| 9·8 | | 37·8 | 3·7 | |
| 10·1 | | 42·8 | 4·5 | |
| 9·8 | | 45·3 | 26·3 | |
| 9·7 | | 47·2 | 52·0 | |
| 9·7 | | 47·2 | 58·9 | |
| 9·6 | | 56·2 | 50·9 | |
| 9·8 | | 56·2 | 33·0 | |
| 9·2 | | 59·2 | 32·9 | |
| 9·6 | 40 | 1·7 | 34·7 | |
| 9·2 | | 3·2 | 49·5 | |
| 9·6 | | 8·7 | 43·3 | |
| 9·7 | | 10·3 | 24·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 20 | 120 | 5·4 |
| | 30 | 122 | 5·1 |
| | 40 | 123 | 4·8 |

| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 15 | 40 | 123 | 4.8 |
| | 50 | 125 | 4.5 |
| 16 | 0 | 126 | 4.2 |

## 6361—6420.

| mag. | 15h. m | s | −59° ′ |
|---|---|---|---|
| 9.6 | 40 | 21.3 | 16.4 |
| 10.0 | | 21.6 | 0.8 |
| 9.7 | | 21.7 | 48.0 |
| 10.1 | | 23.5 | 35.6 |
| 9.2 | | 27.7 | 42.9 |
| 10.1 | | 30.7 | 53.3 |
| 9.7 | | 45.3 | 13.9 |
| 10.1 | 41 | 6.2 | 30.9 |
| 9.7 | | 7.2 | 44.9 |
| 10.0 | | 8.1 | 1.5 |
| 9.0 | | 8.5 | 33.7 |
| 10.0 | | 9.8 | 29.6 |
| 9.4 | | 15.7 | 40.2 |
| 9.4 | | 19.8 | 12.9 |
| 10.1 | | 22.3 | 3.7 |
| 9.6 | | 32.2 | 43.0 |
| 10.0 | | 32.7 | 51.3 |
| 9.5 | | 36.3 | 27.5 |
| 9.4 | | 38.7 | 51.9 |
| 10.1 | | 41.8 | 21.4 |
| 9.6 | | 46.2 | 38.7 |
| 9.8 | | 48.8 | 11.3 |
| 10.1 | | 51.8 | 10.0 |
| 10.0 | | 55.1 | 0.8 |
| 10.0 | | 56.3 | 14.8 |
| 9.6 | | 57.1 | 0.1 |
| 10.1 | | 58.5 | 37.7 |
| 10.1 | | 59.2 | 55.8 |
| 10.1 | | 59.8 | 15.2 |
| 9.8 | 42 | 4.2 | 54.7 |
| 10.1 | | 4.5 | 38.4 |
| 9.4 | | 7.7 | 42.2 |
| 9.4 | | 18.8 | 12.9 |
| 9.1 | | 20.7 | 43.3 |
| 9.8 | | 44.3 | 11.4 |
| 9.8 | | 49.2 | 55.2 |
| 9.7 | | 54.8 | 12.7 |
| 9.8 | | 56.8 | 7.2 |
| 9.6 | | 59.2 | 55.7 |
| 10.0 | 43 | 1.2 | 33.4 |
| 9.8 | | 2.7 | 31.3 |
| 9.8 | | 5.3 | 11.1 |
| 9.7 | | 9.8 | 5.5 |
| 10.0 | | 10.0 | 0.6 |
| 9.8 | | 10.8 | 9.1 |
| 10.1 | | 18.2 | 39.5 |
| 9.7 | | 19.8 | 24.0 |
| 9.9 | | 24.2 | 39.5 |
| 10.1 | | 25.7 | 37.8 |
| 10.1 | | 29.2 | 43.5 |
| 8.9 | | 35.8 | 14.6 |
| 10.1 | | 43.8 | 19.2 |
| 9.3 | | 45.7 | 43.6 |
| 9.2 | | 53.3 | 29.6 |
| 10.0 | | 53.3 | 19.1 |
| 10.0 | | 54.8 | 5.9 |
| 9.9 | 44 | 0.2 | 49.4 |
| 10.1 | | 2.2 | 28.1 |
| 10.1 | | 14.7 | 31.5 |
| 10.0 | | 20.3 | 9.9 |

## 6421—6480.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10.0 | 44 | 29.8 | 10.7 | |
| 10.1 | | 30.8 | 10.3 | |
| 10.1 | | 32.3 | 11.7 | |
| 9.7 | | 33.2 | 40.9 | |
| 9.7 | | 42.7 | 59.9 | |
| 10.1 | | 54.8 | 17.0 | |
| 10.1 | | 59.8 | 20.1 | |
| 6.5 | 45 | 4.7 | 48.1 | GSct |
| 10.1 | | 15.8 | 6.8 | |
| 10.0 | | 20.3 | 11.8 | |
| 10.1 | | 20.8 | 9.5 | |
| 8.9 | | 25.8 | 12.7 | |
| 9.5 | | 25.8 | 19.7 | |
| 9.0 | | 31.8 | 59.5 | 10.0 |
| 8.0 | | 34.2 | 41.3 | 8.0 |
| 10.0 | | 34.8 | 6.1 | |
| 10.1 | | 38.2 | 40.7 | |
| 9.3 | | 39.8 | 10.5 | |
| 9.8 | | 39.8 | 15.3 | |
| 10.0 | | 40.3 | 14.7 | |
| 10.1 | | 58.7 | 38.7 | |
| 9.8 | 46 | 3.8 | 4.1 | |
| 9.6 | | 9.8 | 10.1 | |
| 9.4 | | 9.8 | 15.9 | |
| 10.1 | | 10.2 | 55.1 | |
| 9.2 | | 12.8 | 0.3 | |
| 9.8 | | 13.8 | 5.9 | |
| 10.1 | | 14.7 | 35.5 | |
| 10.1 | | 18.2 | 36.7 | |
| 9.0 | | 18.8 | 19.9 | |
| 8.8 | | 18.8 | 9.3 | 9.5 |
| 9.5 | | 27.3 | 11.3 | |
| 9.1 | | 36.2 | 39.6 | |
| 8.6 | | 37.3 | 3.0 | 8.0 |
| 9.9 | | 38.7 | 41.2 | |
| 9.7 | | 39.8 | 6.0 | |
| 10.0 | | 40.7 | 42.7 | |
| 9.8 | | 58.7 | 55.3 | |
| 10.0 | 47 | 3.8 | 14.4 | |
| 10.0 | | 5.2 | 37.8 | |
| 9.2 | | 6.8 | 7.7 | |
| 9.6 | | 9.3 | 8.9 | |
| 9.7 | | 9.8 | 0.1 | |
| 8.4 | | 12.2 | 49.7 | 7.5 GSt |
| 9.8 | | 12.2 | 45.1 | |
| 9.8 | | 20.3 | 3.7 | |
| 9.8 | | 29.2 | 59.3 | |
| 10.1 | | 30.2 | 38.4 | |
| 9.2 | | 31.3 | 5.7 | 9.0 |
| 10.1 | | 32.2 | 39.1 | |
| 9.0 | | 32.2 | 34.3 | |
| 9.4 | | 33.8 | 8.9 | |
| 9.3 | | 35.2 | 45.1 | |
| 9.0 | | 38.3 | 29.2 | |
| 9.7 | | 38.3 | 8.0 | |
| 10.1 | | 40.2 | 45.4 | |
| 9.8 | | 44.7 | 49.8 | |
| 9.8 | | 44.7 | 37.0 | |
| 8.8 | | 54.9 | 2.7 | 9.5 |
| 9.6 | 48 | 4.2 | 43.8 | |

## 6481—6540.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8.4 | 48 | 5.3 | 8.3 | 8.8 |
| 10.0 | | 8.2 | 38.8 | |
| 9.2 | | 8.3 | 18.7 | |
| 10.1 | | 11.8 | 25.4 | |
| 10.1 | | 14.8 | 29.6 | |
| 10.1 | | 15.8 | 9.7 | |
| 10.1 | | 20.6 | 48.1 | |
| 10.1 | | 20.7 | 53.3 | |
| 10.1 | | 24.7 | 51.7 | |
| 10.1 | | 29.7 | 32.0 | |
| 10.1 | | 32.7 | 48.3 | |
| 10.1 | | 52.6 | 59.4 | |
| 9.7 | | 56.7 | 34.3 | |
| 10.0 | | 58.7 | 46.4 | |
| 9.6 | | 59.2 | 41.1 | |
| 9.6 | | 59.8 | 26.7 | |
| 10.0 | 49 | 0.8 | 10.3 | |
| 10.0 | | 3.3 | 0.7 | |
| 9.8 | | 16.2 | 38.6 | |
| 9.5 | | 16.8 | 12.8 | |
| 9.9 | | 17.7 | 33.3 | |
| 10.0 | | 18.2 | 51.1 | |
| 9.6 | | 18.7 | 45.2 | |
| 10.1 | | 27.3 | 19.7 | |
| 8.8 | | 33.8 | 20.6 | |
| 9.4 | | 35.7 | 32.8 | |
| 10.0 | | 36.2 | 37.5 | |
| 10.0 | | 38.7 | 30.7 | |
| 10.0 | | 43.7 | 44.1 | |
| 9.1 | | 46.3 | 24.3 | |
| 10.1 | | 48.8 | 16.6 | |
| 9.2 | | 53.8 | 21.6 | |
| 9.1 | | 53.8 | 28.3 | |
| 9.6 | | 55.8 | 19.6 | |
| 9.5 | 50 | 0.2 | 50.3 | |
| 9.9 | | 2.2 | 52.8 | |
| 9.3 | | 13.3 | 14.2 | |
| 10.0 | | 15.2 | 44.3 | |
| 9.5 | | 19.8 | 28.6 | |
| 9.8 | | 20.7 | 45.3 | |
| 10.0 | | 20.8 | 17.7 | |
| 9.4 | | 23.7 | 30.4 | |
| 9.6 | | 24.3 | 3.5 | |
| 9.8 | | 25.8 | 10.1 | |
| 9.6 | | 26.2 | 37.0 | |
| 9.0 | | 28.8 | 22.8 | |
| 9.6 | | 29.3 | 1.2 | |
| 10.0 | | 31.5 | 0.3 | |
| 9.6 | | 35.3 | 25.1 | |
| 9.9 | | 38.3 | 26.0 | |
| 8.8 | | 42.6 | 1.4 | 9.0 |
| 9.6 | | 49.8 | 17.7 | |
| 9.2 | | 57.7 | 53.2 | |
| 9.8 | | 59.7 | 56.3 | |
| 9.7 | 51 | 5.3 | 0.6 | |
| 10.1 | | 11.3 | 2.4 | |
| 9.6 | | 12.2 | 39.0 | |
| 9.6 | | 16.3 | 28.1 | |
| 10.1 | | 26.6 | 59.1 | |
| 10.1 | | 30.7 | 53.6 | |

## 6541—6600.

| mag. | 15h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9.6 | 51 | 33.1 | 57.2 | |
| 10.0 | | 33.3 | 29.1 | |
| 9.9 | | 36.8 | 26.0 | |
| 9.7 | | 37.7 | 35.9 | |
| 8.9 | | 38.2 | 46.8 | |
| 10.0 | | 46.7 | 44.6 | |
| 9.7 | | 48.3 | 22.7 | |
| 9.7 | | 49.8 | 22.8 | |
| 10.0 | | 53.2 | 55.5 | |
| 9.6 | | 53.3 | 4.5 | |
| 10.0 | | 59.8 | 21.9 | |
| 9.6 | 52 | 6.7 | 36.9 | |
| 9.6 | | 9.4 | 59.2 | |
| 8.9 | | 16.2 | 40.3 | |
| 8.5 | | 18.7 | 59.0 | 9.0 |
| 9.8 | | 26.7 | 52.0 | |
| 8.8 | | 26.9 | 58.9 | 9.5 |
| 9.5 | | 33.6 | 59.4 | |
| 9.8 | | 33.7 | 40.4 | |
| 9.5 | | 37.3 | 1.7 | |
| 10.0 | | 44.5 | 47.6 | |
| 9.0 | | 47.9 | 58.4 | |
| 8.8 | | 56.9 | 59.0 | |
| 9.2 | | 59.2 | 47.3 | |
| 9.7 | 53 | 1.0 | 23.5 | |
| 9.2 | | 3.2 | 44.8 | |
| 9.7 | | 3.8 | 17.3 | |
| 9.2 | | 6.7 | 50.6 | |
| 9.9 | | 8.6 | 58.2 | |
| 9.8 | | 12.3 | 14.8 | |
| 10.0 | | 15.2 | 47.8 | |
| 10.1 | | 19.8 | 26.8 | |
| 10.1 | | 20.8 | 23.1 | |
| 9.6 | | 27.3 | 20.7 | |
| 9.8 | | 27.4 | 56.7 | |
| 8.4 | | 31.7 | 51.8 | 8.5 |
| 9.6 | | 32.6 | 1.4 | |
| 9.3 | | 43.2 | 53.7 | |
| 9.8 | | 43.3 | 59.4 | |
| 10.1 | | 56.2 | 39.3 | |
| 9.8 | | 58.3 | 14.7 | |
| 10.1 | 54 | 3.7 | 34.1 | |
| 10.0 | | 7.3 | 27.3 | |
| 9.5 | | 12.1 | 54.5 | |
| 9.1 | | 12.3 | 8.4 | |
| 8.9 | | 13.4 | 10.3 | |
| 10.0 | | 18.2 | 37.0 | |
| 9.9 | | 18.2 | 44.7 | |
| 10.1 | | 23.8 | 14.7 | |
| 9.8 | | 25.9 | 37.3 | |
| 10.1 | | 29.2 | 38.7 | |
| 9.8 | | 29.8 | 20.6 | |
| 10.0 | | 36.7 | 49.6 | |
| 10.0 | | 50.2 | 44.8 | |
| 9.8 | | 58.4 | 57.1 | |
| 10.0 | 55 | 0.9 | 28.1 | |
| 9.2 | | 8.0 | 6.8 | |
| 10.0 | | 13.5 | 56.5 | |
| 9.1 | | 14.0 | 57.7 | |
| 8.6 | | 32.5 | 49.9 | |

## 6601—6660.

| mag. | 15h·–16h· m | s | −59° ′ | |
|---|---|---|---|---|
| 9·3 | 55 | 35·0 | 20·7 | |
| 9·6 | | 48·5 | 51·1 | |
| 9·6 | 56 | 9·0 | 32·7 | |
| 9·8 | | 32·0 | 45·0 | |
| 9·0 | | 35·0 | 10·5 | 9·0 |
| 10·0 | | 37·5 | 34·1 | |
| 8·6 | | 39·5 | 46·9 | 9·5 |
| 8·8 | | 48·0 | 44·9 | |
| 9·4 | | 52·5 | 52·3 | |
| 9·6 | | 53·5 | 4·5 | |
| 9·6 | | 54·5 | 40·9 | |
| 8·6 | 57 | 1·0 | 51·1 | 9·5 |
| 10·0 | | 5·0 | 34·3 | |
| 9·8 | | 10·0 | 37·2 | |
| 9·0 | | 13·5 | 1·9 | |
| 10·0 | | 20·7 | 50·4 | |
| 9·4 | | 38·5 | 44·4 | |
| 9·2 | | 47·0 | 15·6 | |
| 10·0 | | 50·7 | 59·8 | |
| 10·0 | 58 | 7·0 | 51·0 | |
| 10·0 | | 18·5 | 47·6 | |
| 9·6 | | 40·0 | 58·3 | |
| 10·0 | 59 | 4·0 | 36·1 | |
| 9·0 | | 4·0 | 57·1 | |
| 9·6 | | 12·0 | 12·1 | |
| 10·0 | | 12·0 | 15·5 | |
| 9·0 | | 19·5 | 45·0 | |
| 9·2 | | 22·0 | 36·4 | |
| 9·6 | | 25·5 | 45·1 | |
| 9·6 | | 30·0 | 39·1 | |
| 9·6 | | 33·7 | 15·6 | |
| 9·6 | | 40·5 | 39·1 | |
| 10·0 | | 47·0 | 11·1 | |
| 9·6 | | 56·3 | 2·1 | |
| 10·0 | 0 | 2·5 | 6·1 | |
| 8·8 | | 8·5 | 28·1 | 9·0 |
| 10·0 | | 27·0 | 17·3 | |
| 10·0 | | 32·0 | 33·1 | |
| 9·2 | | 35·5 | 32·2 | 9·0 |
| 8·5 | | 44·0 | 13·9 | 8·0 |
| 9·4 | | 51·5 | 8·3 | |
| 10·0 | 1 | 6·0 | 6·1 | |
| 10·0 | | 13·7 | 40·6 | |
| 8·6 | | 15·5 | 5·6 | 9·2 |
| 9·5 | | 23·5 | 39·8 | |
| 9·6 | | 31·5 | 8·5 | |
| 10·0 | | 32·7 | 31·4 | |
| 9·1 | | 35·0 | 40·5 | 9·5 |
| 9·5 | | 48·5 | 6·9 | |
| 10·0 | 2 | 8·0 | 44·4 | |
| 9·6 | | 16·5 | 8·7 | |
| 8·6 | | 33·5 | 42·3 | 8·5 |
| 10·0 | 3 | 4·5 | 6·9 | |
| 10·0 | | 8·0 | 22·9 | |
| 9·8 | | 19·0 | 4·2 | |
| 8·4 | | 30·0 | 48·9 | 8·5 |
| 9·4 | | 30·0 | 24·8 | |
| 9·8 | | 36·0 | 8·6 | |
| 8·4 | | 36·0 | 14·1 | 8·5 |
| 10·0 | | 43·7 | 15·1 | |

## 6661—6720.

| mag. | 16h· m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 3 | 44·5 | 38·7 | |
| 9·8 | | 54·0 | 14·3 | |
| 9·6 | | 55·0 | 13·1 | |
| 9·6 | 4 | 4·5 | 9·6 | |
| 9·2 | | 14·5 | 27·5 | 9·0 |
| 8·5 | | 21·5 | 22·1 | 8·5 |
| 10·0 | | 21·7 | 4·5 | |
| 9·0 | | 28·5 | 46·5 | 9·0 |
| 9·2 | | 34·5 | 19·5 | |
| 9·6 | 5 | 2·0 | 3·3 | |
| 9·6 | | 21·0 | 22·5 | |
| 8·6 | | 26·5 | 52·3 | |
| 9·8 | | 35·0 | 29·5 | |
| 10·0 | 6 | 14·5 | 9·3 | |
| 9·5 | | 16·0 | 17·1 | |
| 8·9 | | 38·0 | 26·9 | |
| 10·0 | | 40·0 | 46·5 | |
| 10·0 | | 42·0 | 1·1 | |
| 9·8 | | 49·0 | 59·8 | |
| 8·8 | | 55·0 | 46·3 | 9·5 |
| 9·8 | 7 | 4·5 | 12·8 | |
| 9·0 | | 19·0 | 48·9 | 9·0 |
| 8·9 | | 45·5 | 53·1 | |
| 8·9 | | 53·0 | 56·1 | |
| 9·8 | 8 | 7·0 | 36·7 | |
| 9·2 | | 8·5 | 20·1 | |
| 9·3 | | 17·0 | 11·0 | |
| 9·6 | | 40·5 | 23·7 | |
| 9·4 | | 54·5 | 18·5 | |
| 9·4 | 9 | 4·0 | 47·5 | |
| 9·6 | | 5·5 | 19·1 | 9·5 |
| 10·0 | | 16·0 | 36·1 | |
| 9·6 | | 20·0 | 21·5 | |
| 8·8 | | 21·5 | 23·1 | 9·5 |
| 9·4 | | 25·5 | 48·0 | |
| 10·0 | | 49·0 | 50·7 | |
| 10·0 | 10 | 10·0 | 20·0 | |
| 9·6 | | 35·0 | 49·0 | |
| 9·2 | | 36·0 | 12·4 | |
| 9·2 | | 43·0 | 31·0 | |
| 10·0 | | 50·0 | 1·6 | |
| 9·3 | 11 | 4·5 | 41·8 | |
| 9·8 | | 25·5 | 11·7 | |
| 9·2 | | 31·7 | 57·7 | |
| 8·6 | | 33·5 | 29·6 | 9·5 |
| 9·6 | | 55·5 | 22·6 | |
| 9·6 | 12 | 0·0 | 44·6 | |
| 8·5 | | 18·0 | 46·9 | 9·5 |
| 9·2 | | 18·2 | 59·2 | |
| 10·0 | | 28·0 | 36·0 | |
| 9·8 | | 29·0 | 31·3 | |
| 8·9 | | 35·5 | 6·0 | |
| 9·6 | | 42·5 | 39·0 | |
| 8·8 | | 43·0 | 49·1 | 9·5 |
| 8·9 | | 44·5 | 19·0 | |
| 10·0 | | 48·0 | 50·3 | |
| 8·4 | | 52·5 | 50·2 | 9·0 |
| 8·5 | 13 | 28·0 | 15·8 | 9·5 |
| 10·0 | | 42·2 | 3·0 | |
| 8·8 | | 55·5 | 27·2 | |

## 6721—6780.

| mag. | 16h· m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 14 | 12·5 | 21·0 | |
| 10·0 | | 15·0 | 45·1 | |
| 8·8 | | 17·5 | 45·8 | |
| 9·6 | | 18·0 | 14·4 | 9·5 |
| 10·0 | | 21·5 | 18·0 | |
| 9·0 | | 27·0 | 11·0 | 9·2 |
| 9·2 | | 39·5 | 42·8 | |
| 9·6 | | 42·5 | 46·3 | |
| 9·1 | | 54·0 | 8·2 | 9·5 |
| 9·6 | 15 | 19·0 | 7·9 | |
| 9·8 | | 20·0 | 43·9 | |
| 9·0 | | 22·5 | 26·0 | |
| 10·0 | | 33·0 | 8·8 | |
| 9·8 | | 52·0 | 52·1 | |
| 8·0 | | 58·0 | 28·7 | 9·0 |
| 10·0 | 16 | 0·2 | 59·8 | |
| 8·5 | | 3·5 | 29·2 | 9·5 |
| 8·6 | | 11·0 | 27·0 | 10·0 |
| 7·8 | | 12·5 | 28·4 | 8·5 |
| 8·8 | | 13·5 | 17·8 | 10·0 |
| 8·2 | | 26·5 | 12·7 | 9·0 |
| 10·0 | 17 | 0·0 | 21·6 | |
| 10·0 | | 8·0 | 33·6 | |
| 8·2 | | 10·0 | 33·6 | 9·0 |
| 9·6 | | 24·5 | 36·5 | 9·5 |
| 8·2 | | 30·0 | 38·6 | 8·5 |
| 8·6 | 18 | 37·5 | 17·9 | |
| 8·9 | | 42·0 | 11·6 | |
| 9·0 | | 49·0 | 4·7 | |
| 10·0 | | 50·5 | 22·6 | |
| 9·6 | | 55·5 | 44·0 | |
| 10·0 | 19 | 9·0 | 40·5 | |
| 10·0 | | 28·0 | 17·0 | |
| 10·0 | | 29·5 | 37·3 | |
| 10·0 | | 51·0 | 9·9 | |
| 8·0 | | 54·5 | 40·3 | 8·0 |
| 9·0 | | 55·0 | 35·4 | |
| 10·0 | 20 | 19·0 | 13·7 | |
| 10·0 | | 31·0 | 48·6 | |
| 9·0 | | 59·0 | 53·9 | |
| 8·8 | 21 | 14·0 | 25·0 | |
| 10·0 | | 19·0 | 50·2 | |
| 10·0 | | 30·0 | 1·0 | |
| 9·2 | | 56·5 | 51·8 | |
| 9·6 | 22 | 31·5 | 11·0 | |
| 9·2 | 23 | 4·0 | 5·1 | |
| 9·2 | | 6·7 | 59·2 | 9·5 |
| 10·0 | | 8·0 | 19·7 | |
| 10·0 | | 11·0 | 13·0 | |
| 9·2 | | 22·0 | 28·0 | |
| 9·8 | 24 | 16·5 | 47·9 | |
| 9·6 | | 53·5 | 41·9 | |
| 9·8 | 25 | 4·7 | 57·5 | |
| 10·0 | | 13·5 | 24·9 | |
| 10·0 | | 24·0 | 30·0 | |
| 9·2 | | 30·0 | 38·1 | |
| 9·6 | | 47·0 | 8·0 | |
| 9·1 | 26 | 7·0 | 26·9 | |
| 8·4 | | 42·3 | 0·2 | 9·0 |
| 10·0 | 27 | 15·5 | 43·1 | |

## 6781—6840.

| mag. | 16h· m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 27 | 19·0 | 28·9 | |
| 10·0 | | 20·0 | 42·3 | |
| 9·6 | | 22·5 | 38·7 | |
| 10·0 | | 29·5 | 43·6 | |
| 10·0 | | 38·5 | 12·1 | |
| 9·2 | | 46·0 | 20·9 | |
| 10·0 | | 53·0 | 9·2 | |
| 10·0 | | 56·5 | 51·4 | |
| 8·6 | 28 | 3·5 | 25·6 | 9·5 |
| 9·3 | | 15·5 | 32·9 | |
| 9·8 | | 22·0 | 32·7 | 10·0 |
| 10·0 | | 27·0 | 17·9 | |
| 10·0 | | 35·3 | 43·2 | |
| 8·2 | | 39·5 | 57·9 | 9·0 |
| 10·0 | | 59·5 | 23·9 | |
| 9·8 | 29 | 2·5 | 20·1 | |
| 9·4 | | 12·7 | 58·0 | |
| 8·9 | | 13·0 | 3·8 | |
| 9·4 | | 57·0 | 51·8 | |
| 9·8 | 30 | 22·0 | 49·3 | |
| 9·7 | | 23·0 | 7·0 | |
| 9·8 | | 35·5 | 23·4 | |
| 8·4 | | 38·8 | 41·7 | |
| 8·4 | 31 | 2·2 | 5·2 | |
| 9·2 | | 8·0 | 12·2 | |
| 9·6 | | 32·0 | 53·3 | |
| 9·3 | | 47·0 | 35·2 | |
| 9·6 | 32 | 1·5 | 9·1 | |
| 9·1 | | 22·0 | 45·2 | |
| 9·2 | | 25·5 | 35·3 | |
| 9·4 | 33 | 2·0 | 54·5 | |
| 7·9 | | 16·0 | 14·0 | 9·0 |
| 9·1 | | 21·5 | 24·9 | |
| 9·6 | | 28·0 | 45·8 | |
| 9·6 | | 43·0 | 58·7 | |
| 9·6 | | 45·0 | 19·1 | |
| 9·8 | | 46·0 | 25·9 | |
| 9·6 | 34 | 10·0 | 12·4 | |
| 9·6 | | 28·0 | 59·2 | |
| 9·7 | | 59·5 | 52·3 | |
| 9·4 | 35 | 21·0 | 16·4 | |
| 9·0 | | 48·5 | 58·8 | |
| 9·7 | 36 | 16·5 | 41·1 | 9·0 |
| 8·8 | | 22·5 | 32·1 | |
| 7·8 | | 32·5 | 26·1 | 7·5 GSg |
| 9·7 | | 43·0 | 46·6 | 9·5 |
| 9·7 | | 46·5 | 27·7 | |
| 8·8 | | 56·0 | 40·1 | 8·2 |
| 9·4 | 37 | 9·5 | 51·9 | |
| 9·7 | | 27·0 | 8·9 | |
| 8·6 | | 38·0 | 8·7 | |
| 9·6 | | 40·0 | 6·0 | |
| 9·0 | | 52·0 | 46·3 | |
| 9·6 | | 58·0 | 36·7 | 9·5 |
| 9·3 | 38 | 1·0 | 8·2 | |
| 9·8 | | 5·0 | 52·4 | |
| 8·7 | | 26·5 | 15·7 | |
| 9·8 | | 28·5 | 16·1 | |
| 8·2 | | 37·5 | 31·5 | 8·5 |
| 9·7 | 39 | 11·5 | 45·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 50 | 125 | 4·5 |
| 16 | 0 | 126 | 4·2 |
| | 10 | 127 | 3·9 |
| | 20 | 128 | 3·5 |
| | 30 | 129 | 3·2 |
| | 40 | 130 | 2·9 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 30 | 129 | 3·2 |
| | 40 | 130 | 2·9 |
| | 50 | 131 | 2·5 |
| 17 | 0 | 132 | 2·2 |
| | 10 | 132 | 1·8 |
| | 20 | 133 | 1·5 |
| | 30 | 133 | 1·1 |

### 6841—6900.

| mag. | 16h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·9 | 39 | 21·5 | 20·1 | |
| 9·4 | | 51·0 | 30·0 | |
| 9·6 | 40 | 12·5 | 50·3 | |
| 8·6 | | 27·0 | 17·8 | 8·0 |
| 9·7 | | 40·0 | 39·8 | |
| 8·8 | | 47·5 | 31·1 | 9·5 |
| 9·0 | | 57·0 | 31·4 | |
| 9·0 | 41 | 3·5 | 49·7 | |
| 9·3 | | 11·0 | 2·9 | |
| 9·8 | | 53·0 | 53·6 | |
| 9·7 | 42 | 14·0 | 51·0 | 9·0 |
| 9·7 | | 20·5 | 59·0 | |
| 8·3 | | 45·5 | 28·9 | 9·0 |
| 8·5 | 43 | 20·0 | 5·6 | |
| 9·6 | | 32·0 | 47·5 | |
| 9·6 | | 49·3 | 2·0 | |
| 8·7 | | 50·0 | 30·8 | 8·5 |
| 9·6 | 44 | 4·2 | 22·0 | |
| 9·6 | | 50·0 | 38·5 | |
| 7·6 | | 51·0 | 12·5 | 7·5 GSg |
| 9·8 | | 54·2 | 33·2 | |
| 9·2 | | 56·0 | 30·0 | |
| 7·8 | 45 | 16·5 | 57·3 | 8·0 Gt |
| 9·7 | | 34·2 | 33·4 | |
| 9·2 | | 36·5 | 20·7 | |
| 8·8 | 46 | 10·5 | 4·4 | 9·0 |
| 9·6 | | 21·2 | 25·0 | |
| 9·6 | 47 | 5·0 | 43·0 | |
| 9·6 | | 9·0 | 23·2 | |
| 8·8 | | 10·7 | 3·0 | |
| 8·5 | | 23·0 | 51·3 | |
| 9·2 | 48 | 4·5 | 25·7 | |
| 9·0 | | 25·5 | 51·1 | |
| 8·4 | | 50·5 | 32·3 | |
| 9·7 | | 53·0 | 37·2 | |
| 7·8 | 49 | 1·5 | 7·9 | 7·0 GSctr |
| 9·2 | | 2·0 | 7·5 | |
| 9·6 | | 18·0 | 54·1 | |
| 8·6 | | 52·5 | 41·1 | |
| 9·3 | | 52·5 | 31·1 | |
| 9·7 | 50 | 10·0 | 23·9 | |
| 8·1 | | 22·5 | 34·0 | 8·5 |
| 9·6 | | 28·2 | 24·1 | |
| 7·9 | | 30·0 | 15·4 | 8·5 |
| 9·4 | | 37·5 | 30·6 | |
| 9·6 | | 41·5 | 49·4 | |
| 8·9 | | 57·5 | 51·7 | |
| 9·3 | 51 | 14·5 | 8·4 | |
| 9·1 | | 23·5 | 47·1 | |
| 9·7 | | 30·2 | 40·1 | |
| 9·7 | | 53·2 | 31·8 | |
| 9·8 | 52 | 11·2 | 53·5 | |
| 9·7 | 53 | 3·2 | 13·4 | |
| 8·8 | | 3·5 | 58·5 | |
| 9·8 | | 18·5 | 5·6 | |
| 8·6 | | 38·5 | 42·0 | |
| 8·8 | 54 | 57·5 | 52·5 | |
| 9·6 | 55 | 0·2 | 24·1 | |
| 8·9 | | 2·0 | 16·6 | |
| 8·6 | | 19·5 | 58·2 | |

### 6901—6960.

| mag. | 16h.–17h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·2 | 55 | 24·5 | 8·5 | |
| 9·0 | | 43·5 | 26·8 | |
| 8·0 | 56 | 31·0 | 29·6 | 7·7 GSt |
| 9·2 | | 35·0 | 17·3 | 9·0 |
| 9·2 | 57 | 58·5 | 7·0 | 8·5 |
| 9·4 | 58 | 6·5 | 42·7 | |
| 7·7 | | 11·0 | 38·7 | 8·0 G |
| 9·4 | 59 | 25·5 | 24·3 | 8·5 |
| 8·0 | | 41·0 | 23·8 | 8·0 |
| 9·4 | | 43·0 | 54·0 | |
| 9·0 | | 45·5 | 53·1 | |
| 9·8 | | 53·0 | 6·2 | |
| 8·9 | 0 | 10·5 | 35·0 | |
| 9·6 | | 16·0 | 55·4 | G |
| 9·4 | | 32·5 | 33·3 | |
| 9·3 | | 39·5 | 19·0 | |
| 9·6 | | 47·2 | 8·9 | |
| 8·3 | | 47·5 | 0·5 | 7·5 G |
| 9·4 | | 52·2 | 35·2 | |
| 9·6 | 1 | 34·8 | 58·9 | |
| 9·3 | | 51·5 | 5·3 | |
| 8·6 | 2 | 33·0 | 25·5 | 9·5 |
| 9·0 | | 55·0 | 8·9 | |
| 8·8 | 3 | 47·0 | 6·6 | |
| 8·0 | 4 | 53·5 | 17·1 | 8·5 |
| 8·9 | 5 | 20·5 | 20·5 | |
| 9·7 | | 20·7 | 24·2 | |
| 9·0 | | 22·9 | 38·4 | |
| 9·3 | | 36·4 | 51·7 | |
| 9·8 | | 42·9 | 21·2 | |
| 10·0 | | 48·9 | 7·1 | |
| 9·4 | | 52·3 | 41·6 | |
| 9·6 | | 55·3 | 46·6 | |
| 9·6 | | 55·8 | 35·8 | |
| 9·4 | | 59·9 | 24·4 | |
| 9·8 | 6 | 9·4 | 10·7 | |
| 9·9 | | 20·3 | 44·7 | |
| 9·4 | | 30·9 | 22·9 | |
| 9·5 | | 39·3 | 29·9 | |
| 9·6 | | 49·3 | 30·6 | |
| 9·0 | | 50·9 | 21·1 | |
| 9·4 | | 51·3 | 35·1 | |
| 9·6 | | 58·9 | 29·3 | |
| 9·5 | 7 | 7·4 | 23·0 | |
| 9·9 | | 10·8 | 40·6 | |
| 9·6 | | 17·3 | 52·3 | |
| 9·5 | | 22·3 | 37·4 | |
| 10·0 | | 26·9 | 23·6 | |
| 9·0 | | 29·9 | 4·8 | |
| 9·8 | | 38·3 | 32·5 | |
| 10·0 | | 45·3 | 56·8 | |
| 9·8 | | 51·3 | 46·6 | |
| 9·0 | | 53·3 | 39·3 | |
| 7·6 | 8 | 9·3 | 33·3 | 6·5 GScr |
| 9·8 | | 11·3 | 16·2 | |
| 9·4 | | 19·2 | 30·1 | |
| 10·0 | | 29·7 | 57·6 | |
| 9·5 | | 41·7 | 34·1 | |
| 9·8 | | 48·3 | 7·6 | |
| 10·0 | | 49·7 | 53·7 | |

### 6961—7020.

| mag. | 17h. m | s | −59° ′ | |
|---|---|---|---|---|
| 10·0 | 9 | 2·7 | 44·8 | |
| 10·0 | | 12·2 | 43·8 | |
| 10·0 | | 14·2 | 56·9 | |
| 10·0 | | 18·7 | 35·8 | |
| 10·0 | | 20·8 | 24·2 | |
| 10·0 | | 24·7 | 31·9 | |
| 9·1 | | 30·2 | 46·8 | |
| 9·2 | | 36·8 | 27·2 | |
| 7·3 | | 36·8 | 18·3 | 7·5 GS |
| 10·0 | | 54·8 | 23·7 | |
| 9·8 | | 56·2 | 37·4 | |
| 9·4 | 10 | 2·7 | 35·9 | |
| 8·4 | | 5·8 | 14·2 | 9·0 |
| 7·7 | | 6·2 | 53·0 | |
| 9·6 | | 18·3 | 16·9 | |
| 9·6 | | 35·8 | 25·8 | |
| 9·6 | | 39·3 | 28·6 | 9·0 |
| 9·2 | | 39·5 | 2·4 | |
| 9·6 | | 41·8 | 29·7 | |
| 9·6 | | 50·3 | 29·5 | |
| 9·1 | 11 | 4·2 | 43·8 | |
| 8·8 | | 9·2 | 34·5 | 9·0 |
| 10·0 | | 32·8 | 17·4 | |
| 9·9 | | 37·7 | 40·3 | |
| 9·3 | | 59·7 | 50·5 | |
| 8·7 | 12 | 6·7 | 42·2 | 8·5 |
| 8·8 | | 9·8 | 12·2 | |
| 10·0 | | 9·8 | 39·8 | |
| 9·5 | | 14·8 | 17·1 | |
| 8·6 | | 31·3 | 13·7 | |
| 9·9 | | 39·2 | 43·7 | |
| 9·8 | | 55·7 | 54·3 | |
| 9·9 | | 58·2 | 47·3 | |
| 10·0 | 13 | 1·7 | 52·1 | |
| 10·0 | | 4·8 | 11·2 | |
| 9·8 | | 12·7 | 51·1 | |
| 9·3 | | 26·3 | 11·6 | |
| 7·5 | | 46·6 | 5·5 | 7·5 G |
| 9·0 | | 51·6 | 16·4 | |
| 9·8 | | 56·0 | 55·5 | |
| 9·4 | | 59·6 | 8·3 | |
| 10·0 | 14 | 13·5 | 39·8 | |
| 9·9 | | 24·1 | 17·6 | |
| 9·4 | | 36·1 | 7·1 | |
| 9·6 | | 40·6 | 3·2 | |
| 9·9 | | 49·6 | 5·5 | |
| 9·9 | 15 | 29·5 | 34·6 | |
| 9·6 | | 39·6 | 20·7 | |
| 9·3 | | 49·6 | 6·8 | |
| 9·0 | 16 | 10·0 | 48·4 | |
| 9·5 | | 29·0 | 31·7 | |
| 9·9 | | 29·6 | 10·5 | |
| 10·0 | | 36·1 | 8·7 | |
| 9·9 | | 49·6 | 26·1 | |
| 9·2 | | 57·0 | 35·0 | |
| 10·0 | | 59·1 | 19·3 | |
| 10·0 | 17 | 2·6 | 21·2 | |
| 9·8 | | 6·0 | 38·8 | |
| 9·5 | | 18·0 | 38·6 | |
| 10·0 | | 18·0 | 49·7 | |

### 7021—7080.

| mag. | 17h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·9 | 17 | 32·1 | 18·1 | |
| 10·0 | | 46·6 | 13·6 | |
| 9·8 | 18 | 8·0 | 53·2 | |
| 9·9 | | 9·6 | 9·3 | |
| 9·8 | | 13·5 | 30·1 | |
| 9·5 | | 14·5 | 56·6 | |
| 9·8 | | 19·0 | 50·3 | |
| 9·6 | | 20·0 | 47·5 | |
| 9·8 | | 20·6 | 19·9 | |
| 9·6 | | 22·0 | 31·1 | |
| 8·7 | | 32·0 | 40·8 | 8·5 |
| 10·0 | | 35·5 | 52·8 | |
| 9·9 | | 50·0 | 34·8 | |
| 9·8 | 19 | 2·6 | 11·8 | |
| 9·8 | | 26·6 | 1·9 | |
| 9·9 | | 32·3 | 31·2 | |
| 10·0 | | 37·9 | 14·0 | |
| 10·0 | | 38·8 | 32·5 | |
| 9·0 | | 44·4 | 13·7 | |
| 10·0 | | 52·7 | 22·5 | |
| 9·6 | | 55·8 | 55·4 | |
| 9·8 | 20 | 8·9 | 26·2 | |
| 9·5 | | 9·4 | 17·1 | |
| 9·4 | | 11·9 | 15·2 | |
| 10·0 | | 20·7 | 26·6 | |
| 9·1 | | 20·8 | 41·8 | |
| 10·0 | | 24·4 | 20·8 | |
| 10·0 | | 30·4 | 5·6 | |
| 9·8 | | 32·3 | 31·3 | |
| 9·9 | | 48·9 | 4·2 | |
| 9·4 | | 52·4 | 11·1 | |
| 9·8 | 21 | 4·8 | 33·5 | |
| 9·4 | | 22·4 | 21·7 | 9·5 |
| 9·5 | | 33·3 | 39·0 | |
| 9·4 | | 37·3 | 31·8 | |
| 9·9 | | 48·4 | 4·0 | |
| 9·9 | | 49·4 | 21·1 | |
| 9·4 | 22 | 0·4 | 9·1 | |
| 9·5 | | 16·9 | 28·5 | |
| 9·4 | | 36·3 | 30·2 | |
| 9·4 | | 40·4 | 14·9 | |
| 9·8 | | 53·8 | 33·1 | |
| 8·0 | | 58·8 | 40·1 | 7·5 G |
| 10·0 | 23 | 19·9 | 16·8 | |
| 9·4 | | 20·8 | 38·9 | |
| 10·0 | | 44·4 | 21·4 | |
| 9·0 | | 47·8 | 42·2 | 9·5 |
| 10·0 | 24 | 3·4 | 9·3 | |
| 9·8 | | 18·3 | 34·7 | |
| 9·6 | | 19·4 | 11·6 | |
| 6·2 | | 26·3 | 45·3 | 6·5 GSct |
| 9·8 | | 37·4 | 27·2 | |
| 9·6 | | 51·8 | 50·9 | |
| 10·0 | | 58·3 | 36·8 | |
| 9·4 | 25 | 9·4 | 25·2 | |
| 9·9 | | 18·8 | 34·8 | |
| 10·0 | | 23·4 | 28·7 | |
| 9·5 | | 30·4 | 23·1 | |
| 9·6 | | 34·1 | 18·6 | |
| 9·6 | | 48·1 | 19·2 | |



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## 7081—7140.

| mag. | 17h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 25 | 49·0 | 39·8 | |
| 9·3 | | 53·1 | 26·4 | |
| 9·3 | 26 | 17·7 | 56·9 | |
| 9·6 | | 32·1 | 17·7 | |
| 9·6 | | 45·5 | 46·8 | |
| 8·4 | | 49·1 | 20·9 | 7·5 GS |
| 10·0 | 27 | 11·5 | 37·5 | |
| 9·4 | | 18·0 | 50·6 | |
| 9·4 | | 18·5 | 50·8 | |
| 9·6 | | 29·1 | 13·9 | |
| 9·8 | | 29·5 | 42·3 | |
| 9·6 | | 44·7 | 59·6 | |
| 9·8 | | 45·6 | 8·0 | |
| 10·0 | 28 | 6·6 | 12·1 | |
| 8·7 | | 8·5 | 37·8 | 9·0 |
| 9·6 | | 28·5 | 30·1 | |
| 9·8 | | 29·5 | 48·2 | |
| 9·2 | | 32·5 | 54·7 | |
| 9·8 | | 33·0 | 52·9 | |
| 10·0 | | 35·5 | 39·3 | |
| 8·8 | | 52·1 | 11·2 | |
| 9·0 | 29 | 7·5 | 40·0 | 9·0 |
| 9·5 | | 28·1 | 22·8 | |
| 10·0 | | 44·5 | 33·0 | |
| 9·2 | | 52·6 | 29·8 | |
| 8·1 | 30 | 4·5 | 50·1 | 8·2 |
| 9·2 | | 11·0 | 55·8 | |
| 9·2 | | 27·5 | 58·0 | 9·5 G |
| 9·6 | | 30·1 | 23·7 | |
| 10·0 | 31 | 0·0 | 32·0 | |
| 10·0 | | 29·1 | 23·6 | |
| 9·9 | | 55·6 | 11·5 | |
| 10·0 | 32 | 3·6 | 8·6 | |
| 10·0 | | 9·0 | 47·5 | |
| 9·6 | | 9·5 | 32·3 | |
| 9·8 | | 17·1 | 28·1 | |
| 9·9 | | 18·1 | 28·6 | |
| 8·9 | | 19·5 | 42·0 | G |
| 9·2 | | 53·5 | 31·2 | 9·0 |
| 10·0 | 33 | 11·4 | 57·9 | |
| 9·6 | | 18·3 | 47·5 | |
| 9·6 | | 22·3 | 1·9 | |
| 8·4 | | 28·9 | 27·0 | 8·0 |
| 10·0 | | 43·8 | 57·6 | |
| 10·0 | | 57·9 | 24·5 | |
| 10·0 | 34 | 1·9 | 6·9 | |
| 8·4 | | 23·3 | 37·2 | 8·5 |
| 9·6 | | 39·9 | 17·6 | |
| 9·9 | | 46·8 | 43·3 | |
| 9·9 | 35 | 0·3 | 52·7 | |
| 8·9 | | 5·9 | 16·8 | 9·0 |
| 9·1 | | 8·3 | 37·2 | 9·0 |
| 9·8 | | 9·9 | 17·6 | |
| 9·8 | | 30·8 | 32·7 | |
| 10·0 | | 45·3 | 50·9 | |
| 8·8 | | 47·4 | 2·8 | |
| 7·1 | | 55·3 | 56·2 | 7·0 GSct |
| 9·8 | | 58·3 | 38·2 | |
| 8·7 | 36 | 1·9 | 6·3 | |
| 9·4 | | 2·3 | 0·8 | |

## 7141—7200.

| mag. | 17h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·9 | 36 | 8·9 | 20·8 | |
| 9·9 | | 25·9 | 20·8 | |
| 8·8 | | 27·3 | 46·4 | 8·0 G |
| 9·8 | | 31·0 | 58·5 | |
| 8·8 | | 31·8 | 37·6 | |
| 9·4 | | 46·9 | 4·8 | |
| 9·6 | | 47·9 | 18·7 | |
| 10·0 | | 50·8 | 32·6 | |
| 10·0 | | 51·9 | 7·4 | |
| 8·6 | | 57·9 | 23·7 | |
| 9·3 | 37 | 10·9 | 12·7 | |
| 10·0 | | 18·9 | 29·4 | |
| 7·9 | | 51·9 | 20·1 | 8·0 |
| 9·8 | 38 | 10·8 | 31·2 | |
| 10·0 | | 19·3 | 50·0 | |
| 9·8 | | 28·3 | 44·7 | |
| 10·0 | | 51·3 | 48·7 | |
| 9·4 | 39 | 26·3 | 47·7 | |
| 9·6 | | 52·9 | 21·3 | |
| 9·6 | | 53·5 | 12·2 | |
| 9·6 | 40 | 27·5 | 20·3 | |
| 9·8 | | 29·1 | 47·9 | |
| 8·9 | 41 | 3·6 | 8·7 | |
| 10·0 | | 12·9 | 13·9 | |
| 9·8 | | 57·4 | 55·7 | |
| 9·8 | 42 | 14·4 | 51·7 | |
| 8·2 | | 24·1 | 40·2 | 8·8 |
| 9·8 | | 27·1 | 57·6 | |
| 10·0 | | 48·3 | 21·6 | |
| 9·6 | 43 | 9·1 | 1·2 | |
| 10·0 | | 22·7 | 50·4 | |
| 9·8 | | 38·6 | 31·0 | |
| 8·8 | | 45·1 | 41·7 | |
| 9·8 | 44 | 9·0 | 25·9 | |
| 8·6 | | 12·8 | 57·1 | 9·2 |
| 9·2 | | 17·5 | 5·9 | |
| 9·8 | | 19·5 | 32·7 | |
| 9·8 | | 21·5 | 21·3 | |
| 9·8 | | 27·5 | 5·0 | |
| 8·6 | | 30·0 | 11·3 | 9·5 |
| 9·6 | | 38·5 | 27·3 | |
| 9·5 | | 56·5 | 10·4 | |
| 9·8 | 45 | 6·0 | 57·1 | |
| 9·2 | | 13·5 | 3·0 | |
| 8·7 | | 34·5 | 53·2 | |
| 9·4 | | 41·0 | 13·3 | |
| 9·8 | 46 | 13·5 | 42·5 | |
| 9·8 | | 46·0 | 19·8 | |
| 8·4 | | 52·5 | 40·6 | 8·8 |
| 9·8 | | 56·0 | 41·7 | |
| 8·6 | | 59·0 | 33·3 | 9·2 |
| 9·8 | 47 | 7·0 | 2·1 | |
| 9·6 | | 23·0 | 24·9 | |
| 9·8 | | 28·5 | 24·3 | |
| 9·6 | 48 | 3·0 | 37·2 | |
| 9·8 | | 11·0 | 27·0 | |
| 9·8 | | 32·5 | 57·9 | |
| 9·4 | | 46·5 | 52·9 | |
| 9·8 | | 52·0 | 28·4 | |
| 9·0 | 49 | 3·5 | 47·3 | 9·0 |

## 7201—7260.

| mag. | 17h.—18h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 49 | 15·5 | 57·5 | |
| 9·6 | | 24·5 | 9·3 | |
| 9·8 | | 32·0 | 9·8 | |
| 9·5 | 50 | 22·5 | 23·0 | |
| 8·4 | | 27·0 | 55·1 | 9·0 G |
| 9·6 | | 41·5 | 7·1 | |
| 9·8 | 51 | 43·0 | 16·0 | |
| 9·8 | | 57·2 | 52·5 | |
| 9·2 | 52 | 2·0 | 46·4 | |
| 9·8 | 53 | 0·5 | 8·7 | |
| 9·0 | | 1·5 | 14·1 | |
| 9·8 | | 6·0 | 29·4 | |
| 9·8 | | 12·5 | 26·1 | |
| 8·2 | | 14·0 | 52·1 | 8·5 G |
| 8·2 | | 22·5 | 10·4 | 7·0 GS |
| 9·5 | | 23·5 | 45·4 | |
| 9·8 | | 31·0 | 48·9 | |
| 7·2 | | 41·0 | 12·3 | 7·0 GS |
| 9·8 | | 55·5 | 7·8 | |
| 9·5 | 54 | 25·0 | 56·1 | |
| 9·8 | 55 | 13·5 | 25·9 | |
| 9·1 | 56 | 7·0 | 36·9 | 8·5 |
| 9·6 | | 12·5 | 35·0 | |
| 9·8 | | 53·5 | 50·2 | |
| 8·8 | 57 | 17·0 | 7·5 | |
| 8·8 | | 36·5 | 36·4 | |
| 8·5 | | 37·0 | 15·7 | |
| 8·8 | | 46·3 | 0·6 | 9·5 |
| 9·8 | 58 | 2·8 | 2·8 | |
| 8·2 | | 54·0 | 54·5 | |
| 7·8 | | 56·0 | 3·3 | 6·5 GSt |
| 8·8 | 59 | 16·5 | 19·4 | |
| 9·0 | | 18·8 | 1·1 | 9·0 |
| 9·8 | 0 | 14·2 | 46·0 | |
| 9·4 | | 43·0 | 23·2 | |
| 7·9 | | 47·8 | 0·3 | 8·0 |
| 8·6 | 2 | 13·5 | 32·4 | 8·5 |
| 9·8 | | 17·5 | 6·4 | |
| 9·8 | | 29·0 | 10·8 | |
| 9·8 | 3 | 2·5 | 25·0 | 8·2 |
| 9·8 | 4 | 8·0 | 55·2 | |
| 9·5 | | 48·0 | 43·0 | |
| 7·9 | 5 | 23·0 | 25·9 | 8·0 G |
| 7·0 | | 38·0 | 35·8 | 7·7 G |
| 9·8 | | 50·5 | 32·1 | |
| 9·8 | 6 | 0·0 | 10·4 | |
| 9·8 | | 33·0 | 19·5 | |
| 9·2 | | 40·0 | 45·6 | 8·2 |
| 8·8 | 7 | 9·0 | 55·6 | 8·5 |
| 9·2 | 8 | 24·0 | 16·3 | 9·0 |
| 9·8 | | 25·0 | 51·1 | |
| 9·8 | | 32·0 | 17·2 | 9·0 |
| 9·4 | | 44·0 | 25·6 | 8·0 |
| 9·8 | 9 | 1·0 | 51·6 | |
| 8·2 | | 11·0 | 21·3 | 8·0 |
| 6·2 | | 30·5 | 53·2 | 7·0 GS |
| 9·6 | | 33·0 | 26·9 | 9·0 |
| 8·8 | 11 | 8·0 | 36·8 | 8·8 |
| 9·8 | | 24·5 | 5·4 | |
| 6·7 | 13 | 14·0 | 40·4 | GS |

## 7261—7320.

| mag. | 18h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·8 | 16 | 21·5 | 31·2 | |
| 9·8 | | 22·0 | 32·9 | |
| 9·8 | | 35·5 | 5·2 | |
| 9·6 | 17 | 4·5 | 7·7 | |
| 8·8 | | 7·9 | 36·3 | *8·0* |
| 9·2 | | 8·4 | 30·7 | |
| 9·4 | | 13·0 | 9·0 | |
| 9·6 | | 14·0 | 9·5 | |
| 9·4 | | 27·4 | 41·5 | |
| 10·0 | | 27·4 | 39·7 | |
| 9·4 | | 40·7 | 2·2 | |
| 9·4 | 18 | 33·0 | 19·4 | |
| 9·1 | | 47·5 | 52·1 | |
| 9·8 | | 49·9 | 45·6 | |
| 9·0 | 19 | 3·2 | 49·1 | |
| 9·6 | | 5·5 | 16·7 | |
| 8·8 | | 26·5 | 22·0 | 7·5 G |
| 9·4 | | 37·0 | 21·0 | |
| 9·8 | | 47·5 | 23·0 | |
| 9·4 | | 54·5 | 28·1 | |
| 9·0 | 20 | 8·6 | 59·9 | 8·2 |
| 10·0 | | 29·4 | 9·6 | |
| 9·4 | | 40·4 | 16·4 | |
| 9·8 | | 45·4 | 19·7 | |
| 7·4 | | 49·3 | 38·5 | 7·5 GS |
| 9·2 | | 59·4 | 5·8 | |
| 9·1 | 21 | 0·8 | 32·5 | 9·5 |
| 9·8 | | 42·3 | 59·0 | |
| 10·0 | | 47·3 | 59·6 | |
| 9·8 | | 55·9 | 13·3 | |
| 9·0 | 22 | 0·3 | 41·1 | |
| 10·0 | | 8·3 | 58·0 | |
| 9·4 | | 12·8 | 49·6 | |
| 10·0 | | 13·1 | 58·9 | |
| 10·0 | 23 | 31·4 | 0·9 | |
| 10·0 | | 41·4 | 13·1 | |
| 9·2 | | 51·9 | 28·1 | |
| 9·4 | | 53·9 | 27·8 | |
| 10·0 | 24 | 9·8 | 46·4 | |
| 9·4 | | 12·7 | 2·8 | |
| 9·3 | | 28·9 | 12·0 | |
| 9·4 | | 29·3 | 32·1 | |
| 9·6 | | 34·4 | 13·8 | |
| 9·4 | | 38·3 | 36·4 | 9·0 G |
| 8·4 | | 44·8 | 37·5 | 8·5 G |
| 9·2 | | 49·3 | 54·8 | |
| 10·0 | 25 | 12·4 | 22·0 | |
| 9·6 | | 19·3 | 38·9 | |
| 9·4 | | 23·9 | 14·4 | |
| 8·3 | | 26·4 | 25·3 | 8·2 G |
| 9·4 | | 26·8 | 48·2 | |
| 9·3 | | 28·3 | 41·3 | |
| 9·6 | | 46·3 | 50·7 | |
| 9·0 | | 50·4 | 16·6 | |
| 9·8 | 26 | 7·6 | 30·2 | |
| 8·8 | | 14·9 | 14·1 | 9·0 |
| 10·0 | 27 | 7·9 | 24·2 | |
| 9·8 | | 7·9 | 19·1 | |
| 9·8 | | 38·3 | 54·1 | |
| 9·4 | | 39·3 | 36·0 | 9·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 20 | 133 | 1·5 |
| | 30 | 133 | 1·1 |
| | 40 | 133 | 0·7 |
| | 50 | 133 | 0·4 |
| 18 | 0 | 134 | 0·0 |
| | | | + |
| | 10 | 133 | 0·4 |
| | 20 | 133 | 0·7 |
| | 30 | 133 | 1·1 |



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25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 18 | 20 | 133 | 0·7 |
| | 30 | 133 | 1·1 |
| | 40 | 133 | 1·5 |
| | 50 | 132 | 1·8 |
| 19 | 0 | 132 | 2·2 |
| | 10 | 131 | 2·5 |
| | 20 | 130 | 2·9 |
| | 30 | 129 | 3·2 |
| | 40 | 128 | 3·5 |
| | 50 | 127 | 3·9 |

## 7321—7380.

| mag. | 18h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·8 | 27 | 47·3 | 41·4 | 9·0 |
| 9·8 | | 54·7 | 28·3 | 10·0 |
| 9·8 | 28 | 4·6 | 46·2 | |
| 10·0 | | 12·6 | 44·2 | |
| 8·0 | | 16·2 | 13·3 | 7·2 GSt |
| 9·6 | | 37·2 | 4·9 | |
| 9·4 | | 37·2 | 4·5 | |
| 8·5 | | 46·2 | 24·2 | 7·5 G |
| 9·6 | | 48·2 | 15·9 | |
| 9·8 | | 57·2 | 24·4 | |
| 8·8 | 29 | 19·6 | 50·0 | 8·0 |
| 9·0 | | 57·3 | 1·5 | |
| 10·0 | | 58·5 | 34·9 | |
| 9·8 | 30 | 0·1 | 58·5 | |
| 10·0 | | 5·2 | 23·1 | |
| 8·8 | | 47·1 | 32·2 | 9·0 |
| 9·1 | | 52·1 | 1·0 | 9·5 |
| 10·0 | | 56·7 | 57·4 | |
| 10·0 | 31 | 38·2 | 15·9 | |
| 10·0 | | 40·1 | 39·5 | |
| 9·6 | | 54·1 | 31·8 | 9·0 |
| 9·8 | 32 | 0·2 | 28·9 | |
| 8·8 | | 1·1 | 33·0 | 8·5 |
| 9·8 | | 3·6 | 48·2 | |
| 9·8 | | 53·6 | 50·9 | |
| 9·2 | 33 | 7·6 | 2·2 | |
| 9·4 | | 9·2 | 42·4 | |
| 8·4 | | 12·3 | 5·9 | 7·5 GS |
| 9·6 | | 18·8 | 7·0 | |
| 10·0 | | 19·2 | 48·4 | |
| 9·4 | | 22·8 | 28·9 | |
| 8·2 | | 40·8 | 21·6 | 8·0 |
| 8·8 | | 58·7 | 47·0 | |
| 9·8 | 34 | 15·8 | 19·5 | |
| 9·6 | | 21·8 | 21·8 | 9·0 |
| 10·0 | | 29·8 | 9·2 | |
| 9·3 | | 44·3 | 21·9 | 8·5 |
| 9·6 | 35 | 9·8 | 8·9 | |
| 8·8 | | 30·8 | 13·8 | 8·2 G |
| 9·8 | 36 | 9·8 | 22·6 | |
| 9·4 | | 29·2 | 35·4 | |
| 9·6 | | 29·7 | 42·8 | |
| 9·6 | | 43·7 | 35·9 | |
| 9·3 | | 49·3 | 25·0 | |
| 9·6 | 37 | 4·4 | 4·6 | |
| 10·0 | | 11·8 | 38·7 | |
| 10·0 | | 22·4 | 26·6 | |
| 9·8 | | 41·8 | 43·0 | |
| 9·6 | | 46·9 | 7·8 | |
| 9·8 | 38 | 6·8 | 36·8 | |
| 8·4 | | 21·3 | 33·2 | 8·2 G |
| 10·0 | | 23·9 | 7·5 | |
| 7·8 | | 33·9 | 4·9 | 8·0 GS |
| 9·4 | | 38·8 | 54·3 | |
| 9·0 | | 44·3 | 44·0 | 8·0 G |
| 8·6 | | 58·8 | 33·0 | 8·5 |
| 9·8 | | 59·9 | 11·9 | |
| 9·8 | 39 | 14·8 | 43·6 | |
| 9·3 | | 19·9 | 24·3 | 9·5 |
| 9·6 | | 32·9 | 14·5 | |

## 7381—7440.

| mag. | 18h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·6 | 39 | 39·4 | 9·9 | 8·5 |
| 9·8 | | 46·4 | 22·9 | |
| 9·8 | | 50·3 | 41·5 | |
| 9·8 | 40 | 18·9 | 19·8 | |
| 9·3 | | 42·8 | 48·4 | |
| 9·6 | | 52·9 | 22·7 | |
| 9·2 | | 52·9 | 23·6 | |
| 9·4 | 41 | 9·9 | 1·4 | 9·5 |
| 9·1 | | 19·9 | 2·1 | 9·0 |
| 9·8 | | 26·0 | 57·7 | |
| 8·8 | | 27·4 | 5·2 | 8·5 G |
| 9·8 | 42 | 0·8 | 37·8 | |
| 9·1 | | 25·4 | 11·8 | 8·8 |
| 8·8 | | 27·3 | 40·0 | 9·0 |
| 10·0 | | 52·9 | 29·7 | |
| 9·8 | 43 | 1·8 | 49·0 | |
| 8·4 | | 19·4 | 14·3 | 8·2 G |
| 9·4 | 44 | 9·9 | 20·6 | |
| 9·8 | | 18·3 | 42·2 | |
| 9·4 | | 23·9 | 1·9 | |
| 9·8 | | 39·9 | 17·0 | |
| 9·4 | | 50·8 | 51·9 | |
| 8·2 | | 55·3 | 38·1 | 8·5 |
| 10·0 | 45 | 6·9 | 12·7 | |
| 9·8 | | 11·9 | 21·3 | |
| 9·6 | 46 | 9·7 | 37·1 | |
| 9·2 | | 48·9 | 9·8 | |
| 9·6 | | 57·4 | 3·4 | |
| 9·8 | 47 | 53·8 | 0·6 | |
| 10·0 | 48 | 2·0 | 58·4 | |
| 9·6 | | 31·4 | 16·4 | |
| 8·8 | | 33·9 | 3·8 | 9·0 |
| 9·6 | | 35·8 | 34·3 | |
| 10·0 | | 39·3 | 31·9 | |
| 9·0 | | 47·4 | 2·8 | |
| 10·0 | | 48·9 | 10·0 | |
| 10·0 | | 49·9 | 2·5 | |
| 9·8 | | 51·9 | 11·0 | |
| 9·4 | 49 | 0·3 | 48·9 | |
| 9·6 | | 33·3 | 48·7 | |
| 8·8 | | 45·8 | 38·0 | 8·5 |
| 8·2 | 50 | 12·9 | 3·5 | 8·2 |
| 9·4 | | 31·4 | 5·6 | |
| 9·6 | | 59·0 | 29·0 | |
| 8·8 | 52 | 23·8 | 56·7 | |
| 10·0 | | 33·3 | 34·6 | |
| 9·8 | | 40·8 | 57·2 | |
| 9·6 | | 51·4 | 5·9 | |
| 9·6 | | 59·8 | 57·2 | |
| 9·4 | 53 | 0·2 | 21·2 | |
| 8·0 | | 2·8 | 55·0 | 7·5 G |
| 9·2 | | 18·3 | 26·4 | |
| 9·8 | | 28·4 | 21·3 | |
| 9·1 | | 30·8 | 11·2 | |
| 9·3 | | 39·4 | 28·7 | |
| 10·0 | | 41·8 | 49·9 | |
| 10·0 | 54 | 27·4 | 11·1 | |
| 9·4 | | 32·3 | 44·1 | |
| 9·4 | | 38·3 | 45·1 | |
| 10·0 | | 48·4 | 7·3 | |

## 7441—7500.

| mag. | 18h.–19h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·1 | 55 | 19·1 | 49·1 | |
| 10·0 | | 24·4 | 28·5 | |
| 9·8 | | 37·8 | 32·2 | |
| 10·0 | | 50·4 | 10·9 | |
| 9·1 | 56 | 5·8 | 0·1 | |
| 9·4 | | 56·2 | 0·1 | |
| 9·4 | 57 | 2·4 | 28·9 | |
| 9·2 | | 47·2 | 34·1 | 8·0 G |
| 9·4 | | 47·5 | 45·9 | |
| 7·8 | | 52·2 | 31·2 | 7·5 G |
| 9·6 | 58 | 32·5 | 7·9 | 9·5 Gg |
| 9·6 | | 43·5 | 44·3 | |
| 8·8 | 59 | 12·5 | 44·4 | 8·0 G |
| 9·2 | | 16·0 | 55·0 | |
| 9·2 | | 22·0 | 56·8 | |
| 9·4 | | 58·8 | 1·6 | |
| 9·0 | 0 | 8·5 | 44·4 | |
| 9·4 | 1 | 21·5 | 51·0 | |
| 9·6 | | 34·0 | 41·0 | |
| 8·8 | | 44·5 | 6·2 | |
| 8·4 | | 56·0 | 53·4 | 8·8 |
| 9·6 | 2 | 10·5 | 3·4 | |
| 9·2 | | 53·5 | 40·9 | |
| 9·2 | 3 | 35·5 | 50·3 | |
| 9·2 | 4 | 16·5 | 13·9 | 9·5 |
| 9·2 | 5 | 15·5 | 55·8 | 9·5 |
| 9·6 | 6 | 7·5 | 15·4 | |
| 9·6 | 7 | 2·0 | 26·2 | |
| 7·8 | | 31·5 | 5·4 | 8·0 G |
| 9·4 | 8 | 21·0 | 43·4 | |
| 8·2 | | 50·0 | 35·4 | 8·5 |
| 9·2 | | 59·0 | 22·6 | 9·0 |
| 8·6 | 9 | 40·0 | 52·0 | 8·5 |
| 9·2 | | 40·5 | 2·9 | |
| 9·2 | 10 | 26·0 | 25·4 | 9·8 G |
| 9·0 | 12 | 59·0 | 47·5 | 10·0 |
| 9·2 | 13 | 4·0 | 28·5 | |
| 9·2 | | 10·0 | 43·5 | 9·5 |
| 9·4 | 14 | 17·0 | 6·8 | |
| 9·6 | | 34·5 | 8·1 | |
| 9·6 | 16 | 52·0 | 48·1 | |
| 9·4 | 18 | 17·5 | 51·1 | 9·5 |
| 9·6 | 19 | 49·0 | 15·0 | 9·5 |
| 7·3 | | 53·5 | 28·3 | 8·0 GS |
| 9·6 | 20 | 13·0 | 3·1 | |
| 9·0 | | 46·0 | 29·9 | 9·5 |
| 9·4 | 21 | 18·0 | 10·1 | |
| 8·8 | 22 | 13·0 | 23·1 | 9·0 |
| 8·8 | | 15·0 | 53·8 | 9·0 |
| 9·0 | | 42·5 | 7·7 | |
| 9·0 | 23 | 37·0 | 15·1 | |
| 9·6 | 24 | 16·0 | 39·5 | |
| 9·2 | | 45·0 | 4·5 | |
| 10·0 | 28 | 5·0 | 16·3 | |
| 9·0 | | 12·8 | 36·9 | |
| 9·4 | | 44·4 | 1·9 | |
| 9·8 | 29 | 45·5 | 27·9 | |
| 9·5 | 30 | 14·0 | 13·1 | |
| 9·1 | | 28·4 | 1·6 | |
| 9·2 | | 35·8 | 8·1 | |

## 7501—7560.

| mag. | 19h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·8 | 31 | 19·5 | 44·2 | |
| 9·8 | | 20·0 | 6·2 | |
| 9·1 | | 21·0 | 41·7 | |
| 9·9 | | 24·0 | 22·1 | |
| 8·1 | | 51·5 | 17·3 | GS |
| 9·8 | 32 | 21·5 | 11·5 | |
| 9·2 | | 38·5 | 19·1 | |
| 9·4 | | 38·5 | 18·3 | |
| 10·0 | | 41·5 | 17·1 | |
| 9·4 | | 45·0 | 4·0 | |
| 10·0 | 33 | 0·0 | 12·1 | |
| 10·0 | | 24·0 | 56·2 | |
| 10·0 | | 31·5 | 56·0 | |
| 9·6 | | 58·5 | 54·3 | |
| 10·0 | 34 | 1·5 | 4·1 | |
| 9·6 | | 5·5 | 59·7 | |
| 9·9 | | 11·0 | 10·3 | |
| 9·1 | | 24·5 | 15·2 | |
| 8·2 | 35 | 11·5 | 53·3 | 8·5 G |
| 10·0 | | 21·5 | 31·7 | |
| 9·5 | | 28·5 | 17·6 | |
| 9·8 | | 28·5 | 19·8 | |
| 9·9 | | 40·5 | 16·5 | |
| 9·9 | | 41·5 | 16·3 | |
| 9·8 | | 51·0 | 25·1 | |
| 10·0 | | 55·0 | 52·9 | |
| 9·9 | 36 | 31·0 | 35·1 | |
| 9·4 | 37 | 19·8 | 2·2 | |
| 9·6 | | 40·5 | 49·3 | |
| 10·0 | 38 | 50·5 | 22·2 | |
| 9·2 | 39 | 17·0 | 34·1 | |
| 7·3 | | 25·5 | 34·2 | 7·5 GSt |
| 9·9 | | 57·5 | 55·9 | |
| 5·9 | 40 | 8·0 | 30·1 | 6·0 GSct |
| 9·1 | | 13·5 | 28·5 | 9·0 |
| 9·6 | | 53·5 | 49·5 | 9·5 |
| 10·0 | 41 | 2·5 | 8·1 | |
| 10·0 | | 13·0 | 31·1 | |
| 9·1 | | 51·5 | 28·9 | G |
| 9·5 | 42 | 0·5 | 4·5 | |
| 9·6 | 43 | 2·8 | 1·1 | |
| 10·0 | 44 | 1·0 | 13·7 | |
| 10·0 | | 31·5 | 37·5 | |
| 9·2 | | 39·5 | 30·9 | 8·5 GS |
| 9·2 | | 52·5 | 43·5 | |
| 10·0 | 45 | 18·5 | 4·2 | |
| 9·9 | | 49·5 | 16·9 | |
| 9·8 | 46 | 11·5 | 9·5 | |
| 10·0 | | 25·5 | 36·7 | |
| 5·7 | | 35·5 | 13·7 | 6·0 GSct |
| 9·6 | | 50·5 | 11·1 | |
| 8·4 | 47 | 14·0 | 51·2 | 8·0 GS |
| 9·2 | | 37·5 | 17·4 | |
| 9·9 | | 55·5 | 7·6 | |
| 9·6 | 48 | 10·0 | 13·1 | |
| 10·0 | | 30·5 | 18·9 | |
| 9·1 | | 42·0 | 55·5 | |
| 8·7 | | 51·0 | 8·3 | |
| 9·0 | | 52·0 | 23·4 | 9·0 |
| 9·6 | 49 | 57·5 | 25·1 | |



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**7561—7620.**

| mag. | $19^{h}$–$20^{h}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·9 | 50 | 6·0 | 47·3 | |
| 10·0 | | 21·0 | 53·6 | |
| 9·9 | | 40·0 | 5·1 | |
| 7·0 | 51 | 11·0 | 42·8 | 6·0 GSct |
| 8·3 | | 22·0 | 47·1 | 8·0 G |
| 8·6 | | 33·5 | 13·1 | 9·5 |
| 9·6 | 52 | 10·5 | 56·9 | |
| 9·0 | 53 | 19·0 | 20·9 | |
| 10·0 | | 37·5 | 51·1 | |
| 9·9 | 54 | 35·5 | 12·3 | |
| 8·7 | | 47·5 | 53·3 | 8·5 G |
| 9·0 | 55 | 9·0 | 34·8 | 9·0 |
| 9·2 | | 56·0 | 11·1 | |
| 9·5 | 56 | 19·0 | 3·7 | |
| 9·8 | | 50·0 | 6·1 | |
| 9·4 | 57 | 5·5 | 40·1 | |
| 9·6 | | 18·5 | 43·0 | 9·5 |
| 9·6 | | 52·0 | 19·9 | |
| 9·6 | | 57·5 | 55·3 | |
| 9·6 | 58 | 7·5 | 46·1 | |
| 9·9 | | 23·5 | 30·1 | |
| 9·1 | | 51·0 | 4·0 | |
| 8·7 | | 54·0 | 21·4 | 8·5 |
| 10·0 | 59 | 5·0 | 3·1 | |
| 10·0 | | 25·5 | 11·1 | |
| 9·8 | | 46·3 | 1·8 | |
| 9·4 | 0 | 15·0 | 34·1 | |
| 10·0 | 1 | 18·5 | 28·7 | |
| 10·0 | | 33·0 | 57·0 | |
| 9·9 | 2 | 16·5 | 27·1 | |
| 8·4 | | 38·5 | 8·9 | |
| 9·9 | 3 | 32·0 | 27·1 | |
| 9·9 | | 41·5 | 28·9 | |
| 9·9 | 4 | 5·0 | 49·7 | |
| 9·5 | | 27·5 | 10·4 | |
| 10·0 | | 32·0 | 5·1 | |
| 9·9 | | 52·0 | 48·0 | |
| 9·1 | 6 | 8·5 | 3·3 | |
| 8·8 | | 19·3 | 29·4 | 9·5 |
| 10·0 | | 32·0 | 9·8 | |
| 8·8 | | 41·6 | 2·0 | 9·5 |
| 9·9 | | 52·5 | 14·8 | |
| 9·0 | 10 | 2·7 | 8·9 | S |
| 7·8 | | 23·0 | 7·0 | 7·5 GSt |
| 8·2 | | 36·0 | 25·2 | 8·0 |
| 8·8 | 12 | 4·0 | 46·8 | 9·0 G |
| 9·6 | | 21·0 | 14·0 | |
| 9·7 | | 32·0 | 5·8 | |
| 8·4 | | 40·0 | 53·4 | 8·8 |
| 9·4 | 13 | 6·5 | 18·0 | |
| 9·4 | | 27·5 | 44·0 | 9·0 G |
| 9·6 | 14 | 10·5 | 51·0 | |
| 9·6 | | 15·5 | 14·6 | |
| 9·7 | | 42·0 | 10·1 | |
| 9·0 | 16 | 49·0 | 38·2 | 8·5 G |
| 9·6 | 17 | 23·0 | 2·0 | |
| 9·4 | | 32·3 | 2·2 | |
| 8·0 | 19 | 38·0 | 11·0 | 8·5 GSt |
| 8·4 | 23 | 3·0 | 3·6 | 8·5 |
| 9·6 | | 25·5 | 38·6 | |

**7621—7680.**

| mag. | $20^{h}$–$21^{h}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·7 | 23 | 39·5 | 4·6 | |
| 8·6 | 25 | 22·5 | 30·0 | 9·0 |
| 9·7 | | 27·0 | 15·5 | |
| 9·2 | 26 | 11·5 | 0·0 | |
| 9·4 | | 42·0 | 25·7 | |
| 9·0 | 29 | 10·5 | 56·4 | |
| 9·7 | | 45·0 | 31·0 | |
| 8·9 | 30 | 37·0 | 46·8 | 9·0 |
| 8·9 | | 53·5 | 37·6 | 9·5 |
| 9·6 | 31 | 30·0 | 37·4 | |
| 9·0 | | 46·0 | 53·0 | 8·2 |
| 9·0 | | 54·0 | 26·8 | 8·8 |
| 9·2 | 32 | 54·0 | 4·8 | |
| 9·7 | 33 | 24·0 | 57·0 | |
| 9·0 | 36 | 28·5 | 23·0 | |
| 9·7 | 37 | 34·0 | 57·1 | |
| 9·4 | | 43·0 | 14·0 | |
| 9·6 | | 56·5 | 13·0 | |
| 9·7 | 38 | 42·0 | 25·4 | 9·5 |
| 8·0 | | 52·0 | 41·4 | GScr |
| 9·7 | 39 | 14·0 | 30·9 | |
| 9·2 | 40 | 13·0 | 14·1 | 9·0 |
| 9·6 | | 33·8 | 39·0 | |
| 9·1 | | 39·7 | 23·0 | 8·0 G |
| 9·8 | 42 | 9·0 | 27·4 | |
| 9·3 | 43 | 20·7 | 4·7 | |
| 9·0 | | 30·0 | 39·8 | 9·0 G |
| 9·8 | 44 | 26·0 | 46·8 | |
| 9·6 | | 45·2 | 44·2 | |
| 9·8 | 45 | 8·5 | 52·4 | |
| 9·8 | 46 | 31·0 | 41·6 | |
| 8·4 | | 34·0 | 44·6 | 8·0 Gcr |
| 9·0 | 47 | 17·0 | 31·2 | |
| 8·4 | | 21·5 | 52·4 | 8·5 |
| 9·4 | | 22·0 | 12·9 | |
| 9·6 | | 23·0 | 2·0 | |
| 8·5 | | 32·0 | 32·9 | 8·5 |
| 9·4 | 48 | 31·0 | 24·4 | |
| 8·7 | | 47·5 | 6·8 | 9·0 G |
| 8·6 | 49 | 43·5 | 20·2 | 8·0 GS |
| 9·8 | 50 | 35·0 | 10·8 | |
| 8·9 | 51 | 15·0 | 13·0 | G |
| 9·5 | 52 | 5·5 | 37·0 | |
| 9·8 | 54 | 2·2 | 35·7 | |
| 9·6 | | 31·2 | 2·4 | |
| 8·9 | | 35·5 | 5·7 | |
| 7·4 | | 51·5 | 25·2 | 7·5 GSt |
| 8·8 | | 59·5 | 47·0 | 9·0 G |
| 9·8 | 55 | 14·2 | 0·1 | |
| 9·3 | | 47·0 | 37·8 | 9·5 |
| 9·2 | 57 | 1·0 | 41·7 | |
| 9·3 | | 29·5 | 32·8 | |
| 9·8 | 58 | 26·0 | 20·0 | |
| 9·7 | | 29·2 | 3·1 | |
| 9·2 | | 48·0 | 31·2 | |
| 9·7 | 0 | 16·0 | 22·6 | |
| 7·3 | | 42·5 | 54·7 | GSt |
| 9·1 | 2 | 22·0 | 46·0 | |
| 9·4 | 3 | 20·0 | 49·9 | 9·0 |
| 9·3 | 4 | 12·5 | 59·5 | |

**7681—7740.**

| mag. | $21^{h}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 8·6 | 4 | 44·8 | 2·0 | |
| 8·3 | 5 | 20·0 | 49·4 | 8·0 GS |
| 8·0 | | 42·5 | 26·4 | 7·0 GSct |
| 9·7 | 6 | 31·2 | 4·0 | |
| 9·1 | | 35·8 | 1·4 | |
| 8·6 | | 57·5 | 17·1 | |
| 9·3 | 7 | 2·0 | 52·4 | |
| 8·7 | | 34·0 | 6·0 | 9·5 |
| 8·6 | 9 | 32·0 | 19·9 | 9·0 |
| 9·8 | 10 | 44·5 | 39·6 | |
| 8·4 | | 55·0 | 44·9 | 9·0 GS |
| 8·5 | 11 | 45·0 | 3·6 | 9·5 |
| 9·2 | 13 | 46·0 | 44·0 | |
| 9·4 | 14 | 22·0 | 49·7 | |
| 9·0 | | 53·5 | 13·4 | 8·5 |
| 8·7 | 16 | 0·3 | 28·2 | 8·5 |
| 10·0 | | 33·0 | 47·7 | |
| 7·8 | 18 | 22·0 | 54·2 | 8·0 |
| 10·0 | | 51·5 | 22·9 | |
| 9·5 | | 57·0 | 17·9 | |
| 9·8 | 19 | 57·5 | 21·1 | |
| 10·0 | 20 | 46·5 | 28·6 | |
| 10·0 | | 49·5 | 47·4 | |
| 8·7 | 21 | 49·0 | 57·2 | GSt |
| 8·2 | 22 | 39·0 | 17·8 | 8·0 |
| 8·8 | | 43·5 | 21·7 | 8·0 |
| 9·8 | | 46·5 | 25·6 | |
| 8·7 | | 51·5 | 30·9 | 9·0 |
| 10·1 | 23 | 33·0 | 36·9 | |
| 10·0 | | 47·0 | 59·1 | |
| 9·0 | | 59·0 | 35·8 | |
| 9·4 | 24 | 25·0 | 43·3 | |
| 8·2 | 25 | 17·0 | 43·0 | 9·0 |
| 10·0 | | 21·5 | 10·2 | |
| 9·6 | | 43·0 | 3·2 | |
| 9·6 | 26 | 30·0 | 56·6 | |
| 10·0 | | 38·5 | 16·5 | |
| 10·1 | 27 | 35·3 | 1·9 | |
| 9·2 | 29 | 12·5 | 22·2 | |
| 9·2 | | 53·5 | 33·7 | |
| 9·3 | 30 | 13·0 | 48·1 | |
| 9·8 | | 23·0 | 1·1 | |
| 10·0 | 32 | 19·5 | 40·0 | |
| 8·9 | | 42·5 | 23·7 | 9·0 |
| 10·1 | | 56·5 | 10·6 | |
| 9·3 | 33 | 48·5 | 35·2 | |
| 8·6 | 36 | 47·5 | 43·0 | |
| 10·0 | 37 | 1·5 | 37·0 | |
| 10·1 | | 22·0 | 49·0 | |
| 10·1 | | 28·5 | 11·0 | |
| 9·2 | 38 | 11·5 | 17·0 | 9·5 |
| 8·4 | | 18·5 | 26·3 | 9·0 |
| 10·1 | | 20·5 | 25·8 | |
| 8·8 | 39 | 12·5 | 56·2 | 9·2 |
| 10·0 | 42 | 1·5 | 25·1 | |
| 10·0 | 43 | 1·0 | 35·9 | 9·5 G |
| 10·1 | 44 | 20·5 | 13·3 | |
| 10·0 | 45 | 1·5 | 29·0 | |
| 9·8 | | 6·0 | 15·4 | |
| 9·2 | | 43·0 | 23·9 | 9·0 |

**7741—7800.**

| mag. | $21^{h}$–$22^{h}$ m | s | −59° ′ | |
|---|---|---|---|---|
| 9·4 | 47 | 22·5 | 35·8 | |
| 8·4 | | 24·5 | 56·6 | 7·5 G |
| 10·1 | | 27·0 | 56·2 | |
| 7·0 | 49 | 39·0 | 36·5 | 6·5 GSct |
| 8·7 | 51 | 1·5 | 42·4 | 8·5 |
| 9·5 | 52 | 15·5 | 55·5 | |
| 9·6 | | 19·5 | 4·1 | |
| 10·0 | | 49·0 | 27·3 | |
| 9·6 | | 57·8 | 17·7 | |
| 8·4 | 53 | 19·0 | 48·3 | 8·0 G |
| 9·6 | | 57·0 | 58·8 | |
| 9·6 | 54 | 54·2 | 28·1 | |
| 9·6 | 55 | 0·0 | 22·8 | |
| 9·0 | | 16·0 | 50·7 | 9·0 |
| 9·8 | 56 | 36·5 | 12·1 | |
| 8·2 | | 52·0 | 33·9 | 7·5 G |
| 9·8 | 57 | 2·5 | 11·9 | |
| 9·8 | | 6·0 | 56·9 | |
| 8·6 | | 17·0 | 26·0 | 8·5 |
| 9·8 | | 31·0 | 25·4 | |
| 9·4 | | 32·7 | 2·3 | |
| 9·8 | | 38·5 | 28·3 | |
| 9·0 | | 42·0 | 3·3 | |
| 8·7 | 58 | 14·0 | 46·3 | 9·0 G |
| 8·4 | | 18·5 | 44·1 | 8·0 GSt |
| 7·7 | | 59·5 | 55·6 | 7·0 GSt |
| 9·0 | 0 | 1·0 | 49·1 | 8·5 S |
| 8·5 | | 2·5 | 53·8 | 7·5 GSt |
| 10·0 | | 9·0 | 30·1 | |
| 9·2 | | 47·0 | 27·3 | 9·5 |
| 10·0 | | 58·5 | 52·5 | |
| 10·0 | 2 | 29·5 | 47·1 | |
| 8·8 | 3 | 6·9 | 26·6 | 9·0 G |
| 9·6 | | 9·0 | 26·7 | 10·0 G |
| 10·0 | | 51·0 | 15·1 | |
| 9·1 | 4 | 20·0 | 9·9 | |
| 10·0 | | 34·0 | 39·3 | |
| 9·1 | | 48·5 | 21·1 | |
| 9·6 | 5 | 16·7 | 58·8 | |
| 8·8 | 6 | 2·5 | 54·6 | 8·5 |
| 9·3 | | 21·5 | 17·3 | 9·0 |
| 10·0 | 7 | 4·0 | 5·0 | |
| 8·6 | | 40·5 | 51·2 | 8·5 |
| 9·8 | 8 | 17·5 | 37·3 | |
| 9·6 | | 30·5 | 14·6 | |
| 10·0 | | 49·5 | 14·1 | |
| 9·1 | 9 | 40·0 | 20·9 | 8·0 |
| 8·4 | | 54·0 | 19·9 | 8·5 |
| 10·0 | 10 | 32·0 | 39·9 | |
| 9·3 | | 52·5 | 32·5 | |
| 8·6 | | 55·0 | 55·3 | 7·5 G |
| 9·0 | 12 | 20·5 | 31·9 | 8·0 G |
| 9·1 | | 34·0 | 25·1 | 9·0 |
| 8·4 | 13 | 44·0 | 6·2 | 8·0 G |
| 8·4 | 14 | 36·5 | 42·1 | 9·0 |
| 9·4 | 15 | 10·0 | 26·9 | |
| 9·3 | | 54·3 | 0·0 | |
| 8·6 | 18 | 14·5 | 30·6 | 8·0 G |
| 9·6 | | 29·8 | 58·4 | |
| 9·8 | | 35·5 | 30·6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 40 | 128 | 3·5 |
| | 50 | 127 | 3·9 |
| 20 | 0 | 126 | 4·2 |
| | 10 | 125 | 4·5 |
| | 20 | 123 | 4·8 |
| | 30 | 122 | 5·1 |
| | 40 | 120 | 5·4 |
| | 50 | 119 | 5·6 |
| 21 | 0 | 117 | 5·9 |
| | 10 | 115 | 6·2 |
| | 20 | 113 | 6·4 |
| | 30 | 111 | 6·6 |
| | 40 | 109 | 6·8 |
| | 50 | 107 | 7·0 |
| 22 | 0 | 105 | 7·2 |
| | 10 | 103 | 7·4 |
| | 20 | 101 | 7·6 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 22 | 10 | 103 | 7·4 |
| | 20 | 101 | 7·6 |
| | 30 | 99 | 7·7 |
| | 40 | 96 | 7·9 |
| | 50 | 94 | 8·0 |
| 23 | 0 | 91 | 8·1 |
| | 10 | 89 | 8·2 |
| | 20 | 87 | 8·2 |
| | 30 | 84 | 8·3 |
| | 40 | 82 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

**7801—7840.**

| mag. | 22h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·3 | 18 | 42·5 | 59·2 | |
| 8·0 | 20 | 42·0 | 52·1 | 8·5 Gt |
| 9·8 | 21 | 4·0 | 47·1 | |
| 9·8 | | 30·5 | 48·3 | |
| 9·8 | 23 | 28·5 | 14·6 | |
| 9·3 | | 29·0 | 53·1 | 9·5 |
| 8·4 | | 30·3 | 2·0 | 8·0 G |
| 9·1 | 24 | 17·5 | 24·7 | |
| 9·0 | 25 | 6·5 | 47·0 | G |
| 10·0 | 26 | 22·5 | 3·8 | |
| 8·4 | 27 | 39·0 | 27·8 | |
| 10·0 | 28 | 31·4 | 57·9 | |
| 9·2 | 29 | 13·0 | 36·7 | |
| 9·4 | | 13·0 | 59·0 | |
| 8·2 | | 24·5 | 24·7 | |
| 9·0 | | 40·0 | 51·5 | |
| 9·4 | | 59·0 | 33·5 | |
| 8·6 | | 59·8 | 22·2 | |
| 9·4 | 30 | 19·0 | 40·1 | |
| 9·2 | | 28·5 | 3·1 | |
| 8·0 | 31 | 2·5 | 27·4 | 8·5 |
| 8·6 | 32 | 9·0 | 57·7 | |
| 9·4 | | 31·0 | 25·0 | |
| 8·0 | 36 | 48·0 | 7·4 | 8·0 |
| 9·4 | | 51·0 | 55·3 | |
| 9·4 | 38 | 12·5 | 59·7 | |
| 9·4 | | 44·5 | 10·1 | |
| 8·4 | | 58·5 | 23·2 | |
| 9·4 | 39 | 28·5 | 41·1 | |
| 7·8 | 40 | 2·5 | 20·6 | 7·0 GS |
| 8·8 | 41 | 5·5 | 48·2 | |
| 8·8 | | 31·5 | 54·1 | |
| 9·4 | | 37·0 | 53·7 | |
| 7·8 | | 47·5 | 35·2 | 7·5 GS |
| 7·0 | 43 | 19·0 | 45·5 | 7·0 GSg |
| 9·4 | | 27·0 | 0·2 | |
| 9·4 | 44 | 27·0 | 26·1 | |
| 9·4 | 45 | 38·0 | 25·8 | |
| 8·6 | 46 | 6·0 | 20·5 | |
| 9·4 | 48 | 13·5 | 19·1 | |

**7841—7879.**

| mag. | 22h.–23h. m | s | −59° ′ | |
|---|---|---|---|---|
| 8·9 | 48 | 27·5 | 48·5 | 9·5 |
| 7·0 | 50 | 13·0 | 45·3 | GS |
| 9·4 | | 31·5 | 16·1 | |
| 9·4 | 51 | 11·5 | 26·0 | |
| 9·2 | 52 | 37·0 | 54·2 | |
| 8·2 | | 45·5 | 50·1 | |
| 7·0 | 53 | 21·0 | 6·5 | 7·0 GSct |
| 9·0 | 54 | 15·5 | 55·5 | |
| 9·4 | 55 | 20·0 | 17·8 | |
| 9·4 | | 41·5 | 1·0 | |
| 8·6 | 56 | 12·0 | 35·1 | |
| 9·4 | | 50·5 | 2·1 | |
| 9·4 | 57 | 12·0 | 26·0 | |
| 8·6 | | 22·0 | 25·9 | 8·5 |
| 7·8 | | 25·5 | 26·9 | 8·5 |
| 9·2 | | 33·0 | 58·8 | |
| 7·4 | | 51·5 | 34·3 | 8·0 G |
| 7·6 | 58 | 38·5 | 22·0 | 8·0 G |
| 8·2 | | 51·0 | 26·9 | 8·5 G |
| 9·0 | 59 | 10·8 | 2·6 | |
| 8·4 | | 21·8 | 1·4 | |
| 8·6 | 0 | 9·5 | 47·3 | 8·8 |
| 8·9 | | 13·0 | 11·7 | |
| 8·8 | 1 | 26·0 | 6·0 | |
| 8·0 | | 51·5 | 41·1 | 8·0 G |
| 8·2 | 2 | 58·0 | 47·5 | 8·0 G |
| 9·4 | 3 | 6·2 | 55·4 | |
| 9·2 | | 32·8 | 0·9 | |
| 9·3 | 4 | 5·0 | 33·0 | |
| 9·4 | | 59·0 | 53·4 | |
| 8·4 | 5 | 7·5 | 20·6 | |
| 9·3 | | 22·0 | 14·6 | |
| 9·0 | 6 | 3·5 | 26·8 | 9·0 |
| 9·2 | | 7·0 | 42·3 | |
| 9·0 | 7 | 1·5 | 12·1 | 8·5 |
| 9·0 | 9 | 3·5 | 42·0 | |
| 9·6 | 10 | 41·0 | 6·1 | |
| 9·2 | 11 | 12·5 | 38·5 | |
| 9·0 | | 32·0 | 18·9 | |

**7880—7918.**

| mag. | 23h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·4 | 11 | 48·5 | 12·1 | |
| 9·4 | 13 | 33·5 | 45·6 | |
| 9·6 | 14 | 20·0 | 31·1 | |
| 9·4 | | 32·0 | 53·5 | |
| 9·6 | 15 | 8·0 | 38·1 | |
| 8·6 | | 37·5 | 6·1 | |
| 9·0 | 16 | 10·5 | 20·2 | |
| 9·4 | 18 | 20·5 | 52·1 | |
| 9·0 | 19 | 3·3 | 58·1 | 9·5 |
| 7·9 | | 50·5 | 6·5 | 7·5 GS |
| 6·6 | 20 | 6·5 | 9·9 | 6·0 GSctr |
| 9·1 | | 58·9 | 58·1 | |
| 9·6 | 22 | 36·5 | 37·1 | |
| 9·6 | | 52·0 | 34·7 | |
| 8·6 | 23 | 18·5 | 6·9 | |
| 9·3 | | 37·0 | 20·2 | |
| 8·2 | · | 38·0 | 19·9 | G |
| 8·3 | 25 | 2·0 | 41·5 | 7·5 Gcr |
| 9·4 | | 36·5 | 10·8 | |
| 9·6 | 26 | 27·5 | 41·1 | |
| 9·6 | | 39·5 | 46·5 | |
| 8·6 | 27 | 11·0 | 8·1 | |
| 9·4 | | 17·5 | 30·2 | |
| 9·0 | | 18·0 | 46·1 | 9·0 |
| 9·2 | 28 | 13·3 | 1·1 | |
| 9·0 | | 19·5 | 38·1 | |
| 9·6 | 29 | 4·0 | 52·9 | |
| 8·6 | 30 | 52·0 | 27·5 | |
| 9·4 | 31 | 46·5 | 55·7 | 9·0 |
| 9·0 | 33 | 8·0 | 4·1 | |
| 8·8 | 34 | 11·5 | 52·3 | 9·5 |
| 9·6 | 35 | 3·5 | 35·0 | |
| 8·6 | | 13·5 | 39·1 | |
| 8·6 | | 42·0 | 12·5 | 9·5 |
| 9·1 | 36 | 37·0 | 10·5 | |
| 8·3 | 37 | 33·5 | 48·3 | 9·0 G |
| 8·4 | 38 | 13·5 | 52·1 | 9·0 |
| 9·3 | | 35·0 | 1·1 | |
| 9·0 | 39 | 10·0 | 3·9 | 9·0 |

**7919—7957.**

| mag. | 23h. m | s | −59° ′ | |
|---|---|---|---|---|
| 9·6 | 39 | 17·5 | 7·6 | |
| 9·6 | 41 | 2·5 | 22·4 | |
| 9·2 | | 6·0 | 41·3 | |
| 9·6 | | 8·0 | 47·7 | |
| 9·4 | | 55·0 | 45·1 | 9·5 G |
| 9·5 | 43 | 9·0 | 13·6 | |
| 9·5 | | 31·0 | 7·6 | |
| 9·0 | 44 | 17·3 | 56·4 | 8·5 |
| 8·1 | 45 | 24·0 | 53·7 | 7·5 G |
| 9·3 | | 32·5 | 29·9 | 9·0 |
| 9·7 | | 38·5 | 41·1 | |
| 7·5 | | 51·5 | 14·7 | 7·5 GS |
| 7·6 | 46 | 15·5 | 31·9 | 7·0 G |
| 8·6 | | 42·5 | 47·7 | 8·0 G |
| 9·5 | 47 | 52·5 | 10·9 | |
| 9·5 | 48 | 2·0 | 19·6 | |
| 9·0 | | 16·5 | 1·9 | |
| 9·6 | | 18·5 | 47·7 | |
| 9·6 | | 34·5 | 38·9 | |
| 9·3 | | 48·0 | 26·8 | |
| 9·6 | | 49·5 | 26·7 | |
| 9·6 | 49 | 46·0 | 41·0 | |
| 9·4 | 50 | 25·5 | 50·1 | |
| 9·6 | | 34·0 | 11·8 | |
| 9·4 | | 35·5 | 54·8 | |
| 9·7 | | 53·5 | 32·8 | |
| 8·0 | | 54·5 | 39·7 | 8·0 |
| 8·7 | 51 | 3·5 | 31·3 | 9·0 |
| 9·5 | | 45·5 | 32·4 | |
| 9·5 | 52 | 9·5 | 25·5 | |
| 9·6 | | 18·5 | 20·0 | |
| 9·6 | | 40·3 | 1·7 | |
| 9·5 | | 59·5 | 13·3 | |
| 9·5 | 53 | 4·5 | 55·8 | |
| 9·5 | 54 | 54·5 | 16·7 | |
| 8·8 | 56 | 29·0 | 28·7 | |
| 9·5 | 57 | 4·5 | 22·0 | |
| 9·5 | | 42·5 | 46·8 | |
| 9·7 | 58 | 8·5 | 54·8 | |



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# ZONE—60°.

### 1—45.

| mag. | 0h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 0 | 13·5 | 59·8 | |
| 8·8 | | 53·0 | 45·9 | 9·5 |
| 9·3 | 1 | 30·5 | 10·9 | |
| 9·6 | 2 | 33·5 | 49·9 | 9·2 |
| 9·0 | | 33·5 | 57·8 | 9·5 |
| 9·8 | 3 | 33·7 | 49·9 | |
| 9·4 | | 52·5 | 3·3 | |
| 9·4 | 5 | 15·5 | 11·9 | |
| 9·7 | | 46·0 | 32·7 | |
| 9·6 | | 57·0 | 34·8 | |
| 9·5 | 6 | 23·0 | 9·7 | |
| 9·0 | | 29·0 | 12·1 | |
| 8·8 | 7 | 16·0 | 35·9 | 8·5 G |
| 9·3 | | 25·5 | 42·8 | 9·2 |
| 9·6 | 8 | 23·0 | 23·9 | |
| 9·2 | 9 | 13·5 | 23·7 | 9·5 |
| 9·6 | 10 | 14·5 | 31·1 | |
| 9·5 | | 30·5 | 30·8 | |
| 9·6 | 11 | 36·0 | 52·2 | |
| 9·6 | | 36·0 | 1·7 | |
| 9·6 | 12 | 3·0 | 55·9 | |
| 9·6 | | 10·2 | 57·6 | |
| 9·5 | | 43·5 | 29·8 | |
| 8·9 | | 45·5 | 10·0 | |
| 8·2 | 13 | 19·7 | 22·9 | 8·0 G |
| 9·1 | 15 | 42·7 | 15·0 | |
| 9·5 | 16 | 28·5 | 47·0 | |
| 9·5 | | 34·7 | 37·9 | |
| 9·3 | 17 | 3·1 | 58·8 | 10·0 |
| 9·7 | 19 | 53·5 | 7·2 | |
| 9·4 | 20 | 15·0 | 55·9 | 9·5 |
| 9·1 | | 20·5 | 28·8 | 9·5 |
| 9·4 | | 27·2 | 24·5 | |
| 9·0 | | 55·3 | 34·0 | 9·0 |
| 9·4 | 21 | 33·7 | 52·0 | 9·5 |
| 9·4 | | 39·5 | 45·0 | 9·0 |
| 9·2 | | 45·7 | 58·4 | 8·8 G |
| 9·1 | 22 | 18·0 | 1·0 | |
| 8·6 | 24 | 9·5 | 29·1 | 8·2 GS |
| 9·5 | | 18·5 | 2·0 | 9·5 |
| 9·2 | 25 | 15·0 | 59·2 | |
| 9·4 | 29 | 31·5 | 30·1 | 9·2 |
| 6·9 | 30 | 17·5 | 24·2 | 7·0 GS |
| 9·0 | | 50·5 | 34·1 | 9·2 |
| 9·5 | 31 | 2·5 | 8·0 | |
| 9·0 | 33 | 58·0 | 12·1 | 9·0 |

### 46—90.

| mag. | 0h.—1h. m | s | −60° ′ | |
|---|---|---|---|---|
| 6·1 | 34 | 34·5 | 9·4 | 6·0 GSr |
| 9·6 | 36 | 32·0 | 18·0 | |
| 9·4 | | 52·0 | 19·2 | |
| 7·1 | 37 | 4·0 | 56·9 | 6·0 GSc |
| 8·8 | 38 | 35·5 | 41·3 | 9·0 |
| 9·5 | 39 | 56·5 | 28·0 | |
| 9·2 | 40 | 23·0 | 41·0 | |
| 8·6 | 41 | 34·5 | 14·5 | |
| 9·1 | | 58·0 | 7·6 | |
| 9·0 | 43 | 3·5 | 22·9 | 9·0 |
| 9·6 | | 11·5 | 58·2 | |
| 8·8 | | 49·0 | 15·0 | 8·5 |
| 9·4 | 46 | 29·0 | 1·1 | |
| 8·8 | 47 | 36·0 | 20·8 | |
| 8·5 | 51 | 10·5 | 26·2 | 9·0 G |
| 9·6 | | 11·5 | 20·9 | 9·5 |
| 9·9 | 52 | 41·0 | 11·5 | |
| 9·9 | | 41·5 | 13·0 | |
| 10·2 | 53 | 11·0 | 11·8 | |
| 10·2 | | 23·0 | 15·8 | |
| 10·2 | | 53·0 | 1·9 | |
| 8·5 | 55 | 16·0 | 56·3 | 9·5 |
| 10·2 | | 43·0 | 41·9 | |
| 10·2 | 56 | 21·0 | 23·0 | |
| 9·8 | | 25·5 | 55·9 | |
| 9·8 | 57 | 26·0 | 32·0 | |
| 10·0 | | 40·5 | 27·1 | |
| 7·0 | 58 | 12·5 | 45·9 | 6·6 GSc |
| 10·0 | 0 | 15·5 | 10·1 | |
| 10·0 | | 21·0 | 45·8 | |
| 10·0 | | 41·5 | 39·8 | |
| 9·6 | | 42·0 | 39·6 | 9·5 |
| 8·6 | | 49·5 | 43·8 | 9·0 |
| 10·0 | 1 | 15·0 | 36·8 | |
| 8·2 | | 51·0 | 37·9 | 8·5 |
| 10·0 | 2 | 56·5 | 9·9 | |
| 8·0 | 3 | 35·5 | 12·7 | 9·0 |
| 8·6 | | 45·5 | 18·1 | 9·0 |
| 10·3 | | 45·5 | 7·9 | |
| 9·6 | | 49·5 | 29·7 | |
| 9·4 | 4 | 5·0 | 18·3 | 9·5 |
| 9·4 | | 14·5 | 19·7 | |
| 10·3 | | 19·0 | 12·4 | |
| 9·4 | | 22·5 | 10·9 | 9·2 |
| 10·0 | 5 | 44·5 | 59·2 | |
| 8·6 | | 51·0 | 26·0 | 8·8 |

### 91—135.

| mag. | 1h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 5 | 51·0 | 2·7 | |
| 9·2 | 8 | 33·0 | 54·3 | |
| 9·9 | 9 | 2·5 | 35·7 | |
| 10·0 | | 17·0 | 10·5 | |
| 10·3 | | 19·5 | 22·2 | |
| 10·0 | | 20·5 | 14·8 | |
| 8·6 | 10 | 8·5 | 46·7 | 8·5 |
| 9·4 | 13 | 1·5 | 39·9 | 9·0 |
| 10·0 | | 6·5 | 8·2 | |
| 9·9 | | 9·0 | 21·9 | |
| 10·0 | | 25·5 | 53·9 | |
| 10·0 | | 45·5 | 15·9 | |
| 10·0 | 14 | 9·5 | 41·9 | |
| 10·4 | 15 | 1·0 | 36·8 | |
| 10·0 | | 6·0 | 16·3 | |
| 9·0 | | 20·5 | 34·4 | |
| 9·9 | | 22·0 | 57·8 | 10·0 |
| 8·4 | | 25·0 | 43·8 | 7·5 GS |
| 10·0 | 16 | 54·0 | 46·9 | |
| 8·9 | 17 | 40·0 | 50·7 | |
| 10·0 | 18 | 56·0 | 31·6 | |
| 9·0 | 20 | 36·0 | 8·6 | G |
| 7·4 | | 36·0 | 9·0 | 7·0 GS |
| 10·0 | 21 | 25·0 | 30·8 | |
| 9·8 | | 42·0 | 33·9 | 10·0 |
| 10·0 | 23 | 46·0 | 18·9 | |
| 9·0 | | 54·0 | 10·8 | 8·5 G |
| 9·0 | 25 | 23·5 | 9·1 | 9·0 |
| 8·4 | 26 | 9·2 | 18·1 | 8·0 S |
| 8·0 | | 55·8 | 14·1 | 7·5 GS |
| 10·0 | 27 | 21·0 | 27·9 | |
| 10·6 | 28 | 38·3 | 19·9 | |
| 10·6 | | 39·9 | 29·1 | |
| 8·6 | 29 | 24·8 | 39·1 | |
| 9·4 | 30 | 57·0 | 2·8 | |
| 9·2 | 31 | 6·2 | 17·9 | |
| 10·6 | | 8·0 | 41·6 | |
| 8·0 | | 49·2 | 19·2 | S |
| 10·0 | 32 | 3·5 | 48·3 | |
| 10·2 | 33 | 49·0 | 47·1 | |
| 9·6 | | 55·0 | 42·8 | |
| 9·2 | 36 | 2·8 | 28·2 | |
| 10·6 | | 12·3 | 19·2 | |
| 10·6 | | 23·8 | 27·5 | |
| 10·4 | 37 | 15·5 | 33·2 | |
| 10·6 | | 28·5 | 50·7 | |

### 136—180.

| mag. | 1h.—2h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 37 | 51·3 | 16·1 | |
| 10·6 | | 56·6 | 29·5 | |
| 9·6 | 38 | 33·0 | 34·7 | |
| 10·2 | 39 | 49·8 | 25·7 | |
| 10·6 | 40 | 29·8 | 12·5 | |
| 8·5 | | 46·8 | 20·6 | 9·2 G |
| 9·0 | | 53·5 | 30·9 | |
| 9·8 | 41 | 28·8 | 10·3 | |
| 10·0 | | 41·0 | 42·2 | |
| 9·8 | | 59·8 | 26·2 | |
| 9·5 | 43 | 1·3 | 36·8 | |
| 10·6 | | 25·8 | 11·1 | |
| 10·2 | 45 | 58·3 | 26·5 | |
| 10·6 | 46 | 43·6 | 23·2 | |
| 9·0 | | 53·0 | 35·1 | |
| 9·7 | 47 | 1·3 | 13·5 | |
| 9·8 | | 19·0 | 44·1 | |
| 10·2 | | 41·0 | 50·8 | |
| 9·8 | 48 | 5·3 | 18·5 | |
| 9·0 | | 9·5 | 56·4 | 9·0 |
| 10·4 | | 34·3 | 58·7 | |
| 8·6 | | 55·5 | 1·9 | 9·0 G |
| 10·0 | 49 | 10·5 | 56·9 | 9·5 G |
| 9·9 | | 44·8 | 17·0 | |
| 9·9 | 50 | 22·3 | 7·5 | |
| 10·4 | | 51·8 | 16·1 | |
| 10·6 | 51 | 17·3 | 27·1 | |
| 6·7 | | 17·5 | 55·4 | 6·5 GS |
| 10·4 | | 33·8 | 8·7 | |
| 8·2 | 52 | 19·8 | 24·1 | |
| 8·6 | | 20·0 | 47·9 | 9·0 |
| 10·6 | | 22·3 | 20·1 | |
| 8·8 | | 23·0 | 50·5 | 9·0 |
| 9·9 | | 46·8 | 28·5 | |
| 10·2 | 54 | 32·8 | 15·8 | |
| 10·2 | | 42·5 | 45·6 | |
| 10·4 | 55 | 34·0 | 42·7 | |
| 10·2 | 56 | 13·5 | 42·9 | |
| 9·0 | | 36·0 | 48·0 | |
| 10·2 | | 46·8 | 4·4 | |
| 9·6 | 58 | 19·0 | 53·9 | |
| 9·0 | | 34·3 | 26·5 | 8·8 |
| 9·9 | 0 | 20·6 | 2·7 | |
| 9·6 | | 46·0 | 50·0 | |
| 8·6 | 1 | 9·3 | 6·3 | 9·0 |
| 10·6 | 2 | 0·0 | 49·5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 72 | 8·3 |
| | 30 | 69 | 8·3 |
| | 40 | 67 | 8·2 |
| | 50 | 64 | 8·2 |
| 1 | 0 | 62 | 8·1 |
| | 10 | 59 | 8·0 |
| | 20 | 57 | 7·9 |
| | 30 | 54 | 7·7 |
| | 40 | 52 | 7·6 |
| | 50 | 50 | 7·4 |
| 2 | 0 | 47 | 7·2 |

| 25 prec. | | | |
|---|---|---|---|
| h | m | a + s | δ + ′ |
| 1 | 50 | 50 | 7.4 |
| 2 | 0 | 47 | 7.2 |
| | 10 | 45 | 7.0 |
| | 20 | 43 | 6.8 |
| | 30 | 41 | 6.6 |
| | 40 | 39 | 6.4 |
| | 50 | 37 | 6.2 |
| 3 | 0 | 35 | 5.9 |
| | 10 | 33 | 5.6 |
| | 20 | 32 | 5.4 |
| | 30 | 30 | 5.1 |
| | 40 | 28 | 4.8 |
| | 50 | 27 | 4.5 |
| 4 | 0 | 26 | 4.2 |
| | 10 | 24 | 3.9 |
| | 20 | 23 | 3.5 |
| | 30 | 22 | 3.2 |
| | 40 | 21 | 2.9 |
| | 50 | 20 | 2.5 |
| 5 | 0 | 20 | 2.2 |
| | 10 | 19 | 1.8 |
| | 20 | 19 | 1.5 |
| | 30 | 18 | 1.1 |

**181—240.**

| mag. | $2^h$—$3^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 10.6 | 2 | 27.0 | 30.7 | |
| 7.4 | 3 | 30.9 | 16.3 | 7.5 GS |
| 10.0 | | 37.3 | 15.9 | 9.5 |
| 9.8 | 4 | 43.4 | 4.6 | |
| 10.0 | | 53.0 | 56.0 | |
| 9.0 | 7 | 2.1 | 4.0 | G |
| 10.0 | | 9.0 | 54.2 | |
| 10.6 | 8 | 4.8 | 7.3 | |
| 10.2 | | 16.8 | 4.4 | |
| 8.6 | 9 | 25.4 | 9.1 | 8.5 |
| 9.4 | | 49.5 | 3.9 | |
| 8.8 | 10 | 48.0 | 44.7 | 8.8 |
| 9.2 | 11 | 9.0 | 26.3 | 8.5 G |
| 9.6 | 13 | 17.0 | 57.7 | |
| 9.0 | 17 | 6.5 | 35.8 | |
| 9.4 | 18 | 10.0 | 31.6 | |
| 7.5 | | 34.5 | 19.7 | 7.7 GSg |
| 9.0 | | 37.0 | 32.8 | 8.2 G |
| 5.9 | 21 | 22.5 | 52.4 | 6.0 GSt |
| 9.2 | | 41.5 | 54.0 | 9.5 |
| 8.6 | 22 | 28.0 | 33.6 | 9.0 |
| 8.6 | 26 | 42.5 | 53.2 | 9.0 |
| 8.4 | 27 | 19.0 | 27.1 | 8.0 G |
| 8.6 | 31 | 51.0 | 13.9 | 9.0 |
| 8.0 | 36 | 18.0 | 6.4 | 7.0 GS |
| 7.2 | | 23.0 | 6.5 | 7.5 GS |
| 9.4 | | 47.0 | 45.4 | |
| 8.6 | 38 | 17.0 | 31.2 | 9.2 G |
| 8.6 | | 53.0 | 35.9 | 8.8 |
| 9.0 | 40 | 51.0 | 35.1 | 9.5 |
| 9.5 | 41 | 31.0 | 39.6 | |
| 9.6 | 42 | 29.0 | 41.3 | |
| 9.7 | | 42.0 | 45.9 | |
| 9.8 | | 47.0 | 3.9 | |
| 8.9 | 43 | 27.8 | 47.5 | 9.5 |
| 9.6 | | 41.0 | 40.5 | |
| 8.4 | | 41.3 | 40.1 | 9.0 |
| 9.7 | | 46.5 | 27.8 | |
| 9.2 | 45 | 20.0 | 56.1 | 9.0 |
| 9.0 | 46 | 10.5 | 9.5 | 9.0 |
| 9.6 | | 53.0 | 49.3 | |
| 9.4 | 47 | 36.0 | 51.1 | |
| 9.2 | | 37.5 | 40.5 | |
| 8.7 | 48 | 40.0 | 46.2 | |
| 9.6 | 49 | 13.0 | 28.0 | |
| 8.4 | | 20.0 | 26.2 | 8.2 G |
| 9.4 | | 48.0 | 59.4 | 9.5 G |
| 9.7 | 51 | 14.5 | 50.4 | |
| 7.9 | 52 | 38.0 | 14.4 | 8.5 G |
| 9.1 | 53 | 16.5 | 19.0 | |
| 9.0 | 54 | 41.0 | 31.5 | 9.5 G |
| 8.2 | 57 | 10.0 | 19.0 | 8.0 GSt |
| 9.6 | 58 | 30.0 | 49.4 | |
| 8.0 | 0 | 1.0 | 29.4 | 8.0 G |
| 8.5 | | 1.0 | 16.6 | |
| 5.2 | | 40.0 | 13.3 | 5.5 GSct |
| 8.0 | 1 | 8.0 | 27.1 | 7.8 G |
| 8.4 | | 51.0 | 40.9 | 7.5 GS |
| 9.7 | 2 | 42.5 | 59.5 | 10.0 |
| 9.7 | 3 | 29.0 | 50.4 | |

**241—300.**

| mag. | $3^h$—$4^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 8.6 | 3 | 47.0 | 35.4 | 8.0 |
| 9.4 | 5 | 30.5 | 39.1 | |
| 7.8 | | 55.5 | 57.2 | 8.0 |
| 8.7 | 9 | 33.0 | 19.2 | 9.2 |
| 8.8 | 11 | 40.0 | 57.1 | 9.5 |
| 8.9 | 15 | 6.5 | 3.9 | 9.0 |
| 9.4 | 17 | 17.3 | 2.9 | |
| 8.5 | | 26.5 | 56.8 | 8.5 G |
| 8.2 | 18 | 32.8 | 5.4 | 8.0 G |
| 8.2 | 19 | 42.8 | 9.0 | |
| 9.8 | 20 | 52.5 | 33.0 | |
| 9.2 | 21 | 50.0 | 17.2 | 9.2 |
| 9.8 | 26 | 12.5 | 24.2 | 9.0 |
| 7.0 | 28 | 51.0 | 16.8 | 8.0 GS |
| 9.6 | | 52.0 | 56.0 | 9.0 |
| 8.8 | 30 | 13.5 | 14.0 | |
| 9.4 | 31 | 32.5 | 17.0 | |
| 8.4 | | 33.5 | 33.4 | 8.5 |
| 9.2 | 33 | 22.5 | 17.0 | |
| 9.8 | 34 | 11.5 | 9.5 | |
| 8.0 | 35 | 32.5 | 11.0 | 8.5 GS |
| 6.4 | | 41.0 | 11.0 | 7.0 GSct |
| 8.1 | 36 | 4.5 | 13.6 | 8.5 |
| 8.1 | | 57.0 | 29.0 | 8.5 |
| 8.6 | 39 | 26.5 | 35.0 | 9.2 |
| 8.4 | | 32.0 | 54.6 | 9.0 G |
| 8.4 | | 37.5 | 23.6 | 8.2 G |
| 9.8 | 40 | 33.5 | 56.9 | |
| 8.8 | 44 | 20.0 | 19.3 | |
| 9.2 | 47 | 10.5 | 29.8 | 8.8 |
| 8.8 | 48 | 15.0 | 48.1 | 8.0 G |
| 7.8 | 49 | 29.0 | 43.9 | 8.5 G |
| 9.4 | 51 | 50.5 | 53.1 | 10.0 |
| 8.5 | 53 | 18.5 | 20.7 | 8.5 |
| 9.6 | | 29.5 | 29.6 | |
| 8.9 | | 53.4 | 57.3 | 8.5 G |
| 9.6 | | 55.5 | 26.2 | |
| 9.6 | 54 | 18.0 | 13.8 | |
| 9.9 | | 46.5 | 5.4 | |
| 9.8 | 55 | 42.2 | 15.4 | |
| 9.8 | 56 | 30.0 | 53.6 | ? |
| 9.4 | | 56.0 | 19.6 | |
| 9.4 | 57 | 52.7 | 1.4 | 9.5 |
| 9.4 | | 58.0 | 15.2 | |
| 9.6 | 58 | 20.5 | 42.2 | |
| 9.8 | 1 | 5.2 | 25.0 | |
| 9.8 | 3 | 28.0 | 50.1 | |
| 9.6 | | 35.0 | 18.1 | 9.0 |
| 7.9 | 4 | 1.0 | 12.5 | 7.5 GSt |
| 9.9 | | 7.5 | 15.3 | 9.5 |
| 9.0 | | 29.0 | 38.8 | |
| 9.6 | | 33.0 | 39.6 | |
| 8.2 | 5 | 12.0 | 3.8 | 8.5 G |
| 9.4 | | 16.0 | 46.7 | |
| 8.9 | 7 | 23.0 | 37.7 | 8.5 G |
| 9.0 | | 36.5 | 42.7 | |
| 9.8 | | 42.0 | 42.4 | |
| 9.2 | 10 | 0.2 | 59.1 | 9.5 |
| 9.8 | 11 | 6.0 | 25.2 | |
| 8.6 | 12 | 19.0 | 31.2 | 9.0 G |

**301—360.**

| mag. | $4^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9.0 | 13 | 32.0 | 8.1 | |
| 9.8 | 17 | 7.0 | 58.6 | |
| 9.8 | 18 | 49.0 | 35.7 | |
| 8.8 | 19 | 42.5 | 37.2 | 8.7 |
| 8.9 | | 51.5 | 7.2 | 9.0 G |
| 9.2 | 22 | 37.0 | 56.7 | 9.5 |
| 9.8 | 23 | 8.5 | 2.1 | |
| 9.6 | 25 | 32.5 | 7.4 | |
| 9.4 | 26 | 48.0 | 31.1 | |
| 9.2 | 27 | 22.7 | 32.3 | 9.5 |
| 9.0 | 28 | 10.7 | 42.7 | |
| 9.8 | | 44.0 | 1.0 | |
| 9.1 | | 50.2 | 34.3 | |
| 6.8 | 29 | 25.5 | 2.1 | 7.0 GSct |
| 8.8 | 30 | 0.5 | 8.2 | |
| 9.6 | | 12.5 | 45.9 | |
| 9.6 | | 18.7 | 55.6 | |
| 9.2 | | 21.3 | 47.3 | |
| 9.0 | | 37.3 | 34.4 | |
| 9.8 | 31 | 15.5 | 54.0 | |
| 9.8 | | 52.5 | 4.4 | |
| 9.0 | 32 | 5.5 | 4.2 | 8.5 |
| 9.5 | 34 | 20.5 | 38.2 | 10.0 |
| 9.4 | 35 | 16.0 | 22.7 | |
| 9.8 | | 18.5 | 6.0 | |
| 9.6 | | 58.5 | 46.2 | |
| 9.5 | 36 | 39.5 | 50.7 | |
| 9.5 | 37 | 31.5 | 53.4 | |
| 9.6 | | 35.5 | 32.9 | |
| 9.4 | | 44.0 | 51.3 | |
| 9.2 | 38 | 10.5 | 39.5 | |
| 9.5 | 39 | 33.5 | 15.4 | |
| 9.0 | 40 | 32.0 | 38.4 | 9.0 |
| 9.8 | 41 | 54.5 | 4.2 | |
| 9.8 | 42 | 51.5 | 42.5 | |
| 8.4 | 43 | 35.0 | 2.4 | 8.5 |
| 9.4 | | 58.3 | 0.6 | |
| 9.4 | 44 | 19.5 | 7.9 | 8.5 |
| 9.2 | | 23.5 | 14.4 | 8.5 |
| 9.8 | 45 | 4.5 | 36.2 | |
| 8.0 | | 10.0 | 49.8 | 8.0 GS |
| 9.6 | | 35.5 | 45.6 | 10.0 |
| 9.0 | | 38.0 | 13.3 | 9.0 |
| 8.0 | 47 | 2.0 | 28.4 | 7.0 GS |
| 9.2 | | 48.5 | 46.2 | |
| 9.2 | 48 | 30.5 | 28.3 | |
| 9.8 | | 49.5 | 8.6 | |
| 9.8 | 49 | 38.5 | 19.1 | |
| 9.4 | 50 | 16.1 | 59.6 | |
| 8.6 | | 47.0 | 50.5 | 8.0 G |
| 8.7 | | 52.5 | 57.4 | |
| 9.6 | 51 | 27.0 | 15.4 | |
| 9.6 | | 31.5 | 20.6 | |
| 9.8 | | 45.5 | 46.6 | |
| 8.8 | 52 | 29.5 | 8.7 | 8.5 |
| 9.8 | | 31.5 | 3.7 | |
| 8.3 | | 50.0 | 36.8 | 8.5 G |
| 9.6 | | 55.0 | 19.0 | |
| 9.8 | 53 | 3.5 | 31.0 | |
| 9.8 | | 12.0 | 39.5 | |

**361—420.**

| mag. | $4^h$—$5^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9.0 | 54 | 15.0 | 36.7 | 10.0 |
| 8.6 | | 21.0 | 33.4 | 9.0 |
| 9.5 | | 45.5 | 51.5 | |
| 9.8 | 58 | 2.5 | 51.2 | |
| 9.4 | 59 | 14.0 | 27.3 | |
| 9.2 | | 42.5 | 49.8 | |
| 9.4 | 0 | 18.0 | 41.5 | |
| 9.8 | 1 | 8.5 | 31.4 | |
| 8.8 | | 22.0 | 51.2 | |
| 9.8 | | 40.0 | 30.7 | |
| 9.5 | | 59.0 | 32.5 | |
| 9.5 | 2 | 28.5 | 29.3 | |
| 9.8 | | 45.5 | 25.8 | |
| 9.8 | | 53.5 | 33.2 | |
| 8.9 | 3 | 25.5 | 18.4 | |
| 9.8 | 4 | 59.5 | 30.8 | |
| 8.4 | 5 | 1.8 | 2.6 | 8.0 GS |
| 9.4 | | 18.3 | 23.1 | |
| 9.4 | | 37.5 | 26.1 | |
| 9.6 | 6 | 1.0 | 48.5 | |
| 9.6 | | 5.5 | 55.1 | |
| 9.7 | | 38.0 | 8.7 | |
| 9.6 | | 45.5 | 4.3 | |
| 9.7 | 7 | 8.0 | 31.9 | |
| 9.1 | | 18.7 | 20.1 | |
| 9.6 | | 23.0 | 56.1 | |
| 9.6 | | 27.5 | 19.4 | |
| 9.6 | | 57.5 | 35.6 | |
| 9.3 | 8 | 37.5 | 35.5 | 8.8 |
| 9.0 | 9 | 2.0 | 27.0 | 9.0 |
| 9.6 | | 45.0 | 40.3 | |
| 9.2 | 10 | 22.0 | 48.1 | |
| 9.7 | | 43.5 | 51.7 | |
| 9.4 | 11 | 8.0 | 20.9 | |
| 8.6 | | 28.0 | 8.0 | 8.5 |
| 9.4 | | 43.5 | 12.1 | |
| 9.2 | 12 | 43.5 | 0.7 | |
| 8.9 | 13 | 13.5 | 28.5 | |
| 9.4 | | 45.0 | 32.7 | |
| 9.2 | 14 | 6.0 | 8.0 | |
| 9.6 | | 22.5 | 55.1 | |
| 9.4 | | 50.0 | 35.1 | 9.8 |
| 9.2 | 16 | 27.5 | 53.1 | |
| 9.4 | | 31.0 | 49.0 | |
| 9.4 | | 32.0 | 13.2 | |
| 9.4 | | 38.5 | 10.7 | |
| 9.7 | 17 | 3.5 | 48.9 | |
| 9.5 | | 18.0 | 36.3 | |
| 9.0 | | 27.5 | 9.0 | 9.0 |
| 9.6 | 18 | 7.5 | 36.1 | |
| 9.0 | | 19.5 | 25.0 | |
| 9.7 | | 46.0 | 1.2 | |
| 7.3 | | 59.0 | 54.2 | 8.0 GSct |
| 9.8 | 21 | 4.0 | 35.7 | |
| 8.3 | 22 | 43.0 | 4.0 | |
| 9.8 | 23 | 9.0 | 59.8 | |
| 9.0 | | 57.5 | 44.0 | 9.5 |
| 9.6 | 24 | 22.5 | 8.1 | |
| 9.6 | | 43.5 | 42.4 | |
| 9.6 | | 47.5 | 57.0 | |

### 421—480.

| mag. | 5h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.6 | 24 | 51.0 | 35.8 | |
| 9.7 | | 58.0 | 34.4 | |
| 9.2 | 25 | 50.5 | 57.5 | |
| 7.7 | 26 | 9.5 | 30.8 | 7.8 GSt |
| 8.3 | | 32.5 | 46.6 | 8.5 Gt |
| 9.2 | | 43.5 | 23.3 | |
| 9.4 | | 52.0 | 21.2 | |
| 8.7 | | 56.0 | 58.0 | 9.5 |
| 8.6 | 27 | 52.5 | 5.8 | 9.0 |
| 8.7 | 28 | 58.5 | 54.0 | |
| 9.8 | 29 | 23.2 | 3.0 | |
| 9.3 | | 23.5 | 31.2 | |
| 9.8 | | 30.0 | 5.0 | |
| 9.0 | | 58.5 | 52.7 | |
| 9.6 | 30 | 24.5 | 34.0 | |
| 8.0 | 31 | 8.0 | 12.5 | 8.0 G |
| 9.0 | | 17.0 | 48.6 | |
| 9.7 | | 33.5 | 18.3 | |
| 9.3 | 32 | 13.5 | 37.2 | |
| 9.0 | | 23.5 | 2.0 | 8.5 |
| 8.0 | | 51.5 | 11.1 | 8.0 |
| 9.2 | 33 | 11.0 | 52.1 | |
| 9.5 | | 22.5 | 32.6 | |
| 8.8 | | 41.2 | 58.3 | 9.0 GSt |
| 9.0 | 36 | 23.5 | 42.9 | |
| 8.0 | | 36.5 | 7.8 | |
| 9.4 | 37 | 8.5 | 54.6 | |
| 9.7 | 38 | 6.0 | 21.8 | |
| 9.7 | | 8.5 | 3.1 | |
| 8.8 | 40 | 26.0 | 47.1 | |
| 9.4 | | 33.8 | 50.4 | |
| 9.9 | | 34.0 | 36.0 | |
| 10.0 | | 49.8 | 41.4 | |
| 9.7 | 41 | 0.7 | 6.5 | |
| 9.9 | | 7.5 | 18.2 | |
| 8.6 | | 36.8 | 55.3 | 10.0 |
| 10.0 | | 41.5 | 3.9 | |
| 10.0 | | 45.0 | 5.7 | |
| 9.9 | 42 | 4.5 | 2.7 | |
| 10.0 | | 15.0 | 9.1 | |
| 10.0 | | 19.5 | 2.7 | |
| 9.8 | | 25.2 | 36.0 | |
| 10.0 | | 33.0 | 19.0 | |
| 9.4 | | 41.8 | 0.0 | |
| 9.4 | | 56.2 | 16.9 | |
| 10.0 | 43 | 40.0 | 58.0 | |
| 9.2 | | 43.8 | 57.9 | Gt |
| 9.4 | | 46.7 | 34.4 | 9.0 |
| 9.4 | | 55.0 | 45.5 | 9.2 G |
| 8.2 | 44 | 1.5 | 46.0 | 8.8 GSt |
| 9.3 | | 58.0 | 21.9 | |
| 10.0 | 45 | 1.8 | 3.5 | |
| 9.4 | | 3.8 | 38.3 | |
| 10.0 | | 5.8 | 39.9 | |
| 9.2 | | 17.8 | 22.0 | 9.0 |
| 10.0 | | 53.5 | 3.2 | |
| 10.0 | 46 | 3.0 | 59.5 | |
| 9.6 | | 4.0 | 30.9 | |
| 9.6 | | 35.0 | 9.3 | |
| 10.0 | | 49.0 | 33.1 | |

### 481—540.

| mag. | 5h.—6h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.4 | 46 | 51.5 | 13.6 | G |
| 9.2 | 47 | 11.5 | 21.3 | 9.0 |
| 10.0 | | 35.5 | 43.6 | |
| 9.6 | | 39.0 | 32.1 | |
| 9.8 | | 40.0 | 43.3 | |
| 10.0 | | 54.5 | 38.5 | |
| 8.7 | 48 | 9.5 | 42.6 | 7.5 GSt |
| 9.0 | | 21.0 | 50.4 | 9.5 Gt |
| 10.0 | | 44.0 | 40.4 | |
| 10.0 | | 48.5 | 43.5 | |
| 9.9 | | 49.0 | 41.7 | |
| 10.0 | | 54.5 | 4.9 | |
| 9.8 | 49 | 23.0 | 31.5 | |
| 9.8 | | 30.0 | 39.8 | |
| 9.3 | | 30.0 | 54.6 | |
| 9.5 | 50 | 9.0 | 58.9 | |
| 9.4 | | 30.0 | 0.0 | |
| 9.6 | | 44.5 | 51.5 | |
| 9.7 | | 55.5 | 1.1 | |
| 10.0 | 51 | 4.0 | 56.4 | |
| 9.7 | | 23.0 | 54.5 | |
| 9.8 | | 32.5 | 55.5 | |
| 10.0 | | 50.0 | 40.6 | |
| 10.0 | | 59.5 | 34.0 | |
| 10.0 | 52 | 1.5 | 13.6 | |
| 9.1 | | 20.0 | 6.5 | 9.0 |
| 9.3 | | 22.5 | 44.3 | |
| 7.9 | | 31.0 | 2.5 | 7.0 GS |
| 10.0 | | 58.0 | 6.9 | |
| 9.9 | 53 | 58.0 | 49.6 | |
| 9.2 | 54 | 5.5 | 34.3 | 8.5 |
| 10.0 | | 19.0 | 21.5 | |
| 9.9 | | 51.0 | 17.0 | |
| 10.0 | | 54.5 | 46.5 | |
| 8.5 | | 57.5 | 36.0 | 8.0 G |
| 9.4 | 55 | 3.0 | 9.3 | G |
| 10.0 | | 11.0 | 22.2 | |
| 9.6 | | 15.0 | 42.1 | |
| 8.8 | | 31.0 | 50.7 | 9.0 |
| 9.9 | | 33.0 | 41.6 | |
| 9.4 | 56 | 5.0 | 17.5 | |
| 10.0 | | 19.0 | 14.5 | |
| 9.5 | 57 | 10.5 | 41.5 | |
| 9.4 | | 32.0 | 32.1 | |
| 10.0 | | 42.0 | 57.3 | |
| 9.6 | | 55.5 | 3.3 | |
| 8.2 | 58 | 11.5 | 29.2 | 9.0 GSt |
| 10.0 | | 29.5 | 59.9 | |
| 10.0 | | 49.5 | 55.3 | |
| 8.8 | | 59.5 | 29.5 | 9.5 GSt |
| 8.3 | 59 | 24.0 | 53.5 | |
| 9.6 | | 26.5 | 52.2 | |
| 9.8 | | 43.0 | 1.8 | |
| 7.7 | | 46.0 | 29.0 | 7.2 GSt |
| 10.0 | | 52.5 | 4.4 | |
| 9.3 | 0 | 20.0 | 13.2 | 9.0 |
| 7.9 | | 36.0 | 5.6 | 7.0 GSct |
| 9.9 | 1 | 2.5 | 52.4 | |
| 9.9 | | 5.5 | 27.4 | |
| 9.4 | | 28.0 | 42.1 | |

### 541—600.

| mag. | 6h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8.2 | 1 | 30.5 | 38.2 | 8.5 Gt |
| 9.9 | | 35.0 | 22.3 | |
| 10.0 | | 52.0 | 13.8 | |
| 10.0 | 2 | 5.5 | 57.6 | |
| 9.4 | | 28.5 | 39.3 | |
| 10.0 | | 28.8 | 46.3 | |
| 9.9 | | 49.0 | 5.1 | |
| 10.0 | 3 | 2.5 | 31.2 | |
| 8.6 | | 3.0 | 35.4 | GSt |
| 8.8 | 4 | 9.0 | 5.5 | 9.0 G |
| 10.0 | | 33.5 | 39.6 | |
| 10.0 | 5 | 0.5 | 22.4 | |
| 9.8 | | 9.0 | 35.3 | |
| 9.2 | | 15.5 | 32.8 | 9.5 |
| 10.0 | | 22.5 | 0.8 | |
| 10.0 | | 34.8 | 19.2 | |
| 10.0 | | 49.0 | 34.2 | |
| 9.8 | 6 | 40.8 | 0.9 | |
| 9.7 | 7 | 24.5 | 29.1 | |
| 10.0 | 8 | 21.5 | 55.3 | |
| 10.0 | | 49.0 | 44.4 | |
| 8.1 | 9 | 49.0 | 1.8 | 8.5 Gt |
| 7.9 | | 56.5 | 17.9 | 8.3 G |
| 9.2 | | 59.0 | 48.9 | |
| 8.0 | 10 | 22.5 | 47.8 | 8.8 |
| 9.9 | | 24.5 | 48.6 | |
| 8.7 | | 44.0 | 13.3 | 8.0 GSt |
| 10.0 | | 49.0 | 55.9 | |
| 10.0 | | 59.5 | 5.5 | |
| 8.5 | 11 | 7.5 | 12.0 | 8.5 Gt |
| 8.2 | | 34.5 | 25.4 | 8.5 |
| 10.0 | | 42.0 | 55.3 | |
| 9.0 | 12 | 19.0 | 11.1 | 10.0 |
| 9.7 | | 35.0 | 18.4 | |
| 9.0 | | 39.5 | 32.0 | 9.0 |
| 9.8 | | 58.0 | 11.0 | |
| 9.6 | 13 | 8.5 | 34.4 | |
| 9.7 | | 25.0 | 46.3 | |
| 9.0 | | 34.5 | 45.8 | |
| 9.1 | | 55.0 | 36.4 | 8.5 G |
| 10.0 | 14 | 20.0 | 36.9 | |
| 9.5 | | 41.8 | 1.9 | |
| 10.0 | | 50.0 | 58.6 | |
| 10.0 | 15 | 38.0 | 14.0 | |
| 9.8 | | 38.0 | 46.6 | |
| 9.2 | 16 | 4.5 | 25.7 | |
| 10.0 | | 23.7 | 45.6 | |
| 10.0 | 17 | 0.0 | 19.5 | |
| 9.2 | | 3.0 | 41.1 | 9.5 |
| 10.0 | | 9.5 | 42.5 | |
| 10.0 | | 25.5 | 46.0 | |
| 10.0 | | 47.5 | 43.7 | |
| 10.0 | | 54.0 | 9.4 | |
| 9.9 | 18 | 36.7 | 37.2 | |
| 9.7 | | 42.0 | 46.3 | |
| 10.0 | | 55.0 | 29.6 | |
| 10.0 | 19 | 3.0 | 28.7 | |
| 9.8 | | 33.0 | 53.9 | |
| 10.0 | | 34.0 | 10.7 | |
| 9.4 | | 44.0 | 54.9 | 8.0 |

### 601—660.

| mag. | 6h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10.1 | 20 | 0.5 | 30.9 | |
| 8.7 | | 20.0 | 9.5 | |
| 10.0 | | 26.2 | 58.7 | |
| 7.3 | | 57.5 | 9.3 | 6.8 GSg |
| 10.1 | 21 | 1.0 | 26.6 | |
| 10.0 | 22 | 7.0 | 43.3 | |
| 9.6 | | 19.0 | 49.9 | |
| 5.8 | | 40.5 | 12.6 | 6.0 GScgt |
| 10.1 | | 44.5 | 17.5 | |
| 8.6 | | 54.0 | 9.9 | 8.5 G |
| 10.0 | | 56.0 | 5.6 | |
| 9.5 | 23 | 8.0 | 40.9 | |
| 10.0 | | 31.5 | 19.9 | |
| 10.1 | 24 | 4.5 | 54.9 | |
| 10.1 | | 10.0 | 41.8 | |
| 10.1 | | 11.0 | 51.8 | |
| 10.1 | | 14.0 | 41.5 | |
| 8.4 | | 33.0 | 10.9 | 8.5 |
| 9.9 | | 59.5 | 15.5 | |
| 9.5 | 25 | 3.0 | 28.7 | 9.0 |
| 9.8 | | 12.5 | 18.5 | |
| 9.9 | | 29.0 | 17.9 | |
| 7.9 | | 35.3 | 1.6 | 8.0 |
| 9.6 | | 43.5 | 17.1 | |
| 7.9 | | 43.5 | 38.9 | 7.5 GSg |
| 8.4 | | 55.0 | 11.7 | 8.5 G |
| 9.8 | 26 | 0.0 | 3.7 | |
| 10.0 | | 0.5 | 1.4 | |
| 10.0 | | 3.3 | 50.1 | |
| 10.1 | | 4.0 | 33.9 | |
| 9.2 | | 24.5 | 30.1 | |
| 9.4 | | 25.0 | 22.8 | |
| 10.1 | | 34.5 | 27.7 | |
| 9.5 | 27 | 20.5 | 55.5 | 9.0 |
| 9.3 | | 20.5 | 26.9 | 9.5 G |
| 9.8 | | 23.5 | 50.6 | |
| 9.5 | | 44.0 | 46.6 | |
| 8.6 | | 52.5 | 35.1 | 8.5 |
| 7.9 | | 54.0 | 55.2 | 8.0 |
| 9.9 | 28 | 12.5 | 31.7 | |
| 9.4 | | 13.5 | 41.5 | |
| 9.9 | | 43.5 | 58.9 | |
| 9.9 | | 51.8 | 0.0 | |
| 9.8 | 29 | 11.5 | 18.7 | |
| 9.1 | | 26.2 | 59.9 | 9.5 |
| 10.1 | | 47.0 | 30.9 | |
| 10.0 | 30 | 21.0 | 41.6 | |
| 10.0 | | 23.3 | 58.6 | |
| 9.4 | | 35.5 | 30.0 | 9.0 |
| 9.6 | | 53.5 | 11.9 | |
| 9.1 | 31 | 37.5 | 56.8 | |
| 9.8 | 32 | 2.5 | 29.6 | |
| 9.6 | | 10.5 | 36.9 | |
| 9.0 | | 23.0 | 10.7 | |
| 8.8 | | 32.0 | 29.1 | 9.0 |
| 10.0 | | 37.0 | 49.0 | |
| 10.0 | 33 | 8.8 | 0.7 | |
| 9.7 | | 11.5 | 42.4 | |
| 9.0 | | 25.0 | 36.7 | 8.8 |
| 9.6 | | 29.5 | 15.9 | 9.0 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 5 | 20 | 19 | 1.5 |
| | 30 | 18 | 1.1 |
| | 40 | 18 | 0.7 |
| | 50 | 18 | 0.4 |
| 6 | 0 | 18 | 0.0 |
| | | | − |
| | 10 | 18 | 0.4 |
| | 20 | 18 | 0.7 |
| | 30 | 18 | 1.1 |
| | 40 | 19 | 1.5 |



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| 25 prec. | | | |
|---|---|---|---|
| | | α | δ |
| | | + | − |
| h | m | s | ′ |
| 6 | 30 | 18 | 1·1 |
| | 40 | 19 | 1·5 |
| | 50 | 19 | 1·8 |
| 7 | 0 | 20 | 2·2 |
| | 10 | 20 | 2·5 |
| | 20 | 21 | 2·9 |
| | 30 | 22 | 3·2 |
| | 40 | 23 | 3·5 |
| | 50 | 24 | 3·9 |

**661—720.**

| mag. | 6h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 33 | 30·5 | 58·2 | |
| 9·4 | | 33·3 | 0·0 | |
| 9·2 | | 35·5 | 20·8 | |
| 9·6 | | 54·5 | 1·5 | |
| 9·5 | 34 | 11·8 | 0·5 | |
| 10·0 | | 26·2 | 59·9 | |
| 10·1 | | 40·4 | 23·2 | |
| 9·3 | | 50·0 | 38·2 | |
| 9·5 | 35 | 7·0 | 33·9 | 9·5 |
| 9·8 | | 24·0 | 28·9 | |
| 10·0 | | 30·0 | 17·2 | |
| 10·0 | | 57·0 | 47·9 | |
| 10·1 | 36 | 12·4 | 56·9 | |
| 8·5 | | 26·0 | 0·5 | 9·5 |
| 9·6 | | 37·5 | 42·7 | |
| 6·8 | 37 | 2·5 | 4·1 | 7·2 GSg |
| 9·6 | | 26·0 | 0·7 | 9·0 |
| 9·0 | | 27·5 | 43·4 | |
| 9·0 | | 34·0 | 53·9 | 8·5 |
| 9·8 | | 36·5 | 55·6 | |
| 10·1 | | 43·5 | 46·0 | |
| 9·0 | | 49·0 | 51·0 | 8·0 |
| 9·5 | | 55·5 | 44·9 | |
| 8·0 | 38 | 1·5 | 17·0 | 7·7 Gg |
| 10·1 | | 19·0 | 5·7 | |
| 9·1 | | 24·0 | 19·2 | 9·2 |
| 8·9 | 39 | 1·5 | 28·5 | 9·0 |
| 9·7 | | 4·5 | 4·9 | |
| 8·5 | | 5·5 | 32·9 | 8·5 |
| 9·6 | | 19·0 | 32·0 | |
| 9·6 | | 53·5 | 18·8 | |
| 7·8 | 40 | 2·5 | 33·9 | 8·0 |
| 9·1 | | 31·5 | 32·7 | |
| 9·1 | 41 | 10·0 | 13·5 | |
| 9·4 | | 20·0 | 37·9 | |
| 10·0 | 42 | 15·0 | 31·1 | |
| 10·0 | | 59·3 | 2·7 | |
| 9·5 | 43 | 49·0 | 57·6 | |
| 9·6 | 44 | 4·0 | 45·6 | |
| 8·9 | | 15·0 | 7·7 | 8·5 G |
| 10·0 | | 23·5 | 6·2 | |
| 10·0 | | 34·0 | 32·0 | |
| 9·8 | 45 | 25·0 | 40·6 | |
| 9·4 | | 31·5 | 35·0 | |
| 9·2 | | 59·0 | 4·9 | |
| 9·0 | 46 | 7·0 | 56·9 | |
| 8·4 | | 37·0 | 41·6 | 8·5 |
| 9·9 | | 48·5 | 53·5 | |
| 10·0 | 47 | 35·0 | 34·7 | |
| 8·8 | | 49·5 | 13·5 | 8·5 |
| 10·0 | 48 | 17·0 | 46·6 | |
| 6·7 | | 21·5 | 6·3 | 6·5 GSg |
| 9·1 | | 24·0 | 11·3 | 9·5 |
| 9·1 | | 54·0 | 19·2 | |
| 9·4 | 51 | 50·5 | 9·1 | |
| 8·8 | 52 | 3·5 | 33·4 | 9·5 |
| 9·3 | | 14·2 | 34·5 | |
| 8·8 | | 16·5 | 1·8 | 9·5 G |
| 9·2 | | 21·6 | 3·9 | |
| 9·3 | 53 | 39·5 | 40·9 | |

**721—780.**

| mag. | 6h.—7h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·1 | 53 | 44·2 | 8·7 | |
| 9·4 | | 45·3 | 30·3 | |
| 9·4 | 54 | 14·0 | 1·7 | |
| 9·4 | | 26·0 | 12·7 | |
| 9·1 | | 33·7 | 14·9 | |
| 9·4 | | 48·5 | 23·9 | |
| 9·1 | 55 | 6·7 | 30·7 | |
| 9·4 | | 26·0 | 25·9 | |
| 9·4 | | 42·5 | 49·9 | |
| 8·2 | | 50·7 | 40·9 | 8·1 Gt |
| 8·2 | 56 | 29·5 | 7·5 | G |
| 9·1 | | 48·0 | 35·3 | 9·5 |
| 8·4 | | 59·5 | 55·6 | 8·0 GSt |
| 9·1 | 57 | 8·0 | 5·9 | |
| 9·4 | | 18·5 | 29·1 | |
| 9·2 | | 25·5 | 23·8 | 9·0 |
| 8·2 | | 32·0 | 39·9 | 7·5 GSt |
| 9·1 | | 39·5 | 23·1 | 9·0 |
| 9·4 | | 48·5 | 20·0 | |
| 9·3 | 58 | 23·0 | 45·9 | |
| 9·1 | | 28·5 | 48·8 | |
| 7·6 | | 40·5 | 41·0 | 8·0 GSt |
| 9·4 | | 53·5 | 40·9 | |
| 8·9 | | 53·5 | 41·0 | |
| 9·4 | | 53·5 | 57·8 | |
| 9·0 | 59 | 2·5 | 37·5 | 9·0 |
| 7·5 | | 10·5 | 57·8 | 7·8 GSgt |
| 9·0 | | 21·5 | 26·9 | |
| 9·4 | | 24·5 | 30·7 | |
| 8·6 | | 28·5 | 35·9 | 9·2 |
| 9·3 | | 39·0 | 9·4 | |
| 8·9 | | 49·5 | 34·9 | |
| 8·8 | | 51·0 | 30·5 | |
| 9·4 | 0 | 30·0 | 10·5 | |
| 9·4 | 1 | 0·0 | 4·9 | |
| 8·5 | | 12·5 | 52·6 | 9·0 Gt |
| 9·4 | | 21·5 | 31·9 | |
| 9·4 | | 45·0 | 23·8 | |
| 9·4 | | 48·5 | 24·6 | |
| 8·8 | 2 | 10·5 | 2·1 | |
| 9·2 | | 50·0 | 16·5 | 8·5 |
| 8·3 | 3 | 5·5 | 36·9 | 8·3 Gt |
| 9·3 | | 47·0 | 5·9 | |
| 9·4 | | 48·5 | 47·9 | |
| 8·7 | 4 | 4·5 | 22·7 | 9·5 |
| 9·0 | | 12·5 | 52·6 | |
| 9·0 | | 15·0 | 7·3 | |
| 9·4 | | 53·3 | 39·2 | |
| 9·2 | 5 | 11·5 | 32·3 | |
| 9·4 | | 18·5 | 6·4 | |
| 9·4 | | 43·5 | 42·1 | |
| 9·1 | | 56·0 | 34·9 | |
| 9·3 | | 59·5 | 36·8 | |
| 9·0 | 6 | 42·0 | 38·9 | |
| 9·2 | | 44·5 | 52·6 | |
| 8·6 | | 55·5 | 28·7 | |
| 9·4 | 7 | 21·3 | 37·4 | |
| 7·8 | | 25·5 | 22·3 | GSt |
| 8·9 | | 36·0 | 55·3 | |
| 8·9 | | 38·5 | 19·8 | |

**781—840.**

| mag. | 7h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 7 | 39·5 | 8·8 | |
| 7·7 | | 41·0 | 10·6 | 7·0 GSt |
| 9·4 | | 46·0 | 9·8 | |
| 9·3 | | 54·0 | 18·0 | |
| 9·3 | 8 | 9·5 | 18·4 | |
| 8·8 | | 21·5 | 37·7 | 9·0 |
| 9·4 | | 28·5 | 58·5 | |
| 9·0 | | 29·0 | 40·4 | |
| 8·8 | | 45·0 | 36·9 | 9·0 |
| 9·0 | 9 | 19·5 | 31·6 | |
| 9·4 | | 32·0 | 49·8 | |
| 9·2 | | 38·5 | 23·0 | 9·0 |
| 9·0 | | 39·0 | 50·0 | |
| 9·4 | | 56·5 | 28·0 | |
| 9·3 | 10 | 18·0 | 30·0 | |
| 9·2 | | 20·0 | 35·2 | |
| 9·2 | | 58·8 | 19·9 | |
| 8·8 | 11 | 5·0 | 45·1 | 8·5 |
| 9·4 | | 6·5 | 4·0 | |
| 8·6 | | 15·5 | 14·4 | 9·2 |
| 9·0 | | 16·0 | 25·8 | |
| 8·4 | | 46·0 | 32·7 | 9·0 |
| 7·4 | 12 | 45·5 | 51·0 | 7·5 GSt |
| 8·8 | 13 | 4·3 | 2·7 | 8·5 |
| 9·1 | | 9·0 | 58·5 | |
| 9·4 | | 49·0 | 12·8 | |
| 9·4 | 14 | 2·8 | 3·2 | |
| 9·4 | | 3·0 | 34·0 | |
| 8·8 | | 25·5 | 49·8 | |
| 7·9 | | 26·5 | 18·0 | Gt |
| 9·4 | | 56·5 | 31·0 | |
| 9·4 | 15 | 7·0 | 56·1 | |
| 9·3 | | 48·0 | 54·4 | |
| 9·4 | 16 | 12·5 | 52·9 | |
| 9·4 | | 19·8 | 13·1 | |
| 9·4 | | 21·5 | 37·2 | |
| 9·4 | | 28·8 | 40·7 | |
| 9·4 | | 35·0 | 22·8 | |
| 8·4 | 17 | 0·5 | 22·2 | 8·5 G |
| 9·4 | | 48·5 | 47·9 | |
| 7·8 | | 52·0 | 54·7 | 7·0 GSt |
| 9·4 | 18 | 11·5 | 24·0 | |
| 9·2 | | 19·0 | 48·0 | 9·5 |
| 9·4 | 19 | 1·0 | 12·7 | |
| 9·0 | | 32·4 | 1·0 | 9·0 |
| 9·4 | | 54·0 | 8·0 | |
| 9·2 | | 59·0 | 6·0 | |
| 8·7 | 20 | 18·5 | 27·0 | 9·5 |
| 8·3 | | 25·8 | 3·9 | 8·2 G |
| 9·4 | | 37·5 | 7·7 | |
| 9·0 | | 39·0 | 0·5 | 8·8 |
| 9·2 | 21 | 21·0 | 44·0 | |
| 9·0 | | 25·5 | 28·0 | |
| 9·4 | | 59·0 | 44·9 | |
| 9·2 | 22 | 5·0 | 33·2 | 9·5 |
| 7·8 | | 10·0 | 35·5 | 8·0 GSt |
| 9·1 | | 16·0 | 46·7 | |
| 8·6 | | 24·0 | 15·0 | 8·5 |
| 8·8 | 24 | 50·0 | 44·2 | 8·2 |
| 9·4 | 25 | 34·5 | 42·0 | |

**841—900.**

| mag. | 7h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 26 | 3·5 | 28·0 | |
| 9·2 | | 41·0 | 36·2 | |
| 9·2 | | 55·5 | 35·4 | |
| 9·2 | | 59·0 | 45·6 | |
| 9·0 | 27 | 14·0 | 26·4 | |
| 7·9 | 28 | 11·7 | 59·1 | 7·5 GSt |
| 9·4 | | 15·0 | 5·0 | |
| 9·4 | | 19·0 | 28·0 | |
| 9·6 | | 21·0 | 43·8 | |
| 9·6 | | 23·5 | 59·7 | |
| 9·6 | | 47·0 | 53·8 | |
| 9·7 | | 47·5 | 10·0 | |
| 9·0 | | 53·0 | 13·5 | |
| 9·7 | 29 | 3·0 | 43·0 | |
| 9·7 | | 15·0 | 46·9 | |
| 9·1 | | 21·2 | 44·3 | |
| 9·4 | | 26·5 | 29·2 | |
| 9·4 | | 34·0 | 23·9 | |
| 9·6 | | 41·5 | 21·1 | |
| 7·8 | 32 | 53·0 | 48·3 | 8·5 G |
| 9·2 | 33 | 0·4 | 57·8 | |
| 9·6 | | 32·0 | 22·4 | |
| 9·6 | | 40·5 | 15·0 | |
| 9·7 | 34 | 38·0 | 16·2 | |
| 9·1 | | 54·5 | 1·7 | |
| 9·6 | 35 | 25·5 | 33·0 | |
| 9·6 | | 30·0 | 2·7 | |
| 9·7 | 36 | 5·0 | 52·0 | |
| 7·4 | | 43·0 | 20·5 | 7·4 GSt |
| 9·7 | 37 | 2·0 | 30·1 | |
| 9·2 | | 8·5 | 19·9 | 9·5 |
| 9·2 | | 43·5 | 26·5 | |
| 9·5 | 38 | 32·0 | 56·2 | |
| 9·1 | | 33·0 | 54·8 | |
| 9·4 | | 50·0 | 20·9 | |
| 9·4 | | 56·0 | 36·4 | |
| 9·7 | 39 | 43·0 | 7·7 | |
| 9·4 | 40 | 15·0 | 42·0 | |
| 9·3 | | 20·5 | 44·1 | |
| 9·6 | | 33·0 | 12·9 | |
| 9·0 | | 39·8 | 0·3 | 9·0 G |
| 8·7 | | 54·0 | 26·3 | |
| 9·4 | 42 | 39·0 | 11·7 | |
| 9·7 | 43 | 56·0 | 11·9 | |
| 9·7 | 44 | 9·0 | 12·7 | |
| 9·6 | | 19·0 | 8·9 | |
| 9·6 | | 22·5 | 35·7 | |
| 8·9 | | 38·5 | 12·1 | |
| 9·1 | 45 | 18·0 | 7·8 | |
| 8·7 | | 31·5 | 28·2 | 9·0 |
| 9·6 | | 39·0 | 28·8 | |
| 8·4 | 46 | 22·0 | 34·9 | 8·2 |
| 7·6 | | 53·0 | 51·0 | 7·5 G |
| 8·9 | 47 | 50·0 | 21·9 | |
| 9·7 | | 54·0 | 23·9 | |
| 8·2 | 48 | 3·0 | 20·9 | |
| 9·1 | | 4·0 | 14·1 | |
| 8·4 | | 8·0 | 54·2 | 8·0 |
| 9·2 | | 9·0 | 49·0 | 9·0 |
| 8·2 | 49 | 17·5 | 56·0 | 8·8 |



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### 901—960.

| mag. | 7h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.6 | 49 | 19.5 | 24.7 | |
| 9.6 | | 28.0 | 21.9 | |
| 9.7 | | 30.5 | 5.4 | |
| 8.3 | | 52.5 | 3.7 | |
| 8.9 | 50 | 9.0 | 28.7 | 9.2 |
| 9.6 | | 9.5 | 3.0 | |
| 9.2 | | 14.0 | 33.7 | |
| 9.7 | | 24.0 | 1.8 | |
| 9.7 | | 52.5 | 27.5 | |
| 9.7 | | 55.0 | 12.9 | |
| 9.6 | 51 | 4.0 | 11.6 | |
| 7.9 | | 13.0 | 36.5 | 8.3 |
| 9.0 | | 18.0 | 23.1 | |
| 9.6 | | 19.0 | 23.2 | |
| 9.6 | | 20.0 | 6.2 | |
| 7.5 | | 30.0 | 43.5 | 8.0 |
| 9.1 | | 36.5 | 34.8 | |
| 9.2 | | 40.5 | 14.7 | 9.0 |
| 8.4 | | 50.0 | 15.2 | 7.5 G |
| 8.9 | 52 | 7.0 | 22.9 | |
| 9.2 | | 31.5 | 58.8 | |
| 9.7 | | 58.5 | 29.1 | |
| 9.6 | 53 | 0.0 | 18.4 | |
| 8.0 | | 2.5 | 12.8 | 8.0 |
| 9.1 | | 5.0 | 16.0 | 8.5 |
| 9.7 | | 18.0 | 37.6 | |
| 8.5 | | 19.0 | 30.7 | |
| 9.2 | | 20.5 | 20.0 | |
| 9.7 | | 22.5 | 4.0 | |
| 8.2 | | 45.0 | 7.7 | 9.0 |
| 9.7 | | 49.5 | 26.0 | |
| 7.8 | | 50.0 | 50.1 | 8.0 |
| 9.0 | | 58.0 | 11.4 | |
| 9.6 | 54 | 3.5 | 22.0 | |
| 7.5 | | 12.5 | 11.5 | 6.0 GSct |
| 9.1 | | 12.5 | 16.2 | |
| 6.9 | | 15.0 | 45.8 | 7.0 GSg |
| 9.5 | | 16.0 | 3.0 | |
| 8.4 | | 17.0 | 27.9 | |
| 9.7 | | 18.0 | 10.7 | |
| 8.6 | | 24.0 | 57.0 | |
| 9.1 | | 34.5 | 26.3 | |
| 9.3 | | 37.5 | 17.8 | |
| 7.6 | | 41.5 | 28.7 | 8.5 |
| 8.0 | | 43.5 | 30.2 | 8.5 |
| 9.4 | | 45.0 | 6.0 | |
| 7.6 | | 49.0 | 15.7 | 8.0 |
| 8.7 | | 55.5 | 26.8 | |
| 8.8 | 55 | 8.5 | 33.0 | |
| 9.2 | | 9.0 | 5.4 | |
| 9.3 | | 12.0 | 14.6 | |
| 8.3 | | 15.5 | 28.3 | G |
| 7.6 | | 17.5 | 25.7 | 8.0 G |
| 9.0 | | 24.5 | 30.0 | |
| 8.2 | | 26.0 | 17.5 | |
| 9.7 | | 30.0 | 39.0 | |
| 9.4 | | 31.5 | 54.7 | |
| 9.4 | | 32.0 | 39.1 | |
| 9.7 | | 33.0 | 33.6 | |
| 8.3 | | 33.0 | 43.1 | |

### 961—1020.

| mag. | 7h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8.2 | 55 | 34.5 | 34.1 | |
| 9.7 | | 35.0 | 33.1 | |
| 9.3 | | 37.0 | 23.2 | |
| 8.5 | | 38.0 | 17.5 | |
| 9.6 | | 41.0 | 26.7 | |
| 7.8 | | 41.0 | 16.2 | |
| 6.7 | | 41.5 | 35.2 | 7.8 G |
| 8.2 | | 42.0 | 29.2 | |
| 8.0 | | 43.5 | 20.6 | |
| 8.4 | | 43.5 | 28.5 | |
| 8.8 | | 44.0 | 22.9 | |
| 9.6 | | 48.0 | 24.6 | |
| 8.6 | | 52.5 | 25.0 | |
| 8.8 | | 52.5 | 23.9 | |
| 8.2 | | 53.5 | 30.3 | |
| 7.5 | | 56.5 | 16.5 | 7.5 G |
| 9.6 | | 58.0 | 22.1 | |
| 8.3 | | 58.5 | 28.4 | |
| 7.6 | 56 | 3.0 | 26.3 | G |
| 7.6 | | 5.0 | 28.5 | 7.8 GS |
| 8.8 | | 7.0 | 31.5 | |
| 7.4 | | 8.5 | 27.6 | G |
| 9.6 | | 9.0 | 18.5 | |
| 8.8 | | 9.0 | 23.0 | |
| 8.0 | | 9.5 | 32.0 | |
| 9.2 | | 9.5 | 24.9 | |
| 9.7 | | 15.0 | 29.1 | |
| 6.7 | | 18.5 | 30.9 | 8.2 G |
| 8.4 | | 20.0 | 32.0 | |
| 7.8 | | 22.0 | 27.6 | |
| 8.7 | | 23.5 | 21.3 | |
| 9.6 | | 24.5 | 17.2 | |
| 8.0 | | 25.0 | 23.2 | |
| 9.5 | | 28.0 | 36.9 | |
| 8.5 | | 28.0 | 13.7 | |
| 9.6 | | 29.0 | 33.3 | |
| 9.6 | | 29.0 | 29.0 | |
| 9.3 | | 29.0 | 21.5 | |
| 9.6 | | 30.0 | 13.1 | |
| 8.6 | | 31.5 | 18.9 | |
| 8.4 | | 35.0 | 40.2 | |
| 9.6 | | 36.0 | 2.4 | |
| 7.4 | | 38.0 | 21.6 | |
| 9.4 | | 39.0 | 26.0 | |
| 7.8 | | 44.0 | 18.1 | |
| 5.7 | | 44.0 | 29.0 | 6.7 GSgt |
| 9.6 | | 45.0 | 19.5 | |
| 8.6 | | 46.5 | 15.7 | |
| 9.5 | | 49.0 | 50.0 | |
| 9.6 | | 58.0 | 27.1 | |
| 9.7 | 57 | 1.5 | 29.4 | |
| 7.8 | | 8.0 | 14.6 | GS |
| 9.0 | | 10.5 | 31.3 | |
| 9.0 | | 11.5 | 5.0 | G |
| 7.8 | | 15.5 | 28.1 | 9.5 |
| 9.1 | | 18.5 | 26.9 | |
| 8.5 | | 22.5 | 27.1 | |
| 7.3 | | 29.5 | 14.5 | 5.8 GSgt |
| 8.6 | | 38.0 | 19.6 | |
| 9.7 | | 39.0 | 51.0 | |

### 1021—1080.

| mag. | 7h.—8h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.7 | 57 | 49.0 | 21.0 | |
| 7.6 | | 51.0 | 24.0 | 8.3 |
| 7.9 | | 58.5 | 25.7 | 9.5 |
| 9.7 | | 58.5 | 4.5 | |
| 9.2 | 58 | 0.5 | 20.1 | |
| 9.6 | | 4.0 | 41.0 | |
| 9.7 | | 15.5 | 28.3 | |
| 9.6 | | 23.5 | 15.8 | |
| 8.8 | | 28.5 | 22.1 | |
| 9.6 | | 32.5 | 10.9 | |
| 8.8 | | 36.0 | 9.8 | |
| 9.4 | | 48.0 | 40.2 | |
| 8.0 | | 58.0 | 35.1 | 8.5 |
| 9.2 | | 59.5 | 53.8 | |
| 9.7 | 59 | 1.2 | 58.9 | |
| 9.7 | | 25.5 | 0.2 | |
| 8.2 | | 32.0 | 10.1 | 9.0 |
| 8.4 | | 53.0 | 43.9 | |
| 9.6 | 0 | 35.5 | 28.9 | |
| 9.4 | | 39.5 | 32.3 | |
| 9.5 | | 42.5 | 21.9 | |
| 9.1 | | 44.0 | 35.6 | |
| 9.7 | | 49.0 | 40.7 | |
| 9.7 | | 49.0 | 19.9 | |
| 9.2 | 1 | 8.0 | 17.2 | |
| 9.1 | | 11.5 | 3.5 | |
| 9.7 | | 14.0 | 24.6 | |
| 8.2 | | 19.0 | 10.2 | 8.5 |
| 7.7 | | 34.0 | 33.1 | 8.8 |
| 9.7 | | 36.0 | 11.3 | |
| 8.6 | 2 | 23.5 | 7.9 | 9.0 |
| 9.7 | | 24.0 | 22.9 | |
| 9.6 | | 30.0 | 59.3 | |
| 9.7 | | 41.5 | 10.0 | |
| 9.7 | | 43.0 | 25.0 | |
| 7.1 | | 49.0 | 1.9 | 7.5 GSg |
| 9.7 | | 51.0 | 42.0 | |
| 9.2 | 3 | 34.0 | 42.0 | 9.5 |
| 8.9 | | 39.0 | 35.2 | |
| 9.7 | 4 | 4.5 | 13.8 | |
| 9.3 | | 39.2 | 56.9 | 9.5 |
| 9.2 | 5 | 3.5 | 12.4 | |
| 9.1 | | 13.8 | 41.0 | |
| 9.7 | | 23.5 | 42.5 | |
| 9.6 | | 27.3 | 45.0 | |
| 9.6 | | 53.5 | 12.9 | |
| 9.3 | 6 | 2.2 | 7.8 | |
| 7.6 | | 4.5 | 42.6 | 8.5 GSg |
| 9.6 | | 13.7 | 18.9 | |
| 9.5 | | 14.2 | 15.9 | |
| 8.8 | | 20.7 | 26.0 | 9.2 |
| 7.5 | | 30.7 | 15.4 | 7.5 GSg |
| 9.5 | | 50.7 | 40.2 | |
| 6.2 | | 55.3 | 55.4 | 5.5 GScgt |
| 9.6 | | 59.0 | 12.5 | |
| 9.0 | 7 | 6.0 | 40.9 | |
| 9.6 | | 7.0 | 21.9 | |
| 9.6 | | 31.5 | 25.0 | |
| 9.6 | | 39.5 | 35.0 | |
| 9.6 | | 44.0 | 23.2 | |

### 1081—1140.

| mag. | 8h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.6 | 7 | 56.0 | 25.9 | |
| 9.2 | 8 | 50.0 | 35.5 | |
| 9.6 | | 50.5 | 53.9 | |
| 9.5 | 9 | 1.0 | 52.5 | |
| 9.6 | | 9.5 | 35.0 | |
| 9.6 | | 19.6 | 1.5 | |
| 9.6 | | 35.6 | 2.7 | |
| 9.5 | 10 | 10.0 | 2.9 | |
| 9.0 | | 18.5 | 48.7 | |
| 9.6 | | 21.5 | 59.0 | |
| 8.8 | | 30.5 | 34.5 | 9.2 |
| 9.6 | 11 | 48.5 | 52.4 | |
| 9.6 | | 50.5 | 52.9 | |
| 9.5 | | 59.5 | 45.3 | |
| 8.7 | 13 | 20.5 | 40.5 | 9.5 G |
| 9.6 | | 56.5 | 51.4 | |
| 8.9 | 14 | 36.0 | 9.7 | 8.0 G |
| 9.2 | | 50.5 | 22.9 | 9.0 |
| 9.2 | 15 | 14.5 | 20.3 | |
| 9.6 | 16 | 9.5 | 0.9 | |
| 9.6 | | 14.5 | 19.5 | |
| 9.2 | | 16.0 | 39.2 | |
| 9.6 | | 23.5 | 3.8 | |
| 9.6 | 17 | 3.5 | 2.1 | |
| 9.6 | | 13.5 | 45.7 | |
| 9.6 | | 48.5 | 19.8 | |
| 8.6 | 19 | 38.0 | 13.0 | |
| 9.6 | 20 | 10.0 | 24.3 | 9.5 |
| 9.6 | 21 | 3.5 | 35.9 | |
| 9.6 | | 5.3 | 35.0 | |
| 8.4 | | 14.0 | 43.6 | 9.0 G |
| 9.5 | | 19.5 | 30.6 | |
| 9.1 | | 40.0 | 25.5 | 9.5 |
| 9.1 | | 49.5 | 14.5 | 9.0 |
| 9.6 | 22 | 29.5 | 50.5 | |
| 9.2 | | 44.0 | 8.7 | |
| 8.0 | 23 | 11.0 | 56.2 | 8.0 |
| 9.6 | | 13.0 | 53.8 | |
| 9.4 | | 18.5 | 29.7 | |
| 9.5 | 24 | 10.3 | 25.0 | |
| 9.1 | | 16.0 | 59.6 | 9.5 |
| 8.7 | | 16.0 | 14.4 | 9.0 |
| 9.2 | | 57.5 | 34.4 | 8.6 |
| 9.6 | 25 | 3.5 | 41.1 | |
| 9.6 | | 29.5 | 7.5 | |
| 9.6 | | 33.0 | 2.8 | |
| 9.6 | | 55.5 | 34.2 | |
| 8.5 | 26 | 3.0 | 55.8 | 9.0 |
| 8.9 | | 5.5 | 47.3 | |
| 9.6 | | 12.0 | 45.1 | 9.5 |
| 8.9 | | 20.5 | 40.4 | 9.2 |
| 9.2 | | 40.0 | 32.1 | 10.0 |
| 9.2 | 27 | 5.5 | 41.4 | 9.3 |
| 9.5 | | 6.5 | 59.8 | |
| 9.6 | | 17.7 | 22.9 | 9.5 |
| 9.3 | | 32.5 | 17.6 | 9.0 |
| 9.5 | 28 | 25.5 | 6.0 | |
| 8.4 | | 30.0 | 3.6 | 9.0 |
| 8.8 | | 40.5 | 34.6 | 9.0 |
| 9.2 | 29 | 10.5 | 3.1 | 9.0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 40 | 23 | 3.5 |
| | 50 | 24 | 3.9 |
| 8 | 0 | 26 | 4.2 |
| | 10 | 27 | 4.5 |
| | 20 | 28 | 4.8 |
| | 30 | 30 | 5.1 |



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| 25 prec. | α + | δ − |
|---|---|---|
| h m | s | ′ |
| 8 20 | 28 | 4·8 |
| 30 | 30 | 5·1 |
| 40 | 32 | 5·4 |
| 50 | 33 | 5·6 |
| 9 0 | 35 | 5·9 |
| 10 | 37 | 6·2 |
| 20 | 39 | 6·4 |

## 1141—1200.

| mag. | 8h. m s | −60° ′ | |
|---|---|---|---|
| 9·2 | 29 29·5 | 45·2 | |
| 9·6 | 35·5 | 0·7 | 9·5 |
| 9·0 | 36·0 | 45·0 | 9·0 |
| 9·5 | 30 11·0 | 41·0 | |
| 8·9 | 51·5 | 25·7 | 9·5 |
| 8·5 | 31 24·0 | 5·6 | 8·8 |
| 9·5 | 34·0 | 40·5 | |
| 9·6 | 32 10·7 | 59·0 | 9·0 |
| 9·3 | 33 16·0 | 17·2 | |
| 8·8 | 47·6 | 1·8 | 9·5 |
| 9·4 | 34 1·8 | 44·3 | |
| 9·2 | 6·9 | 59·1 | |
| 9·2 | 41·8 | 51·0 | |
| 9·5 | 42·8 | 5·9 | |
| 9·2 | 43·8 | 2·1 | 9·5 |
| 9·6 | 35 52·8 | 36·5 | 9·5 |
| 9·6 | 36 8·8 | 5·6 | |
| 9·5 | 12·8 | 7·3 | |
| 9·6 | 32·8 | 14·4 | |
| 8·6 | 39·8 | 18·5 | 9·5 |
| 9·6 | 37 11·8 | 19·0 | 9·5 |
| 9·0 | 45·3 | 56·0 | |
| 9·6 | 38 8·3 | 39·1 | 9·5 |
| 9·1 | 31·3 | 50·3 | 9·5 |
| 9·6 | 53·8 | 59·5 | |
| 9·6 | 39 16·3 | 44·5 | |
| 9·6 | 35·3 | 22·0 | 10·0 |
| 9·2 | 51·3 | 34·8 | |
| 9·2 | 40 41·3 | 15·5 | 9·5 |
| 8·8 | 44·3 | 18·8 | 9·5 |
| 8·7 | 41 2·6 | 16·5 | 9·0 |
| 9·6 | 2·6 | 7·4 | 9·5 G |
| 9·6 | 12·7 | 39·0 | |
| 9·7 | 15·0 | 57·7 | |
| 10·0 | 18·0 | 31·3 | |
| 10·0 | 25·0 | 26·1 | |
| 9·9 | 29·5 | 54·2 | |
| 9·8 | 39·2 | 4·7 | |
| 9·6 | 53·5 | 0·1 | |
| 10·0 | 42 10·5 | 22·0 | |
| 9·9 | 24·0 | 29·9 | |
| 9·8 | 33·0 | 49·6 | |
| 9·9 | 40·5 | 19·8 | |
| 9·1 | 42·5 | 9·8 | 9·5 |
| 9·6 | 43 2·5 | 25·7 | 9·5 |
| 10·0 | 3·0 | 32·8 | |
| 9·6 | 9·5 | 3·4 | |
| 10·0 | 12·0 | 56·5 | |
| 9·7 | 14·0 | 1·0 | |
| 10·0 | 19·5 | 17·9 | |
| 9·6 | 31·7 | 53·1 | |
| 9·6 | 53·2 | 4·2 | 9·5 |
| 8·9 | 44 10·5 | 43·9 | 9·5 |
| 9·6 | 20·5 | 44·1 | 9·0 |
| 9·6 | 41·0 | 3·5 | 10·0 |
| 10·0 | 48·0 | 34·9 | |
| 9·9 | 48·0 | 35·2 | |
| 10·0 | 54·0 | 3·5 | |
| 9·8 | 56·0 | 11·2 | |
| 9·9 | 59·5 | 25·5 | |

## 1201—1260.

| mag. | 8h. m s | −60° ′ | |
|---|---|---|---|
| 9·6 | 45 34·0 | 53·4 | |
| 9·7 | 34·0 | 12·1 | 9·5 |
| 9·8 | 39·5 | 1·9 | |
| 10·0 | 43·3 | 59·4 | |
| 10·0 | 44·5 | 36·0 | |
| 9·7 | 49·5 | 30·8 | 9·5 |
| 8·6 | 56·0 | 10·4 | 9·0 |
| 9·9 | 59·0 | 51·2 | |
| 10·0 | 46 6·5 | 5·1 | |
| 9·8 | 15·0 | 54·9 | |
| 9·4 | 39·5 | 49·4 | |
| 8·4 | 40·5 | 9·3 | 8·5 |
| 9·9 | 53·7 | 11·4 | |
| 9·9 | 54·5 | 5·6 | |
| 9·6 | 47 2·5 | 19·0 | 10·0 |
| 9·6 | 4·5 | 53·9 | |
| 9·6 | 7·5 | 49·2 | 9·0 |
| 9·8 | 15·5 | 36·0 | |
| 9·8 | 31·5 | 25·0 | |
| 9·6 | 37·5 | 18·2 | |
| 9·5 | 48 0·5 | 35·9 | |
| 10·0 | 33·7 | 44·3 | |
| 10·0 | 34·0 | 18·9 | |
| 8·0 | 50·5 | 53·9 | 7·0 GSg |
| 9·4 | 49 2·5 | 54·2 | 9·8 |
| 7·6 | 3·5 | 57·0 | 7·2 GSg |
| 9·0 | 9·0 | 13·9 | 9·2 |
| 9·4 | 15·0 | 32·9 | |
| 10·0 | 24·5 | 59·5 | |
| 10·0 | 31·5 | 18·1 | |
| 10·0 | 44·0 | 36·5 | |
| 10·0 | 50 4·5 | 44·0 | |
| 9·7 | 17·0 | 57·6 | |
| 9·3 | 20·5 | 17·1 | 9·5 |
| 10·0 | 51 5·0 | 5·7 | |
| 10·0 | 10·5 | 1·1 | |
| 9·9 | 19·5 | 21·1 | |
| 10·0 | 30·5 | 59·1 | |
| 10·0 | 52·5 | 29·1 | |
| 8·7 | 59·5 | 19·0 | 9·5 |
| 9·6 | 52 6·0 | 6·2 | |
| 9·7 | 6·0 | 13·4 | 9·5 |
| 4·3 | 12·5 | 10·0 | 4·0 GSctr |
| 10·0 | 32·0 | 0·2 | |
| 10·0 | 38·5 | 58·0 | |
| 9·4 | 40·0 | 42·5 | 10·0 |
| 9·6 | 41·5 | 0·2 | |
| 7·9 | 48·5 | 43·5 | 8·2 GSt |
| 9·6 | 56·5 | 7·8 | |
| 9·3 | 53 10·0 | 13·0 | 9·5 |
| 9·7 | 12·5 | 11·0 | |
| 9·6 | 13·5 | 3·9 | |
| 9·5 | 35·0 | 3·7 | |
| 10·0 | 36·0 | 38·6 | |
| 9·9 | 40·8 | 1·0 | |
| 9·7 | 47·0 | 46·0 | |
| 8·4 | 49·0 | 21·5 | 9·0 |
| 10·0 | 57·0 | 18·0 | |
| 9·9 | 54 1·5 | 53·2 | |
| 10·0 | 10·5 | 58·2 | |

## 1261—1320.

| mag. | 8h.–9h. m s | −60° ′ | |
|---|---|---|---|
| 9·2 | 54 25·0 | 5·6 | 9·5 |
| 9·3 | 40·0 | 5·7 | 9·5 |
| 9·7 | 40·0 | 41·6 | 9·5 |
| 9·4 | 49·0 | 5·7 | 10·0 |
| 10·0 | 54·0 | 59·2 | |
| 8·6 | 57·0 | 47·0 | 8·5 |
| 9·4 | 55 3·5 | 3·3 | 9·5 |
| 10·0 | 7·0 | 26·0 | |
| 10·0 | 16·5 | 5·0 | |
| 9·0 | 20·5 | 49·9 | 9·0 |
| 9·8 | 36·0 | 1·5 | |
| 10·0 | 41·5 | 12·0 | |
| 9·3 | 56 0·0 | 46·0 | 9·5 |
| 9·8 | 4·5 | 19·2 | |
| 9·9 | 13·5 | 22·4 | |
| 9·9 | 15·2 | 47·3 | |
| 8·8 | 17·5 | 50·0 | 9·0 |
| 9·9 | 23·5 | 48·0 | |
| 9·9 | 50·0 | 4·9 | |
| 9·3 | 57 30·0 | 29·0 | 9·4 |
| 9·3 | 37·5 | 22·0 | 10·0 |
| 9·8 | 46·0 | 36·3 | |
| 7·6 | 53·5 | 28·3 | 6·4 GSct |
| 10·0 | 58 8·0 | 19·0 | |
| 10·0 | 17·0 | 45·0 | |
| 9·6 | 18·5 | 57·4 | |
| 8·1 | 20·0 | 23·8 | 8·8 |
| 10·0 | 38·5 | 8·7 | |
| 10·0 | 44·0 | 41·1 | |
| 9·5 | 59 4·0 | 17·7 | |
| 10·0 | 9·0 | 38·0 | |
| 9·8 | 9·2 | 10·1 | |
| 9·8 | 10·0 | 19·4 | |
| 9·6 | 42·5 | 25·0 | |
| 9·9 | 47·0 | 40·0 | |
| 9·1 | 49·0 | 7·9 | 9·5 |
| 9·2 | 0 20·0 | 10·6 | 8·5 |
| 9·8 | 23·0 | 23·5 | |
| 9·6 | 46·5 | 40·6 | |
| 9·9 | 52·5 | 58·7 | |
| 10·0 | 54·4 | 0·4 | |
| 9·7 | 1 0·0 | 46·2 | G |
| 9·8 | 0·5 | 4·5 | |
| 8·4 | 7·0 | 31·3 | 8·5 |
| 8·6 | 19·5 | 4·2 | 8·0 G |
| 9·4 | 39·5 | 26·2 | |
| 9·0 | 2 9·0 | 19·9 | |
| 9·9 | 34·0 | 23·8 | |
| 9·7 | 42·5 | 14·0 | |
| 10·0 | 3 0·5 | 38·1 | |
| 10·0 | 9·0 | 53·3 | |
| 10·0 | 24·5 | 18·0 | |
| 9·4 | 4 4·0 | 33·8 | |
| 9·5 | 11·0 | 29·1 | |
| 10·0 | 11·5 | 6·8 | |
| 10·0 | 19·0 | 3·4 | |
| 10·0 | 29·2 | 58·8 | |
| 8·5 | 47·5 | 40·2 | 8·0 |
| 9·8 | 5 0·0 | 54·8 | |
| 8·0 | 7·5 | 14·6 | 8·5 G |

## 1321—1380.

| mag. | 9h. m s | −60° ′ | |
|---|---|---|---|
| 8·8 | 5 8·5 | 40·2 | 9·2 |
| 9·9 | 11·5 | 39·5 | |
| 9·7 | 21·0 | 21·6 | |
| 10·0 | 41·5 | 1·0 | |
| 8·9 | 45·0 | 41·8 | 9·0 |
| 9·9 | 47·5 | 44·1 | |
| 9·9 | 59·0 | 27·2 | |
| 9·0 | 6 12·5 | 54·6 | |
| 9·0 | 12·5 | 43·1 | 10·0 |
| 9·4 | 43·0 | 22·1 | 9·5 |
| 9·9 | 52·5 | 4·5 | |
| 9·9 | 57·5 | 36·9 | |
| 10·0 | 7 6·0 | 1·1 | |
| 8·8 | 7·0 | 10·1 | 8·5 |
| 9·0 | 30·0 | 58·7 | |
| 8·9 | 41·5 | 49·4 | |
| 10·0 | 54·0 | 58·7 | |
| 9·0 | 57·0 | 18·2 | 9·2 G |
| 7·4 | 8 1·5 | 26·4 | 8·0 GSg |
| 9·4 | 4·0 | 36·2 | |
| 9·1 | 15·5 | 13·1 | 9·5 |
| 9·9 | 30·0 | 35·1 | |
| 9·2 | 49·5 | 41·8 | 9·0 |
| 9·8 | 50·7 | 1·4 | |
| 10·0 | 9 8·0 | 1·4 | |
| 9·6 | 9·5 | 0·9 | |
| 8·8 | 11·5 | 19·0 | 9·0 |
| 9·9 | 18·0 | 43·5 | |
| 10·0 | 20·0 | 17·2 | |
| 9·8 | 30·0 | 51·2 | |
| 8·2 | 34·0 | 34·4 | 8·6 |
| 9·8 | 43·0 | 10·0 | 9·0 |
| 6·4 | 46·5 | 24·1 | 7·0 GSg |
| 8·4 | 47·0 | 34·2 | 8·5 |
| 9·9 | 47·0 | 9·1 | |
| 10·0 | 50·0 | 2·6 | 9·0 |
| 9·9 | 51·5 | 56·1 | |
| 8·8 | 59·0 | 9·1 | 9·0 |
| 10·0 | 10 24·0 | 35·9 | |
| 9·7 | 30·5 | 28·0 | 9·0 |
| 8·0 | 35·0 | 42·4 | 8·3 |
| 9·7 | 37·0 | 47·0 | |
| 9·3 | 41·5 | 49·4 | 9·5 |
| 9·3 | 47·0 | 12·2 | |
| 9·8 | 48·5 | 51·3 | |
| 7·2 | 49·0 | 45·7 | 8·2 GSg |
| 7·5 | 58·8 | 1·1 | 7·8 GSg |
| 9·9 | 58·9 | 1·6 | |
| 8·8 | 11 0·0 | 23·4 | 8·0 G |
| 9·2 | 12·5 | 26·5 | 9·5 |
| 9·8 | 26·0 | 33·0 | |
| 8·6 | 33·5 | 59·3 | 9·0 |
| 9·6 | 12 9·0 | 56·1 | |
| 10·0 | 37·0 | 33·0 | |
| 9·5 | 38·5 | 51·8 | |
| 9·9 | 52·0 | 25·2 | |
| 9·5 | 52·5 | 8·0 | 9·5 |
| 9·2 | 13 5·0 | 38·4 | 8·8 |
| 9·0 | 15·0 | 39·1 | 8·5 |
| 9·8 | 21·0 | 50·0 | |



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### 1381—1440.

| mag. | 9h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 13 | 30·0 | 5·0 | 9·0 |
| 9·9 | 14 | 47·0 | 42·2 | |
| 9·8 | | 47·5 | 42·0 | |
| 8·9 | 15 | 13·0 | 45·8 | 9·0 |
| 9·6 | | 16·5 | 55·8 | |
| 8·9 | | 21·0 | 31·4 | 8·8 |
| 8·5 | | 33·5 | 27·0 | 8·6 |
| 10·0 | 16 | 5·5 | 37·0 | |
| 10·0 | | 42·5 | 25·6 | |
| 10·0 | | 50·0 | 15·0 | |
| 9·0 | 17 | 2·2 | 1·3 | 8·8 |
| 10·0 | | 10·2 | 34·2 | |
| 9·0 | | 45·5 | 19·5 | 9·0 |
| 8·4 | | 50·8 | 29·2 | 8·5 |
| 10·0 | | 54·0 | 18·4 | |
| 10·0 | | 55·5 | 59·0 | |
| 9·9 | | 56·0 | 58·5 | |
| 8·3 | | 59·5 | 1·7 | 8·5 |
| 10·0 | 18 | 8·5 | 26·7 | |
| 9·2 | | 12·2 | 5·4 | 9·0 |
| 10·0 | | 13·0 | 20·9 | |
| 7·4 | | 20·2 | 17·9 | GSt |
| 9·9 | | 45·2 | 9·7 | |
| 8·5 | | 47·5 | 22·7 | |
| 9·8 | | 55·0 | 17·4 | |
| 9·4 | 19 | 0·5 | 25·0 | |
| 9·8 | | 5·5 | 21·0 | |
| 9·4 | | 24·5 | 32·0 | |
| 8·7 | | 37·5 | 33·4 | 8·5 |
| 9·4 | 20 | 16·5 | 7·3 | |
| 9·8 | | 22·0 | 39·3 | |
| 8·6 | | 52·0 | 37·7 | |
| 9·6 | | 58·5 | 14·4 | |
| 9·8 | 21 | 7·5 | 21·0 | |
| 9·8 | | 14·0 | 13·2 | |
| 9·3 | | 24·5 | 22·7 | 9·0 |
| 9·4 | | 24·5 | 17·0 | |
| 9·4 | | 28·5 | 0·4 | |
| 9·8 | | 32·0 | 52·1 | |
| 9·8 | | 36·5 | 56·3 | |
| 9·4 | | 38·5 | 36·3 | |
| 8·4 | | 46·0 | 48·4 | 8·5 |
| 9·8 | | 49·0 | 23·4 | |
| 8·8 | | 59·0 | 30·4 | 9·5 |
| 9·3 | 22 | 11·0 | 14·7 | 9·2 |
| 9·8 | | 39·5 | 20·0 | |
| 8·5 | | 41·0 | 57·3 | 8·5 |
| 9·7 | 23 | 10·0 | 15·5 | 9·5 |
| 8·9 | | 19·5 | 8·1 | 9·5 |
| 9·7 | | 22·0 | 57·1 | 9·0 |
| 8·8 | | 23·5 | 50·4 | 8·5 |
| 9·6 | | 28·5 | 23·7 | 9·0 |
| 9·7 | | 34·0 | 21·7 | |
| 9·8 | | 36·0 | 30·6 | |
| 9·6 | | 43·5 | 56·3 | |
| 9·6 | | 44·5 | 44·0 | |
| 9·8 | | 52·0 | 49·3 | |
| 9·6 | 24 | 23·0 | 31·8 | |
| 9·2 | | 38·5 | 47·2 | |
| 9·2 | | 45·0 | 2·1 | 9·3 |

### 1441—1500.

| mag. | 9h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 25 | 10·0 | 54·9 | |
| 9·6 | | 41·5 | 5·8 | 9·3 |
| 9·4 | | 48·5 | 29·2 | 9·0 |
| 9·6 | | 59·0 | 49·4 | |
| 9·4 | | 59·0 | 18·4 | |
| 9·8 | 26 | 15·8 | 33·1 | 9·5 |
| 9·8 | | 32·5 | 3·2 | 9·5 |
| 9·7 | | 43·5 | 40·9 | |
| 9·7 | | 52·5 | 45·2 | |
| 9·2 | 27 | 50·0 | 41·7 | |
| 9·6 | | 57·5 | 40·2 | 9·2 |
| 9·8 | | 58·0 | 3·3 | |
| 9·2 | 28 | 3·0 | 48·3 | 9·5 |
| 9·7 | | 30·0 | 4·6 | 9·5 |
| 7·6 | | 42·0 | 41·0 | 7·2 GScgr |
| 9·8 | | 44·5 | 47·2 | |
| 9·8 | | 47·0 | 54·3 | |
| 9·8 | | 50·0 | 56·7 | |
| 9·8 | | 52·5 | 55·1 | |
| 9·8 | | 52·5 | 31·3 | 9·5 |
| 9·3 | 29 | 3·5 | 46·8 | |
| 9·3 | | 20·0 | 30·3 | |
| 9·6 | 30 | 13·0 | 34·1 | 9·1 |
| 8·2 | | 18·0 | 4·4 | 7·5 GSgt |
| 9·3 | | 29·0 | 25·8 | 9·5 |
| 8·5 | 31 | 46·0 | 12·1 | 8·8 G |
| 9·8 | 32 | 36·0 | 16·4 | 9·5 |
| 9·3 | | 47·5 | 16·5 | |
| 9·4 | | 48·5 | 30·6 | 9·7 |
| 8·0 | | 53·5 | 34·3 | 8·3 G |
| 9·5 | 33 | 9·5 | 25·9 | |
| 8·3 | | 33·5 | 49·4 | 8·5 |
| 9·6 | | 56·5 | 1·7 | |
| 9·4 | 34 | 15·0 | 39·4 | 9·2 |
| 9·8 | | 29·5 | 45·3 | |
| 9·8 | | 45·0 | 41·2 | |
| 4·7 | 35 | 52·0 | 45·7 | 5·0 GSctr |
| 9·6 | 36 | 5·0 | 10·2 | |
| 9·8 | 37 | 3·0 | 55·0 | |
| 8·5 | | 18·5 | 41·2 | 8·5 |
| 9·8 | | 55·0 | 14·2 | |
| 9·8 | | 59·4 | 1·1 | |
| 9·8 | 38 | 7·5 | 21·2 | |
| 9·8 | | 23·2 | 9·0 | |
| 9·6 | | 28·2 | 9·2 | |
| 8·7 | | 33·0 | 27·7 | 9·0 |
| 9·8 | | 41·5 | 18·9 | |
| 9·4 | | 48·0 | 57·7 | |
| 9·8 | | 54·5 | 36·2 | |
| 8·6 | 39 | 5·0 | 35·2 | 8·0 |
| 9·4 | | 9·0 | 0·9 | |
| 8·9 | | 13·0 | 39·0 | |
| 9·8 | | 18·5 | 4·0 | |
| 9·8 | | 52·5 | 35·0 | |
| 9·8 | 40 | 49·0 | 33·1 | |
| 9·6 | | 52·5 | 17·4 | |
| 9·8 | 41 | 43·5 | 27·7 | 8·8 |
| 9·1 | 43 | 37·5 | 32·1 | 8·2 |
| 9·8 | | 39·5 | 32·7 | |
| 8·4 | | 58·0 | 27·4 | 9·2 |

### 1501—1560.

| mag. | 9h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·2 | 44 | 7·0 | 32·6 | 9·5 |
| 8·1 | | 23·0 | 26·0 | 8·2 |
| 9·1 | | 27·3 | 0·1 | 9·5 |
| 9·4 | | 35·5 | 9·4 | |
| 9·8 | | 54·5 | 44·0 | |
| 9·8 | 45 | 5·5 | 51·4 | |
| 9·4 | | 15·0 | 39·4 | |
| 8·0 | 46 | 25·0 | 0·7 | 8·5 |
| 9·8 | | 39·5 | 3·3 | |
| 8·4 | | 45·5 | 23·0 | 9·0 |
| 9·2 | 47 | 4·0 | 30·4 | 9·0 |
| 9·6 | | 11·5 | 59·2 | |
| 9·8 | | 25·5 | 46·4 | |
| 9·5 | | 29·0 | 31·2 | 8·5 G |
| 9·8 | | 52·5 | 9·4 | |
| 8·2 | | 54·5 | 0·5 | 8·0 GS |
| 9·5 | | 57·5 | 16·3 | |
| 9·6 | 48 | 39·0 | 7·2 | |
| 8·6 | | 40·5 | 24·1 | 9·0 |
| 9·1 | | 54·5 | 14·3 | |
| 9·4 | 49 | 15·5 | 28·3 | |
| 9·3 | | 26·5 | 5·7 | |
| 9·6 | | 43·5 | 40·2 | |
| 9·8 | | 48·5 | 39·1 | |
| 9·8 | | 53·5 | 5·4 | |
| 9·8 | 50 | 39·5 | 5·3 | |
| 9·3 | | 50·0 | 49·1 | |
| 9·8 | 51 | 1·5 | 0·5 | |
| 8·4 | | 8·5 | 3·1 | 8·0 |
| 9·8 | | 43·0 | 33·2 | 9·5 |
| 9·8 | | 58·5 | 3·1 | |
| 9·8 | 52 | 6·0 | 50·2 | |
| 9·5 | | 7·5 | 5·4 | |
| 9·8 | | 9·5 | 0·8 | |
| 9·8 | | 29·0 | 4·9 | |
| 9·8 | | 55·2 | 5·4 | |
| 10·0 | 53 | 2·5 | 3·1 | |
| 10·0 | | 7·0 | 49·7 | |
| 10·0 | | 18·0 | 36·3 | |
| 8·9 | | 19·5 | 42·9 | 9·5 |
| 9·0 | | 27·0 | 26·9 | |
| 9·7 | | 33·5 | 10·9 | |
| 10·0 | | 43·0 | 3·5 | |
| 9·9 | | 52·5 | 59·1 | |
| 9·8 | | 53·5 | 37·6 | |
| 10·0 | | 59·0 | 15·0 | |
| 9·6 | | 59·5 | 42·8 | |
| 8·6 | 54 | 3·8 | 9·1 | 8·0 |
| 10·0 | | 5·5 | 44·7 | |
| 10·0 | | 8·0 | 12·1 | |
| 10·0 | | 11·5 | 35·7 | |
| 9·6 | | 13·5 | 20·6 | |
| 10·0 | | 14·0 | 36·1 | |
| 10·0 | | 23·5 | 14·9 | |
| 9·6 | | 24·5 | 16·8 | |
| 10·0 | | 28·0 | 21·5 | |
| 9·6 | | 50·5 | 33·6 | |
| 9·4 | | 50·8 | 55·5 | |
| 9·8 | | 54·0 | 54·5 | |
| 9·8 | | 55·0 | 11·1 | |

### 1561—1620.

| mag. | 9h.—10h. m | s | −60° ′ |
|---|---|---|---|
| 9·8 | 55 | 2·5 | 52·2 |
| 10·0 | | 6·0 | 11·1 |
| 9·8 | | 6·5 | 19·3 |
| 10·0 | | 7·5 | 7·1 |
| 10·0 | | 25·0 | 39·3 |
| 9·6 | | 49·5 | 35·9 |
| 9·2 | | 57·8 | 42·5 |
| 10·0 | 56 | 2·5 | 46·4 |
| 9·6 | | 3·0 | 35·1 |
| 9·9 | | 8·0 | 6·5 |
| 9·3 | | 9·8 | 46·3 |
| 10·0 | | 10·0 | 50·9 |
| 10·0 | | 12·0 | 49·3 |
| 10·0 | | 19·5 | 0·5 |
| 9·7 | | 19·5 | 20·6 |
| 10·0 | | 21·5 | 48·5 |
| 9·5 | | 28·0 | 38·7 |
| 9·4 | | 28·0 | 54·9 |
| 9·2 | | 38·0 | 27·9 |
| 9·6 | | 57·5 | 32·9 |
| 9·9 | 57 | 14·0 | 53·7 |
| 9·9 | | 18·5 | 54·3 |
| 9·8 | | 22·0 | 43·9 |
| 8·8 | | 22·0 | 22·9 |
| 10·0 | | 22·5 | 3·9 |
| 10·0 | | 30·5 | 55·6 |
| 9·6 | | 33·5 | 15·6 |
| 10·0 | | 40·0 | 26·2 |
| 9·2 | 58 | 1·0 | 24·9 |
| 9·2 | | 2·0 | 46·9 |
| 10·0 | | 3·0 | 48·9 |
| 10·0 | | 3·5 | 29·5 |
| 9·8 | | 6·5 | 13·6 |
| 9·9 | | 13·0 | 5·1 |
| 9·6 | | 14·0 | 3·1 |
| 10·0 | | 14·5 | 58·4 |
| 10·0 | | 19·0 | 44·7 |
| 9·6 | | 21·5 | 54·5 |
| 10·0 | | 23·5 | 12·9 |
| 9·4 | | 24·5 | 28·5 |
| 10·0 | | 34·5 | 56·9 |
| 8·4 | | 47·0 | 42·1 |
| 10·0 | | 47·0 | 1·1 |
| 10·0 | | 50·0 | 34·9 |
| 9·6 | | 50·0 | 32·7 |
| 10·0 | | 54·0 | 3·3 |
| 10·0 | | 57·5 | 3·8 |
| 9·1 | | 58·0 | 3·1 |
| 9·6 | 59 | 6·5 | 44·1 |
| 8·9 | | 8·0 | 8·1 |
| 9·8 | | 32·5 | 25·8 |
| 10·0 | | 41·5 | 20·5 |
| 10·0 | | 43·5 | 10·1 |
| 9·2 | | 43·5 | 21·7 |
| 9·8 | | 47·0 | 14·1 |
| 10·0 | | 52·0 | 13·2 |
| 10·0 | | 56·0 | 1·3 |
| 9·8 | | 56·5 | 2·5 |
| 10·0 | | 59·0 | 5·7 |
| 9·2 | 0 | 1·5 | 42·2 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 10 | 37 | 6·2 |
| | 20 | 39 | 6·4 |
| | 30 | 41 | 6·6 |
| | 40 | 43 | 6·8 |
| | 50 | 45 | 7·0 |
| 10 | 0 | 47 | 7·2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 9 | 50 | 45 | 7·0 |
| 10 | 0 | 47 | 7·2 |
| | 10 | 50 | 7·4 |
| | 20 | 52 | 7·6 |

## 1621—1680.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 3·5 | 32·5 | |
| 9·0 | | 5·5 | 55·1 | |
| 9·0 | | 8·5 | 29·1 | |
| 9·8 | | 11·5 | 53·1 | |
| 10·0 | | 13·0 | 6·5 | |
| 9·9 | | 24·0 | 57·0 | |
| 10·0 | | 27·5 | 2·7 | |
| 9·4 | | 36·5 | 12·3 | |
| 9·5 | | 38·5 | 22·9 | |
| 10·0 | | 52·0 | 18·3 | |
| 10·0 | | 52·0 | 13·1 | |
| 9·2 | 1 | 0·0 | 57·1 | |
| 10·0 | | 2·5 | 52·1 | |
| 9·5 | | 4·0 | 23·3 | |
| 9·6 | | 6·5 | 18·9 | |
| 9·0 | | 6·5 | 6·1 | |
| 9·5 | | 7·5 | 59·5 | |
| 10·0 | | 21·0 | 49·5 | |
| 10·0 | | 25·5 | 55·1 | |
| 9·4 | | 32·5 | 38·9 | |
| 9·8 | | 33·0 | 25·3 | |
| 10·0 | | 40·0 | 21·2 | |
| 10·0 | | 40·5 | 59·7 | |
| 10·0 | | 41·0 | 11·2 | |
| 10·0 | | 43·5 | 14·5 | |
| 8·6 | | 46·5 | 33·9 | 7·5 G |
| 10·0 | | 49·5 | 48·9 | |
| 10·0 | | 53·5 | 48·3 | |
| 10·0 | | 56·0 | 52·0 | |
| 8·9 | | 56·5 | 21·9 | |
| 9·7 | | 57·0 | 31·3 | |
| 9·6 | | 57·0 | 1·7 | |
| 9·8 | | 57·5 | 25·1 | |
| 9·0 | | 59·5 | 16·0 | |
| 9·8 | 2 | 2·5 | 40·9 | |
| 10·0 | | 2·5 | 15·9 | |
| 10·0 | | 4·5 | 41·1 | |
| 10·0 | | 7·0 | 40·1 | |
| 9·2 | | 12·0 | 20·6 | |
| 10·0 | | 13·5 | 39·1 | |
| 9·8 | | 14·0 | 13·9 | |
| 9·8 | | 15·5 | 33·2 | |
| 9·9 | | 19·0 | 15·2 | |
| 9·5 | | 26·5 | 23·1 | |
| 10·0 | | 31·5 | 43·9 | |
| 9·2 | | 32·5 | 40·3 | |
| 9·2 | | 34·5 | 12·5 | |
| 9·1 | | 44·0 | 28·5 | 9·5 |
| 9·8 | | 45·0 | 5·1 | |
| 10·0 | | 50·5 | 31·0 | |
| 9·4 | | 56·5 | 13·1 | |
| 9·5 | 3 | 1·0 | 17·7 | |
| 7·6 | | 3·0 | 36·2 | 8·0 GSr |
| 9·5 | | 18·5 | 9·1 | |
| 10·0 | | 27·0 | 59·2 | |
| 10·0 | | 31·0 | 32·2 | |
| 10·0 | | 39·0 | 54·0 | |
| 9·0 | | 39·5 | 29·1 | 9·5 |
| 9·9 | | 42·5 | 43·5 | |
| 9·8 | | 47·0 | 8·8 | |

## 1681—1740.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 3 | 49·5 | 0·3 | |
| 9·3 | | 53·0 | 40·5 | |
| 10·0 | | 55·0 | 50·7 | |
| 9·3 | | 56·5 | 32·6 | |
| 10·0 | 4 | 3·5 | 45·4 | |
| 8·6 | | 3·5 | 19·1 | 9·0 |
| 9·9 | | 20·5 | 10·6 | |
| 9·6 | | 32·0 | 40·9 | |
| 8·6 | | 34·5 | 17·3 | |
| 9·0 | | 38·0 | 41·6 | |
| 9·6 | | 39·0 | 50·1 | |
| 9·1 | | 49·0 | 18·1 | |
| 10·0 | | 49·5 | 7·6 | |
| 9·1 | | 52·0 | 18·5 | |
| 8·6 | | 53·5 | 34·8 | 8·5 G |
| 9·3 | 5 | 8·5 | 41·1 | |
| 8·8 | | 11·5 | 28·3 | 9·5 |
| 9·7 | | 13·0 | 36·9 | |
| 9·5 | | 14·5 | 36·5 | |
| 9·8 | | 21·0 | 39·1 | |
| 8·4 | | 22·5 | 56·2 | 8·0 GSg |
| 10·0 | | 22·5 | 11·1 | |
| 10·0 | | 28·5 | 25·1 | |
| 10·0 | | 29·0 | 46·9 | |
| 9·2 | | 35·0 | 33·5 | 9·5 |
| 9·1 | | 37·0 | 47·8 | 9·0 |
| 10·0 | | 37·5 | 26·0 | |
| 8·8 | | 43·5 | 22·9 | |
| 9·8 | | 48·5 | 25·9 | |
| 9·9 | | 53·3 | 57·5 | |
| 9·5 | | 56·5 | 43·5 | |
| 9·6 | | 58·0 | 41·9 | |
| 9·4 | 6 | 1·5 | 37·2 | |
| 9·8 | | 12·5 | 0·9 | |
| 10·0 | | 13·5 | 32·5 | |
| 9·2 | | 13·5 | 46·7 | |
| 10·0 | | 20·5 | 3·5 | |
| 10·0 | | 22·0 | 31·4 | |
| 9·4 | | 25·5 | 2·0 | |
| 9·9 | | 29·0 | 39·8 | |
| 9·1 | | 35·0 | 19·9 | |
| 10·0 | | 36·5 | 41·3 | |
| 8·7 | | 42·0 | 19·5 | 9·5 |
| 10·0 | | 50·0 | 58·5 | |
| 9·7 | | 50·0 | 8·4 | |
| 10·0 | | 50·5 | 8·7 | |
| 9·9 | 7 | 1·5 | 49·7 | |
| 9·9 | | 3·5 | 37·2 | |
| 9·5 | | 5·5 | 32·7 | |
| 9·6 | | 6·5 | 40·9 | |
| 10·0 | | 13·5 | 43·8 | |
| 9·2 | | 28·5 | 7·9 | 9·5 |
| 10·0 | | 28·5 | 43·5 | |
| 8·6 | | 29·0 | 37·4 | 8·5 |
| 10·0 | | 32·0 | 58·1 | |
| 10·0 | | 33·5 | 32·2 | |
| 8·9 | | 33·5 | 55·3 | 9·5 |
| 8·6 | | 36·0 | 13·1 | |
| 9·5 | | 42·0 | 37·8 | |
| 9·6 | | 42·5 | 4·3 | |

## 1741—1800.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 7 | 44·0 | 10·3 | |
| 7·3 | | 47·5 | 55·5 | 8·0 GSgt |
| 10·0 | | 49·0 | 8·8 | |
| 10·0 | | 50·0 | 15·1 | |
| 10·0 | | 54·5 | 0·0 | |
| 10·0 | | 59·5 | 51·3 | |
| 9·9 | 8 | 2·3 | 16·4 | |
| 9·2 | | 4·0 | 59·1 | |
| 9·6 | | 5·5 | 53·0 | 9·5 |
| 10·0 | | 8·3 | 48·0 | |
| 10·0 | | 11·5 | 13·2 | |
| 9·4 | | 11·5 | 24·1 | |
| 10·0 | | 17·0 | 46·1 | |
| 9·6 | | 22·5 | 13·3 | |
| 9·4 | | 29·5 | 10·7 | |
| 9·8 | | 32·0 | 20·1 | |
| 9·6 | | 32·5 | 14·3 | |
| 9·6 | | 38·5 | 41·9 | |
| 9·9 | | 39·0 | 32·9 | |
| 10·0 | | 39·0 | 0·1 | |
| 10·0 | | 47·5 | 4·1 | |
| 10·0 | | 50·5 | 18·1 | |
| 9·8 | | 51·0 | 25·1 | |
| 9·8 | | 55·3 | 20·9 | |
| 8·4 | | 56·0 | 33·5 | G |
| 10·0 | | 57·5 | 0·1 | |
| 10·0 | | 59·3 | 12·0 | |
| 9·9 | 9 | 5·3 | 33·5 | |
| 9·0 | | 11·5 | 8·4 | 10·0 |
| 9·2 | | 12·0 | 13·4 | |
| 9·5 | | 12·5 | 28·9 | |
| 10·0 | | 15·5 | 26·5 | |
| 9·2 | | 17·0 | 4·1 | |
| 9·6 | | 32·5 | 14·3 | 10·0 |
| 9·5 | | 34·0 | 37·4 | |
| 9·5 | | 39·5 | 15·5 | |
| 10·0 | | 42·0 | 44·0 | |
| 10·0 | | 46·3 | 27·3 | |
| 9·6 | | 48·5 | 50·1 | |
| 9·4 | | 49·0 | 0·5 | |
| 10·0 | | 57·0 | 57·1 | |
| 10·0 | | 59·0 | 48·5 | |
| 9·0 | 10 | 2·3 | 37·9 | 9·5 |
| 10·0 | | 12·5 | 4·1 | 9·5 G |
| 9·0 | | 12·5 | 25·1 | |
| 10·0 | | 17·5 | 12·7 | |
| 10·0 | | 20·0 | 39·1 | |
| 9·5 | | 22·5 | 41·1 | |
| 9·9 | | 29·0 | 37·9 | |
| 10·0 | | 38·0 | 25·5 | |
| 8·6 | | 42·5 | 7·1 | 9·5 |
| 10·0 | | 49·0 | 1·0 | |
| 9·5 | | 52·5 | 18·1 | |
| 10·0 | | 53·0 | 57·1 | |
| 9·2 | 11 | 1·0 | 22·5 | |
| 10·0 | | 9·3 | 57·1 | |
| 9·9 | | 12·0 | 30·3 | |
| 10·0 | | 16·3 | 23·7 | |
| 8·8 | | 19·0 | 6·9 | 9·0 |
| 10·0 | | 20·3 | 31·9 | |

## 1801—1860.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 29·3 | 31·0 | |
| 9·5 | | 31·0 | 2·6 | |
| 9·4 | | 33·5 | 7·1 | |
| 10·0 | | 33·5 | 20·1 | |
| 9·5 | | 41·5 | 58·5 | |
| 10·0 | | 46·5 | 45·3 | |
| 8·9 | | 49·5 | 5·4 | 9·5 |
| 10·0 | | 50·0 | 47·1 | |
| 9·8 | 12 | 12·0 | 38·1 | |
| 10·0 | | 12·0 | 8·2 | |
| 10·0 | | 13·0 | 3·1 | |
| 9·6 | | 32·0 | 22·1 | |
| 9·8 | | 32·0 | 52·7 | |
| 10·0 | | 39·0 | 53·3 | |
| 9·8 | | 42·3 | 5·9 | |
| 10·0 | | 46·0 | 37·4 | |
| 6·1 | | 54·0 | 42·4 | 3·5 GSctr |
| 10·0 | | 58·0 | 38·6 | |
| 10·0 | | 58·5 | 2·0 | |
| 9·8 | 13 | 4·5 | 52·3 | |
| 10·0 | | 7·0 | 43·1 | |
| 9·8 | | 8·5 | 41·9 | |
| 10·0 | | 26·0 | 59·2 | |
| 9·2 | | 36·0 | 18·2 | |
| 10·0 | | 36·5 | 47·0 | |
| 9·8 | | 38·0 | 10·2 | |
| 10·0 | | 39·5 | 38·4 | |
| 9·8 | | 42·0 | 44·2 | |
| 10·0 | | 42·5 | 57·9 | |
| 9·8 | | 46·5 | 27·2 | 9·5 |
| 9·1 | | 56·0 | 16·1 | |
| 10·0 | 14 | 2·0 | 43·2 | |
| 10·0 | | 20·5 | 0·7 | |
| 10·0 | | 22·0 | 34·6 | |
| 9·8 | | 27·0 | 16·4 | |
| 9·2 | | 34·5 | 19·2 | 9·0 |
| 9·2 | | 41·5 | 9·2 | |
| 9·2 | | 42·5 | 0·0 | |
| 9·2 | | 44·0 | 45·2 | 8·5 G |
| 9·4 | | 50·5 | 5·9 | |
| 9·0 | | 57·0 | 11·2 | |
| 8·0 | 15 | 0·5 | 28·8 | 8·2 G |
| 9·1 | | 16·0 | 8·4 | |
| 9·8 | | 19·0 | 19·0 | |
| 9·1 | | 20·5 | 3·2 | |
| 9·6 | | 37·0 | 1·2 | |
| 10·0 | | 41·0 | 0·2 | |
| 10·0 | | 48·5 | 3·2 | |
| 10·0 | | 50·5 | 4·2 | |
| 10·0 | | 52·8 | 59·6 | |
| 10·0 | 16 | 18·0 | 42·0 | |
| 9·6 | | 32·0 | 32·7 | |
| 9·1 | | 39·0 | 18·0 | 8·5 |
| 10·0 | | 42·0 | 26·0 | |
| 9·9 | 17 | 3·5 | 49·2 | |
| 9·1 | | 7·0 | 26·6 | 9·0 |
| 9·8 | | 13·5 | 33·8 | |
| 10·0 | | 29·5 | 11·4 | |
| 9·7 | | 36·0 | 10·8 | |
| 9·8 | | 37·0 | 32·6 | |



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### 1861—1920.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 17 | 38·0 | 4·0 | |
| 10·0 | | 41·0 | 0·3 | |
| 10·0 | | 42·0 | 37·3 | |
| 10·0 | | 46·0 | 37·3 | |
| 10·0 | | 52·5 | 1·1 | |
| 10·0 | | 58·5 | 46·6 | |
| 10·0 | 18 | 4·0 | 9·1 | |
| 10·0 | | 6·0 | 3·7 | |
| 10·0 | | 6·0 | 46·2 | |
| 10·0 | | 10·0 | 23·2 | |
| 9·2 | | 10·5 | 21·6 | |
| 9·6 | | 27·0 | 10·6 | |
| 9·1 | | 37·0 | 2·4 | 8·5 G |
| 8·4 | | 47·5 | 38·0 | 8·0 G |
| 10·0 | | 47·5 | 11·2 | |
| 10·0 | | 51·5 | 25·1 | |
| 10·0 | 19 | 3·5 | 35·7 | |
| 9·8 | | 14·0 | 29·1 | |
| 9·6 | | 21·0 | 25·3 | |
| 9·9 | | 21·0 | 17·5 | |
| 8·6 | | 24·5 | 56·1 | 8·0 G |
| 9·5 | | 25·5 | 12·7 | |
| 9·9 | | 29·5 | 28·1 | |
| 9·8 | | 33·0 | 23·1 | |
| 10·0 | | 39·5 | 34·7 | |
| 9·9 | | 43·5 | 43·7 | |
| 10·0 | | 48·5 | 42·4 | |
| 10·0 | | 48·5 | 57·3 | |
| 9·2 | | 54·0 | 26·5 | |
| 7·5 | 20 | 5·0 | 55·1 | 8·0 GSt |
| 10·0 | | 13·0 | 21·1 | |
| 9·2 | | 19·0 | 53·1 | |
| 10·0 | | 19·5 | 37·7 | |
| 9·7 | | 37·0 | 37·6 | |
| 9·9 | | 41·5 | 11·1 | |
| 9·7 | | 44·0 | 29·7 | |
| 10·0 | | 48·0 | 21·5 | |
| 10·0 | | 50·0 | 19·5 | |
| 10·0 | 21 | 11·5 | 40·7 | |
| 9·5 | | 16·5 | 27·1 | |
| 10·0 | | 17·0 | 3·1 | |
| 8·1 | | 22·5 | 11·9 | 8·5 G |
| 10·0 | | 50·0 | 46·1 | |
| 8·8 | 22 | 0·5 | 9·0 | 9·0 |
| 9·4 | | 14·0 | 15·2 | |
| 9·4 | | 16·0 | 11·1 | 9·5 |
| 9·5 | | 22·5 | 59·7 | |
| 10·0 | | 30·5 | 38·5 | |
| 9·2 | | 32·0 | 1·8 | 9·5 |
| 9·3 | | 52·5 | 0·7 | |
| 8·8 | 23 | 2·0 | 4·1 | 9·5 |
| 9·6 | | 3·5 | 48·4 | |
| 9·6 | | 9·5 | 20·8 | 9·0 |
| 9·3 | | 13·5 | 1·5 | |
| 9·6 | | 21·0 | 12·3 | |
| 9·9 | | 22·5 | 51·9 | |
| 10·0 | | 23·5 | 46·7 | |
| 9·6 | | 23·5 | 11·2 | |
| 9·9 | | 33·0 | 6·7 | |
| 10·0 | | 41·0 | 52·7 | |

### 1921—1980.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 23 | 48·5 | 56·7 | |
| 10·0 | 24 | 3·0 | 7·7 | |
| 9·8 | | 4·0 | 24·8 | |
| 10·0 | | 17·5 | 14·1 | |
| 8·0 | | 22·5 | 15·3 | 8·5 GSt |
| 10·0 | | 25·0 | 50·9 | |
| 10·0 | | 27·5 | 14·1 | |
| 9·9 | | 28·5 | 29·2 | |
| 9·5 | | 29·0 | 31·3 | |
| 8·9 | | 33·0 | 20·1 | |
| 9·5 | | 33·5 | 10·3 | |
| 9·7 | | 42·0 | 20·9 | |
| 10·0 | 25 | 3·0 | 7·3 | |
| 10·0 | | 8·0 | 46·1 | |
| 9·5 | | 14·0 | 24·8 | 9·0 |
| 10·0 | | 19·0 | 3·2 | |
| 9·9 | | 22·5 | 42·5 | |
| 8·9 | | 27·0 | 28·0 | 9·5 |
| 10·0 | | 31·0 | 35·1 | |
| 9·7 | | 50·5 | 22·5 | |
| 9·6 | | 56·0 | 5·7 | 9·0 |
| 10·0 | | 59·5 | 10·3 | |
| 9·9 | 26 | 1·0 | 35·1 | |
| 7·4 | | 7·5 | 41·7 | 8·0 G |
| 8·6 | | 12·5 | 42·9 | 7·0 GSt |
| 10·0 | | 19·0 | 40·1 | |
| 9·8 | | 29·5 | 36·1 | |
| 8·0 | | 32·3 | 58·4 | 8·5 |
| 8·0 | | 41·5 | 56·1 | 8·5 |
| 9·3 | | 48·5 | 55·3 | |
| 9·8 | | 49·5 | 26·1 | |
| 10·0 | 27 | 4·3 | 25·0 | |
| 10·0 | | 6·0 | 43·3 | |
| 9·2 | | 7·5 | 4·0 | |
| 10·0 | | 10·0 | 36·2 | |
| 9·1 | | 31·5 | 6·1 | |
| 10·0 | | 37·0 | 9·3 | |
| 9·3 | | 44·5 | 34·1 | |
| 10·0 | | 53·0 | 48·9 | |
| 10·0 | | 53·5 | 50·6 | |
| 9·4 | | 53·5 | 6·1 | |
| 8·7 | | 59·0 | 40·3 | |
| 10·0 | 28 | 2·5 | 25·0 | |
| 9·9 | | 4·0 | 38·2 | |
| 9·8 | | 12·5 | 21·7 | |
| 9·9 | | 19·5 | 29·5 | |
| 8·6 | | 29·0 | 53·2 | 9·0 |
| 9·0 | | 29·0 | 12·1 | |
| 10·0 | | 32·5 | 7·3 | |
| 10·0 | | 37·0 | 45·1 | |
| 10·0 | | 37·0 | 16·3 | |
| 10·0 | | 39·5 | 21·1 | |
| 9·5 | | 43·0 | 35·5 | |
| 9·3 | | 45·0 | 47·1 | |
| 9·3 | | 47·5 | 16·3 | |
| 9·2 | | 54·0 | 29·5 | 8·8 |
| 9·0 | | 57·0 | 44·9 | |
| 8·9 | 29 | 9·5 | 35·8 | |
| 10·0 | | 12·0 | 56·1 | |
| 9·6 | | 26·7 | 11·1 | |

### 1981—2040.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 29 | 29·5 | 25·0 | |
| 9·8 | | 40·0 | 21·1 | |
| 8·2 | | 40·3 | 20·6 | 7·0 GSct |
| 9·7 | | 45·0 | 32·7 | |
| 9·0 | | 46·0 | 22·0 | |
| 9·7 | | 48·5 | 6·5 | |
| 9·7 | | 50·0 | 50·6 | |
| 9·6 | | 51·0 | 8·1 | |
| 9·0 | | 51·0 | 17·2 | 9·2 |
| 9·8 | | 51·5 | 18·1 | |
| 9·8 | | 52·2 | 18·1 | |
| 9·8 | | 54·0 | 6·6 | |
| 9·8 | | 54·5 | 17·0 | |
| 9·8 | | 56·0 | 40·9 | |
| 9·2 | | 59·0 | 17·9 | |
| 9·9 | | 59·5 | 5·5 | |
| 9·4 | 30 | 3·0 | 50·8 | |
| 9·9 | | 6·0 | 52·9 | |
| 9·8 | | 6·5 | 24·0 | |
| 9·6 | | 14·5 | 30·2 | |
| 9·2 | | 14·5 | 39·1 | |
| 9·8 | | 15·0 | 49·0 | |
| 9·7 | | 20·0 | 18·8 | |
| 9·5 | | 20·0 | 16·3 | |
| 9·7 | | 23·0 | 35·0 | |
| 9·8 | | 25·5 | 55·8 | |
| 9·6 | | 27·0 | 16·0 | |
| 9·8 | | 31·5 | 33·5 | |
| 9·4 | | 32·3 | 30·2 | |
| 9·9 | | 32·5 | 31·9 | |
| 9·8 | | 39·5 | 47·0 | |
| 9·8 | | 40·5 | 42·0 | |
| 9·9 | | 43·0 | 45·0 | |
| 9·3 | | 45·8 | 18·1 | |
| 9·6 | | 47·3 | 33·5 | |
| 9·7 | | 48·0 | 9·7 | |
| 9·9 | | 49·0 | 45·6 | |
| 9·8 | | 49·5 | 21·8 | |
| 9·2 | | 57·8 | 8·5 | |
| 9·8 | | 59·5 | 12·0 | |
| 9·6 | 31 | 13·5 | 18·9 | |
| 9·3 | | 14·5 | 37·4 | G |
| 9·7 | | 20·5 | 47·9 | |
| 9·7 | | 22·5 | 17·9 | |
| 9·5 | | 24·5 | 46·9 | 9·5 |
| 9·0 | | 26·5 | 14·8 | 9·5 |
| 9·2 | | 32·0 | 7·4 | |
| 9·8 | | 32·0 | 39·1 | |
| 9·8 | | 33·0 | 1·9 | |
| 9·9 | | 38·0 | 12·2 | |
| 9·2 | | 41·5 | 44·4 | |
| 9·7 | | 43·0 | 37·6 | |
| 9·4 | | 43·5 | 21·8 | 9·0 |
| 9·8 | | 46·5 | 58·9 | |
| 9·7 | | 47·0 | 41·9 | |
| 9·6 | | 57·0 | 20·6 | |
| 9·6 | 32 | 3·0 | 49·7 | |
| 9·8 | | 3·5 | 37·8 | |
| 9·7 | | 6·5 | 36·8 | |
| 9·0 | | 13·5 | 4·3 | |

### 2041—2100.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 32 | 13·5 | 15·7 | |
| 9·9 | | 14·0 | 48·9 | |
| 9·8 | | 15·5 | 10·9 | |
| 9·7 | | 16·5 | 9·0 | |
| 9·6 | | 17·0 | 14·4 | |
| 9·7 | | 17·0 | 9·8 | |
| 9·8 | | 18·0 | 18·3 | |
| 9·8 | | 19·5 | 54·9 | |
| 9·7 | | 22·0 | 42·0 | |
| 9·8 | | 25·0 | 49·6 | |
| 9·7 | | 33·5 | 41·7 | |
| 9·8 | | 33·7 | 57·9 | |
| 9·6 | | 35·0 | 32·7 | |
| 9·8 | | 39·0 | 45·6 | |
| 9·7 | | 40·5 | 6·3 | |
| 9·8 | | 42·5 | 5·8 | |
| 9·8 | | 42·5 | 5·3 | |
| 9·8 | | 44·5 | 6·9 | |
| 9·8 | | 48·0 | 19·9 | |
| 9·7 | | 48·5 | 40·3 | |
| 9·4 | | 53·0 | 30·0 | |
| 9·7 | | 53·0 | 49·0 | |
| 9·7 | | 59·5 | 20·6 | |
| 8·8 | 33 | 0·0 | 9·6 | 9·0 |
| 9·2 | | 3·5 | 58·9 | 8·5 |
| 9·3 | | 3·5 | 54·5 | |
| 9·4 | | 3·5 | 32·6 | |
| 9·6 | | 5·0 | 38·9 | |
| 9·9 | | 7·0 | 7·1 | |
| 9·6 | | 7·5 | 27·0 | |
| 9·5 | | 8·5 | 36·0 | |
| 9·8 | | 9·0 | 28·4 | |
| 9·4 | | 10·5 | 49·5 | |
| 9·7 | | 12·5 | 9·9 | |
| 9·9 | | 13·5 | 20·1 | |
| 9·7 | | 20·0 | 27·5 | |
| 8·7 | | 20·5 | 37·5 | 9·0 G |
| 9·9 | | 23·5 | 27·5 | |
| 9·4 | | 25·5 | 52·9 | 9·2 |
| 9·8 | | 29·5 | 29·9 | |
| 9·8 | | 31·0 | 3·0 | |
| 9·4 | | 32·0 | 31·0 | |
| 9·6 | | 32·0 | 35·9 | |
| 9·4 | | 33·5 | 39·2 | |
| 9·8 | | 35·0 | 28·4 | |
| 9·7 | | 37·0 | 57·7 | |
| 9·4 | | 41·0 | 47·4 | |
| 9·8 | | 43·5 | 38·4 | |
| 9·8 | | 46·5 | 33·9 | |
| 9·8 | | 46·5 | 13·3 | |
| 9·8 | | 47·0 | 53·5 | |
| 9·5 | | 50·0 | 28·5 | |
| 9·8 | | 51·0 | 33·1 | |
| 9·6 | | 53·0 | 23·4 | |
| 9·6 | | 53·5 | 53·7 | |
| 9·4 | | 55·0 | 41·0 | |
| 9·7 | | 57·0 | 16·9 | |
| 9·8 | | 59·5 | 20·7 | |
| 9·8 | 34 | 0·0 | 7·9 | |
| 9·8 | | 0·5 | 26·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 50 | 7·4 |
| | 20 | 52 | 7·6 |
| | 30 | 54 | 7·7 |
| | 40 | 57 | 7·9 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 54 | 7·7 |
| | 40 | 57 | 7·9 |
| | 50 | 59 | 8·0 |

## 2101—2160.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 34 | 0·5 | 7·9 | |
| 9·8 | | 1·0 | 12·0 | |
| 9·4 | | 2·5 | 29·4 | |
| 9·7 | | 5·0 | 39·2 | |
| 9·6 | | 9·0 | 35·0 | |
| 9·8 | | 10·0 | 10·5 | |
| 9·8 | | 11·5 | 42·8 | |
| 9·8 | | 13·5 | 11·0 | |
| 9·9 | | 14·5 | 15·6 | |
| 9·9 | | 20·5 | 12·4 | |
| 9·6 | | 20·5 | 51·0 | |
| 9·4 | | 30·5 | 59·9 | |
| 9·8 | | 32·0 | 51·2 | |
| 9·6 | | 33·5 | 9·0 | |
| 9·2 | | 35·0 | 4·2 | |
| 9·4 | | 43·0 | 30·0 | 9·2 |
| 8·8 | | 43·5 | 21·1 | |
| 8·9 | | 43·5 | 20·2 | |
| 9·7 | | 45·0 | 27·4 | |
| 9·0 | | 47·5 | 26·0 | 7·8 G |
| 9·7 | | 50·5 | 53·0 | |
| 7·2 | | 50·5 | 20·0 | 7·0 GSt |
| 8·9 | | 58·0 | 56·5 | 9·5 |
| 9·8 | | 59·0 | 25·0 | |
| 8·8 | 35 | 3·5 | 38·4 | 9·0 |
| 8·8 | | 6·5 | 15·7 | |
| 9·4 | | 6·5 | 34·4 | |
| 9·4 | | 11·5 | 46·1 | |
| 8·6 | | 12·0 | 20·7 | 8·5 |
| 9·7 | | 12·0 | 23·1 | |
| 9·8 | | 13·0 | 34·9 | |
| 9·7 | | 15·0 | 4·0 | |
| 9·8 | | 15·5 | 9·0 | |
| 9·7 | | 21·5 | 29·6 | |
| 9·2 | | 22·0 | 9·1 | |
| 9·9 | | 23·5 | 48·1 | |
| 9·9 | | 32·0 | 58·2 | |
| 9·9 | | 33·0 | 1·5 | |
| 9·9 | | 35·5 | 56·8 | |
| 9·8 | | 36·0 | 19·7 | |
| 9·2 | | 42·0 | 32·1 | 8·5 |
| 9·2 | | 42·0 | 7·7 | |
| 9·9 | | 54·0 | 38·3 | |
| 9·8 | 36 | 3·0 | 20·6 | |
| 9·7 | | 5·5 | 54·1 | |
| 9·8 | | 6·0 | 50·0 | |
| 9·7 | | 8·0 | 43·0 | |
| 9·7 | | 8·0 | 16·9 | |
| 9·8 | | 10·0 | 48·9 | |
| 8·8 | | 10·0 | 57·0 | |
| 9·6 | | 10·5 | 48·0 | |
| 9·9 | | 12·0 | 42·0 | |
| 9·9 | | 15·5 | 36·0 | |
| 9·9 | | 18·5 | 10·8 | |
| 9·9 | | 20·0 | 42·0 | |
| 9·8 | | 20·5 | 44·7 | |
| 9·8 | | 21·0 | 43·6 | |
| 9·6 | | 31·0 | 9·2 | |
| 8·9 | | 31·5 | 1·1 | |
| 9·2 | | 41·0 | 7·5 | |

## 2161—2220.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 36 | 46·5 | 55·4 | |
| 8·8 | | 47·5 | 22·6 | 9·0 |
| 9·7 | | 50·0 | 22·4 | |
| 9·6 | | 50·0 | 49·0 | |
| 9·9 | | 53·5 | 53·6 | |
| 8·8 | | 56·0 | 50·7 | 8·5 |
| 9·9 | 37 | 6·0 | 59·5 | |
| 9·8 | | 8·0 | 46·6 | |
| 9·8 | | 9·5 | 30·1 | |
| 9·4 | | 11·5 | 41·9 | 9·5 |
| 9·0 | | 12·5 | 46·0 | 9·0 |
| 9·9 | | 13·5 | 46·6 | |
| 9·5 | | 13·5 | 8·0 | |
| 9·7 | | 14·0 | 3·1 | |
| 9·4 | | 15·5 | 40·9 | |
| 8·6 | | 16·0 | 24·7 | 9·0 |
| 9·9 | | 21·0 | 54·9 | |
| 9·8 | | 22·0 | 23·4 | |
| 9·3 | | 25·0 | 5·5 | |
| 9·9 | | 26·0 | 54·4 | |
| 9·9 | | 28·0 | 6·2 | |
| 9·9 | | 30·5 | 57·0 | |
| 8·8 | | 37·5 | 15·7 | |
| 9·2 | | 37·5 | 43·1 | |
| 9·7 | | 39·5 | 17·0 | |
| 9·8 | | 41·0 | 47·6 | |
| 9·7 | | 42·0 | 30·8 | |
| 9·4 | | 49·0 | 50·8 | |
| 9·7 | | 51·0 | 41·4 | |
| 9·9 | | 52·0 | 32·8 | |
| 9·6 | | 56·0 | 41·0 | |
| 8·9 | | 58·5 | 33·5 | 9·5 |
| 8·9 | 38 | 3·5 | 42·4 | |
| 9·7 | | 3·7 | 57·7 | |
| 8·6 | | 4·0 | 28·4 | 9·0 |
| 9·6 | | 15·0 | 22·6 | |
| 9·4 | | 17·5 | 56·1 | |
| 9·4 | | 19·5 | 32·2 | |
| 7·7 | | 21·0 | 20·0 | 7·5 GSt |
| 8·5 | | 22·0 | 34·3 | 8·2 |
| 9·7 | | 22·5 | 0·4 | |
| 9·4 | | 25·5 | 21·9 | |
| 6·4 | | 27·0 | 30·9 | *7·0* GSt |
| 8·3 | | 30·5 | 29·5 | 8·2 G |
| 9·9 | | 34·0 | 0·1 | |
| 8·8 | | 34·0 | 25·4 | 9·0 |
| 8·9 | | 35·5 | 33·5 | 9·2 |
| 9·8 | | 39·0 | 22·0 | |
| 9·2 | | 39·5 | 30·7 | |
| 9·8 | | 39·5 | 4·0 | |
| 9·8 | | 44·5 | 56·0 | |
| 9·2 | | 47·0 | 41·6 | |
| 9·8 | | 48·0 | 4·1 | |
| 9·0 | | 49·5 | 44·9 | |
| 9·7 | | 50·5 | 41·6 | |
| 9·8 | | 51·5 | 41·0 | |
| 9·7 | 39 | 0·0 | 21·5 | |
| 9·9 | | 0·0 | 3·6 | |
| 9·8 | | 6·0 | 49·5 | |
| 9·8 | | 9·0 | 31·8 | |

## 2221—2280.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 39 | 10·0 | 39·8 | 9·5 |
| 9·8 | | 12·5 | 29·0 | |
| 9·9 | | 13·5 | 54·6 | |
| 9·8 | | 15·0 | 31·9 | |
| 9·8 | | 23·0 | 32·0 | |
| 9·6 | | 23·0 | 54·6 | |
| 9·4 | | 24·5 | 21·6 | |
| 9·7 | | 30·0 | 21·9 | |
| 9·2 | | 31·0 | 41·4 | |
| 9·9 | | 32·0 | 26·7 | |
| 9·9 | | 32·0 | 14·1 | |
| 9·2 | | 35·0 | 33·6 | |
| 9·8 | | 36·0 | 5·0 | |
| 9·9 | | 38·5 | 24·9 | |
| 9·8 | | 40·0 | 5·6 | |
| 9·8 | | 40·5 | 31·8 | |
| 9·8 | | 41·0 | 30·0 | |
| 9·8 | | 43·0 | 52·9 | |
| 9·9 | | 43·0 | 42·9 | |
| 8·3 | | 44·0 | 42·4 | 9·0 |
| 9·7 | | 47·0 | 7·8 | |
| 9·0 | | 51·0 | 55·4 | 8·5 |
| 8·5 | | 53·5 | 34·6 | 8·8 |
| 8·6 | | 54·5 | 18·6 | 9·0 |
| 9·4 | 40 | 3·5 | 37·9 | |
| 9·8 | | 9·5 | 35·4 | |
| 9·6 | | 12·0 | 49·6 | |
| 9·8 | | 13·0 | 9·2 | |
| 9·8 | | 16·0 | 31·2 | |
| 9·3 | | 17·5 | 55·8 | 9·5 |
| 9·0 | | 19·8 | 0·1 | *G* |
| 9·7 | | 23·4 | 58·3 | |
| 9·6 | | 29·0 | 11·6 | |
| 9·6 | | 31·0 | 45·0 | |
| 9·8 | | 33·0 | 42·1 | |
| 9·6 | | 34·0 | 23·0 | |
| 9·8 | | 34·5 | 30·7 | |
| 9·8 | | 39·0 | 5·9 | |
| 9·8 | | 47·5 | 29·0 | |
| 9·5 | | 55·5 | 13·5 | 9·5 |
| 9·9 | | 58·5 | 13·5 | |
| 9·0 | 41 | 0·5 | 39·7 | |
| 9·2 | | 2·5 | 28·3 | |
| 9·2 | | 5·0 | 57·1 | |
| 8·3 | | 5·5 | 56·9 | 8·0 |
| 9·8 | | 19·5 | 21·0 | |
| 9·9 | | 24·0 | 14·4 | |
| 8·8 | | 24·5 | 37·0 | |
| 9·8 | | 27·0 | 34·4 | |
| 9·9 | | 27·4 | 58·6 | |
| 8·8 | | 27·5 | 10·0 | 9·0 |
| 8·6 | | 29·0 | 14·7 | 9·0 |
| 9·2 | | 47·5 | 15·4 | |
| 9·5 | 42 | 5·0 | 55·0 | 9·5 |
| 8·8 | | 5·0 | 32·0 | 9·5 |
| 9·6 | | 6·0 | 2·1 | |
| 9·6 | | 15·0 | 9·9 | |
| 9·8 | | 17·5 | 15·6 | |
| 9·8 | | 25·0 | 57·7 | |
| 9·4 | | 28·5 | 16·6 | |

## 2281—2340.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 29·0 | 53·8 | |
| 9·4 | | 33·5 | 27·0 | |
| 9·8 | | 40·5 | 27·0 | |
| 9·6 | | 41·5 | 19·0 | |
| 9·3 | | 43·0 | 6·8 | 9·0 |
| 9·8 | | 44·0 | 22·4 | |
| 9·2 | | 51·0 | 35·1 | |
| 9·8 | | 51·5 | 5·1 | |
| 9·7 | | 58·5 | 18·7 | |
| 9·6 | 43 | 1·5 | 9·1 | |
| 9·3 | | 2·5 | 57·5 | |
| 9·9 | | 9·0 | 3·9 | |
| 9·6 | | 13·0 | 5·1 | |
| 9·7 | | 18·0 | 41·6 | |
| 9·2 | | 21·5 | 2·0 | |
| 9·8 | | 37·0 | 52·7 | |
| 9·8 | | 41·5 | 17·0 | |
| 8·9 | | 42·5 | 16·5 | |
| 9·8 | | 45·0 | 33·0 | |
| 8·3 | | 50·5 | 29·0 | 8·5 |
| 9·8 | | 56·0 | 2·8 | |
| 9·6 | | 58·5 | 39·6 | |
| 9·6 | | 59·5 | 54·6 | |
| 9·7 | 44 | 3·5 | 48·5 | |
| 9·5 | | 6·5 | 3·8 | |
| 9·2 | | 12·0 | 35·9 | 9·5 |
| 8·9 | | 17·5 | 3·3 | 9·5 |
| 9·9 | | 30·5 | 37·5 | |
| 9·8 | | 41·5 | 11·0 | |
| 9·9 | | 47·5 | 35·0 | |
| 9·2 | 45 | 5·0 | 5·9 | 9·0 |
| 8·8 | | 8·5 | 38·4 | 9·5 |
| 9·8 | | 10·5 | 8·4 | |
| 9·7 | | 19·0 | 24·1 | |
| 9·7 | | 31·5 | 8·4 | 9·0 |
| 9·8 | | 35·5 | 50·4 | |
| 7·5 | | 49·5 | 36·4 | 7·5 GSg |
| 9·6 | | 50·5 | 50·7 | |
| 9·7 | | 54·0 | 48·4 | |
| 8·7 | | 55·0 | 8·1 | 9·0 |
| 8·6 | 46 | 5·0 | 54·6 | 9·5 |
| 9·8 | | 9·0 | 36·9 | |
| 9·8 | | 14·5 | 22·3 | |
| 9·3 | | 16·3 | 2·0 | |
| 9·2 | | 22·0 | 23·3 | |
| 9·1 | | 23·0 | 16·8 | |
| 9·5 | | 24·5 | 52·6 | |
| 9·6 | | 24·5 | 2·9 | |
| 9·3 | | 28·5 | 9·4 | 9·0 |
| 9·8 | | 34·0 | 55·0 | |
| 9·6 | | 36·0 | 8·4 | |
| 9·8 | | 36·5 | 37·0 | |
| 9·8 | | 39·0 | 38·7 | |
| 8·9 | | 41·0 | 8·1 | 9·5 |
| 9·8 | | 46·0 | 4·5 | |
| 9·6 | | 48·0 | 23·6 | |
| 9·4 | | 58·0 | 23·7 | |
| 7·8 | 47 | 10·5 | 46·0 | 8·0 |
| 9·8 | | 10·5 | 8·5 | |
| 9·7 | | 14·0 | 37·0 | |



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## 2341—2400.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.7 | 47 | 16.0 | 32.9 | |
| 9.3 | | 21.0 | 45.1 | |
| 9.7 | | 22.0 | 4.3 | |
| 9.9 | | 30.0 | 59.6 | |
| 8.8 | | 30.0 | 20.7 | |
| 9.8 | | 34.0 | 56.1 | |
| 9.6 | | 35.0 | 28.9 | |
| 9.8 | | 36.5 | 12.6 | 9.5 |
| 9.9 | | 37.5 | 0.7 | |
| 9.7 | | 49.5 | 33.1 | |
| 8.9 | | 52.5 | 38.7 | 9.5 |
| 9.8 | | 59.0 | 46.2 | |
| 9.3 | | 59.5 | 4.0 | |
| 9.8 | 48 | 1.0 | 5.1 | |
| 9.8 | | 2.5 | 14.0 | |
| 9.8 | | 3.0 | 50.6 | |
| 9.4 | | 6.5 | 13.8 | 9.5 |
| 9.7 | | 17.5 | 31.7 | |
| 7.6 | | 20.0 | 9.0 | 7.5 G |
| 9.0 | | 23.0 | 5.2 | |
| 9.8 | | 24.0 | 40.4 | |
| 9.8 | | 31.0 | 8.9 | |
| 9.3 | | 31.0 | 39.2 | 9.0 |
| 9.4 | | 31.5 | 55.0 | |
| 8.9 | | 34.2 | 59.9 | 9.5 G |
| 9.2 | | 41.5 | 38.7 | |
| 9.9 | | 50.0 | 10.0 | |
| 9.8 | | 54.8 | 5.5 | |
| 9.3 | 49 | 2.5 | 1.4 | 8.7 G |
| 9.4 | | 4.0 | 25.6 | 9.0 |
| 9.7 | | 4.8 | 23.0 | |
| 9.9 | | 8.0 | 18.0 | |
| 9.2 | | 12.5 | 17.0 | |
| 9.7 | | 14.5 | 56.6 | |
| 9.8 | | 16.8 | 40.0 | |
| 9.4 | | 18.0 | 52.1 | |
| 9.9 | | 24.0 | 24.0 | |
| 8.3 | | 25.0 | 6.0 | 8.5 |
| 9.2 | | 31.0 | 55.8 | |
| 9.1 | | 35.0 | 22.8 | 8.5 |
| 9.4 | | 57.0 | 18.0 | 9.0 |
| 8.6 | | 58.5 | 48.0 | 9.5 |
| 9.9 | 50 | 0.5 | 33.0 | |
| 9.8 | | 5.0 | 52.7 | |
| 8.8 | | 13.5 | 11.6 | 9.5 |
| 9.5 | | 21.0 | 16.3 | 9.0 |
| 9.4 | | 30.5 | 8.4 | |
| 8.9 | | 39.5 | 49.0 | 9.5 |
| 9.4 | | 42.5 | 2.8 | |
| 9.0 | | 42.5 | 33.3 | |
| 9.9 | | 45.0 | 13.6 | |
| 9.8 | | 54.0 | 50.0 | |
| 9.8 | 51 | 10.5 | 59.1 | |
| 9.9 | | 13.0 | 54.5 | |
| 9.0 | | 23.0 | 42.0 | |
| 9.3 | | 25.5 | 14.3 | |
| 9.2 | | 29.5 | 31.1 | |
| 9.6 | | 29.8 | 25.8 | |
| 9.7 | | 30.0 | 10.0 | |
| 9.6 | | 33.0 | 26.7 | |

## 2401—2460.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.8 | 51 | 34.5 | 28.9 | |
| 9.8 | | 38.5 | 4.3 | |
| 9.8 | | 40.5 | 28.6 | |
| 9.8 | | 41.5 | 32.0 | |
| 9.8 | | 54.0 | 48.4 | |
| 8.9 | | 55.0 | 45.3 | |
| 9.7 | | 55.0 | 45.9 | |
| 9.2 | | 57.5 | 15.7 | 9.2 |
| 8.8 | | 59.0 | 26.5 | |
| 8.8 | 52 | 5.0 | 31.1 | 9.0 |
| 8.5 | | 9.8 | 10.6 | 9.0 |
| 8.6 | | 14.8 | 3.5 | 9.0 |
| 8.7 | | 19.8 | 26.2 | 9.8 G |
| 9.8 | | 22.5 | 15.8 | |
| 9.8 | | 23.0 | 24.1 | |
| 9.6 | | 24.5 | 23.0 | |
| 9.6 | | 35.0 | 15.9 | |
| 9.7 | | 37.5 | 48.2 | |
| 9.6 | | 41.0 | 48.0 | |
| 9.4 | | 41.5 | 59.5 | |
| 9.4 | | 49.5 | 4.6 | |
| 9.8 | | 51.8 | 16.1 | |
| 9.9 | | 58.8 | 16.5 | |
| 9.8 | 53 | 1.0 | 49.0 | |
| 9.6 | | 30.0 | 56.6 | |
| 9.2 | | 38.5 | 3.1 | |
| 9.9 | | 40.5 | 14.1 | |
| 8.9 | | 43.5 | 11.6 | 8.0 |
| 9.7 | | 52.0 | 36.1 | |
| 9.8 | 54 | 3.5 | 10.2 | |
| 9.0 | | 4.0 | 27.3 | 8.8 G |
| 9.8 | | 5.0 | 41.2 | |
| 6.0 | | 11.0 | 39.0 | 7.0 GSgtr |
| 9.9 | | 15.5 | 10.6 | |
| 9.4 | | 20.5 | 1.1 | |
| 9.7 | | 27.5 | 13.8 | |
| 9.8 | | 28.0 | 51.0 | |
| 9.8 | | 32.5 | 45.9 | |
| 9.8 | | 54.8 | 9.1 | |
| 9.3 | | 55.5 | 12.8 | |
| 9.9 | | 59.0 | 25.8 | |
| 9.8 | | 59.5 | 37.0 | |
| 9.2 | 55 | 4.0 | 21.0 | |
| 9.2 | | 7.5 | 14.6 | |
| 9.9 | | 9.8 | 33.7 | |
| 9.6 | | 14.5 | 33.6 | |
| 9.8 | | 16.0 | 37.8 | |
| 9.9 | | 28.0 | 22.3 | |
| 9.8 | | 30.0 | 13.0 | 9.0 |
| 9.9 | | 42.0 | 15.0 | |
| 9.9 | | 42.5 | 15.5 | |
| 9.4 | | 51.5 | 21.6 | 9.0 S |
| 9.5 | | 58.0 | 29.0 | |
| 9.8 | | 58.8 | 36.1 | |
| 8.1 | 56 | 5.0 | 33.0 | 8.5 G |
| 8.6 | | 11.0 | 35.2 | 9.2 |
| 9.6 | | 20.5 | 42.9 | |
| 9.8 | | 28.0 | 9.6 | |
| 8.8 | | 31.0 | 22.6 | 8.0 GSt |
| 7.8 | | 35.0 | 53.4 | 8.5 G |

## 2461—2520.

| mag. | 10h.–11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.9 | 56 | 36.0 | 1.1 | |
| 9.5 | | 38.0 | 18.9 | |
| 9.9 | | 39.0 | 38.8 | |
| 9.6 | | 52.5 | 13.0 | |
| 9.4 | 57 | 0.5 | 50.9 | |
| 9.0 | | 2.5 | 47.0 | |
| 9.8 | | 2.8 | 14.6 | |
| 9.8 | | 9.5 | 1.5 | |
| 8.8 | | 12.5 | 5.3 | |
| 9.4 | | 15.5 | 33.0 | 8.5 |
| 9.7 | | 16.0 | 5.7 | |
| 9.5 | | 20.0 | 4.9 | |
| 9.2 | | 22.5 | 8.6 | 9.5 |
| 9.9 | | 24.0 | 26.5 | |
| 9.8 | | 30.0 | 11.3 | |
| 9.0 | | 41.5 | 33.4 | 9.5 |
| 9.8 | | 42.4 | 0.1 | |
| 7.9 | | 56.8 | 9.2 | 8.0 GSt |
| 8.7 | | 58.5 | 14.2 | 7.0 GSt |
| 8.6 | 58 | 4.5 | 0.5 | 8.8 G |
| 9.7 | | 4.8 | 17.2 | |
| 9.9 | | 9.3 | 0.4 | |
| 9.1 | | 9.5 | 46.9 | |
| 9.8 | | 12.0 | 6.8 | |
| 9.4 | | 15.0 | 18.5 | |
| 9.4 | | 16.0 | 31.9 | |
| 9.7 | | 19.5 | 6.6 | |
| 9.4 | | 26.0 | 27.6 | |
| 9.6 | | 32.0 | 31.6 | |
| 9.9 | | 37.5 | 33.5 | |
| 9.8 | | 40.5 | 8.8 | |
| 9.7 | | 47.5 | 18.9 | |
| 9.9 | | 54.0 | 6.5 | |
| 9.8 | | 54.5 | 41.6 | |
| 9.2 | | 57.5 | 33.1 | |
| 9.7 | 59 | 1.0 | 3.9 | |
| 9.4 | | 5.0 | 18.2 | 8.2 G |
| 8.5 | | 5.5 | 15.3 | 8.5 |
| 8.4 | | 21.0 | 48.8 | 8.0 G |
| 9.2 | | 35.8 | 56.8 | |
| 9.9 | | 41.0 | 9.9 | |
| 9.8 | | 42.0 | 8.8 | |
| 9.8 | | 45.0 | 5.2 | |
| 9.4 | | 45.0 | 16.0 | 9.5 |
| 7.6 | | 45.0 | 22.6 | 7.6 G |
| 9.2 | | 51.0 | 43.1 | |
| 9.2 | | 57.0 | 6.0 | |
| 8.3 | 0 | 1.5 | 30.0 | 8.7 |
| 8.8 | | 10.0 | 9.2 | 9.5 |
| 8.8 | | 15.5 | 14.2 | |
| 8.9 | | 17.0 | 45.6 | |
| 8.6 | | 18.0 | 59.6 | 9.5 |
| 9.2 | | 21.0 | 37.0 | 9.0 |
| 9.6 | | 21.5 | 14.7 | |
| 9.8 | | 26.0 | 44.0 | |
| 9.0 | | 39.0 | 28.0 | 9.5 |
| 8.5 | | 50.0 | 30.0 | 8.9 |
| 9.6 | | 50.5 | 47.3 | |
| 9.8 | | 54.0 | 33.8 | |
| 8.4 | | 57.0 | 34.0 | 8.5 G |

## 2521—2580.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8.4 | 0 | 57.0 | 28.6 | 9.2 |
| 8.2 | | 57.0 | 22.7 | 8.5 G |
| 9.7 | 1 | 0.0 | 38.1 | |
| 9.9 | | 0.3 | 2.0 | |
| 9.7 | | 9.5 | 42.7 | |
| 9.9 | | 13.0 | 34.0 | |
| 9.8 | | 13.5 | 27.1 | |
| 9.9 | | 14.5 | 15.0 | |
| 9.9 | | 21.5 | 12.8 | |
| 9.6 | | 21.5 | 37.6 | |
| 9.9 | | 22.5 | 52.9 | |
| 9.9 | | 44.0 | 1.2 | |
| 9.3 | | 47.5 | 24.8 | 9.5 |
| 9.6 | | 57.5 | 55.0 | |
| 9.7 | 2 | 0.0 | 38.0 | |
| 9.7 | | 8.0 | 17.1 | 9.0 |
| 9.3 | | 12.5 | 46.0 | |
| 9.7 | | 14.0 | 5.9 | 9.0 G |
| 8.2 | | 19.5 | 42.3 | |
| 9.4 | | 19.5 | 17.7 | |
| 9.6 | | 22.7 | 4.9 | |
| 9.6 | | 30.0 | 16.1 | |
| 9.4 | | 42.5 | 30.1 | |
| 9.2 | | 49.2 | 59.7 | |
| 9.8 | | 51.0 | 46.4 | |
| 8.0 | | 52.0 | 9.0 | 7.5 GS |
| 9.8 | | 56.0 | 50.0 | |
| 9.8 | | 59.0 | 54.6 | 9.5 |
| 9.8 | 3 | 3.0 | 52.6 | 9.0 |
| 9.9 | | 3.5 | 7.5 | |
| 9.2 | | 7.5 | 49.6 | |
| 8.9 | | 8.5 | 30.4 | 9.0 |
| 8.4 | | 10.0 | 36.5 | 8.5 |
| 8.1 | | 14.5 | 57.1 | 8.5 G |
| 8.7 | | 18.5 | 18.2 | 9.0 |
| 9.0 | | 19.5 | 52.1 | |
| 9.8 | | 30.0 | 7.9 | 9.0 |
| 7.5 | | 35.0 | 52.9 | 8.0 GSt |
| 8.6 | | 36.0 | 5.1 | 8.2 G |
| 9.9 | | 37.0 | 40.6 | |
| 8.3 | | 41.0 | 14.2 | 8.0 G |
| 9.0 | | 43.0 | 23.8 | |
| 8.8 | | 52.0 | 8.9 | 9.0 |
| 9.9 | | 52.0 | 14.8 | |
| 9.7 | | 58.0 | 41.7 | |
| 9.3 | 4 | 3.0 | 2.0 | |
| 9.4 | | 5.0 | 25.4 | |
| 9.5 | | 13.0 | 55.9 | |
| 8.9 | | 15.0 | 30.7 | 10.0 |
| 9.9 | | 23.0 | 21.0 | |
| 8.8 | | 24.0 | 36.0 | |
| 8.9 | | 29.0 | 32.4 | 10.0 |
| 9.9 | | 42.0 | 3.5 | |
| 9.6 | | 42.0 | 5.9 | 9.5 |
| 9.4 | | 42.0 | 57.9 | |
| 9.2 | | 43.5 | 31.8 | 9.5 |
| 8.4 | | 47.0 | 15.0 | 8.5 |
| 8.0 | | 48.5 | 18.0 | 8.0 G |
| 9.2 | | 52.0 | 5.0 | 9.0 |
| 9.8 | | 52.0 | 8.9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 57 | 7.9 |
| | 50 | 59 | 8.0 |
| 11 | 0 | 62 | 8.1 |
| | 10 | 64 | 8.2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 54 | 7·7 |
| | 40 | 57 | 7·9 |
| | 50 | 59 | 8·0 |

## 2101—2160.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 34 | 0·5 | 7·9 | |
| 9·8 | | 1·0 | 12·0 | |
| 9·4 | | 2·5 | 29·4 | |
| 9·7 | | 5·0 | 39·2 | |
| 9·6 | | 9·0 | 35·0 | |
| 9·8 | | 10·0 | 10·5 | |
| 9·8 | | 11·5 | 42·8 | |
| 9·8 | | 13·5 | 11·0 | |
| 9·9 | | 14·5 | 15·6 | |
| 9·9 | | 20·5 | 12·4 | |
| 9·6 | | 20·5 | 51·0 | |
| 9·4 | | 30·5 | 59·9 | |
| 9·8 | | 32·0 | 51·2 | |
| 9·6 | | 33·5 | 9·0 | |
| 9·2 | | 35·0 | 4·2 | |
| 9·4 | | 43·0 | 30·0 | 9·2 |
| 8·8 | | 43·5 | 21·1 | |
| 8·9 | | 43·5 | 20·2 | |
| 9·7 | | 45·0 | 27·4 | |
| 9·0 | | 47·5 | 26·0 | 7·8 G |
| 9·7 | | 50·5 | 53·0 | |
| 7·2 | | 50·5 | 20·0 | 7·0 GSt |
| 8·9 | | 58·0 | 56·5 | 9·5 |
| 9·8 | | 59·0 | 25·0 | |
| 8·8 | 35 | 3·5 | 38·4 | 9·0 |
| 8·8 | | 6·5 | 15·7 | |
| 9·4 | | 6·5 | 34·4 | |
| 9·4 | | 11·5 | 46·1 | |
| 8·6 | | 12·0 | 20·7 | 8·5 |
| 9·7 | | 12·0 | 23·1 | |
| 9·8 | | 13·0 | 34·9 | |
| 9·7 | | 15·0 | 4·0 | |
| 9·8 | | 15·5 | 9·0 | |
| 9·7 | | 21·5 | 29·6 | |
| 9·2 | | 22·0 | 9·1 | |
| 9·9 | | 23·5 | 48·1 | |
| 9·9 | | 32·0 | 58·2 | |
| 9·9 | | 33·0 | 1·5 | |
| 9·9 | | 35·5 | 56·8 | |
| 9·8 | | 36·0 | 19·7 | |
| 9·2 | | 42·0 | 32·1 | 8·5 |
| 9·2 | | 42·0 | 7·7 | |
| 9·9 | | 54·0 | 38·3 | |
| 9·8 | 36 | 3·0 | 20·6 | |
| 9·7 | | 5·5 | 54·1 | |
| 9·8 | | 6·0 | 50·0 | |
| 9·7 | | 8·0 | 43·0 | |
| 9·7 | | 8·0 | 16·9 | |
| 9·8 | | 10·0 | 48·9 | |
| 8·8 | | 10·0 | 57·0 | |
| 9·6 | | 10·5 | 48·0 | |
| 9·9 | | 12·0 | 42·0 | |
| 9·9 | | 15·5 | 36·0 | |
| 9·9 | | 18·5 | 10·8 | |
| 9·9 | | 20·0 | 42·0 | |
| 9·8 | | 20·5 | 44·7 | |
| 9·8 | | 21·0 | 43·6 | |
| 9·6 | | 31·0 | 9·2 | |
| 8·9 | | 31·5 | 1·1 | |
| 9·2 | | 41·0 | 7·5 | |

## 2161—2220.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 36 | 46·5 | 55·4 | |
| 8·8 | | 47·5 | 22·6 | 9·0 |
| 9·7 | | 50·0 | 22·4 | |
| 9·6 | | 50·0 | 49·0 | |
| 9·9 | | 53·5 | 53·6 | |
| 8·8 | | 56·0 | 50·7 | 8·5 |
| 9·9 | 37 | 6·0 | 59·5 | |
| 9·8 | | 8·0 | 46·6 | |
| 9·8 | | 9·5 | 30·1 | |
| 9·4 | | 11·5 | 41·9 | 9·5 |
| 9·0 | | 12·5 | 46·0 | 9·0 |
| 9·9 | | 13·5 | 46·6 | |
| 9·5 | | 13·5 | 8·0 | |
| 9·7 | | 14·0 | 3·1 | |
| 9·4 | | 15·5 | 40·9 | |
| 8·6 | | 16·0 | 24·7 | 9·0 |
| 9·9 | | 21·0 | 54·9 | |
| 9·8 | | 22·0 | 23·4 | |
| 9·3 | | 25·0 | 5·5 | |
| 9·9 | | 26·0 | 54·4 | |
| 9·9 | | 28·0 | 6·2 | |
| 9·9 | | 30·5 | 57·0 | |
| 8·8 | | 37·5 | 15·7 | |
| 9·2 | | 37·5 | 43·1 | |
| 9·7 | | 39·5 | 17·0 | |
| 9·8 | | 41·0 | 47·6 | |
| 9·7 | | 42·0 | 30·8 | |
| 9·4 | | 49·0 | 50·8 | |
| 9·7 | | 51·0 | 41·4 | |
| 9·9 | | 52·0 | 32·8 | |
| 9·6 | | 56·0 | 41·0 | |
| 8·9 | | 58·5 | 33·5 | 9·5 |
| 8·9 | 38 | 3·5 | 42·4 | |
| 9·7 | | 3·7 | 57·7 | |
| 8·6 | | 4·0 | 28·4 | 9·0 |
| 9·6 | | 15·0 | 22·6 | |
| 9·4 | | 17·5 | 56·1 | |
| 9·4 | | 19·5 | 32·2 | |
| 7·7 | | 21·0 | 20·0 | 7·5 GSt |
| 8·5 | | 22·0 | 34·3 | 8·2 |
| 9·7 | | 22·5 | 0·4 | |
| 9·4 | | 25·5 | 21·9 | |
| 6·4 | | 27·0 | 30·9 | 7·0 GSt |
| 8·3 | | 30·5 | 29·5 | 8·2 G |
| 9·9 | | 34·0 | 0·1 | |
| 8·8 | | 34·0 | 25·4 | 9·0 |
| 8·9 | | 35·5 | 33·5 | 9·2 |
| 9·8 | | 39·0 | 22·0 | |
| 9·2 | | 39·5 | 30·7 | |
| 9·8 | | 39·5 | 4·0 | |
| 9·8 | | 44·5 | 56·0 | |
| 9·2 | | 47·0 | 41·6 | |
| 9·8 | | 48·0 | 4·1 | |
| 9·0 | | 49·5 | 44·9 | |
| 9·7 | | 50·5 | 41·6 | |
| 9·8 | | 51·5 | 41·0 | |
| 9·7 | 39 | 0·0 | 21·5 | |
| 9·9 | | 0·0 | 3·6 | |
| 9·8 | | 6·0 | 49·5 | |
| 9·8 | | 9·0 | 31·8 | |

## 2221—2280.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 39 | 10·0 | 39·8 | 9·5 |
| 9·8 | | 12·5 | 29·0 | |
| 9·9 | | 13·5 | 54·6 | |
| 9·8 | | 15·0 | 31·9 | |
| 9·8 | | 23·0 | 32·0 | |
| 9·6 | | 23·0 | 54·6 | |
| 9·4 | | 24·5 | 21·6 | |
| 9·7 | | 30·0 | 21·9 | |
| 9·2 | | 31·0 | 41·4 | |
| 9·9 | | 32·0 | 26·7 | |
| 9·9 | | 32·0 | 14·1 | |
| 9·2 | | 35·0 | 33·6 | |
| 9·8 | | 36·0 | 5·0 | |
| 9·9 | | 38·5 | 24·9 | |
| 9·8 | | 40·0 | 5·6 | |
| 9·8 | | 40·5 | 31·8 | |
| 9·8 | | 41·0 | 30·0 | |
| 9·8 | | 43·0 | 52·9 | |
| 9·9 | | 43·0 | 42·9 | |
| 8·3 | | 44·0 | 42·4 | 9·0 |
| 9·7 | | 47·0 | 7·8 | |
| 9·0 | | 51·0 | 55·4 | 8·5 |
| 8·5 | | 53·5 | 34·6 | 8·8 |
| 8·6 | | 54·5 | 18·6 | 9·0 |
| 9·4 | 40 | 3·5 | 37·9 | |
| 9·8 | | 9·5 | 35·4 | |
| 9·6 | | 12·0 | 49·6 | |
| 9·8 | | 13·0 | 9·2 | |
| 9·8 | | 16·0 | 31·2 | |
| 9·3 | | 17·5 | 55·8 | 9·5 |
| 9·0 | | 19·8 | 0·1 | *G* |
| 9·7 | | 23·4 | 58·3 | |
| 9·6 | | 29·0 | 11·6 | |
| 9·6 | | 31·0 | 45·0 | |
| 9·8 | | 33·0 | 42·1 | |
| 9·6 | | 34·0 | 23·0 | |
| 9·8 | | 34·5 | 30·7 | |
| 9·8 | | 39·0 | 5·9 | |
| 9·8 | | 47·5 | 29·0 | |
| 9·5 | | 55·5 | 13·5 | 9·5 |
| 9·9 | | 58·5 | 13·5 | |
| 9·0 | 41 | 0·5 | 39·7 | |
| 9·2 | | 2·5 | 28·3 | |
| 9·2 | | 5·0 | 57·1 | |
| 8·3 | | 5·5 | 56·9 | 8·0 |
| 9·8 | | 19·5 | 21·0 | |
| 9·9 | | 24·0 | 14·4 | |
| 8·8 | | 24·5 | 37·0 | |
| 9·8 | | 27·0 | 34·4 | |
| 9·9 | | 27·4 | 58·6 | |
| 8·8 | | 27·5 | 10·0 | 9·0 |
| 8·6 | | 29·0 | 14·7 | 9·0 |
| 9·2 | | 47·5 | 15·4 | |
| 9·5 | 42 | 5·0 | 55·0 | 9·5 |
| 8·8 | | 5·0 | 32·0 | 9·5 |
| 9·6 | | 6·0 | 2·1 | |
| 9·6 | | 15·0 | 9·9 | |
| 9·8 | | 17·5 | 15·6 | |
| 9·8 | | 25·0 | 57·7 | |
| 9·4 | | 28·5 | 16·6 | |

## 2281—2340.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 42 | 29·0 | 53·8 | |
| 9·4 | | 33·5 | 27·0 | |
| 9·8 | | 40·5 | 27·0 | |
| 9·6 | | 41·5 | 19·0 | |
| 9·3 | | 43·0 | 6·8 | 9·0 |
| 9·8 | | 44·0 | 22·4 | |
| 9·2 | | 51·0 | 35·1 | |
| 9·8 | | 51·5 | 5·1 | |
| 9·7 | | 58·5 | 18·7 | |
| 9·6 | 43 | 1·5 | 9·1 | |
| 9·3 | | 2·5 | 57·5 | |
| 9·9 | | 9·0 | 3·9 | |
| 9·6 | | 13·0 | 5·1 | |
| 9·7 | | 18·0 | 41·6 | |
| 9·2 | | 21·5 | 2·0 | |
| 9·8 | | 37·0 | 52·7 | |
| 9·8 | | 41·5 | 17·0 | |
| 8·9 | | 42·5 | 16·5 | |
| 9·8 | | 45·0 | 33·0 | |
| 8·3 | | 50·5 | 29·0 | 8·5 |
| 9·8 | | 56·0 | 2·8 | |
| 9·6 | | 58·5 | 39·6 | |
| 9·6 | | 59·5 | 54·6 | |
| 9·7 | 44 | 3·5 | 48·5 | |
| 9·5 | | 6·5 | 3·8 | |
| 9·2 | | 12·0 | 35·9 | 9·5 |
| 8·9 | | 17·5 | 3·3 | 9·5 |
| 9·9 | | 30·5 | 37·5 | |
| 9·8 | | 41·5 | 11·0 | |
| 9·9 | | 47·5 | 35·0 | |
| 9·2 | 45 | 5·0 | 5·9 | 9·0 |
| 8·8 | | 8·5 | 38·4 | 9·5 |
| 9·8 | | 10·5 | 8·4 | |
| 9·7 | | 19·0 | 24·1 | |
| 9·7 | | 31·5 | 8·4 | 9·0 |
| 9·8 | | 35·5 | 50·4 | |
| 7·5 | | 49·5 | 36·4 | 7·5 GSg |
| 9·6 | | 50·5 | 50·7 | |
| 9·7 | | 54·0 | 48·4 | |
| 8·7 | | 55·0 | 8·1 | 9·0 |
| 8·6 | 46 | 5·0 | 54·6 | 9·5 |
| 9·8 | | 9·0 | 36·9 | |
| 9·8 | | 14·5 | 22·3 | |
| 9·3 | | 16·3 | 2·0 | |
| 9·2 | | 22·0 | 23·3 | |
| 9·1 | | 23·0 | 16·8 | |
| 9·5 | | 24·5 | 52·6 | |
| 9·6 | | 24·5 | 2·9 | |
| 9·3 | | 28·5 | 9·4 | 9·0 |
| 9·8 | | 34·0 | 55·0 | |
| 9·6 | | 36·0 | 8·4 | |
| 9·8 | | 36·5 | 37·0 | |
| 9·8 | | 39·0 | 38·7 | |
| 8·9 | | 41·0 | 8·1 | 9·5 |
| 9·8 | | 46·0 | 4·5 | |
| 9·6 | | 48·0 | 23·6 | |
| 9·4 | | 58·0 | 23·7 | |
| 7·8 | 47 | 10·5 | 46·0 | 8·0 |
| 9·8 | | 10·5 | 8·5 | |
| 9·7 | | 14·0 | 37·0 | |



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## 2341—2400.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.7 | 47 | 16.0 | 32.9 | |
| 9.3 | | 21.0 | 45.1 | |
| 9.7 | | 22.0 | 4.3 | |
| 9.9 | | 30.0 | 59.6 | |
| 8.8 | | 30.0 | 20.7 | |
| 9.8 | | 34.0 | 56.1 | |
| 9.6 | | 35.0 | 28.9 | |
| 9.8 | | 36.5 | 12.6 | 9.5 |
| 9.9 | | 37.5 | 0.7 | |
| 9.7 | | 49.5 | 33.1 | |
| 8.9 | | 52.5 | 38.7 | 9.5 |
| 9.8 | | 59.0 | 46.2 | |
| 9.3 | | 59.5 | 4.0 | |
| 9.8 | 48 | 1.0 | 5.1 | |
| 9.8 | | 2.5 | 14.0 | |
| 9.8 | | 3.0 | 50.6 | |
| 9.4 | | 6.5 | 13.8 | 9.5 |
| 9.7 | | 17.5 | 31.7 | |
| 7.6 | | 20.0 | 9.0 | 7.5 G |
| 9.0 | | 23.0 | 5.2 | |
| 9.8 | | 24.0 | 40.4 | |
| 9.8 | | 31.0 | 8.9 | |
| 9.3 | | 31.0 | 39.2 | 9.0 |
| 9.4 | | 31.5 | 55.0 | |
| 8.9 | | 34.2 | 59.9 | 9.5 G |
| 9.2 | | 41.5 | 38.7 | |
| 9.9 | | 50.0 | 10.0 | |
| 9.8 | | 54.8 | 5.5 | |
| 9.3 | 49 | 2.5 | 1.4 | 8.7 G |
| 9.4 | | 4.0 | 25.6 | 9.0 |
| 9.7 | | 4.8 | 23.0 | |
| 9.9 | | 8.0 | 18.0 | |
| 9.2 | | 12.5 | 17.0 | |
| 9.7 | | 14.5 | 56.6 | |
| 9.8 | | 16.8 | 40.0 | |
| 9.4 | | 18.0 | 52.1 | |
| 9.9 | | 24.0 | 24.0 | |
| 8.3 | | 25.0 | 6.0 | 8.5 |
| 9.2 | | 31.0 | 55.8 | |
| 9.1 | | 35.0 | 22.8 | 8.5 |
| 9.4 | | 57.0 | 18.0 | 9.0 |
| 8.6 | | 58.5 | 48.0 | 9.5 |
| 9.9 | 50 | 0.5 | 33.0 | |
| 9.8 | | 5.0 | 52.7 | |
| 8.8 | | 13.5 | 11.6 | 9.5 |
| 9.5 | | 21.0 | 16.3 | 9.0 |
| 9.4 | | 30.5 | 8.4 | |
| 8.9 | | 39.5 | 49.0 | 9.5 |
| 9.4 | | 42.5 | 2.8 | |
| 9.0 | | 42.5 | 33.3 | |
| 9.9 | | 45.0 | 13.6 | |
| 9.8 | | 54.0 | 50.0 | |
| 9.8 | 51 | 10.5 | 59.1 | |
| 9.9 | | 13.0 | 54.5 | |
| 9.0 | | 23.0 | 42.0 | |
| 9.3 | | 25.5 | 14.3 | |
| 9.2 | | 29.5 | 31.1 | |
| 9.6 | | 29.8 | 25.8 | |
| 9.7 | | 30.0 | 10.0 | |
| 9.6 | | 33.0 | 26.7 | |

## 2401—2460.

| mag. | 10h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.8 | 51 | 34.5 | 28.9 | |
| 9.8 | | 38.5 | 4.3 | |
| 9.8 | | 40.5 | 28.6 | |
| 9.8 | | 41.5 | 32.0 | |
| 9.8 | | 54.0 | 48.4 | |
| 8.9 | | 55.0 | 45.3 | |
| 9.7 | | 55.0 | 45.9 | |
| 9.2 | | 57.5 | 15.7 | 9.2 |
| 8.8 | | 59.0 | 26.5 | |
| 8.8 | 52 | 5.0 | 31.1 | 9.0 |
| 8.5 | | 9.8 | 10.6 | 9.0 |
| 8.6 | | 14.8 | 3.5 | 9.0 |
| 8.7 | | 19.8 | 26.2 | 9.8 G |
| 9.8 | | 22.5 | 15.8 | |
| 9.8 | | 23.0 | 24.1 | |
| 9.6 | | 24.5 | 23.0 | |
| 9.6 | | 35.0 | 15.9 | |
| 9.7 | | 37.5 | 48.2 | |
| 9.6 | | 41.0 | 48.0 | |
| 9.4 | | 41.5 | 59.5 | |
| 9.4 | | 49.5 | 4.6 | |
| 9.8 | | 51.8 | 16.1 | |
| 9.9 | | 58.8 | 16.5 | |
| 9.8 | 53 | 1.0 | 49.0 | |
| 9.6 | | 30.0 | 56.6 | |
| 9.2 | | 38.5 | 3.1 | |
| 9.9 | | 40.5 | 14.1 | |
| 8.9 | | 43.5 | 11.6 | 8.0 |
| 9.7 | | 52.0 | 36.1 | |
| 9.8 | 54 | 3.5 | 10.2 | |
| 9.0 | | 4.0 | 27.3 | 8.8 G |
| 9.8 | | 5.0 | 41.2 | |
| 6.0 | | 11.0 | 39.0 | 7.0 GSgtr |
| 9.9 | | 15.5 | 10.6 | |
| 9.4 | | 20.5 | 1.1 | |
| 9.7 | | 27.5 | 13.8 | |
| 9.8 | | 28.0 | 51.0 | |
| 9.8 | | 32.5 | 45.9 | |
| 9.8 | | 54.8 | 9.1 | |
| 9.3 | | 55.5 | 12.8 | |
| 9.9 | | 59.0 | 25.8 | |
| 9.8 | | 59.5 | 37.0 | |
| 9.2 | 55 | 4.0 | 21.0 | |
| 9.2 | | 7.5 | 14.6 | |
| 9.9 | | 9.8 | 33.7 | |
| 9.6 | | 14.5 | 33.6 | |
| 9.8 | | 16.0 | 37.8 | |
| 9.9 | | 28.0 | 22.3 | |
| 9.8 | | 30.0 | 13.0 | 9.0 |
| 9.9 | | 42.0 | 15.0 | |
| 9.9 | | 42.5 | 15.5 | |
| 9.4 | | 51.5 | 21.6 | 9.0 S |
| 9.5 | | 58.0 | 29.0 | |
| 9.8 | | 58.8 | 36.1 | |
| 8.1 | 56 | 5.0 | 33.0 | 8.5 G |
| 8.6 | | 11.0 | 35.2 | 9.2 |
| 9.6 | | 20.5 | 42.9 | |
| 9.8 | | 28.0 | 9.6 | |
| 8.8 | | 31.0 | 22.6 | 8.0 GSt |
| 7.8 | | 35.0 | 53.4 | 8.5 G |

## 2461—2520.

| mag. | 10h.–11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.9 | 56 | 36.0 | 1.1 | |
| 9.5 | | 38.0 | 18.9 | |
| 9.9 | | 39.0 | 38.8 | |
| 9.6 | | 52.5 | 13.0 | |
| 9.4 | 57 | 0.5 | 50.9 | |
| 9.0 | | 2.5 | 47.0 | |
| 9.8 | | 2.8 | 14.6 | |
| 9.8 | | 9.5 | 1.5 | |
| 8.8 | | 12.5 | 5.3 | |
| 9.4 | | 15.5 | 33.0 | 8.5 |
| 9.7 | | 16.0 | 5.7 | |
| 9.5 | | 20.0 | 4.9 | |
| 9.2 | | 22.5 | 8.6 | 9.5 |
| 9.9 | | 24.0 | 26.5 | |
| 9.8 | | 30.0 | 11.3 | |
| 9.0 | | 41.5 | 33.4 | 9.5 |
| 9.8 | | 42.4 | 0.1 | |
| 7.9 | | 56.8 | 9.2 | 8.0 GSt |
| 8.7 | | 58.5 | 14.2 | 7.0 GSt |
| 8.6 | 58 | 4.5 | 0.5 | 8.8 G |
| 9.7 | | 4.8 | 17.2 | |
| 9.9 | | 9.3 | 0.4 | |
| 9.1 | | 9.5 | 46.9 | |
| 9.8 | | 12.0 | 6.8 | |
| 9.4 | | 15.0 | 18.5 | |
| 9.4 | | 16.0 | 31.9 | |
| 9.7 | | 19.5 | 6.6 | |
| 9.4 | | 26.0 | 27.6 | |
| 9.6 | | 32.0 | 31.6 | |
| 9.9 | | 37.5 | 33.5 | |
| 9.8 | | 40.5 | 8.8 | |
| 9.7 | | 47.5 | 18.9 | |
| 9.9 | | 54.0 | 6.5 | |
| 9.8 | | 54.5 | 41.6 | |
| 9.2 | | 57.5 | 33.1 | |
| 9.7 | 59 | 1.0 | 3.9 | |
| 9.4 | | 5.0 | 18.2 | 8.2 G |
| 8.5 | | 5.5 | 15.3 | 8.5 |
| 8.4 | | 21.0 | 48.8 | 8.0 G |
| 9.2 | | 35.8 | 56.8 | |
| 9.9 | | 41.0 | 9.9 | |
| 9.8 | | 42.0 | 8.8 | |
| 9.8 | | 45.0 | 5.2 | |
| 9.4 | | 45.0 | 16.0 | 9.5 |
| 7.6 | | 45.0 | 22.6 | 7.6 G |
| 9.2 | | 51.0 | 43.1 | |
| 9.2 | | 57.0 | 6.0 | |
| 8.3 | 0 | 1.5 | 30.0 | 8.7 |
| 8.8 | | 10.0 | 9.2 | 9.5 |
| 8.8 | | 15.5 | 14.2 | |
| 8.9 | | 17.0 | 45.6 | |
| 8.6 | | 18.0 | 59.6 | 9.5 |
| 9.2 | | 21.0 | 37.0 | 9.0 |
| 9.6 | | 21.5 | 14.7 | |
| 9.8 | | 26.0 | 44.0 | |
| 9.0 | | 39.0 | 28.0 | 9.5 |
| 8.5 | | 50.0 | 30.0 | 8.9 |
| 9.6 | | 50.5 | 47.3 | |
| 9.8 | | 54.0 | 33.8 | |
| 8.4 | | 57.0 | 34.0 | 8.5 G |

## 2521—2580.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8.4 | 0 | 57.0 | 28.6 | 9.2 |
| 8.2 | | 57.0 | 22.7 | 8.5 G |
| 9.7 | 1 | 0.0 | 38.1 | |
| 9.9 | | 0.3 | 2.0 | |
| 9.7 | | 9.5 | 42.7 | |
| 9.9 | | 13.0 | 34.0 | |
| 9.8 | | 13.5 | 27.1 | |
| 9.9 | | 14.5 | 15.0 | |
| 9.9 | | 21.5 | 12.8 | |
| 9.6 | | 21.5 | 37.6 | |
| 9.9 | | 22.5 | 52.9 | |
| 9.9 | | 44.0 | 1.2 | |
| 9.3 | | 47.5 | 24.8 | 9.5 |
| 9.6 | | 57.5 | 55.0 | |
| 9.7 | 2 | 0.0 | 38.0 | |
| 9.7 | | 8.0 | 17.1 | 9.0 |
| 9.3 | | 12.5 | 46.0 | |
| 9.7 | | 14.0 | 5.9 | 9.0 G |
| 8.2 | | 19.5 | 42.3 | |
| 9.4 | | 19.5 | 17.7 | |
| 9.6 | | 22.7 | 4.9 | |
| 9.6 | | 30.0 | 16.1 | |
| 9.4 | | 42.5 | 30.1 | |
| 9.2 | | 49.2 | 59.7 | |
| 9.8 | | 51.0 | 46.4 | |
| 8.0 | | 52.0 | 9.0 | 7.5 GS |
| 9.8 | | 56.0 | 50.0 | |
| 9.8 | | 59.0 | 54.6 | 9.5 |
| 9.8 | 3 | 3.0 | 52.6 | 9.0 |
| 9.9 | | 3.5 | 7.5 | |
| 9.2 | | 7.5 | 49.6 | |
| 8.9 | | 8.5 | 30.4 | 9.0 |
| 8.4 | | 10.0 | 36.5 | 8.5 |
| 8.1 | | 14.5 | 57.1 | 8.5 G |
| 8.7 | | 18.5 | 18.2 | 9.0 |
| 9.0 | | 19.5 | 52.1 | |
| 9.8 | | 30.0 | 7.9 | 9.0 |
| 7.5 | | 35.0 | 52.9 | 8.0 GSt |
| 8.6 | | 36.0 | 5.1 | 8.2 G |
| 9.9 | | 37.0 | 40.6 | |
| 8.3 | | 41.0 | 14.2 | 8.0 G |
| 9.0 | | 43.0 | 23.8 | |
| 8.8 | | 52.0 | 8.9 | 9.0 |
| 9.9 | | 52.0 | 14.8 | |
| 9.7 | | 58.0 | 41.7 | |
| 9.3 | 4 | 3.0 | 2.0 | |
| 9.4 | | 5.0 | 25.4 | |
| 9.5 | | 13.0 | 55.9 | |
| 8.9 | | 15.0 | 30.7 | 10.0 |
| 9.9 | | 23.0 | 21.0 | |
| 8.8 | | 24.0 | 36.0 | |
| 8.9 | | 29.0 | 32.4 | 10.0 |
| 9.9 | | 42.0 | 3.5 | |
| 9.6 | | 42.0 | 5.9 | 9.5 |
| 9.4 | | 42.0 | 57.9 | |
| 9.2 | | 43.5 | 31.8 | 9.5 |
| 8.4 | | 47.0 | 15.0 | 8.5 |
| 8.0 | | 48.5 | 18.0 | 8.0 G |
| 9.2 | | 52.0 | 5.0 | 9.0 |
| 9.8 | | 52.0 | 8.9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 57 | 7.9 |
| | 50 | 59 | 8.0 |
| 11 | 0 | 62 | 8.1 |
| | 10 | 64 | 8.2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 0 | 62 | 8·1 |
| | 10 | 64 | 8·2 |
| | 20 | 67 | 8·2 |

## 2581—2640.

| mag. | 11ʰ m s | −60° ′ | |
|---|---|---|---|
| 9·6 | 4 54·5 | 24·5 | |
| 8·7 | 56·0 | 11·0 | 9·0 |
| 9·1 | 56·5 | 45·8 | |
| 9·7 | 57·0 | 6·1 | 9·0 |
| 9·4 | 57·0 | 5·9 | 9·5 |
| 9·8 | 58·5 | 35·7 | 9·5 |
| 9·0 | 5 1·0 | 14·6 | 8·5 G |
| 9·7 | 1·0 | 12·5 | |
| 9·8 | 2·5 | 9·9 | |
| 9·6 | 11·0 | 5·9 | |
| 9·8 | 13·0 | 57·0 | |
| 8·9 | 18·5 | 53·0 | |
| 8·9 | 19·5 | 14·5 | 8·5 |
| 9·8 | 24·0 | 19·0 | |
| 9·2 | 26·5 | 4·5 | 9·0 |
| 9·8* | 28·0 | 1·2 | |
| 9·8 | 33·5 | 19·8 | |
| 8·7 | 34·5 | 3·9 | 9·0 |
| 10·0 | 34·5 | 57·9 | |
| 9·8 | 40·5 | 25·4 | |
| 9·5 | 40·8 | 48·2 | |
| 9·7 | 43·0 | 29·4 | |
| 9·9 | 45·0 | 5·7 | |
| 10·0 | 46·0 | 1·7 | |
| 10·0 | 46·5 | 17·4 | |
| 8·6 | 48·3 | 26·3 | 8·8 G |
| 10·0 | 49·0 | 0·9 | |
| 9·5 | 50·8 | 6·6 | |
| 10·0 | 52·5 | 11·0 | |
| 9·8 | 53·0 | 37·1 | |
| 9·8 | 53·7 | 0·0 | |
| 10·0 | 6 0·0 | 8·2 | |
| 8·8 | 0·8 | 14·5 | 8·5 |
| 10·0 | 1·0 | 32·5 | |
| 8·9 | 1·5 | 28·2 | 9·2 |
| 9·9 | 2·5 | 34·8 | |
| 10·0 | 2·5 | 10·2 | |
| 10·0 | 4·5 | 31·1 | |
| 8·7 | 7·5 | 0·1 | 9·0 |
| 10·0 | 12·0 | 41·1 | |
| 9·8 | 17·0 | 52·0 | |
| 9·9 | 20·0 | 16·2 | |
| 8·9 | 21·5 | 1·9 | 9·5 G |
| 9·2 | 22·8 | 21·5 | 9·0 |
| 9·8 | 24·5 | 15·8 | |
| 9·2 | 24·5 | 25·8 | |
| 9·5 | 25·0 | 0·0 | |
| 9·6 | 28·5 | 30·9 | |
| 8·2 | 29·9 | 1·3 | 8·5 G |
| 10·0 | 31·0 | 27·1 | |
| 8·8 | 33·3 | 45·0 | |
| 10·0 | 36·5 | 20·0 | |
| 10·0 | 37·0 | 8·1 | |
| 9·6 | 40·5 | 25·8 | |
| 10·0 | 43·5 | 30·9 | |
| 10·0 | 44·0 | 4·3 | |
| 9·5 | 44·2 | 30·1 | |
| 8·6 | 45·0 | 25·0 | 8·8 G |
| 9·9 | 47·0 | 21·1 | |
| 9·6 | 47·8 | 2·7 | |

## 2641—2700.

| mag. | 11ʰ m s | −60° ′ | |
|---|---|---|---|
| 9·8 | 6 50·0 | 35·9 | |
| 10·0 | 51·0 | 33·7 | |
| 8·9 | 51·3 | 38·0 | G |
| 10·0 | 52·5 | 30·4 | |
| 10·0 | 53·5 | 49·3 | |
| 9·6 | 54·7 | 6·0 | |
| 9·5 | 54·7 | 5·1 | |
| 9·2 | 57·5 | 4·9 | |
| 10·0 | 59·5 | 29·9 | |
| 9·9 | 7 0·0 | 15·2 | |
| 10·0 | 3·0 | 31·1 | |
| 9·7 | 3·0 | 3·1 | |
| 10·0 | 4·5 | 33·3 | |
| 9·9 | 6·5 | 39·1 | |
| 9·7 | 7·3 | 8·9 | |
| 10·0 | 7·5 | 8·1 | |
| 9·3 | 7·5 | 12·3 | |
| 9·2 | 10·5 | 7·0 | |
| 10·0 | 11·5 | 43·3 | |
| 9·9 | 13·5 | 32·2 | |
| 10·0 | 17·5 | 32·0 | |
| 8·4 | 18·5 | 14·6 | 8·5 G |
| 9·1 | 19·0 | 21·2 | |
| 9·6 | 21·0 | 47·4 | |
| 8·7 | 27·0 | 3·6 | 8·8 |
| 9·5 | 30·0 | 5·8 | |
| 9·6 | 30·0 | 2·1 | |
| 9·6 | 33·5 | 30·1 | |
| 9·8 | 35·2 | 0·9 | |
| 10·0 | 36·5 | 4·2 | |
| 9·5 | 37·5 | 6·7 | |
| 10·0 | 37·5 | 30·0 | |
| 9·6 | 41·5 | 6·4 | |
| 9·9 | 42·5 | 7·1 | |
| 10·0 | 43·0 | 24·3 | |
| 9·6 | 43·5 | 6·6 | |
| 9·1 | 47·5 | 26·1 | 9·5 |
| 9·7 | 47·5 | 41·7 | |
| 10·0 | 49·5 | 40·1 | |
| 9·8 | 51·5 | 8·0 | |
| 10·0 | 52·0 | 27·6 | |
| 10·0 | 52·0 | 46·4 | |
| 10·0 | 52·5 | 21·5 | |
| 10·0 | 54·0 | 26·4 | |
| 10·0 | 58·0 | 48·1 | |
| 10·0 | 8 3·5 | 3·3 | |
| 10·0 | 3·5 | 18·2 | |
| 9·1 | 4·0 | 23·0 | 9·0 |
| 9·4 | 4·0 | 43·3 | |
| 10·0 | 5·5 | 43·8 | |
| 10·0 | 5·5 | 30·0 | |
| 10·0 | 6·5 | 3·9 | |
| 9·9 | 7·5 | 43·0 | |
| 9·8 | 7·5 | 9·2 | |
| 10·0 | 9·0 | 31·1 | |
| 9·2 | 10·0 | 35·1 | |
| 9·3 | 14·0 | 40·0 | |
| 8·5 | 16·0 | 3·9 | 8·2 G |
| 9·6 | 17·0 | 14·3 | |
| 10·0 | 22·5 | 51·2 | |

## 2701—2760.

| mag. | 11ʰ m s | −60° ′ | |
|---|---|---|---|
| 10·0 | 8 23·5 | 5·3 | |
| 10·0 | 28·0 | 30·8 | |
| 10·0 | 29·0 | 3·9 | |
| 10·0 | 30·5 | 38·9 | |
| 10·0 | 32·0 | 4·5 | |
| 10·0 | 32·5 | 4·1 | |
| 10·0 | 34·0 | 36·8 | |
| 9·3 | 41·5 | 50·2 | |
| 10·0 | 48·8 | 59·0 | |
| 9·8 | 49·5 | 36·3 | |
| 9·9 | 51·0 | 36·0 | |
| 9·8 | 52·0 | 16·2 | |
| 8·2 | 9 1·5 | 54·5 | 9·0 G |
| 9·9 | 1·5 | 36·9 | |
| 9·2 | 2·0 | 28·8 | 9·5 |
| 9·9 | 3·5 | 55·7 | |
| 10·0 | 5·5 | 46·3 | |
| 9·0 | 7·0 | 22·4 | 9·2 |
| 9·4 | 11·0 | 5·0 | |
| 10·0 | 16·0 | 17·8 | |
| 9·8 | 16·2 | 2·4 | |
| 10·0 | 16·5 | 59·4 | |
| 9·7 | 19·5 | 54·5 | |
| 10·0 | 22·0 | 51·4 | |
| 9·6 | 25·0 | 35·1 | |
| 9·9 | 26·0 | 32·3 | |
| 9·0 | 37·0 | 46·2 | 9·5 |
| 8·8 | 37·0 | 23·4 | 9·2 G |
| 10·0 | 39·5 | 27·2 | |
| 9·0 | 41·7 | 0·3 | 9·2 |
| 10·0 | 42·0 | 24·0 | |
| 8·8 | 44·5 | 34·8 | 9·5 |
| 9·9 | 50·0 | 49·0 | |
| 10·0 | 50·5 | 25·8 | |
| 9·8 | 10 2·0 | 34·1 | |
| 10·0 | 4·0 | 37·0 | |
| 9·6 | 8·5 | 6·1 | |
| 9·5 | 9·5 | 49·6 | |
| 10·0 | 10·0 | 47·0 | |
| 10·0 | 11·5 | 46·1 | |
| 10·0 | 12·0 | 37·4 | |
| 9·9 | 12·0 | 49·4 | |
| 10·0 | 13·5 | 1·4 | |
| 10·0 | 19·5 | 12·1 | |
| 10·0 | 20·0 | 20·1 | |
| 10·0 | 20·5 | 30·0 | |
| 10·0 | 21·0 | 19·6 | |
| 9·8 | 29·0 | 26·0 | |
| 10·0 | 32·5 | 23·0 | |
| 9·1 | 37·0 | 30·6 | 9·5 |
| 10·0 | 39·5 | 20·1 | |
| 10·0 | 41·0 | 20·1 | |
| 9·6 | 42·0 | 50·7 | |
| 10·0 | 42·5 | 48·1 | |
| 9·8 | 54·0 | 59·6 | 9·5 |
| 10·0 | 54·5 | 57·0 | |
| 10·0 | 59·5 | 20·1 | |
| 9·3 | 11 2·0 | 11·0 | |
| 10·0 | 5·5 | 2·5 | |
| 10·0 | 6·5 | 28·5 | |

## 2761—2820.

| mag. | 11ʰ m s | −60° ′ | |
|---|---|---|---|
| 9·2 | 11 6·5 | 35·4 | |
| 9·4 | 11·0 | 14·0 | |
| 10·0 | 11·0 | 34·6 | |
| 9·7 | 13·0 | 40·1 | |
| 8·8 | 15·5 | 8·7 | 9·5 S |
| 10·0 | 21·5 | 38·0 | |
| 10·0 | 23·0 | 17·3 | |
| 9·8 | 23·0 | 14·3 | |
| 9·1 | 27·5 | 24·1 | 9·0 |
| 10·0 | 28·0 | 12·1 | |
| 10·0 | 33·5 | 22·8 | |
| 10·0 | 33·5 | 18·5 | |
| 10·0 | 34·8 | 59·4 | |
| 8·6 | 37·5 | 14·8 | 9·0 G |
| 9·4 | 37·5 | 30·2 | |
| 10·0 | 39·5 | 39·2 | |
| 9·8 | 42·5 | 39·8 | |
| 10·0 | 43·5 | 31·0 | |
| 9·8 | 46·0 | 19·1 | |
| 9·6 | 52·0 | 12·9 | |
| 9·8 | 53·5 | 38·3 | |
| 9·6 | 54·5 | 46·1 | |
| 9·3 | 56·0 | 49·8 | |
| 10·0 | 12 4·0 | 4·9 | |
| 10·0 | 6·5 | 24·1 | |
| 8·8 | 12·2 | 57·2 | 9·0 |
| 9·8 | 15·5 | 51·0 | |
| 9·6 | 20·0 | 27·3 | |
| 10·0 | 23·5 | 59·9 | |
| 10·0 | 31·0 | 4·0 | |
| 10·0 | 32·5 | 27·2 | |
| 10·0 | 33·0 | 37·5 | |
| 9·6 | 33·5 | 51·7 | |
| 10·0 | 37·0 | 15·2 | |
| 9·9 | 45·5 | 15·1 | |
| 10·0 | 54·2 | 27·0 | |
| 9·2 | 13 3·0 | 14·5 | |
| 9·4 | 3·5 | 8·5 | |
| 9·3 | 5·0 | 8·3 | 9·5 |
| 10·0 | 5·5 | 16·2 | |
| 8·4 | 13·5 | 28·3 | 9·0 |
| 10·0 | 14·0 | 52·1 | |
| 10·0 | 19·2 | 28·2 | |
| 9·5 | 20·0 | 32·2 | |
| 10·0 | 21·2 | 45·5 | |
| 10·0 | 21·2 | 34·0 | |
| 9·6 | 21·5 | 13·1 | |
| 8·3 | 27·5 | 58·0 | 9·0 |
| 9·6 | 31·5 | 31·8 | |
| 10·0 | 34·0 | 37·1 | |
| 9·8 | 35·0 | 37·6 | |
| 10·0 | 37·5 | 42·1 | |
| 10·0 | 41·5 | 11·2 | |
| 10·0 | 43·3 | 59·6 | |
| 9·2 | 49·0 | 13·0 | 8·8 |
| 9·3 | 50·2 | 39·3 | |
| 9·6 | 52·0 | 26·1 | |
| 9·6 | 52·0 | 53·8 | |
| 8·6 | 54·0 | 15·3 | 9·0 |
| 10·0 | 54·5 | 30·4 | |



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## 2821—2880.

| mag. | 11ʰ m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 14 | 3·5 | 39·7 | |
| 9·8 | | 10·0 | 29·1 | |
| 10·0 | | 13·5 | 42·1 | |
| 9·4 | | 17·0 | 44·6 | |
| 10·0 | | 21·0 | 46·1 | |
| 9·8 | | 21·5 | 50·6 | |
| 9·0 | | 24·0 | 3·0 | |
| 9·6 | | 24·5 | 47·7 | |
| 9·2 | | 37·5 | 33·1 | 9·5 |
| 10·0 | | 42·0 | 2·2 | |
| 10·0 | | 42·5 | 34·1 | |
| 9·1 | | 44·5 | 19·7 | 9·5 |
| 9·4 | | 50·0 | 42·8 | |
| 10·0 | | 52·2 | 37·3 | |
| 8·1 | | 53·5 | 24·8 | 8·0 GS |
| 10·0 | | 53·5 | 57·1 | |
| 10·0 | 15 | 0·5 | 57·1 | |
| 9·4 | | 9·0 | 6·1 | |
| 10·0 | | 16·0 | 13·5 | |
| 10·0 | | 21·8 | 59·3 | |
| 9·6 | | 27·5 | 23·4 | |
| 9·6 | | 28·5 | 22·1 | |
| 9·3 | | 30·0 | 19·2 | 9·0 |
| 9·8 | | 35·5 | 46·2 | |
| 10·0 | | 36·0 | 31·1 | |
| 9·6 | | 37·0 | 4·1 | |
| 10·0 | | 42·0 | 40·6 | |
| 10·0 | | 46·0 | 45·9 | |
| 9·6 | | 51·2 | 0·2 | |
| 8·4 | 16 | 4·5 | 32·5 | 7·8 GSt |
| 9·1 | | 7·0 | 49·5 | |
| 9·2 | | 9·0 | 18·2 | 8·0 G |
| 10·0 | | 13·5 | 19·8 | |
| 9·9 | | 16·5 | 17·9 | |
| 10·0 | | 20·5 | 17·2 | |
| 9·4 | | 23·5 | 18·9 | 9·0 |
| 8·9 | | 28·0 | 20·6 | 9·5 |
| 9·6 | | 30·0 | 17·1 | |
| 10·0 | | 33·5 | 27·5 | |
| 9·3 | | 40·0 | 38·2 | |
| 9·6 | | 40·5 | 6·4 | 9·5 |
| 10·0 | | 42·0 | 6·3 | 9·5 |
| 9·9 | | 43·0 | 23·5 | |
| 10·0 | | 44·0 | 35·7 | |
| 8·4 | | 45·5 | 2·9 | 8·8 |
| 9·5 | | 48·0 | 41·1 | |
| 8·7 | | 48·5 | 23·2 | 9·2 |
| 10·0 | | 49·0 | 44·1 | |
| 9·6 | | 50·0 | 35·4 | |
| 9·8 | | 52·5 | 17·6 | |
| 10·0 | | 52·5 | 34·3 | |
| 10·0 | | 58·5 | 35·6 | |
| 9·5 | | 58·5 | 15·1 | |
| 10·0 | 17 | 9·5 | 17·3 | |
| 10·0 | | 9·5 | 8·3 | |
| 9·9 | | 12·5 | 17·2 | |
| 9·8 | | 15·0 | 53·0 | |
| 9·9 | | 22·0 | 27·1 | |
| 9·0 | | 24·0 | 51·0 | |
| 9·9 | | 31·0 | 39·4 | |

## 2881—2940.

| mag. | 11ʰ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 17 | 31·5 | 56·1 | |
| 9·0 | | 32·5 | 57·1 | 9·5 |
| 10·0 | | 33·0 | 29·9 | |
| 9·5 | | 38·0 | 24·0 | |
| 9·5 | | 39·5 | 8·1 | |
| 9·5 | | 49·0 | 36·1 | |
| 9·6 | | 52·5 | 2·1 | |
| 10·0 | 18 | 0·0 | 35·2 | |
| 10·0 | | 6·0 | 21·8 | |
| 9·6 | | 7·5 | 59·2 | 9·5 |
| 8·5 | | 21·5 | 10·9 | 9·0 |
| 8·6 | | 23·0 | 24·2 | 8·5 G |
| 8·9 | | 25·5 | 40·1 | |
| 10·0 | | 28·0 | 11·4 | |
| 10·0 | | 36·5 | 0·8 | |
| 10·0 | | 40·0 | 51·4 | |
| 9·8 | | 47·5 | 59·0 | |
| 10·0 | | 47·5 | 22·1 | |
| 10·0 | | 49·5 | 51·2 | |
| 9·5 | | 51·0 | 17·2 | |
| 10·0 | | 53·0 | 37·2 | |
| 10·0 | | 56·5 | 50·2 | |
| 10·0 | | 58·5 | 42·9 | |
| 9·1 | 19 | 2·5 | 50·7 | |
| 10·0 | | 3·5 | 25·2 | |
| 9·0 | | 7·0 | 22·1 | 9·0 |
| 10·0 | | 10·5 | 48·0 | |
| 10·0 | | 11·0 | 32·3 | |
| 9·5 | | 13·5 | 52·3 | 9·5 G |
| 9·3 | | 13·5 | 3·3 | 9·5 |
| 8·7 | | 14·8 | 58·0 | 8·0 G |
| 9·3 | | 15·0 | 26·3 | 9·5 |
| 9·0 | | 21·0 | 51·4 | |
| 9·0 | | 21·0 | 35·6 | 8·8 G |
| 10·0 | | 21·5 | 47·2 | |
| 9·2 | | 30·0 | 6·6 | |
| 9·5 | | 30·5 | 2·9 | 8·8 |
| 9·5 | | 33·0 | 28·4 | |
| 9·1 | | 39·5 | 41·0 | 9·0 |
| 8·7 | | 39·5 | 35·3 | 9·5 |
| 10·0 | | 43·5 | 38·3 | |
| 10·0 | | 50·0 | 36·0 | |
| 8·5 | | 53·0 | 17·2 | 9·0 |
| 9·9 | | 53·0 | 6·4 | |
| 9·7 | | 56·0 | 2·0 | |
| 10·0 | | 59·5 | 36·3 | |
| 10·0 | | 59·5 | 3·4 | |
| 10·0 | 20 | 12·5 | 27·0 | |
| 10·0 | | 12·5 | 3·3 | |
| 10·0 | | 13·0 | 11·8 | |
| 9·2 | | 22·5 | 41·1 | |
| 9·8 | | 24·0 | 47·3 | |
| 8·3 | | 26·0 | 57·7 | |
| 9·0 | | 31·0 | 20·5 | 9·5 |
| 10·0 | | 34·0 | 53·5 | |
| 10·0 | | 43·0 | 38·1 | |
| 10·0 | | 45·0 | 27·4 | |
| 9·9 | | 48·3 | 57·3 | |
| 9·8 | | 48·5 | 52·9 | |
| 9·9 | | 55·0 | 31·4 | 9·5 |

## 2941—3000.

| mag. | 11ʰ m | s | −60° ′ | |
|---|---|---|---|---|
| 5·1 | 20 | 57·0 | 25·6 | 6·0 GSct |
| 9·8 | 21 | 7·0 | 49·2 | |
| 10·0 | | 7·0 | 48·0 | |
| 9·6 | | 10·5 | 53·1 | |
| 10·0 | | 17·5 | 41·2 | |
| 9·7 | | 22·5 | 52·4 | |
| 9·5 | | 23·0 | 13·1 | 10·0 |
| 8·8 | | 23·0 | 41·0 | 7·0 GSt |
| 9·8 | | 27·0 | 9·5 | |
| 10·0 | | 32·5 | 12·1 | |
| 9·7 | | 34·0 | 36·1 | |
| 10·0 | | 48·0 | 44·1 | |
| 10·0 | | 54·5 | 0·7 | |
| 10·0 | | 59·5 | 25·2 | |
| 9·1 | 22 | 0·5 | 58·0 | 9·0 |
| 9·5 | | 2·0 | 53·1 | 9·5 |
| 10·0 | | 6·5 | 46·5 | |
| 10·0 | | 7·0 | 45·2 | |
| 10·0 | | 11·0 | 23·9 | |
| 9·6 | | 11·5 | 15·7 | |
| 10·0 | | 18·5 | 1·9 | |
| 9·9 | | 19·5 | 17·0 | |
| 9·6 | | 23·0 | 31·3 | |
| 10·0 | | 23·8 | 57·1 | |
| 8·6 | | 25·0 | 43·3 | 9·0 |
| 10·0 | | 31·5 | 28·8 | |
| 9·6 | | 32·5 | 34·2 | |
| 9·5 | | 35·5 | 49·9 | |
| 9·5 | | 36·0 | 17·1 | 9·5 |
| 10·0 | | 36·5 | 20·1 | |
| 9·9 | | 43·0 | 12·6 | |
| 9·9 | | 43·5 | 12·1 | |
| 9·6 | | 44·5 | 17·0 | |
| 9·1 | | 49·0 | 53·9 | 9·0 |
| 9·2 | | 49·5 | 18·9 | 9·5 |
| 9·6 | | 50·0 | 3·0 | |
| 9·4 | | 52·5 | 41·3 | |
| 8·9 | 23 | 3·0 | 23·4 | 9·0 |
| 9·6 | | 3·0 | 47·1 | |
| 9·8 | | 8·5 | 48·1 | |
| 9·9 | | 11·5 | 48·2 | |
| 9·2 | | 19·5 | 49·9 | |
| 8·7 | | 20·5 | 11·5 | 9·5 |
| 10·0 | | 33·0 | 47·2 | |
| 10·0 | | 39·5 | 12·2 | |
| 8·6 | | 49·0 | 54·4 | 9·0 |
| 9·6 | | 50·5 | 53·4 | |
| 9·3 | | 50·5 | 20·5 | 10·0 |
| 9·8 | | 51·0 | 37·2 | |
| 10·0 | | 53·0 | 32·9 | |
| 9·7 | 24 | 3·8 | 59·0 | 9·5 |
| 10·0 | | 7·5 | 41·3 | |
| 9·2 | | 12·5 | 33·8 | |
| 9·8 | | 19·0 | 3·2 | |
| 10·0 | | 29·5 | 28·4 | 9·5 |
| 9·7 | | 47·0 | 49·1 | |
| 10·0 | | 52·0 | 5·4 | |
| 10·0 | | 53·0 | 51·7 | |
| 9·6 | | 53·5 | 45·9 | |
| 10·0 | | 56·5 | 32·7 | |

## 3001—3060.

| mag. | 11ʰ m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 25 | 2·0 | 50·6 | |
| 8·6 | | 3·5 | 23·2 | 8·2 G |
| 9·8 | | 6·5 | 46·0 | |
| 9·4 | | 6·5 | 18·3 | |
| 10·0 | | 9·0 | 9·3 | |
| 9·4 | | 11·5 | 4·0 | |
| 10·0 | | 12·5 | 26·1 | |
| 9·5 | | 20·0 | 57·2 | 9·0 |
| 10·0 | | 20·5 | 51·9 | |
| 10·0 | | 20·5 | 31·6 | |
| 7·5 | | 32·5 | 35·3 | 7·0 GSt |
| 9·7 | | 36·0 | 7·1 | |
| 9·8 | | 59·0 | 27·3 | |
| 10·0 | | 59·5 | 3·0 | |
| 9·1 | 26 | 0·2 | 2·0 | |
| 9·6 | | 1·0 | 54·9 | |
| 8·2 | | 5·0 | 0·3 | 8·2 GS |
| 9·5 | | 6·5 | 2·4 | |
| 9·2 | | 11·5 | 56·8 | |
| 9·5 | | 14·5 | 6·0 | |
| 9·5 | | 15·0 | 11·3 | |
| 10·0 | | 22·0 | 52·4 | |
| 10·0 | | 22·5 | 53·4 | |
| 9·5 | | 22·5 | 40·0 | |
| 10·0 | | 26·5 | 15·4 | |
| 9·6 | | 27·5 | 7·1 | |
| 10·0 | | 32·0 | 7·4 | |
| 7·9 | | 32·0 | 9·8 | 8·5 G |
| 9·0 | | 35·5 | 28·2 | 9·8 |
| 9·7 | | 35·5 | 2·8 | |
| 9·8 | | 36·5 | 1·1 | |
| 10·0 | | 42·5 | 6·9 | |
| 10·0 | | 42·5 | 35·2 | |
| 8·4 | | 43·5 | 55·3 | |
| 10·0 | | 48·0 | 48·1 | |
| 10·0 | | 48·5 | 45·9 | |
| 8·2 | | 50·5 | 3·5 | 9·0 |
| 9·1 | | 52·5 | 11·8 | |
| 8·9 | | 53·0 | 42·1 | |
| 10·0 | 27 | 1·0 | 1·3 | |
| 10·0 | | 1·5 | 33·0 | |
| 9·5 | | 5·0 | 51·7 | 9·5 |
| 9·5 | | 7·0 | 51·1 | 9·0 |
| 10·0 | | 11·5 | 18·1 | |
| 9·4 | | 17·5 | 38·3 | 8·5 |
| 10·0 | | 17·5 | 42·1 | |
| 10·0 | | 23·5 | 42·3 | |
| 9·4 | | 30·0 | 12·0 | |
| 9·5 | | 31·5 | 55·0 | |
| 9·2 | | 33·0 | 4·3 | |
| 9·9 | | 37·5 | 50·1 | |
| 9·8 | | 40·5 | 31·8 | 9·5 |
| 8·3 | | 40·5 | 4·9 | 9·0 *g* |
| 10·0 | | 42·5 | 20·0 | |
| 10·0 | | 42·5 | 51·7 | |
| 9·6 | | 51·0 | 51·0 | |
| 9·5 | | 59·0 | 47·5 | |
| 8·8 | 28 | 2·0 | 11·8 | 8·5 GS*g* |
| 10·0 | | 5·5 | 1·2 | |
| 10·0 | | 6·0 | 53·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 64 | 8·2 |
| | 20 | 67 | 8·2 |
| | 30 | 69 | 8·3 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 20 | 67 | 8.2 |
| | 30 | 69 | 8.3 |
| | 40 | 72 | 8.3 |

## 3061—3120.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10.0 | 28 | 15.5 | 8.4 | |
| 9.5 | | 20.5 | 21.6 | |
| 9.5 | | 22.5 | 12.0 | |
| 10.0 | | 36.0 | 49.7 | |
| 9.9 | | 42.5 | 7.8 | |
| 10.0 | | 49.5 | 27.1 | |
| 9.8 | | 58.5 | 13.8 | 9.5 |
| 10.0 | 29 | 2.5 | 41.0 | |
| 8.7 | | 3.0 | 5.9 | 8.0 G*g* |
| 9.4 | | 4.0 | 46.3 | |
| 9.7 | | 5.0 | 55.7 | |
| 9.7 | | 9.5 | 11.1 | |
| 10.0 | | 12.5 | 15.2 | 9.5 |
| 9.6 | | 22.0 | 13.4 | |
| 7.2 | | 29.0 | 12.1 | 7.5 GS*gt* |
| 9.5 | | 35.5 | 50.6 | |
| 9.9 | | 37.0 | 19.6 | 9.5 |
| 10.0 | | 39.5 | 44.7 | |
| 10.0 | | 42.0 | 32.6 | |
| 8.7 | | 44.0 | 3.3 | 8.5 *g* |
| 10.0 | | 44.2 | 1.7 | |
| 9.8 | | 46.0 | 54.2 | |
| 9.4 | | 49.0 | 53.5 | |
| 10.0 | | 49.0 | 55.2 | |
| 9.6 | | 49.5 | 31.7 | |
| 10.0 | | 50.0 | 3.7 | |
| 9.8 | | 50.0 | 47.6 | |
| 9.4 | | 50.0 | 52.6 | |
| 10.0 | | 50.0 | 59.8 | |
| 6.8 | | 52.5 | 35.7 | 7.2 GSct |
| 9.2 | | 53.0 | 55.4 | |
| 9.8 | | 55.5 | 59.5 | |
| 10.0 | | 57.0 | 54.6 | |
| 8.8 | | 57.5 | 53.2 | 8.5 GSt |
| 8.2 | 30 | 0.0 | 52.2 | 9.0 G |
| 9.0 | | 0.0 | 47.9 | |
| 9.7 | | 2.0 | 54.7 | |
| 8.4 | | 5.0 | 56.8 | |
| 9.4 | | 5.0 | 58.2 | |
| 9.1 | | 5.0 | 43.2 | |
| 9.6 | | 7.0 | 53.0 | |
| 8.2 | | 7.5 | 54.8 | |
| 10.0 | | 7.5 | 27.2 | |
| 9.9 | | 8.5 | 51.0 | |
| 9.9 | | 9.5 | 56.9 | |
| 10.0 | | 12.0 | 50.9 | |
| 10.0 | | 12.0 | 52.9 | |
| 9.0 | | 12.0 | 55.9 | |
| 10.0 | | 12.0 | 27.2 | |
| 10.0 | | 12.0 | 49.0 | |
| 10.0 | | 14.5 | 0.5 | |
| 8.4 | | 16.0 | 53.9 | 9.0 |
| 10.0 | | 16.0 | 54.4 | |
| 10.0 | | 16.5 | 57.4 | |
| 10.0 | | 17.0 | 15.1 | |
| 9.0 | | 17.0 | 53.3 | |
| 9.6 | | 18.0 | 59.4 | |
| 10.0 | | 18.5 | 56.4 | |
| 10.0 | | 19.0 | 50.4 | |
| 9.4 | | 20.0 | 52.9 | |

## 3121—3180.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.6 | 30 | 20.0 | 56.8 | |
| 8.8 | | 20.0 | 57.2 | |
| 10.0 | | 20.5 | 50.4 | |
| 10.0 | | 21.0 | 35.0 | |
| 9.1 | | 21.5 | 54.2 | |
| 8.5 | | 22.0 | 56.2 | |
| 10.0 | | 22.0 | 55.1 | |
| 8.3 | | 22.5 | 54.3 | |
| 8.7 | | 23.0 | 51.2 | |
| 10.0 | | 23.0 | 57.0 | |
| 10.0 | | 23.5 | 53.7 | |
| 10.0 | | 24.0 | 59.9 | |
| 8.9 | | 26.0 | 56.1 | |
| 9.4 | | 28.0 | 53.5 | |
| 9.9 | | 28.5 | 54.7 | |
| 8.4 | | 28.5 | 46.4 | |
| 9.2 | | 30.0 | 54.1 | |
| 9.5 | | 30.0 | 55.6 | |
| 9.5 | | 30.0 | 59.3 | |
| 5.7 | | 31.0 | 21.7 | 6.5 GS*gt* |
| 9.3 | | 31.5 | 22.9 | |
| 9.8 | | 32.0 | 35.4 | |
| 9.4 | | 32.0 | 55.5 | |
| 9.5 | | 32.0 | 56.0 | |
| 8.4 | | 32.0 | 57.6 | 9.0 |
| 10.0 | | 32.0 | 31.9 | |
| 9.0 | | 32.0 | 53.8 | |
| 8.6 | | 32.5 | 54.2 | |
| 9.4 | | 33.0 | 55.0 | |
| 9.3 | | 36.0 | 59.0 | |
| 9.1 | | 38.0 | 26.0 | 9.5 |
| 9.0 | | 38.0 | 37.7 | 8.5 |
| 10.0 | | 38.5 | 15.3 | |
| 10.0 | | 38.5 | 54.1 | |
| 7.4 | | 40.0 | 58.4 | 8.0 GSt |
| 8.9 | | 40.5 | 27.8 | |
| 8.4 | | 42.0 | 53.0 | 9.0 G |
| 9.1 | | 42.5 | 53.3 | |
| 7.6 | | 43.5 | 12.1 | 8.0 GS*g* |
| 9.4 | | 45.5 | 29.1 | |
| 8.9 | | 46.0 | 55.1 | 8.5 G |
| 9.7 | | 48.0 | 31.1 | |
| 9.7 | | 49.5 | 51.6 | |
| 10.0 | | 50.0 | 52.8 | |
| 9.8 | | 52.0 | 56.4 | |
| 10.0 | | 52.0 | 54.2 | |
| 10.0 | | 52.0 | 53.0 | |
| 8.7 | | 52.0 | 50.1 | |
| 10.0 | | 52.0 | 46.1 | |
| 10.0 | | 55.5 | 42.0 | |
| 9.4 | | 58.0 | 27.1 | 8.5 G |
| 9.6 | | 59.0 | 45.1 | |
| 9.7 | | 59.5 | 16.0 | |
| 9.8 | 31 | 0.5 | 54.9 | |
| 8.6 | | 1.0 | 58.6 | |
| 9.8 | | 2.5 | 23.4 | |
| 10.0 | | 5.8 | 58.1 | |
| 8.7 | | 7.0 | 29.3 | 8.0 |
| 10.0 | | 9.0 | 25.1 | |
| 9.5 | | 10.5 | 55.2 | |

## 3181—3240.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8.7 | 31 | 11.5 | 33.7 | |
| 7.1 | | 13.0 | 35.5 | 6.0 GSt |
| 10.0 | | 15.0 | 50.3 | |
| 10.0 | | 16.5 | 55.9 | |
| 10.0 | | 19.5 | 55.1 | |
| 9.6 | | 21.0 | 58.0 | |
| 9.6 | | 22.0 | 20.1 | |
| 10.0 | | 23.0 | 5.3 | |
| 9.8 | | 25.5 | 39.1 | |
| 8.6 | | 29.5 | 2.2 | 8.0 G*g* |
| 8.8 | | 32.0 | 44.4 | |
| 9.9 | | 35.5 | 51.1 | |
| 10.0 | | 35.5 | 41.5 | |
| 9.6 | | 40.0 | 59.1 | |
| 7.2 | | 42.0 | 47.5 | 8.0 GSt |
| 8.2 | | 43.0 | 12.8 | 7.3 GS*g* |
| 9.7 | | 45.0 | 31.4 | |
| 9.4 | | 45.5 | 12.1 | |
| 10.0 | | 46.5 | 43.5 | |
| 10.0 | | 46.5 | 18.3 | |
| 7.6 | | 46.5 | 17.4 | 7.8 GS*gt* |
| 9.8 | | 49.5 | 55.9 | |
| 9.5 | | 55.5 | 48.0 | |
| 9.7 | 32 | 1.5 | 57.2 | |
| 10.0 | | 3.3 | 57.4 | |
| 10.0 | | 9.0 | 12.0 | |
| 8.7 | | 18.5 | 40.8 | |
| 9.5 | | 22.0 | 29.8 | |
| 9.4 | | 30.5 | 58.2 | |
| 10.0 | | 33.5 | 18.2 | |
| 10.0 | | 34.5 | 53.0 | |
| 8.9 | | 39.0 | 40.4 | |
| 10.0 | | 44.5 | 25.5 | |
| 9.8 | | 59.0 | 12.1 | 9.0 S |
| 8.6 | 33 | 13.0 | 42.1 | 9.0 |
| 9.8 | | 20.5 | 46.4 | |
| 9.3 | | 22.0 | 43.1 | 8.5 |
| 9.5 | | 25.0 | 45.1 | |
| 10.0 | | 26.5 | 25.5 | |
| 9.2 | | 29.5 | 15.1 | 9.0 |
| 9.8 | | 32.5 | 19.6 | |
| 8.4 | | 35.0 | 28.2 | 8.5 G*g* |
| 9.4 | | 40.5 | 26.7 | 9.0 |
| 9.6 | | 41.5 | 47.5 | |
| 9.4 | 34 | 2.5 | 21.0 | |
| 10.0 | | 5.0 | 12.4 | |
| 9.4 | | 6.0 | 34.8 | |
| 9.5 | | 7.5 | 34.4 | |
| 9.2 | | 9.0 | 56.1 | |
| 9.2 | | 9.5 | 12.3 | 9.0 |
| 7.5 | | 12.5 | 29.5 | 8.0 G*g* |
| 10.0 | | 18.0 | 30.1 | |
| 8.6 | | 20.0 | 43.1 | |
| 10.0 | | 21.0 | 53.8 | |
| 9.9 | | 25.5 | 13.5 | |
| 9.8 | | 30.5 | 23.3 | |
| 10.0 | | 49.5 | 28.1 | |
| 9.4 | | 52.0 | 24.8 | |
| 8.6 | | 54.0 | 17.2 | 7.0 GS*g* |
| 10.0 | | 59.0 | 42.8 | |

## 3241—3300.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9.6 | 35 | 0.5 | 41.2 | |
| 9.3 | | 1.0 | 27.8 | |
| 8.7 | | 2.0 | 19.3 | |
| 9.8 | | 5.5 | 4.0 | |
| 10.0 | | 7.5 | 53.4 | |
| 8.4 | | 8.0 | 13.9 | 8.0 GS*g* |
| 9.8 | | 11.0 | 36.6 | |
| 8.1 | | 15.0 | 26.9 | 7.5 G*g* |
| 9.5 | | 17.0 | 4.7 | |
| 9.9 | | 17.5 | 3.5 | |
| 9.4 | | 18.5 | 18.0 | |
| 9.4 | | 29.5 | 17.7 | |
| 9.6 | | 32.0 | 44.3 | |
| 8.6 | | 35.5 | 18.1 | 9.0 |
| 10.0 | | 37.0 | 20.0 | |
| 10.0 | | 38.5 | 27.1 | |
| 9.6 | | 40.5 | 12.0 | |
| 9.8 | | 40.5 | 57.1 | |
| 10.0 | | 56.5 | 26.4 | |
| 10.0 | 36 | 0.0 | 4.1 | |
| 10.0 | | 1.0 | 59.1 | |
| 9.8 | | 1.0 | 4.0 | |
| 10.0 | | 4.5 | 4.7 | |
| 9.1 | | 5.5 | 58.9 | |
| 10.0 | | 13.5 | 48.0 | |
| 9.0 | | 21.5 | 16.1 | 7.5 G*g* |
| 9.5 | | 24.5 | 32.1 | |
| 9.6 | | 24.5 | 11.1 | |
| 10.0 | | 28.5 | 45.2 | |
| 10.0 | | 32.0 | 33.0 | |
| 10.0 | | 32.5 | 47.2 | |
| 9.6 | | 42.0 | 47.3 | |
| 10.0 | | 49.5 | 49.1 | |
| 8.2 | | 49.5 | 48.9 | 9.0 |
| 9.9 | | 54.0 | 55.1 | |
| 10.0 | | 55.0 | 25.4 | |
| 10.0 | | 57.5 | 3.5 | |
| 8.8 | 37 | 8.5 | 2.5 | |
| 9.5 | | 10.5 | 56.5 | |
| 10.0 | | 14.2 | 1.0 | |
| 9.2 | | 18.0 | 5.5 | |
| 9.2 | | 22.0 | 29.6 | |
| 10.0 | | 22.0 | 30.3 | |
| 9.2 | | 25.5 | 59.6 | |
| 10.0 | | 30.0 | 26.1 | |
| 9.5 | | 32.0 | 13.5 | 9.5 G |
| 10.0 | | 36.5 | 47.0 | |
| 9.4 | | 39.5 | 17.9 | 9.5 |
| 9.2 | | 40.5 | 8.2 | |
| 9.3 | | 41.0 | 13.1 | 9.5 |
| 10.0 | | 53.3 | 58.6 | |
| 9.6 | 38 | 7.0 | 43.5 | |
| 10.0 | | 7.3 | 0.1 | |
| 9.7 | | 9.5 | 24.0 | |
| 10.0 | | 13.5 | 7.1 | |
| 10.0 | | 14.0 | 59.1 | |
| 8.9 | | 26.5 | 47.5 | 9.5 |
| 8.8 | | 38.5 | 9.4 | 8.0 G*g* |
| 9.1 | | 45.0 | 29.7 | |
| 9.4 | | 47.0 | 13.5 | 9.2 |



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### 3301—3360.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 38 | 49·0 | 12·4 | |
| 9·7 | | 50·5 | 13·1 | |
| 10·0 | 39 | 1·0 | 27·0 | |
| 8·4 | | 5·0 | 49·3 | 9·5 |
| 9·4 | | 9·0 | 16·4 | |
| 10·0 | | 9·5 | 21·3 | |
| 9·5 | | 17·0 | 46·0 | |
| 9·5 | | 19·0 | 11·1 | 9·5 |
| 9·6 | | 20·5 | 51·4 | |
| 9·2 | | 21·0 | 0·5 | |
| 9·6 | | 31·5 | 57·2 | |
| 8·4 | | 38·0 | 30·3 | 8·8 G |
| 10·0 | | 40·5 | 15·2 | |
| 7·8 | | 43·0 | 45·1 | 8·5 G |
| 8·3 | | 44·5 | 46·1 | 9·0 |
| 10·0 | | 58·5 | 49·8 | |
| 10·0 | | 59·0 | 17·0 | |
| 9·9 | 40 | 1·5 | 12·3 | |
| 8·9 | | 2·0 | 44·7 | |
| 9·5 | | 8·0 | 17·0 | |
| 9·8 | | 14·5 | 18·3 | |
| 10·0 | | 18·0 | 20·0 | |
| 10·0 | | 18·5 | 1·8 | |
| 9·4 | | 20·0 | 14·1 | |
| 5·7 | | 27·0 | 29·0 | 4·8 GScgt |
| 9·7 | | 32·0 | 26·9 | |
| 10·0 | | 36·0 | 30·0 | |
| 9·5 | | 41·0 | 28·2 | |
| 9·9 | | 49·5 | 12·4 | |
| 8·1 | | 49·5 | 20·7 | 8·5 GS |
| 10·0 | | 50·0 | 12·5 | |
| 9·8 | | 51·5 | 49·5 | |
| 8·9 | | 51·5 | 46·1 | 9·5 |
| 8·7 | | 59·5 | 26·1 | 9·0 |
| 8·8 | 41 | 10·0 | 27·9 | 9·5 |
| 8·6 | | 12·0 | 12·0 | 9·5 |
| 8·8 | | 14·5 | 47·3 | 9·0 |
| 9·4 | | 16·0 | 30·1 | 9·1 |
| 9·4 | | 18·0 | 43·2 | |
| 9·9 | | 21·0 | 1·8 | |
| 10·0 | | 26·3 | 57·8 | |
| 10·0 | | 40·5 | 56·7 | |
| 10·0 | | 40·7 | 16·1 | |
| 10·0 | | 42·0 | 18·2 | |
| 10·2 | | 46·5 | 49·3 | |
| 10·2 | | 48·0 | 55·3 | |
| 10·0 | | 49·2 | 3·9 | |
| 10·2 | | 56·0 | 2·1 | |
| 10·2 | 42 | 1·0 | 55·0 | |
| 10·2 | | 1·2 | 33·3 | |
| 10·0 | | 6·3 | 42·9 | |
| 9·6 | | 9·2 | 11·0 | 9·5 |
| 9·6 | | 9·5 | 38·2 | |
| 10·0 | | 16·2 | 59·3 | |
| 9·3 | | 18·0 | 53·7 | |
| 8·7 | | 19·0 | 55·6 | 8·8 |
| 9·5 | | 21·0 | 48·3 | |
| 10·2 | | 21·0 | 39·4 | |
| 9·5 | | 28·0 | 20·3 | |
| 10·0 | | 28·0 | 32·1 | |

### 3361—3420.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 31·0 | 31·9 | |
| 10·0 | | 34·0 | 39·4 | |
| 9·0 | | 34·0 | 47·5 | 9·5 |
| 9·6 | | 34·4 | 1·7 | |
| 8·9 | | 37·5 | 52·1 | 8·8 |
| 10·0 | | 39·5 | 35·7 | |
| 10·2 | | 41·0 | 44·4 | |
| 10·0 | | 42·0 | 12·3 | |
| 9·1 | | 44·5 | 14·2 | |
| 10·2 | | 44·5 | 10·7 | |
| 10·2 | | 49·0 | 59·9 | |
| 9·9 | | 51·0 | 43·2 | |
| 9·2 | | 55·0 | 44·9 | |
| 9·1 | | 58·0 | 27·1 | 9·5 |
| 10·0 | 43 | 0·5 | 18·9 | |
| 9·9 | | 1·0 | 59·9 | |
| 10·2 | | 1·0 | 45·1 | |
| 10·2 | | 2·0 | 36·6 | |
| 9·1 | | 4·9 | 57·6 | |
| 10·0 | | 5·5 | 42·1 | |
| 9·3 | | 8·0 | 45·7 | |
| 10·2 | | 9·5 | 47·9 | |
| 9·2 | | 11·5 | 33·5 | |
| 10·2 | | 20·0 | 1·6 | |
| 10·2 | | 21·0 | 47·0 | |
| 9·5 | | 22·5 | 35·6 | |
| 9·8 | | 24·0 | 30·9 | |
| 10·2 | | 24·0 | 18·7 | |
| 10·2 | | 25·0 | 45·5 | |
| 10·2 | | 25·0 | 46·9 | |
| 9·4 | | 26·0 | 57·9 | |
| 9·6 | | 28·0 | 35·3 | 9·5 |
| 10·0 | | 29·5 | 19·0 | |
| 10·0 | | 30·0 | 10·1 | |
| 9·8 | | 31·2 | 0·2 | |
| 10·2 | | 31·5 | 20·3 | |
| 10·2 | | 35·0 | 54·5 | |
| 9·9 | | 45·0 | 38·9 | 9·2 |
| 9·7 | | 45·5 | 9·9 | |
| 9·6 | | 54·0 | 43·9 | |
| 9·8 | | 54·0 | 31·7 | |
| 10·0 | 44 | 0·0 | 29·8 | |
| 10·0 | | 1·0 | 34·1 | 9·5 |
| 9·7 | | 1·5 | 29·2 | |
| 10·2 | | 2·0 | 35·5 | |
| 9·4 | | 4·5 | 31·9 | 9·5 |
| 9·6 | | 4·5 | 40·7 | |
| 10·2 | | 7·0 | 10·3 | |
| 9·8 | | 9·0 | 24·4 | |
| 9·8 | | 14·0 | 28·3 | |
| 9·6 | | 14·0 | 20·2 | 9·5 |
| 9·0 | | 19·0 | 52·1 | 9·0 |
| 10·2 | | 20·0 | 29·5 | |
| 10·0 | | 21·0 | 25·9 | |
| 8·4 | | 24·5 | 6·0 | 8·3 |
| 9·4 | | 27·5 | 31·0 | 9·1 |
| 10·2 | | 27·5 | 29·9 | |
| 10·2 | | 29·0 | 53·3 | |
| 9·1 | | 29·8 | 58·1 | |
| 10·0 | | 31·5 | 12·9 | |

### 2421—3480.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 44 | 33·0 | 32·3 | |
| 10·0 | | 38·0 | 17·1 | |
| 9·2 | | 41·0 | 40·6 | |
| 10·2 | | 42·0 | 50·3 | |
| 10·0 | | 52·0 | 11·2 | |
| 10·2 | | 54·0 | 49·3 | |
| 9·7 | | 58·5 | 25·9 | |
| 10·0 | | 58·5 | 32·9 | |
| 9·9 | 45 | 0·5 | 10·9 | |
| 9·7 | | 1·0 | 26·0 | |
| 9·6 | | 1·5 | 6·0 | |
| 10·2 | | 8·0 | 5·9 | |
| 10·0 | | 8·0 | 20·4 | 9·5 |
| 10·2 | | 16·0 | 30·9 | |
| 9·4 | | 18·0 | 31·3 | |
| 10·2 | | 18·5 | 48·3 | |
| 9·2 | | 21·5 | 53·3 | |
| 9·9 | | 24·5 | 4·9 | |
| 9·0 | | 26·5 | 47·9 | |
| 10·2 | | 28·0 | 42·1 | |
| 10·2 | | 30·0 | 36·5 | |
| 9·3 | | 34·0 | 27·9 | 8·0 G |
| 10·0 | | 47·5 | 23·3 | |
| 9·8 | | 53·5 | 33·3 | |
| 10·0 | | 54·5 | 37·1 | |
| 9·2 | 46 | 0·0 | 21·5 | 9·5 |
| 9·6 | | 0·5 | 47·7 | |
| 9·2 | | 4·5 | 57·7 | |
| 10·2 | | 7·0 | 36·7 | |
| 9·9 | | 8·0 | 32·5 | |
| 10·0 | | 11·5 | 40·1 | |
| 10·0 | | 13·0 | 16·1 | 9·5 |
| 10·0 | | 15·0 | 46·3 | |
| 8·5 | | 19·5 | 49·8 | 9·2 |
| 10·2 | | 20·0 | 5·6 | |
| 9·6 | | 21·5 | 15·1 | |
| 8·9 | | 24·0 | 30·8 | 9·5 |
| 10·0 | | 29·0 | 12·2 | |
| 10·2 | | 31·0 | 28·0 | |
| 10·2 | | 41·0 | 35·0 | |
| 9·0 | | 43·5 | 19·3 | 9·0 |
| 10·2 | | 43·5 | 30·1 | |
| 9·1 | | 49·0 | 4·3 | |
| 10·0 | | 52·0 | 19·9 | |
| 10·0 | | 57·5 | 52·1 | |
| 10·2 | 47 | 2·0 | 45·1 | |
| 10·2 | | 4·0 | 2·9 | |
| 9·1 | | 6·0 | 12·2 | 9·5 |
| 9·7 | | 9·0 | 23·9 | |
| 9·6 | | 17·0 | 19·9 | 9·5 |
| 9·9 | | 18·0 | 16·1 | |
| 10·2 | | 18·0 | 4·2 | |
| 8·5 | | 18·5 | 35·0 | 8·7 G |
| 9·6 | | 20·0 | 8·9 | |
| 9·6 | | 30·0 | 20·0 | 8·5 |
| 9·6 | | 31·0 | 16·6 | 9·0 |
| 10·2 | | 36·0 | 54·8 | |
| 9·7 | | 40·5 | 42·1 | |
| 9·7 | | 44·0 | 15·9 | |
| 9·3 | | 45·0 | 57·7 | 9·0 |

### 3481—3540.

| mag. | 11h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 47 | 46·0 | 33·3 | |
| 9·0 | | 49·0 | 17·0 | 9·2 |
| 10·2 | | 50·0 | 47·7 | |
| 10·2 | | 55·5 | 4·3 | |
| 9·8 | | 58·0 | 33·5 | |
| 10·2 | 48 | 1·0 | 22·0 | |
| 9·4 | | 1·5 | 20·9 | |
| 10·2 | | 4·0 | 22·5 | |
| 9·9 | | 6·0 | 4·4 | |
| 9·6 | | 17·0 | 38·9 | |
| 9·6 | | 17·5 | 44·7 | |
| 9·6 | | 18·0 | 32·8 | |
| 10·0 | | 29·5 | 50·3 | |
| 9·8 | | 37·5 | 13·6 | |
| 9·4 | | 42·5 | 7·7 | 9·5 |
| 9·6 | | 46·5 | 58·0 | |
| 10·2 | | 49·5 | 15·9 | |
| 10·0 | | 50·5 | 44·5 | |
| 10·2 | | 54·0 | 26·0 | |
| 10·2 | | 55·5 | 57·3 | |
| 9·8 | | 57·5 | 55·8 | |
| 9·6 | | 57·5 | 19·6 | |
| 10·0 | | 58·5 | 14·3 | |
| 9·0 | 49 | 24·5 | 7·8 | 9·5 |
| 10·2 | | 27·0 | 58·2 | |
| 9·8 | | 27·5 | 16·0 | |
| 10·0 | | 32·5 | 17·1 | |
| 10·2 | | 33·2 | 0·6 | |
| 9·7 | | 40·5 | 3·9 | |
| 10·0 | | 47·5 | 15·1 | |
| 9·8 | | 50·5 | 15·9 | |
| 9·7 | | 51·5 | 18·3 | |
| 9·7 | 50 | 0·0 | 52·9 | |
| 10·2 | | 11·0 | 52·6 | |
| 9·9 | | 17·5 | 40·7 | |
| 9·4 | | 22·5 | 16·4 | |
| 9·2 | | 24·5 | 32·2 | 9·5 |
| 9·6 | | 25·5 | 44·0 | |
| 10·2 | | 30·5 | 9·1 | |
| 9·8 | | 34·0 | 24·7 | |
| 9·7 | | 40·5 | 6·2 | |
| 9·0 | | 40·5 | 47·9 | 9·5 |
| 10·2 | | 41·5 | 58·5 | |
| 10·2 | | 43·5 | 0·3 | |
| 9·2 | | 43·5 | 17·3 | 9·5 |
| 9·1 | | 46·0 | 45·3 | 9·5 |
| 9·6 | | 54·5 | 46·0 | |
| 9·8 | 51 | 4·0 | 39·7 | |
| 10·2 | | 8·5 | 2·1 | |
| 9·0 | | 9·5 | 25·7 | 7·5 G |
| 9·8 | | 9·5 | 3·8 | |
| 8·6 | | 18·5 | 51·1 | 9·0 |
| 9·8 | | 21·0 | 56·1 | |
| 10·0 | | 23·0 | 10·1 | |
| 9·9 | | 23·5 | 27·2 | |
| 10·2 | | 28·5 | 32·6 | |
| 10·0 | | 49·5 | 31·0 | |
| 10·0 | | 56·5 | 59·1 | |
| 10·2 | 52 | 3·5 | 20·9 | |
| 9·4 | | 9·5 | 52·1 | 9·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 69 | 8·3 |
| | 40 | 72 | 8·3 |
| | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |

**3541—3600.**

| mag. | 11h. m s | −60° ′ | |
|---|---|---|---|
| 9·0 | 52 17·5 | 28·1 | 9·0 |
| 9·4 | 18·0 | 11·1 | |
| 10·2 | 18·0 | 16·3 | |
| 10·0 | 30·5 | 4·7 | |
| 10·2 | 45·5 | 26·0 | |
| 10·2 | 49·5 | 41·2 | |
| 9·8 | 49·5 | 12·1 | |
| 9·8 | 50·5 | 3·9 | |
| 9·6 | 59·5 | 33·3 | 8·8 G |
| 9·2 | 53 0·5 | 6·8 | 9·5 |
| 10·0 | 3·5 | 46·8 | |
| 10·0 | 5·5 | 54·8 | |
| 10·2 | 7·5 | 42·3 | |
| 9·6 | 9·0 | 22·7 | |
| 10·0 | 9·5 | 4·9 | |
| 10·0 | 15·5 | 7·2 | |
| 8·2 | 20·5 | 6·5 | 8·5 GSt |
| 10·0 | 28·0 | 36·9 | |
| 9·4 | 30·5 | 35·7 | |
| 10·2 | 33·5 | 6·4 | |
| 10·2 | 36·0 | 40·1 | |
| 9·8 | 37·5 | 15·2 | |
| 9·4 | 37·5 | 24·6 | |
| 9·8 | 40·0 | 15·9 | |
| 10·2 | 45·5 | 21·8 | |
| 10·2 | 47·5 | 45·9 | |
| 10·2 | 49·5 | 29·4 | |
| 9·8 | 50·0 | 19·9 | |
| 10·2 | 50·5 | 29·1 | |
| 10·0 | 57·0 | 48·7 | |
| 10·2 | 58·5 | 29·3 | |
| 8·4 | 58·5 | 40·3 | 8·5 |
| 9·8 | 54 1·0 | 55·8 | |
| 9·7 | 3·0 | 35·8 | |
| 10·2 | 3·5 | 46·2 | |
| 9·8 | 3·5 | 10·3 | |
| 9·0 | 9·5 | 42·1 | |
| 9·8 | 10·5 | 51·8 | |
| 10·0 | 13·5 | 35·8 | |
| 10·0 | 19·0 | 50·9 | |
| 9·5 | 21·0 | 46·9 | |
| 9·9 | 23·5 | 12·3 | |
| 10·2 | 23·5 | 17·5 | |
| 9·7 | 27·0 | 38·9 | |
| 10·0 | 29·5 | 39·3 | |
| 9·5 | 30·5 | 36·3 | |
| 9·2 | 30·5 | 44·8 | 9·5 |
| 10·2 | 31·0 | 0·4 | |
| 9·5 | 32·5 | 39·9 | |
| 10·2 | 37·0 | 36·5 | |
| 9·4 | 39·0 | 58·9 | |
| 10·2 | 41·5 | 3·8 | |
| 10·2 | 42·0 | 1·0 | |
| 10·2 | 46·5 | 47·7 | |
| 10·2 | 46·5 | 49·2 | |
| 10·0 | 49·0 | 14·9 | 9·2 |
| 10·0 | 49·5 | 39·2 | |
| 8·9 | 50·5 | 40·9 | |
| 9·0 | 56·5 | 42·6 | 9·5 |
| 10·2 | 59·5 | 6·9 | 9·5 |

**3601—3660.**

| mag. | 11h. m s | −60° ′ | |
|---|---|---|---|
| 9·8 | 55 4·0 | 32·9 | |
| 9·2 | 6·5 | 39·4 | 10·0 |
| 10·2 | 7·0 | 29·5 | |
| 9·7 | 9·0 | 15·5 | |
| 10·2 | 27·0 | 43·1 | |
| 9·2 | 27·5 | 9·5 | 9·5 |
| 9·2 | 27·5 | 42·3 | |
| 9·4 | 31·5 | 4·7 | 8·7 |
| 9·6 | 34·0 | 10·9 | |
| 9·4 | 36·5 | 4·8 | 10·0 |
| 9·9 | 36·5 | 7·9 | 9·5 |
| 9·9 | 36·5 | 36·9 | |
| 9·8 | 37·5 | 38·1 | |
| 10·0 | 45·0 | 10·0 | |
| 10·0 | 47·0 | 44·5 | |
| 10·2 | 47·5 | 2·9 | |
| 10·2 | 51·0 | 15·5 | |
| 9·4 | 54·5 | 53·3 | |
| 10·0 | 57·0 | 23·9 | |
| 10·0 | 56 0·0 | 7·3 | |
| 8·9 | 0·5 | 45·2 | 9·5 |
| 10·0 | 0·5 | 42·3 | |
| 9·3 | 2·0 | 34·3 | |
| 10·2 | 2·5 | 13·8 | |
| 9·5 | 2·5 | 18·3 | |
| 9·8 | 2·5 | 17·3 | |
| 10·0 | 3·0 | 58·6 | |
| 9·4 | 3·5 | 21·6 | |
| 9·4 | 7·0 | 18·2 | |
| 10·2 | 8·0 | 11·9 | |
| 10·2 | 8·5 | 52·9 | |
| 9·4 | 10·2 | 0·7 | |
| 8·7 | 10·5 | 3·3 | |
| 10·2 | 10·5 | 34·8 | |
| 9·4 | 11·5 | 30·8 | 9·0 |
| 9·7 | 13·5 | 42·3 | |
| 9·5 | 17·5 | 22·7 | |
| 9·8 | 19·5 | 29·7 | |
| 10·0 | 20·5 | 26·3 | |
| 10·2 | 22·5 | 18·7 | |
| 10·2 | 25·5 | 39·9 | |
| 8·8 | 26·5 | 13·7 | 9·0 |
| 9·6 | 27·0 | 16·3 | |
| 10·0 | 30·5 | 4·0 | |
| 10·2 | 31·0 | 39·9 | |
| 10·2 | 37·0 | 8·8 | |
| 8·8 | 37·5 | 13·2 | 8·7 |
| 9·4 | 40·5 | 13·4 | |
| 10·0 | 42·0 | 11·1 | |
| 9·7 | 42·0 | 19·6 | |
| 10·2 | 43·5 | 11·9 | |
| 10·2 | 49·0 | 15·2 | |
| 9·9 | 49·5 | 9·6 | |
| 10·0 | 51·0 | 32·2 | |
| 9·6 | 53·0 | 20·3 | |
| 9·9 | 53·5 | 16·0 | |
| 10·2 | 57·5 | 0·3 | |
| 10·0 | 57 0·0 | 14·4 | |
| 10·2 | 3·5 | 34·0 | |
| 10·0 | 6·5 | 29·5 | |

**3661—3720.**

| mag. | 11h. m s | −60° ′ | |
|---|---|---|---|
| 10·2 | 57 7·5 | 52·4 | |
| 10·2 | 8·5 | 36·8 | |
| 7·8 | 8·5 | 24·0 | 8·0 |
| 8·7 | 11·5 | 22·8 | 8·5 |
| 9·0 | 13·5 | 15·0 | 8·5 |
| 9·8 | 14·0 | 56·3 | |
| 9·5 | 23·5 | 40·0 | |
| 9·5 | 27·5 | 38·4 | |
| 9·8 | 30·5 | 7·0 | |
| 10·2 | 31·0 | 2·0 | |
| 9·6 | 34·0 | 53·4 | |
| 10·0 | 37·0 | 11·6 | |
| 10·2 | 37·5 | 53·0 | |
| 9·7 | 38·5 | 16·1 | |
| 10·2 | 41·5 | 27·6 | |
| 10·2 | 46·0 | 5·0 | |
| 9·8 | 46·5 | 36·3 | |
| 10·2 | 48·0 | 42·0 | |
| 9·3 | 48·5 | 8·8 | |
| 9·8 | 53·5 | 42·8 | |
| 9·6 | 56·5 | 29·0 | |
| 9·6 | 58·0 | 19·1 | 9·0 |
| 8·2 | 58·5 | 20·3 | 8·5 |
| 10·2 | 59·0 | 36·3 | |
| 9·9 | 58 1·0 | 1·0 | |
| 9·4 | 6·0 | 50·6 | |
| 9·5 | 8·0 | 51·3 | |
| 10·2 | 10·5 | 13·0 | |
| 10·0 | 14·5 | 16·9 | |
| 9·8 | 16·5 | 37·4 | |
| 9·8 | 20·5 | 8·4 | |
| 10·2 | 20·5 | 6·6 | |
| 9·4 | 23·5 | 20·0 | 9·0 |
| 9·8 | 27·0 | 52·9 | |
| 10·2 | 27·5 | 3·3 | |
| 9·9 | 29·5 | 9·8 | |
| 8·5 | 30·5 | 16·2 | 6·5 GSg |
| 10·0 | 32·5 | 40·8 | |
| 9·6 | 34·0 | 26·0 | |
| 9·6 | 34·0 | 41·3 | |
| 9·0 | 38·0 | 10·2 | 9·0 |
| 9·4 | 40·5 | 10·4 | |
| 10·0 | 41·5 | 24·1 | |
| 8·2 | 43·0 | 29·0 | 7·3 GS |
| 10·2 | 45·0 | 21·0 | |
| 8·5 | 47·5 | 30·2 | 9·0 |
| 9·4 | 47·5 | 36·2 | |
| 10·2 | 53·5 | 37·1 | |
| 9·9 | 55·5 | 38·1 | |
| 9·5 | 58·5 | 28·0 | 9·5 |
| 9·4 | 59 0·5 | 22·6 | |
| 8·7 | 0·5 | 38·9 | |
| 10·0 | 5·5 | 7·0 | |
| 9·4 | 7·5 | 9·4 | |
| 10·2 | 9·0 | 21·8 | |
| 9·0 | 9·5 | 11·2 | 8·8 |
| 9·5 | 17·5 | 34·2 | |
| 9·5 | 19·5 | 1·4 | |
| 10·2 | 27·0 | 32·0 | |
| 9·7 | 27·5 | 50·0 | |

**3721—3780.**

| mag. | 11h.–12h. m s | −60° ′ | |
|---|---|---|---|
| 10·2 | 59 39·0 | 38·4 | |
| 10·2 | 40·0 | 14·8 | |
| 9·2 | 40·5 | 33·6 | 9·0 |
| 9·4 | 41·0 | 49·4 | |
| 10·2 | 42·0 | 22·0 | |
| 10·0 | 46·5 | 27·8 | |
| 9·0 | 49·0 | 33·2 | 9·5 |
| 10·2 | 51·0 | 26·0 | |
| 10·0 | 54·0 | 33·0 | |
| 10·0 | 0 1·0 | 31·4 | |
| 9·2 | 3·5 | 33·0 | |
| 10·0 | 5·0 | 35·6 | |
| 8·6 | 6·5 | 23·2 | 9·0 |
| 9·1 | 6·5 | 45·0 | |
| 9·5 | 6·5 | 31·7 | |
| 10·2 | 7·0 | 24·1 | |
| 10·2 | 12·0 | 2·1 | |
| 9·4 | 13·5 | 31·9 | |
| 9·4 | 13·5 | 33·5 | 9·5 |
| 10·2 | 14·0 | 33·1 | |
| 9·2 | 14·5 | 31·9 | |
| 9·0 | 15·0 | 32·6 | 10·0 |
| 10·0 | 18·5 | 33·5 | |
| 8·8 | 19·5 | 29·4 | 9·5 |
| 9·6 | 20·0 | 34·9 | |
| 9·0 | 23·5 | 34·4 | 9·5 |
| 10·2 | 26·0 | 48·8 | |
| 9·0 | 29·5 | 34·2 | 9·5 |
| 9·3 | 30·5 | 35·9 | |
| 9·2 | 31·5 | 7·5 | |
| 10·0 | 33·5 | 38·1 | |
| 10·2 | 34·0 | 26·3 | |
| 10·2 | 35·0 | 46·6 | |
| 10·0 | 35·0 | 31·9 | |
| 10·0 | 36·5 | 19·8 | |
| 10·0 | 40·0 | 2·8 | |
| 8·7 | 42·0 | 34·1 | 9·0 |
| 10·2 | 43·5 | 27·5 | |
| 10·2 | 47·5 | 31·1 | |
| 9·1 | 53·0 | 42·7 | |
| 10·0 | 1 3·5 | 56·0 | |
| 10·2 | 10·5 | 30·0 | |
| 8·7 | 18·2 | 2·6 | 9·0 |
| 9·4 | 19·5 | 8·4 | |
| 10·2 | 20·0 | 40·2 | |
| 9·4 | 29·0 | 13·1 | |
| 9·7 | 30·5 | 29·6 | |
| 10·0 | 30·5 | 33·1 | |
| 9·2 | 33·5 | 28·0 | 9·5 G |
| 9·7 | 39·0 | 36·0 | |
| 8·2 | 39·5 | 5·2 | 8·0 GS |
| 9·0 | 41·5 | 24·9 | 8·2 G |
| 10·2 | 45·5 | 25·0 | 10·0 G |
| 9·0 | 48·1 | 56·4 | 9·0 |
| 9·9 | 48·5 | 27·2 | |
| 10·2 | 52·0 | 8·7 | |
| 8·4 | 53·5 | 9·1 | 7·0 GSct |
| 10·2 | 57·0 | 11·1 | |
| 9·8 | 58·5 | 52·1 | |
| 9·2 | 58·5 | 33·2 | 8·3 G |



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## 3781—3840.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 2 | 3·5 | 8·9 | |
| 10·0 | | 4·0 | 45·9 | |
| 10·0 | | 8·0 | 0·7 | |
| 9·9 | | 9·0 | 49·0 | |
| 9·8 | | 10·5 | 26·8 | 9·0 |
| 10·2 | | 14·5 | 25·0 | |
| 9·4 | | 17·0 | 9·9 | |
| 9·7 | | 17·5 | 31·9 | 9·2 |
| 10·2 | | 20·5 | 19·5 | |
| 9·4 | | 20·5 | 9·9 | |
| 10·2 | | 23·5 | 38·0 | |
| 9·0 | | 30·5 | 47·2 | |
| 9·6 | | 34·5 | 42·4 | |
| 9·4 | | 37·5 | 33·2 | |
| 10·2 | | 50·5 | 51·0 | |
| 8·4 | | 52·5 | 15·4 | 8·8 |
| 8·4 | | 53·0 | 20·6 | 8·8 |
| 9·5 | | 54·5 | 43·0 | |
| 9·6 | | 57·5 | 18·8 | |
| 10·0 | 3 | 7·5 | 35·0 | |
| 10·2 | | 24·0 | 50·0 | |
| 10·2 | | 28·2 | 57·2 | |
| 10·0 | | 28·5 | 25·1 | |
| 10·2 | | 32·5 | 59·3 | |
| 8·6 | 4 | 3·5 | 16·7 | 9·0 |
| 10·0 | | 14·0 | 23·2 | |
| 10·2 | | 19·5 | 9·0 | 9·5 |
| 9·6 | | 25·0 | 24·0 | |
| 9·5 | | 27·5 | 43·9 | |
| 10·0 | | 30·5 | 9·2 | |
| 10·0 | | 32·5 | 21·0 | |
| 7·1 | | 32·5 | 34·8 | 6·7 GSt |
| 9·1 | | 35·5 | 38·8 | 9·5 |
| 10·0 | | 45·0 | 30·9 | |
| 10·0 | | 48·5 | 40·9 | |
| 9·0 | | 50·5 | 15·0 | |
| 10·2 | | 50·5 | 54·2 | |
| 9·8 | 5 | 4·5 | 10·9 | |
| 10·2 | | 8·5 | 28·3 | |
| 9·5 | | 10·5 | 6·8 | |
| 9·7 | | 16·5 | 56·9 | |
| 10·2 | | 16·5 | 7·0 | |
| 10·0 | | 20·5 | 40·8 | |
| 9·6 | | 20·5 | 34·4 | 8·8 |
| 9·9 | | 39·5 | 3·5 | |
| 10·2 | | 51·5 | 38·1 | |
| 10·0 | | 52·0 | 37·8 | |
| 10·2 | | 53·5 | 46·1 | |
| 9·5 | 6 | 6·0 | 15·9 | |
| 10·2 | | 18·0 | 26·0 | |
| 9·8 | | 22·5 | 31·9 | |
| 8·7 | | 30·5 | 22·6 | 8·2 G |
| 10·0 | | 37·5 | 53·3 | |
| 9·2 | | 44·0 | 9·2 | |
| 9·8 | | 47·5 | 38·8 | |
| 9·0 | | 51·0 | 54·8 | |
| 10·2 | | 52·0 | 52·4 | |
| 9·6 | | 53·5 | 51·4 | |
| 10·2 | 7 | 3·5 | 29·1 | |
| 8·5 | | 3·5 | 30·0 | 9·5 |

## 3841—3900.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 7 | 6·0 | 28·6 | |
| 9·8 | | 10·0 | 31·4 | |
| 9·8 | | 19·0 | 11·1 | |
| 9·4 | | 19·5 | 39·2 | |
| 10·2 | | 28·0 | 36·7 | |
| 9·0 | | 29·5 | 22·2 | 9·5 |
| 10·0 | | 32·5 | 16·9 | 10·0 |
| 9·9 | | 39·5 | 39·0 | |
| 10·2 | | 49·0 | 24·0 | |
| 10·2 | | 58·0 | 55·0 | |
| 10·2 | 8 | 0·5 | 10·1 | |
| 9·8 | | 4·0 | 23·6 | |
| 10·0 | | 6·5 | 50·0 | |
| 10·2 | | 8·5 | 45·3 | |
| 9·9 | | 9·0 | 37·9 | |
| 9·6 | | 9·0 | 56·0 | |
| 9·3 | | 16·0 | 49·2 | |
| 8·8 | | 18·0 | 15·9 | 9·4 G |
| 10·2 | | 20·0 | 16·7 | |
| 9·6 | | 38·5 | 49·7 | |
| 9·0 | | 42·0 | 20·0 | 8·8 |
| 9·0 | | 44·5 | 55·0 | 9·5 |
| 8·0 | 9 | 5·5 | 26·1 | 8·5 G |
| 9·2 | | 10·5 | 38·1 | |
| 10·2 | | 11·0 | 17·4 | |
| 9·6 | | 14·5 | 25·8 | |
| 9·8 | | 24·0 | 9·8 | |
| 10·0 | | 30·0 | 22·0 | |
| 9·0 | | 35·5 | 49·9 | |
| 9·1 | | 38·0 | 20·7 | |
| 9·6 | | 39·0 | 23·9 | |
| 9·7 | | 47·5 | 55·0 | |
| 9·0 | | 47·5 | 56·3 | 8·8 |
| 10·0 | 10 | 14·0 | 51·0 | |
| 10·2 | | 20·5 | 49·2 | |
| 9·6 | | 26·0 | 30·4 | 9·5 |
| 10·2 | | 28·0 | 23·0 | |
| 9·7 | | 31·0 | 6·0 | |
| 9·7 | | 31·0 | 5·8 | |
| 9·2 | | 35·0 | 32·1 | 9·5 |
| 10·2 | | 36·0 | 20·9 | |
| 9·6 | | 45·0 | 10·8 | |
| 10·2 | | 46·0 | 18·4 | |
| 10·2 | | 46·0 | 51·0 | |
| 9·8 | | 48·0 | 21·6 | |
| 9·6 | | 59·0 | 11·6 | |
| 9·6 | | 59·0 | 3·9 | |
| 9·5 | 11 | 0·0 | 33·4 | |
| 10·2 | | 20·5 | 56·1 | |
| 7·5 | | 23·0 | 46·5 | 8·0 GSt |
| 10·2 | | 23·5 | 56·8 | |
| 8·9 | | 31·0 | 47·9 | 9·5 |
| 10·0 | | 39·5 | 3·0 | |
| 9·0 | | 47·0 | 13·1 | 8·5 |
| 9·6 | 12 | 9·5 | 25·6 | 9·2 |
| 9·6 | | 14·0 | 34·1 | |
| 9·6 | | 23·5 | 53·0 | |
| 8·4 | | 26·0 | 26·3 | 8·5 |
| 9·0 | | 35·5 | 26·8 | 9·5 |
| 9·8 | | 36·0 | 17·4 | |

## 3901—3960.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 12 | 38·0 | 8·0 | |
| 10·2 | | 41·0 | 44·0 | |
| 9·1 | | 58·5 | 58·7 | |
| 10·0 | 13 | 4·0 | 2·2 | |
| 10·2 | | 5·0 | 1·6 | |
| 10·2 | | 11·5 | 1·3 | |
| 9·8 | | 18·0 | 50·2 | |
| 9·8 | | 20·0 | 50·3 | |
| 9·3 | | 20·0 | 52·8 | |
| 9·2 | | 23·0 | 1·6 | |
| 9·0 | | 34·0 | 8·1 | 9·5 |
| 9·9 | | 42·0 | 35·3 | |
| 10·2 | | 45·0 | 24·6 | |
| 10·2 | 14 | 1·0 | 11·0 | |
| 10·2 | | 13·5 | 33·1 | |
| 9·0 | | 18·0 | 34·1 | |
| 10·0 | | 19·5 | 12·2 | |
| 10·2 | | 20·5 | 15·6 | |
| 9·5 | | 27·5 | 52·5 | |
| 9·0 | | 30·0 | 37·1 | |
| 10·0 | | 37·0 | 52·1 | |
| 9·4 | | 41·0 | 22·1 | |
| 9·4 | | 44·0 | 24·6 | |
| 10·2 | | 54·0 | 22·4 | |
| 8·2 | 15 | 0·5 | 50·6 | 8·5 |
| 9·8 | | 3·0 | 55·4 | |
| 10·2 | | 11·0 | 56·8 | |
| 9·8 | | 20·0 | 33·5 | |
| 10·0 | | 21·5 | 28·5 | 9·5 |
| 9·0 | | 31·0 | 31·2 | 9·8 |
| 10·2 | | 31·5 | 35·9 | |
| 9·5 | | 51·0 | 26·6 | |
| 9·4 | 16 | 3·5 | 36·0 | |
| 9·4 | | 14·0 | 41·9 | |
| 10·0 | | 28·0 | 18·7 | |
| 10·2 | | 32·0 | 10·1 | |
| 9·7 | | 45·0 | 52·2 | |
| 7·4 | | 47·0 | 56·2 | 8·0 GSt |
| 10·0 | | 47·0 | 4·8 | |
| 9·6 | | 50·0 | 32·5 | |
| 9·7 | | 51·0 | 7·9 | |
| 10·2 | 17 | 1·5 | 5·8 | |
| 9·9 | | 2·5 | 14·3 | |
| 9·5 | | 4·5 | 4·5 | |
| 10·0 | | 16·5 | 49·0 | |
| 10·0 | | 18·5 | 30·2 | |
| 9·2 | | 30·5 | 53·7 | |
| 9·9 | | 37·8 | 51·8 | |
| 9·9– | | 38·0 | 42·7 | |
| 10·2 | | 44·0 | 45·9 | |
| 10·0* | | 45·0 | 22·8 | |
| 10·2 | | 45·5 | 1·2 | |
| 9·2 | | 45·8 | 6·7 | 9·5 |
| 9·8 | | 50·0 | 41·7 | |
| 8·6 | | 51·0 | 12·7 | 7·8 G |
| 8·9 | | 52·0 | 59·1 | 9·5 |
| 8·7 | | 54·5 | 11·7 | 9·0 |
| 10·2 | | 56·5 | 21·4 | |
| 10·0 | 18 | 2·0 | 27·8 | |
| 10·2 | | 2·0 | 41·3 | |

## 3961—4020.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 18 | 6·0 | 37·0 | |
| 9·8 | | 8·3 | 22·6 | 9·5 |
| 8·8 | | 11·0 | 40·9 | 9·5 |
| 9·5 | | 15·8 | 42·1 | |
| 10·2 | | 16·0 | 22·9 | |
| 9·5 | | 18·5 | 39·2 | |
| 10·2 | | 19·0 | 21·0 | |
| 10·0 | | 26·5 | 7·9 | |
| 9·9 | | 27·5 | 48·7 | |
| 10·2 | | 33·5 | 36·1 | |
| 10·1 | | 43·7 | 27·1 | |
| 9·4 | | 48·3 | 1·3 | |
| 9·8 | | 49·0 | 5·3 | |
| 10·2 | | 52·5 | 6·5 | |
| 10·2 | | 58·5 | 52·6 | |
| 10·2 | 19 | 2·0 | 7·8 | |
| 9·2 | | 3·7 | 46·5 | |
| 10·2 | | 13·5 | 52·7 | |
| 10·2 | | 20·0 | 45·9 | |
| 9·4 | | 27·5 | 19·2 | |
| 10·2 | | 34·0 | 4·2 | |
| 10·0 | | 38·0 | 1·8 | |
| 9·0 | | 42·0 | 39·3 | 9·5 |
| 10·1 | | 42·5 | 38·9 | |
| 10·0 | | 44·5 | 38·8 | |
| 10·2 | | 48·0 | 9·5 | |
| 8·8 | | 52·5 | 11·9 | 9·2 |
| 10·2 | | 52·5 | 3·7 | |
| 9·0 | | 59·0 | 3·8 | 9·5 |
| 9·7 | 20 | 1·0 | 12·9 | |
| 9·4 | | 6·0 | 35·3 | |
| 8·6 | | 8·0 | 41·6 | 7·5 |
| 9·8 | | 9·0 | 3·8 | |
| 9·4 | | 12·0 | 59·7 | |
| 9·2 | | 16·5 | 23·7 | |
| 10·2 | | 21·5 | 30·2 | |
| 9·5 | | 21·5 | 8·7 | 9·0 |
| 8·6 | | 22·0 | 5·2 | 8·5 |
| 10·2 | | 22·0 | 6·3 | |
| 9·2 | | 22·5 | 4·8 | |
| 10·1 | | 25·0 | 39·9 | |
| 10·2 | | 25·5 | 5·9 | |
| 10·0 | | 26·0 | 28·9 | |
| 10·0 | | 27·5 | 3·4 | |
| 9·4 | | 30·0 | 4·3 | |
| 9·8 | | 38·0 | 32·9 | |
| 9·8 | | 39·0 | 3·0 | |
| 9·7 | | 43·0 | 28·0 | |
| 9·5 | | 44·5 | 43·8 | |
| 9·9 | | 47·0 | 51·5 | |
| 10·0 | | 53·0 | 51·9 | |
| 9·2 | | 57·0 | 3·4 | |
| 9·8 | | 58·0 | 7·2 | |
| 10·2 | 21 | 0·5 | 18·9 | |
| 10·0 | | 2·5 | 17·5 | |
| 10·2 | | 5·5 | 25·6 | |
| 10·2 | | 9·0 | 8·3 | |
| 9·2 | | 11·0 | 53·4 | |
| 10·0 | | 11·0 | 50·0 | |
| 9·8 | | 13·5 | 47·2 | |

25 prec

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |
| | 30 | 85 | 8·3 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 20 | 82 | 8·3 |
| | 30 | 85 | 8·3 |
| | 40 | 87 | 8·2 |

**4021—4080.**

| mag. | 12h. m s | −60° ′ | |
|---|---|---|---|
| 9·8 | 21 15·5 | 58·6 | |
| 10·2 | 16·5 | 16·1 | |
| 10·1 | 22·0 | 40·9 | |
| 10·1 | 24·0 | 6·2 | |
| 9·0 | 27·5 | 21·5 | |
| 9·6 | 27·5 | 12·0 | 9·2 G |
| 9·8 | 29·0 | 56·0 | |
| 10·2 | 31·5 | 40·0 | |
| 10·2 | 33·5 | 55·0 | |
| 10·2 | 34·0 | 13·3 | |
| 8·6 | 36·0 | 12·2 | 8·8 |
| 9·5 | 43·0 | 38·6 | |
| 10·2 | 44·0 | 31·0 | |
| 9·4 | 51·0 | 46·7 | |
| 9·3 | 51·5 | 13·6 | 9·5 |
| 10·0 | 53·0 | 31·9 | |
| 8·8 | 59·0 | 14·3 | 9·5 |
| 9·4 | 59·5 | 24·8 | |
| 9·8 | 59·5 | 36·1 | |
| 10·2 | 22 1·5 | 3·5 | |
| 10·2 | 1·5 | 24·3 | |
| 8·9 | 3·5 | 34·3 | 9·5 |
| 10·2 | 6·5 | 43·0 | |
| 9·8 | 8·5 | 15·3 | |
| 10·0 | 10·5 | 20·0 | |
| 10·2 | 10·5 | 17·1 | |
| 8·3 | 12·0 | 6·8 | 8·2 G |
| 9·6 | 18·0 | 48·0 | |
| 10·2 | 19·0 | 17·6 | |
| 9·2 | 23·5 | 32·0 | |
| 9·8 | 27·0 | 45·0 | |
| 9·6 | 30·5 | 13·6 | |
| 9·8 | 33·5 | 51·2 | |
| 9·7 | 35·5 | 56·2 | |
| 10·2 | 35·5 | 21·4 | |
| 10·0 | 37·0 | 14·0 | |
| 10·2 | 37·0 | 46·0 | |
| 9·4 | 40·0 | 26·0 | |
| 10·0 | 46·5 | 31·1 | |
| 9·5 | 48·0 | 54·0 | |
| 9·8 | 58·5 | 14·6 | |
| 10·0 | 59·0 | 7·8 | |
| 10·1 | 59·0 | 45·5 | |
| 9·9 | 23 1·0 | 37·8 | |
| 9·6 | 3·0 | 29·0 | |
| 8·8 | 4·0 | 45·8 | 9·0 |
| 10·1 | 5·0 | 57·8 | |
| 10·2 | 10·0 | 37·0 | |
| 9·2 | 17·5 | 15·0 | |
| 8·1 | 21·5 | 17·9 | 7·5 GSt |
| 9·2 | 27·5 | 17·0 | |
| 10·2 | 33·5 | 40·4 | |
| 8·8 | 38·5 | 42·4 | 9·0 |
| 9·7 | 39·5 | 6·0 | |
| 10·2 | 42·5 | 12·8 | |
| 9·5 | 44·5 | 33·0 | |
| 9·4 | 46·0 | 25·9 | |
| 10·2 | 46·5 | 22·8 | |
| 9·9 | 49·0 | 30·0 | |
| 10·2 | 49·0 | 57·5 | |

**4081—4140.**

| mag. | 12h. m s | −60° ′ | |
|---|---|---|---|
| 8·8 | 23 56·0 | 48·0 | 9·0 |
| 10·2 | 57·5 | 12·0 | |
| 9·0 | 24 1·5 | 38·0 | |
| 9·8 | 2·0 | 24·6 | |
| 10·2 | 17·3 | 0·2 | |
| 10·2 | 18·5 | 36·0 | |
| 9·3 | 19·5 | 1·2 | |
| 10·1 | 27·0 | 26·9 | |
| 9·4 | 32·0 | 25·4 | 8·5 |
| 8·2 | 32·0 | 11·7 | 8·5 G |
| 10·2 | 35·5 | 43·1 | |
| 9·1 | 39·0 | 30·2 | |
| 10·1 | 41·5 | 48·4 | |
| 8·6 | 43·5 | 39·6 | 9·0 |
| 9·0 | 43·5 | 20·9 | 9·5 |
| 10·1 | 44·5 | 56·0 | |
| 10·2 | 44·5 | 44·8 | |
| 9·2 | 46·0 | 1·7 | |
| 9·7 | 51·0 | 39·0 | 9·0 |
| 9·5 | 51·0 | 55·8 | |
| 9·3 | 51·0 | 43·6 | |
| 9·9 | 51·0 | 53·0 | |
| 10·1 | 58·0 | 25·2 | |
| 9·4 | 25 1·5 | 8·1 | |
| 9·8 | 1·5 | 35·1 | |
| 10·2 | 6·5 | 22·4 | |
| 9·8 | 10·5 | 41·0 | |
| 9·9 | 13·5 | 31·7 | |
| 9·8 | 14·0 | 36·0 | |
| 10·1 | 16·0 | 11·5 | |
| 10·0 | 18·0 | 35·1 | |
| 10·2 | 18·6 | 1·7 | |
| 10·2 | 22·5 | 15·1 | |
| 10·0 | 28·5 | 39·3 | |
| 10·2 | 39·0 | 10·7 | |
| 9·2 | 42·5 | 10·9 | 9·5 |
| 10·2 | 43·0 | 16·4 | |
| 9·8 | 44·0 | 31·3 | |
| 10·2 | 44·5 | 12·0 | |
| 10·2 | 49·0 | 18·5 | |
| 10·0 | 50·0 | 58·1 | |
| 9·7 | 50·5 | 33·3 | |
| 10·1 | 51·5 | 28·8 | |
| 10·2 | 53·0 | 33·2 | |
| 10·0 | 26 3·5 | 14·0 | |
| 10·2 | 6·0 | 27·7 | |
| 10·0 | 6·0 | 3·5 | |
| 8·5 | 8·5 | 15·3 | 8·5 G |
| 10·0 | 9·0 | 10·3 | |
| 9·2 | 12·5 | 15·3 | 9·5 |
| 9·3 | 17·0 | 8·1 | |
| 9·4 | 17·0 | 21·3 | |
| 9·6 | 21·0 | 54·3 | |
| 10·2 | 21·0 | 35·0 | |
| 10·2 | 21·5 | 21·8 | |
| 9·4 | 22·0 | 38·9 | |
| 9·8 | 23·0 | 15·0 | |
| 9·7 | 24·0 | 43·6 | |
| 10·1 | 25·5 | 3·9 | |
| 10·2 | 28·0 | 43·9 | |

**4141—4200.**

| mag. | 12h. m s | −60° ′ | |
|---|---|---|---|
| 10·1 | 26 34·0 | 57·4 | |
| 9·4 | 40·5 | 38·6 | |
| 9·8 | 41·0 | 32·6 | |
| 10·2 | 42·0 | 17·8 | |
| 10·2 | 55·5 | 35·0 | |
| 10·0 | 27 11·0 | 33·4 | |
| 9·0 | 12·0 | 29·9 | 9·5 |
| 10·1 | 13·0 | 12·7 | |
| 10·2 | 14·0 | 51·4 | |
| 9·4 | 15·5 | 37·7 | 8·0 |
| 10·0 | 18·5 | 28·7 | |
| 10·2 | 22·0 | 3·0 | |
| 9·6 | 22·5 | 15·6 | |
| 9·2 | 28·0 | 40·0 | |
| 9·6 | 29·5 | 10·4 | |
| 10·0 | 31·0 | 42·1 | |
| 10·1 | 45·5 | 54·9 | |
| 9·8 | 52·0 | 3·9 | |
| 9·4 | 53·5 | 42·7 | |
| 10·2 | 57·0 | 4·3 | |
| 10·2 | 28 0·0 | 38·0 | |
| 10·0 | 1·0 | 52·4 | |
| 8·9 | 1·5 | 1·8 | |
| 10·0 | 3·5 | 29·1 | |
| 10·0 | 8·5 | 30·8 | |
| 9·2 | 21·5 | 59·7 | |
| 8·8 | 22·0 | 36·8 | 9·0 |
| 8·9 | 33·0 | 48·7 | 9·0 |
| 9·8 | 38·5 | 48·7 | 9·0 |
| 8·4 | 39·0 | 53·0 | 8·5 G |
| 9·2 | 42·0 | 6·7 | |
| 9·2 | 43·0 | 10·6 | |
| 9·4 | 58·5 | 7·2 | |
| 9·4 | 59·0 | 55·1 | |
| 10·1 | 29 4·0 | 29·0 | |
| 9·9 | 4·0 | 48·3 | |
| 9·4 | 8·5 | 29·8 | |
| 10·2 | 23·0 | 3·0 | |
| 9·5 | 25·0 | 8·8 | |
| 10·2 | 31·0 | 7·8 | |
| 9·3 | 35·5 | 21·9 | 9·5 |
| 10·2 | 37·0 | 47·7 | |
| 8·9 | 39·0 | 2·2 | 9·5 |
| 10·1 | 41·5 | 8·3 | |
| 9·2 | 49·5 | 14·9 | |
| 10·2 | 56·0 | 24·3 | |
| 10·2 | 57·5 | 15·6 | |
| 9·9 | 30 3·0 | 24·9 | |
| 9·9 | 3·5 | 23·9 | |
| 9·8 | 16·0 | 59·0 | |
| 9·0 | 18·0 | 6·3 | |
| 9·5 | 19·5 | 26·9 | |
| 9·4 | 21·5 | 11·8 | |
| 10·2 | 35·2 | 16·0 | |
| 10·2 | 46·0 | 38·0 | |
| 10·2 | 49·0 | 17·9 | |
| 10·2 | 59·0 | 34·2 | |
| 10·2 | 31 1·0 | 57·2 | |
| 8·4 | 5·5 | 54·9 | 8·5 G |
| 9·7 | 15·5 | 42·0 | |

**4201—4260.**

| mag. | 12h. m s | −60° ′ | |
|---|---|---|---|
| 9·8 | 31 18·0 | 15·0 | |
| 9·8 | 23·0 | 9·8 | |
| 9·4 | 23·0 | 18·9 | |
| 9·6 | 26·5 | 33·9 | |
| 10·2 | 29·5 | 42·7 | |
| 9·7 | 30·0 | 45·6 | |
| 10·1 | 30·5 | 10·1 | |
| 10·0 | 32·0 | 10·8 | |
| 10·2 | 34·0 | 42·0 | |
| 10·2 | 40·0 | 32·1 | |
| 9·3 | 46·5 | 31·1 | |
| 9·7 | 49·0 | 8·3 | |
| 10·0 | 54·5 | 35·0 | |
| 9·7 | 57·0 | 2·0 | |
| 10·2 | 32 11·0 | 1·2 | |
| 10·0 | 14·0 | 0·0 | |
| 9·9 | 25·0 | 17·0 | |
| 9·5 | 47·5 | 56·4 | |
| 10·1 | 48·5 | 33·4 | |
| 10·0 | 33 1·2 | 33·4 | |
| 9·8 | 5·0 | 54·8 | |
| 10·2 | 20·0 | 29·9 | |
| 9·8 | 25·0 | 49·0 | |
| 10·1 | 28·0 | 28·0 | |
| 8·4 | 30·5 | 13·5 | 9·0 G |
| 10·0 | 48·5 | 12·5 | |
| 9·6 | 48·5 | 21·0 | 10·0 |
| 9·9 | 52·3 | 0·1 | |
| 10·0 | 56·5 | 51·9 | G |
| 10·2 | 57·0 | 31·8 | |
| 9·2 | 34 6·5 | 23·3 | |
| 9·1 | 7·0 | 15·8 | |
| 9·8 | 12·0 | 37·9 | |
| 10·2 | 26·2 | 39·0 | |
| 10·2 | 30·0 | 0·7 | |
| 9·4 | 34·5 | 3·0 | |
| 10·2 | 40·5 | 57·4 | |
| 9·7 | 41·0 | 15·5 | |
| 9·8 | 55·5 | 20·5 | |
| 9·3 | 35 3·5 | 36·0 | |
| 10·2 | 5·0 | 51·9 | |
| 10·0 | 8·0 | 57·8 | |
| 10·2 | 12·0 | 1·6 | |
| 7·8 | 13·0 | 19·8 | 8·0 GSt |
| 9·8 | 14·5 | 47·2 | |
| 9·8 | 15·0 | 12·0 | |
| 10·2 | 17·5 | 32·9 | |
| 9·8 | 30·5 | 20·6 | |
| 8·6 | 38·5 | 17·3 | |
| 10·2 | 40·5 | 30·1 | |
| 8·3 | 50·5 | 27·6 | 8·2 G |
| 9·9 | 51·0 | 12·4 | |
| 9·2 | 58·5 | 57·8 | |
| 10·2 | 58·5 | 59·8 | |
| 8·8 | 36 13·5 | 1·9 | 9·5 |
| 9·8 | 17·5 | 3·9 | |
| 9·6 | 18·0 | 34·4 | |
| 9·6 | 20·5 | 34·7 | |
| 8·6 | 37 0·5 | 42·5 | 8·5 |
| 8·6 | 2·5 | 50·3 | 9·0 |



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### 4261—4320.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 37 | 13·0 | 5·9 | |
| 9·4 | | 14·0 | 57·4 | |
| 10·2 | | 17·5 | 28·2 | |
| 9·3 | | 18·0 | 19·8 | |
| 10·2 | | 22·5 | 23·2 | |
| 10·0 | | 33·5 | 51·3 | |
| 10·2 | | 51·5 | 24·9 | |
| 9·8 | 38 | 1·0 | 7·5 | |
| 9·5 | | 4·5 | 18·9 | |
| 10·2 | | 6·0 | 55·6 | |
| 10·2 | | 7·5 | 34·1 | |
| 9·2 | | 13·0 | 18·6 | |
| 7·6 | | 18·0 | 17·5 | 6·0 GStr |
| 8·8 | | 38·5 | 5·3 | |
| 10·2 | | 39·0 | 4·0 | |
| 10·2 | | 42·5 | 26·7 | 9·5 |
| 8·8 | 39 | 1·5 | 9·1 | 9·0 |
| 9·5 | | 2·5 | 26·3 | |
| 10·2 | | 5·0 | 20·1 | |
| 10·2 | | 8·5 | 9·2 | |
| 10·2 | | 12·5 | 8·7 | |
| 9·5 | | 20·0 | 27·3 | |
| 10·2 | | 22·5 | 30·7 | |
| 10·2 | | 22·5 | 30·9 | |
| 8·8 | | 25·0 | 30·0 | 9·2 |
| 9·6 | | 33·0 | 44·0 | |
| 9·8 | | 44·5 | 10·2 | |
| 8·7 | | 51·5 | 32·2 | 9·0 |
| 10·2 | 40 | 2·0 | 59·4 | |
| 10·1 | | 15·5 | 22·2 | |
| 9·6 | | 21·0 | 0·9 | |
| 10·2 | | 26·0 | 14·2 | |
| 9·8 | | 28·0 | 13·9 | |
| 10·2 | | 50·0 | 53·5 | |
| 10·2 | | 52·0 | 38·3 | |
| 9·4 | | 58·5 | 7·3 | |
| 10·0 | 41 | 21·5 | 5·3 | |
| 9·8 | | 25·5 | 2·8 | |
| 10·2 | | 35·5 | 21·0 | |
| 9·2 | | 43·0 | 44·9 | 9·5 |
| 8·8 | | 44·5 | 22·9 | 9·0 |
| 9·8 | | 50·5 | 16·1 | |
| 9·6 | 42 | 1·5 | 14·9 | |
| 9·7 | | 4·0 | 2·1 | |
| 9·9 | | 5·0 | 27·4 | |
| 8·8 | | 6·5 | 1·0 | 10·0 |
| 9·1 | | 8·0 | 33·6 | |
| 10·0 | | 10·5 | 48·4 | |
| 9·0 | | 15·0 | 16·9 | |
| 10·2 | | 19·5 | 20·0 | |
| 10·2 | | 26·5 | 16·0 | |
| 10·2 | | 57·5 | 54·0 | |
| 10·2 | 43 | 1·5 | 14·1 | |
| 9·7 | | 2·0 | 36·6 | 10·0 |
| 10·2 | | 2·5 | 20·0 | |
| 9·8 | | 20·5 | 2·0 | |
| 10·0 | | 28·0 | 1·3 | |
| 10·1 | | 34·0 | 1·8 | |
| 10·0 | | 38·0 | 37·0 | |
| 8·8 | | 38·0 | 33·5 | 9·5 |

### 4321—4380.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 43 | 40·0 | 2·8 | |
| 10·2 | | 42·0 | 0·0 | |
| 9·5 | | 43·5 | 33·5 | |
| 9·9 | | 48·5 | 3·1 | |
| 9·6 | 44 | 7·0 | 1·0 | |
| 10·2 | | 12·0 | 8·5 | |
| 10·1 | | 20·0 | 32·9 | |
| 10·2 | | 21·5 | 8·6 | |
| 8·7 | | 22·5 | 23·8 | 9·8 G |
| 9·9 | | 29·0 | 29·0 | |
| 10·2 | | 39·0 | 56·3 | |
| 10·2 | 45 | 3·5 | 3·1 | |
| 9·8 | | 9·0 | 8·0 | |
| 9·4 | | 11·0 | 33·9 | |
| 8·8 | | 19·5 | 7·8 | |
| 10·2 | | 23·5 | 6·3 | |
| 9·6 | | 37·8 | 2·1 | |
| 10·2 | | 42·0 | 4·7 | |
| 8·5 | | 42·5 | 11·9 | 9·5 |
| 9·6 | | 46·0 | 25·6 | |
| 8·6 | | 47·0 | 3·4 | G |
| 9·5 | | 49·5 | 9·0 | |
| 9·6 | 46 | 2·0 | 19·3 | |
| 9·3 | | 13·0 | 32·0 | |
| 9·4 | | 18·0 | 2·2 | |
| 8·6 | | 21·0 | 3·5 | G |
| 9·7 | | 24·0 | 16·9 | |
| 10·0 | | 33·0 | 8·6 | |
| 9·7 | | 33·0 | 8·9 | |
| 8·7 | | 48·5 | 23·8 | G |
| 8·4 | | 49·5 | 12·8 | |
| 9·1 | | 56·0 | 1·1 | |
| 10·2 | 47 | 6·5 | 30·4 | |
| 9·2 | | 23·0 | 0·1 | |
| 9·6 | | 42·0 | 15·8 | |
| 10·2 | 48 | 21·5 | 34·7 | |
| 8·3 | | 26·5 | 14·2 | 9·0 G |
| 9·2 | | 28·5 | 13·6 | |
| 9·8 | | 30·0 | 16·7 | 10·0 |
| 10·2 | | 35·5 | 20·8 | |
| 9·2 | | 37·0 | 46·7 | |
| 10·2 | | 56·0 | 11·1 | |
| 9·0 | 49 | 1·0 | 39·3 | 9·5 |
| 8·9 | | 3·0 | 0·4 | 9·5 |
| 9·4 | | 24·0 | 10·1 | |
| 10·2 | | 42·0 | 25·1 | |
| 10·2 | | 42·5 | 24·9 | |
| 10·2 | 50 | 10·0 | 9·3 | |
| 8·5 | | 12·0 | 12·7 | 9·5 |
| 8·5 | | 19·0 | 8·3 | 10·0 |
| 8·6 | | 25·0 | 19·2 | 9·0 |
| 8·3 | | 27·5 | 22·7 | 9·0 |
| 9·7 | | 30·0 | 7·4 | |
| 10·1 | | 38·0 | 10·7 | |
| 9·0 | | 45·5 | 20·4 | |
| 10·2 | | 56·0 | 11·5 | |
| 9·6 | 51 | 2·5 | 19·1 | |
| 9·9 | | 4·0 | 16·0 | |
| 10·2 | 52 | 33·0 | 7·4 | |
| 9·9* | | 42·5 | 59·4 | |

### 4381—4440.

| mag. | 12h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·2 | 52 | 53·0 | 4·7 | |
| 8·9 | 53 | 1·8 | 11·2 | 9·0 |
| 10·1 | | 3·5 | 17·5 | |
| 10·1 | | 4·0 | 17·0 | |
| 10·0 | | 22·5 | 13·0 | |
| 10·1 | | 26·0 | 1·7 | |
| 9·2 | | 41·3 | 22·9 | 8·7 |
| 9·8 | 54 | 16·5 | 7·2 | |
| 9·6 | | 22·7 | 4·5 | |
| 9·2 | | 25·5 | 19·7 | |
| 10·1 | | 30·0 | 6·9 | |
| 10·0 | | 47·0 | 42·9 | |
| 10·1 | | 51·2 | 13·7 | |
| 9·6 | | 53·0 | 14·0 | |
| 8·4 | 55 | 2·7 | 39·4 | 7·8 G |
| 8·4 | | 9·5 | 4·3 | 8·0 GStr |
| 9·8 | | 12·0 | 4·0 | |
| 10·0 | | 15·0 | 12·0 | |
| 9·8 | | 19·5 | 11·0 | |
| 9·6 | | 31·5 | 12·3 | 9·0 |
| 10·0 | | 32·5 | 2·1 | |
| 9·9 | | 41·0 | 48·1 | |
| 9·6 | | 41·5 | 35·5 | |
| 9·8 | 56 | 8·5 | 24·2 | |
| 10·1 | | 18·5 | 23·7 | |
| 8·8 | | 22·5 | 47·4 | 8·8 G |
| 9·2 | | 22·5 | 14·9 | |
| 9·8 | | 32·5 | 38·7 | |
| 10·1 | | 35·5 | 19·0 | |
| 9·6 | | 36·0 | 25·2 | |
| 10·1 | | 39·0 | 7·9 | |
| 9·5 | | 39·5 | 27·9 | |
| 10·1 | | 41·5 | 50·5 | |
| 9·3 | | 42·5 | 19·9 | |
| 9·3 | | 47·0 | 22·0 | |
| 10·1 | | 48·5 | 26·0 | |
| 9·7 | | 56·0 | 36·2 | |
| 9·7 | 57 | 2·5 | 52·2 | |
| 8·6 | | 3·5 | 23·4 | 8·7 G |
| 9·9 | | 8·5 | 13·6 | |
| 10·1 | | 10·0 | 10·0 | |
| 9·6 | | 12·5 | 38·5 | |
| 9·2 | | 16·0 | 46·0 | 8·0 G |
| 10·1 | | 22·5 | 6·0 | |
| 9·8 | | 23·0 | 57·0 | |
| 10·1 | | 25·0 | 12·0 | |
| 9·2 | | 28·5 | 2·2 | |
| 10·1 | | 34·5 | 1·0 | |
| 10·0 | | 38·0 | 55·1 | |
| 9·7 | | 45·5 | 59·8 | |
| 10·1 | 58 | 10·5 | 18·0 | |
| 9·8 | | 11·5 | 41·5 | |
| 10·1 | | 19·5 | 4·3 | |
| 9·3 | | 21·5 | 32·1 | 9·2 |
| 9·8 | | 22·0 | 49·0 | |
| 8·8 | | 33·0 | 28·3 | 9·8 |
| 10·1 | | 43·0 | 5·9 | |
| 9·2 | | 43·5 | 20·6 | |
| 9·4 | | 50·0 | 18·9 | |
| 10·1 | | 50·5 | 17·4 | |

### 4441—4500.

| mag. | 12h.—13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 58 | 52·5 | 36·9 | |
| 9·9 | | 56·5 | 7·3 | 9·0 |
| 10·1 | 59 | 2·5 | 19·8 | |
| 10·1 | | 2·5 | 43·9 | |
| 10·1 | | 3·0 | 8·1 | |
| 10·0 | | 12·5 | 44·0 | |
| 10·1 | | 23·0 | 39·0 | |
| 8·8 | | 35·5 | 2·0 | 9·0 G |
| 9·2 | | 36·0 | 10·0 | 8·5 G |
| 9·8 | | 39·0 | 15·2 | |
| 9·3 | | 39·5 | 56·2 | |
| 10·0 | | 53·5 | 25·9 | |
| 10·0 | | 59·5 | 18·9 | |
| 9·8 | 0 | 0·5 | 41·6 | |
| 9·4 | | 3·5 | 16·1 | |
| 10·1 | | 13·5 | 22·3 | |
| 9·4 | | 15·5 | 16·7 | |
| 9·8 | | 21·5 | 28·9 | |
| 9·5 | | 22·5 | 34·1 | |
| 9·6 | | 33·0 | 33·9 | |
| 8·6 | | 39·0 | 34·4 | 8·8 |
| 9·2 | | 39·5 | 27·2 | |
| 8·8 | | 41·5 | 32·0 | 8·8 |
| 9·5 | | 41·5 | 43·0 | 9·0 |
| 8·8 | | 45·5 | 16·0 | |
| 8·8 | | 56·0 | 31·0 | 9·2 |
| 10·1 | | 56·5 | 28·0 | |
| 9·9 | 1 | 0·5 | 37·0 | |
| 9·8 | | 13·0 | 42·7 | |
| 10·1 | | 19·5 | 15·0 | |
| 10·1 | | 22·5 | 8·6 | |
| 10·0 | | 26·5 | 15·7 | |
| 10·1 | | 27·5 | 37·9 | |
| 9·3 | | 39·5 | 10·7 | |
| 9·3 | | 43·0 | 59·7 | |
| 9·8 | | 52·5 | 24·9 | |
| 9·7 | | 52·5 | 18·1 | |
| 10·0 | | 55·5 | 21·7 | |
| 9·3 | 2 | 0·0 | 2·0 | |
| 9·1 | | 3·0 | 27·9 | 9·0 |
| 9·4 | | 4·0 | 34·1 | |
| 9·4 | | 5·0 | 21·3 | |
| 9·3 | | 25·0 | 33·4 | |
| 10·0 | | 27·0 | 11·3 | |
| 8·9 | | 30·5 | 48·3 | 8·8 |
| 9·2 | | 35·0 | 7·2 | 8·5 |
| 8·6 | | 42·5 | 11·1 | 8·5 |
| 9·8 | | 45·5 | 11·4 | |
| 10·1 | | 48·5 | 26·2 | |
| 9·2 | 3 | 3·0 | 22·7 | |
| 10·1 | | 6·0 | 23·4 | |
| 9·7 | | 7·5 | 37·0 | |
| 9·0 | | 9·5 | 42·7 | |
| 8·7 | | 12·5 | 17·5 | 9·5 |
| 10·0 | | 15·0 | 15·8 | |
| 10·1 | | 18·5 | 34·2 | |
| 9·8 | | 21·5 | 6·1 | |
| 9·6 | | 34·0 | 51·1 | |
| 10·1 | | 35·5 | 15·9 | |
| 9·3 | | 38·0 | 6·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 30 | 85 | 8·3 |
| | 40 | 87 | 8·2 |
| | 50 | 90 | 8·2 |
| 13 | 0 | 92 | 8·1 |
| | 10 | 95 | 8·0 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 13 | 0 | 92 | 8·1 |
| | 10 | 95 | 8·0 |
| | 20 | 97 | 7·9 |
| | 30 | 99 | 7·7 |

**4501—4560.**

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 3 | 44·5 | 21·7 | |
| 9·4 | | 48·0 | 7·6 | |
| 10·1 | | 49·0 | 1·4 | |
| 10·1 | | 49·5 | 33·1 | |
| 10·0 | | 52·5 | 16·4 | |
| 10·0 | 4 | 1·5 | 28·0 | |
| 9·2 | | 3·0 | 29·3 | 9·2 |
| 8·1 | | 4·0 | 27·1 | 7·0 GSg |
| 9·0 | | 10·0 | 55·5 | |
| 10·1 | | 13·0 | 49·3 | |
| 10·0 | | 20·5 | 41·3 | |
| 8·7 | | 23·5 | 24·2 | 8·5 |
| 10·1 | | 29·5 | 22·4 | |
| 9·6 | | 29·5 | 52·0 | |
| 10·1 | | 37·0 | 42·4 | |
| 10·1 | | 42·5 | 34·9 | |
| 8·6 | | 47·0 | 47·9 | 9·0 |
| 9·4 | | 50·0 | 21·1 | |
| 9·2 | | 51·5 | 16·0 | |
| 8·1 | | 56·5 | 52·8 | 7·5 GS |
| 9·8 | | 57·5 | 42·4 | |
| 9·2 | 5 | 3·0 | 28·0 | |
| 9·7 | | 5·0 | 30·9 | |
| 10·0 | | 5·5 | 4·0 | |
| 8·9 | | 8·5 | 36·5 | |
| 10·1 | | 11·0 | 36·7 | |
| 10·1 | | 18·5 | 48·9 | |
| 8·5 | | 19·5 | 25·4 | 8·5 |
| 9·2 | | 22·5 | 26·4 | 9·5 |
| 9·3 | | 23·0 | 58·4 | |
| 10·1 | | 26·5 | 26·8 | |
| 9·8 | | 29·0 | 4·4 | |
| 9·6 | | 29·5 | 18·4 | 9·0 |
| 9·2 | | 32·5 | 19·2 | 9·0 |
| 9·2 | | 50·0 | 2·4 | |
| 10·0 | | 50·5 | 15·5 | |
| 9·5 | | 56·5 | 47·8 | |
| 10·1 | | 59·0 | 58·4 | |
| 9·8 | 6 | 0·5 | 30·3 | |
| 9·2 | | 6·5 | 41·9 | |
| 9·2 | | 9·5 | 17·7 | |
| 9·2 | | 13·5 | 19·7 | 7·5 G |
| 9·2 | | 32·5 | 20·1 | |
| 9·8 | | 46·5 | 22·0 | |
| 8·8 | | 46·5 | 26·6 | |
| 9·8 | | 51·5 | 50·5 | |
| 10·1 | | 53·5 | 16·0 | |
| 9·4 | | 56·5 | 8·4 | |
| 10·2 | 7 | 11·5 | 53·2 | |
| 10·2 | | 12·5 | 55·5 | |
| 9·0 | | 15·5 | 18·1 | 9·5 |
| 9·4 | | 31·0 | 56·1 | |
| 9·2 | | 37·5 | 29·5 | |
| 9·8 | | 40·5 | 20·9 | |
| 10·1 | | 41·0 | 59·2 | |
| 10·1 | | 42·5 | 22·9 | |
| 9·8 | | 45·5 | 30·0 | |
| 8·8 | | 59·5 | 9·9 | 9·0 |
| 9·4 | 8 | 11·5 | 47·9 | |
| 10·1 | | 12·5 | 52·5 | |

**4561—4620.**

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 8 | 22·5 | 18·6 | |
| 10·1 | | 30·0 | 42·0 | |
| 8·6 | | 32·5 | 53·1 | 9·0 |
| 9·0 | | 32·5 | 44·8 | |
| 9·8 | | 35·5 | 23·0 | |
| 9·1 | | 39·5 | 26·7 | 9·0 G |
| 10·1 | | 49·0 | 9·4 | |
| 9·0 | 9 | 25·5 | 55·4 | 8·5 |
| 8·5 | | 26·5 | 24·5 | 9·0 |
| 10·0 | | 31·5 | 41·3 | |
| 9·4 | | 47·0 | 4·9 | |
| 9·8 | | 51·0 | 1·6 | |
| 8·6 | | 58·5 | 21·0 | 8·0 G |
| 10·1 | | 58·5 | 50·0 | |
| 10·1 | | 59·5 | 27·4 | |
| 10·1 | 10 | 2·5 | 22·7 | |
| 9·3 | | 2·5 | 37·0 | |
| 9·0 | | 12·5 | 40·6 | |
| 8·7 | | 18·0 | 40·1 | 7·5 G |
| 9·0 | | 19·0 | 32·2 | |
| 9·8 | | 48·5 | 52·3 | |
| 9·4 | | 52·0 | 44·4 | |
| 9·8 | | 56·5 | 43·8 | |
| 8·8 | 11 | 3·7 | 57·5 | 9·0 |
| 9·1 | | 7·0 | 17·7 | |
| 9·7 | | 8·0 | 20·0 | |
| 8·8 | | 23·0 | 42·7 | 8·0 |
| 9·2 | | 31·5 | 55·2 | |
| 9·8 | | 37·5 | 20·9 | |
| 10·1 | | 39·5 | 33·9 | |
| 10·0 | | 43·5 | 39·0 | |
| 9·6 | | 46·5 | 12·2 | |
| 8·9 | | 51·5 | 51·1 | |
| 8·6 | | 53·5 | 12·8 | 9·0 |
| 10·1 | | 57·0 | 52·8 | |
| 9·2 | 12 | 4·0 | 50·0 | |
| 9·2 | | 5·0 | 22·7 | |
| 8·9 | | 5·5 | 45·2 | |
| 10·1 | | 15·5 | 20·3 | |
| 10·1 | | 16·5 | 23·0 | |
| 10·1 | | 17·0 | 13·3 | |
| 9·7 | | 26·5 | 45·0 | |
| 10·0 | | 32·5 | 25·1 | |
| 8·8 | | 36·5 | 40·7 | |
| 8·5 | | 41·5 | 12·1 | 8·0 |
| 10·1 | | 52·0 | 39·9 | |
| 10·1 | | 52·5 | 34·2 | |
| 9·6 | 13 | 3·5 | 54·5 | |
| 9·8 | | 30·5 | 8·6 | |
| 8·8 | | 30·5 | 9·1 | 8·5 G |
| 9·7 | | 32·5 | 54·9 | |
| 10·1 | | 42·5 | 7·4 | |
| 10·1 | | 43·0 | 11·1 | |
| 9·4 | | 58·5 | 54·4 | |
| 9·4 | | 59·5 | 15·1 | |
| 9·8 | 14 | 1·0 | 31·5 | |
| 9·4 | | 2·0 | 43·3 | 9·5 |
| 9·8 | | 3·0 | 23·1 | |
| 8·8 | | 5·5 | 43·9 | 9·0 |
| 10·1 | | 9·0 | 34·3 | |

**4621—4680.**

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 14 | 12·5 | 51·4 | |
| 10·0 | | 14·0 | 58·2 | |
| 9·2 | | 19·0 | 37·0 | |
| 10·1 | | 20·5 | 30·0 | |
| 10·0 | | 23·0 | 57·5 | |
| 9·1 | | 26·0 | 17·0 | |
| 4·7 | | 32·5 | 19·6 | 4·8 GSt |
| 9·3 | | 34·5 | 38·2 | |
| 9·8 | | 44·5 | 44·8 | |
| 8·7 | 15 | 5·5 | 30·0 | 9·2 |
| 9·3 | | 7·0 | 57·7 | |
| 9·9 | | 9·5 | 14·2 | |
| 8·9 | | 10·0 | 25·2 | 9·0 |
| 10·0 | | 19·0 | 30·0 | |
| 10·1 | | 20·5 | 56·2 | |
| 10·1 | | 25·5 | 56·1 | |
| 9·0 | | 29·5 | 30·0 | |
| 10·1 | | 42·0 | 55·9 | |
| 9·4 | | 49·0 | 26·8 | |
| 9·2 | 16 | 2·5 | 25·9 | 8·8 G |
| 9·8 | | 3·0 | 53·1 | |
| 9·8 | | 4·5 | 57·8 | |
| 8·5 | | 10·0 | 57·5 | 9·5 |
| 10·1 | | 21·5 | 20·3 | |
| 9·0 | | 25·5 | 40·0 | |
| 10·0 | | 31·0 | 55·4 | |
| 10·1 | | 32·5 | 43·0 | |
| 9·6 | | 43·0 | 20·0 | |
| 8·5 | | 44·5 | 22·4 | 8·5 |
| 10·1 | | 52·0 | 29·7 | |
| 8·4 | | 52·5 | 19·1 | 8·0 |
| 10·1 | | 52·5 | 21·1 | |
| 9·1 | 17 | 0·0 | 27·1 | |
| 9·3 | | 2·5 | 26·1 | |
| 9·4 | | 12·5 | 36·9 | 9·5 |
| 9·3 | | 13·0 | 38·0 | |
| 9·6 | | 13·5 | 26·5 | |
| 9·4 | | 22·0 | 23·4 | |
| 9·7 | | 24·0 | 14·5 | |
| 9·2 | | 44·0 | 51·3 | |
| 10·1 | | 45·0 | 53·3 | |
| 9·9 | | 49·0 | 51·8 | |
| 9·6 | | 53·5 | 45·0 | |
| 9·7 | | 54·0 | 8·5 | |
| 10·0 | | 57·5 | 50·9 | |
| 9·7 | 18 | 9·5 | 57·1 | |
| 10·1 | | 12·5 | 50·4 | |
| 9·8 | | 22·5 | 20·5 | |
| 10·1 | | 25·5 | 21·6 | |
| 10·1 | | 28·5 | 13·0 | |
| 8·8 | | 46·0 | 10·5 | 8·5 |
| 9·3 | | 46·0 | 54·9 | |
| 9·6 | | 49·5 | 17·0 | 9·0 |
| 9·8 | | 50·5 | 24·1 | |
| 10·1 | | 59·0 | 15·9 | |
| 10·1 | 19 | 1·5 | 13·2 | |
| 10·1 | | 3·5 | 22·9 | |
| 9·1 | | 19·5 | 41·9 | 9·5 |
| 9·1 | | 20·0 | 23·9 | 9·0 |
| 8·8 | | 29·0 | 50·5 | 9·0 |

**4681—4740.**

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 19 | 30·5 | 19·9 | |
| 9·2 | | 32·5 | 57·1 | |
| 9·4 | | 36·0 | 45·3 | |
| 9·4 | | 36·5 | 11·1 | |
| 10·1 | | 39·5 | 46·4 | |
| 10·1 | | 39·5 | 58·9 | |
| 7·5 | | 51·0 | 24·6 | 7·5 GSt |
| 10·1 | | 55·5 | 57·9 | |
| 9·1 | | 55·5 | 42·0 | 8·5 |
| 10·1 | 20 | 10·0 | 53·9 | |
| 9·4 | | 23·0 | 52·9 | |
| 8·8 | | 33·0 | 22·4 | 9·5 |
| 10·1 | | 36·5 | 13·1 | |
| 10·1 | | 53·0 | 34·2 | |
| 10·0 | | 53·0 | 32·2 | |
| 8·1 | | 54·0 | 16·4 | 8·0 GSt |
| 9·4 | | 55·0 | 33·2 | |
| 10·1 | | 56·5 | 32·1 | |
| 9·1 | | 57·5 | 26·8 | |
| 8·6 | | 58·5 | 3·7 | 9·0 |
| 9·4 | | 59·5 | 33·1 | |
| 10·1 | 21 | 3·0 | 3·1 | |
| 10·0 | | 5·0 | 32·9 | |
| 10·1 | | 5·5 | 19·1 | |
| 10·1 | | 7·0 | 21·1 | |
| 10·1 | | 17·5 | 33·2 | |
| 9·3 | | 18·5 | 56·7 | |
| 9·0 | | 22·0 | 32·6 | |
| 10·1 | | 22·0 | 13·0 | |
| 8·9 | | 26·0 | 28·8 | 9·0 |
| 9·6 | | 31·0 | 22·0 | |
| 9·2 | | 32·5 | 15·1 | |
| 9·8 | | 34·0 | 15·5 | |
| 9·4 | | 46·0 | 19·9 | |
| 10·1 | | 58·0 | 9·1 | |
| 10·1 | 22 | 2·0 | 54·2 | |
| 10·1 | | 6·0 | 4·1 | |
| 9·0 | | 8·0 | 42·5 | |
| 10·1 | | 10·0 | 36·1 | |
| 9·8 | | 11·5 | 37·3 | |
| 9·2 | | 17·0 | 31·5 | 9·5 |
| 9·0 | | 18·0 | 11·0 | |
| 9·6 | | 18·0 | 38·5 | |
| 9·2 | | 22·0 | 34·1 | |
| 10·0 | | 26·5 | 18·0 | |
| 9·6 | | 30·5 | 37·1 | |
| 10·1 | | 34·0 | 41·3 | |
| 9·2 | | 37·5 | 44·9 | |
| 9·1 | | 39·0 | 33·9 | 9·5 |
| 9·6 | | 39·5 | 0·5 | |
| 9·4 | | 44·0 | 13·5 | |
| 9·8 | | 49·0 | 48·5 | |
| 9·8 | | 55·5 | 7·2 | |
| 8·1 | | 56·5 | 5·0 | 8·0 GS |
| 9·0 | 23 | 0·5 | 17·2 | |
| 10·1 | | 5·0 | 8·2 | |
| 9·8 | | 11·5 | 41·1 | |
| 9·8 | | 15·0 | 31·1 | |
| 8·1 | | 16·0 | 56·2 | 7·0 GSt |
| 9·8 | | 16·0 | 41·4 | |



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### 4741—4800.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 23 | 30·0 | 49·3 | |
| 8·9 | | 41·5 | 23·2 | |
| 10·1 | | 51·5 | 24·9 | |
| 8·4 | | 53·5 | 10·2 | 8·5 |
| 10·0 | | 57·0 | 59·1 | |
| 10·1 | | 57·0 | 27·5 | |
| 10·0 | 24 | 5·5 | 30·1 | |
| 9·6 | | 5·5 | 49·0 | |
| 9·1 | | 11·5 | 32·0 | 8·0 |
| 9·8 | | 29·0 | 38·9 | |
| 10·1 | | 30·5 | 39·8 | |
| 9·8 | | 40·0 | 55·4 | |
| 10·1 | | 42·5 | 9·4 | |
| 10·1 | | 46·5 | 10·5 | |
| 9·4 | | 48·5 | 26·9 | |
| 8·9 | 25 | 5·5 | 39·1 | |
| 9·8 | | 6·0 | 13·9 | |
| 9·8 | | 10·5 | 22·1 | |
| 8·9 | | 11·0 | 48·0 | |
| 9·8 | | 13·0 | 59·8 | |
| 10·1 | | 28·5 | 35·3 | |
| 9·8 | | 28·5 | 57·2 | |
| 8·6 | | 29·5 | 58·8 | |
| 10·0 | | 33·5 | 56·4 | |
| 8·8 | | 46·0 | 32·1 | 9·0 |
| 10·0 | | 50·5 | 6·5 | |
| 10·0 | | 52·0 | 49·4 | |
| 10·1 | | 56·0 | 56·0 | |
| 10·1 | | 59·0 | 43·0 | |
| 10·1 | 26 | 27·5 | 14·0 | |
| 9·4 | | 33·0 | 52·8 | |
| 10·1 | | 33·5 | 1·7 | |
| 9·8 | | 43·0 | 23·2 | |
| 9·0 | | 44·0 | 35·2 | 9·5 |
| 8·9 | | 46·5 | 37·1 | *8·1* |
| 9·8 | | 47·0 | 46·9 | |
| 9·1 | | 50·0 | 10·7 | |
| 9·8 | | 50·0 | 41·0 | |
| 9·8 | 27 | 0·5 | 33·7 | |
| 9·4 | | 23·0 | 3·2 | |
| 9·4 | | 26·0 | 27·9 | |
| 10·0 | | 28·0 | 51·0 | |
| 8·4 | | 38·5 | 45·0 | 9·0 |
| 9·0 | | 41·5 | 55·8 | |
| 9·8 | | 43·0 | 39·2 | |
| 9·2 | | 48·0 | 28·3 | 9·5 |
| 9·4 | | 52·5 | 48·1 | |
| 9·9 | | 53·0 | 36·4 | |
| 9·6 | | 57·5 | 27·0 | |
| 10·1 | | 58·5 | 14·1 | |
| 9·9 | 28 | 2·5 | 26·8 | |
| 9·6 | | 9·0 | 55·1 | |
| 9·2 | | 22·0 | 31·2 | |
| 9·3 | | 29·0 | 55·0 | |
| 9·8 | | 34·0 | 7·1 | |
| 9·8 | | 36·5 | 0·6 | |
| 9·4 | | 40·0 | 13·5 | |
| 9·8 | | 43·0 | 48·4 | |
| 9·7 | | 43·0 | 52·9 | |
| 9·7 | 29 | 0·5 | 34·2 | |

### 4801—4860.

| mag | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 29 | 10·0 | 10·9 | |
| 9·6 | | 24·0 | 56·1 | |
| 10·0 | | 28·0 | 29·8 | |
| 9·6 | | 28·8 | 29·9 | |
| 9·8 | | 29·7 | 54·4 | |
| 9·2 | | 30·7 | 41·4 | |
| 9·4 | | 31·8 | 41·9 | |
| 9·7 | | 33·8 | 28·8 | |
| 9·8 | | 35·5 | 6·9 | |
| 10·0 | | 38·0 | 5·9 | |
| 9·8 | | 40·2 | 54·9 | |
| 10·0 | | 40·8 | 49·9 | |
| 10·1 | | 44·0 | 18·9 | |
| 9·7 | | 46·8 | 18·9 | |
| 9·2 | | 48·5 | 31·7 | |
| 10·0 | | 48·8 | 19·2 | |
| 10·1 | | 52·0 | 28·8 | |
| 10·1 | | 56·0 | 18·6 | |
| 9·0 | 30 | 0·2 | 41·0 | 9·5 |
| 10·0 | | 5·0 | 29·3 | |
| 9·6 | | 11·8 | 30·8 | |
| 9·7 | | 14·3 | 29·6 | |
| 9·0 | | 16·5 | 4·9 | 9·0 |
| 9·6 | | 18·7 | 57·9 | |
| 9·6 | | 19·0 | 22·7 | |
| 9·3 | | 19·8 | 42·9 | |
| 9·2 | | 28·0 | 10·1 | 9·0 |
| 9·6 | | 33·0 | 9·6 | 9·5 |
| 9·5 | | 33·7 | 0·1 | |
| 9·8 | | 42·0 | 37·9 | |
| 9·3 | | 45·2 | 1·9 | |
| 9·7 | | 45·5 | 30·9 | |
| 9·4 | | 46·0 | 52·8 | |
| 10·0 | | 48·5 | 56·9 | |
| 10·0 | | 49·0 | 32·4 | |
| 8·6 | | 52·0 | 20·8 | 8·5 |
| 10·1 | | 52·0 | 29·4 | |
| 10·1 | | 55·0 | 29·4 | |
| 9·9 | | 56·5 | 54·3 | |
| 10·1 | | 58·0 | 35·9 | |
| 9·5 | | 58·5 | 23·9 | |
| 10·0 | | 59·5 | 0·9 | |
| 8·5 | 31 | 5·0 | 34·6 | 8·5 |
| 10·0 | | 5·5 | 35·6 | |
| 9·6 | | 7·0 | 24·9 | |
| 9·9 | | 7·5 | 8·5 | |
| 9·0 | | 9·5 | 8·3 | 9·5 |
| 10·0 | | 13·0 | 27·4 | |
| 10·0 | | 13·5 | 1·0 | |
| 8·6 | | 17·0 | 12·9 | 8·5 |
| 9·6 | | 18·0 | 35·3 | |
| 9·6 | | 22·0 | 14·9 | |
| 9·8 | | 23·0 | 25·1 | |
| 9·6 | | 23·0 | 42·9 | |
| 10·0 | | 38·0 | 23·0 | |
| 10·0 | | 41·5 | 31·5 | |
| 9·6 | | 42·5 | 52·9 | |
| 9·1 | | 47·0 | 50·9 | |
| 9·8 | | 48·0 | 51·6 | |
| 9·5 | | 48·0 | 6·8 | |

### 4861—4920.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 32 | 4·0 | 27·8 | |
| 10·1 | | 4·0 | 49·4 | |
| 9·6 | | 5·5 | 46·0 | |
| 10·0 | | 11·0 | 22·3 | |
| 9·5 | | 15·5 | 26·7 | |
| 10·0 | | 15·5 | 22·0 | |
| 10·0 | | 28·0 | 18·2 | |
| 10·0 | | 43·5 | 17·0 | |
| 10·1 | | 49·5 | 19·4 | |
| 9·0 | | 53·5 | 47·1 | 9·0 |
| 9·6 | | 56·5 | 51·0 | |
| 9·8 | 33 | 0·5 | 57·4 | |
| 9·6 | | 5·0 | 37·2 | |
| 10·0 | | 6·5 | 19·0 | |
| 9·6 | | 6·5 | 55·3 | |
| 9·6 | | 7·5 | 52·7 | |
| 9·7 | | 11·0 | 34·4 | |
| 9·6 | | 18·0 | 24·2 | |
| 9·5 | | 18·5 | 4·6 | |
| 9·8 | | 27·5 | 6·0 | |
| 8·7 | | 28·0 | 21·2 | 8·5 |
| 10·0 | | 32·0 | 40·0 | |
| 10·0 | | 36·5 | 51·4 | |
| 9·7 | | 37·0 | 53·2 | |
| 9·6 | | 43·5 | 16·5 | |
| 9·8 | | 46·0 | 20·3 | |
| 10·0 | | 48·0 | 12·7 | |
| 9·0 | | 49·5 | 58·0 | |
| 9·5 | 34 | 7·0 | 20·0 | |
| 9·4 | | 13·0 | 3·9 | |
| 10·1 | | 16·0 | 39·1 | |
| 9·8 | | 21·5 | 54·9 | |
| 9·2 | | 27·0 | 18·6 | |
| 9·6 | | 28·0 | 20·1 | |
| 10·1 | | 30·0 | 55·0 | |
| 9·6 | | 32·5 | 35·4 | |
| 9·6 | | 33·5 | 56·4 | |
| 8·8 | | 40·0 | 35·0 | 9·0 |
| 10·0 | | 42·5 | 32·2 | |
| 10·1 | | 44·0 | 17·0 | |
| 9·3 | | 44·5 | 18·2 | |
| 9·4 | | 47·0 | 31·7 | 8·0 |
| 10·1 | | 48·5 | 2·0 | |
| 9·6 | | 49·2 | 58·7 | |
| 10·0 | | 54·0 | 19·2 | |
| 10·1 | 35 | 2·0 | 1·9 | |
| 9·5 | | 12·5 | 27·7 | |
| 10·1 | | 14·5 | 4·1 | |
| 10·0 | | 18·0 | 42·0 | |
| 9·8 | | 18·5 | 4·0 | |
| 9·4 | | 23·5 | 55·6 | |
| 9·2 | | 27·5 | 24·9 | |
| 9·0 | | 28·0 | 44·1 | 8·5 |
| 10·0 | | 30·0 | 44·4 | |
| 10·1 | | 32·0 | 1·6 | |
| 10·0 | | 32·5 | 13·0 | |
| 10·1 | | 35·0 | 56·4 | |
| 9·6 | | 49·5 | 29·1 | |
| 9·7 | | 53·5 | 37·0 | |
| 10·1 | | 55·0 | 20·5 | |

### 4921—4980.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 35 | 57·5 | 50·0 | |
| 10·1 | 36 | 10·5 | 59·6 | |
| 10·0 | | 12·0 | 52·9 | |
| 9·1 | | 17·0 | 3·6 | |
| 9·8 | | 18·0 | 26·0 | |
| 10·0 | | 18·0 | 27·6 | |
| 9·0 | | 26·0 | 24·8 | 10·0 |
| 10·1 | | 26·5 | 53·8 | |
| 10·1 | | 30·0 | 54·0 | |
| 9·1 | | 38·5 | 35·1 | 9·5 |
| 8·8 | | 40·0 | 12·2 | 9·0 |
| 9·9 | | 46·0 | 19·0 | |
| 10·0 | | 47·0 | 25·6 | |
| 9·9 | | 57·0 | 17·0 | |
| 10·0 | | 58·5 | 24·4 | |
| 9·0 | 37 | 2·5 | 24·5 | 9·5 |
| 9·9 | | 8·5 | 14·1 | |
| 10·1 | | 15·0 | 0·9 | |
| 9·9 | | 16·0 | 53·2 | |
| 9·9 | | 26·5 | 45·9 | |
| 9·8 | | 27·0 | 51·9 | |
| 9·8 | | 28·0 | 41·4 | |
| 10·1 | | 28·0 | 16·4 | |
| 9·7 | | 32·0 | 25·9 | |
| 9·6 | | 33·0 | 40·2 | |
| 10·0 | | 45·0 | 24·3 | |
| 9·7 | | 54·0 | 2·4 | |
| 8·7 | | 54·5 | 43·1 | 9·0 |
| 10·0 | | 55·5 | 2·9 | |
| 10·0 | | 56·0 | 23·3 | |
| 9·7 | | 59·5 | 31·7 | |
| 9·9 | 38 | 1·0 | 34·9 | |
| 10·0 | | 2·0 | 45·2 | |
| 10·0 | | 5·5 | 43·3 | |
| 9·9 | | 6·0 | 6·7 | |
| 9·8 | | 23·0 | 6·9 | |
| 10·0 | | 25·0 | 22·8 | |
| 9·8 | | 26·0 | 2·7 | |
| 9·2 | | 28·5 | 2·9 | 9·0 |
| 10·0 | | 28·5 | 37·9 | |
| 8·7 | | 34·0 | 4·3 | 8·5 |
| 9·6 | | 35·0 | 6·2 | |
| 10·0 | | 36·0 | 20·7 | |
| 10·0 | | 36·0 | 58·1 | |
| 9·5 | | 38·5 | 36·4 | 9·5 |
| 9·9 | | 40·0 | 46·2 | |
| 9·6 | | 47·5 | 32·9 | |
| 8·4 | | 53·5 | 59·5 | 9·5 |
| 10·0 | | 54·0 | 38·6 | |
| 10·0 | | 56·5 | 2·7 | |
| 9·8 | 39 | 5·5 | 13·6 | |
| 9·5 | | 8·5 | 11·5 | |
| 10·1 | | 10·0 | 55·9 | |
| 10·0 | | 12·5 | 27·5 | |
| 10·1 | | 17·0 | 7·0 | |
| 10·0 | | 17·5 | 54·9 | |
| 10·0 | | 18·0 | 29·0 | |
| 8·2 | | 19·5 | 15·3 | 8·0 |
| 10·1 | | 28·0 | 16·0 | |
| 10·0 | | 30·7 | 59·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 20 | 97 | 7·9 |
| | 30 | 99 | 7·7 |
| | 40 | 102 | 7·6 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 13 | 30 | 99 | 7·7 |
| | 40 | 102 | 7·6 |
| | 50 | 104 | 7·4 |
| 14 | 0 | 106 | 7·2 |
| | 10 | 109 | 7·0 |

## 4981—5040.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·0 | 39 | 36·0 | 10·9 | 8·0 G |
| 10·1 | | 36·5 | 40·3 | |
| 10·0 | | 43·0 | 8·2 | |
| 9·5 | | 44·0 | 18·1 | |
| 9·0 | | 56·0 | 13·3 | |
| 9·6 | 40 | 4·0 | 59·5 | |
| 9·6 | | 4·5 | 54·9 | |
| 10·1 | | 8·0 | 0·4 | |
| 9·1 | | 21·0 | 13·8 | |
| 9·4 | | 21·5 | 9·9 | 8·5 |
| 9·5 | | 22·5 | 11·2 | |
| 10·0 | | 25·0 | 33·3 | |
| 9·6 | | 28·0 | 6·1 | |
| 10·1 | | 28·0 | 27·7 | |
| 9·9 | | 35·0 | 19·8 | |
| 10·0 | | 37·5 | 8·9 | |
| 9·5 | | 41·5 | 11·5 | 8·5 G |
| 7·7 | | 41·5 | 7·7 | 7·5 GScr |
| 9·9 | | 43·0 | 44·8 | |
| 9·6 | | 44·5 | 6·0 | |
| 9·6 | | 45·5 | 50·1 | |
| 10·0 | | 50·0 | 45·8 | |
| 9·6 | | 52·5 | 49·9 | |
| 10·1 | | 53·5 | 59·7 | |
| 9·8 | | 57·0 | 49·9 | |
| 10·0 | | 59·0 | 0·7 | |
| 10·0 | | 59·0 | 46·3 | |
| 9·6 | 41 | 2·0 | 15·6 | 9·0 |
| 9·6 | | 3·0 | 17·7 | |
| 9·7 | | 15·0 | 42·9 | |
| 10·1 | | 35·0 | 4·9 | |
| 10·1 | | 36·0 | 16·1 | |
| 9·0 | | 44·0 | 12·1 | 9·5 |
| 9·7 | | 52·5 | 4·7 | |
| 10·0 | | 52·5 | 25·8 | |
| 9·7 | | 59·5 | 30·3 | |
| 10·1 | 42 | 0·0 | 27·3 | |
| 9·8 | | 3·0 | 47·7 | |
| 10·0 | | 4·5 | 55·7 | |
| 9·9 | | 8·5 | 53·6 | |
| 9·3 | | 9·0 | 10·1 | |
| 10·1 | | 15·0 | 5·2 | |
| 10·0 | | 16·0 | 34·5 | |
| 10·0 | | 18·5 | 15·7 | |
| 9·6 | | 24·0 | 37·2 | |
| 9·8 | | 25·0 | 28·0 | |
| 9·6 | | 27·5 | 25·9 | |
| 10·0 | | 28·0 | 56·9 | |
| 10·0 | | 33·0 | 42·5 | |
| 10·1 | | 36·0 | 47·9 | |
| 8·5 | | 37·5 | 0·6 | 8·5 |
| 10·0 | | 41·5 | 27·7 | |
| 9·0 | | 49·5 | 29·0 | 9·0 |
| 10·1 | | 50·5 | 48·0 | |
| 9·3 | | 54·0 | 58·0 | |
| 10·0 | | 54·0 | 53·1 | |
| 10·0 | | 55·5 | 21·0 | |
| 10·1 | | 58·2 | 57·3 | |
| 9·1 | 43 | 12·5 | 37·0 | |
| 10·1 | | 14·0 | 16·4 | |

## 5041—5100.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 43 | 15·5 | 6·3 | |
| 9·9 | | 17·5 | 27·0 | |
| 9·4 | | 18·5 | 29·8 | |
| 10·0 | | 25·0 | 15·1 | |
| 10·1 | | 29·5 | 15·5 | |
| 9·8 | | 34·0 | 26·9 | |
| 9·0 | | 35·5 | 14·9 | 9·5 |
| 9·4 | | 42·0 | 20·3 | |
| 9·7 | | 45·5 | 45·9 | |
| 10·1 | | 57·5 | 59·9 | |
| 9·5 | | 58·0 | 0·8 | 9·0 |
| 9·0 | 44 | 6·0 | 30·7 | |
| 9·0 | | 12·0 | 2·9 | |
| 9·8 | | 12·5 | 22·1 | |
| 9·9 | | 15·5 | 16·9 | |
| 8·2 | | 21·5 | 44·1 | 8·0 |
| 9·6 | | 45·0 | 45·7 | |
| 9·6 | | 47·0 | 23·8 | |
| 10·1 | 45 | 2·5 | 15·6 | |
| 9·6 | | 3·5 | 22·8 | |
| 9·5 | | 5·5 | 16·5 | |
| 8·5 | | 9·5 | 24·5 | 8·2 |
| 10·0 | | 12·0 | 37·9 | |
| 9·0 | | 22·5 | 47·1 | G |
| 9·5 | | 26·0 | 7·3 | |
| 9·8 | | 33·0 | 2·9 | |
| 9·3 | | 36·0 | 1·9 | |
| 10·1 | | 36·5 | 2·3 | |
| 9·7 | | 46·0 | 26·9 | |
| 10·1 | | 55·5 | 44·5 | |
| 7·9 | | 59·0 | 43·0 | 8·0 GSr |
| 10·0 | 46 | 0·0 | 31·9 | |
| 10·1 | | 5·5 | 32·5 | |
| 9·0 | | 7·0 | 40·9 | 8·5 G |
| 10·0 | | 8·0 | 20·9 | |
| 9·0 | | 9·0 | 16·8 | |
| 9·6 | | 17·5 | 9·9 | |
| 9·6 | | 23·5 | 59·0 | |
| 9·7 | | 25·0 | 50·6 | |
| 10·0 | | 32·5 | 46·1 | |
| 9·8 | | 33·0 | 48·7 | |
| 10·1 | | 37·0 | 1·9 | |
| 10·0 | | 44·0 | 56·9 | |
| 9·8 | | 50·5 | 41·3 | |
| 10·0 | | 51·0 | 22·4 | |
| 10·0 | | 57·0 | 4·9 | |
| 10·0 | | 58·0 | 28·9 | |
| 10·1 | | 59·5 | 6·1 | |
| 9·9 | 47 | 1·0 | 27·2 | 9·5 |
| 9·5 | | 4·0 | 4·5 | |
| 10·0 | | 4·2 | 58·1 | |
| 10·0 | | 5·0 | 15·8 | |
| 8·6 | | 8·5 | 53·2 | 9·0 |
| 10·0 | | 12·0 | 38·8 | |
| 10·0 | | 23·5 | 55·7 | |
| 8·4 | | 28·5 | 35·9 | 8·3 |
| 8·8 | | 36·0 | 57·4 | 9·5 |
| 10·0 | | 45·0 | 17·2 | |
| 10·0 | | 46·0 | 13·0 | |
| 9·6 | | 55·0 | 33·9 | |

## 5101—5160.

| mag. | 13h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·9 | 47 | 58·0 | 59·6 | |
| 9·0 | 48 | 1·5 | 32·5 | |
| 9·3 | | 6·5 | 59·5 | |
| 10·0 | | 13·0 | 32·0 | |
| 8·3 | | 21·0 | 6·1 | 8·5 |
| 9·9 | | 24·5 | 43·5 | |
| 10·1 | | 25·0 | 6·8 | |
| 10·1 | | 36·5 | 40·7 | |
| 9·4 | | 38·0 | 25·4 | 9·5 |
| 10·0 | | 38·5 | 40·7 | |
| 10·0 | | 38·5 | 32·9 | |
| 10·0 | | 45·5 | 15·5 | |
| 9·4 | | 48·0 | 55·3 | |
| 10·1 | | 58·0 | 22·3 | |
| 9·6 | | 58·5 | 14·9 | |
| 10·0 | 49 | 0·0 | 19·8 | |
| 10·0 | | 35·0 | 44·2 | |
| 9·3 | | 45·0 | 50·9 | |
| 10·0 | | 48·0 | 26·9 | |
| 9·4 | | 55·2 | 59·6 | 9·5 |
| 10·1 | | 57·0 | 55·9 | |
| 10·0 | 50 | 0·5 | 23·9 | |
| 10·0 | | 3·0 | 51·7 | |
| 10·0 | | 7·0 | 42·8 | |
| 10·1 | | 7·5 | 37·9 | |
| 10·0 | | 18·5 | 12·3 | |
| 9·2 | | 18·5 | 32·1 | |
| 10·0 | | 27·0 | 6·0 | |
| 9·9 | | 39·0 | 42·3 | |
| 10·0 | | 41·5 | 30·3 | |
| 8·3 | | 51·5 | 46·1 | 8·0 S |
| 9·9 | 51 | 3·5 | 32·7 | |
| 10·0 | | 22·0 | 46·3 | |
| 9·9 | | 22·0 | 54·9 | |
| 7·2 | | 27·0 | 52·3 | 7·0 GSr |
| 9·9 | | 27·0 | 7·3 | |
| 10·0 | | 33·0 | 46·9 | |
| 8·7 | | 36·0 | 48·0 | 9·5 |
| 8·8 | | 45·0 | 35·5 | 9·0 |
| 10·1 | | 46·0 | 48·7 | |
| 10·1 | | 47·0 | 7·1 | |
| 10·1 | 52 | 3·5 | 49·0 | |
| 10·0 | | 16·5 | 52·0 | |
| 9·2 | | 27·5 | 46·7 | |
| 10·1 | | 27·5 | 26·9 | |
| 8·6 | | 54·5 | 41·7 | 8·5 |
| 8·8 | | 56·0 | 42·2 | 9·0 |
| 10·0 | | 58·5 | 49·6 | |
| 9·6 | 53 | 4·0 | 10·5 | |
| 10·1 | | 6·0 | 10·0 | |
| 8·1 | | 6·5 | 11·1 | 8·0 |
| 9·9 | | 7·0 | 37·9 | |
| 9·1 | | 14·0 | 11·1 | 9·0 |
| 10·1 | | 16·5 | 39·9 | |
| 10·1 | | 18·0 | 0·2 | |
| 10·1 | | 27·0 | 19·5 | |
| 10·1 | | 55·5 | 49·0 | |
| 10·1 | | 55·5 | 18·6 | |
| 10·1 | | 56·0 | 11·1 | |
| 9·7 | 54 | 5·5 | 47·2 | |

## 5161—5220.

| mag. | 13h.—14h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·7 | 54 | 15·5 | 45·8 | |
| 10·1 | | 26·0 | 39·9 | |
| 10·1 | | 27·0 | 36·1 | |
| 9·8 | | 28·5 | 14·8 | |
| 9·1 | | 43·8 | 57·3 | |
| 10·1 | 55 | 8·0 | 32·0 | |
| 8·3 | | 18·5 | 6·3 | 9·0 |
| 10·0 | | 22·5 | 46·9 | |
| 9·1 | | 28·5 | 31·1 | |
| 9·8 | | 32·0 | 18·5 | |
| 9·5 | | 36·5 | 53·9 | |
| 9·2 | | 38·5 | 30·3 | |
| 10·1 | | 51·0 | 7·9 | |
| 9·0 | 56 | 2·0 | 46·5 | 9·5 |
| 9·5 | | 27·0 | 30·4 | |
| 9·4 | | 27·0 | 50·9 | 9·0 |
| 10·1 | | 35·0 | 16·2 | |
| 9·4 | | 46·0 | 56·3 | |
| 10·0 | | 54·5 | 30·0 | |
| 9·0 | | 56·5 | 2·8 | 9·0 |
| 9·8 | | 56·5 | 57·7 | |
| 8·5 | 57 | 8·5 | 54·9 | 9·0 |
| 10·0 | | 9·0 | 22·5 | |
| 10·0 | | 16·0 | 48·9 | |
| 9·6 | | 18·5 | 0·9 | |
| 9·0 | | 19·5 | 44·0 | |
| 10·0 | | 22·5 | 57·3 | |
| 9·0 | | 27·5 | 21·3 | |
| 10·0 | | 38·5 | 44·1 | |
| 9·0 | | 41·5 | 9·9 | |
| 9·4 | | 42·5 | 0·3 | |
| 9·8 | | 58·5 | 35·1 | |
| 9·6 | 58 | 4·5 | 17·9 | |
| 9·0 | | 15·5 | 49·4 | 9·0 |
| 10·1 | | 26·5 | 57·0 | |
| 9·6 | | 27·5 | 28·7 | |
| 8·9 | | 27·5 | 45·3 | |
| 8·2 | | 30·2 | 57·8 | 7·5 G |
| 7·9 | | 56·5 | 54·6 | 8·0 G |
| 8·8 | 59 | 2·0 | 36·1 | 9·5 |
| 8·0 | | 5·0 | 10·6 | 8·0 G |
| 10·1 | | 7·5 | 57·1 | |
| 10·1 | | 10·0 | 40·0 | |
| 9·0 | | 18·0 | 27·7 | |
| 9·5 | | 39·0 | 58·6 | |
| 9·4 | | 45·5 | 27·9 | |
| 10·1 | | 55·0 | 10·9 | |
| 9·9 | | 59·0 | 36·1 | |
| 9·2 | 0 | 44·5 | 34·5 | |
| 9·5 | | 50·0 | 41·5 | |
| 9·9 | | 56·5 | 9·9 | |
| 9·6 | | 58·5 | 6·7 | 9·0 S |
| 10·1 | 1 | 3·5 | 10·3 | |
| 10·1 | | 3·5 | 48·9 | |
| 9·0 | | 7·5 | 54·4 | |
| 8·7 | | 27·0 | 40·2 | 9·0 |
| 10·0 | | 30·0 | 48·8 | |
| 8·8 | | 34·0 | 16·8 | 9·5 |
| 10·0 | | 43·0 | 34·2 | |
| 9·2 | | 46·0 | 43·6 | |



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## 5221—5280.

| mag. | 14h m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 1 | 48·0 | 10·9 | |
| 9·0 | 2 | 0·5 | 49·8 | |
| 10·0 | | 11·5 | 21·9 | |
| 9·5 | | 14·5 | 15·9 | |
| 9·4 | | 22·0 | 19·9 | 9·0 |
| 10·0 | | 23·5 | 9·0 | |
| 9·8 | | 25·5 | 22·8 | |
| 9·6 | | 36·5 | 18·9 | |
| 9·7 | | 41·5 | 24·8 | |
| 9·7 | 3 | 3·0 | 51·7 | |
| 9·0 | | 17·5 | 54·2 | |
| 9·8 | | 43·0 | 9·9 | |
| 8·8 | | 44·0 | 42·9 | 9·5 |
| 9·2 | | 53·5 | 5·3 | |
| 9·7 | 4 | 0·0 | 10·5 | |
| 10·0 | | 11·5 | 12·1 | |
| 10·1 | | 16·5 | 38·8 | |
| 9·6 | | 21·5 | 50·0 | |
| 9·0 | | 38·0 | 52·7 | 8·5 |
| 9·6 | | 42·5 | 5·5 | |
| 8·8 | | 46·5 | 20·7 | 8·5 |
| 8·9 | | 55·5 | 20·0 | 9·2 |
| 9·4 | | 58·8 | 5·9 | |
| 8·8 | 5 | 5·3 | 3·8 | |
| 9·2 | | 13·5 | 22·9 | 8·7 |
| 9·5 | | 21·2 | 24·9 | |
| 10·3 | | 39·0 | 41·8 | |
| 8·7 | | 50·3 | 39·1 | |
| 10·2 | 6 | 1·2 | 11·6 | |
| 10·3 | | 4·5 | 5·8 | |
| 8·2 | | 4·7 | 31·5 | 8·5 |
| 10·3 | | 11·0 | 24·3 | |
| 10·3 | | 15·0 | 26·7 | |
| 8·6 | | 16·5 | 54·9 | 9·0 |
| 10·2 | | 22·0 | 15·9 | |
| 9·6 | | 24·2 | 46·9 | |
| 9·9 | | 43·5 | 34·1 | |
| 8·9 | | 46·0 | 36·3 | 9·5 |
| 10·2 | | 52·0 | 17·3 | |
| 10·3 | 7 | 14·0 | 20·8 | |
| 10·2 | | 26·0 | 29·1 | |
| 8·7 | | 38·5 | 36·0 | 8·2 |
| 8·8 | | 49·5 | 54·0 | |
| 10·2 | | 53·0 | 54·3 | |
| 9·4 | 8 | 3·0 | 12·0 | 9·8 |
| 10·3 | | 6·0 | 1·1 | |
| 10·2 | | 6·5 | 32·3 | |
| 9·4 | | 16·0 | 39·1 | 9·5 |
| 10·3 | | 21·0 | 25·0 | |
| 9·4 | | 22·5 | 35·0 | 9·5 |
| 10·2 | | 24·3 | 58·7 | |
| 9·0 | | 35·0 | 55·3 | 8·2 |
| 8·5 | | 35·5 | 12·3 | 8·8 |
| 10·2 | | 46·5 | 54·0 | |
| 10·3 | | 53·0 | 6·6 | |
| 8·6 | 9 | 18·0 | 19·0 | 9·2 |
| 10·2 | | 21·0 | 50·3 | |
| 9·9 | | 28·0 | 41·1 | |
| 10·2 | | 28·5 | 44·9 | |
| 10·2 | | 29·0 | 43·9 | |

## 5281—5340.

| mag. | 14h m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 9 | 34·0 | 21·7 | |
| 10·2 | | 34·5 | 37·1 | |
| 9·0 | | 47·0 | 27·0 | |
| 10·0 | | 53·0 | 18·8 | |
| 10·3 | 10 | 3·0 | 22·0 | |
| 8·6 | | 6·5 | 14·8 | 8·2 |
| 10·3 | | 18·0 | 34·1 | |
| 10·2 | | 21·5 | 21·9 | |
| 10·2 | | 21·5 | 58·1 | |
| 9·0 | | 22·0 | 8·9 | |
| 10·0 | | 25·0 | 44·3 | |
| 10·2 | | 25·5 | 25·9 | |
| 9·5 | | 26·0 | 27·2 | 10·0 |
| 6·3 | | 42·5 | 41·5 | 6·0 GSr |
| 10·2 | | 45·5 | 14·1 | |
| 10·3 | | 46·5 | 29·3 | |
| 9·5 | | 56·5 | 15·7 | |
| 8·1 | | 57·5 | 30·1 | 8·0 |
| 9·0 | 11 | 13·0 | 26·9 | 9·5 |
| 8·3 | | 13·0 | 18·7 | 8·1 |
| 10·2 | | 20·0 | 30·6 | |
| 10·0 | | 21·0 | 51·7 | |
| 9·7 | | 35·5 | 42·5 | |
| 8·7 | | 40·0 | 42·9 | 9·0 |
| 9·0 | | 46·5 | 18·4 | |
| 10·2 | | 56·0 | 16·9 | |
| 10·2 | | 58·0 | 21·2 | |
| 10·0 | 12 | 2·5 | 15·1 | |
| 10·2 | | 6·5 | 33·3 | |
| 10·2 | | 10·0 | 31·2 | |
| 9·6 | | 13·8 | 57·3 | |
| 10·2 | | 23·0 | 39·3 | |
| 10·3 | | 30·0 | 55·5 | |
| 9·6 | | 30·5 | 55·9 | |
| 9·5 | | 33·5 | 58·5 | 8·8 |
| 8·9 | | 38·5 | 27·7 | 9·5 |
| 9·3 | | 39·5 | 15·7 | 8·8 |
| 9·6 | | 41·0 | 3·2 | |
| 10·2 | | 53·0 | 38·7 | |
| 9·3 | 13 | 7·0 | 5·5 | |
| 9·3 | | 8·5 | 46·9 | |
| 9·5 | | 19·5 | 34·3 | |
| 9·6 | | 20·5 | 18·1 | 9·2 |
| 10·2 | | 29·0 | 25·9 | |
| 9·7 | | 30·5 | 38·1 | |
| 9·4 | | 33·0 | 27·9 | |
| 9·5 | | 34·5 | 4·9 | |
| 10·2 | | 41·5 | 51·5 | |
| 9·8 | 14 | 7·0 | 32·9 | |
| 9·7 | | 15·5 | 24·7 | |
| 9·6 | | 32·0 | 49·9 | |
| 9·6 | | 39·5 | 23·9 | |
| 8·7 | | 43·0 | 43·8 | 9·5 |
| 9·6 | | 48·5 | 21·0 | |
| 9·0 | | 49·3 | 44·2 | 9·5 |
| 10·2 | | 49·5 | 34·2 | |
| 10·3 | | 51·3 | 36·5 | |
| 9·8 | | 53·5 | 45·9 | |
| 9·2 | | 56·5 | 46·1 | 9·0 |
| 10·3 | 15 | 4·0 | 45·0 | |

## 5341—5400.

| mag. | 14h m | s | −60° ′ | |
|---|---|---|---|---|
| 8·8 | 15 | 7·0 | 46·7 | 9·0 |
| 7·7 | | 15·5 | 49·1 | 8·0 G |
| 10·2 | | 18·3 | 13·5 | |
| 8·4 | | 20·0 | 59·8 | 9·0 |
| 10·0 | | 27·3 | 53·6 | |
| 9·3 | | 28·5 | 43·2 | |
| 10·2 | | 32·5 | 44·9 | |
| 9·8 | | 43·5 | 48·9 | |
| 10·3 | | 45·5 | 3·9 | |
| 9·7 | | 54·5 | 5·9 | |
| 9·9 | | 58·5 | 6·9 | |
| 10·2 | | 59·0 | 52·9 | |
| 8·6 | | 59·0 | 44·9 | |
| 10·3 | 16 | 8·0 | 54·4 | |
| 9·6 | | 33·5 | 37·5 | |
| 9·0 | | 39·0 | 26·4 | 8·5 G |
| 9·7 | | 40·0 | 22·4 | 9·5 |
| 8·9 | | 57·0 | 9·4 | 9·5 |
| 9·6 | 17 | 3·0 | 40·0 | |
| 9·4 | | 9·0 | 34·3 | |
| 10·2 | | 11·0 | 32·4 | |
| 9·6 | | 13·5 | 56·8 | |
| 10·0 | | 14·5 | 15·0 | |
| 9·7 | | 26·5 | 22·9 | |
| 10·3 | | 35·5 | 5·0 | |
| 8·6 | | 38·0 | 11·1 | 7·8 G |
| 9·0 | | 39·5 | 12·0 | 9·5 |
| 10·2 | | 59·0 | 18·0 | |
| 10·3 | | 59·0 | 25·1 | |
| 9·0 | 18 | 0·5 | 24·4 | 9·5 |
| 9·9 | | 5·5 | 32·1 | |
| 9·8 | | 14·0 | 48·8 | |
| 9·9 | | 23·5 | 5·3 | |
| 9·9 | | 28·0 | 7·9 | |
| 9·8 | | 29·0 | 32·6 | |
| 10·3 | | 45·5 | 9·0 | |
| 10·2 | 19 | 11·5 | 5·2 | |
| 8·6 | | 17·0 | 0·6 | 9·5 |
| 8·1 | | 27·0 | 50·0 | 8·0 G |
| 10·3 | | 27·0 | 18·5 | |
| 9·7 | | 49·0 | 5·0 | |
| 8·9 | 20 | 5·0 | 48·7 | |
| 10·3 | | 10·0 | 49·0 | |
| 8·9 | | 15·5 | 13·8 | |
| 10·3 | | 24·0 | 11·5 | |
| 9·4 | | 25·5 | 10·2 | |
| 10·2 | | 27·0 | 9·0 | |
| 9·4 | | 27·5 | 10·9 | |
| 10·3 | | 29·3 | 59·9 | |
| 10·2 | | 29·5 | 9·2 | |
| 8·6 | | 30·5 | 36·4 | 8·5 |
| 9·2 | | 34·0 | 4·6 | |
| 10·3 | | 38·0 | 56·2 | |
| 10·2 | | 39·0 | 10·9 | |
| 9·3 | | 44·5 | 17·2 | 9·0 |
| 10·3 | | 45·5 | 18·0 | |
| 10·3 | | 49·0 | 10·6 | |
| 10·3 | | 50·0 | 27·7 | |
| 8·8 | | 56·0 | 15·3 | 9·2 |
| 10·3 | 21 | 8·0 | 1·0 | |

## 5401—5460.

| mag. | 14h m | s | −60° ′ | |
|---|---|---|---|---|
| 10·3 | 21 | 8·5 | 6·1 | |
| 10·2 | | 8·5 | 52·9 | |
| 10·3 | | 12·5 | 40·4 | |
| 9·0 | | 15·5 | 40·3 | |
| 10·3 | | 15·5 | 18·5 | |
| 9·4 | | 16·0 | 18·1 | 9·0 |
| 10·2 | | 25·5 | 36·0 | |
| 10·2 | | 47·0 | 3·6 | |
| 9·7 | | 48·0 | 32·2 | |
| 10·3 | 22 | 6·5 | 59·8 | |
| 10·2 | | 16·5 | 9·6 | |
| 10·2 | | 18·5 | 12·8 | |
| 8·6 | | 20·0 | 18·0 | 9·0 |
| 9·8 | | 31·0 | 33·0 | |
| 10·3 | | 56·5 | 28·4 | |
| 10·3 | 23 | 16·5 | 34·4 | |
| 10·3 | | 35·0 | 44·5 | |
| 10·2 | | 36·0 | 48·4 | |
| 10·3 | | 38·0 | 27·2 | |
| 9·4 | | 57·0 | 43·9 | |
| 9·2 | 24 | 7·5 | 54·7 | |
| 9·7 | | 9·0 | 42·7 | |
| 9·6 | | 13·0 | 18·5 | |
| 9·5 | | 21·0 | 2·6 | |
| 9·2 | | 23·5 | 48·5 | |
| 10·2 | | 25·5 | 6·1 | |
| 10·2 | | 27·5 | 5·1 | |
| 10·2 | | 30·5 | 54·1 | |
| 8·0 | | 30·5 | 14·9 | 7·8 G |
| 10·2 | 25 | 0·5 | 57·9 | |
| 9·4 | | 7·5 | 33·3 | |
| 8·8 | | 23·5 | 24·7 | 8·0 G |
| 8·6 | | 34·5 | 38·0 | 9·5 |
| 10·3 | | 35·5 | 33·2 | |
| 8·6 | | 41·5 | 28·3 | 9·0 |
| 10·2 | | 43·5 | 38·8 | |
| 7·5 | 26 | 7·0 | 27·4 | 7·8 GS |
| 9·2 | | 7·0 | 5·4 | 8·0 G |
| 10·0 | | 8·5 | 18·2 | |
| 8·8 | | 14·5 | 37·8 | 9·5 |
| 8·8 | | 15·5 | 58·1 | |
| 10·2 | | 20·5 | 47·1 | |
| 8·5 | | 29·5 | 15·4 | |
| 10·3 | | 31·5 | 50·3 | |
| 10·2 | | 34·5 | 26·5 | |
| 10·0 | | 48·0 | 10·2 | |
| 9·0 | | 48·0 | 39·1 | |
| 9·0 | | 52·0 | 34·3 | 9·5 |
| 8·9 | | 58·5 | 30·2 | 9·0 |
| 10·3 | 27 | 1·5 | 30·5 | 9·5 |
| 10·3 | | 4·5 | 27·5 | |
| 9·6 | | 5·5 | 8·7 | |
| 8·7 | | 11·0 | 25·1 | 9·5 |
| 9·8 | | 19·0 | 19·9 | |
| 8·2 | | 29·5 | 12·3 | 8·5 |
| 10·2 | | 30·5 | 2·0 | |
| 10·2 | | 55·5 | 58·2 | |
| 9·8 | | 59·5 | 21·1 | |
| 10·2 | 28 | 0·0 | 42·8 | |
| 9·2 | | 5·5 | 0·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 0 | 106 | 7·2 |
| | 10 | 109 | 7·0 |
| | 20 | 111 | 6·8 |
| | 30 | 113 | 6·6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 111 | 6·8 |
| | 30 | 113 | 6·6 |
| | 40 | 115 | 6·4 |
| | 50 | 117 | 6·2 |
| 15 | 0 | 119 | 5·9 |
| | 10 | 120 | 5·6 |

**5461—5520.** 14h. −60°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 10·2 | 28 | 9·0 | 13·9 | |
| 10·3 | | 10·5 | 23·3 | |
| 10·2 | | 20·5 | 30·2 | |
| 10·3 | | 20·5 | 37·4 | |
| 10·3 | | 21·0 | 50·7 | |
| 9·7 | | 40·0 | 52·3 | |
| 9·9 | | 42·0 | 1·1 | |
| 9·0 | | 49·5 | 55·4 | |
| 10·3 | | 57·5 | 6·0 | |
| 10·3 | | 59·5 | 40·1 | |
| 9·2 | 29 | 11·0 | 31·1 | |
| 9·4 | | 19·5 | 47·9 | |
| 10·0 | | 34·5 | 6·3 | |
| 9·5 | | 35·5 | 26·3 | |
| 9·4 | | 37·5 | 28·9 | |
| 9·5 | | 46·0 | 38·1 | |
| 9·8 | | 48·5 | 14·9 | |
| 9·8 | | 49·0 | 24·3 | |
| 9·4 | | 54·5 | 26·5 | |
| 10·2 | 30 | 4·5 | 28·1 | |
| 9·8 | | 6·5 | 36·4 | |
| 10·3 | | 25·5 | 4·1 | |
| 2·1 | | 59·0 | 18·7 | 1·0 GSgtrλ |
| 10·2 | 31 | 11·5 | 4·8 | |
| 10·0 | | 12·5 | 16·5 | |
| 10·2 | | 18·0 | 5·2 | |
| 10·3 | 32 | 1·5 | 38·3 | |
| 10·3 | | 12·5 | 21·7 | |
| 10·2 | | 13·0 | 41·1 | |
| 8·6 | | 20·5 | 8·2 | |
| 10·2 | | 21·5 | 21·3 | |
| 10·3 | | 54·5 | 53·1 | |
| 10·3 | | 55·0 | 39·1 | |
| 10·3 | 33 | 0·5 | 12·3 | |
| 8·4 | | 4·0 | 10·0 | 9·5 |
| 10·2 | | 29·0 | 6·3 | |
| 10·3 | 34 | 5·0 | 37·1 | |
| 9·3 | | 9·0 | 26·7 | 9·5 |
| 10·0 | | 23·0 | 12·0 | |
| 9·4 | | 40·5 | 25·7 | |
| 10·2 | | 57·5 | 16·1 | |
| 8·6 | 35 | 18·5 | 59·3 | 7·5 G |
| 10·0 | | 38·0 | 22·1 | |
| 9·0 | | 51·0 | 18·1 | |
| 9·8 | 36 | 15·0 | 58·2 | |
| 9·8 | | 20·0 | 58·2 | |
| 10·3 | | 24·0 | 32·0 | |
| 8·7 | | 27·5 | 40·3 | |
| 10·2 | | 33·0 | 41·1 | |
| 10·0 | | 52·5 | 15·4 | |
| 8·0 | 37 | 1·5 | 55·9 | 7·5 G |
| 8·3 | | 21·5 | 20·1 | 8·5 G |
| 9·4 | | 42·5 | 32·5 | |
| 9·6 | | 45·5 | 27·1 | |
| 10·0 | | 48·0 | 4·5 | |
| 9·2 | | 51·0 | 12·1 | |
| 8·6 | 38 | 0·5 | 44·4 | 9·5 |
| 10·3 | | 23·0 | 20·2 | |
| 9·0 | | 26·5 | 19·5 | |
| 10·3 | | 59·5 | 12·5 | |

**5521—5580.** 14h. −60°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·9 | 39 | 13·0 | 13·1 | |
| 8·6 | | 32·0 | 18·6 | |
| 8·9 | | 43·5 | 24·0 | |
| 9·7 | | 46·0 | 6·3 | |
| 8·9 | | 49·5 | 6·9 | |
| 9·9 | | 53·5 | 45·1 | |
| 9·7 | 41 | 11·8 | 18·0 | |
| 9·7 | | 20·0 | 10·9 | |
| 9·2 | | 25·2 | 31·0 | 9·0 |
| 8·0 | | 48·8 | 24·8 | 7·5 GS |
| 9·8 | 42 | 2·5 | 31·6 | |
| 9·8 | | 16·5 | 17·6 | |
| 9·4 | | 20·0 | 59·9 | |
| 9·2 | | 30·0 | 31·8 | |
| 9·7 | | 31·5 | 29·6 | |
| 9·4 | | 44·0 | 2·7 | |
| 9·7 | | 51·5 | 27·9 | |
| 9·6 | | 53·5 | 57·9 | |
| 8·9 | 43 | 2·5 | 53·8 | |
| 9·6 | | 11·5 | 25·6 | |
| 8·6 | | 20·0 | 19·7 | 8·0 GS |
| 9·7 | | 21·5 | 35·0 | |
| 8·9 | | 39·0 | 25·3 | 9·5 |
| 9·7 | | 44·0 | 9·2 | |
| 9·9 | | 49·5 | 57·3 | |
| 9·9 | 44 | 1·5 | 16·9 | |
| 9·4 | | 4·5 | 13·7 | |
| 9·2 | | 8·0 | 29·3 | 9·5 |
| 9·8 | | 20·0 | 19·3 | |
| 8·9 | | 24·0 | 46·2 | |
| 9·7 | | 27·0 | 19·6 | |
| 9·9 | | 27·5 | 37·3 | |
| 9·7 | | 28·5 | 51·1 | |
| 9·7 | | 38·5 | 48·6 | |
| 9·5 | | 44·0 | 38·5 | |
| 9·5 | 45 | 3·5 | 29·9 | |
| 9·5 | | 3·5 | 55·0 | |
| 8·9 | | 10·5 | 33·8 | GS |
| 9·9 | | 31·5 | 15·1 | |
| 8·9 | | 38·5 | 0·5 | 8·5 |
| 9·2 | | 58·0 | 26·2 | |
| 9·5 | 46 | 1·5 | 55·0 | |
| 8·2 | | 13·0 | 23·6 | 7·0 GS |
| 9·8 | | 23·0 | 58·9 | |
| 8·4 | | 27·5 | 45·2 | 8·0 G |
| 9·7 | | 47·0 | 26·6 | |
| 9·9 | | 52·5 | 22·8 | |
| 9·5 | 47 | 18·0 | 3·1 | |
| 9·4 | | 19·0 | 58·4 | |
| 9·5 | | 21·5 | 53·3 | |
| 9·8 | | 39·5 | 19·9 | 9·5 |
| 9·9 | 48 | 7·0 | 30·9 | |
| 9·2 | | 8·5 | 19·5 | 8·8 G |
| 8·6 | | 21·5 | 43·6 | 9·2 G |
| 8·7 | | 23·0 | 53·8 | 9·5 |
| 9·6 | | 29·5 | 59·7 | |
| 9·2 | | 33·0 | 16·0 | |
| 9·9 | 49 | 0·5 | 7·9 | |
| 9·9 | | 3·0 | 45·7 | |
| 9·0 | | 5·5 | 6·2 | 9·5 |

**5581—5640.** 14h. −60°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·8 | 49 | 6·0 | 4·1 | |
| 9·0 | | 16·8 | 56·9 | |
| 8·7 | | 29·0 | 9·9 | 8·8 G |
| 9·2 | | 38·0 | 33·0 | 10·0 |
| 9·4 | | 47·5 | 3·0 | |
| 9·4 | 50 | 35·5 | 52·7 | |
| 9·8 | | 53·5 | 7·0 | |
| 9·4 | 51 | 10·0 | 25·0 | |
| 9·4 | | 18·0 | 42·2 | |
| 8·9 | | 35·0 | 17·2 | 9·5 |
| 9·8 | | 35·0 | 32·1 | |
| 9·2 | 52 | 6·0 | 59·0 | |
| 9·5 | | 11·5 | 28·9 | |
| 9·8 | | 14·3 | 12·1 | |
| 9·5 | | 16·5 | 6·0 | |
| 9·4 | | 22·0 | 11·0 | |
| 9·5 | | 23·5 | 37·8 | |
| 9·7 | | 32·0 | 11·0 | |
| 9·4 | | 33·0 | 55·4 | |
| 9·9 | | 38·0 | 26·0 | |
| 9·9 | | 49·3 | 7·1 | |
| 9·9 | | 51·0 | 33·0 | |
| 9·5 | 53 | 25·5 | 6·1 | |
| 9·4 | | 32·5 | 14·6 | |
| 9·4 | | 48·0 | 9·1 | |
| 9·7 | 54 | 5·0 | 58·9 | |
| 8·2 | | 7·0 | 19·5 | 9·0 |
| 9·8 | | 12·5 | 58·4 | |
| 9·5 | | 15·0 | 32·7 | |
| 9·4 | | 19·0 | 5·0 | |
| 9·6 | | 19·3 | 41·1 | |
| 9·9 | | 32·3 | 21·0 | |
| 9·2 | | 38·0 | 21·1 | |
| 9·8 | | 45·0 | 26·5 | |
| 9·7 | | 46·0 | 30·5 | |
| 9·4 | | 46·0 | 55·3 | |
| 9·9 | | 50·3 | 18·9 | |
| 9·8 | | 52·5 | 22·2 | |
| 9·9 | 55 | 1·0 | 37·2 | |
| 8·2 | | 7·5 | 15·4 | |
| 8·9 | | 21·5 | 26·7 | |
| 9·4 | | 36·0 | 41·0 | |
| 8·5 | | 41·5 | 40·9 | 9·5 |
| 9·9 | | 43·0 | 3·0 | |
| 9·6 | | 49·5 | 45·6 | |
| 9·7 | | 56·5 | 15·9 | |
| 9·4 | | 59·5 | 14·6 | |
| 8·8 | 56 | 7·5 | 31·9 | 9·5 |
| 9·8 | | 15·0 | 57·0 | |
| 9·5 | | 48·0 | 41·0 | |
| 9·7 | 57 | 11·5 | 40·2 | |
| 9·6 | | 21·5 | 38·0 | |
| 9·9 | | 31·3 | 32·2 | |
| 8·4 | | 34·5 | 17·4 | 9·0 |
| 9·7 | | 47·0 | 11·0 | |
| 9·7 | | 54·5 | 54·0 | |
| 7·1 | | 56·0 | 38·5 | 7·2 GSt |
| 9·8 | 58 | 12·0 | 35·0 | |
| 9·7 | | 18·0 | 9·0 | |
| 9·4 | | 32·0 | 33·1 | |

**5641—5700.** 14h.–15h. −60°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·6 | 58 | 32·3 | 50·5 | |
| 9·5 | 59 | 4·0 | 34·5 | |
| 8·6 | | 7·5 | 5·5 | |
| 9·9 | | 15·3 | 57·8 | |
| 8·6 | | 21·0 | 12·0 | 9·5 |
| 9·5 | | 27·0 | 34·4 | |
| 9·9 | | 27·3 | 56·6 | |
| 8·9 | | 33·5 | 18·4 | |
| 9·1 | | 44·0 | 6·2 | |
| 8·9 | | 49·5 | 15·5 | 9·0 |
| 9·1 | | 57·5 | 17·0 | |
| 9·5 | 0 | 1·5 | 36·1 | |
| 9·5 | | 14·0 | 38·4 | |
| 9·8 | | 23·0 | 42·5 | |
| 9·4 | | 31·5 | 40·2 | |
| 7·1 | | 43·0 | 56·5 | 6·5 GS |
| 9·9 | | 45·5 | 53·4 | |
| 9·2 | | 52·5 | 13·8 | |
| 9·5 | | 55·0 | 9·0 | |
| 9·7 | 1 | 2·5 | 36·4 | |
| 8·7 | | 2·5 | 42·2 | |
| 8·4 | | 11·5 | 59·1 | 9·0 |
| 9·6 | | 29·5 | 43·0 | |
| 9·7 | | 29·5 | 31·2 | |
| 9·0 | | 43·0 | 6·9 | |
| 9·6 | | 46·0 | 41·4 | |
| 9·9 | | 56·0 | 7·6 | |
| 9·4 | 2 | 8·0 | 7·0 | |
| 9·9 | | 11·0 | 27·3 | |
| 9·2 | | 14·5 | 37·5 | |
| 9·5 | | 23·5 | 42·7 | |
| 9·5 | | 28·5 | 22·4 | |
| 8·9 | | 37·5 | 2·6 | |
| 9·2 | | 53·0 | 20·0 | |
| 9·4 | 3 | 12·5 | 32·9 | |
| 9·9 | | 23·0 | 39·1 | |
| 9·1 | | 25·5 | 29·3 | |
| 9·8 | | 33·0 | 34·1 | |
| 9·0 | | 48·0 | 51·9 | |
| 6·7 | | 52·5 | 52·2 | 6·5 GSctr |
| 8·6 | | 53·0 | 1·0 | |
| 9·8 | | 53·0 | 32·1 | |
| 9·9 | 4 | 21·5 | 14·0 | |
| 9·5 | | 35·5 | 7·7 | |
| 9·9 | | 41·5 | 16·1 | |
| 9·8 | | 44·0 | 5·8 | |
| 8·9 | | 49·5 | 52·9 | |
| 8·9 | | 55·0 | 57·5 | |
| 9·2 | | 57·5 | 10·5 | |
| 9·8 | 5 | 12·5 | 52·4 | |
| 9·1 | | 33·5 | 44·8 | |
| 9·8 | 6 | 2·0 | 37·4 | |
| 9·6 | | 7·0 | 44·7 | |
| 9·2 | | 9·0 | 51·0 | |
| 9·9 | | 15·0 | 57·7 | |
| 9·9 | | 22·0 | 9·0 | |
| 9·2 | | 26·0 | 57·1 | |
| 5·9 | | 31·5 | 26·2 | 6·2 GSct |
| 9·4 | | 35·5 | 47·1 | |
| 9·4 | | 39·5 | 1·6 | |



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### 5701—5760.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 5·4 | 6 | 51·0 | 29·4 | 5·7 GSct |
| 9·9 | | 52·5 | 34·6 | |
| 8·0 | | 53·0 | 39·2 | 8·5 |
| 9·7 | 7 | 0·5 | 43·7 | |
| 9·7 | | 7·0 | 48·3 | |
| 9·7 | | 11·0 | 16·5 | |
| 9·7 | | 15·5 | 3·9 | |
| 9·2 | | 16·5 | 53·5 | |
| 8·2 | | 21·0 | 32·5 | 9·5 G |
| 9·6 | | 33·0 | 12·3 | |
| 9·9 | 8 | 7·5 | 36·9 | |
| 9·9 | | 9·5 | 41·6 | |
| 9·0 | | 13·5 | 37·4 | |
| 9·6 | | 21·0 | 45·3 | |
| 9·4 | | 31·0 | 6·0 | |
| 9·1 | | 32·5 | 31·2 | |
| 9·7 | | 38·0 | 28·1 | |
| 9·4 | | 43·0 | 57·7 | |
| 9·8 | | 44·5 | 34·8 | |
| 5·9 | | 45·0 | 2·2 | 6·0 GSctr |
| 8·8 | | 46·0 | 0·8 | |
| 9·7 | | 50·5 | 57·0 | |
| 8·8 | | 51·0 | 16·8 | |
| 8·6 | | 54·5 | 14·6 | |
| 9·2 | | 57·0 | 54·7 | |
| 9·8 | | 57·5 | 55·4 | |
| 9·6 | 9 | 3·0 | 43·9 | |
| 8·8 | | 6·5 | 38·3 | |
| 9·8 | | 8·5 | 28·0 | |
| 9·4 | | 9·5 | 39·5 | |
| 9·7 | | 17·5 | 5·8 | |
| 8·9 | | 29·0 | 22·1 | |
| 9·9 | | 39·5 | 37·4 | |
| 8·7 | | 45·0 | 35·3 | |
| 9·9 | | 47·0 | 28·9 | |
| 7·8 | | 50·0 | 6·2 | 8·0 |
| 9·7 | | 52·0 | 23·3 | |
| 9·9 | | 53·5 | 11·2 | |
| 9·9 | | 54·0 | 3·9 | |
| 9·4 | 10 | 0·0 | 11·1 | |
| 9·7 | | 6·5 | 19·1 | |
| 9·9 | | 9·0 | 8·7 | |
| 9·9 | | 10·5 | 43·9 | |
| 9·0 | | 24·0 | 39·5 | |
| 9·6 | | 30·0 | 26·6 | |
| 9·9 | | 34·0 | 53·0 | |
| 9·8 | | 46·5 | 3·5 | |
| 9·9 | | 53·0 | 13·0 | |
| 9·0 | 11 | 21·5 | 25·9 | 9·0 |
| 9·6 | | 26·5 | 22·9 | |
| 9·5 | | 38·5 | 15·0 | |
| 9·9 | | 42·0 | 51·9 | |
| 9·6 | | 51·5 | 30·2 | |
| 8·5 | 12 | 1·5 | 59·3 | 9·0 |
| 9·0 | | 7·0 | 28·1 | |
| 9·9 | | 18·0 | 43·6 | |
| 8·2 | | 33·5 | 50·5 | 9·5 |
| 9·9 | | 47·0 | 4·1 | |
| 9·9 | | 56·0 | 36·9 | |
| 6·5 | 13 | 3·5 | 12·2 | 6·0 GScr |

### 5761—5820.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·2 | 13 | 23·5 | 0·5 | |
| 8·6 | | 30·5 | 5·0 | |
| 9·0 | | 41·0 | 22·9 | |
| 9·6 | | 43·0 | 27·8 | |
| 9·9 | 14 | 18·5 | 7·2 | |
| 9·4 | | 20·0 | 8·3 | |
| 9·4 | | 23·0 | 37·9 | |
| 9·4 | | 26·0 | 30·9 | |
| 9·4 | | 28·0 | 3·4 | |
| 9·5 | | 31·0 | 56·1 | 9·0 |
| 9·9 | | 48·0 | 12·6 | |
| 9·4 | | 54·5 | 18·0 | |
| 8·6 | | 55·5 | 57·7 | 9·5 |
| 9·2 | 15 | 10·0 | 12·8 | |
| 9·7 | | 13·0 | 32·5 | |
| 9·9 | | 32·0 | 2·6 | |
| 9·9 | | 45·0 | 50·9 | |
| 8·6 | | 51·5 | 51·0 | |
| 9·5 | 16 | 20·0 | 30·7 | |
| 9·9 | | 31·0 | 35·2 | |
| 9·4 | | 31·3 | 37·9 | |
| 8·9 | | 33·7 | 10·2 | |
| 9·9 | | 38·5 | 56·5 | |
| 8·6 | | 39·8 | 48·9 | |
| 9·6 | | 48·0 | 30·2 | |
| 8·4 | | 55·6 | 0·2 | |
| 9·9 | 17 | 7·4 | 54·8 | |
| 9·9 | | 18·5 | 5·5 | |
| 9·5 | | 22·8 | 19·5 | |
| 10·1 | | 33·5 | 53·2 | |
| 10·0 | | 35·5 | 48·5 | |
| 9·9 | | 42·5 | 49·1 | |
| 9·8 | | 43·5 | 33·4 | |
| 9·6 | | 44·0 | 12·1 | |
| 10·1 | | 45·5 | 50·3 | |
| 9·6 | | 46·6 | 58·0 | |
| 10·1 | | 48·5 | 50·1 | |
| 9·8 | | 52·5 | 28·7 | |
| 9·4 | | 56·9 | 0·1 | |
| 9·5 | | 58·3 | 13·1 | |
| 10·1 | | 58·7 | 3·2 | |
| 10·0 | 18 | 11·5 | 21·2 | |
| 9·1 | | 11·5 | 23·8 | |
| 10·1 | | 14·0 | 12·3 | |
| 10·1 | | 15·0 | 11·1 | |
| 10·1 | | 17·0 | 12·1 | |
| 9·8 | | 17·5 | 3·7 | |
| 10·1 | | 24·5 | 17·5 | |
| 10·1 | | 26·0 | 47·9 | |
| 8·6 | | 34·0 | 16·0 | |
| 8·5 | | 35·8 | 59·4 | 9·5 |
| 10·1 | | 37·5 | 56·4 | |
| 10·1 | | 37·5 | 55·4 | |
| 8·7 | | 40·0 | 21·5 | |
| 9·6 | | 42·0 | 55·7 | |
| 9·1 | | 44·5 | 52·5 | |
| 9·4 | | 45·7 | 24·5 | |
| 9·8 | | 49·0 | 48·6 | |
| 10·1 | | 49·7 | 2·9 | |
| 10·0 | | 54·0 | 15·1 | |

### 5821—5880.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 18 | 57·0 | 53·1 | |
| 10·0 | | 58·1 | 1·3 | |
| 10·0 | | 59·0 | 49·0 | |
| 10·1 | 19 | 8·0 | 45·8 | |
| 9·6 | | 8·6 | 0·6 | |
| 9·2 | | 10·0 | 8·7 | |
| 9·4 | | 14·5 | 25·0 | |
| 9·6 | | 20·0 | 6·7 | |
| 10·1 | | 22·5 | 49·5 | |
| 9·8 | | 28·0 | 12·0 | |
| 9·8 | | 29·0 | 23·5 | |
| 10·1 | | 30·0 | 34·9 | |
| 9·7 | | 34·0 | 43·8 | |
| 9·2 | | 51·0 | 23·0 | |
| 10·0 | | 52·0 | 12·4 | |
| 9·8 | | 56·5 | 24·7 | |
| 9·6 | | 57·0 | 4·6 | |
| 9·6 | | 57·0 | 22·2 | |
| 8·3 | 20 | 0·0 | 3·3 | 8·5 Sgr |
| 9·9 | | 8·0 | 18·0 | |
| 9·6 | | 11·5 | 54·6 | |
| 10·1 | | 19·0 | 34·6 | |
| 9·4 | | 23·0 | 47·4 | |
| 9·7 | | 25·5 | 4·8 | |
| 10·0 | | 28·5 | 8·7 | |
| 9·8 | | 37·0 | 26·2 | |
| 10·1 | | 46·5 | 31·4 | |
| 10·0 | | 48·5 | 13·5 | |
| 10·0 | | 55·0 | 34·4 | |
| 9·3 | | 58·5 | 27·3 | |
| 8·8 | 21 | 6·0 | 13·2 | 9·0 |
| 9·5 | | 8·0 | 52·0 | |
| 8·9 | | 8·5 | 26·4 | 8·5 |
| 9·4 | | 15·8 | 57·6 | |
| 9·2 | | 27·0 | 43·2 | |
| 10·1 | | 28·0 | 40·6 | |
| 10·0 | | 31·0 | 21·2 | |
| 10·0 | | 32·0 | 22·8 | |
| 10·0 | | 38·0 | 45·0 | |
| 9·7 | | 47·6 | 59·6 | |
| 10·0 | | 50·0 | 2·8 | |
| 8·6 | | 53·0 | 23·4 | 9·0 |
| 9·4 | | 53·5 | 40·6 | |
| 9·2 | | 58·0 | 8·6 | |
| 10·1 | | 58·5 | 36·0 | |
| 10·1 | 22 | ·5·0 | 37·7 | |
| 9·5 | | 8·0 | 54·9 | |
| 9·0 | | 10·5 | 6·4 | |
| 10·1 | | 14·5 | 0·8 | |
| 10·0 | | 23·0 | 19·4 | |
| 9·9 | | 43·0 | 15·6 | |
| 10·1 | | 48·0 | 45·1 | |
| 9·6 | | 51·0 | 18·7 | |
| 8·7 | | 53·5 | 28·9 | |
| 7·2 | 23 | 6·0 | 50·7 | 7·0 GS |
| 9·9 | | 12·5 | 38·0 | |
| 9·8 | | 17·5 | 17·7 | |
| 10·1 | | 30·5 | 32·2 | |
| 9·2 | | 32·5 | 14·9 | |
| 10·1 | | 33·5 | 34·1 | |

### 5881—5940.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 23 | 34·5 | 31·0 | |
| 10·0 | | 50·0 | 53·9 | |
| 10·1 | | 52·6 | 19·9 | |
| 9·6 | | 56·0 | 9·6 | |
| 7·5 | | 56·5 | 22·8 | 8·0 GS |
| 9·8 | | 57·0 | 7·1 | |
| 9·8 | | 57·0 | 55·0 | |
| 9·2 | 24 | 6·5 | 27·6 | |
| 9·4 | | 12·2 | 59·8 | |
| 9·7 | | 16·7 | 59·8 | |
| 9·2 | | 18·5 | 4·3 | |
| 9·6 | | 20·0 | 45·5 | |
| 10·0 | | 26·6 | 30·1 | |
| 9·6 | | 29·0 | 3·0 | |
| 9·8 | | 37·5 | 49·8 | |
| 9·8 | | 38·0 | 6·0 | |
| 9·8 | | 39·0 | 56·4 | |
| 9·7 | | 47·0 | 25·0 | |
| 9·8 | | 48·0 | 17·1 | |
| 10·0 | | 52·1 | 2·1 | |
| 10·0 | | 53·5 | 22·0 | |
| 9·7 | | 56·5 | 25·5 | |
| 9·6 | | 57·5 | 31·8 | |
| 10·0 | 25 | 6·0 | 25·0 | |
| 10·1 | | 8·0 | 13·8 | |
| 10·1 | | 11·0 | 10·4 | |
| 9·7 | | 17·0 | 6·4 | |
| 9·0 | | 18·5 | 19·2 | 9·0 |
| 10·1 | | 19·5 | 54·6 | |
| 9·5 | | 20·7 | 59·0 | |
| 10·1 | | 32·5 | 46·8 | |
| 10·1 | | 35·0 | 28·5 | |
| 9·2 | | 35·1 | 0·9 | |
| 9·4 | | 43·0 | 19·4 | |
| 10·1 | | 45·0 | 18·2 | |
| 9·4 | | 48·5 | 5·8 | |
| 10·1 | | 58·5 | 26·5 | |
| 10·1 | 26 | 3·5 | 26·8 | |
| 9·6 | | 5·5 | 17·8 | |
| 10·0 | | 12·5 | 13·3 | |
| 10·1 | | 13·5 | 37·4 | |
| 9·7 | | 16·0 | 16·8 | |
| 10·0 | | 17·5 | 40·6 | |
| 10·1 | | 19·0 | 49·5 | |
| 10·0 | | 19·0 | 39·5 | |
| 8·6 | | 20·5 | 7·8 | |
| 9·7 | | 23·5 | 21·2 | |
| 8·9 | | 26·5 | 25·6 | 8·8 |
| 10·0 | | 31·5 | 27·9 | |
| 9·8 | | 32·5 | 17·2 | |
| 9·7 | | 37·0 | 33·7 | |
| 9·8 | | 38·0 | 48·6 | |
| 10·0 | | 40·0 | 29·2 | |
| 9·6 | | 41·5 | 13·9 | |
| 9·6 | | 46·5 | 6·2 | |
| 10·1 | | 58·0 | 47·7 | |
| 9·4 | | 58·5 | 49·8 | |
| 9·3 | 27 | 1·0 | 18·9 | |
| 10·0 | | 7·5 | 13·8 | |
| 10·0 | | 7·8 | 0·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 119 | 5·9 |
| | 10 | 120 | 5·6 |
| | 20 | 122 | 5·4 |
| | 30 | 124 | 5·1 |

| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 20 | 122 | 5·4 |
| | 30 | 124 | 5·1 |
| | 40 | 125 | 4·8 |
| | 50 | 127 | 4·5 |

## 5941—6000.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·7 | 27 | 12·5 | 35·1 | |
| 9·4 | | 16·5 | 56·6 | |
| 9·8 | | 22·0 | 13·8 | |
| 9·7 | | 34·5 | 14·6 | |
| 9·7 | | 34·5 | 33·7 | |
| 9·6 | | 35·5 | 35·6 | |
| 9·5 | | 37·5 | 52·0 | |
| 9·9 | | 46·5 | 3·0 | |
| 10·1 | | 50·3 | 1·2 | |
| 10·0 | | 54·0 | 55·8 | |
| 9·2 | 28 | 3·5 | 47·6 | |
| 9·2 | | 5·0 | 41·8 | |
| 10·0 | | 5·6 | 26·4 | |
| 9·6 | | 12·5 | 30·2 | |
| 9·6 | | 17·0 | 38·0 | |
| 9·6 | | 18·5 | 7·8 | |
| 9·7 | | 24·0 | 17·2 | |
| 9·7 | | 30·0 | 7·2 | |
| 10·1 | | 31·5 | 55·4 | |
| 9·6 | | 34·5 | 16·5 | |
| 9·8 | | 39·5 | 20·8 | |
| 9·8 | | 43·5 | 57·6 | |
| 10·0 | | 49·0 | 36·6 | |
| 9·9 | | 50·5 | 31·5 | |
| 9·6 | | 58·5 | 28·8 | |
| 9·7 | 29 | 3·0 | 18·9 | |
| 10·1 | | 3·5 | 10·0 | |
| 9·5 | | 8·5 | 20·1 | |
| 10·0 | | 11·5 | 35·2 | |
| 9·8 | | 16·0 | 37·0 | |
| 10·0 | | 17·0 | 37·8 | |
| 9·6 | | 17·5 | 22·0 | |
| 10·1 | | 22·0 | 43·6 | |
| 9·7 | | 24·0 | 16·8 | |
| 9·2 | | 27·5 | 45·8 | 9·0 |
| 9·8 | | 30·0 | 24·4 | |
| 10·1 | | 32·0 | 36·8 | |
| 10·0 | | 34·5 | 31·6 | |
| 10·1 | | 39·5 | 55·5 | |
| 9·7 | | 41·5 | 4·2 | |
| 9·7 | | 47·5 | 45·4 | |
| 9·9 | | 48·0 | 31·6 | |
| 9·6 | | 51·0 | 29·2 | |
| 10·1 | | 57·5 | 14·6 | |
| 9·5 | 30 | 3·0 | 40·0 | |
| 9·6 | | 6·5 | 56·3 | |
| 9·6 | | 17·0 | 49·6 | |
| 10·1 | | 21·9 | 10·1 | |
| 9·7 | | 25·4 | 10·0 | |
| 9·7 | | 25·9 | 17·9 | |
| 8·9 | | 30·4 | 43·8 | 8·5 |
| 10·1 | | 33·9 | 27·8 | |
| 10·1 | | 35·9 | 10·4 | |
| 9·8 | | 37·4 | 21·0 | |
| 10·0 | | 39·9 | 10·0 | |
| 9·6 | | 40·4 | 20·8 | G |
| 10·1 | | 43·4 | 27·9 | |
| 9·7 | | 51·4 | 16·6 | |
| 9·6 | | 52·4 | 27·0 | |
| 9·9 | 31 | 2·9 | 3·0 | |

## 6001—6060.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 31 | 3·4 | 15·0 | |
| 9·8 | | 3·9 | 48·7 | |
| 9·7 | | 6·9 | 45·8 | |
| 9·8 | | 9·9 | 2·0 | |
| 10·0 | | 19·4 | 3·1 | |
| 9·8 | | 20·9 | 19·2 | |
| 9·2 | | 32·9 | 33·6 | |
| 9·8 | | 34·4 | 52·6 | |
| 9·7 | | 37·4 | 45·9 | |
| 9·8 | | 38·6 | 1·2 | |
| 9·6 | | 41·9 | 11·2 | |
| 9·4 | | 44·9 | 8·6 | |
| 10·1 | 32 | 1·4 | 52·0 | |
| 9·6 | | 14·4 | 14·9 | |
| 9·6 | | 17·4 | 8·2 | |
| 9·6 | | 20·9 | 16·2 | |
| 10·1 | | 26·2 | 59·0 | |
| 9·2 | | 27·9 | 15·2 | |
| 9·3 | | 36·9 | 50·8 | |
| 9·8 | | 38·4 | 58·4 | |
| 9·2 | | 42·2 | 59·6 | |
| 9·5 | | 45·4 | 8·8 | |
| 9·6 | | 47·4 | 47·6 | |
| 9·7 | | 48·9 | 33·6 | |
| 10·1 | | 55·4 | 42·8 | |
| 10·0 | 33 | 4·4 | 31·8 | |
| 9·2 | | 5·4 | 49·0 | |
| 10·1 | | 10·9 | 13·9 | |
| 10·1 | | 13·9 | 23·7 | |
| 9·7 | | 14·8 | 2·6 | |
| 9·6 | | 16·4 | 49·0 | |
| 10·1 | | 17·9 | 43·1 | |
| 10·0 | | 18·9 | 54·4 | |
| 9·8 | | 31·9 | 17·4 | |
| 9·7 | | 37·4 | 54·2 | |
| 9·2 | | 37·9 | 33·8 | 9·0 |
| 9·6 | | 38·4 | 58·3 | |
| 9·2 | | 46·9 | 44·4 | 9·0 |
| 9·7 | | 48·9 | 49·5 | |
| 10·1 | | 59·9 | 14·1 | |
| 9·3 | | 59·9 | 36·2 | 9·0 |
| 9·7 | 34 | 7·9 | 40·1 | |
| 10·1 | | 17·4 | 21·0 | |
| 9·8 | | 17·9 | 42·6 | |
| 10·1 | | 20·1 | 19·3 | |
| 10·0 | | 21·9 | 15·2 | |
| 9·7 | | 24·9 | 43·7 | |
| 9·8 | | 27·9 | 34·8 | |
| 9·5 | | 32·4 | 54·6 | |
| 9·3 | | 32·9 | 15·0 | |
| 9·9 | | 33·1 | 7·6 | |
| 10·0 | | 34·4 | 12·3 | |
| 7·7 | | 35·4 | 53·8 | 8·0 GSt |
| 10·1 | | 36·0 | 0·6 | |
| 9·9 | | 38·4 | 5·6 | |
| 9·5 | | 38·9 | 29·6 | |
| 9·6 | | 48·9 | 12·2 | |
| 10·1 | | 50·9 | 21·6 | |
| 9·8 | | 52·4 | 3·8 | |
| 9·4 | 35 | 0·9 | 20·4 | |

## 6061—6120.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 35 | 3·1 | 16·3 | |
| 9·2 | | 11·9 | 17·8 | |
| 9·6 | | 17·4 | 3·4 | |
| 10·1 | | 20·9 | 3·6 | |
| 10·0 | | 21·4 | 13·3 | |
| 9·8 | | 26·9 | 42·4 | |
| 10·0 | | 37·9 | 30·6 | |
| 10·1 | | 40·4 | 7·8 | |
| 10·0 | | 42·9 | 52·8 | |
| 9·9 | | 46·9 | 19·6 | |
| 9·0 | | 50·9 | 39·2 | |
| 10·0 | | 57·9 | 7·5 | |
| 10·1 | | 59·4 | 27·4 | |
| 10·1 | 36 | 18·9 | 30·0 | |
| 9·0 | | 19·4 | 28·6 | |
| 9·6 | | 22·9 | 20·8 | |
| 9·6 | | 25·9 | 40·3 | |
| 9·5 | | 36·4 | 36·5 | |
| 9·7 | | 38·9 | 3·9 | |
| 9·7 | | 40·4 | 11·2 | |
| 9·8 | | 45·9 | 36·4 | |
| 10·1 | | 48·4 | 22·2 | |
| 10·0 | | 49·9 | 12·5 | |
| 10·0 | | 51·4 | 19·2 | |
| 9·9 | | 52·9 | 6·4 | |
| 9·5 | | 56·9 | 27·4 | |
| 9·6 | 37 | 3·9 | 52·1 | |
| 10·1 | | 11·4 | 9·8 | |
| 9·7 | | 12·9 | 4·2 | |
| 9·4 | | 18·9 | 59·9 | |
| 10·1 | | 21·4 | 52·0 | |
| 10·1 | | 22·4 | 54·2 | |
| 10·1 | | 22·9 | 53·5 | |
| 10·1 | | 24·4 | 20·7 | |
| 9·8 | | 30·4 | 16·0 | |
| 10·1 | | 46·4 | 6·9 | |
| 9·2 | | 50·4 | 5·1 | 8·5 |
| 8·9 | | 54·9 | 18·4 | 9·0 |
| 9·6 | | 57·9 | 56·2 | |
| 10·1 | 38 | 0·4 | 22·9 | |
| 9·3 | | 1·4 | 39·2 | |
| 9·9 | | 3·9 | 35·4 | |
| 9·8 | | 4·4 | 41·2 | |
| 9·6 | | 8·4 | 29·0 | |
| 9·7 | | 8·9 | 15·9 | |
| 10·1 | | 11·9 | 2·0 | |
| 9·6 | | 23·9 | 1·3 | |
| 9·6 | | 32·9 | 16·0 | |
| 9·2 | | 34·9 | 8·5 | |
| 9·7 | | 42·4 | 14·2 | |
| 9·8 | | 46·4 | 55·6 | |
| 9·7 | | 48·4 | 18·0 | |
| 9·8 | | 50·4 | 22·7 | |
| 10·1 | | 50·9 | 54·8 | |
| 9·6 | | 52·9 | 47·5 | |
| 10·1 | | 52·9 | 45·5 | |
| 9·8 | | 55·7 | 59·9 | |
| 9·0 | | 59·4 | 53·2 | 9·5 |
| 10·1 | 39 | 2·9 | 46·2 | ? |
| 9·6 | | 9·4 | 31·3 | |

## 6121—6180.

| mag. | 15h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 39 | 24·4 | 26·1 | |
| 10·0 | | 24·4 | 17·3 | |
| 10·0 | | 27·9 | 13·8 | |
| 9·4 | | 36·9 | 45·9 | |
| 10·1 | | 37·9 | 33·8 | |
| 10·1 | | 40·4 | 34·8 | |
| 9·4 | | 42·9 | 38·1 | |
| 9·5 | | 44·9 | 47·8 | |
| 9·4 | 40 | 2·4 | 30·6 | |
| 10·1 | | 5·9 | 44·4 | |
| 9·0 | | 9·9 | 21·6 | |
| 9·7 | | 17·4 | 35·9 | |
| 10·1 | | 17·9 | 12·4 | |
| 9·8 | | 26·4 | 36·7 | |
| 10·0 | | 34·4 | 3·4 | |
| 9·2 | | 36·9 | 41·0 | 9·5 |
| 10·1 | | 37·9 | 3·6 | |
| 9·1 | | 42·4 | 4·3 | 10·0 |
| 9·6 | | 46·4 | 40·5 | |
| 10·0 | | 50·4 | 25·0 | |
| 9·9 | | 58·4 | 29·2 | |
| 9·9 | | 58·4 | 38·5 | |
| 10·1 | | 59·4 | 1·9 | |
| 10·0 | | 59·9 | 12·6 | |
| 10·0 | 41 | 1·9 | 2·4 | |
| 9·2 | | 10·4 | 54·6 | |
| 9·0 | | 13·9 | 24·2 | |
| 9·6 | | 28·0 | 1·3 | |
| 10·1 | | 30·4 | 19·2 | |
| 9·4 | | 37·8 | 0·0 | |
| 10·1 | | 41·9 | 20·9 | |
| 9·7 | | 47·9 | 3·1 | |
| 9·6 | | 48·4 | 43·0 | |
| 10·1 | | 57·9 | 16·6 | |
| 10·1 | | 59·8 | 29·8 | |
| 9·3 | 42 | 6·9 | 36·2 | |
| 10·1 | | 8·4 | 10·7 | |
| 9·2 | | 35·9 | 49·9 | |
| 9·0 | | 39·4 | 20·9 | 8·8 |
| 8·4 | | 45·4 | 59·3 | 8·5 |
| 9·6 | | 47·9 | 34·8 | |
| 9·8 | | 51·4 | 21·6 | 9·5 |
| 9·6 | | 52·9 | 12·8 | |
| 9·6 | | 53·9 | 44·5 | |
| 10·1 | 43 | 1·4 | 50·2 | |
| 10·1 | | 1·9 | 48·5 | |
| 9·2 | | 3·9 | 32·4 | |
| 10·1 | | 8·9 | 52·5 | |
| 10·0 | | 14·9 | 1·4 | |
| 9·6 | | 19·9 | 7·6 | |
| 10·1 | | 26·4 | 41·7 | |
| 9·6 | | 32·8 | 2·7 | |
| 9·0 | | 44·2 | 56·8 | |
| 10·0 | | 45·4 | 20·9 | |
| 9·9 | | 47·4 | 20·9 | |
| 10·1 | | 47·8 | 0·1 | |
| 9·8 | | 47·9 | 30·7 | |
| 9·6 | | 49·8 | 0·3 | |
| 9·2 | | 51·4 | 26·0 | G |
| 10·0 | | 53·8 | 1·6 | |



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## 6181—6240.

| mag. | 15^h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·0 | 43 | 56·9 | 36·8 | 9·0 G |
| 8·8 | 44 | 0·9 | 18·9 | 9·5 G |
| 9·8 | | 0·9 | 12·0 | |
| 9·8 | | 3·3 | 1·1 | |
| 10·0 | | 10·4 | 37·3 | |
| 10·0 | | 13·4 | 23·4 | |
| 8·5 | | 13·4 | 22·3 | 9·0 |
| 9·8 | | 15·3 | 1·1 | |
| 10·1 | | 15·4 | 9·8 | |
| 9·8 | | 15·9 | 34·8 | |
| 6·5 | | 19·4 | 22·1 | 6·5 GSr |
| 9·0 | | 24·4 | 21·6 | 9·8 |
| 10·1 | | 24·4 | 56·8 | |
| 10·1 | | 26·4 | 44·2 | |
| 10·1 | | 30·9 | 40·2 | |
| 10·1 | | 33·9 | 12·8 | |
| 9·8 | | 34·9 | 13·8 | |
| 9·8 | | 35·5 | 0·7 | |
| 10·1 | | 42·9 | 41·2 | |
| 9·8 | | 59·4 | 48·7 | |
| 10·1 | 45 | 11·4 | 13·6 | |
| 9·6 | | 19·0 | 31·1 | |
| 9·3 | | 19·9 | 53·4 | |
| 9·3 | | 24·9 | 43·0 | |
| 9·7 | | 25·4 | 21·0 | |
| 9·8 | | 25·9 | 49·1 | |
| 9·6 | | 30·9 | 23·3 | |
| 6·4 | | 34·4 | 6·5 | 6·0 GSgr |
| 10·1 | | 37·4 | 47·8 | |
| 10·0 | | 40·4 | 7·9 | |
| 9·6 | | 43·9 | 7·3 | |
| 10·1 | | 53·4 | 31·3 | |
| 10·1 | | 55·9 | 22·3 | |
| 9·4 | 46 | 3·9 | 16·6 | |
| 9·7 | | 5·4 | 46·1 | |
| 9·6 | | 6·9 | 29·2 | |
| 9·8 | | 9·4 | 24·3 | |
| 9·2 | | 9·9 | 38·0 | |
| 9·8 | | 14·9 | 1·6 | |
| 9·8 | | 18·8 | 2·0 | |
| 9·9 | | 21·9 | 25·6 | |
| 9·3 | | 26·5 | 2·7 | |
| 10·0 | | 33·9 | 7·4 | |
| 9·7 | | 46·9 | 18·1 | |
| 10·0 | | 48·4 | 21·4 | |
| 9·2 | | 55·9 | 20·9 | 9·0 |
| 10·1 | | 57·4 | 51·5 | |
| 9·8 | | 59·4 | 51·5 | |
| 9·8 | 47 | 4·9 | 38·7 | |
| 10·0 | | 27·4 | 9·5 | |
| 10·0 | | 29·9 | 40·0 | |
| 10·0 | | 30·4 | 52·7 | |
| 10·1 | | 33·9 | 38·1 | |
| 10·1 | | 37·4 | 49·3 | |
| 10·0 | | 37·9 | 44·4 | |
| 9·9 | | 41·4 | 24·8 | |
| 10·0 | | 43·4 | 6·3 | |
| 10·1 | | 51·9 | 49·3 | |
| 9·5 | | 57·9 | 26·7 | |
| 9·9 | 48 | 2·9 | 40·6 | |

## 6241—6300.

| mag. | 15^h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 48 | 3·4 | 11·1 | |
| 8·8 | | 7·9 | 20·5 | 7·8 G |
| 10·0 | | 12·9 | 11·4 | |
| 10·1 | | 12·9 | 53·1 | |
| 9·8 | | 13·9 | 6·6 | |
| 9·9 | | 14·4 | 9·1 | |
| 9·8 | | 14·4 | 53·1 | |
| 9·7 | | 28·9 | 24·0 | |
| 9·4 | | 34·4 | 52·8 | |
| 9·4 | | 34·9 | 19·1 | |
| 9·8 | | 39·9 | 55·9 | |
| 8·8 | | 43·4 | 44·5 | 9·0 |
| 9·7 | | 43·4 | 31·4 | |
| 9·6 | | 57·5 | 0·3 | |
| 9·8 | 49 | 2·4 | 30·6 | |
| 8·9 | | 3·9 | 17·8 | |
| 9·9 | | 12·9 | 13·6 | |
| 9·7 | | 13·9 | 3·3 | |
| 10·0 | | 15·9 | 34·8 | |
| 9·7 | | 23·9 | 46·5 | |
| 9·7 | | 25·4 | 38·6 | |
| 10·1 | | 28·4 | 23·4 | |
| 9·6 | | 29·4 | 40·7 | |
| 9·9 | | 37·4 | 27·7 | |
| 9·6 | | 38·9 | 32·0 | |
| 9·5 | | 39·9 | 17·4 | |
| 9·7 | | 40·4 | 50·9 | |
| 10·0 | | 41·9 | 5·8 | |
| 9·6 | | 46·9 | 3·4 | |
| 10·0 | | 53·4 | 10·6 | |
| 9·6 | | 57·4 | 33·4 | |
| 8·3 | | 58·4 | 56·2 | 8·0 G |
| 10·0 | 50 | 0·9 | 25·3 | |
| 9·9 | | 0·9 | 52·5 | |
| 9·9 | | 3·4 | 5·3 | |
| 9·8 | | 4·9 | 18·1 | |
| 9·4 | | 11·4 | 17·1 | |
| 10·0 | | 13·4 | 11·2 | |
| 10·1 | | 15·8 | 54·4 | |
| 8·9 | | 19·9 | 38·5 | 10·0 |
| 10·0 | | 23·0 | 24·8 | |
| 9·6 | | 42·9 | 30·7 | |
| 9·2 | | 44·9 | 10·8 | |
| 9·8 | | 46·9 | 41·4 | |
| 9·7 | | 49·4 | 26·9 | |
| 9·9 | | 51·4 | 6·4 | |
| 9·5 | | 56·4 | 4·6 | |
| 9·8 | 51 | 1·9 | 14·4 | |
| 9·8 | | 4·8 | 44·2 | |
| 9·5 | | 4·9 | 17·0 | |
| 10·1 | | 5·4 | 37·3 | |
| 10·1 | | 7·4 | 38·2 | |
| 8·5 | | 9·4 | 27·6 | 8·6 |
| 8·8 | | 17·0 | 9·2 | 9·5 |
| 10·1 | | 17·5 | 36·0 | |
| 9·6 | | 19·0 | 13·1 | |
| 9·8 | | 33·5 | 10·0 | |
| 9·6 | | 35·5 | 11·5 | |
| 10·1 | | 35·5 | 40·9 | |
| 9·6 | | 38·0 | 7·3 | |

## 6301—6360.

| mag. | 15^h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·1 | 51 | 41·5 | 40·2 | |
| 9·4 | | 45·5 | 32·0 | 9·5 |
| 9·6 | | 48·5 | 6·2 | |
| 10·1 | | 48·5 | 16·8 | |
| 9·3 | | 54·4 | 2·5 | |
| 9·6 | | 57·5 | 37·6 | |
| 10·0 | | 58·0 | 21·1 | |
| 9·6 | | 59·5 | 8·4 | |
| 9·2 | 52 | 1·0 | 20·5 | |
| 10·1 | | 2·5 | 5·4 | |
| 9·5 | | 2·5 | 14·6 | |
| 9·5 | | 7·5 | 43·1 | |
| 9·4 | | 12·3 | 2·6 | |
| 10·0 | | 12·5 | 23·7 | |
| 10·0 | | 13·0 | 49·0 | |
| 9·2 | | 18·0 | 7·4 | |
| 8·6 | | 18·0 | 5·5 | |
| 9·4 | | 21·5 | 46·7 | |
| 8·8 | | 25·0 | 4·2 | |
| 9·7 | | 25·0 | 17·4 | |
| 9·6 | | 27·0 | 10·2 | |
| 9·1 | | 28·0 | 3·2 | |
| 10·0 | | 29·8 | 0·0 | |
| 8·9 | | 37·5 | 39·5 | 9·0 |
| 8·6 | | 37·8 | 1·7 | 9·0 |
| 8·0 | | 38·0 | 3·2 | 8·5 |
| 9·2 | | 40·0 | 5·8 | |
| 10·1 | | 42·4 | 13·2 | |
| 9·5 | | 43·5 | 9·0 | |
| 9·6 | | 44·1 | 2·1 | |
| 9·7 | | 45·5 | 19·7 | |
| 9·0 | | 45·5 | 9·1 | |
| 10·1 | | 47·4 | 28·4 | |
| 8·9 | | 48·8 | 1·5 | |
| 9·5 | | 49·0 | 11·7 | |
| 9·4 | | 50·1 | 0·2 | |
| 9·4 | | 51·5 | 44·0 | |
| 8·4 | | 52·0 | 8·0 | 8·5 |
| 9·0 | | 53·0 | 5·2 | |
| 9·6 | | 56·0 | 10·6 | |
| 9·2 | | 56·5 | 3·2 | |
| 9·7 | | 58·5 | 14·6 | |
| 9·6 | | 59·0 | 5·4 | |
| 9·7 | 53 | 2·0 | 9·9 | |
| 9·6 | | 4·5 | 6·5 | |
| 9·7 | | 4·5 | 29·9 | |
| 10·0 | | 5·0 | 45·1 | |
| 7·9 | | 7·5 | 8·8 | 7·5 GSct |
| 8·4 | | 7·5 | 9·7 | 8·5 |
| 9·6 | | 8·8 | 1·8 | |
| 9·9 | | 12·0 | 58·1 | |
| 9·6 | | 13·4 | 6·9 | |
| 8·2 | | 14·5 | 22·5 | 8·0 G |
| 10·0 | | 15·5 | 49·0 | |
| 10·1 | | 18·5 | 10·4 | |
| 9·8 | | 18·5 | 28·5 | |
| 9·9 | | 21·5 | 51·4 | |
| 10·0 | | 23·0 | 29·6 | |
| 9·7 | | 23·5 | 48·2 | |
| 9·6 | | 27·5 | 14·3 | |

## 6361—6420.

| mag. | 15^h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 53 | 28·0 | 11·1 | |
| 9·2 | | 28·4 | 2·6 | |
| 9·8 | | 29·0 | 27·8 | |
| 9·8 | | 33·5 | 28·5 | |
| 9·6 | | 38·0 | 19·8 | |
| 9·8 | | 39·1 | 2·7 | |
| 10·1 | | 47·0 | 18·9 | |
| 9·7 | | 49·2 | 4·0 | |
| 9·7 | | 55·3 | 55·7 | |
| 10·0 | | 57·0 | 12·9 | |
| 9·6 | | 59·2 | 2·5 | |
| 9·6 | 54 | 0·5 | 52·9 | |
| 9·9 | | 16·0 | 19·1 | |
| 10·0 | | 22·0 | 32·1 | |
| 8·2 | | 26·0 | 48·3 | 9·0 |
| 9·8 | | 27·7 | 38·8 | |
| 10·0 | | 29·0 | 34·8 | |
| 10·1 | | 29·5 | 22·7 | |
| 9·6 | | 33·9 | 2·8 | |
| 9·8 | | 38·0 | 6·3 | |
| 10·0 | | 43·5 | 13·3 | |
| 10·1 | | 45·5 | 22·7 | |
| 10·0 | | 47·5 | 56·3 | |
| 9·6 | | 51·5 | 18·1 | |
| 8·8 | 55 | 11·7 | 40·9 | 8·5 |
| 9·2 | | 34·0 | 15·9 | |
| 9·6 | | 35·5 | 27·7 | |
| 9·8 | | 37·5 | 1·2 | |
| 9·2 | | 47·5 | 3·7 | |
| 10·0 | 56 | 6·0 | 55·3 | |
| 9·6 | | 6·5 | 54·7 | |
| 10·0 | | 28·0 | 2·8 | |
| 9·2 | | 31·0 | 11·9 | 9·0 |
| 8·5 | | 32·0 | 0·8 | 8·5 |
| 9·8 | | 40·5 | 19·0 | |
| 10·0 | | 45·0 | 23·1 | |
| 9·8 | | 49·5 | 12·3 | |
| 9·0 | | 50·5 | 45·0 | |
| 10·0 | 57 | 5·0 | 11·0 | |
| 8·4 | | 10·0 | 44·6 | 8·5 |
| 9·5 | | 27·0 | 16·2 | |
| 9·2 | | 30·5 | 6·8 | |
| 9·8 | | 31·0 | 3·2 | |
| 10·0 | | 38·5 | 5·2 | |
| 10·0 | | 42·0 | 36·5 | |
| 9·6 | | 49·0 | 35·7 | |
| 10·0 | | 49·0 | 22·7 | |
| 9·6 | | 51·0 | 42·3 | |
| 10·0 | | 53·0 | 5·7 | |
| 10·0 | | 53·0 | 6·4 | |
| 10·0 | | 54·0 | 52·1 | |
| 9·0 | 58 | 0·0 | 11·1 | |
| 10·0 | | 9·0 | 2·8 | |
| 10·0 | | 15·5 | 13·2 | |
| 9·6 | | 16·5 | 48·3 | |
| 9·4 | | 27·5 | 43·1 | |
| 10·0 | | 32·0 | 59·1 | |
| 9·6 | | 33·0 | 58·1 | |
| 9·6 | | 34·0 | 25·2 | 9·5 |
| 9·4 | | 38·0 | 19·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 40 | .125 | 4·8 |
| | 50 | .127 | 4·5 |
| 16 | 0 | .128 | 4·2 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 50 | 127 | 4·5 |
| 16 | 0 | 128 | 4·2 |
| | 10 | 129 | 3·9 |
| | 20 | 130 | 3·5 |
| | 30 | 131 | 3·2 |
| | 40 | 132 | 2·9 |

## 6421—6480.

| mag. | $15^{h.}$–$16^{h.}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 58 | 40·0 | 18·9 | |
| 10·0 | | 46·5 | 17·5 | |
| 9·6 | | 51·0 | 24·1 | |
| 10·0 | | 53·0 | 53·1 | |
| 10·0 | | 53·5 | 53·9 | |
| 9·6 | | 59·5 | 43·1 | |
| 9·8 | 59 | 3·0 | 39·1 | |
| 9·8 | | 6·0 | 53·5 | |
| 10·0 | | 9·0 | 30·5 | |
| 9·8 | | 11·0 | 42·0 | |
| 10·0 | | 17·0 | 47·1 | |
| 10·0 | | 25·0 | 11·5 | |
| 10·0 | | 31·5 | 2·2 | |
| 9·4 | | 40·0 | 7·3 | |
| 9·2 | | 40·5 | 10·7 | |
| 9·4 | | 53·5 | 11·1 | |
| 8·8 | | 54·5 | 53·0 | 9·0 |
| 9·0 | | 56·5 | 44·5 | 9·5 |
| 9·8 | 0 | 4·0 | 35·1 | |
| 10·0 | | 11·0 | 18·1 | |
| 10·0 | | 14·0 | 51·2 | |
| 10·0 | | 16·0 | 16·7 | |
| 9·0 | | 26·5 | 47·1 | |
| 9·2 | | 32·0 | 48·3 | 9·0 |
| 9·8 | | 34·5 | 8·1 | |
| 9·4 | | 38·5 | 53·3 | |
| 9·2 | | 50·0 | 44·3 | |
| 10·0 | 1 | 23·0 | 14·9 | |
| 10·0 | | 44·5 | 14·1 | |
| 9·1 | | 52·0 | 6·9 | |
| 10·0 | 2 | 2·5 | 7·7 | |
| 10·0 | | 19·5 | 56·4 | |
| 9·6 | | 23·0 | 22·3 | 9·5 |
| 9·1 | | 44·5 | 19·2 | 8·5 |
| 9·6 | | 45·0 | 33·7 | |
| 9·6 | | 49·5 | 15·3 | |
| 9·4 | | 52·0 | 0·3 | |
| 9·4 | 3 | 16·0 | 24·9 | |
| 10·0 | | 39·0 | 7·5 | |
| 8·6 | | 48·0 | 27·3 | 8·5 |
| 10·0 | | 53·0 | 41·5 | |
| 9·6 | | 59·4 | 58·0 | 9·5 |
| 9·6 | 4 | 3·5 | 27·2 | |
| 9·4 | | 4·5 | 24·0 | |
| 8·6 | | 14·4 | 56·9 | 8·5 |
| 10·0 | | 15·0 | 17·7 | |
| 8·6 | | 28·5 | 27·9 | 9·0 |
| 9·6 | | 41·5 | 35·1 | 8·8 |
| 9·2 | | 42·0 | 19·1 | |
| 9·8 | | 43·0 | 56·7 | |
| 10·0 | | 43·0 | 18·1 | |
| 10·0 | | 54·5 | 39·6 | |
| 10·0 | | 58·5 | 43·1 | |
| 9·4 | 5 | 1·5 | 11·1 | |
| 10·0 | | 7·5 | 55·1 | |
| 10·0 | | 12·0 | 33·7 | |
| 8·9 | | 22·0 | 39·3 | 9·0 |
| 10·0 | | 23·0 | 1·1 | |
| 9·4 | | 42·5 | 41·7 | 9·2 |
| 8·8 | | 43·5 | 46·7 | |

## 6481—6540.

| mag. | $16^{h.}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 5 | 54·5 | 38·2 | 9·0 |
| 8·5 | | 58·0 | 14·7 | |
| 10·0 | | 59·5 | 18·1 | |
| 10·0 | 6 | 4·0 | 50·1 | |
| 9·0 | | 4·0 | 34·1 | 8·5 |
| 10·0 | | 9·0 | 59·0 | |
| 9·8 | | 16·5 | 46·9 | |
| 10·0 | | 22·5 | 22·3 | |
| 9·2 | 7 | 44·0 | 57·5 | |
| 9·2 | | 51·5 | 53·1 | |
| 9·0 | 8 | 33·5 | 14·5 | |
| 9·6 | | 35·0 | 35·1 | |
| 9·2 | | 50·5 | 30·3 | |
| 8·6 | | 54·0 | 49·5 | 8·5 |
| 9·1 | 9 | 28·0 | 45·2 | 8·5 |
| 10·0 | | 56·0 | 13·1 | |
| 9·8 | 10 | 16·0 | 30·7 | |
| 9·6 | | 19·0 | 16·1 | |
| 8·7 | | 26·5 | 9·9 | 9·5 |
| 10·0 | | 28·0 | 29·3 | |
| 9·0 | | 33·0 | 50·1 | 9·5 |
| 9·0 | | 39·0 | 21·1 | 8·5 |
| 10·0 | | 45·5 | 21·7 | |
| 9·6 | | 55·7 | 59·8 | 9·0 |
| 9·0 | | 56·5 | 8·9 | 10·0 |
| 10·0 | 11 | 6·5 | 20·9 | |
| 9·2 | | 24·0 | 24·9 | |
| 9·8 | | 34·5 | 56·9 | |
| 10·0 | 12 | 10·0 | 51·7 | |
| 10·0 | 13 | 39·5 | 2·8 | |
| 10·0 | | 54·0 | 12·6 | |
| 9·0 | 14 | 1·2 | 57·3 | |
| 8·5 | | 1·5 | 13·2 | 9·5 |
| 8·5 | | 19·5 | 57·1 | 9·0 |
| 10·0 | | 33·5 | 34·4 | |
| 9·2 | | 45·5 | 33·6 | |
| 10·0 | 15 | 2·0 | 23·0 | |
| 9·2 | | 3·5 | 36·6 | |
| 9·8 | | 19·0 | 18·6 | |
| 10·0 | | 24·0 | 51·1 | |
| 9·6 | | 24·5 | 10·6 | |
| 9·8 | | 36·5 | 31·2 | |
| 9·8 | | 46·5 | 24·2 | |
| 9·6 | | 48·0 | 31·0 | |
| 8·5 | | 53·5 | 20·7 | 9·0 |
| 10·0 | | 58·5 | 57·7 | |
| 10·0 | 16 | 18·0 | 53·9 | |
| 9·8 | | 36·0 | 2·1 | |
| 10·0 | | 42·0 | 51·8 | |
| 8·8 | 17 | 6·5 | 27·0 | 8·0 |
| 8·9 | | 24·0 | 40·0 | 9·0 |
| 9·0 | | 24·0 | 50·2 | 8·5 |
| 8·8 | | 42·0 | 52·8 | 9·0 |
| 9·4 | | 53·0 | 16·3 | |
| 8·4 | 18 | 11·5 | 13·6 | |
| 8·8 | | 12·0 | 10·1 | |
| 10·0 | | 41·0 | 37·0 | |
| 7·8 | | 58·0 | 30·0 | 8·0 G |
| 9·4 | 19 | 8·0 | 11·3 | |
| 9·0 | | 13·5 | 17·0 | |

## 6541—6600.

| mag. | $16^{h.}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 19 | 29·7 | 58·2 | |
| 8·3 | | 38·0 | 29·6 | 8·2 G |
| 8·9 | | 51·5 | 45·8 | |
| 10·0 | | 52·0 | 51·2 | |
| 9·6 | | 59·0 | 58·3 | |
| 8·6 | 20 | 42·0 | 24·8 | 8·8 |
| 9·2 | | 48·0 | 57·1 | |
| 8·6 | | 52·5 | 3·5 | |
| 10·0 | | 53·5 | 17·8 | |
| 9·6 | | 54·3 | 2·8 | |
| 10·0 | | 55·5 | 36·3 | |
| 10·0 | 21 | 3·0 | 40·5 | |
| 8·9 | | 13·5 | 0·9 | 9·5 |
| 9·8 | | 19·0 | 15·7 | |
| 10·0 | | 26·5 | 36·4 | 9·0 |
| 10·0 | | 46·5 | 8·5 | |
| 8·5 | | 47·5 | 20·9 | 8·5 |
| 8·4 | 22 | 2·5 | 37·8 | 8·2 G |
| 10·0 | | 3·5 | 41·9 | |
| 8·2 | | 6·0 | 37·7 | 8·0 G |
| 9·8 | | 16·5 | 24·9 | |
| 8·5 | | 30·5 | 41·3 | |
| 9·6 | | 33·5 | 4·9 | |
| 9·0 | | 51·8 | 0·7 | 9·0 |
| 9·2 | | 53·0 | 5·7 | |
| 8·6 | 23 | 4·0 | 0·3 | 8·5 |
| 10·0 | | 5·5 | 36·8 | |
| 10·0 | | 34·5 | 55·1 | 9·5 |
| 9·2 | | 43·5 | 59·2 | 9·0 |
| 10·0 | 24 | 18·0 | 11·9 | |
| 9·6 | | 25·0 | 34·9 | |
| 9·3 | | 29·5 | 56·3 | |
| 10·0 | | 32·5 | 13·1 | |
| 9·5 | | 47·0 | 44·9 | |
| 10·0 | | 53·7 | 56·9 | |
| 9·4 | 25 | 3·0 | 45·7 | |
| 9·8 | | 16·5 | 6·9 | |
| 9·0 | | 27·5 | 38·5 | 9·2 |
| 9·0 | | 28·0 | 40·9 | 10·0 |
| 10·0 | | 41·5 | 53·5 | |
| 9·2 | | 52·5 | 44·7 | 8·5 G |
| 8·8 | | 52·5 | 43·1 | 8·5 G |
| 10·0 | 26 | 15·5 | 39·4 | |
| 9·0 | | 23·5 | 13·8 | |
| 8·5 | | 27·0 | 30·5 | 8·4 |
| 9·8 | | 36·5 | 42·8 | |
| 9·6 | | 42·5 | 17·9 | |
| 8·6 | | 51·0 | 17·9 | 9·5 |
| 9·8 | 27 | 9·5 | 27·9 | |
| 9·8 | | 10·5 | 46·4 | |
| 8·6 | | 11·5 | 12·9 | |
| 9·3 | | 16·0 | 37·5 | 9·0 |
| 9·2 | | 42·7 | 1·2 | |
| 5·9 | | 49·0 | 43·9 | 6·6 GS |
| 8·4 | 28 | 20·0 | 42·3 | 8·5 |
| 9·8 | | 45·5 | 7·1 | |
| 9·3 | | 50·7 | 39·9 | 9·5 |
| 7·7 | | 51·5 | 54·2 | 8·0 G |
| 9·8 | | 57·0 | 51·0 | |
| 9·8 | 29 | 24·3 | 30·4 | |

## 6601—6660.

| mag. | $16^{h.}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·3 | 29 | 29·0 | 23·1 | |
| 9·3 | | 34·2 | 58·9 | 9·0 |
| 7·2 | | 52·2 | 11·6 | 6·5 GS |
| 9·4 | 30 | 15·7 | 38·2 | |
| 8·3 | | 25·5 | 20·1 | 9·5 |
| 9·6 | | 35·5 | 39·3 | |
| 10·0 | | 36·0 | 6·7 | |
| 9·8 | | 43·0 | 48·0 | |
| 9·0 | 31 | 1·3 | 39·9 | |
| 9·8 | | 4·0 | 33·2 | |
| 9·4 | | 7·0 | 0·7 | |
| 9·8 | | 9·0 | 0·2 | |
| 8·8 | | 33·0 | 45·4 | |
| 8·0 | | 53·0 | 40·9 | 8·5 GSc |
| 9·6 | 32 | 1·0 | 37·0 | |
| 9·2 | | 13·5 | 22·9 | |
| 8·5 | | 23·5 | 5·5 | 9·0 |
| 9·7 | | 29·5 | 46·5 | |
| 9·7 | | 32·5 | 49·1 | |
| 9·8 | 33 | 9·0 | 29·6 | 8·8 |
| 9·0 | | 33·5 | 12·1 | 8·5 |
| 9·6 | | 40·0 | 4·2 | |
| 8·3 | | 55·5 | 22·1 | 8·7 G |
| 9·8 | | 56·0 | 41·1 | |
| 9·3 | 34 | 1·5 | 42·1 | |
| 9·1 | | 4·0 | 8·5 | |
| 9·8 | | 22·5 | 12·8 | |
| 9·7 | | 22·5 | 32·3 | |
| 7·6 | | 26·5 | 19·4 | 7·5 GS |
| 9·6 | | 38·5 | 42·8 | |
| 9·8 | 35 | 4·5 | 37·5 | |
| 9·7 | | 31·5 | 48·3 | |
| 9·3 | | 35·5 | 3·2 | |
| 9·3 | | 45·5 | 48·0 | |
| 8·2 | | 49·0 | 46·4 | 8·5 |
| 8·6 | 36 | 34·0 | 55·8 | 8·5 |
| 9·1 | | 42·5 | 7·1 | |
| 9·6 | | 51·5 | 43·8 | |
| 9·2 | 37 | 13·5 | 46·2 | |
| 9·6 | | 29·5 | 4·8 | |
| 9·7 | | 32·5 | 51·5 | |
| 8·6 | | 43·5 | 54·1 | |
| 9·4 | | 47·5 | 1·7 | |
| 8·6 | | 59·5 | 14·2 | |
| 9·7 | 38 | 3·0 | 55·7 | |
| 9·8 | | 32·5 | 44·9 | |
| 9·3 | | 56·5 | 10·8 | |
| 9·2 | | 58·5 | 38·7 | |
| 9·7 | 39 | 0·0 | 8·5 | |
| 9·6 | | 5·5 | 12·6 | |
| 9·4 | | 20·5 | 2·6 | |
| 9·7 | | 41·5 | 11·0 | |
| 9·3 | | 41·5 | 24·1 | |
| 8·9 | | 55·5 | 10·1 | |
| 9·6 | 40 | 20·5 | 20·4 | |
| 9·8 | | 24·5 | 1·0 | |
| 9·2 | | 26·0 | 10·6 | |
| 8·2 | | 33·5 | 20·4 | 8·2 |
| 9·7 | 41 | 10·5 | 49·3 | |
| 8·2 | | 44·5 | 36·0 | 8·5 |

### 6661—6720.

| mag. | 16h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 41 | 48·5 | 30·5 | |
| 9·0 | 42 | 4·0 | 45·4 | 9·0 |
| 9·7 | | 26·5 | 36·6 | 9·5 |
| 8·8 | | 59·5 | 25·0 | 9·5 |
| 9·6 | 43 | 57·5 | 5·2 | |
| 9·4 | 44 | 5·0 | 1·3 | |
| 8·6 | | 28·5 | 28·0 | 7·5 G |
| 9·4 | | 43·0 | 32·4 | |
| 9·8 | | 52·5 | 34·8 | |
| 9·4 | 45 | 18·5 | 2·1 | |
| 9·6 | | 34·5 | 5·2 | |
| 9·6 | | 40·0 | 18·8 | |
| 8·6 | | 41·5 | 45·1 | *8·1* |
| 9·7 | | 43·5 | 21·0 | |
| 9·3 | 46 | 21·5 | 23·1 | |
| 7·0 | | 23·5 | 23·7 | 7·0 GS |
| 9·7 | | 28·0 | 54·3 | |
| 9·2 | | 37·0 | 29·1 | 9·5 |
| 8·2 | 47 | 21·0 | 30·3 | 8·7 |
| 8·9 | 48 | 50·0 | 58·3 | 9·0 |
| 9·2 | | 58·5 | 33·3 | |
| 9·1 | 49 | 2·0 | 12·5 | |
| 9·8 | | 2·0 | 38·9 | |
| 9·4 | | 8·0 | 20·2 | |
| 9·5 | 50 | 6·0 | 14·8 | |
| 9·6 | | 38·0 | 45·7 | 9·0 |
| 9·7 | | 54·0 | 51·1 | 9·5 |
| 9·6 | 51 | 9·0 | 27·3 | |
| 8·9 | | 16·0 | 15·4 | |
| 8·2 | 52 | 41·0 | 3·1 | |
| 9·4 | 53 | 13·0 | 51·2 | |
| 9·3 | | 22·0 | 41·1 | 8·2 |
| 9·3 | | 39·5 | 8·4 | |
| 8·2 | 54 | 29·0 | 45·1 | 7·8 G |
| 8·2 | 55 | 4·0 | 14·4 | 7·5 G |
| 9·7 | | 10·0 | 36·8 | |
| 9·6 | | 17·5 | 36·5 | 10·0 |
| 9·8 | | 21·5 | 36·4 | |
| 8·6 | | 47·0 | 29·1 | 9·5 |
| 9·7 | 56 | 17·0 | 31·0 | 9·5 |
| 9·8 | | 40·0 | 36·1 | |
| 8·6 | | 45·0 | 59·4 | |
| 8·4 | | 57·5 | 34·7 | 9·0 |
| 9·8 | 57 | 6·5 | 19·5 | |
| 8·6 | | 8·0 | 40·4 | 9·0 |
| 9·8 | | 16·5 | 33·9 | 9·5 |
| 9·8 | | 22·5 | 18·0 | |
| 9·7 | | 24·5 | 34·0 | 9·2 G |
| 9·3 | | 34·5 | 24·1 | |
| 9·0 | | 39·0 | 54·0 | 9·0 |
| 9·7 | 58 | 5·8 | 0·0 | |
| 8·5 | | 14·0 | 26·9 | 8·4 |
| 9·6 | | 14·5 | 49·0 | |
| 8·2 | | 23·0 | 56·1 | 8·2 |
| 9·8 | | 36·0 | 38·6 | 9·5 |
| 9·8 | | 46·5 | 47·5 | |
| 9·4 | | 55·0 | 37·1 | 10·0 |
| 8·2 | | 56·5 | 34·8 | 7·5 G |
| 9·0 | 59 | 42·5 | 11·2 | |
| 9·7 | | 52·5 | 27·0 | 8·8 |

### 6721—6780.

| mag. | 16h.—17h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·1 | 0 | 2·5 | 4·3 | |
| 9·8 | | 15·5 | 26·0 | |
| 8·9 | | 23·5 | 53·0 | |
| 9·3 | 1 | 48·0 | 7·4 | |
| 8·4 | 2 | 19·5 | 21·1 | 8·5 |
| 8·8 | | 41·0 | 42·3 | 9·5 |
| 9·0 | 3 | 19·5 | 23·6 | 9·2 |
| 9·7 | | 25·5 | 45·2 | |
| 9·3 | 4 | 9·5 | 24·5 | 8·8 |
| 7·8 | | 28·8 | 38·9 | 7·8 G |
| 9·7 | | 35·5 | 50·6 | |
| 9·7 | | 38·0 | 7·1 | |
| 9·8 | | 38·7 | 50·1 | |
| 8·6 | 5 | 8·0 | 54·8 | 8·5 |
| 9·8 | | 20·3 | 50·9 | |
| 9·8 | | 20·9 | 59·5 | |
| 7·4 | | 21·8 | 48·6 | 8·0 GS |
| 9·9 | | 39·4 | 20·1 | |
| 10·0 | | 45·3 | 41·9 | |
| 9·3 | | 52·1 | 25·1 | |
| 10·0 | | 52·8 | 1·5 | |
| 9·6 | | 56·3 | 51·0 | |
| 9·6 | 6 | 0·9 | 8·4 | |
| 9·6 | | 1·3 | 30·7 | |
| 8·9 | | 6·4 | 7·7 | |
| 9·8 | | 9·8 | 35·8 | |
| 9·8 | | 13·8 | 31·4 | |
| 9·8 | | 16·3 | 30·1 | |
| 7·9 | | 17·5 | 41·9 | 7·8 GS |
| 9·8 | | 18·4 | 13·4 | |
| 9·2 | | 24·9 | 54·8 | 9·5 |
| 9·8 | | 28·4 | 23·6 | |
| 10·0 | | 29·9 | 29·0 | |
| 9·6 | | 30·9 | 27·5 | |
| 9·6 | | 32·4 | 9·4 | |
| 9·8 | | 38·3 | 55·8 | |
| 9·6 | | 43·2 | 11·3 | |
| 9·6 | | 59·9 | 11·1 | |
| 9·4 | 7 | 3·7 | 18·6 | |
| 9·0 | | 14·8 | 36·0 | 9·0 |
| 9·8 | | 17·8 | 35·9 | |
| 9·4 | | 20·8 | 39·9 | 8·7 |
| 9·1 | | 26·9 | 6·0 | |
| 10·0 | | 34·4 | 9·7 | |
| 9·8 | | 38·9 | 6·7 | |
| 9·6 | | 46·8 | 35·7 | 9·5 |
| 9·8 | 8 | 2·9 | 19·1 | |
| 9·8 | | 8·9 | 58·6 | |
| 9·4 | | 12·4 | 4·6 | |
| 9·8 | | 17·8 | 52·7 | |
| 10·0 | | 21·9 | 7·1 | |
| 9·3 | | 23·3 | 35·6 | 9·5 |
| 9·8 | | 47·9 | 21·0 | |
| 9·8 | | 48·4 | 4·8 | |
| 9·4 | | 49·8 | 36·9 | |
| 9·8 | | 55·9 | 24·5 | |
| 9·8 | 9 | 3·4 | 6·6 | |
| 9·8 | | 13·9 | 8·7 | |
| 9·6 | | 26·4 | 12·3 | |
| 9·6 | | 33·9 | 58·0 | |

### 6781—6840.

| mag. | 17h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 9 | 34·8 | 54·4 | |
| 9·9 | | 37·1 | 58·7 | |
| 9·9 | | 39·8 | 35·5 | |
| 8·9 | | 50·4 | 23·1 | 8·0 |
| 10·0 | | 54·6 | 26·6 | |
| 9·2 | 10 | 17·8 | 50·2 | 9·5 |
| 9·8 | | 45·3 | 1·6 | |
| 9·5 | | 58·8 | 48·0 | 8·8 |
| 9·9 | 11 | 5·3 | 55·4 | |
| 9·3 | | 5·8 | 52·8 | |
| 9·5 | | 28·3 | 45·4 | |
| 9·8 | | 58·8 | 41·4 | |
| 9·4 | 12 | 14·9 | 26·2 | |
| 9·2 | | 20·3 | 56·1 | 9·5 |
| 9·6 | | 21·9 | 4·5 | |
| 8·8 | | 34·8 | 48·9 | 8·5 |
| 10·0 | | 49·4 | 4·9 | |
| 10·0 | | 56·1 | 59·0 | |
| 8·8 | | 59·9 | 13·2 | 9·5 |
| 5·9 | 13 | 2·3 | 32·9 | 6·5 GSct |
| 8·2 | | 13·9 | 17·2 | 8·2 |
| 10·0 | | 14·6 | 24·3 | |
| 9·1 | | 35·8 | 54·0 | 9·5 |
| 10·0 | | 36·6 | 57·5 | |
| 9·9 | | 52·9 | 14·9 | |
| 9·3 | | 58·8 | 44·6 | |
| 9·8 | 14 | 15·8 | 32·0 | |
| 9·4 | | 28·4 | 20·4 | |
| 9·2 | | 28·7 | 1·5 | 9·0 |
| 10·0 | | 32·8 | 46·1 | |
| 9·5 | 15 | 19·4 | 14·5 | |
| 9·3 | | 27·4 | 11·6 | 9·0 |
| 9·6 | | 29·1 | 56·9 | |
| 8·4 | 16 | 3·9 | 7·3 | 8·8 |
| 10·0 | | 16·9 | 0·6 | |
| 10·0 | | 22·3 | 41·8 | |
| 9·2 | | 25·8 | 59·7 | 10·0 |
| 9·8 | | 31·3 | 52·6 | |
| 9·6 | | 31·8 | 49·1 | |
| 9·3 | | 35·4 | 7·8 | |
| 10·0 | | 37·9 | 24·5 | |
| 10·0 | | 38·4 | 24·0 | |
| 9·6 | | 56·8 | 43·1 | |
| 9·8 | | 58·3 | 41·5 | |
| 10·0 | 17 | 3·4 | 6·4 | |
| 10·0 | | 11·4 | 59·9 | |
| 10·0 | | 17·4 | 3·2 | |
| 10·0 | | 21·4 | 22·2 | |
| 9·2 | | 29·4 | 17·5 | 8·5 |
| 10·0 | | 44·9 | 23·7 | |
| 9·8 | | 46·8 | 47·3 | |
| 9·0 | | 54·9 | 7·0 | |
| 8·0 | | 55·8 | 31·7 | 8·0 Gg |
| 9·6 | 18 | 2·6 | 57·7 | |
| 9·8 | | 8·8 | 53·8 | |
| 9·5 | | 32·3 | 33·7 | |
| 10·0 | | 37·3 | 33·7 | |
| 10·0 | | 38·3 | 58·3 | |
| 9·6 | 19 | 9·8 | 56·3 | |
| 10·0 | | 19·7 | 23·5 | |

### 6841—6900.

| mag. | 17h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·4 | 19 | 20·8 | 39·8 | |
| 4·1 | | 49·3 | 34·7 | 4·0 GSgctλ |
| 9·3 | 20 | 4·9 | 5·4 | |
| 8·5 | | 16·4 | 20·1 | 8·2 |
| 10·0 | | 31·7 | 1·5 | |
| 9·9 | | 44·8 | 1·1 | |
| 9·3 | | 48·4 | 25·0 | |
| 9·8 | | 53·4 | 19·6 | |
| 9·8 | | 57·9 | 21·7 | |
| 9·1 | 21 | 5·3 | 36·5 | |
| 9·9 | | 13·4 | 3·7 | |
| 10·0 | | 16·7 | 10·6 | |
| 10·0 | | 20·4 | 22·1 | |
| 10·0 | | 28·4 | 27·4 | |
| 9·4 | 22 | 7·3 | 30·9 | |
| 9·4 | | 8·8 | 49·1 | |
| 8·9 | | 8·9 | 6·7 | |
| 9·3 | | 27·9 | 25·0 | |
| 9·9 | | 34·4 | 27·9 | |
| 9·9 | | 39·3 | 0·2 | |
| 9·8 | | 51·3 | 41·5 | |
| 9·8 | | 51·9 | 5·3 | |
| 9·8 | | 59·8 | 43·0 | |
| 9·4 | 23 | 22·8 | 35·1 | |
| 9·4 | | 22·9 | 14·1 | |
| 9·2 | | 23·9 | 22·3 | 8·5 |
| 9·6 | | 36·6 | 1·0 | |
| 9·2 | | 40·8 | 42·4 | 10·0 |
| 9·4 | 24 | 14·9 | 24·2 | |
| 9·8 | | 41·8 | 31·6 | |
| 8·9 | | 46·4 | 12·7 | 9·0 |
| 9·8 | 25 | 27·9 | 21·3 | |
| 10·0 | | 29·8 | 48·1 | |
| 9·6 | | 49·4 | 11·5 | |
| 9·5 | | 51·9 | 6·8 | |
| 9·3 | 26 | 7·4 | 2·4 | |
| 10·0 | | 16·8 | 31·2 | |
| 10·0 | | 24·8 | 34·7 | |
| 9·6 | | 45·3 | 33·0 | |
| 9·2 | | 47·4 | 5·9 | |
| 9·9 | 27 | 2·9 | 5·2 | |
| 9·2 | | 17·4 | 28·5 | 9·2 |
| 9·4 | | 18·3 | 48·4 | |
| 9·8 | | 27·4 | 8·9 | |
| 9·8 | | 27·4 | 26·9 | |
| 9·4 | | 30·4 | 29·5 | 9·5 |
| 7·5 | | 41·8 | 51·3 | 7·5 GS |
| 9·8 | | 55·8 | 49·9 | |
| 8·9 | | 58·3 | 36·1 | 8·4 |
| 9·4 | 28 | 15·3 | 37·1 | 9·3 |
| 9·6 | | 33·9 | 20·4 | |
| 9·2 | | 36·4 | 20·4 | |
| 9·6 | | 43·3 | 57·5 | |
| 9·6 | | 43·8 | 43·6 | |
| 8·4 | | 45·2 | 2·1 | 8·2 |
| 9·8 | | 52·4 | 10·2 | |
| 9·9 | 29 | 1·3 | 49·6 | |
| 8·2 | | 30·9 | 6·3 | 9·0 |
| 10·0 | | 33·8 | 34·2 | |
| 9·8 | | 52·4 | 11·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 30 | 131 | 3·2 |
| | 40 | 132 | 2·9 |
| | 50 | 133 | 2·5 |
| 17 | 0 | 134 | 2·2 |
| | 10 | 134 | 1·8 |
| | 20 | 135 | 1·5 |
| | 30 | 135 | 1·1 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 17 | 20 | 135 | 1·5 |
| | 30 | 135 | 1·1 |
| | 40 | 136 | 0·7 |
| | 50 | 136 | 0·4 |
| 18 | 0 | 136 | 0·0 |
| | | | + |
| | 10 | 136 | 0·4 |
| | 20 | 136 | 0·7 |
| | 30 | 135 | 1·1 |
| | 40 | 135 | 1·5 |

### 6901—6960.

| mag. | 17h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·9 | 30 | 0·1 | 58·9 | |
| 9·8 | | 6·3 | 55·0 | |
| 9·0 | | 26·9 | 16·5 | |
| 9·2 | | 30·4 | 21·5 | 9·0 |
| 9·2 | | 58·9 | 13·8 | 9·5 |
| 9·6 | 31 | 7·9 | 29·9 | |
| 9·8 | | 16·4 | 20·2 | |
| 9·3 | | 28·8 | 33·3 | |
| 9·6 | | 28·8 | 30·8 | |
| 9·9 | | 46·8 | 33·3 | |
| 9·6 | | 48·3 | 35·1 | |
| 9·6 | | 48·8 | 56·0 | |
| 10·0 | | 59·8 | 48·9 | |
| 8·4 | 32 | 5·9 | 4·7 | 8·2 |
| 9·2 | | 7·4 | 3·1 | |
| 10·0 | | 11·4 | 8·6 | |
| 9·9 | | 15·3 | 44·6 | |
| 8·5 | | 21·5 | 0·7 | 9·0 |
| 10·0 | | 33·5 | 39·5 | |
| 10·0 | | 41·1 | 26·2 | |
| 10·0 | | 46·0 | 46·8 | |
| 10·0 | 33 | 25·0 | 47·3 | |
| 9·0 | | 44·6 | 11·2 | |
| 9·0 | | 48·1 | 27·0 | 8·8 |
| 9·0 | | 48·5 | 41·4 | 9·5 |
| 8·7 | 34 | 0·6 | 7·8 | |
| 10·0 | | 42·6 | 23·7 | |
| 8·8 | 35 | 2·5 | 45·8 | 8·0 G |
| 9·4 | | 30·0 | 49·1 | |
| 9·6 | | 31·0 | 35·6 | |
| 9·4 | | 37·5 | 53·1 | |
| 9·1 | | 40·5 | 44·4 | |
| 7·6 | | 59·1 | 12·0 | 7·5 GS |
| 8·6 | 36 | 1·1 | 25·6 | 9·0 |
| 10·0 | | 40·5 | 45·8 | |
| 9·4 | | 50·5 | 55·1 | |
| 9·9 | | 57·5 | 54·3 | |
| 9·4 | | 59·5 | 31·6 | |
| 8·4 | 37 | 2·0 | 36·5 | 8·1 G |
| 9·6 | | 8·0 | 30·8 | |
| 10·0 | | 14·1 | 25·7 | |
| 9·0 | | 23·5 | 37·5 | 8·1 G |
| 9·0 | | 53·1 | 29·1 | 8·1 G |
| 9·6 | 38 | 17·6 | 14·6 | |
| 9·5 | | 27·1 | 18·2 | |
| 9·6 | | 46·0 | 33·7 | |
| 10·0 | 39 | 40·0 | 33·5 | |
| 9·9 | | 43·9 | 3·0 | |
| 9·5 | 40 | 17·0 | 40·8 | |
| 7·2 | | 20·7 | 7·3 | 6·0 GScgtr |
| 9·4 | | 31·3 | 22·9 | 9·0 |
| 9·9 | | 36·4 | 58·6 | |
| 7·9 | | 47·3 | 21·0 | 7·5 GS |
| 8·9 | 41 | 10·3 | 46·8 | 8·3 |
| 9·2 | | 37·3 | 54·5 | 9·0 |
| 9·8 | | 51·8 | 21·7 | [illegible] |
| 9·6 | 42 | 1·1 | 6·3 | [illegible] |
| 9·4 | | 11·3 | 26·5 | 9·0 G |
| 9·0 | 43 | 12·5 | 52·7 | [illegible] |
| 9·1 | | 26·0 | 45·3 | [illegible] |

### 6961—7020.

| mag. | 17h.—18h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8·4 | 43 | 29·0 | 12·0 | 8·5 G |
| 8·2 | | 41·3 | 13·9 | 8·5 G |
| 9·8 | | 41·7 | 55·4 | |
| 9·2 | | 53·0 | 7·5 | 9·2 |
| 9·8 | | 59·5 | 29·9 | |
| 9·1 | 45 | 23·5 | 47·5 | |
| 9·8 | | 32·0 | 29·6 | 10·0 |
| 9·8 | | 40·0 | 38·5 | |
| 8·4 | | 42·0 | 17·9 | 8·5 GScr |
| 8·8 | 46 | 39·5 | 32·0 | 9·5 |
| 7·7 | 47 | 17·0 | 39·5 | 8·2 G |
| 9·8 | | 27·0 | 53·7 | |
| 9·6 | | 47·0 | 10·5 | |
| 9·8 | 48 | 1·0 | 16·5 | |
| 9·8 | | 2·5 | 27·1 | |
| 9·8 | | 3·0 | 41·5 | |
| 9·2 | | 10·0 | 26·4 | |
| 9·2 | | 27·0 | 33·3 | |
| 9·6 | 49 | 0·0 | 47·9 | |
| 9·4 | | 20·0 | 35·4 | |
| 8·8 | | 27·0 | 20·9 | 9·5 |
| 9·4 | | 28·0 | 10·9 | |
| 9·8 | | 37·0 | 38·8 | |
| 8·5 | | 53·0 | 45·9 | 8·5 |
| 9·0 | 50 | 55·0 | 9·8 | 9·5 |
| 9·4 | 51 | 2·0 | 38·9 | |
| 7·9 | | 8·0 | 7·7 | 7·5 GS |
| 9·8 | | 16·5 | 48·3 | |
| 9·2 | | 54·5 | 9·7 | 9·0 |
| 9·1 | 52 | 0·5 | 13·1 | 9·0 |
| 9·2 | 53 | 1·0 | 39·3 | |
| 9·2 | 54 | 10·0 | 7·1 | |
| 8·8 | | 37·5 | 18·0 | 9·5 |
| 9·5 | | 37·5 | 10·9 | |
| 9·2 | | 39·0 | 10·3 | |
| 9·6 | 55 | 2·0 | 54·5 | |
| 8·4 | | 5·5 | 31·9 | 8·3 GS |
| 8·4 | 56 | 21·0 | 4·3 | 9·5 |
| 9·8 | | 31·0 | 52·4 | |
| 9·2 | | 55·5 | 21·9 | 9·4 |
| 8·8 | 57 | 48·0 | 20·2 | 9·5 |
| 9·5 | 58 | 7·0 | 22·8 | 9·0 |
| 8·5 | | 31·5 | 53·8 | 10·0 |
| 9·6 | 59 | 1·0 | 39·0 | |
| 8·8 | | 8·5 | 27·6 | |
| 8·4 | | 21·0 | 7·5 | |
| 9·0 | | 59·5 | 22·6 | 9·2 |
| 7·5 | 0 | 20·5 | 25·9 | 7·5 G |
| 9·8 | | 33·0 | 40·1 | |
| 8·4 | | 50·0 | 3·1 | |
| 8·2 | | 52·0 | 9·6 | 8·5 |
| 7·0 | 1 | 52·5 | 9·9 | 7·2 GS |
| 9·0 | 2 | 0·0 | 48·1 | |
| 9·2 | | 3·5 | 22·9 | |
| 8·7 | 3 | 15·5 | 47·6 | |
| 9·2 | | 31·3 | 1·7 | |
| 9·2 | | 47·5 | 24·1 | 8·8 |
| 9·8 | | 53·0 | 36·7 | 8·5 |
| 8·2 | 4 | 23·0 | 41·5 | 8·0 |
| 9·5 | | 27·0 | 43·9 | |

### 7021—7080.

| mag. | 18h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·2 | 5 | 40·5 | 37·9 | 9·0 |
| 9·8 | | 42·0 | 3·5 | |
| 9·8 | 8 | 46·5 | 38·5 | |
| 9·8 | | 53·0 | 44·9 | |
| 9·8 | | 55·0 | 44·9 | |
| 9·6 | 9 | 23·0 | 13·8 | |
| 9·8 | | 42·5 | 13·8 | |
| 9·6 | 10 | 2·5 | 54·9 | |
| 9·8 | | 11·5 | 38·5 | |
| 9·8 | | 35·4 | 3·9 | 8·5 G |
| 7·0 | 11 | 42·5 | 48·1 | 7·0 GSct |
| 9·2 | 12 | 45·0 | 5·9 | 8·5 |
| 8·4 | 13 | 4·0 | 10·9 | 8·5 |
| 9·8 | | 19·5 | 45·7 | |
| 9·8 | | 21·5 | 26·7 | |
| 9·0 | 14 | 20·5 | 9·9 | 8·0 |
| 9·2 | | 24·0 | 49·9 | |
| 9·6* | 15 | 35·5 | 37·0 | ? |
| 9·8 | 16 | 51·0 | 49·7 | |
| 9·8 | 17 | 8·7 | 30·5 | |
| 8·4 | | 10·0 | 18·3 | 8·2 G |
| 8·6 | | 29·6 | 40·9 | 8·0 G |
| 10·0 | | 32·1 | 53·2 | |
| 9·2 | | 36·3 | 45·1 | |
| 9·6 | | 47·2 | 3·6 | |
| 10·0 | | 49·9 | 20·2 | |
| 10·0 | 18 | 11·6 | 40·5 | |
| 9·8 | | 17·7 | 24·5 | |
| 9·4 | | 19·2 | 13·2 | |
| 9·6 | | 22·1 | 46·8 | |
| 8·8 | | 43·1 | 7·7 | |
| 9·2 | | 48·6 | 35·9 | |
| 8·2 | | 49·3 | 45·2 | |
| 9·4 | | 53·6 | 45·0 | |
| 9·3 | 19 | 40·6 | 4·2 | |
| 10·0 | | 46·6 | 42·8 | |
| 9·6 | 20 | 0·2 | 8·3 | |
| 9·8 | | 17·2 | 58·4 | |
| 9·3 | | 38·6 | 50·4 | |
| 9·8 | | 41·7 | 6·3 | |
| 9·6 | | 45·7 | 2·0 | |
| 9·0 | | 50·2 | 59·1 | |
| 9·3 | | 52·1 | 34·2 | |
| 9·2 | 21 | 6·7 | 19·6 | |
| 9·4 | | 9·2 | 4·8 | |
| 9·8 | | 15·9 | 59·0 | |
| 10·0 | | 19·7 | 10·5 | |
| 10·0 | | 41·1 | 49·7 | |
| 9·6 | | 44·7 | 16·5 | |
| 8·8 | | 57·2 | 13·7 | 8·5 |
| 9·1 | 22 | 0·2 | 17·3 | 9·0 |
| 8·6 | | 8·7 | 19·1 | 9·0 |
| 9·2 | | 9·6 | 30·3 | |
| 9·8 | | 14·1 | 41·1 | |
| 8·8 | | 17·6 | 43·2 | 10·0 |
| 10·0 | | 18·2 | 10·0 | |
| 9·2 | | 20·2 | 7·6 | |
| 9·1 | | 46·7 | 8·4 | |
| 9·8 | | 57·2 | 3·6 | |
| 9·8 | 23 | 3·7 | 12·6 | |

### 7081—7140.

| mag. | 18h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·1 | 23 | 18·6 | 39·7 | |
| 10·0 | | 46·6 | 57·2 | |
| 8·8 | | 50·6 | 33·5 | 9·0 |
| 8·4 | | 56·2 | 19·1 | 8·5 |
| 9·8 | 24 | 4·7 | 16·5 | |
| 9·4 | | 7·1 | 51·0 | |
| 9·1 | | 17·1 | 42·1 | |
| 10·0 | | 18·1 | 21·5 | |
| 9·8 | | 18·2 | 24·6 | |
| 8·8 | | 19·6 | 56·2 | 9·0 |
| 9·4 | | 30·2 | 25·0 | |
| 9·0 | | 36·6 | 51·1 | 10·0 |
| 7·4 | | 42·2 | 28·2 | 7·8 G |
| 10·0 | | 50·1 | 12·2 | |
| 10·0 | | 55·2 | 7·1 | |
| 8·6 | | 58·2 | 9·7 | 8·5 |
| 10·0 | 25 | 7·6 | 31·0 | |
| 8·8 | | 42·3 | 4·2 | |
| 9·4 | 26 | 2·2 | 46·6 | |
| 8·4 | | 7·7 | 51·6 | 9·5 |
| 10·0 | | 9·2 | 41·7 | |
| 9·8 | | 10·9 | 50·6 | |
| 9·0 | | 19·7 | 34·8 | 9·5 |
| 10·0 | | 38·3 | 20·3 | |
| 9·4 | | 56·2 | 44·2 | |
| 8·8 | | 59·7 | 36·2 | 9·0 |
| 9·6 | 27 | 8·3 | 18·4 | |
| 9·2 | | 10·0 | 0·5 | |
| 9·0 | | 15·3 | 19·3 | G |
| 8·8 | | 17·8 | 18·7 | 9·0 G |
| 8·6 | | 17·8 | 18·0 | 9·0 G |
| 10·0 | | 20·3 | 9·3 | |
| 9·4 | | 29·0 | 0·1 | |
| 10·0 | | 30·3 | 7·2 | |
| 8·5 | | 42·2 | 42·7 | 9·2 |
| 10·0 | | 46·3 | 4·4 | |
| 9·4 | 28 | 11·8 | 6·8 | |
| 9·8 | | 18·2 | 38·0 | |
| 9·8 | | 22·9 | 44·6 | |
| 9·4 | 29 | 2·7 | 35·0 | |
| 10·0 | | 7·3 | 19·7 | |
| 10·0 | | 8·2 | 48·2 | |
| 9·6 | | 17·3 | 12·0 | |
| 9·6 | | 21·7 | 49·3 | |
| 9·3 | | 33·2 | 38·7 | |
| 9·2 | | 47·2 | 1·3 | |
| 9·6 | | 50·3 | 3·7 | |
| 10·0 | | 59·7 | 51·2 | |
| 8·8 | 30 | 1·8 | 24·9 | |
| 9·4 | | 20·3 | 25·4 | |
| 10·0 | | 32·7 | 45·9 | |
| 9·4 | | 48·2 | 53·0 | |
| 9·4 | | 53·3 | 1·3 | |
| 8·8 | 31 | 3·7 | 12·6 | |
| 9·6 | | 9·2 | 56·5 | |
| 9·8 | | 17·2 | 38·4 | |
| 9·6 | | 23·2 | 55·7 | |
| 9·4 | | 25·3 | 18·0 | |
| 9·4 | | 59·7 | 56·6 | |
| 10·0 | | 59·8 | 47·2 | |



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## 7141—7200.

| mag. | 18h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 32 | 4·8 | 53·0 | |
| 9·8 | | 22·4 | 22·7 | |
| 9·2 | | 28·8 | 40·7 | |
| 10·0 | | 46·4 | 7·3 | |
| 9·6 | | 54·4 | 2·4 | |
| 9·8 | 33 | 17·4 | 21·6 | |
| 9·4 | | 18·4 | 20·5 | |
| 9·8 | | 20·9 | 2·0 | |
| 9·3 | | 27·3 | 46·5 | |
| 9·4 | | 30·4 | 13·0 | |
| 9·3 | | 56·9 | 25·6 | |
| 10·0 | 34 | 1·8 | 37·3 | |
| 9·4 | | 4·4 | 14·3 | |
| 10·0 | | 13·3 | 39·0 | |
| 9·4 | | 35·3 | 36·1 | |
| 9·4 | | 39·6 | 22·5 | |
| 9·4 | | 56·8 | 39·4 | |
| 9·6 | 35 | 21·8 | 49·2 | |
| 9·4 | | 50·9 | 13·9 | |
| 9·4 | | 50·9 | 11·3 | |
| 7·3 | 36 | 8·8 | 30·1 | 7·2 GS |
| 9·8 | | 9·4 | 17·1 | |
| 9·4 | | 20·9 | 4·7 | |
| 9·8 | | 38·6 | 25·6 | |
| 9·4 | | 49·3 | 45·1 | |
| 9·0 | | 49·3 | 39·4 | |
| 9·4 | | 49·9 | 12·5 | |
| 9·4 | 37 | 7·8 | 48·6 | |
| 9·8 | | 15·8 | 50·5 | |
| 10·0 | | 21·9 | 5·0 | |
| 8·5 | | 40·9 | 23·6 | 7·8 G |
| 10·0 | | 43·3 | 32·0 | |
| 9·0 | 38 | 25·9 | 22·1 | 9·5 |
| 9·3 | | 28·4 | 10·2 | |
| 10·0 | | 48·8 | 40·9 | |
| 9·8 | | 50·4 | 13·5 | |
| 9·2 | | 50·9 | 23·4 | 8·5 |
| 9·2 | 39 | 25·8 | 31·6 | |
| 8·8 | | 28·1 | 39·4 | |
| 9·4 | 40 | 15·1 | 32·2 | |
| 9·3 | | 15·7 | 23·8 | |
| 10·0 | | 32·1 | 41·7 | |
| 9·6 | | 48·1 | 30·7 | |
| 8·8 | 41 | 13·7 | 20·1 | |
| 7·9 | | 28·7 | 21·8 | 8·2 G |
| 9·8 | 42 | 16·1 | 54·2 | |
| 9·8 | | 25·1 | 37·8 | |
| 10·0 | 43 | 12·7 | 7·9 | |
| 8·6 | | 13·1 | 46·1 | 8·0 G |
| 9·4 | | 39·7 | 21·1 | |
| 9·8 | | 49·1 | 32·2 | |
| 10·0 | 44 | 0·6 | 32·8 | |
| 9·4 | | 29·7 | 24·3 | |
| 9·2 | | 34·2 | 3·1 | |
| 10·0 | | 36·2 | 1·0 | |
| 9·3 | | 40·9 | 33·3 | 9·5 |
| 10·0 | | 49·2 | 2·1 | |
| 10·0 | | 52·1 | 58·0 | |
| 10·0 | | 53·7 | 14·6 | |
| 10·0 | 45 | 13·7 | 9·4 | |

## 7201—7260.

| mag. | 18h. m | s | −60° ′ | |
|---|---|---|---|---|
| 8·8 | 45 | 36·1 | 40·2 | 9·2 G |
| 9·8 | | 46·1 | 49·2 | |
| 10·0 | | 53·1 | 46·6 | |
| 10·0 | | 59·1 | 42·6 | |
| 8·8 | 46 | 7·7 | 26·0 | 9·c |
| 9·3 | | 9·6 | 58·0 | |
| 8·8 | | 50·7 | 18·5 | |
| 9·8 | | 54·6 | 33·6 | |
| 9·6 | 47 | 10·7 | 12·0 | |
| 9·4 | | 20·6 | 52·9 | |
| 9·6 | | 27·4 | 0·2 | |
| 9·6 | | 28·1 | 45·3 | |
| 7·1 | | 29·2 | 21·7 | 5·7 GSct |
| 10·0 | | 40·1 | 52·2 | |
| 9·8 | 48 | 1·9 | 56·7 | |
| 9·8 | | 42·1 | 32·9 | |
| 9·0 | | 43·7 | 25·0 | 8·2 |
| 7·6 | 49 | 2·7 | 22·0 | 7·2 GS |
| 8·8 | | 4·7 | 24·5 | 9·2 |
| 9·6 | | 17·5 | 10·7 | |
| 9·6 | | 17·9 | 44·9 | |
| 9·2 | | 24·0 | 4·4 | |
| 9·4 | | 27·9 | 2·0 | 8·5 |
| 10·0 | | 34·4 | 39·9 | |
| 9·3 | | 45·9 | 1·1 | |
| 9·2 | | 45·9 | 51·6 | |
| 9·6 | | 51·4 | 47·2 | |
| 10·0 | | 55·4 | 45·5 | |
| 9·2 | 50 | 4·2 | 23·2 | 9·2 |
| 9·8 | | 20·0 | 8·6 | |
| 9·6 | | 36·2 | 45·7 | |
| 9·6 | | 43·5 | 45·9 | |
| 9·6 | | 50·0 | 10·1 | |
| 10·0 | | 56·0 | 26·6 | |
| 9·4 | 51 | 16·7 | 45·9 | |
| 9·4 | | 29·5 | 17·0 | |
| 9·2 | | 39·0 | 27·0 | |
| 9·2 | | 58·4 | 40·7 | |
| 9·3 | 52 | 0·9 | 16·7 | |
| 9·8 | | 3·8 | 42·8 | |
| 10·0 | | 12·8 | 24·4 | |
| 10·0 | | 27·0 | 52·2 | |
| 9·4 | | 38·4 | 0·2 | |
| 9·4 | 53 | 16·5 | 25·2 | |
| 9·6 | | 22·5 | 28·6 | |
| 10·0 | | 29·9 | 4·1 | |
| 10·0 | | 38·3 | 53·5 | |
| 9·6 | | 40·8 | 32·2 | |
| 9·6 | | 50·3 | 44·5 | |
| 9·4 | 54 | 2·3 | 33·2 | |
| 8·8 | | 20·8 | 53·7 | |
| 10·0 | | 41·3 | 39·9 | |
| 9·2 | | 52·7 | 17·4 | 8·0 |
| 9·8 | 55 | 11·0 | 47·6 | |
| 9·6 | | 11·7 | 47·9 | |
| 9·8 | | 28·7 | 16·1 | |
| 9·4 | | 33·0 | 16·2 | |
| 9·1 | 56 | 36·7 | 19·9 | |
| 8·8 | | 36·7 | 5·5 | 9·2 |
| 9·0 | | 47·2 | 48·5 | |

## 7261—7320.

| mag. | 18h.–19h. m | s | −60° ′ | |
|---|---|---|---|---|
| 9·8 | 56 | 59·8 | 10·6 | |
| 9·8 | 57 | 12·5 | 58·0 | |
| 9·8 | | 16·8 | 9·2 | |
| 9·6 | | 19·9 | 10·7 | |
| 9·8 | | 21·9 | 21·0 | |
| 8·3 | | 31·5 | 40·8 | 8·5 |
| 9·2 | 58 | 11·5 | 34·2 | 9·5 |
| 9·2 | | 26·5 | 5·6 | 9·0 |
| 7·4 | 59 | 34·5 | 14·4 | 7·5 GS |
| 9·2 | | 45·5 | 10·2 | |
| neb. | | 51·0 | 10·7 | GS |
| 8·3 | | 52·0 | 27·8 | 8·0 |
| 9·2 | 0 | 39·5 | 16·8 | |
| 9·6 | 1 | 0·0 | 56·7 | |
| 9·6 | | 6·5 | 53·2 | |
| 9·4 | 2 | 58·5 | 21·8 | |
| 8·6 | 3 | 7·5 | 8·1 | |
| 9·4 | 4 | 27·5 | 56·5 | |
| 9·2 | 5 | 2·5 | 59·6 | |
| 9·6 | 6 | 2·5 | 31·4 | |
| 9·6 | | 22·5 | 59·7 | |
| 9·0 | 8 | 50·5 | 14·5 | 10·0 |
| 9·0 | | 51·0 | 24·3 | |
| 9·0 | 9 | 23·5 | 59·9 | |
| 9·6 | 11 | 1·0 | 56·1 | |
| 9·4 | 12 | 30·5 | 18·0 | |
| 9·2 | | 39·0 | 30·0 | |
| 9·4 | | 59·0 | 12·4 | 9·0 |
| 9·6 | 13 | 30·5 | 24·6 | |
| 9·6 | | 50·0 | 14·6 | |
| 8·8 | 14 | 52·5 | 40·0 | 9·0 |
| 9·0 | | 58·0 | 56·0 | 9·0 |
| 9·0 | 15 | 32·0 | 45·5 | 9·5 |
| 7·8 | 16 | 44·0 | 9·2 | 8·5 G |
| 9·2 | 17 | 7·5 | 31·0 | 9·5 |
| 9·2 | | 40·5 | 34·0 | 9·5 |
| 6·9 | 21 | 13·5 | 31·5 | 7·0 GSct |
| 9·6 | | 57·5 | 33·9 | |
| 9·4 | 23 | 25·0 | 23·3 | 8·8 G |
| 9·0 | 25 | 25·5 | 44·3 | |
| 9·6 | | 53·5 | 33·5 | |
| 9·6 | 27 | 9·0 | 28·6 | 9·5 |
| 8·7 | | 14·5 | 41·1 | 8·5 |
| 9·0 | 28 | 6·5 | 12·5 | |
| 9·4 | | 27·0 | 11·0 | |
| 8·6 | | 29·5 | 8·1 | |
| 9·4 | 29 | 20·2 | 7·6 | |
| 9·8 | | 31·3 | 43·9 | |
| 9·9 | | 43·0 | 23·6 | |
| 10·0 | | 50·0 | 23·3 | |
| 9·6 | 30 | 16·0 | 34·7 | |
| 10·0 | | 22·0 | 34·6 | |
| 9·9 | | 24·5 | 13·7 | |
| 10·0 | | 30·5 | 59·9 | |
| 9·6 | 31 | 42·0 | 6·2 | |
| 9·8 | 32 | 10·0 | 20·0 | |
| 10·0 | 33 | 12·0 | 20·9 | |
| 10·0 | | 16·0 | 14·2 | |
| 8·8 | | 26·0 | 44·5 | |
| 10·0 | 34 | 18·0 | 58·0 | |

## 7321—7380.

| mag. | 19h. m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 34 | 29·0 | 47·3 | |
| 9·2 | 35 | 0·5 | 59·9 | |
| 9·4 | | 3·5 | 35·0 | |
| 9·1 | | 18·0 | 24·8 | |
| 10·0 | | 19·0 | 52·8 | |
| 10·0 | | 38·0 | 5·5 | |
| 9·8 | 37 | 1·0 | 57·1 | |
| 9·9 | | 22·0 | 19·0 | |
| 10·0 | 38 | 3·0 | 46·1 | |
| 9·9 | | 45·0 | 27·0 | |
| 10·0 | | 59·0 | 12·8 | |
| 9·1 | | 59·5 | 43·0 | 8·5 G |
| 9·6 | 39 | 6·0 | 53·9 | |
| 8·8 | | 31·5 | 42·5 | 8·5 G |
| 8·4 | | 35·0 | 1·4 | |
| 9·5 | 40 | 46·0 | 31·0 | |
| 9·9 | 41 | 4·0 | 14·0 | |
| 9·8 | | 12·5 | 57·0 | 9·5 |
| 9·2 | | 28·0 | 28·6 | 9·5 |
| 8·8 | | 56·0 | 26·2 | 9·5 |
| 9·0 | 42 | 28·0 | 34·6 | |
| 10·0 | 43 | 26·5 | 56·3 | |
| 9·9 | 44 | 10·0 | 44·1 | |
| 8·8 | | 28·0 | 11·1 | |
| 9·4 | 45 | 40·0 | 50·8 | |
| 9·9 | | 54·0 | 59·8 | |
| 10·0 | 46 | 18·0 | 38·7 | |
| 8·8 | 47 | 12·5 | 55·2 | |
| 9·5 | | 42·0 | 19·0 | |
| 9·5 | 48 | 57·5 | 30·7 | |
| 8·3 | 49 | 15·0 | 21·1 | 8·0 G |
| 10·0 | 50 | 22·4 | 9·8 | |
| 9·8 | | 24·0 | 31·9 | |
| 9·9 | | 28·5 | 42·0 | |
| 8·8 | | 51·5 | 24·5 | 8·5 |
| 9·9 | 51 | 2·4 | 42·6 | |
| 9·0 | | 5·0 | 33·4 | 9·0 |
| 9·3 | | 29·5 | 2·8 | |
| 9·4 | 52 | 1·0 | 30·7 | |
| 10·0 | | 34·5 | 58·5 | |
| 9·6 | 53 | 10·5 | 54·8 | |
| 9·6 | 54 | 22·5 | 35·9 | |
| 10·0 | | 42·5 | 18·8 | |
| 9·1 | 55 | 18·5 | 25·8 | |
| 9·6 | | 45·5 | 55·8 | |
| 10·0 | | 54·5 | 10·9 | |
| 8·4 | 56 | 9·0 | 42·8 | 8·5 |
| 9·1 | | 9·5 | 12·9 | |
| 10·0 | | 31·5 | 7·7 | |
| 9·9 | | 48·5 | 50·3 | |
| 8·8 | 57 | 23·5 | 41·9 | 9·0 |
| 9·9 | | 53·0 | 31·6 | |
| 9·4 | 58 | 14·0 | 9·5 | 9·5 |
| 8·4 | | 14·5 | 22·6 | 9·2 |
| 9·2 | | 16·5 | 10·7 | 9·5 |
| 9·9 | | 36·5 | 40·8 | |
| 9·6 | | 37·0 | 30·9 | |
| 9·9 | | 51·5 | 57·2 | |
| 9·5 | | 54·0 | 3·8 | |
| 9·9 | | 56·5 | 58·8 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 30 | 135 | 1·1 |
| | 40 | 135 | 1·5 |
| | 50 | 134 | 1·8 |
| 19 | 0 | 134 | 2·2 |
| | 10 | 133 | 2·5 |
| | 20 | 132 | 2·9 |
| | 30 | 131 | 3·2 |
| | 40 | 130 | 3·5 |
| | 50 | 129 | 3·9 |
| 20 | 0 | 128 | 4·2 |



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| 25 prec. | | α + | δ + |
|---|---|---|---|
| h | m | s | |
| 19 | 50 | 129 | 3·9 |
| 20 | 0 | 128 | 4·2 |
| | 10 | 127 | 4·5 |
| | 20 | 125 | 4·8 |
| | 30 | 124 | 5·1 |
| | 40 | 122 | 5·4 |
| | 50 | 120 | 5·6 |
| 21 | 0 | 119 | 5·9 |
| | 10 | 117 | 6·2 |
| | 20 | 115 | 6·4 |
| | 30 | 113 | 6·6 |
| | 40 | 111 | 6·8 |
| | 50 | 109 | 7·0 |
| 22 | 0 | 106 | 7·2 |
| | 10 | 104 | 7·4 |
| | 20 | 102 | 7·6 |
| | 30 | 99 | 7·7 |
| | 40 | 97 | 7·9 |
| | 50 | 95 | 8·0 |
| 23 | 0 | 92 | 8·1 |

## 7381—7440.

| mag. | $19^{h}$—$20^{h}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 10·0 | 59 | 50·0 | 26·0 | |
| 9·9 | 1 | 5·5 | 12·3 | |
| 9·8 | | 7·0 | 49·9 | |
| 9·4 | | 12·5 | 18·0 | 8·5 G |
| 9·9 | | 32·4 | 13·5 | |
| 10·0 | | 42·0 | 11·9 | |
| 8·4 | 2 | 14·2 | 37·2 | 8·8 G |
| 9·1 | 4 | 42·9 | 58·0 | 9·0 G |
| 9·9 | 5 | 13·5 | 18·3 | |
| 9·2 | 6 | 6·7 | 4·3 | |
| 9·4 | | 14·5 | 3·6 | |
| 8·6 | | 30·0 | 1·2 | 8·0 G |
| 9·6 | 7 | 50·5 | 52·4 | |
| 9·7 | 10 | 7·0 | 22·1 | |
| 9·4 | | 53·5 | 39·9 | |
| 9·3 | 12 | 8·0 | 19·5 | |
| 9·6 | 14 | 13·5 | 21·5 | |
| 9·7 | | 20·0 | 30·2 | |
| 9·6 | | 22·0 | 36·8 | |
| 8·5 | | 26·0 | 21·7 | 8·5 G |
| 9·7 | 15 | 1·0 | 2·0 | |
| 9·7 | | 49·0 | 38·2 | |
| 9·6 | 16 | 1·0 | 37·7 | |
| 9·0 | | 1·5 | 25·2 | 9·0 G |
| 9·6 | 17 | 33·5 | 52·7 | |
| 9·2 | 18 | 29·5 | 24·1 | |
| 9·6 | | 31·5 | 15·1 | |
| 9·6 | 21 | 41·0 | 27·4 | 9·0 |
| 9·0 | 22 | 32·5 | 59·9 | |
| 8·6 | 25 | 53·0 | 6·1 | 7·5 G |
| 9·6 | | 55·0 | 20·7 | |
| 8·8 | 26 | 14·0 | 24·1 | 9·0 |
| 9·3 | | 29·5 | 17·1 | |
| 9·4 | | 49·5 | 6·5 | 9·0 G |
| 8·9 | 27 | 4·0 | 16·0 | 8·5 |
| 9·6 | 28 | 18·5 | 21·1 | |
| 9·4 | 29 | 11·0 | 7·0 | |
| 9·3 | | 22·0 | 3·1 | |
| 6·5 | | 41·0 | 58·0 | 5·5 GSct |
| 9·4 | 30 | 33·0 | 52·7 | |
| 8·8 | 34 | 0·5 | 15·2 | 9·5 |
| 8·7 | 35 | 13·7 | 2·8 | 8·5 G |
| 9·2 | | 39·0 | 59·3 | |
| 8·4 | 36 | 24·0 | 43·8 | 8·5 G |
| 9·1 | 39 | 28·5 | 28·5 | |
| 9·4 | 41 | 18·0 | 52·2 | |
| 9·4 | 42 | 1·5 | 51·8 | |
| 9·4 | 43 | 7·0 | 46·6 | |
| 9·4 | | 19·0 | 35·3 | |
| 9·4 | | 22·6 | 58·4 | |
| 9·2 | | 40·7 | 8·1 | 9·5 G |
| 9·8 | | 44·0 | 33·5 | |
| 8·6 | | 45·7 | 5·2 | 9·0 G |
| 7·5 | | 46·0 | 10·6 | 7·0 GS |
| 8·6 | 44 | 0·0 | 9·0 | 8·0 G |
| 8·6 | | 47·3 | 40·7 | 8·2 G |
| 9·3 | 45 | 31·5 | 59·7 | 9·0 |
| 9·4 | | 52·5 | 54·8 | |
| 9·5 | | 55·0 | 3·6 | |
| 9·2 | 46 | 20·0 | 44·4 | |

## 7441—7500.

| mag. | $20^{h}$—$21^{h}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·5 | 47 | 1·0 | 56·3 | |
| 9·4 | | 16·5 | 52·1 | |
| 9·4 | 48 | 39·5 | 28·6 | |
| 9·2 | 53 | 18·5 | 52·1 | |
| 8·9 | 55 | 32·0 | 53·8 | 8·5 G |
| 9·4 | | 51·5 | 34·7 | |
| 9·8 | 56 | 12·0 | 11·5 | |
| 9·4 | | 20·0 | 13·2 | |
| 9·4 | 57 | 10·0 | 19·9 | |
| 8·6 | | 12·0 | 2·1 | |
| 7·5 | | 36·5 | 29·3 | 7·0 GSct |
| 7·7 | 2 | 50·0 | 33·2 | 8·0 GS |
| 9·7 | 3 | 59·0 | 56·1 | |
| 9·3 | 4 | 4·0 | 51·7 | 9·0 |
| 8·6 | | 48·0 | 13·2 | 8·0 GS |
| 9·8 | 5 | 29·0 | 50·1 | |
| 9·2 | 6 | 12·3 | 2·9 | |
| 9·2 | 8 | 32·0 | 17·5 | |
| 9·4 | | 57·0 | 55·9 | |
| 9·6 | 9 | 16·5 | 43·9 | |
| 9·5 | | 19·5 | 44·0 | |
| 9·8 | | 21·0 | 22·1 | |
| 9·4 | | 23·0 | 58·3 | |
| 8·8 | 10 | 21·0 | 48·9 | |
| 8·8 | | 22·5 | 49·2 | |
| 8·9 | 11 | 15·0 | 19·0 | 9·5 |
| 9·8 | 12 | 36·0 | 44·6 | |
| 8·3 | | 49·0 | 23·4 | 8·0 GS |
| 9·0 | 13 | 19·5 | 46·7 | 9·0 G |
| 9·8 | 14 | 3·5 | 36·9 | |
| 10·1 | 15 | 43·5 | 14·0 | |
| 10·0 | 16 | 0·0 | 51·2 | |
| 9·2 | | 27·0 | 10·3 | 9·0 |
| 10·1 | 17 | 2·0 | 40·0 | |
| 10·1 | | 3·5 | 21·7 | |
| 9·8 | | 50·5 | 35·1 | |
| 10·0 | 18 | 2·5 | 26·7 | |
| 9·4 | | 16·3 | 14·8 | |
| 9·5 | 19 | 11·7 | 45·7 | |
| 9·5 | 20 | 47·3 | 14·2 | |
| 7·8 | | 55·8 | 45·0 | 8·0 |
| 9·6 | 21 | 6·0 | 47·0 | |
| 9·4 | 22 | 29·3 | 16·4 | |
| 8·8 | | 52·3 | 8·4 | |
| 7·6 | 23 | 36·8 | 14·9 | 8·0 GSctr |
| 10·0 | | 54·0 | 57·3 | |
| 9·6 | 24 | 30·0 | 3·0 | |
| 8·0 | 26 | 22·0 | 14·8 | 8·0 GS |
| 9·8 | 27 | 19·5 | 1·0 | |
| 10·0 | | 24·5 | 59·9 | |
| 9·6 | 28 | 30·5 | 51·0 | |
| 9·2 | | 57·0 | 0·0 | |
| 10·0 | 29 | 18·0 | 38·8 | |
| 9·6 | | 20·0 | 4·0 | |
| 9·4 | 30 | 51·5 | 35·1 | |
| 9·8 | 31 | 3·5 | 53·3 | |
| 10·1 | | 40·5 | 6·5 | |
| 10·0 | 32 | 50·0 | 42·0 | |
| 8·6 | 33 | 15·0 | 33·4 | 9·8 |
| 10·0 | | 19·5 | 44·8 | |

## 7501—7560.

| mag. | $21^{h}$—$22^{h}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 8·8 | 33 | 34·0 | 34·0 | 9·8 |
| 10·1 | 34 | 56·5 | 11·0 | |
| 9·4 | 35 | 8·5 | 47·0 | |
| 8·9 | 36 | 42·0 | 21·8 | |
| 8·8 | 39 | 18·0 | 7·3 | 8·5 |
| 8·4 | 40 | 11·0 | 54·8 | |
| 10·0 | | 21·0 | 6·4 | |
| 7·8 | | 43·5 | 38·0 | 8·2 G |
| 8·8 | | 44·0 | 26·6 | 8·0 G |
| 8·4 | 41 | 4·0 | 36·0 | 8·8 G |
| 8·0 | | 50·5 | 13·4 | 7·5 G |
| 8·4 | 42 | 33·3 | 0·3 | 8·0 G |
| 10·1 | | 52·5 | 17·0 | |
| 9·6 | 43 | 15·5 | 3·1 | |
| 10·0 | | 49·5 | 56·3 | |
| 8·8 | | 58·5 | 11·8 | 9·0 G |
| 10·1 | 44 | 12·0 | 28·4 | |
| 8·2 | | 18·5 | 10·1 | 8·5 G |
| 10·1 | | 54·5 | 5·4 | |
| 10·1 | 46 | 13·0 | 58·8 | |
| 10·1 | | 23·5 | 50·4 | |
| 9·2 | | 46·0 | 7·5 | |
| 9·6 | | 58·0 | 31·7 | |
| 8·0 | 47 | 8·0 | 49·1 | 8·5 G |
| 8·0 | 48 | 3·5 | 3·8 | 7·5 G |
| 10·0 | | 57·2 | 22·0 | |
| 8·8 | 49 | 33·5 | 29·4 | 8·5 |
| 10·1 | 50 | 28·0 | 20·6 | |
| 8·0 | | 54·5 | 10·0 | 8·0 G |
| 9·5 | | 57·0 | 17·0 | |
| 9·8 | 51 | 7·0 | 16·0 | |
| 10·1 | | 20·3 | 46·6 | |
| 10·0 | | 53·5 | 59·3 | |
| 10·0* | 52 | 7·5 | 59·4 | |
| 8·7 | 53 | 11·8 | 19·2 | 8·8 |
| 10·0 | | 17·0 | 10·4 | |
| 7·8 | 54 | 37·5 | 46·1 | 8·5 |
| 9·8 | 55 | 32·0 | 41·9 | |
| 9·6 | 56 | 5·5 | 36·1 | |
| 9·8 | | 59·0 | 52·0 | |
| 7·0 | 57 | 3·2 | 14·4 | 6·0 GSct |
| 10·0 | 58 | 39·5 | 20·5 | |
| 10·0 | 59 | 8·5 | 28·9 | |
| 9·4 | | 27·0 | 48·2 | |
| 8·5 | | 30·0 | 12·9 | 9·0 |
| 8·0 | | 42·5 | 6·0 | 8·5 |
| 9·6 | 1 | 24·0 | 21·8 | |
| 8·8 | | 38·5 | 21·5 | 9·0 |
| 9·6 | 2 | 20·0 | 6·4 | |
| 9·6 | | 49·0 | 49·8 | |
| 7·1 | 4 | 27·0 | 18·4 | GS |
| 7·9 | 5 | 29·0 | 6·8 | |
| 9·3 | | 36·5 | 11·1 | |
| 9·0 | | 46·0 | 42·0 | |
| 9·8 | 8 | 33·0 | 35·1 | |
| 9·0 | 9 | 15·5 | 54·9 | 10·0 |
| 10·0 | | 15·6 | 58·9 | |
| 10·0 | | 20·0 | 55·2 | |
| 9·3 | | 26·0 | 7·3 | 8·5 |
| 10·0 | | 49·0 | 27·4 | G |

## 7561—7620.

| mag. | $22^{h}$ m | s | −60° ′ | |
|---|---|---|---|---|
| 4·4 | 9 | 54·5 | 52·9 | GScgtrλ |
| 9·2 | 10 | 43·5 | 44·4 | G |
| 9·4 | 12 | 21·0 | 50·9 | |
| 8·5 | 13 | 13·0 | 34·5 | Gk |
| 9·6 | 16 | 9·0 | 43·3 | |
| 9·2 | | 27·0 | 24·7 | |
| 7·6 | 20 | 33·0 | 41·4 | 7·0 GScg |
| 10·0 | 21 | 24·5 | 54·7 | |
| 10·0 | 22 | 9·5 | 41·5 | |
| 9·8 | 23 | 21·5 | 48·0 | |
| 10·0 | | 23·0 | 42·0 | |
| 10·0 | 24 | 42·0 | 11·6 | |
| 9·0 | | 56·5 | 39·3 | 8·0 G |
| 7·9 | 25 | 7·0 | 38·1 | 7·2 G |
| 7·6 | | 44·0 | 47·1 | 8·2 G |
| 9·8 | 26 | 40·2 | 19·1 | |
| 7·8 | 27 | 44·2 | 30·3 | 8·0 G |
| 9·4 | 28 | 15·0 | 6·1 | |
| 7·8 | | 56·5 | 12·5 | 8·0 |
| 7·9 | 29 | 38·0 | 44·5 | 8·2 G |
| 9·3 | | 53·0 | 42·7 | |
| 9·0 | 30 | 16·0 | 49·5 | |
| 7·8 | | 17·8 | 38·0 | 7·8 |
| 9·4 | | 43·5 | 36·1 | |
| 8·5 | | 51·2 | 43·1 | |
| 8·8 | 31 | 14·0 | 31·1 | 9·2 |
| 9·2 | | 23·0 | 39·6 | |
| 9·4 | | 46·8 | 37·8 | |
| 8·8 | 32 | 14·0 | 45·6 | |
| 9·4 | 33 | 19·0 | 18·1 | |
| 8·8 | 35 | 5·2 | 57·4 | |
| 9·4 | | 24·5 | 7·0 | |
| 8·8 | | 42·5 | 48·7 | |
| 8·2 | 36 | 35·5 | 46·3 | GS |
| 8·8 | | 39·5 | 46·2 | |
| 9·4 | 37 | 50·8 | 42·1 | |
| 9·0 | 38 | 2·5 | 51·0 | |
| 9·4 | | 37·5 | 14·7 | |
| 9·2 | | 57·0 | 1·3 | |
| 8·0 | 39 | 3·5 | 44·1 | 7·5 G |
| 9·4 | 40 | 29·0 | 21·1 | |
| 8·9 | | 38·0 | 22·1 | |
| 8·9 | 42 | 0·5 | 41·1 | |
| 8·8 | | 17·5 | 8·1 | 9·0 |
| 7·4 | | 32·5 | 11·1 | 7·5 GS |
| 8·6 | | 40·5 | 5·1 | 9·0 |
| 9·4 | | 53·0 | 26·9 | |
| 9·2 | 43 | 13·0 | 12·0 | |
| 8·2 | | 32·5 | 1·2 | 7·5 G |
| 7·2 | | 51·5 | 32·5 | 6·5 GSgt |
| 8·8 | 44 | 14·0 | 49·1 | |
| 9·0 | | 27·5 | 42·1 | |
| 9·4 | | 49·5 | 29·0 | |
| 9·2 | 45 | 2·5 | 17·7 | |
| 9·2 | 46 | 7·5 | 28·5 | |
| 9·3 | | 22·5 | 11·3 | |
| 9·4 | 47 | 42·8 | 39·6 | |
| 9·2 | 48 | 30·5 | 11·3 | |
| 8·4 | 50 | 36·0 | 4·6 | |
| 8·9 | 51 | 25·0 | 28·1 | |



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**7621—7645.**

| mag. | $22^h$–$23^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 7·7 | 51 | 31·0 | 49·5 | 7·5 GS |
| 8·6 | 53 | 9·0 | 5·3 | |
| 7·8 | 54 | 21·0 | 8·1 | 9·0 |
| 9·4 | | 22·0 | 47·4 | |
| 9·4 | 55 | 1·8 | 7·2 | |
| 9·0 | | 11·5 | 31·1 | |
| 8·2 | 56 | 12·5 | 11·2 | 8·5 |
| 9·4 | | 28·8 | 47·3 | |
| 8·0 | 58 | 1·5 | 45·1 | |
| 8·7 | 59 | 43·5 | 45·7 | 9·5 |
| 9·3 | | 59·5 | 3·3 | |
| 7·7 | 0 | 1·0 | 18·4 | 7·8 G |
| 9·4 | | 22·8 | 18·0 | |
| 8·9 | | 34·5 | 4·1 | |
| 7·3 | 1 | 2·5 | 24·5 | 7·0 GSg |
| 9·4 | | 37·0 | 37·0 | |
| 9·3 | 2 | 0·5 | 46·4 | |
| 9·3 | | 41·0 | 52·9 | |
| 7·7 | | 44·3 | 2·9 | 7·5 G |
| 9·4 | 3 | 4·0 | 17·5 | |
| 9·4 | 6 | 1·7 | 18·8 | |
| 8·2 | | 2·5 | 5·1 | |
| 9·6 | | 20·0 | 50·0 | |
| 8·0 | 8 | 5·7 | 22·4 | 7·0 GScg |
| 7·6 | | 47·0 | 27·7 | 7·5 G |

**7646—7669.**

| mag. | $23^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·3 | 9 | 16·5 | 57·1 | |
| 9·6 | | 57·5 | 24·1 | |
| 8·3 | 11 | 13·0 | 41·0 | 7·5 GS |
| 9·6 | 12 | 8·3 | 41·9 | |
| 8·8 | 14 | 22·0 | 46·0 | |
| 8·8 | 15 | 11·5 | 39·5 | 8·5 |
| 8·8 | | 19·7 | 2·1 | |
| 9·6 | | 23·5 | 1·4 | |
| 7·6 | | 39·5 | 44·4 | GSr |
| 9·1 | | 57·5 | 35·3 | |
| 9·6 | 16 | 12·0 | 4·8 | |
| 8·8 | | 46·5 | 12·5 | 8·5 G |
| 8·6 | 17 | 31·5 | 19·2 | 8·8 G |
| 9·1 | 19 | 23·3 | 58·4 | 8·8 G |
| 7·6 | | 40·0 | 19·7 | 7·8 G |
| 8·8 | 20 | 19·5 | 21·3 | |
| 9·0 | | 53·5 | 26·9 | |
| 8·0 | 21 | 41·5 | 7·6 | 7·2 GS |
| 9·3 | | 55·0 | 14·6 | |
| 8·3 | 23 | 58·5 | 46·9 | 8·8 G |
| 9·1 | 25 | 56·0 | 18·6 | |
| 8·3 | 26 | 30·5 | 36·5 | 8·8 G |
| 8·8 | | 52·0 | 11·0 | |
| 8·8 | 30 | 20·5 | 11·0 | |

**7670—7693.**

| mag. | $23^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 8·3 | 30 | 57·0 | 28·0 | 8·0 G |
| 8·8 | 32 | 13·5 | 59·4 | |
| 8·8 | | 41·0 | 25·7 | |
| 9·6 | 33 | 19·5 | 52·8 | |
| 9·6 | 34 | 1·5 | 4·3 | |
| 9·6 | | 12·5 | 30·6 | |
| 9·6 | 35 | 16·0 | 37·3 | |
| 8·4 | 36 | 13·0 | 22·4 | 9·5 |
| 8·4 | | 33·0 | 30·4 | 9·0 |
| 8·0 | | 40·5 | 28·2 | 8·5 |
| 8·8 | 38 | 4·5 | 6·7 | G |
| 9·6 | 39 | 20·5 | 22·4 | |
| 8·7 | 40 | 4·5 | 37·7 | 9·0 |
| 8·8 | | 25·5 | 29·8 | 9·0 |
| 9·6 | | 58·5 | 31·6 | 9·2 G |
| 9·5 | 41 | 10·0 | 27·8 | |
| 8·0 | 42 | 39·5 | 46·2 | 8·0 G |
| 9·3 | | 44·3 | 43·7 | 9·2 |
| 9·1 | 43 | 17·5 | 50·5 | 9·0 G |
| 9·1 | 44 | 5·5 | 14·0 | |
| 9·6 | | 12·0 | 18·2 | |
| 9·6 | 45 | 52·5 | 26·8 | |
| 9·5 | 47 | 19·0 | 8·8 | |
| 9·7 | | 21·0 | 1·1 | |

**7694—7717.**

| mag. | $23^h$ m | s | −60° ′ | |
|---|---|---|---|---|
| 9·6 | 47 | 35·5 | 56·8 | |
| 7·0 | | 36·5 | 14·3 | 7·0 GSg |
| 9·2 | 48 | 5·5 | 42·1 | 9·0 |
| 9·1 | | 6·5 | 33·6 | 9·2 |
| 8·7 | | 32·5 | 39·8 | 8·8 |
| 9·6 | 49 | 57·0 | 53·8 | |
| 9·7 | 50 | 1·5 | 18·4 | |
| 9·0 | | 4·5 | 13·8 | 8·5 |
| 9·7 | | 12·7 | 11·7 | |
| 9·6 | | 30·7 | 37·8 | |
| 9·7 | 51 | 14·5 | 45·0 | |
| 9·1 | | 52·5 | 54·7 | |
| 9·6 | 52 | 1·0 | 11·8 | |
| 8·7 | | 33·5 | 13·5 | |
| 9·5 | 54 | 49·5 | 31·5 | |
| 9·6 | 55 | 3·7 | 37·6 | |
| 9·5 | | 28·0 | 49·8 | |
| 9·8 | 57 | 32·7 | 35·4 | |
| 9·6 | | 43·5 | 10·8 | |
| 9·0 | | 44·0 | 44·9 | |
| 8·1 | | 54·0 | 0·8 | 9·0 |
| 9·1 | 58 | 40·5 | 24·7 | 9·0 |
| 8·7 | | 41·5 | 31·4 | 8·5 |
| 9·0 | | 59·0 | 30·6 | 8·5 G |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 22 | 40 | 97 | 7·9 |
| | 50 | 95 | 8·0 |
| 23 | 0 | 92 | 8·1 |
| | 10 | 90 | 8·2 |
| | 20 | 87 | 8·2 |
| | 30 | 85 | 8·3 |
| | 40 | 82 | 8·3 |
| | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

# ZONE—61°

**1—15.**

| mag. | $0^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 8·1 | 1 | 15·5 | 20·1 | 8·5 |
| 9·5 | 3 | 4·0 | 4·9 | |
| 9·6 | | 26·7 | 15·6 | |
| 9·2 | | 31·5 | 51·9 | |
| 9·2 | 7 | 10·0 | 5·9 | |
| 9·7 | 8 | 20·2 | 1·4 | |
| 9·5 | 9 | 33·0 | 1·8 | |
| 9·5 | | 50·5 | 27·4 | |
| 9·5 | 10 | 5·5 | 29·4 | |
| 8·0 | 11 | 7·0 | 57·1 | 8·5 G |
| 7·4 | | 35·0 | 29·6 | 7·2 G |
| 8·7 | 12 | 41·0 | 31·5 | 8·0 G |
| 7·6 | 13 | 45·0 | 36·4 | 8·5 G |
| 9·7 | | 48·0 | 33·4 | |
| 9·6 | 14 | 49·5 | 46·8 | |

**16—30.**

| mag. | $0^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·7 | 15 | 30·0 | 47·0 | |
| 9·6 | | 50·0 | 2·9 | |
| 9·7 | 16 | 5·0 | 11·0 | |
| 8·3 | | 11·1 | 59·5 | 8·0 G |
| 9·2 | | 30·2 | 19·0 | |
| 7·1 | | 34·2 | 43·7 | 7·5 GScr |
| 9·5 | 20 | 2·3 | 13·9 | |
| 9·2 | 21 | 31·5 | 46·5 | |
| 9·4 | 22 | 14·8 | 43·0 | |
| 9·0 | 23 | 0·0 | 28·0 | 9·0 |
| 9·1 | 26 | 5·0 | 38·0 | 9·5 |
| 8·8 | | 30·0 | 32·0 | 9·0 |
| 9·2 | | 42·5 | 21·8 | 9·0 |
| 7·8 | 27 | 49·0 | 50·2 | 8·0 GSg |
| 9·0 | 30 | 51·5 | 44·1 | 9·0 S |

**31—45.**

| mag. | $0^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 32 | 19·0 | 20·2 | |
| 8·8 | 34 | 36·5 | 45·9 | 9·0 |
| 9·5 | 36 | 14·0 | 46·8 | |
| 8·8 | 38 | 7·5 | 22·1 | 9·5 |
| 9·4 | 40 | 0·5 | 3·9 | |
| 9·4 | | 28·5 | 25·2 | |
| 7·6 | 43 | 28·5 | 3·2 | 8·0 G |
| 8·8 | | 41·0 | 43·9 | 9·0 G |
| 9·5 | 44 | 19·0 | 49·7 | 9·5 |
| 8·8 | 45 | 13·0 | 10·2 | 9·0 |
| 8·8 | | 14·0 | 2·7 | 9·0 |
| 9·0 | | 35·5 | 12·1 | 9·0 |
| 9·6 | 46 | 5·0 | 7·3 | 9·0 G |
| 7·8 | 47 | 43·0 | 45·2 | *8·1* GSg |
| 9·5 | 48 | 21·0 | 56·7 | |

**46—60.**

| mag. | $0^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·5 | 49 | 18·5 | 51·1 | |
| 9·1 | | 34·5 | 25·1 | |
| 8·8 | 51 | 30·0 | 14·9 | 9·0 |
| 9·6 | 52 | 0·5 | 31·0 | |
| 6·1 | 53 | 10·0 | 22·3 | 6·5 GSc |
| 8·4 | | 24·0 | 26·7 | 9·0 G |
| 10·2 | | 55·0 | 7·0 | |
| 9·6 | | 55·5 | 55·1 | |
| 10·2 | 54 | 40·0 | 33·1 | |
| 9·2 | | 40·0 | 59·7 | |
| 10·2 | 55 | 23·0 | 22·5 | |
| 10·2 | | 33·5 | 56·0 | |
| 7·1 | 56 | 9·8 | 32·2 | 7·0 GSr |
| 9·0 | | 15·5 | 58·3 | |
| 10·2 | | 32·5 | 1·5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 71 | 8·3 |
| | 30 | 69 | 8·3 |
| | 40 | 66 | 8·2 |
| | 50 | 63 | 8·2 |
| 1 | 0 | 61 | 8·1 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 50 | 63 | 8·2 |
| 1 | 0 | 61 | 8·1 |
| | 10 | 58 | 8·0 |
| | 20 | 56 | 7·9 |
| | 30 | 53 | 7·7 |
| | 40 | 51 | 7·6 |
| | 50 | 48 | 7·4 |
| 2 | 0 | 46 | 7·2 |
| | 10 | 44 | 7·0 |
| | 20 | 41 | 6·8 |
| | 30 | 39 | 6·6 |
| | 40 | 37 | 6·4 |
| | 50 | 35 | 6·2 |
| 3 | 0 | 33 | 5·9 |
| | 10 | 31 | 5·6 |
| | 20 | 30 | 5·4 |
| | 30 | 28 | 5·1 |
| | 40 | 26 | 4·8 |
| | 50 | 25 | 4·5 |
| 4 | 0 | 23 | 4·2 |
| | 10 | 22 | 3·9 |

## 61—120.

| mag. | 0h.–1h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8·6 | 56 | 33·5 | 30·3 | 9·5 |
| 10·4 | 58 | 9·0 | 55·0 | |
| 9·4 | | 41·0 | 8·3 | |
| 9·8 | 59 | 24·0 | 8·8 | |
| 9·9 | 0 | 3·0 | 29·9 | |
| 10·0 | | 11·0 | 30·9 | |
| 10·0 | | 14·0 | 4·7 | |
| 9·0 | | 36·5 | 23·9 | 9·5 |
| 10·2 | 1 | 24·5 | 28·1 | |
| 8·5 | | 26·0 | 49·3 | 8·5 |
| 9·6 | | 54·0 | 35·5 | |
| 10·2 | 2 | 38·5 | 16·1 | |
| 9·6 | 3 | 20·5 | 35·7 | |
| 9·0 | | 48·0 | 17·2 | 9·5 |
| 10·2 | 4 | 25·0 | 42·8 | |
| 10·2 | 5 | 16·0 | 0·8 | |
| 10·4 | | 23·0 | 33·8 | |
| 9·2 | 7 | 9·0 | 53·6 | |
| 10·2 | | 21·0 | 32·9 | |
| 10·2 | | 36·0 | 33·3 | |
| 9·2 | 8 | 5·2 | 59·8 | |
| 10·0 | | 23·0 | 50·1 | |
| 9·8 | | 26·0 | 50·9 | |
| 7·8 | 9 | 13·5 | 40·2 | 8·0 GS |
| 10·4 | 10 | 38·0 | 3·9 | |
| 10·2 | 11 | 15·0 | 49·6 | |
| 10·2 | 12 | 29·0 | 41·9 | |
| 10·2 | | 42·5 | 35·0 | 9·5 |
| 10·2 | 13 | 17·5 | 10·5 | |
| 10·4 | 14 | 13·0 | 44·5 | |
| 10·0 | 15 | 0·5 | 30·4 | |
| 10·2 | | 16·0 | 37·9 | |
| 9·0 | | 50·0 | 58·6 | |
| 8·6 | 17 | 42·0 | 59·0 | 8·0 GS |
| 8·5 | | 47·0 | 39·3 | 8·0 GS |
| 9·2 | 18 | 12·0 | 31·7 | 9·5 |
| 9·2 | | 29·0 | 41·8 | |
| 9·9 | 19 | 12·0 | 53·6 | |
| 8·9 | | 17·5 | 16·9 | 8·0 GS |
| 9·8 | | 28·0 | 22·9 | |
| 9·8 | | 31·0 | 45·9 | |
| 9·8 | 20 | 23·5 | 4·9 | |
| 10·4 | 22 | 5·0 | 56·0 | |
| 9·9 | | 31·0 | 15·9 | |
| 9·9 | | 35·0 | 35·0 | |
| 10·4 | | 57·0 | 9·5 | |
| 9·0 | 24 | 7·0 | 36·1 | 9·5 |
| 10·2 | | 12·0 | 34·5 | |
| 8·9 | | 29·5 | 43·8 | 9·0 |
| 9·6 | 25 | 6·0 | 40·0 | |
| 8·4 | | 8·5 | 52·0 | 8·5 G |
| 9·8 | | 10·5 | 9·9 | |
| 9·4 | | 27·0 | 3·4 | 7·5 G |
| 10·4 | 26 | 23·5 | 36·7 | |
| 7·1 | 27 | 11·8 | 53·6 | 7·5 GS |
| 10·6 | | 46·7 | 3·5 | |
| 8·4 | 29 | 40·1 | 52·6 | 9·0 |
| 9·4 | 31 | 2·0 | 58·8 | |
| 9·6 | | 6·1 | 23·5 | |
| 7·3 | | 20·1 | 36·2 | 8·0 GS |

## 121—180.

| mag. | 1h.–2h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 31 | 37·9 | 12·3 | |
| 9·2 | | 44·0 | 42·0 | |
| 10·6 | 32 | 38·9 | 55·4 | |
| 7·6 | 33 | 29·7 | 8·9 | 8·0 GS |
| 7·6 | 36 | 5·8 | 37·8 | 8·0 GS |
| 10·6 | | 7·0 | 51·8 | |
| 8·9 | | 8·3 | 0·4 | |
| 10·6 | | 15·0 | 54·8 | |
| 10·6 | 37 | 23·6 | 27·2 | |
| 6·6 | | 31·6 | 25·1 | 6·0 GScr |
| 9·0 | | 37·6 | 4·2 | |
| 10·2 | 38 | 12·6 | 10·2 | |
| 8·4 | | 55·8 | 59·6 | 8·5 |
| 10·2 | 39 | 16·6 | 3·7 | |
| 9·2 | | 25·6 | 14·8 | |
| 10·6 | | 47·7 | 9·6 | |
| 10·6 | | 48·3 | 31·6 | |
| 10·6 | | 58·1 | 20·7 | |
| 6·3 | 40 | 20·3 | 38·8 | 7·0 GSc |
| 10·2 | | 38·8 | 53·3 | |
| 8·6 | | 56·8 | 1·0 | 9·0 |
| 8·9 | 41 | 16·1 | 12·6 | |
| 10·4 | | 39·3 | 55·9 | |
| 10·6 | 42 | 33·6 | 7·2 | |
| 10·6 | | 51·1 | 10·7 | |
| 10·6 | 43 | 11·0 | 35·9 | |
| 10·2 | | 12·8 | 35·5 | |
| 10·0 | 44 | 39·3 | 32·9 | |
| 9·0 | 46 | 7·8 | 37·9 | |
| 10·6 | 47 | 1·7 | 25·4 | |
| 10·0 | 49 | 10·1 | 24·0 | |
| 9·7 | | 28·2 | 3·0 | |
| 10·0 | 50 | 14·8 | 42·3 | |
| 10·4 | | 29·1 | 12·1 | |
| 9·6 | | 45·6 | 25·5 | |
| 10·6 | 51 | 20·7 | 20·1 | |
| 6·1 | | 46·6 | 28·4 | 6·5 GS |
| 10·6 | | 58·3 | 49·8 | |
| 9·6 | | 59·6 | 27·0 | |
| 10·6 | 52 | 6·8 | 57·7 | |
| 8·6 | 53 | 17·6 | 19·5 | |
| 10·2 | 54 | 20·3 | 42·7 | |
| 10·2 | | 27·8 | 33·5 | |
| 9·0 | 55 | 19·6 | 7·0 | |
| 9·7 | | 50·8 | 46·9 | |
| 10·6 | | 59·6 | 27·2 | |
| 10·2 | 56 | 0·8 | 37·3 | |
| 10·2 | | 23·2 | 8·3 | |
| 10·6 | | 28·9 | 57·8 | |
| 10·6 | 57 | 39·2 | 19·8 | |
| 8·9 | | 45·2 | 28·8 | 8·5 |
| 8·8 | 58 | 7·7 | 18·6 | |
| 9·2 | | 20·2 | 12·0 | |
| 10·0 | 59 | 25·7 | 20·3 | |
| 9·8 | | 44·4 | 34·8 | |
| 10·4 | 0 | 21·9 | 39·7 | |
| 9·6 | | 44·7 | 13·9 | |
| 9·0 | 1 | 14·7 | 24·1 | |
| 10·4 | 2 | 12·2 | 29·3 | |
| 10·2 | 3 | 11·7 | 6·0 | |

## 181—240.

| mag. | 2h. m | s | −61° ′ | |
|---|---|---|---|---|
| 7·6 | 3 | 22·9 | 34·9 | 7·5 GSt |
| 8·9 | | 50·7 | 30·4 | 10·0 |
| 10·2 | 4 | 22·7 | 28·6 | |
| 9·4 | 5 | 3·7 | 3·8 | |
| 10·0 | | 31·9 | 43·1 | |
| 10·6 | 6 | 19·9 | 50·5 | |
| 8·8 | | 25·2 | 20·9 | 9·0 |
| 8·4 | | 33·9 | 41·2 | 8·0 GSt |
| 9·6 | | 49·9 | 46·9 | |
| 10·2 | | 54·7 | 0·0 | 9·5 |
| 9·0 | 7 | 0·4 | 43·9 | 8·8 |
| 10·6 | | 21·4 | 32·8 | |
| 10·2 | | 52·9 | 44·4 | |
| 9·6 | 8 | 1·5 | 31·8 | |
| 9·2 | | 51·0 | 26·6 | |
| 9·4 | 10 | 35·0 | 10·4 | |
| 9·6 | 14 | 9·5 | 33·7 | |
| 9·4 | 16 | 38·5 | 56·0 | |
| 8·2 | | 42·5 | 15·3 | 8·0 GS |
| 9·6 | 17 | 15·5 | 16·7 | |
| 9·2 | | 46·0 | 47·2 | |
| 8·8 | 18 | 3·0 | 0·1 | |
| 9·6 | | 7·5 | 56·8 | |
| 9·0 | 19 | 18·5 | 57·7 | |
| 9·6 | 20 | 23·5 | 39·1 | |
| 9·2 | 22 | 29·0 | 48·8 | 9·2 G |
| 9·2 | 24 | 1·0 | 30·9 | |
| 9·4 | | 35·0 | 18·9 | |
| 8·2 | 25 | 0·0 | 51·9 | 8·5 G |
| 8·5 | | 53·0 | 28·2 | 8·2 GS |
| 9·0 | 28 | 22·0 | 39·2 | |
| 6·8 | 30 | 33·0 | 31·9 | 6·8 GSc |
| 9·4 | 31 | 16·5 | 54·1 | |
| 8·8 | | 33·0 | 36·3 | 8·8 |
| 8·1 | 32 | 1·5 | 22·9 | 8·2 G |
| 8·6 | 35 | 23·5 | 55·1 | 8·2 G |
| 8·3 | 36 | 3·0 | 5·0 | 8·0 GS |
| 9·2 | | 54·5 | 53·0 | 9·0 |
| 9·0 | 37 | 38·5 | 16·9 | |
| 9·5 | 41 | 44·0 | 14·8 | |
| 9·4 | | 44·5 | 51·8 | |
| 9·4 | | 59·0 | 0·0 | |
| 9·7 | 42 | 10·5 | 59·2 | |
| 8·7 | | 11·0 | 36·9 | |
| 9·2 | 43 | 8·5 | 25·9 | |
| 9·4 | | 36·5 | 6·9 | |
| 9·4 | 44 | 40·5 | 26·1 | |
| 9·5 | | 46·8 | 55·4 | |
| 9·4 | 46 | 43·0 | 6·0 | |
| 9·4 | | 55·0 | 5·1 | |
| 9·7 | | 59·5 | 45·0 | |
| 8·6 | 48 | 3·0 | 24·8 | 9·0 |
| 8·8 | 51 | 17·5 | 38·7 | 10·0 |
| 9·1 | 52 | 49·5 | 6·9 | 10·0 G |
| 8·4 | | 53·0 | 58·0 | 8·0 GS |
| 9·5 | 53 | 36·5 | 41·6 | |
| 8·6 | | 58·5 | 5·9 | 8·0 G |
| 9·4 | 55 | 23·5 | 34·9 | |
| 9·5 | 56 | 31·5 | 23·9 | |
| 9·7 | 58 | 21·5 | 25·3 | |

## 241—300.

| mag. | 3h.–4h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8·2 | 0 | 6·5 | 17·2 | 7·5 GSt |
| 9·1 | | 6·5 | 5·0 | |
| 9·1 | | 21·0 | 3·7 | |
| 8·8 | 1 | 1·5 | 19·8 | 8·0 GSct |
| 7·9 | | 22·0 | 32·0 | 8·0 GSt |
| 9·0 | | 36·0 | 59·1 | 9·5 |
| 8·2 | 5 | 27·0 | 37·8 | 7·5 GSct |
| 9·1 | 10 | 5·0 | 57·6 | |
| 8·0 | 12 | 13·0 | 6·0 | 8·2 G |
| 8·8 | | 34·0 | 50·2 | 9·0 |
| 9·0 | 15 | 19·5 | 29·8 | |
| 9·8 | 16 | 43·5 | 19·2 | |
| 7·3 | 18 | 58·5 | 56·0 | 9·0 S |
| 9·2 | 19 | 13·5 | 39,4 | |
| 8·8 | | 29·2 | 26·1 | 9·5 |
| 9·8 | 21 | 10·0 | 5·7 | |
| 9·6 | | 25·5 | 58·5 | |
| 9·4 | 23 | 30·0 | 12·1 | |
| 9·8 | 24 | 8·5 | 40·0 | |
| 9·6 | | 53·0 | 37·5 | 10·0 |
| 7·6 | | 53·0 | 41·7 | 8·0 G |
| 9·8 | | 54·0 | 54·7 | |
| 9·6 | 26 | 6·0 | 33·8 | 9·0 G |
| 8·6 | | 15·0 | 37·2 | 8·2 G |
| 7·5 | 30 | 16·0 | 0·0 | 7·0 GS |
| 7·8 | | 25·0 | 48·9 | 7·5 GS |
| 7·1 | | 29·5 | 26·3 | 6·5 GS |
| 9·8 | 31 | 2·5 | 27·5 | |
| 7·2 | 33 | 45·5 | 57·4 | 7·0 GS |
| 9·8 | | 56·0 | 1·8 | |
| 9·8 | 34 | 7·0 | 54·1 | 9·0 |
| 9·8 | 35 | 19·0 | 7·0 | |
| 8·4 | | 55·5 | 22·3 | 9·0 G |
| 9·4 | 40 | 38·0 | 42·3 | |
| 7·1 | 41 | 1·0 | 54·2 | 7·5 GS |
| 10·0 | | 14·5 | 58·2 | |
| 9·0 | 42 | 32·5 | 29·4 | |
| 9·0 | | 36·5 | 10·0 | 9·5 |
| 9·8 | | 38·5 | 50·8 | |
| 8·8 | 45 | 21·0 | 33·4 | 9·5 |
| 9·8 | 46 | 3·5 | 59·1 | |
| 9·8 | | 43·5 | 43·2 | |
| 8·6 | 47 | 1·5 | 21·0 | 9·0 G |
| 7·4 | 53 | 15·7 | 16·2 | 8·0 GS |
| 8·0 | | 33·8 | 8·9 | 8·5 G |
| 9·5 | | 37·5 | 55·0 | |
| 9·8 | 54 | 25·0 | 19·1 | |
| 9·8 | 56 | 30·0 | 1·6 | |
| 8·6 | | 40·0 | 39·4 | 8·5 G |
| 6·6 | | 45·8 | 45·2 | 5·0 GSct |
| 8·8 | 57 | 9·0 | 31·2 | 10·0 G |
| 9·8 | 59 | 19·0 | 52·2 | |
| 6·5 | | 19·5 | 25·8 | GSct |
| 9·4 | 0 | 10·0 | 9·1 | |
| 6·8 | | 25·5 | 42·3 | 7·0 GSt |
| 8·4 | 1 | 19·0 | 35·8 | 9·5 |
| 9·8 | 2 | 8·0 | 11·2 | |
| 9·8 | | 54·0 | 10·1 | |
| 8·2 | 3 | 10·0 | 49·2 | 9·0 |
| 9·4 | 5 | 20·0 | 33·0 | |



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## 301—360.

| mag. | $4^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 5 | 33·0 | 31·8 | |
| 9·8 | 6 | 10·0 | 54·9 | |
| 9·4 | | 51·5 | 29·9 | |
| 9·6 | 7 | 28·0 | 6·8 | |
| 9·5 | | 46·5 | 45·0 | 9·0 |
| 9·9 | 8 | 15·0 | 57·8 | |
| 7·1 | | 19·0 | 55·2 | 8·0 GS |
| 9·2 | | 44·5 | 5·5 | 9·0 |
| 8·9 | 9 | 32·0 | 42·0 | 9·0 |
| 8·6 | 10 | 19·5 | 54·8 | 9·5 |
| 10·0 | | 42·5 | 59·1 | |
| 9·6 | | 50·5 | 43·1 | |
| 9·6 | 12 | 7·5 | 28·7 | |
| 8·7 | | 12·7 | 57·4 | 8·5 GS |
| 9·4 | | 34·5 | 11·0 | |
| 9·2 | 13 | 38·0 | 31·1 | 9·0 G |
| 6·0 | 14 | 28·5 | 15·3 | 6·0 GSct |
| 9·2 | | 39·0 | 23·3 | |
| 9·6 | | 54·5 | 59·9 | |
| 9·4 | 15 | 5·5 | 34·6 | |
| 9·4 | | 13·0 | 11·0 | 9·5 |
| 9·4 | | 17·0 | 17·2 | |
| 9·9 | | 19·5 | 29·8 | |
| 9·0 | | 52·0 | 41·6 | |
| 9·8 | 17 | 5·5 | 15·1 | |
| 9·2 | | 34·0 | 33·5 | |
| 9·2 | | 49·0 | 48·2 | |
| 9·2 | 18 | 9·5 | 18·1 | 9·5 |
| 9·9 | | 54·0 | 1·4 | |
| 8·8 | 19 | 26·7 | 56·6 | |
| 8·8 | | 39·0 | 11·2 | 10·0 |
| 9·8 | | 51·0 | 36·2 | |
| 10·0 | 20 | 2·0 | 36·3 | |
| 9·8 | 22 | 24·0 | 43·7 | |
| 7·6 | 23 | 21·0 | 31·2 | 6·5 GSct |
| 8·2 | | 32·0 | 54·4 | 9·0 |
| 8·2 | | 46·0 | 2·3 | 9·0 |
| 9·8 | 24 | 5·5 | 34·2 | |
| 8·6 | 25 | 29·5 | 59·4 | |
| 9·8 | 26 | 33·5 | 46·9 | |
| 9·1 | | 57·6 | 28·3 | |
| 10·0 | 27 | 3·0 | 42·1 | |
| 9·6 | | 48·5 | 49·6 | |
| 9·8 | 28 | 48·5 | 13·8 | |
| 9·1 | | 51·0 | 40·9 | |
| 9·8 | 29 | 52·6 | 47·8 | |
| 8·8 | 30 | 14·5 | 38·9 | 9·5 GS |
| 9·4 | | 27·6 | 17·1 | |
| 9·6 | 32 | 18·6 | 44·9 | |
| 9·8 | | 43·2 | 9·1 | G |
| 9·0 | | 48·7 | 3·6 | GS |
| 8·9 | | 57·7 | 57·7 | 9·0 |
| 9·8 | | 58·2 | 21·0 | |
| 9·8 | 35 | 22·2 | 33·0 | |
| 9·5 | 36 | 58·2 | 35·2 | |
| 9·4 | 37 | 38·2 | 35·4 | |
| 8·4 | 39 | 21·2 | 5·1 | 9·0 |
| 9·8 | | 54·2 | 48·8 | |
| 7·6 | 40 | 8·2 | 27·3 | 8·2 G |
| 8·8 | | 27·7 | 19·5 | 8·5 |

## 361—420.

| mag. | $4^h$–$5^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 8·7 | 40 | 48·2 | 51·8 | |
| 9·8 | 41 | 29·2 | 6·9 | |
| 9·4 | 42 | 29·2 | 32·3 | |
| 9·5 | 43 | 49·2 | 47·4 | |
| 8·8 | | 55·2 | 20·8 | |
| 9·6 | 45 | 8·2 | 39·1 | |
| 7·3 | | 49·7 | 41·6 | 7·5 GSt |
| 9·8 | 46 | 45·7 | 10·8 | |
| 9·2 | 47 | 18·7 | 37·1 | G |
| 9·8 | 49 | 6·7 | 10·1 | |
| 9·5 | | 10·7 | 6·9 | |
| 9·4 | | 13·2 | 43·7 | |
| 9·8 | | 36·7 | 40·6 | |
| 9·8 | 50 | 11·7 | 33·1 | |
| 8·7 | | 55·2 | 44·6 | 9·0 S |
| 8·7 | 51 | 27·2 | 35·1 | 8·5 GS |
| 8·8 | | 28·2 | 14·3 | |
| 8·8 | | 33·4 | 1·9 | 9·5 |
| 9·2 | 52 | 8·2 | 3·7 | 9·0 G |
| 9·4 | | 30·7 | 27·8 | G |
| 9·6 | | 32·7 | 31·2 | |
| 8·8 | | 34·7 | 55·1 | |
| 9·8 | 53 | 14·7 | 14·7 | |
| 9·4 | 54 | 27·2 | 17·3 | S |
| 9·2 | | 49·7 | 48·6 | |
| 9·6 | | 52·7 | 10·6 | |
| 8·3 | 56 | 1·7 | 29·0 | 9·0 G |
| 9·2 | | 22·7 | 7·9 | |
| 9·8 | | 43·2 | 29·4 | |
| 9·8 | | 57·7 | 22·3 | |
| 9·6 | 57 | 0·5 | 36·6 | |
| 9·4 | | 3·0 | 35·8 | |
| 9·8 | | 16·0 | 23·6 | |
| 8·5 | | 25·0 | 17·2 | 9·0 S |
| 9·5 | 58 | 0·0 | 59·2 | |
| 8·8 | | 4·5 | 8·3 | |
| 9·2 | | 55·0 | 51·5 | |
| 9·8 | | 58·5 | 4·5 | |
| 8·8 | 59 | 7·5 | 50·8 | 9·0 |
| 9·2 | 0 | 3·0 | 34·2 | |
| 9·0 | | 10·5 | 58·5 | |
| 9·5 | 1 | 33·0 | 29·1 | |
| 8·6 | | 52·5 | 35·1 | 9·0 |
| 9·8 | 4 | 0·0 | 9·1 | |
| 9·8 | | 38·5 | 44·3 | |
| 9·2 | | 53·5 | 45·2 | |
| 8·7 | | 55·3 | 1·3 | |
| 9·4 | 5 | 17·3 | 32·9 | |
| 9·6 | | 19·5 | 29·2 | |
| 9·3 | | 23·0 | 57·9 | |
| 8·2 | | 53·1 | 58·0 | 9·0 GS |
| 9·3 | 6 | 41·0 | 42·2 | |
| 9·7 | 7 | 14·5 | 5·3 | |
| 9·4 | 8 | 19·5 | 56·0 | |
| 8·8 | | 39·5 | 45·1 | |
| 9·0 | | 46·0 | 53·3 | |
| 9·6 | 9 | 24·5 | 28·8 | |
| 9·8 | | 39·5 | 49·3 | |
| 9·6 | 10 | 46·0 | 34·3 | |
| 9·6 | 11 | 19·5 | 35·1 | |

## 421—480.

| mag. | $5^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 11 | 35·0 | 50·7 | |
| 9·0 | 12 | 9·0 | 13·3 | |
| 9·7 | | 13·0 | 7·3 | |
| 9·7 | | 57·0 | 12·8 | |
| 9·4 | 13 | 21·5 | 0·7 | |
| 9·8 | | 53·5 | 3·0 | |
| 9·3 | | 58·0 | 7·0 | |
| 9·6 | 14 | 14·5 | 11·3 | |
| 9·2 | | 18·5 | 47·6 | 10·0 |
| 9·6 | | 27·5 | 0·8 | |
| 9·5 | 15 | 27·5 | 34·1 | |
| 9·2 | | 40·5 | 38·8 | |
| 9·8 | | 55·5 | 37·1 | |
| 9·7 | 16 | 7·5 | 50·4 | |
| 9·8 | | 12·5 | 39·9 | |
| 9·8 | | 39·0 | 39·8 | |
| 9·8 | | 41·0 | 8·9 | |
| 9·8 | | 44·0 | 51·2 | |
| 9·0 | | 44·0 | 37·3 | |
| 9·6 | | 59·0 | 27·2 | |
| 9·5 | 17 | 14·5 | 50·8 | |
| 9·4 | | 43·0 | 11·9 | |
| 9·7 | | 56·0 | 12·7 | |
| 9·6 | 18 | 25·5 | 43·0 | |
| 8·7 | | 44·5 | 17·6 | 8·5 |
| 9·6 | | 59·0 | 37·3 | |
| 9·4 | 19 | 35·5 | 7·9 | |
| 9·4 | | 37·5 | 21·0 | |
| 9·4 | 20 | 0·5 | 21·7 | |
| 9·7 | | 51·5 | 7·9 | |
| 9·6 | 21 | 33·5 | 6·7 | |
| 9·4 | | 44·0 | 36·0 | |
| 9·8 | | 51·0 | 44·6 | |
| 8·7 | 22 | 3·5 | 45·0 | |
| 9·5 | | 8·0 | 2·3 | |
| 9·3 | | 52·5 | 25·1 | |
| 9·6 | 23 | 38·0 | 2·9 | |
| 8·5 | | 38·0 | 12·8 | 9·0 |
| 9·4 | | 59·5 | 6·9 | |
| 9·7 | 24 | 15·0 | 21·5 | |
| 9·8 | | 38·5 | 22·7 | |
| 9·2 | | 58·5 | 47·9 | |
| 9·3 | 25 | 23·0 | 2·0 | |
| 9·1 | 26 | 45·5 | 1·6 | |
| 8·8 | | 56·5 | 21·7 | |
| 9·7 | 27 | 16·0 | 57·6 | |
| 9·7 | | 20·5 | 3·8 | |
| 9·7 | | 25·5 | 41·6 | |
| 9·6 | | 47·5 | 42·2 | |
| 9·6 | 28 | 6·5 | 8·7 | |
| 8·5 | | 8·5 | 55·0 | 8·0 GSt |
| 9·0 | | 16·0 | 36·2 | |
| 9·6 | | 31·5 | 1·1 | |
| 9·8 | | 38·5 | 58·3 | |
| 9·8 | | 42·5 | 44·1 | |
| 9·8 | 29 | 9·5 | 54·7 | |
| 9·5 | 30 | 5·0 | 32·6 | 9·0 |
| 8·4 | | 13·5 | 32·5 | 9·0 |
| 7·0 | | 18·0 | 37·8 | 7·5 GSt |
| 8·7 | | 40·5 | 3·0 | |

## 481—540.

| mag. | $5^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 30 | 54·5 | 39·3 | |
| 9·8 | 31 | 20·5 | 48·8 | |
| 9·4 | | 21·0 | 9·6 | |
| 9·6 | | 58·5 | 45·6 | |
| 9·8 | 32 | 13·0 | 24·0 | |
| 9·8 | | 19·5 | 50·6 | |
| 9·4 | | 28·0 | 55·5 | |
| 7·2 | 33 | 36·5 | 15·2 | GSct |
| 9·7 | 34 | 26·5 | 9·8 | |
| 9·7 | 35 | 26·0 | 5·9 | |
| 8·6 | 36 | 40·5 | 33·8 | 8·5 Gt |
| 9·6 | | 48·0 | 26·0 | |
| 7·8 | 37 | 4·5 | 14·1 | 8·5 GSt |
| 9·2 | | 7·5 | 58·0 | |
| 9·5 | 39 | 9·5 | 47·0 | |
| 9·4 | | 21·0 | 16·1 | |
| 9·0 | | 52·0 | 55·0 | |
| 9·7 | 40 | 13·3 | 56·9 | |
| 9·6 | | 25·3 | 33·2 | |
| 10·0 | | 54·0 | 48·0 | |
| 10·0 | 41 | 9·0 | 45·9 | |
| 9·7 | | 25·2 | 47·8 | |
| 9·6 | | 34·2 | 31·0 | |
| 9·8 | 42 | 4·5 | 57·7 | |
| 10·0 | | 10·0 | 34·0 | |
| 10·0 | | 21·0 | 50·9 | |
| 9·4 | | 31·4 | 2·5 | |
| 10·0 | | 42·0 | 47·0 | |
| 10·0 | | 44·0 | 41·7 | |
| 10·0 | | 44·5 | 17·9 | |
| 10·0 | 43 | 17·0 | 25·4 | |
| 9·1 | | 34·0 | 50·1 | |
| 10·0 | | 40·5 | 42·9 | |
| 9·9 | | 43·0 | 30·7 | |
| 10·0 | 44 | 25·0 | 4·3 | |
| 9·8 | | 36·0 | 36·7 | |
| 8·5 | | 41·0 | 16·4 | 7·5 GSt |
| 10·0 | 45 | 0·0 | 52·0 | |
| 9·0 | | 0·0 | 12·4 | |
| 9·9 | 46 | 0·0 | 13·3 | |
| 10·0 | | 7·0 | 30·1 | |
| 10·0 | | 10·0 | 44·0 | |
| 10·0 | | 32·5 | 13·8 | |
| 10·0 | | 35·0 | 55·1 | |
| 10·0 | | 44·0 | 24·4 | |
| 10·0 | | 45·0 | 59·1 | 9·5 |
| 10·0 | | 46·0 | 49·9 | |
| 8·3 | | 48·0 | 14·6 | 8·5 GSt |
| 10·0 | 47 | 10·0 | 52·7 | |
| 8·8 | | 11·5 | 4·4 | 9·0 |
| 9·6 | | 43·5 | 10·2 | |
| 10·0 | | 43·5 | 10·7 | |
| 9·5 | 49 | 7·5 | 13·0 | |
| 8·7 | | 36·0 | 27·2 | 9·0 Gt |
| 10·0 | | 49·0 | 56·9 | |
| 9·5 | 50 | 48·0 | 17·9 | |
| 9·6 | | 48·0 | 8·9 | |
| 9·4 | | 57·0 | 24·8 | |
| 9·6 | | 58·5 | 23·0 | |
| 10·0 | 51 | 34·0 | 43·0 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 0 | 23 | 4·2 |
| | 10 | 22 | 3·9 |
| | 20 | 21 | 3·5 |
| | 30 | 20 | 3·2 |
| | 40 | 19 | 2·9 |
| | 50 | 18 | 2·5 |
| 5 | 0 | 17 | 2·2 |
| | 10 | 17 | 1·8 |
| | 20 | 16 | 1·5 |
| | 30 | 16 | 1·1 |
| | 40 | 15 | 0·7 |
| | 50 | 15 | 0·4 |
| 6 | 0 | 15 | 0·0 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 5 | 50 | 15 | 0·4 |
| 6 | 0 | 15 | 0·0 |
| | | | − |
| | 10 | 15 | 0·4 |
| | 20 | 15 | 0·7 |
| | 30 | 16 | 1·1 |
| | 40 | 16 | 1·5 |
| | 50 | 17 | 1·8 |
| 7 | 0 | 17 | 2·2 |
| | 10 | 18 | 2·5 |

**541—600.**

| mag. | $5^{h}$–$6^{h}$ m | s | −61° ′ | |
|---|---|---|---|---|
| 7·4 | 52 | 3·5 | 51·7 | 7·5 GSt |
| 10·0 | | 5·5 | 2·2 | |
| 8·1 | | 8·5 | 25·4 | Gt |
| 10·0 | | 9·5 | 24·7 | |
| 10·0 | | 14·5 | 10·1 | |
| 9·9 | | 15·5 | 13·9 | |
| 9·9 | | 20·5 | 45·4 | |
| 9·6 | | 25·0 | 54·0 | 9·5 |
| 10·0 | 53 | 10·0 | 55·8 | |
| 10·0 | 54 | 9·5 | 20·0 | |
| 10·0 | | 19·5 | 22·2 | |
| 8·2 | | 51·0 | 27·7 | 8·5 Gt |
| 10·0 | | 51·0 | 28·5 | |
| 9·7 | | 52·0 | 36·4 | |
| 10·0 | | 54·0 | 57·7 | |
| 10·0 | | 59·5 | 38·7 | |
| 10·0 | 55 | 51·0 | 8·0 | |
| 10·0 | 57 | 1·5 | 45·3 | |
| 9·8 | | 30·0 | 24·1 | |
| 9·8 | | 34·5 | 42·6 | |
| 8·4 | | 45·5 | 46·5 | 9·0 |
| 10·0 | 58 | 13·5 | 12·5 | |
| 9·0 | | 51·5 | 49·9 | |
| 8·5 | 59 | 10·0 | 59·8 | |
| 9·8 | | 23·5 | 21·4 | |
| 10·0 | 0 | 25·5 | 16·0 | |
| 9·6 | 1 | 13·5 | 9·0 | |
| 8·8 | | 15·5 | 42·3 | |
| 8·8 | | 37·5 | 11·2 | |
| 9·6 | 2 | 26·5 | 8·6 | |
| 10·0 | 3 | 13·0 | 16·0 | |
| 10·0 | | 43·0 | 53·1 | |
| 8·8 | | 45·0 | 16·0 | |
| 10·0 | | 59·5 | 8·7 | |
| 10·0 | 4 | 17·0 | 37·2 | |
| 10·0 | | 18·5 | 34·7 | |
| 8·0 | | 29·5 | 44·0 | 8·2 GSt |
| 10·0 | | 38·5 | 16·0 | |
| 9·8 | | 50·5 | 56·1 | |
| 9·4 | | 54·5 | 25·1 | |
| 9·8 | | 59·5 | 59·4 | |
| 10·0 | 5 | 4·5 | 4·8 | |
| 9·1 | | 16·3 | 0·6 | 9·5 |
| 10·0 | | 35·5 | 13·0 | |
| 10·0 | | 48·0 | 27·9 | |
| 9·4 | | 49·5 | 43·0 | |
| 9·8 | 6 | 3·0 | 58·5 | |
| 10·0 | | 3·0 | 56·6 | |
| 9·4 | | 6·0 | 47·1 | |
| 8·8 | | 26·0 | 40·5 | 9·5 |
| 10·0 | | 56·5 | 13·1 | |
| 10·0 | 7 | 16·0 | 39·9 | |
| 8·5 | | 34·5 | 18·3 | 9·0 |
| 10·0 | | 58·5 | 9·0 | |
| 9·2 | 8 | 21·0 | 52·1 | |
| 10·0 | | 45·5 | 31·9 | |
| 7·6 | 9 | 36·0 | 28·1 | 8·0 GSt |
| 9·4 | | 39·5 | 50·6 | |
| 9·5 | | 41·0 | 59·5 | 9·5 |
| 10·0 | 10 | 25·5 | 2·5 | |

**601—660.**

| mag. | $6^{h}$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 10 | 34·5 | 9·4 | |
| 9·6 | | 39·5 | 31·1 | |
| 10·0 | | 45·5 | 19·0 | |
| 10·0 | | 50·0 | 11·9 | |
| 9·8 | 11 | 5·0 | 34·1 | |
| 10·0 | | 7·5 | 38·1 | |
| 6·8 | | 14·5 | 26·2 | 7·0 GSgt |
| 9·8 | | 19·5 | 43·6 | |
| 9·7 | | 30·5 | 45·9 | |
| 9·4 | | 56·5 | 9·5 | × |
| 9·8 | 12 | 5·5 | 10·3 | |
| 9·4 | | 33·5 | 30·0 | |
| 9·2 | | 44·5 | 26·0 | |
| 9·7 | 14 | 8·5 | 53·1 | |
| 8·8 | | 25·5 | 15·4 | |
| 9·8 | | 33·0 | 27·5 | |
| 8·9 | | 41·0 | 33·0 | 8·5 |
| 10·0 | 15 | 0·0 | 6·0 | |
| 8·5 | 16 | 0·0 | 11·8 | 8·5 |
| 8·8 | | 2·5 | 35·4 | 9·5 |
| 9·3 | 17 | 9·7 | 22·2 | |
| 9·4 | | 10·7 | 54·2 | |
| 9·4 | | 18·2 | 20·0 | |
| 9·7 | | 22·5 | 17·9 | |
| 9·2 | | 33·3 | 53·0 | |
| 10·0 | 18 | 5·5 | 5·9 | |
| 9·3 | | 20·7 | 16·0 | 9·0 |
| 9·2 | | 24·8 | 41·0 | |
| 8·3 | | 38·5 | 45·7 | |
| 8·3 | | 39·5 | 28·6 | 8·5 |
| 7·9 | | 40·3 | 16·2 | 7·5 GSt |
| 9·8 | | 46·3 | 42·9 | |
| 9·6 | 19 | 4·7 | 37·9 | |
| 9·2 | | 6·2 | 32·3 | 9·0 |
| 10·0 | | 12·5 | 6·9 | |
| 10·0 | | 24·7 | 34·0 | |
| 9·3 | 20 | 35·5 | 32·2 | 8·5 |
| 8·5 | 21 | 13·5 | 2·8 | |
| 10·0 | | 20·0 | 40·8 | |
| 9·6 | 22 | 23·5 | 38·5 | |
| 10·0 | 23 | 2·5 | 5·3 | |
| 10·0 | 24 | 32·0 | 17·9 | |
| 9·6 | | 42·5 | 32·8 | 9·5 |
| 9·9 | | 46·5 | 29·3 | |
| 10·0 | | 48·5 | 30·9 | |
| 10·0 | 26 | 18·0 | 0·7 | |
| 9·4 | | 21·5 | 26·7 | |
| 9·6 | | 27·0 | 15·2 | |
| 9·4 | | 35·0 | 10·9 | |
| 9·8 | | 36·5 | 4·8 | |
| 10·0 | 27 | 21·0 | 12·9 | |
| 10·0 | | 21·0 | 38·0 | |
| 10·0 | | 29·5 | 10·2 | |
| 8·5 | | 32·5 | 0·6 | 8·5 |
| 9·6 | | 58·5 | 1·7 | |
| 9·3 | 28 | 2·5 | 13·1 | |
| 10·0 | | 9·0 | 33·3 | |
| 9·5 | | 18·5 | 9·2 | |
| 9·6 | | 26·3 | 1·9 | |
| 9·6 | | 32·5 | 32·1 | |

**661—720.**

| mag. | $6^{h}$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 28 | 33·5 | 27·5 | |
| 9·4 | | 39·0 | 53·9 | 9·0 |
| 8·0 | | 47·0 | 10·5 | 8·5 |
| 10·0 | | 54·0 | 20·7 | |
| 8·2 | 29 | 0·0 | 41·9 | |
| 9·8 | | 8·5 | 42·5 | |
| 9·0 | | 15·5 | 51·0 | |
| 8·9 | | 27·0 | 30·9 | |
| 6·0 | | 55·0 | 47·2 | 6·5 GSct |
| 10·0 | 30 | 0·7 | 40·1 | |
| 10·0 | | 24·5 | 35·5 | |
| 10·0 | 31 | 11·5 | 21·7 | |
| 8·0 | | 31·5 | 43·9 | 7·5 GSt |
| 9·4 | 32 | 4·5 | 30·6 | |
| 10·0 | | 22·0 | 5·9 | |
| 9·6 | | 27·5 | 44·9 | |
| 9·5 | 33 | 12·0 | 33·9 | |
| 10·0 | | 12·0 | 1·9 | |
| 8·0 | | 13·5 | 23·5 | 7·5 GSgt |
| 10·0 | | 17·4 | 1·1 | |
| 7·5 | | 45·5 | 4·3 | 8·0 GSg |
| 9·8 | 34 | 20·0 | 13·9 | |
| 10·0 | | 52·5 | 10·9 | |
| 8·8 | 35 | 0·0 | 29·2 | 9·5 |
| 9·4 | | 54·5 | 26·0 | 8·5 |
| 10·0 | 36 | 0·0 | 2·2 | |
| 9·4 | | 39·0 | 29·8 | |
| 7·0 | | 40·5 | 25·3 | 7·0 GScgt |
| 9·6 | | 47·5 | 45·5 | |
| 9·9 | | 50·5 | 17·1 | |
| 9·5 | 37 | 21·5 | 22·9 | |
| 10·0 | | 30·5 | 43·9 | |
| 9·6 | | 53·5 | 39·0 | |
| 10·1 | 38 | 15·5 | 15·0 | |
| 9·4 | | 19·5 | 56·0 | |
| 9·9 | | 29·5 | 21·6 | |
| 10·0 | 39 | 25·5 | 50·5 | |
| 9·0 | | 27·5 | 56·0 | |
| 10·0 | | 42·0 | 50·3 | |
| 10·0 | | 52·5 | 30·9 | |
| 10·0 | | 59·5 | 29·9 | |
| 9·0 | 40 | 39·5 | 59·5 | |
| 10·0 | | 42·5 | 38·5 | |
| 8·8 | 41 | 0·5 | 6·1 | 8·0 Gt |
| 10·0 | | 3·5 | 33·9 | |
| 7·4 | | 10·0 | 37·7 | 7·0 GSt |
| 9·6 | 42 | 0·0 | 16·5 | |
| 10·0 | | 4·0 | 27·0 | |
| 9·5 | | 15·7 | 58·1 | |
| 9·1 | 43 | 10·5 | 13·9 | |
| 7·8 | | 19·0 | 5·5 | 7·0 GSt |
| 10·0 | | 51·5 | 14·9 | |
| 10·0 | 44 | 46·5 | 19·3 | |
| 10·0 | 45 | 1·5 | 43·3 | |
| 10·0 | | 13·5 | 2·8 | |
| 8·1 | | 51·5 | 40·2 | 8·2 G |
| 9·5 | | 56·0 | 4·5 | |
| 10·0 | 46 | 35·0 | 52·0 | |
| 10·0 | | 45·5 | 34·2 | |
| 4·1 | | 53·0 | 48·4 | 4·0 GSgtrλ |

**721—780.**

| mag. | $6^{h}$–$7^{h}$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 47 | 10·7 | 0·9 | |
| 10·0 | | 19·0 | 52·8 | |
| 9·2 | | 34·5 | 9·5 | |
| 10·0 | 48 | 21·0 | 11·9 | |
| 9·4 | | 40·5 | 11·9 | |
| 9·6 | | 44·5 | 50·0 | 9·0 |
| 9·2 | | 49·5 | 29·9 | |
| 10·0 | 50 | 22·5 | 46·8 | |
| 10·0 | | 36·5 | 55·1 | |
| 9·5 | 51 | 7·5 | 35·5 | |
| 8·1 | | 49·5 | 29·5 | 8·2 |
| 10·0 | 52 | 5·5 | 48·4 | |
| 10·0 | | 8·8 | 4·4 | |
| 10·0 | | 12·2 | 31·5 | |
| 9·5 | | 43·7 | 30·0 | |
| 10·0 | | 45·0 | 53·1 | |
| 8·4 | 53 | 24·0 | 59·0 | |
| 10·0 | 54 | 16·8 | 15·9 | |
| 8·9 | | 20·5 | 27·2 | 9·5 |
| 9·4 | | 23·5 | 36·5 | |
| 8·8 | | 44·0 | 33·8 | 9·0 |
| 9·0 | | 59·7 | 30·2 | |
| 9·4 | 55 | 35·5 | 40·0 | |
| 9·4 | | 39·7 | 20·6 | |
| 9·4 | | 51·0 | 6·5 | |
| 9·4 | 56 | 5·5 | 13·2 | |
| 9·3 | | 11·0 | 42·0 | |
| 9·2 | | 16·0 | 21·8 | |
| 8·7 | | 29·5 | 21·0 | 9·5 |
| 9·4 | 57 | 21·5 | 52·6 | |
| 9·0 | | 58·0 | 59·0 | |
| 9·4 | 58 | 8·0 | 13·0 | |
| 9·4 | | 25·0 | 3·3 | |
| 7·9 | | 32·0 | 10·0 | 7·8 GSg |
| 8·7 | | 50·0 | 36·2 | |
| 8·8 | 59 | 21·0 | 22·2 | |
| 8·9 | | 29·0 | 40·6 | |
| 9·4 | | 33·5 | 47·1 | |
| 9·4 | 0 | 4·5 | 0·1 | |
| 9·4 | | 11·5 | 48·1 | G |
| 9·4 | 2 | 5·5 | 4·7 | |
| 9·1 | | 18·0 | 7·2 | |
| 8·9 | 3 | 13·0 | 39·1 | |
| 9·2 | | 20·0 | 19·0 | |
| 8·6 | | 35·0 | 2·1 | 8·0 Gt |
| 8·4 | | 57·5 | 12·6 | 8·5 Gt |
| 8·8 | 4 | 7·0 | 36·7 | |
| 9·4 | | 9·0 | 30·2 | |
| 9·4 | | 20·2 | 16·5 | |
| 9·4 | | 30·0 | 38·1 | |
| 9·4 | | 48·0 | 37·6 | |
| 9·4 | | 54·0 | 34·8 | |
| 8·6 | 5 | 4·0 | 15·5 | |
| 9·4 | | 43·2 | 42·6 | |
| 9·4 | 7 | 2·5 | 16·0 | |
| 9·0 | | 28·0 | 13·9 | |
| 9·4 | | 32·0 | 1·1 | |
| 8·9 | 8 | 2·0 | 20·2 | |
| 9·4 | | 3·0 | 17·3 | |
| 9·4 | | 5·0 | 8·3 | |

### 781—840.

| mag. | $7^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 8·7 | 9 | 53·0 | 37·0 | |
| 8·9 | 10 | 38·0 | 3·5 | |
| 9·0 | | 49·0 | 50·0 | |
| 8·5 | | 55·0 | 10·0 | GSt |
| 9·4 | 11 | 2·0 | 30·5 | |
| 8·5 | | 27·0 | 23·7 | |
| 8·7 | | 42·0 | 52·1 | |
| 9·1 | | 59·0 | 59·7 | |
| 9·0 | 12 | 10·0 | 37·7 | |
| 9·2 | | 27·0 | 44·2 | |
| 9·4 | 14 | 9·0 | 10·1 | |
| 8·9 | | 10·0 | 26·3 | |
| 9·4 | | 13·0 | 8·2 | |
| 9·2 | | 24·0 | 38·4 | |
| 8·8 | | 45·0 | 34·1 | |
| 9·2 | 15 | 51·0 | 13·4 | |
| 9·0 | 16 | 3·5 | 11·8 | |
| 9·2 | | 19·0 | 32·4 | |
| 9·4 | | 19·0 | 42·6 | |
| 9·4 | | 34·0 | 31·9 | |
| 8·8 | | 44·5 | 19·1 | |
| 9·3 | | 49·0 | 26·4 | |
| 9·4 | | 53·0 | 46·0 | |
| 8·6 | 17 | 9·0 | 59·4 | |
| 9·4 | | 31·0 | 56·0 | |
| 8·8 | | 50·5 | 26·4 | |
| 9·4 | 18 | 9·0 | 22·4 | |
| 9·2 | | 15·5 | 8·1 | |
| 8·9 | | 36·0 | 42·7 | |
| 9·4 | | 48·0 | 25·1 | |
| 9·2 | 19 | 14·5 | 51·3 | |
| 9·4 | | 36·0 | 43·4 | |
| 7·9 | | 58·0 | 45·2 | 8·5 Gt |
| 7·3 | 20 | 9·5 | 42·7 | 7·0 GSt |
| 9·3 | 21 | 25·0 | 45·8 | |
| 9·3 | | 43·0 | 48·2 | |
| 9·4 | 22 | 6·5 | 44·6 | |
| 9·4 | | 59·5 | 33·3 | |
| 9·4 | 23 | 10·0 | 12·2 | |
| 9·3 | 24 | 31·0 | 59·1 | |
| 9·1 | 25 | 9·0 | 58·4 | |
| 9·4 | | 11·5 | 54·4 | |
| 9·4 | | 22·5 | 3·5 | |
| 9·4 | | 38·0 | 5·7 | |
| 9·4 | 26 | 10·0 | 35·3 | |
| 8·8 | | 43·5 | 29·6 | |
| 9·1 | 27 | 9·0 | 20·5 | 9·0 |
| 9·4 | | 10·0 | 13·3 | |
| 9·4 | | 20·0 | 5·2 | |
| 9·2 | | 21·5 | 47·3 | |
| 9·4 | 28 | 10·8 | 17·2 | |
| 9·4 | | 40·8 | 14·1 | |
| 9·7 | | 42·5 | 8·2 | |
| 8·6 | | 48·3 | 9·0 | 9·0 |
| 8·8 | 29 | 34·3 | 56·6 | |
| 9·6 | | 51·0 | 23·5 | |
| 9·6 | | 55·0 | 50·3 | |
| 8·6 | 30 | 10·5 | 25·3 | 8·5 |
| 9·5 | | 17·2 | 21·9 | |
| 9·6 | | 22·5 | 5·3 | |

### 841—900.

| mag. | $7^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 31 | 12·5 | 56·8 | |
| 9·5 | | 26·5 | 44·2 | |
| 9·7 | 32 | 6·0 | 1·0 | |
| 9·6 | | 6·5 | 10·1 | |
| 8·8 | | 9·3 | 38·0 | 9·0 |
| 9·2 | | 12·8 | 42·6 | |
| 9·5 | | 40·5 | 22·9 | |
| 9·2 | 33 | 9·8 | 54·0 | |
| 9·3 | | 32·5 | 18·1 | |
| 9·7 | | 59·5 | 24·3 | |
| 8·0 | 34 | 45·0 | 35·5 | 8·0 G |
| 9·7 | | 45·5 | 17·9 | |
| 9·4 | 35 | 51·0 | 36·2 | |
| 9·3 | 36 | 7·5 | 25·4 | |
| 9·4 | | 33·0 | 3·2 | |
| 9·0 | | 41·5 | 58·1 | |
| 9·7 | | 46·5 | 7·7 | |
| 9·6 | | 59·0 | 31·8 | |
| 8·9 | 37 | 18·5 | 7·8 | |
| 9·1 | | 32·5 | 47·2 | |
| 9·6 | | 50·0 | 3·0 | |
| 9·3 | | 56·0 | 28·3 | |
| 9·6 | | 59·5 | 44·0 | |
| 9·6 | 38 | 8·0 | 28·4 | |
| 8·9 | | 10·0 | 23·9 | 8·0 |
| 9·7 | | 36·5 | 19·0 | |
| 9·7 | | 40·0 | 13·2 | |
| 9·7 | 39 | 4·0 | 41·1 | |
| 9·4 | | 6·5 | 52·0 | |
| 8·3 | | 14·0 | 41·7 | 8·0 |
| 9·7 | | 21·0 | 39·9 | 9·5 |
| 8·8 | 40 | 13·5 | 15·4 | |
| 9·6 | | 32·5 | 13·9 | |
| 9·0 | 41 | 3·0 | 36·0 | 9·0 G |
| 8·0 | | 28·5 | 36·0 | 8·0 G |
| 9·6 | 42 | 11·0 | 28·1 | |
| 9·1 | | 11·5 | 23·4 | |
| 9·7 | | 34·5 | 16·2 | |
| 9·7 | | 44·5 | 5·0 | |
| 9·3 | 43 | 18·5 | 2·0 | |
| 9·6 | | 37·5 | 24·1 | |
| 9·5 | | 38·5 | 27·9 | |
| 8·3 | | 50·0 | 40·6 | 8·0 |
| 9·3 | 44 | 0·0 | 54·9 | 9·0 |
| 9·2 | | 12·0 | 21·9 | |
| 9·6 | | 20·5 | 59·8 | 9·5 |
| 9·6 | | 29·5 | 26·0 | |
| 8·0 | | 33·5 | 7·8 | 7·5 GSg |
| 8·7 | | 38·5 | 5·4 | 9·2 |
| 9·4 | | 48·5 | 37·3 | |
| 8·5 | | 50·5 | 25·1 | |
| 8·1 | 45 | 9·5 | 3·2 | 8·0 |
| 9·6 | | 56·0 | 45·1 | |
| 9·0 | 46 | 24·5 | 7·8 | 9·5 |
| 9·6 | | 47·0 | 2·9 | |
| 9·7 | 47 | 3·5 | 54·1 | |
| 9·5 | | 8·5 | 2·0 | |
| 9·1 | | 38·5 | 31·0 | |
| 9·5 | | 44·5 | 46·0 | |
| 9·3 | 49 | 9·0 | 11·3 | |

### 901—960.

| mag. | $7^h$–$8^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 49 | 27·0 | 12·9 | |
| 9·4 | | 41·0 | 27·0 | |
| 9·7 | | 50·0 | 31·7 | |
| 9·2 | 50 | 6·0 | 29·4 | |
| 9·1 | | 29·0 | 23·3 | |
| 9·4 | 51 | 13·0 | 33·9 | |
| 9·6 | | 15·5 | 22·0 | |
| 8·6 | | 16·5 | 19·5 | G |
| 8·6 | | 34·5 | 59·3 | 9·0 |
| 9·3 | | 38·0 | 43·2 | |
| 8·2 | | 49·0 | 38·6 | |
| 9·6 | 52 | 12·0 | 8·3 | |
| 8·8 | | 19·5 | 42·1 | |
| 9·4 | | 24·0 | 38·1 | 9·5 |
| 9·7 | | 26·5 | 29·0 | |
| 8·5 | | 37·0 | 14·8 | |
| 9·6 | | 37·5 | 53·1 | 9·0 |
| 8·5 | | 38·5 | 32·2 | 7·5 G |
| 9·6 | | 44·0 | 54·5 | 10·0 |
| 9·7 | | 47·5 | 16·4 | |
| 9·7 | 53 | 18·8 | 3·1 | |
| 9·7 | | 20·0 | 4·0 | |
| 9·2 | | 22·0 | 22·8 | |
| 9·7 | | 25·0 | 7·4 | |
| 9·7 | | 31·5 | 19·1 | |
| 9·7 | | 37·5 | 16·1 | |
| 9·7 | | 43·0 | 22·9 | |
| 9·2 | | 45·5 | 1·2 | |
| 9·6 | | 59·5 | 48·0 | |
| 9·6 | 54 | 9·5 | 55·2 | |
| 9·1 | | 27·5 | 34·4 | |
| 9·7 | | 39·8 | 36·8 | |
| 9·7 | | 47·0 | 49·1 | 10·0 |
| 9·2 | 55 | 8·5 | 38·8 | |
| 9·5 | | 58·5 | 1·6 | |
| 8·4 | 56 | 4·5 | 43·5 | |
| 9·7 | | 8·8 | 48·0 | |
| 9·6 | | 14·5 | 5·8 | |
| 9·5 | | 26·5 | 4·6 | |
| 9·2 | | 27·5 | 44·1 | |
| 7·6 | 57 | 6·0 | 14·5 | G |
| 9·2 | | 47·5 | 5·1 | |
| 8·7 | | 58·5 | 7·3 | |
| 9·5 | 58 | 22·0 | 35·2 | |
| 9·3 | | 49·0 | 53·2 | |
| 8·3 | | 56·5 | 14·5 | 9·5 |
| 7·5 | 59 | 2·0 | 10·6 | 8·5 |
| 8·7 | | 13·0 | 1·2 | |
| 8·3 | | 23·0 | 31·8 | 8·0 |
| 9·1 | | 28·5 | 19·6 | |
| 8·5 | | 29·5 | 54·5 | |
| 8·5 | | 37·5 | 4·4 | |
| 9·2 | | 50·5 | 50·1 | |
| 8·5 | 1 | 0·0 | 42·2 | 9·5 |
| 9·7 | | 8·0 | 50·7 | |
| 7·5 | | 13·5 | 46·7 | 8·5 |
| 9·4 | | 19·5 | 3·4 | |
| 9·2 | | 20·0 | 33·1 | 9·2 |
| 9·7 | | 35·0 | 25·5 | |
| 9·4 | | 45·0 | 34·1 | |

### 961—1020.

| mag. | $8^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 2 | 1·5 | 26·4 | |
| 9·0 | 3 | 22·5 | 36·8 | |
| 8·4 | 4 | 16·0 | 10·5 | 9·0 |
| 9·7 | | 41·5 | 56·1 | |
| 8·2 | 5 | 11·2 | 0·2 | 9·2 |
| 8·1 | | 13·5 | 13·8 | 9·0 |
| 9·5 | | 15·5 | 2·6 | |
| 9·6 | | 32·5 | 1·6 | |
| 9·2 | | 49·5 | 47·5 | |
| 8·8 | | 59·0 | 11·2 | 9·0 |
| 9·1 | 6 | 4·1 | 59·4 | 9·0 |
| 9·0 | | 20·0 | 36·1 | |
| 8·7 | | 21·3 | 13·9 | 9·0 |
| 9·4 | | 44·7 | 12·0 | 8·5 |
| 9·4 | 7 | 9·5 | 9·1 | |
| 8·8 | | 10·0 | 12·8 | 9·0 |
| 9·2 | | 32·2 | 52·4 | |
| 8·9 | | 33·0 | 41·4 | |
| 9·4 | | 50·8 | 37·9 | |
| 9·6 | 8 | 3·5 | 27·0 | |
| 8·8 | | 17·3 | 28·3 | 9·0 |
| 9·2 | | 44·9 | 57·7 | |
| 9·3 | 9 | 18·5 | 3·4 | |
| 8·9 | 10 | 38·0 | 28·1 | 9·0 |
| 9·6 | 11 | 16·5 | 48·0 | |
| 8·1 | | 59·5 | 3·8 | 7·5 GSg |
| 9·2 | 12 | 4·0 | 9·2 | 9·0 |
| 9·3 | | 6·5 | 2·0 | |
| 9·6 | | 14·0 | 15·4 | |
| 8·9 | | 19·5 | 16·6 | 9·5 |
| 9·4 | | 39·0 | 24·7 | |
| 9·2 | | 43·5 | 53·8 | |
| 9·5 | | 53·0 | 18·0 | |
| 9·5 | 13 | 3·5 | 41·7 | |
| 9·2 | | 23·5 | 28·0 | |
| 9·6 | | 33·0 | 45·1 | |
| 9·2 | | 39·0 | 47·5 | |
| 9·6 | | 40·0 | 15·0 | |
| 9·5 | 14 | 0·5 | 48·2 | |
| 8·7 | | 5·5 | 58·9 | 9·0 |
| 9·6 | | 21·5 | 0·1 | |
| 9·4 | 15 | 5·5 | 16·0 | 9·5 |
| 9·2 | | 33·5 | 4·5 | 9·0 |
| 9·2 | 16 | 15·5 | 45·0 | |
| 8·8 | | 19·5 | 27·0 | 9·5 |
| 9·6 | | 55·5 | 7·6 | |
| 8·8 | 17 | 0·5 | 18·3 | 8·5 G |
| 9·6 | | 8·5 | 21·9 | |
| 9·4 | 18 | 15·5 | 54·0 | |
| 9·6 | | 32·0 | 58·8 | |
| 7·6 | | 49·5 | 59·7 | 8·2 GSg |
| 9·5 | | 52·5 | 52·6 | |
| 9·0 | | 59·5 | 2·9 | 9·0 |
| 9·5 | 19 | 38·0 | 57·9 | 9·5 |
| 9·5 | 20 | 20·5 | 4·2 | |
| 8·7 | | 29·0 | 9·3 | 9·5 |
| 9·6 | 21 | 8·0 | 26·6 | |
| 9·6 | | 21·2 | 57·8 | |
| 9·6 | | 29·0 | 9·0 | |
| 9·6 | | 48·0 | 52·0 | |

| h | m | 25 prec. α + s | δ − ′ |
|---|---|---|---|
| 7 | 0 | 17 | 2·2 |
| | 10 | 18 | 2·5 |
| | 20 | 19 | 2·9 |
| | 30 | 20 | 3·2 |
| | 40 | 21 | 3·5 |
| | 50 | 22 | 3·9 |
| 8 | 0 | 23 | 4·2 |
| | 10 | 25 | 4·5 |
| | 20 | 26 | 4·8 |
| | 30 | 28 | 5·1 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 20 | 26 | 4.8 |
| | 30 | 28 | 5.1 |
| | 40 | 30 | 5.4 |
| | 50 | 31 | 5.6 |
| 9 | 0 | 33 | 5.9 |
| | 10 | 35 | 6.2 |
| | 20 | 37 | 6.4 |

## 1021—1080.

| mag. | 8h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9.5 | 22 | 11.0 | 5.4 | |
| 9.3 | 23 | 3.5 | 45.7 | 10.0 |
| 9.5 | 24 | 42.0 | 2.1 | |
| 9.4 | 25 | 3.5 | 40.2 | 9.0 G |
| 9.6 | | 20.0 | 53.1 | |
| 9.6 | | 38.0 | 21.2 | |
| 9.4 | | 48.0 | 55.1 | |
| 9.5 | | 50.0 | 8.9 | |
| 9.5 | 26 | 23.0 | 31.8 | |
| 8.8 | | 51.5 | 27.2 | |
| 9.2 | 27 | 32.0 | 41.2 | |
| 9.2 | | 33.0 | 22.8 | |
| 9.6 | | 47.2 | 59.0 | |
| 9.2 | | 49.0 | 38.8 | 8.5 |
| 9.6 | 28 | 52.0 | 23.3 | |
| 9.6 | | 59.5 | 14.1 | |
| 7.4 | 29 | 24.5 | 54.9 | 8.0 GSg |
| 9.3 | 30 | 24.5 | 34.0 | |
| 9.6 | | 28.0 | 15.3 | |
| 9.4 | | 40.0 | 23.0 | |
| 9.5 | 31 | 1.0 | 19.4 | |
| 9.5 | | 17.0 | 42.8 | |
| 9.2 | | 52.0 | 50.8 | |
| 9.2 | | 55.0 | 2.1 | |
| 8.0 | 32 | 3.0 | 3.5 | 8.5 |
| 9.2 | | 19.0 | 38.7 | |
| 9.5 | | 52.5 | 11.5 | |
| 9.6 | 33 | 43.5 | 55.1 | |
| 9.6 | | 55.0 | 5.3 | |
| 8.0 | 34 | 9.5 | 31.5 | 8.5 G |
| 9.4 | | 13.0 | 50.1 | |
| 9.4 | 35 | 1.0 | 28.1 | |
| 9.4 | 36 | 8.0 | 29.2 | |
| 9.6 | | 54.0 | 20.1 | 9.5 |
| 9.4 | 37 | 29.0 | 42.1 | |
| 9.5 | | 36.8 | 2.0 | |
| 9.6 | 38 | 2.5 | 24.0 | |
| 9.6 | | 10.0 | 13.9 | |
| 8.2 | | 18.0 | 15.1 | 8.5 |
| 9.2 | | 43.0 | 16.2 | |
| 9.6 | | 59.0 | 13.1 | |
| 9.4 | 39 | 20.0 | 46.2 | |
| 9.2 | | 39.0 | 32.7 | |
| 9.6 | 40 | 7.5 | 13.2 | |
| 9.6 | | 39.5 | 55.6 | |
| 9.4 | | 48.5 | 53.2 | |
| 6.9 | | 58.0 | 14.0 | 7.0 GSg |
| 9.5 | 41 | 0.0 | 50.9 | 9.2 |
| 9.9 | | 15.5 | 20.9 | |
| 9.3 | | 26.5 | 18.9 | |
| 9.5 | | 37.0 | 39.8 | |
| 10.0 | | 38.5 | 17.0 | |
| 9.6 | | 39.0 | 53.6 | |
| 10.0 | | 39.5 | 5.1 | |
| 10.0 | | 44.0 | 58.5 | |
| 8.8 | | 53.0 | 38.8 | |
| 10.0 | 42 | 23.5 | 17.9 | |
| 9.3 | | 31.5 | 35.8 | |
| 9.6 | | 57.0 | 27.8 | |
| 9.8 | 43 | 1.0 | 54.8 | |

## 1081—1140.

| mag. | 8h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10.0 | 44 | 58.0 | 35.7 | |
| 9.8 | 45 | 4.5 | 21.6 | |
| 9.9 | | 7.0 | 0.8 | |
| 9.3 | | 10.5 | 54.9 | |
| 10.0 | | 19.5 | 35.8 | |
| 9.6 | | 23.5 | 35.4 | |
| 9.6 | | 23.5 | 14.9 | |
| 10.0 | | 25.5 | 52.8 | |
| 10.0 | 46 | 3.5 | 3.6 | |
| 9.6 | | 19.0 | 11.8 | |
| 9.6 | 47 | 3.0 | 29.8 | 9.0 |
| 8.4 | | 4.0 | 8.6 | 8.8 |
| 9.4 | | 9.5 | 1.4 | |
| 9.9 | 48 | 0.0 | 23.8 | |
| 10.0 | | 17.0 | 45.8 | |
| 9.9 | | 25.0 | 49.8 | |
| 10.0 | | 33.5 | 10.7 | |
| 9.3 | | 38.5 | 49.8 | |
| 10.0 | | 55.5 | 8.0 | |
| 9.8 | 49 | 21.0 | 10.0 | |
| 9.8 | | 59.0 | 18.8 | |
| 9.9 | | 59.5 | 50.2 | |
| 9.8 | 50 | 13.5 | 41.2 | |
| 9.4 | | 21.5 | 57.8 | |
| 9.2 | | 28.0 | 12.4 | 9.5 |
| 9.2 | | 36.5 | 58.2 | 9.5 |
| 9.6 | 51 | 29.0 | 53.4 | |
| 9.5 | | 37.5 | 13.6 | 9.2 |
| 10.0 | | 38.5 | 0.5 | |
| 9.9 | | 43.0 | 54.7 | |
| 10.0 | | 56.0 | 1.8 | |
| 9.9 | 52 | 4.5 | 10.5 | |
| 9.8 | | 6.5 | 42.6 | |
| 9.4 | | 18.5 | 34.6 | 9.0 |
| 9.6 | | 24.5 | 45.2 | |
| 9.9 | | 26.0 | 16.8 | |
| 9.8 | | 32.5 | 56.1 | |
| 9.3 | | 49.0 | 13.4 | |
| 9.6 | 53 | 12.5 | 51.8 | |
| 9.9 | | 23.5 | 34.8 | |
| 9.3 | | 30.5 | 44.2 | 9.0 |
| 10.0 | | 31.5 | 35.1 | |
| 9.6 | | 34.5 | 4.4 | |
| 10.0 | | 43.0 | 4.6 | |
| 8.9 | | 44.5 | 23.8 | 8.0 |
| 8.9 | | 47.5 | 9.8 | 9.2 |
| 9.6 | 54 | 23.5 | 24.8 | |
| 8.0 | | 29.0 | 4.8 | 8.2 |
| 9.9 | | 29.0 | 7.4 | |
| 10.0 | | 31.0 | 29.0 | |
| 9.6 | | 33.5 | 59.9 | |
| 10.0 | | 37.0 | 28.4 | |
| 9.7 | | 44.5 | 59.1 | |
| 9.6 | | 53.0 | 5.4 | 9.2 |
| 10.0 | | 53.7 | 58.7 | |
| 10.0 | | 54.5 | 55.8 | |
| 10.0 | 55 | 21.0 | 0.6 | |
| 9.6 | | 32.0 | 31.0 | |
| 8.9 | | 49.0 | 46.2 | 9.5 |
| 9.8 | | 49.5 | 53.1 | |

## 1141—1200.

| mag. | 8h.–9h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10.0 | 56 | 9.5 | 39.8 | |
| 8.7 | | 23.5 | 44.6 | 9.0 |
| 10.0 | | 24.0 | 12.2 | |
| 10.0 | | 28.5 | 58.1 | |
| 10.0 | | 32.5 | 35.0 | |
| 8.6 | | 33.5 | 22.8 | 8.5 G |
| 10.0 | | 47.5 | 12.4 | |
| 10.0 | 57 | 18.0 | 17.5 | |
| 9.6 | | 19.0 | 38.9 | |
| 10.0 | | 20.0 | 53.2 | |
| 10.0 | | 42.0 | 52.7 | |
| 9.6 | | 44.5 | 5.3 | |
| 10.0 | | 51.0 | 31.7 | |
| 9.5 | | 52.0 | 53.9 | |
| 9.9 | | 55.0 | 33.3 | |
| 10.0 | 58 | 8.0 | 51.1 | |
| 10.0 | | 17.0 | 10.7 | |
| 9.0 | | 31.5 | 36.3 | 9.8 |
| 10.0 | | 49.5 | 30.7 | |
| 10.0 | 59 | 32.5 | 2.7 | |
| 9.6 | | 53.5 | 0.4 | |
| 10.0 | 0 | 9.5 | 3.9 | |
| 10.0 | | 21.0 | 8.7 | |
| 9.8 | | 21.8 | 51.4 | |
| 9.8 | | 24.0 | 44.0 | 9.0 |
| 9.8 | | 28.5 | 27.2 | |
| 8.1 | | 29.8 | 51.4 | 7.9 GSt : |
| 10.0 | | 30.0 | 46.9 | |
| 9.3 | 1 | 26.0 | 23.7 | |
| 9.5 | | 29.5 | 37.1 | |
| 9.6 | | 41.5 | 46.1 | |
| 8.3 | 2 | 29.5 | 19.6 | 8.2 GSg |
| 10.0 | | 43.0 | 10.9 | |
| 8.0 | | 52.0 | 36.1 | 8.0 G |
| 9.9 | | 52.5 | 34.1 | |
| 9.6 | 3 | 4.0 | 36.8 | 9.0 |
| 9.8 | | 5.5 | 51.9 | |
| 9.9 | | 52.5 | 58.7 | |
| 10.0 | | 54.0 | 34.6 | |
| 10.0 | 4 | 9.5 | 38.9 | |
| 9.6 | | 13.5 | 40.7 | |
| 8.8 | | 15.0 | 15.7 | 8.0 G |
| 10.0 | | 18.2 | 2.6 | |
| 10.0 | | 19.0 | 20.5 | |
| 9.3 | 5 | 15.0 | 58.7 | |
| 9.6 | | 18.0 | 5.7 | |
| 9.8 | | 21.0 | 20.7 | |
| 10.0 | 6 | 5.5 | 7.6 | |
| 9.8 | | 8.8 | 4.2 | : |
| 10.0 | | 14.0 | 10.1 | |
| 8.5 | | 15.5 | 25.7 | 8.8 G |
| 9.9 | | 15.8 | 16.9 | |
| 9.3 | | 25.5 | 20.7 | 8.5 |
| 9.9 | | 39.5 | 19.1 | |
| 9.3 | | 49.0 | 19.3 | |
| 10.0 | | 53.0 | 59.9 | |
| 8.8 | 7 | 0.5 | 46.5 | 9.5 |
| 9.8 | | 34.0 | 13.9 | |
| 10.0 | | 39.0 | 48.5 | |
| 10.0 | 8 | 0.8 | 44.0 | |

## 1201—1260.

| mag. | 9h. m | s | −61° ′ | |
|---|---|---|---|---|
| 4.5 | 8 | 25.5 | 48.2 | 4.2 GStr |
| 10.0 | | 40.5 | 59.0 | |
| 10.0 | | 45.0 | 49.9 | |
| 10.0 | 9 | 0.5 | 54.5 | |
| 9.6 | | 10.0 | 20.9 | |
| 9.9 | | 46.0 | 44.9 | |
| 8.8 | 10 | 20.0 | 24.0 | |
| 8.6 | | 20.5 | 54.4 | |
| 10.0 | | 25.0 | 50.9 | |
| 9.6 | | 28.0 | 54.9 | |
| 8.6 | | 39.5 | 9.9 | |
| 8.6 | 11 | 15.0 | 35.7 | |
| 9.6 | | 28.5 | 51.9 | |
| 9.6 | | 30.0 | 38.7 | |
| 9.5 | | 50.0 | 39.8 | |
| 10.0 | | 54.0 | 9.8 | |
| 9.7 | 12 | 12.5 | 23.9 | |
| 10.0 | | 19.0 | 0.0 | |
| 8.7 | | 24.0 | 5.0 | |
| 10.0 | | 29.5 | 14.9 | |
| 10.0 | | 50.5 | 1.1 | |
| 9.4 | 13 | 17.0 | 29.9 | |
| 10.0 | | 30.0 | 34.7 | |
| 8.2 | 14 | 0.0 | 54.9 | 9.0 |
| 8.6 | | 4.0 | 47.9 | 9.0 |
| 8.8 | | 11.0 | 54.9 | 9.2 |
| 10.0 | | 26.0 | 36.5 | |
| 10.0 | | 46.0 | 46.9 | |
| 8.4 | | 58.0 | 17.9 | 9.0 |
| 9.1 | 15 | 3.5 | 41.5 | |
| 9.0 | | 6.5 | 9.1 | 8.5 |
| 9.6 | | 10.0 | 56.8 | |
| 9.8 | | 14.0 | 5.9 | |
| 9.3 | | 19.0 | 3.1 | |
| 9.0 | | 43.5 | 23.7 | |
| 9.6 | 16 | 0.7 | 23.5 | |
| 9.6 | | 10.0 | 58.8 | |
| 8.5 | | 22.5 | 12.7 | 8.5 |
| 10.0 | | 26.0 | 2.0 | |
| 9.5 | | 26.5 | 8.6 | 9.0 |
| 7.6 | 17 | 29.0 | 27.7 | 7.2 GSt |
| 6.8 | | 56.2 | 52.3 | 5.7 GSctr |
| 9.5 | | 56.5 | 9.5 | |
| 8.7 | 18 | 9.5 | 25.1 | 9.5 |
| 9.9 | | 15.0 | 17.5 | |
| 9.0 | | 17.2 | 30.2 | 9.5 |
| 9.6 | | 27.0 | 6.9 | |
| 9.5 | | 29.5 | 46.7 | |
| 8.8 | | 30.7 | 13.0 | |
| 9.8 | | 33.7 | 41.4 | |
| 9.9 | | 38.7 | 37.9 | |
| 9.2 | | 39.7 | 31.0 | |
| 9.7 | | 40.0 | 32.3 | |
| 9.8 | | 41.5 | 38.4 | |
| 9.8 | | 41.5 | 29.8 | |
| 8.6 | 19 | 9.2 | 16.2 | |
| 9.6 | | 15.0 | 42.4 | 9.0 |
| 9.7 | | 21.0 | 30.6 | |
| 9.6 | | 28.8 | 49.0 | |
| 9.8 | | 35.8 | 42.6 | |



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### 1261—1320.

| mag. | 9h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9.8 | 19 | 51.5 | 38.0 | 9.0 |
| 9.2 | | 55.3 | 42.6 | 8.5 |
| 9.8 | 20 | 40.0 | 53.8 | |
| 9.8 | | 46.5 | 19.4 | |
| 7.5 | | 55.0 | 6.6 | 6.5 GSct |
| 8.7 | 21 | 25.0 | 18.2 | |
| 9.1 | | 28.5 | 55.1 | 10.0 |
| 9.3 | | 29.5 | 49.2 | |
| 9.4 | | 45.5 | 37.0 | |
| 9.4 | | 48.5 | 37.8 | |
| 6.7 | 22 | 20.0 | 24.6 | 6.0 GStr |
| 9.7 | | 55.5 | 36.5 | |
| 9.4 | 23 | 54.5 | 57.1 | |
| 9.4 | 24 | 11.5 | 38.1 | |
| 9.6 | 25 | 9.0 | 5.6 | |
| 9.6 | | 24.5 | 45.1 | |
| 7.7 | | 38.5 | 43.5 | 6.5 GSct |
| 7.2 | 26 | 23.5 | 48.8 | 7.0 GSt |
| 9.7 | | 24.0 | 54.0 | |
| 8.8 | | 39.0 | 1.6 | 9.5 |
| 9.3 | | 44.0 | 19.0 | 9.0 |
| 8.9 | | 48.5 | 8.0 | |
| 9.8 | | 58.5 | 7.6 | |
| 9.0 | 27 | 9.0 | 14.7 | 8.0 G |
| 9.8 | | 27.5 | 49.0 | |
| 9.8 | | 29.5 | 37.0 | |
| 8.9 | | 45.5 | 24.5 | |
| 9.8 | 28 | 12.5 | 26.1 | |
| 9.8 | | 29.5 | 13.6 | |
| 9.8 | | 39.0 | 4.1 | |
| 9.8 | | 58.5 | 56.1 | |
| 9.4 | | 59.5 | 59.1 | |
| 9.0 | 30 | 6.0 | 25.4 | |
| 9.7 | | 13.5 | 42.6 | |
| 9.7 | | 29.0 | 47.0 | |
| 9.2 | | 57.0 | 53.9 | 8.5 G |
| 9.4 | 31 | 19.5 | 43.2 | |
| 9.8 | | 41.0 | 19.0 | |
| 9.8 | | 48.0 | 32.9 | |
| 9.8 | 32 | 6.0 | 51.2 | |
| 9.6 | | 9.5 | 30.6 | |
| 8.9 | | 12.0 | 11.4 | 9.0 |
| 9.4 | | 12.5 | 54.0 | 8.2 |
| 9.4 | 33 | 5.8 | 2.2 | |
| 9.8 | | 13.5 | 1.4 | |
| 9.6 | | 44.5 | 23.9 | |
| 8.2 | 34 | 3.0 | 4.7 | 9.0 |
| 7.3 | 35 | 9.0 | 59.5 | 8.0 G |
| 9.6 | | 13.0 | 12.3 | |
| 9.6 | | 22.0 | 29.0 | |
| 9.8 | | 30.0 | 44.8 | |
| 9.8 | | 40.0 | 3.4 | |
| 7.4 | | 51.5 | 59.3 | 8.0 G |
| 9.8 | 36 | 15.0 | 10.6 | |
| 9.8 | | 23.5 | 14.4 | |
| 9.8 | | 28.5 | 16.0 | |
| 9.7 | | 29.0 | 21.8 | |
| 9.8 | | 37.0 | 52.0 | |
| 8.9 | | 42.0 | 48.2 | 9.0 |
| 8.7 | 37 | 7.0 | 56.8 | 9.0 |

### 1321—1380.

| mag. | 9h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9.1 | 37 | 14.5 | 15.9 | |
| 9.6 | | 48.2 | 28.5 | |
| 9.8 | | 49.0 | 58.1 | |
| 9.8 | | 58.0 | 58.8 | |
| 9.2 | 38 | 39.0 | 15.9 | |
| 9.8 | | 53.0 | 25.1 | |
| 9.6 | 39 | 10.5 | 50.3 | |
| 9.8 | | 23.5 | 59.4 | |
| 9.8 | | 43.0 | 24.7 | |
| 9.4 | | 52.0 | 3.1 | 10.0 |
| 9.2 | 40 | 49.0 | 51.9 | |
| 9.8 | 41 | 45.5 | 13.7 | |
| 5.8 | | 48.5 | 56.0 | 4.0 GSctr |
| 9.3 | | 59.0 | 38.0 | |
| 9.8 | 42 | 28.0 | 11.2 | |
| 9.1 | | 45.5 | 23.1 | 9.0 |
| 9.8 | 43 | 25.5 | 2.7 | |
| 9.8 | | 27.0 | 57.7 | |
| 9.8 | | 32.0 | 45.5 | |
| 9.7 | 44 | 3.0 | 9.1 | |
| 9.8 | | 23.0 | 34.7 | |
| 9.2 | | 33.0 | 39.1 | |
| 9.7 | | 40.0 | 55.0 | |
| 9.8 | | 44.5 | 41.6 | |
| 9.8 | | 55.5 | 39.1 | |
| 9.5 | 45 | 5.5 | 35.0 | 9.0 |
| 8.1 | 46 | 17.0 | 40.1 | 8.5 |
| 9.8 | | 58.0 | 2.3 | |
| 9.8 | | 59.0 | 8.5 | |
| 9.8 | 47 | 30.5 | 56.3 | |
| 9.7 | | 39.5 | 9.7 | |
| 8.4 | 48 | 13.0 | 27.3 | |
| 8.4 | | 39.0 | 50.1 | 8.5 |
| 9.8 | | 55.5 | 25.3 | |
| 9.8 | 49 | 12.0 | 7.1 | |
| 8.2 | | 27.5 | 44.8 | 8.0 GSt |
| 9.7 | | 55.0 | 58.2 | |
| 9.8 | 50 | 8.0 | 50.2 | |
| 7.8 | | 19.0 | 31.7 | 7.5 GSt |
| 9.8 | | 45.0 | 28.3 | 9.5 |
| 9.8 | 51 | 13.0 | 56.1 | |
| 9.5 | | 38.5 | 59.1 | |
| 9.8 | | 50.5 | 29.5 | |
| 9.1 | | 52.0 | 12.1 | 9.5 |
| 9.8 | | 54.0 | 7.1 | 10.0 |
| 9.8 | 52 | 12.5 | 21.1 | |
| 9.8 | | 38.2 | 10.2 | |
| 9.8 | 53 | 3.0 | 54.1 | |
| 9.2 | | 19.0 | 7.1 | |
| 9.8 | | 22.8 | 43.7 | |
| 10.0 | | 30.0 | 14.0 | |
| 9.7 | | 33.0 | 39.3 | |
| 9.9 | | 38.5 | 48.0 | |
| 9.8 | | 39.5 | 42.8 | |
| 9.7 | | 40.5 | 10.2 | |
| 9.7 | | 49.0 | 43.0 | |
| 9.6 | | 53.0 | 10.3 | |
| 10.0 | | 54.5 | 10.2 | |
| 7.8 | 54 | 4.3 | 20.1 | 7.5 GSt |
| 8.8 | | 8.2 | 5.0 | 9.0 |

### 1381—1440.

| mag. | 9h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8.1 | 54 | 26.8 | 59.3 | 7.2 GSt |
| 10.0 | | 32.0 | 12.4 | |
| 9.2 | | 38.5 | 57.9 | |
| 8.2 | 55 | 13.5 | 43.1 | 7.5 GSt |
| 9.6 | | 26.0 | 27.5 | |
| 10.0 | | 42.5 | 51.7 | |
| 8.6 | | 50.0 | 46.0 | 8.5 |
| 9.4 | | 59.5 | 10.8 | 9.0 |
| 10.0 | 56 | 3.0 | 10.0 | |
| 9.2 | | 3.0 | 0.2 | 8.0 G |
| 10.0 | | 10.0 | 47.6 | |
| 9.9 | | 12.5 | 58.0 | |
| 9.9 | | 13.5 | 15.3 | |
| 10.0 | | 19.0 | 24.8 | |
| 9.6 | | 25.0 | 24.4 | |
| 9.5 | | 28.5 | 1.2 | |
| 9.6 | | 34.5 | 12.0 | |
| 9.9 | | 35.0 | 33.1 | |
| 9.6 | | 44.5 | 15.7 | |
| 8.6 | | 46.0 | 9.7 | 8.0 GSt |
| 9.1 | | 52.5 | 5.3 | 9.5 |
| 9.6 | 57 | 2.0 | 15.0 | |
| 9.9 | | 3.0 | 51.2 | |
| 10.0 | | 10.0 | 5.9 | |
| 10.0 | | 23.5 | 14.8 | |
| 9.4 | | 30.0 | 28.1 | |
| 10.0 | | 33.0 | 17.6 | |
| 9.3 | | 43.0 | 26.5 | |
| 9.6 | | 44.5 | 13.1 | |
| 9.6 | | 45.0 | 1.1 | |
| 9.4 | | 50.0 | 31.5 | |
| 10.0 | | 53.5 | 29.1 | |
| 9.7 | | 55.0 | 49.0 | |
| 10.0 | 58 | 8.0 | 23.0 | |
| 10.0 | | 18.0 | 36.0 | |
| 9.1 | | 20.0 | 10.1 | |
| 10.0 | | 22.0 | 22.5 | |
| 10.0 | | 29.5 | 39.2 | |
| 10.0 | | 39.5 | 47.1 | |
| 10.0 | | 40.0 | 0.9 | |
| 10.0 | | 43.5 | 27.2 | |
| 10.0 | | 44.5 | 27.5 | |
| 8.8 | | 47.0 | 47.1 | 9.0 |
| 9.4 | | 49.5 | 28.4 | |
| 9.5 | | 50.5 | 21.0 | |
| 9.7 | | 50.5 | 59.1 | |
| 9.5 | | 52.0 | 47.0 | 9.0 |
| 9.6 | | 54.5 | 33.9 | |
| 9.6 | | 55.0 | 17.9 | |
| 10.0 | 59 | 0.0 | 15.9 | |
| 8.5 | | 0.0 | 33.1 | 5.5 GSt |
| 10.0 | | 0.5 | 36.3 | |
| 10.0 | | 6.0 | 10.7 | |
| 10.0 | | 12.0 | 55.8 | |
| 8.6 | | 13.5 | 25.0 | 9.0 G |
| 10.0 | | 24.0 | 59.2 | |
| 10.0 | | 27.0 | 25.0 | |
| 9.8 | | 29.5 | 15.0 | |
| 9.5 | | 34.0 | 31.0 | |
| 8.6 | | 39.0 | 19.4 | 8.5 G |

### 1441—1500.

| mag. | 9h.–10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 6.8 | 59 | 43.0 | 16.6 | 6.5 GStr |
| 10.0 | | 49.5 | 48.1 | |
| 9.6 | | 55.5 | 47.4 | |
| 9.9 | 0 | 0.0 | 59.4 | |
| 10.0 | | 9.5 | 57.9 | |
| 10.0 | | 11.0 | 50.0 | |
| 8.6 | | 12.5 | 37.8 | 8.8 |
| 10.0 | | 24.0 | 29.0 | |
| 9.1 | | 26.0 | 42.0 | 10.0 |
| 9.6 | | 33.5 | 52.6 | |
| 9.8 | | 41.0 | 23.4 | |
| 9.8 | | 45.5 | 23.6 | |
| 9.4 | | 46.5 | 27.1 | |
| 9.8 | | 50.0 | 14.1 | |
| 9.1 | | 50.5 | 4.3 | |
| 9.8 | | 54.5 | 8.8 | |
| 10.0 | | 56.5 | 24.3 | |
| 8.8 | 1 | 13.5 | 4.5 | |
| 10.0 | | 15.0 | 27.4 | |
| 9.4 | | 21.5 | 52.7 | |
| 9.2 | | 28.5 | 48.3 | |
| 9.9 | | 29.5 | 50.4 | |
| 10.0 | | 31.5 | 7.0 | |
| 9.7 | | 50.0 | 59.1 | |
| 9.6 | | 51.0 | 47.9 | |
| 10.0 | | 57.5 | 47.8 | |
| 9.4 | 2 | 3.0 | 37.8 | |
| 10.0 | | 6.0 | 57.9 | |
| 10.0 | | 9.0 | 44.1 | |
| 9.4 | | 28.5 | 24.0 | |
| 9.7 | | 30.0 | 17.9 | |
| 9.2 | | 49.0 | 49.7 | 10.0 |
| 8.8 | 3 | 2.0 | 44.0 | 9.5 |
| 10.0 | | 3.0 | 19.5 | |
| 9.8 | | 26.5 | 4.2 | |
| 8.2 | | 29.0 | 27.4 | 8.5 G |
| 7.8 | | 35.5 | 37.7 | 8.0 G |
| 10.0 | | 38.0 | 27.5 | |
| 6.8 | 4 | 2.0 | 36.5 | 7.0 GSt |
| 8.8 | | 17.0 | 9.0 | 8.0 G |
| 9.7 | | 29.0 | 23.2 | |
| 9.6 | | 31.5 | 12.1 | |
| 10.0 | | 46.0 | 26.6 | |
| 8.6 | | 54.5 | 16.3 | 9.0 |
| 10.0 | 5 | 49.0 | 31.1 | |
| 9.8 | | 55.0 | 58.1 | |
| 9.0 | | 59.5 | 59.0 | |
| 10.0 | 6 | 3.5 | 42.3 | |
| 9.6 | | 15.5 | 18.1 | |
| 9.5 | | 17.5 | 25.1 | |
| 10.0 | | 20.0 | 1.8 | |
| 9.6 | | 23.5 | 4.0 | ? |
| 10.0 | | 35.0 | 2.0 | ? |
| 9.8 | | 36.0 | 14.8 | |
| 9.6 | | 58.0 | 34.0 | |
| 8.5 | 7 | 13.5 | 9.1 | 8.0 GSt |
| 9.5 | | 14.0 | 22.0 | |
| 10.0 | | 17.5 | 49.3 | |
| 10.0 | | 19.0 | 12.7 | ? |
| 9.4 | | 23.0 | 20.8 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 9 | 10 | 35 | 6.2 |
| | 20 | 37 | 6.4 |
| | 30 | 39 | 6.6 |
| | 40 | 41 | 6.8 |
| | 50 | 44 | 7.0 |
| 10 | 0 | 46 | 7.2 |
| | 10 | 48 | 7.4 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 10 | 0 | 46 | 7·2 |
| | 10 | 48 | 7·4 |
| | 20 | 51 | 7·6 |
| | 30 | 53 | 7·7 |
| | 40 | 56 | 7·9 |

## 1501—1560.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·5 | 7 | 25·0 | 43·1 | |
| 10·0 | | 26·0 | 4·2 | |
| 9·7 | | 29·5 | 31·0 | |
| 9·8 | | 43·0 | 38·1 | |
| 9·5 | | 48·0 | 2·9 | |
| 10·0 | | 59·0 | 11·7 | |
| 10·0 | | 59·5 | 28·5 | |
| 10·0 | | 59·5 | 55·1 | |
| 10·0 | 8 | 11·0 | 45·3 | |
| 10·0 | | 14·0 | 37·0 | |
| 10·0 | | 44·0 | 24·7 | |
| 10·0 | | 46·0 | 11·6 | |
| 8·6 | | 54·0 | 11·6 | 9·0 |
| 9·4 | 9 | 5·5 | 56·1 | |
| 10·0 | | 8·5 | 14·0 | |
| 9·0 | | 10·5 | 40·2 | |
| 6·8 | | 17·8 | 2·4 | 7·0 GSgt |
| 9·2 | | 19·5 | 32·1 | |
| 8·4 | | 22·5 | 53·1 | 9·0 |
| 8·6 | | 24·0 | 27·7 | 9·5 |
| 9·6 | | 30·0 | 30·7 | |
| 9·8 | | 39·0 | 42·1 | |
| 9·0 | | 39·0 | 15·2 | |
| 9·6 | | 39·0 | 1·8 | |
| 9·5 | | 39·5 | 46·0 | 9·0 |
| 10·0 | | 41·0 | 8·8 | |
| 10·0 | | 43·0 | 45·2 | |
| 10·0 | | 56·5 | 23·1 | |
| 9·4 | 10 | 2·0 | 4·1 | |
| 10·0 | | 4·0 | 47·6 | |
| 9·8 | | 4·0 | 25·1 | |
| 10·0 | | 7·0 | 37·1 | |
| 10·0 | | 14·5 | 47·2 | |
| 10·0 | | 19·5 | 37·1 | |
| 9·0 | | 20·5 | 2·1 | |
| 8·9 | | 26·0 | 50·1 | 9·0 |
| 9·4 | | 27·5 | 33·1 | |
| 10·0 | | 30·0 | 11·5 | |
| 10·0 | | 33·5 | 8·4 | |
| 9·0 | | 49·5 | 39·2 | |
| 8·9 | | 53·0 | 58·2 | 9·0 |
| 10·0 | | 53·5 | 22·5 | |
| 10·0 | 11 | 5·0 | 35·1 | |
| 10·0 | | 7·0 | 14·5 | |
| 10·0 | | 7·0 | 12·2 | |
| 9·5 | | 10·5 | 25·6 | 9·0 |
| 10·0 | | 10·5 | 48·8 | |
| 10·0 | | 13·0 | 55·3 | |
| 10·0 | | 17·0 | 51·1 | |
| 9·8 | | 19·0 | 34·1 | |
| 9·8 | | 25·5 | 31·8 | |
| 10·0 | | 29·5 | 3·5 | |
| 7·2 | | 30·5 | 54·8 | 7·2 GSg |
| 10·0 | | 43·0 | 19·1 | |
| 9·8 | | 47·5 | 23·3 | |
| 10·0 | | 52·5 | 40·0 | |
| 9·6 | | 57·0 | 8·4 | |
| 10·0 | 12 | 5·5 | 3·1 | |
| 10·0 | | 8·5 | 15·1 | |
| 10·0 | | 20·0 | 59·5 | |

## 1561—1620.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 12 | 32·5 | 31·7 | |
| 10·0 | | 33·5 | 48·1 | |
| 8·4 | | 35·5 | 40·9 | 8·5 S |
| 10·0 | | 40·0 | 44·0 | |
| 8·8 | | 58·5 | 3·4 | 9·0 |
| 10·0 | 13 | 33·0 | 31·1 | |
| 9·2 | | 33·0 | 39·0 | |
| 10·0 | | 39·5 | 38·8 | |
| 10·0 | 14 | 0·0 | 0·4 | |
| 9·5 | | 2·0 | 25·0 | |
| 10·0 | | 18·0 | 48·6 | |
| 10·0 | | 32·0 | 20·5 | |
| 9·3 | | 33·0 | 19·1 | |
| 9·3 | | 34·0 | 13·1 | |
| 10·0 | | 35·0 | 20·4 | |
| 8·7 | | 37·0 | 2·6 | 9·5 |
| 10·0 | | 39·5 | 28·4 | |
| 9·8 | 15 | 0·0 | 5·1 | |
| 10·0 | | 0·0 | 28·1 | |
| 9·4 | | 1·0 | 21·6 | |
| 10·0 | | 4·0 | 33·7 | |
| 9·8 | | 9·5 | 37·5 | |
| 10·0 | | 22·5 | 59·1 | |
| 8·6 | | 25·0 | 34·0 | 9·0 S |
| 9·4 | | 32·5 | 0·1 | |
| 9·7 | | 55·0 | 59·3 | |
| 8·9 | | 59·8 | 1·0 | 9·0 |
| 10·0 | 16 | 8·8 | 9·5 | |
| 9·7 | | 11·8 | 44·2 | |
| 9·9 | | 15·8 | 34·2 | |
| 9·9 | | 23·0 | 55·6 | |
| 9·5 | | 23·5 | 42·0 | |
| 9·5 | | 25·5 | 39·6 | |
| 10·0 | | 30·5 | 30·7 | |
| 9·7 | | 43·0 | 3·3 | |
| 9·8 | | 48·5 | 55·7 | |
| 9·5 | | 49·0 | 38·0 | |
| 9·4 | | 49·0 | 21·1 | 9·5 |
| 9·9 | | 51·0 | 11·7 | |
| 10·0 | | 55·0 | 12·7 | |
| 9·6 | 17 | 20·5 | 54·9 | |
| 9·7 | | 20·5 | 29·1 | |
| 9·6 | | 36·5 | 35·4 | |
| 8·8 | | 43·0 | 24·2 | 8·5 G |
| 10·0 | | 44·5 | 10·5 | 10·0 |
| 8·6 | | 53·0 | 13·1 | 7·5 GSt |
| 10·0 | | 57·0 | 17·2 | |
| 10·0 | | 59·5 | 36·5 | |
| 9·5 | 18 | 0·5 | 20·1 | |
| 9·4 | | 3·0 | 12·7 | 10·0 |
| 8·5 | | 18·5 | 43·1 | |
| 8·0 | | 24·0 | 26·3 | 8·0 GSt |
| 10·0 | | 34·0 | 25·2 | |
| 10·0 | | 46·0 | 55·7 | |
| 10·0 | | 47·0 | 44·6 | |
| 10·0 | | 50·0 | 58·0 | |
| 9·2 | | 54·0 | 17·9 | |
| 9·8 | | 54·5 | 32·9 | |
| 10·0 | | 58·0 | 38·7 | |
| 9·3 | | 59·0 | 41·1 | |

## 1621—1680.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 19 | 1·0 | 22·8 | |
| 8·7 | | 7·0 | 5·1 | 8·5 GSt |
| 10·0 | | 16·0 | 23·8 | |
| 10·0 | | 29·0 | 12·2 | |
| 10·0 | | 33·0 | 23·0 | |
| 8·7 | | 33·0 | 22·1 | 9·0 |
| 9·9 | | 39·0 | 52·2 | |
| 10·0 | | 40·5 | 19·5 | |
| 9·8 | | 44·5 | 14·6 | |
| 9·5 | | 45·5 | 18·2 | 9·0 |
| 9·7 | | 49·5 | 34·9 | |
| 10·0 | 20 | 11·0 | 59·3 | |
| 9·7 | | 17·0 | 30·2 | |
| 10·0 | | 30·0 | 24·1 | |
| 9·4 | | 31·0 | 8·1 | |
| 10·0 | | 33·5 | 39·4 | |
| 9·2 | | 36·0 | 14·0 | 8·5 |
| 9·7 | | 40·5 | 8·7 | |
| 9·6 | | 45·0 | 27·1 | |
| 9·2 | | 54·0 | 22·2 | |
| 9·4 | | 57·5 | 0·4 | 9·0 |
| 9·8 | | 59·5 | 29·5 | |
| 10·0 | 21 | 0·5 | 2·4 | |
| 9·6 | | 5·5 | 48·2 | |
| 9·3 | | 9·0 | 21·0 | |
| 10·0 | | 14·0 | 47·7 | |
| 10·0 | | 20·5 | 24·7 | |
| 9·5 | | 33·5 | 26·2 | |
| 9·5 | | 34·5 | 30·4 | |
| 10·0 | | 40·5 | 52·4 | G |
| 9·9 | | 45·0 | 5·1 | |
| 9·6 | | 46·0 | 39·7 | |
| 9·6 | 22 | 4·0 | 16·1 | |
| 9·8 | | 6·5 | 3·0 | |
| 10·0 | | 20·5 | 54·1 | |
| 9·8 | | 29·5 | 34·8 | |
| 9·0 | | 46·0 | 21·9 | 9·0 G |
| 9·4 | | 49·5 | 44·1 | |
| 8·2 | | 51·5 | 22·6 | 8·0 GSt |
| 9·5 | 23 | 1·5 | 17·6 | 9·0 |
| 10·0 | | 5·0 | 40·9 | |
| 10·0 | | 16·5 | 51·6 | |
| 9·6 | | 17·5 | 10·1 | 9·0 |
| 9·4 | | 18·0 | 31·5 | |
| 10·0 | | 29·5 | 8·0 | |
| 10·0 | | 30·0 | 53·1 | |
| 9·5 | | 31·5 | 36·3 | |
| 10·0 | | 43·0 | 0·9 | |
| 10·0 | 24 | 11·5 | 27·2 | |
| 9·6 | | 15·0 | 29·0 | |
| 8·9 | | 15·5 | 3·0 | 9·0 |
| 10·0 | | 17·0 | 3·3 | |
| 10·0 | | 20·5 | 47·1 | |
| 9·6 | | 21·5 | 14·7 | |
| 9·2 | | 25·5 | 24·9 | |
| 8·6 | | 30·0 | 56·9 | 9·0 GS |
| 8·7 | | 30·5 | 56·6 | 8·5 GS |
| 9·2 | | 31·5 | 54·5 | 8·0 GSt |
| 10·0 | | 39·5 | 26·7 | |
| 10·0 | | 42·0 | 20·1 | |

## 1681—1740.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 24 | 43·5 | 46·5 | |
| 9·5 | | 53·0 | 36·1 | |
| 10·0 | 25 | 2·5 | 39·5 | |
| 9·4 | | 3·5 | 41·4 | |
| 9·9 | | 4·0 | 52·3 | |
| 8·8 | | 14·0 | 28·0 | |
| 9·9 | | 22·0 | 31·1 | |
| 9·9 | | 23·0 | 45·4 | |
| 10·0 | | 30·5 | 7·1 | |
| 10·0 | | 38·0 | 48·1 | |
| 9·4 | | 43·0 | 30·0 | |
| 10·0 | | 44·5 | 8·8 | |
| 10·0 | | 47·0 | 58·9 | |
| 8·6 | | 51·0 | 50·9 | 9·0 |
| 10·0 | | 59·5 | 53·3 | |
| 10·0 | 26 | 32·0 | 40·4 | |
| 9·2 | | 48·0 | 21·0 | |
| 10·0 | 27 | 4·0 | 7·0 | |
| 9·5 | | 10·0 | 36·1 | |
| 10·0 | | 13·0 | 48·8 | |
| 10·0 | | 21·5 | 41·5 | |
| 9·8 | | 23·0 | 9·1 | |
| 10·0 | | 29·5 | 22·4 | |
| 4·1 | | 34·0 | 2·5 | 4·0 GSctλ |
| 9·2 | | 37·5 | 8·4 | 8·5 |
| 10·0 | | 55·5 | 24·0 | |
| 8·8 | 28 | 28·5 | 15·6 | |
| 9·2 | | 34·0 | 20·0 | |
| 10·0 | | 36·5 | 5·9 | |
| 10·0 | | 50·0 | 13·7 | |
| 10·0 | | 59·0 | 18·1 | |
| 10·0 | 29 | 0·3 | 47·1 | |
| 9·2 | | 3·5 | 17·2 | |
| 10·0 | | 10·2 | 14·1 | |
| 9·9 | | 46·0 | 30·5 | |
| 9·6 | | 55·3 | 13·8 | |
| 9·6 | 30 | 2·8 | 12·2 | |
| 9·8 | | 3·0 | 6·4 | |
| 9·8 | | 4·0 | 57·2 | |
| 9·2 | | 9·7 | 53·6 | |
| 9·9 | | 14·0 | 12·9 | |
| 9·9 | | 15·0 | 8·7 | |
| 9·9 | | 23·0 | 7·1 | |
| 9·4 | | 39·8 | 51·3 | |
| 9·5 | | 43·3 | 12·1 | |
| 9·8 | | 44·0 | 30·2 | |
| 9·6 | | 46·0 | 41·2 | |
| 9·7 | | 46·5 | 21·0 | |
| 9·2 | | 48·8 | 3·0 | 9·0 |
| 9·7 | | 50·0 | 51·5 | |
| 9·1 | | 51·5 | 15·3 | |
| 9·8 | | 52·0 | 10·9 | |
| 9·9 | 31 | 23·5 | 31·2 | |
| 8·4 | | 28·0 | 13·0 | 8·8 |
| 9·8 | | 35·5 | 28·9 | |
| 8·9 | | 39·0 | 2·0 | |
| 9·4 | | 39·5 | 15·7 | |
| 9·0 | | 47·0 | 34·1 | |
| 9·3 | | 49·0 | 15·6 | |
| 9·8 | | 54·0 | 17·0 | |



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## 1741—1800.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 32 | 19·5 | 30·1 | |
| 9·4 | | 21·0 | 23·1 | |
| 9·7 | | 21·5 | 23·0 | |
| 9·0 | | 25·0 | 11·4 | |
| 9·8 | | 25·5 | 27·0 | |
| 9·9 | | 32·5 | 38·6 | |
| 9·8 | | 32·5 | 39·2 | |
| 9·8 | | 39·0 | 13·9 | |
| 8·8 | | 53·5 | 0·7 | 9·5 G |
| 8·6 | | 55·5 | 28·8 | 8·0 |
| 9·9 | | 59·5 | 30·0 | |
| 9·8 | 33 | 1·5 | 10·1 | |
| 9·6 | | 14·0 | 3·1 | |
| 9·4 | | 31·0 | 6·0 | |
| 9·3 | | 34·5 | 33·7 | |
| 9·8 | | 36·0 | 9·1 | |
| 9·9 | | 46·0 | 45·1 | |
| 9·8 | | 47·0 | 26·5 | |
| 9·8 | | 49·5 | 8·0 | |
| 9·4 | | 49·5 | 8·7 | |
| 9·3 | | 52·5 | 38·1 | 9·0 |
| 9·9 | | 54·0 | 42·1 | |
| 9·8 | 34 | 9·5 | 0·1 | |
| 9·2 | | 13·5 | 54·4 | |
| 9·7 | | 22·0 | 37·5 | |
| 8·8 | | 22·5 | 38·3 | 8·5 |
| 9·8 | | 23·5 | 16·0 | |
| 9·8 | | 24·0 | 18·8 | |
| 8·8 | | 31·5 | 8·4 | 8·0 |
| 9·5 | | 34·0 | 30·0 | |
| 9·4 | | 37·0 | 7·5 | |
| 8·7 | | 55·0 | 37·4 | 8·2 |
| 9·9 | | 59·0 | 50·1 | |
| 9·6 | 35 | 2·0 | 51·7 | |
| 9·9 | | 5·5 | 52·8 | |
| 9·9 | | 14·0 | 8·6 | |
| 9·7 | | 19·5 | 8·8 | |
| 9·7 | | 19·5 | 32·0 | |
| 9·7 | | 23·0 | 54·1 | |
| 9·2 | | 33·0 | 7·2 | |
| 9·6 | | 33·5 | 24·2 | |
| 9·7 | | 36·0 | 17·5 | |
| 9·8 | | 43·0 | 34·4 | |
| 9·8 | | 49·0 | 14·7 | |
| 9·8 | | 59·5 | 11·5 | |
| 9·6 | 36 | 3·5 | 15·9 | |
| 9·5 | | 9·5 | 26·8 | 9·0 |
| 9·8 | | 19·0 | 45·8 | 9·5 |
| 9·8 | | 26·0 | 13·0 | |
| 9·2 | | 29·5 | 44·8 | 9·2 |
| 9·7 | | 32·5 | 2·3 | |
| 9·5 | | 32·5 | 36·2 | 9·0 |
| 9·6 | | 39·5 | 20·9 | |
| 9·9 | | 40·5 | 18·9 | |
| 9·8 | | 40·5 | 5·6 | |
| 9·8 | | 42·5 | 2·7 | |
| 9·4 | | 43·5 | 3·7 | |
| 9·8 | | 43·5 | 13·1 | |
| 9·7 | | 45·5 | 1·1 | |
| 9·8 | | 49·5 | 3·4 | |

## 1801—1860.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 36 | 54·0 | 54·0 | |
| 9·9 | | 57·5 | 21·1 | |
| 9·0 | | 59·5 | 5·9 | 9·0 |
| 9·6 | 37 | 0·5 | 1·6 | |
| 9·9 | | 5·0 | 4·3 | |
| 9·8 | | 10·0 | 10·2 | |
| 9·9 | | 16·0 | 53·0 | |
| 9·9 | | 18·5 | 24·8 | |
| 9·8 | | 22·0 | 5·5 | |
| 9·8 | | 35·0 | 17·6 | |
| 9·1 | | 35·0 | 43·5 | |
| 8·8 | | 36·0 | 14·7 | 9·5 |
| 9·2 | | 38·0 | 34·9 | |
| 9·6 | | 40·0 | 6·1 | |
| 9·6 | | 43·5 | 14·4 | |
| 9·5 | | 52·0 | 32·2 | 9·2 |
| 9·1 | | 54·0 | 32·7 | 8·2 |
| 9·9 | | 56·0 | 58·1 | |
| 9·5 | 38 | 4·0 | 42·4 | |
| 9·5 | | 4·5 | 45·8 | |
| 9·4 | | 10·0 | 15·4 | 9·0 |
| 9·8 | | 10·5 | 25·7 | |
| 9·2 | | 17·0 | 44·1 | |
| 9·4 | | 19·0 | 4·1 | |
| 9·7 | | 21·5 | 6·3 | |
| 9·0 | | 23·5 | 33·9 | 9·0 |
| 9·8 | | 30·5 | 57·0 | |
| 9·6 | | 34·0 | 58·3 | |
| 9·8 | | 35·5 | 53·0 | |
| 9·6 | | 36·0 | 24·8 | |
| 9·7 | | 39·0 | 6·1 | |
| 9·0 | | 45·0 | 24·1 | 9·5 |
| 9·4 | | 47·5 | 55·6 | |
| 9·4 | | 54·5 | 24·5 | |
| 9·8 | 39 | 1·0 | 37·2 | |
| 9·8 | | 4·5 | 1·9 | |
| 9·8 | | 9·5 | 2·0 | |
| 9·8 | | 9·5 | 27·3 | |
| 9·6 | | 17·5 | 28·9 | |
| 9·3 | | 25·5 | 28·8 | |
| 9·2 | | 36·0 | 23·6 | |
| 8·6 | | 40·5 | 24·9 | 9·0 |
| 9·7 | | 41·5 | 49·1 | |
| 9·6 | | 46·0 | 56·1 | |
| 9·4 | | 48·8 | 5·2 | |
| 9·5 | | 50·5 | 7·3 | |
| 9·2 | | 53·5 | 57·0 | 9·5 |
| 9·7 | | 55·0 | 14·3 | |
| 9·4 | 40 | 3·0 | 57·3 | |
| 9·8 | | 9·5 | 44·5 | |
| 9·0 | | 15·0 | 9·2 | |
| 9·4 | | 32·5 | 18·9 | |
| 9·8 | | 33·5 | 0·0 | |
| 9·8 | | 39·5 | 14·2 | |
| 9·4 | | 53·5 | 44·2 | 8·8 |
| 9·4 | 41 | 2·5 | 1·5 | |
| 9·0 | | 10·0 | 49·6 | 9·0 |
| 9·4 | | 11·5 | 46·5 | |
| 9·9 | | 13·5 | 36·0 | |
| 9·8 | | 15·5 | 32·6 | |

## 1861—1920.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 41 | 16·0 | 21·6 | |
| 9·7 | | 20·0 | 47·2 | |
| 9·8 | | 20·5 | 26·4 | |
| 9·3 | | 21·0 | 28·5 | 9·5 |
| 7·3 | | 29·5 | 17·0 | 8·0 GSt |
| 9·9 | | 30·0 | 37·1 | |
| 9·4 | | 30·5 | 3·8 | |
| 9·4 | | 33·5 | 22·4 | |
| 9·9 | | 39·0 | 33·0 | |
| 9·8 | | 39·5 | 6·5 | |
| 9·9 | | 58·5 | 15·1 | |
| 9·3 | 42 | 1·0 | 44·2 | |
| 9·8 | | 23·0 | 10·9 | |
| 9·9 | | 28·0 | 57·2 | |
| 9·4 | | 32·0 | 30·1 | |
| 9·8 | | 32·8 | 42·2 | |
| 9·2 | | 34·0 | 27·1 | 9·5 |
| 9·8 | | 34·0 | 3·2 | |
| 9·8 | | 36·0 | 40·2 | |
| 9·7 | | 43·0 | 24·2 | 9·2 |
| 9·8 | | 56·0 | 43·1 | |
| 9·7 | | 56·0 | 9·6 | |
| 9·7 | 43 | 6·8 | 0·8 | |
| 9·4 | | 14·0 | 14·1 | |
| 8·8 | | 15·0 | 20·2 | 8·8 |
| 9·8 | | 18·8 | 14·1 | |
| 9·8 | | 20·0 | 1·1 | |
| 8·4 | | 21·0 | 22·1 | 8·2 |
| 9·8 | | 29·0 | 9·2 | |
| 8·3 | | 40·0 | 54·3 | 8·2 S |
| 9·8 | | 40·5 | 26·6 | |
| 9·9 | | 41·5 | 17·9 | |
| 9·0 | | 42·0 | 3·1 | |
| 9·0 | | 46·5 | 4·1 | |
| 9·8 | | 49·8 | 26·5 | |
| 9·6 | 44 | 12·5 | 20·1 | 8·8 |
| 9·6 | | 14·0 | 8·3 | 9·2 |
| 8·7 | | 32·5 | 10·3 | 8·8 |
| 9·8 | | 38·0 | 30·4 | |
| 9·9 | | 40·5 | 44·3 | |
| 9·7 | | 42·8 | 33·2 | |
| 9·9 | | 44·5 | 43·2 | |
| 9·6 | | 47·0 | 42·9 | |
| 8·5 | | 52·0 | 22·8 | 8·2 |
| 8·4 | 45 | 19·5 | 8·6 | 9·0 |
| 9·8 | | 23·5 | 16·1 | |
| 9·0 | | 26·0 | 34·4 | 9·0 |
| 7·5 | | 28·0 | 58·5 | 7·5 GS |
| 8·8 | | 38·5 | 32·8 | 9·0 |
| 9·2 | | 48·5 | 34·5 | 9·0 |
| 9·8 | | 52·5 | 32·3 | |
| 9·8 | | 54·0 | 55·5 | |
| 9·4 | | 55·5 | 5·7 | |
| 9·8 | | 58·0 | 46·2 | |
| 9·5 | 46 | 1·0 | 5·2 | |
| 9·2 | | 11·0 | 5·0 | |
| 9·9 | | 14·5 | 5·5 | |
| 9·8 | | 19·5 | 59·2 | |
| 9·8 | | 19·5 | 57·1 | |
| 9·8 | | 29·5 | 2·4 | |

## 1921—1980.

| mag. | 10h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 46 | 31·5 | 12·4 | |
| 8·6 | | 34·0 | 28·6 | 8·3 |
| 9·1 | | 35·0 | 42·0 | 8·2 |
| 9·8 | | 35·5 | 31·5 | |
| 9·6 | | 45·5 | 14·5 | |
| 9·9 | | 46·0 | 3·0 | |
| 8·8 | | 50·5 | 2·0 | |
| 9·8 | 47 | 3·0 | 19·2 | |
| 8·9 | | 5·5 | 31·3 | 9·0 |
| 9·6 | | 8·0 | 23·5 | |
| 9·4 | | 17·5 | 15·4 | |
| 9·9 | | 40·0 | 6·2 | |
| 9·3 | | 48·5 | 30·2 | |
| 9·8 | | 50·0 | 0·1 | |
| 9·8 | | 58·5 | 36·2 | |
| 9·3 | 48 | 0·0 | 20·7 | 8·5 G |
| 9·9 | | 3·5 | 29·0 | |
| 9·9 | | 10·5 | 38·2 | |
| 9·9 | | 15·0 | 45·6 | |
| 9·6 | | 16·5 | 21·0 | |
| 9·8 | | 18·5 | 20·1 | |
| 9·9 | | 20·0 | 9·0 | |
| 9·9 | | 23·0 | 39·6 | |
| 9·0 | | 29·5 | 26·8 | |
| 9·8 | | 33·0 | 19·4 | |
| 9·8 | | 34·0 | 20·5 | |
| 9·8 | | 34·0 | 1·8 | |
| 9·7 | | 38·5 | 12·5 | |
| 9·9 | | 38·5 | 26·8 | |
| 9·8 | | 43·5 | 3·2 | |
| 7·9 | | 48·3 | 0·2 | 8·0 G |
| 9·9 | | 49·5 | 16·0 | |
| 9·9 | | 53·0 | 16·9 | |
| 9·9 | | 54·0 | 32·1 | |
| 8·9 | 49 | 14·0 | 22·5 | 7·0 GSt |
| 9·5 | | 15·5 | 23·8 | |
| 9·2 | | 21·5 | 16·3 | 9·5 |
| 9·7 | | 23·5 | 3·5 | |
| 9·8 | | 25·0 | 10·5 | |
| 8·1 | | 35·5 | 9·6 | 7·0 GSt |
| 9·7 | | 43·5 | 6·0 | |
| 8·9 | | 57·0 | 0·2 | |
| 9·3 | | 59·5 | 15·2 | |
| 9·9 | 50 | 4·0 | 45·0 | |
| 9·8 | | 10·5 | 3·2 | |
| 9·9 | | 37·5 | 8·1 | |
| 9·8 | | 38·0 | 0·5 | |
| 9·2 | 51 | 7·0 | 2·2 | |
| 8·3 | | 17·5 | 2·5 | 9·0 |
| 9·9 | | 17·5 | 38·2 | |
| 9·8 | | 19·0 | 19·3 | |
| 8·7 | | 19·0 | 7·4 | 8·8 |
| 9·4 | | 21·0 | 13·3 | |
| 9·9 | | 25·5 | 34·3 | 9·5 |
| 7·3 | | 38·5 | 2·6 | 8·0 GSt |
| 9·8 | | 41·5 | 50·0 | |
| 9·8 | | 41·7 | 58·2 | |
| 9·4 | | 48·0 | 53·0 | |
| 9·9 | | 49·5 | 18·3 | |
| 9·2 | | 49·5 | 6·6 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 53 | 7·7 |
| | 40 | 56 | 7·9 |
| | 50 | 58 | 8·0 |
| 11 | 0 | 61 | 8·1 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 10 | 50 | 58 | 8·0 |
| 11 | 0 | 61 | 8·1 |
| | 10 | 63 | 8·2 |
| | 20 | 66 | 8·2 |

## 1981—2040.

| mag. | $10^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 51 | 50·0 | 45·2 | |
| 9·2 | 52 | 4·0 | 2·4 | |
| 9·8 | | 5·0 | 21·5 | 10·0 |
| 9·4 | | 12·5 | 15·4 | |
| 9·8 | | 19·0 | 3·4 | |
| 9·9 | | 25·5 | 27·1 | 9·5 |
| 9·8 | | 29·5 | 39·2 | |
| 9·9 | | 30·5 | 20·6 | |
| 9·9 | | 31·0 | 25·3 | |
| 9·1 | | 34·0 | 49·9 | 8·5G |
| 9·1 | | 36·0 | 37·9 | |
| 9·0 | | 40·0 | 24·8 | 8·8 G |
| 9·9 | | 40·5 | 46·9 | |
| 9·2 | | 42·5 | 30·3 | |
| 9·8 | | 44·0 | 6·3 | |
| 9·0 | | 50·0 | 5·0 | |
| 9·4 | | 55·5 | 38·1 | 9·0 |
| 9·3 | | 58·0 | 37·4 | |
| 9·0 | | 59·0 | 51·3 | |
| 9·4 | 53 | 14·5 | 29·4 | |
| 8·8 | | 26·5 | 12·2 | 9·5 |
| 9·8 | | 29·5 | 43·9 | |
| 9·4 | | 34·5 | 17·1 | |
| 9·9 | | 40·0 | 13·3 | |
| 9·6 | 54 | 0·0 | 8·9 | |
| 9·8 | | 0·0 | 15·4 | |
| 9·9 | | 10·5 | 9·2 | |
| 9·6 | | 18·5 | 5·3 | |
| 9·8 | | 25·0 | 20·3 | |
| 9·8 | | 29·5 | 12·0 | |
| 8·6 | | 39·0 | 48·9 | 8·0 GSt |
| 9·6 | | 44·0 | 33·7 | |
| 9·7 | | 46·0 | 44·2 | |
| 9·7 | | 49·5 | 39·2 | |
| 9·4 | | 52·0 | 5·9 | |
| 9·8 | 55 | 1·5 | 34·0 | |
| 9·2 | | 8·0 | 27·4 | 9·5 |
| 9·1 | | 11·5 | 10·2 | |
| 9·9 | | 15·5 | 56·0 | |
| 9·9 | | 39·0 | 34·1 | |
| 8·8 | | 40·0 | 56·6 | 9·8 |
| 9·0 | | 50·0 | 44·2 | 9·5 |
| 9·8 | | 57·0 | 22·2 | |
| 9·8 | | 59·0 | 15·1 | |
| 9·8 | 56 | 0·0 | 21·2 | |
| 9·9 | | 9·5 | 19·3 | |
| 9·0 | | 26·0 | 18·6 | |
| 8·7 | | 33·5 | 26·2 | 9·0 S |
| 9·9 | | 34·0 | 39·0 | |
| 9·4 | | 36·0 | 5·5 | |
| 9·0 | | 45·0 | 6·2 | 9·5 |
| 8·8 | | 46·5 | 12·9 | 9·2 |
| 9·0 | | 50·5 | 23·0 | 9·0 |
| 9·8 | | 54·0 | 20·0 | |
| 9·9 | | 58·5 | 9·4 | |
| 9·0 | 57 | 1·5 | 17·0 | 9·5 |
| 8·8 | | 1·5 | 29·3 | 8·8 S |
| 9·6 | | 10·0 | 12·4 | |
| 9·9 | | 29·4 | 0·8 | |
| 9·9 | | 30·0 | 4·4 | |

## 2041—2100.

| mag. | $10^h$–$11^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·7 | 57 | 36·0 | 3·1 | |
| 9·7 | | 41·0 | 12·0 | |
| 9·9 | | 43·0 | 14·7 | |
| 8·8 | | 44·0 | 48·3 | 8·5 |
| 8·8 | 58 | 1·0 | 13·1 | 9·2 GS |
| 8·6 | | 4·5 | 5·9 | 9·0 GS |
| 9·9 | | 6·5 | 32·1 | |
| 9·9 | | 8·0 | 14·3 | |
| 9·8 | | 8·0 | 27·4 | |
| 9·8 | | 11·8 | 43·6 | |
| 9·2 | | 14·0 | 47·2 | 9·0 |
| 9·9 | | 16·0 | 44·0 | |
| 9·3 | | 33·5 | 27·3 | 9·0 |
| 9·9 | | 43·5 | 0·5 | |
| 9·4 | | 53·0 | 24·2 | 9·5 |
| 9·9 | 59 | 1·5 | 37·2 | |
| 9·1 | | 1·5 | 29·0 | |
| 9·0 | | 6·0 | 51·1 | 9·2 |
| 9·6 | | 16·5 | 37·3 | |
| 9·8 | | 23·8 | 8·1 | |
| 9·2 | | 24·5 | 6·1 | |
| 9·4 | | 31·5 | 54·1 | 9·5 |
| 9·4 | | 43·5 | 3·4 | |
| 8·6 | 0 | 20·5 | 10·3 | 9·0 |
| 9·6 | | 35·5 | 0·1 | |
| 8·6 | 1 | 19·0 | 0·4 | |
| 6·7 | | 24·0 | 44·9 | 5·0 GSct |
| 8·0 | | 31·5 | 10·9 | 8·0 |
| 9·2 | 2 | 1·5 | 30·3 | |
| 9·2 | | 4·5 | 22·3 | 10·0 |
| 9·0 | | 13·5 | 18·3 | 8·3 |
| 9·2 | | 34·0 | 26·2 | |
| 9·9 | | 45·5 | 0·1 | |
| 9·9 | 3 | 16·0 | 19·0 | |
| 6·0 | | 21·0 | 16·3 | 6·0 GSt |
| 9·8 | 4 | 6·5 | 13·2 | |
| 9·7 | | 7·0 | 4·2 | |
| 9·9 | | 10·5 | 11·2 | |
| 9·7 | | 21·0 | 5·1 | |
| 9·8 | | 36·5 | 22·2 | |
| 9·2 | | 38·5 | 14·7 | |
| 9·9 | | 59·0 | 28·1 | |
| 9·0 | 5 | 20·7 | 3·4 | |
| 9·8 | | 25·0 | 26·9 | |
| 10·0 | | 28·0 | 47·4 | |
| 9·8 | | 30·0 | 5·0 | |
| 9·5 | | 31·2 | 12·8 | |
| 10·0 | | 31·5 | 11·7 | |
| 10·0 | | 42·0 | 15·8 | |
| 9·4 | | 47·7 | 30·0 | |
| 9·1 | | 49·5 | 5·9 | |
| 9·5 | | 52·0 | 58·4 | |
| 9·9 | | 54·5 | 27·9 | |
| 10·0 | 6 | 4·0 | 0·2 | |
| 9·1 | | 15·0 | 57·6 | 10·0 |
| 10·0 | | 17·5 | 45·2 | |
| 10·0 | | 23·5 | 6·8 | |
| 10·0 | | 32·0 | 38·6 | |
| 9·1 | | 34·7 | 7·7 | |
| 10·0 | | 38·0 | 7·4 | |

## 2101—2160.

| mag. | $11^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 6 | 49·5 | 11·9 | |
| 9·7 | | 52·2 | 7·9 | |
| 8·9 | | 53·0 | 4·6 | 9·0 G |
| 9·7 | | 54·0 | 32·6 | |
| 9·4 | | 57·0 | 0·9 | |
| 10·0 | 7 | 1·0 | 34·7 | |
| 10·0 | | 2·0 | 5·3 | |
| 9·9 | | 2·0 | 45·9 | |
| 9·4 | | 8·0 | 52·1 | |
| 10·0 | | 17·5 | 19·2 | |
| 10·0 | | 18·0 | 10·2 | |
| 10·0 | | 19·0 | 9·0 | |
| 9·7 | | 21·0 | 6·0 | |
| 10·0 | | 22·5 | 51·0 | |
| 10·0 | | 24·5 | 45·1 | |
| 10·0 | | 31·0 | 13·3 | |
| 9·9 | | 34·0 | 56·0 | |
| 10·0 | | 37·5 | 4·7 | |
| 9·4 | | 38·0 | 47·9 | 9·8 |
| 8·9 | | 43·0 | 44·7 | 9·0 |
| 10·0 | | 58·0 | 25·6 | |
| 9·8 | | 59·0 | 43·8 | |
| 9·7 | 8 | 2·0 | 55·9 | |
| 9·6 | | 5·5 | 5·6 | |
| 9·2 | | 7·5 | 24·7 | 9·5 |
| 9·9 | | 11·0 | 16·9 | |
| 9·2 | | 11·0 | 15·5 | |
| 9·2 | | 15·5 | 33·7 | |
| 9·3 | | 20·5 | 48·2 | |
| 9·2 | | 34·0 | 7·9 | |
| 9·4 | | 41·5 | 8·5 | |
| 10·0 | | 47·5 | 34·5 | |
| 10·0 | | 48·0 | 10·5 | |
| 10·0 | | 51·5 | 40·6 | |
| 10·0 | | 51·5 | 52·2 | |
| 10·0 | | 57·0 | 35·6 | |
| 10·0 | 9 | 0·0 | 19·2 | |
| 9·6 | | 9·0 | 2·8 | |
| 10·0 | | 29·0 | 31·6 | |
| 9·4 | | 33·5 | 49·8 | |
| 10·0 | | 34·5 | 33·1 | |
| 9·7 | | 42·0 | 23·9 | |
| 10·0 | | 51·5 | 42·9 | |
| 10·0 | | 55·5 | 0·2 | |
| 9·7 | | 58·5 | 2·0 | |
| 10·0 | 10 | 0·0 | 23·3 | |
| 9·7 | | 4·0 | 38·0 | |
| 9·8 | | 14·0 | 44·0 | |
| 10·0 | | 14·5 | 33·4 | 9·5 |
| 9·4 | | 21·5 | 35·7 | |
| 9·4 | | 27·5 | 26·3 | |
| 10·0 | | 31·5 | 12·6 | |
| 9·8 | | 33·5 | 45·4 | |
| 10·0 | | 37·0 | 12·9 | |
| 9·1 | | 37·0 | 34·6 | 9·5 |
| 9·6 | | 37·5 | 44·0 | |
| 9·7 | | 37·5 | 44·3 | |
| 9·3 | | 43·5 | 25·1 | |
| 10·0 | | 46·0 | 32·9 | |
| 9·7 | | 50·0 | 17·3 | |

## 2161—2220.

| mag. | $11^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 11 | 10·0 | 25·9 | |
| 9·6 | | 10·5 | 29·0 | |
| 9·5 | | 12·5 | 26·0 | |
| 9·5 | | 16·5 | 16·7 | |
| 9·6 | | 21·0 | 19·2 | |
| 10·0 | | 21·5 | 58·0 | |
| 9·8 | | 23·5 | 5·9 | |
| 9·9 | | 32·0 | 59·9 | |
| 9·5 | | 39·0 | 26·9 | |
| 9·8 | | 40·5 | 25·9 | |
| 10·0 | | 41·5 | 59·5 | |
| 10·0 | | 41·5 | 55·2 | |
| 9·7 | | 41·5 | 6·5 | |
| 9·1 | | 51·0 | 18·4 | 9·0 |
| 10·0 | | 52·0 | 14·0 | |
| 9·7 | | 53·5 | 3·0 | |
| 9·6 | | 57·5 | 3·0 | |
| 9·9 | 12 | 1·5 | 30·0 | |
| 9·6 | | 5·5 | 39·1 | |
| 9·8 | | 7·5 | 35·8 | |
| 10·0 | | 9·0 | 32·3 | |
| 8·8 | | 11·5 | 15·1 | 9·0 |
| 10·0 | | 31·5 | 8·9 | |
| 10·0 | | 35·5 | 16·9 | |
| 9·4 | | 42·0 | 14·1 | 9·0 |
| 10·0 | | 43·0 | 7·1 | |
| 9·5 | | 47·0 | 17·0 | |
| 9·5 | | 50·0 | 13·2 | |
| 10·0 | 13 | 6·5 | 8·7 | |
| 10·0 | | 7·0 | 28·1 | |
| 10·0 | | 11·0 | 33·7 | |
| 10·0 | | 40·5 | 30·2 | |
| 10·0 | | 47·5 | 56·2 | |
| 10·0 | | 48·0 | 58·1 | |
| 9·5 | | 48·5 | 22·5 | |
| 10·0 | | 57·0 | 42·0 | |
| 10·0 | | 57·5 | 23·8 | |
| 9·5 | | 58·0 | 14·2 | |
| 9·6 | 14 | 3·0 | 22·4 | |
| 10·0 | | 8·5 | 19·1 | |
| 10·0 | | 11·0 | 15·0 | |
| 10·0 | | 13·0 | 45·2 | |
| 10·0 | | 13·5 | 57·4 | |
| 9·6 | | 23·0 | 20·1 | |
| 10·0 | | 23·5 | 31·0 | |
| 10·0 | | 32·5 | 43·0 | |
| 10·0 | | 38·0 | 53·1 | |
| 9·7 | | 41·5 | 0·2 | |
| 10·0 | | 42·0 | 44·2 | |
| 10·0 | | 48·0 | 55·7 | |
| 10·0 | | 48·0 | 42·6 | |
| 9·6 | | 50·0 | 26·6 | |
| 9·5 | | 52·0 | 15·8 | 9·2 |
| 9·2 | 15 | 11·0 | 18·0 | 9·5 |
| 9·6 | | 14·0 | 35·9 | |
| 10·0 | | 16·5 | 54·9 | |
| 9·8 | | 17·0 | 32·8 | |
| 9·3 | | 17·0 | 17·3 | |
| 9·7 | | 18·5 | 34·8 | |
| 9·4 | | 28·5 | 4·1 | |



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## 2221—2280.

| mag. | 11h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 15 | 43·0 | 5·6 | |
| 9·4 | | 47·5 | 21·3 | |
| 9·8 | | 48·0 | 32·0 | |
| 9·6 | | 55·0 | 21·2 | |
| 9·7 | 16 | 0·5 | 39·5 | |
| 9·7 | | 3·0 | 40·0 | |
| 9·4 | | 7·5 | 29·4 | |
| 9·0 | | 7·5 | 4·6 | |
| 8·4 | | 7·5 | 41·2 | 9·0 |
| 9·5 | | 9·2 | 56·4 | |
| 10·0 | | 10·5 | 20·4 | |
| 9·8 | | 11·0 | 40·5 | |
| 10·0 | | 13·0 | 19·3 | |
| 10·0 | | 13·0 | 16·4 | |
| 9·9 | | 17·0 | 15·0 | |
| 10·0 | | 19·5 | 16·4 | |
| 9·9 | | 22·0 | 30·0 | |
| 10·0 | | 26·5 | 8·9 | |
| 9·8 | | 28·5 | 35·2 | |
| 9·7 | | 34·5 | 14·5 | |
| 10·0 | | 41·0 | 13·5 | |
| 9·7 | | 53·0 | 29·5 | |
| 9·9 | | 55·0 | 10·0 | |
| 9·4 | | 56·5 | 11·3 | |
| 8·3 | 17 | 1·0 | 46·2 | 8·5 |
| 9·6 | | 3·0 | 51·4 | |
| 10·0 | | 4·5 | 47·2 | 9·5 |
| 9·7 | | 7·0 | 29·3 | |
| 9·8 | | 9·0 | 22·3 | |
| 10·0 | | 10·0 | 25·4 | |
| 10·0 | | 11·0 | 23·2 | |
| 9·8 | | 12·5 | 42·2 | |
| 8·4 | | 17·5 | 23·5 | 8·0 |
| 10·0 | | 20·5 | 14·7 | |
| 9·2 | | 22·0 | 38·3 | |
| 9·6 | | 27·0 | 35·8 | |
| 9·3 | | 30·0 | 43·2 | 8·0 |
| 10·0 | | 32·0 | 0·0 | |
| 10·0 | | 34·0 | 23·7 | |
| 9·8 | | 40·0 | 1·4 | |
| 10·0 | | 41·0 | 1·1 | |
| 9·6 | | 41·0 | 9·8 | |
| 9·9 | | 42·5 | 10·2 | |
| 10·0 | | 43·0 | 34·7 | |
| 8·7 | | 43·0 | 36·5 | 7·8 S |
| 9·8 | | 45·5 | 10·9 | |
| 10·0 | | 46·5 | 33·2 | |
| 9·8 | | 54·5 | 27·1 | |
| 9·3 | | 57·0 | 57·6 | |
| 9·2 | 18 | 1·0 | 5·1 | |
| 9·8 | | 10·0 | 30·2 | |
| 10·0 | | 21·0 | 48·3 | |
| 10·0 | | 26·5 | 10·0 | |
| 10·0 | | 31·0 | 46·3 | |
| 9·8 | | 32·5 | 44·8 | |
| 9·4 | | 33·0 | 7·0 | |
| 10·0 | | 33·0 | 47·4 | |
| 10·0 | | 33·5 | 13·9 | |
| 9·0 | | 35·0 | 2·7 | |
| 10·0 | | 43·0 | 21·2 | |

## 2281—2340.

| mag. | 11h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 18 | 43·0 | 33·1 | |
| 10·0 | | 46·0 | 43·1 | |
| 9·4 | | 51·0 | 3·3 | |
| 10·0 | | 51·5 | 0·3 | |
| 10·0 | 19 | 1·5 | 31·1 | |
| 10·0 | | 2·0 | 1·2 | |
| 9·8 | | 5·0 | 15·1 | |
| 9·8 | | 10·0 | 8·3 | |
| 10·0 | | 17·0 | 34·2 | |
| 10·0 | | 17·0 | 38·5 | |
| 9·7 | | 20·0 | 31·3 | |
| 9·5 | | 22·0 | 26·3 | |
| 10·0 | | 33·0 | 6·8 | |
| 9·8 | | 37·0 | 8·8 | |
| 10·0 | | 40·5 | 16·0 | |
| 10·0 | | 42·0 | 16·4 | |
| 10·0 | | 51·0 | 43·2 | |
| 9·4 | | 51·0 | 33·0 | 8·0 |
| 10·0 | | 56·0 | 17·1 | |
| 9·6 | | 58·5 | 42·9 | |
| 9·9 | 20 | 5·5 | 58·5 | |
| 10·0 | | 10·0 | 21·2 | |
| 10·0 | | 13·0 | 38·5 | |
| 10·0 | | 19·0 | 2·4 | |
| 8·4 | | 30·0 | 46·1 | 8·5 |
| 10·0 | | 30·5 | 0·3 | |
| 9·7 | | 35·0 | 5·2 | |
| 9·8 | | 36·0 | 39·8 | |
| 10·0 | | 38·5 | 40·1 | |
| 10·0 | | 39·0 | 29·0 | |
| 9·4 | | 46·5 | 14·1 | |
| 9·5 | | 48·0 | 17·2 | |
| 10·0 | | 51·5 | 39·2 | |
| 9·8 | | 52·0 | 38·4 | |
| 9·4 | | 53·0 | 19·9 | |
| 9·6 | | 53·0 | 7·8 | |
| 10·0 | 21 | 0·0 | 48·6 | |
| 9·8 | | 0·5 | 16·1 | |
| 10·0 | | 0·5 | 5·8 | |
| 9·8 | | 3·0 | 53·1 | |
| 9·1 | | 6·5 | 24·9 | 9·0 |
| 9·4 | | 7·7 | 2·2 | |
| 9·6 | | 10·5 | 9·9 | |
| 9·8 | | 13·0 | 8·0 | |
| 10·0 | | 20·0 | 19·7 | |
| 9·8 | | 22·5 | 33·4 | |
| 9·6 | | 23·0 | 39·3 | |
| 9·8 | | 32·5 | 25·0 | |
| 9·5 | | 33·2 | 1·9 | |
| 10·0 | | 37·5 | 44·0 | |
| 10·0 | | 40·5 | 56·4 | |
| 9·6 | | 45·0 | 20·6 | |
| 9·0 | | 52·5 | 3·9 | 9·5 |
| 9·5 | | 55·0 | 22·7 | |
| 9·0 | | 56·0 | 36·4 | |
| 10·0 | | 59·0 | 20·2 | |
| 9·7 | 22 | 0·5 | 31·0 | |
| 10·0 | | 18·0 | 20·1 | |
| 10·0 | | 18·0 | 17·4 | |
| 10·0 | | 22·0 | 31·4 | |

## 2341—2400.

| mag. | 11h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8·8 | 22 | 22·5 | 14·9 | |
| 8·8 | | 40·5 | 22·4 | 9·0 |
| 10·0 | | 41·0 | 41·3 | |
| 10·0 | | 44·0 | 39·9 | |
| 10·0 | | 45·0 | 47·9 | |
| 9·7 | | 48·0 | 9·0 | |
| 10·0 | | 59·0 | 34·1 | |
| 9·5 | 23 | 2·0 | 41·8 | |
| 10·0 | | 10·0 | 41·9 | |
| 8·4 | | 18·0 | 57·9 | 8·0 |
| 9·4 | | 21·0 | 45·3 | |
| 10·0 | | 31·0 | 27·0 | |
| 9·4 | | 36·0 | 40·0 | |
| 10·0 | | 45·5 | 13·1 | |
| 10·0 | | 47·5 | 20·4 | |
| 9·3 | | 52·0 | 41·1 | 9·5 |
| 8·7 | | 54·0 | 50·2 | 9·0 |
| 9·2 | 24 | 2·5 | 28·4 | |
| 9·6 | | 7·5 | 4·1 | |
| 9·9 | | 10·5 | 58·3 | |
| 9·0 | | 20·5 | 54·9 | |
| 10·0 | | 31·0 | 35·0 | |
| 8·8 | | 39·5 | 0·6 | |
| 8·3 | | 50·5 | 28·9 | 8·0 |
| 9·4 | | 55·0 | 15·7 | |
| 9·3 | | 59·5 | 20·0 | |
| 9·2 | 25 | 0·5 | 14·9 | |
| 10·0 | | 2·0 | 37·1 | |
| 10·0 | | 12·0 | 10·5 | |
| 8·7 | | 39·0 | 35·1 | 8·5 |
| 10·0 | | 40·8 | 57·4 | |
| 9·7 | | 50·5 | 52·0 | |
| 9·9 | | 50·5 | 13·2 | |
| 9·6 | | 51·0 | 0·4 | |
| 10·0 | | 53·0 | 9·8 | |
| 9·6 | 26 | 0·0 | 57·1 | |
| 10·0 | | 1·0 | 1·1 | |
| 10·0 | | 4·5 | 20·1 | |
| 8·7 | | 5·0 | 24·0 | 8·5 |
| 8·4 | | 8·0 | 5·1 | 8·0 G |
| 9·1 | | 8·5 | 3·6 | |
| 10·0 | | 10·0 | 54·5 | |
| 9·4 | | 12·5 | 10·4 | |
| 9·8 | | 14·0 | 56·1 | |
| 9·9 | | 15·5 | 47·3 | |
| 9·8 | | 15·5 | 52·9 | |
| 9·4 | | 22·5 | 11·1 | |
| 10·0 | | 23·0 | 55·9 | |
| 9·8 | | 29·5 | 49·2 | |
| 9·7 | | 30·5 | 15·1 | |
| 8·6 | | 35·5 | 51·4 | |
| 10·0 | | 36·5 | 56·2 | |
| 9·4 | | 40·5 | 27·0 | |
| 9·4 | | 46·5 | 15·1 | 9·5 |
| 9·5 | | 47·0 | 12·7 | 9·2 |
| 9·9 | | 49·5 | 50·8 | |
| 9·6 | 27 | 0·5 | 41·3 | |
| 9·9 | | 1·0 | 7·3 | |
| 9·8 | | 6·0 | 26·3 | |
| 8·1 | | 6·5 | 7·8 | 9·0 G |

## 2401—2460.

| mag. | 11h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·1 | 27 | 10·0 | 46·8 | |
| 9·0 | | 13·0 | 45·1 | 9·0 |
| 10·0 | | 16·5 | 41·2 | |
| 9·2 | | 21·5 | 34·5 | |
| 10·0 | | 29·5 | 31·6 | |
| 9·9 | | 32·5 | 19·5 | |
| 10·0 | | 52·0 | 13·1 | |
| 10·0 | 28 | 0·5 | 54·9 | |
| 10·0 | | 5·0 | 24·0 | |
| 9·8 | | 15·0 | 12·1 | |
| 9·7 | | 22·5 | 29·1 | |
| 9·0 | | 22·5 | 0·5 | |
| 10·0 | | 23·0 | 58·7 | |
| 10·0 | | 34·5 | 6·4 | |
| 9·5 | | 35·5 | 30·1 | |
| 10·0 | 29 | 10·0 | 39·4 | |
| 10·0 | | 16·5 | 27·3 | |
| 9·0 | | 20·5 | 27·4 | |
| 9·4 | | 26·5 | 56·4 | 9·0 |
| 9·2 | | 27·5 | 29·3 | |
| 9·4 | | 28·8 | 0·6 | 10·0 |
| 9·4 | | 33·0 | 48·9 | |
| 10·0 | | 40·5 | 16·1 | |
| 10·0 | | 43·0 | 48·2 | |
| 9·8 | | 43·5 | 47·0 | |
| 9·7 | | 53·5 | 3·4 | |
| 9·9 | 30 | 0·5 | 3·5 | |
| 9·7 | | 9·5 | 16·0 | |
| 9·8 | | 10·5 | 54·1 | 9·0 |
| 9·4 | | 15·0 | 5·8 | |
| 9·7 | | 17·0 | 9·1 | |
| 9·1 | | 17·5 | 0·8 | |
| 9·9 | | 18·5 | 3·0 | |
| 9·1 | | 21·0 | 0·2 | |
| 10·0 | | 30·5 | 56·1 | |
| 9·6 | | 30·5 | 47·3 | 9·5 |
| 9·7 | | 34·5 | 54·1 | 9·5 G |
| 9·9 | | 37·5 | 17·0 | |
| 9·8 | | 41·5 | 34·1 | |
| 9·2 | | 46·0 | 55·9 | 9·0 |
| 9·5 | | 52·5 | 1·0 | |
| 9·7 | | 52·5 | 17·4 | |
| 9·8 | | 56·5 | 26·0 | |
| 9·0 | 31 | 5·5 | 55·0 | |
| 9·4 | | 5·5 | 16·0 | |
| 10·0 | | 6·5 | 58·4 | |
| 10·0 | | 12·0 | 46·9 | |
| 9·2 | | 16·5 | 47·4 | 8·0 |
| 8·9 | | 18·0 | 6·5 | |
| 9·1 | | 21·0 | 53·4 | |
| 10·0 | | 32·5 | 33·0 | |
| 10·0 | | 49·5 | 12·0 | |
| 9·6 | | 50·5 | 56·2 | |
| 9·5 | | 51·0 | 4·1 | |
| 9·6 | | 52·5 | 55·1 | |
| 9·5 | | 52·5 | 44·3 | |
| 9·7 | | 52·5 | 46·5 | |
| 10·0 | | 53·0 | 14·9 | |
| 9·8 | | 59·0 | 3·5 | |
| 8·3 | | 59·5 | 46·5 | 8·0 Gg |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 63 | 8·2 |
| | 20 | 66 | 8·2 |
| | 30 | 69 | 8·3 |
| | 40 | 71 | 8·3 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 69 | 8·3 |
| | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |

**2461—2520.**

| mag. | 11ʰ· m | s | −61° ′ | |
|---|---|---|---|---|
| 9·6 | 32 | 10·5 | 54·5 | |
| 8·7 | | 12·5 | 38·1 | 9·0 |
| 5·6 | | 16·5 | 8·1 | 6·0 GSct |
| 10·0 | | 23·5 | 9·4 | |
| 9·9 | | 26·5 | 20·1 | |
| 10·0 | | 31·5 | 56·7 | |
| 10·0 | | 32·5 | 33·9 | |
| 9·4 | | 33·0 | 59·9 | |
| 10·0 | | 37·0 | 32·9 | |
| 10·0 | | 39·0 | 11·7 | |
| 10·0 | | 45·5 | 24·1 | |
| 9·8 | | 46·5 | 1·2 | |
| 10·0 | | 53·0 | 59·9 | |
| 9·5 | | 55·5 | 40·0 | |
| 9·7 | 33 | 2·5 | 45·0 | |
| 9·5 | | 3·0 | 9·9 | |
| 10·0 | | 15·5 | 38·0 | |
| 7·9 | | 18·5 | 43·8 | 7·0 Gg |
| 9·4 | | 22·5 | 43·4 | |
| 10·0 | | 26·5 | 34·6 | |
| 10·0 | | 26·5 | 47·9 | |
| 9·6 | | 28·0 | 9·0 | |
| 10·0 | | 28·5 | 0·4 | |
| 9·2 | | 29·5 | 14·2 | |
| 9·7 | | 32·0 | 12·5 | |
| 9·8 | | 37·5 | 44·5 | |
| 8·8 | | 38·0 | 56·9 | |
| 8·7 | | 41·5 | 6·5 | 8·0 GSt |
| 10·0 | | 48·2 | 58·2 | |
| 10·0 | | 49·0 | 4·2 | |
| 9·2 | | 54·5 | 31·4 | |
| 9·4 | 34 | 0·5 | 0·5 | |
| 10·0 | | 2·5 | 10·5 | |
| 9·8 | | 6·0 | 52·2 | |
| 9·5 | | 14·0 | 18·7 | 8·5 |
| 9·8 | | 16·5 | 36·6 | |
| 10·0 | | 18·3 | 57·4 | |
| 8·9 | | 19·0 | 31·6 | |
| 10·0 | | 22·5 | 23·6 | |
| 8·3 | | 23·0 | 44·3 | 7·5 GSg |
| 10·0 | | 27·5 | 29·3 | |
| 9·2 | | 29·5 | 32·3 | |
| 9·4 | | 30·5 | 22·0 | |
| 8·4 | | 32·5 | 30·3 | 8·0 |
| 9·7 | | 37·0 | 17·2 | |
| 9·8 | | 39·0 | 41·4 | |
| 9·7 | | 40·5 | 51·9 | |
| 6·7 | | 43·5 | 52·5 | 7·0 GS |
| 9·1 | | 44·0 | 48·3 | |
| 9·9 | | 46·5 | 28·6 | |
| 10·0 | | 54·5 | 59·7 | |
| 10·0 | | 56·5 | 55·1 | |
| 9·8 | | 57·5 | 41·2 | |
| 7·1 | 35 | 0·0 | 23·8 | 5·5 GStr |
| 9·5 | | 9·5 | 48·2 | |
| 9·9 | | 19·5 | 59·5 | |
| 9·6 | | 20·5 | 54·1 | |
| 9·7 | | 20·5 | 51·5 | |
| 10·0 | | 22·5 | 9·9 | |
| 10·0 | | 23·0 | 0·2 | |

**2521—2580.**

| mag. | 11ʰ· m | s | −61° ′ | |
|---|---|---|---|---|
| 9·3 | 35 | 24·0 | 55·0 | |
| 9·1 | | 32·5 | 37·0 | |
| 9·7 | | 33·0 | 6·2 | |
| 9·7 | | 33·0 | 4·2 | |
| 10·0 | | 36·0 | 8·4 | |
| 10·0 | | 42·0 | 29·3 | |
| 10·0 | | 50·5 | 16·1 | |
| 10·0 | | 53·0 | 22·3 | |
| 8·9 | | 53·5 | 2·4 | |
| 9·9 | | 53·5 | 48·6 | |
| 9·9 | | 54·0 | 58·3 | |
| 9·8 | | 56·5 | 47·0 | |
| 9·6 | | 59·0 | 12·2 | |
| 9·8 | 36 | 2·5 | 3·4 | |
| 9·9 | | 3·5 | 47·2 | |
| 9·7 | | 8·0 | 48·5 | |
| 9·7 | | 12·5 | 50·5 | |
| 10·0 | | 20·5 | 45·9 | |
| 10·0 | | 26·5 | 9·1 | |
| 9·5 | | 30·0 | 53·0 | |
| 8·2 | | 30·5 | 47·0 | 8·0 |
| 9·4 | | 31·0 | 6·4 | |
| 9·5 | | 36·0 | 21·9 | |
| 9·8 | | 38·0 | 14·9 | |
| 10·0 | | 46·0 | 19·0 | |
| 9·8 | | 46·5 | 52·7 | 9·0 |
| 10·0 | | 48·5 | 26·9 | |
| 10·0 | | 48·5 | 28·9 | |
| 9·6 | | 50·5 | 14·5 | |
| 8·2 | | 52·5 | 52·2 | 8·5 |
| 8·3 | | 52·5 | 44·3 | |
| 10·0 | 37 | 6·5 | 18·1 | |
| 9·6 | | 21·0 | 21·2 | |
| 10·0 | | 21·5 | 39·4 | |
| 9·1 | | 22·5 | 7·1 | |
| 9·7 | | 28·0 | 15·4 | |
| 10·0 | | 30·5 | 20·1 | |
| 9·4 | | 32·5 | 53·4 | |
| 6·8 | | 32·5 | 47·7 | 6·0 GSctr |
| 9·8 | | 44·5 | 50·3 | 8·5 |
| 9·7 | | 45·5 | 46·4 | |
| 9·4 | | 47·0 | 54·1 | |
| 10·0 | | 47·5 | 39·5 | |
| 9·5 | | 48·0 | 3·1 | |
| 9·4 | | 50·0 | 49·1 | 9·0 |
| 9·8 | | 50·5 | 39·4 | |
| 8·6 | | 51·5 | 49·1 | 8·5 |
| 10·0 | | 52·5 | 35·7 | |
| 9·2 | | 52·5 | 51·9 | |
| 8·3 | 38 | 0·0 | 26·6 | |
| 8·3 | | 2·5 | 50·8 | 9·0 |
| 9·7 | | 10·0 | 28·2 | |
| 9·6 | | 11·5 | 4·0 | |
| 9·5 | | 16·5 | 1·4 | |
| 9·5 | | 17·0 | 59·7 | |
| 8·5 | | 19·5 | 52·2 | 8·5 |
| 9·9 | | 22·5 | 35·1 | |
| 10·0 | | 23·0 | 59·8 | |
| 9·5 | | 39·0 | 11·0 | |
| 9·7 | | 41·0 | 57·4 | |

**2581—2640.**

| mag. | 11ʰ· m | s | −61° ′ | |
|---|---|---|---|---|
| 9·7 | 38 | 51·5 | 37·1 | |
| 9·5 | | 51·5 | 47·1 | 9·2 |
| 10·0 | | 58·0 | 5·3 | |
| 8·8 | 39 | 0·0 | 7·4 | |
| 9·8 | | 0·5 | 49·1 | |
| 9·7 | | 3·5 | 48·2 | |
| 10·0 | | 5·5 | 2·4 | |
| 10·0 | | 8·0 | 43·0 | |
| 10·0 | | 8·0 | 41·7 | |
| 9·0 | | 10·0 | 21·3 | 9·0 |
| 10·0 | | 10·5 | 4·1 | |
| 10·0 | | 10·5 | 31·9 | |
| 10·0 | | 16·0 | 5·1 | |
| 8·8 | | 16·5 | 14·1 | |
| 9·8 | | 19·5 | 17·1 | |
| 9·7 | | 20·0 | 3·0 | |
| 8·7 | | 20·0 | 48·1 | 8·0 |
| 10·0 | | 21·5 | 6·2 | |
| 9·7 | | 26·0 | 36·8 | |
| 9·4 | | 32·5 | 44·2 | |
| 8·4 | | 36·0 | 37·3 | 9·0 |
| 9·4 | | 37·0 | 21·1 | |
| 10·0 | | 43·8 | 57·9 | |
| 9·8 | | 45·5 | 10·3 | |
| 10·0 | | 46·0 | 42·2 | |
| 9·4 | | 58·5 | 57·7 | |
| 9·0 | 40 | 1·0 | 17·2 | 9·2 |
| 9·5 | | 7·0 | 59·4 | |
| 9·4 | | 32·0 | 22·6 | |
| 10·0 | | 33·0 | 36·2 | |
| 8·1 | | 34·0 | 23·0 | 7·8 GSt |
| 9·7 | | 35·0 | 58·0 | |
| 9·3 | | 37·0 | 4·5 | |
| 9·5 | | 37·0 | 28·5 | |
| 8·8 | | 40·0 | 36·0 | GSt |
| 8·7 | | 47·0 | 39·0 | |
| 9·6 | | 50·5 | 29·1 | |
| 10·0 | | 50·5 | 17·4 | |
| 8·9 | | 53·0 | 0·2 | 8·5 |
| 10·0 | 41 | 5·1 | 58·4 | |
| 8·7 | | 10·0 | 56·1 | GS |
| 8·2 | | 16·5 | 44·4 | |
| 10·0 | | 17·0 | 13·2 | |
| 9·3 | | 18·0 | 29·1 | |
| 10·0 | | 19·5 | 37·3 | |
| 8·9 | | 19·5 | 14·4 | 9·0 |
| 9·4 | | 20·0 | 38·6 | |
| 10·2 | | 20·0 | 57·3 | |
| 10·2 | | 27·0 | 33·4 | |
| 10·2 | | 30·0 | 46·4 | |
| 10·0 | | 30·5 | 20·2 | |
| 9·1 | | 47·0 | 17·3 | 9·5 |
| 10·2 | | 53·5 | 12·0 | |
| 10·0 | | 55·8 | 21·6 | |
| 9·8 | | 57·3 | 25·1 | |
| 8·9 | | 57·3 | 30·7 | |
| 10·2 | 42 | 1·0 | 55·0 | |
| 10·2 | | 8·0 | 12·5 | |
| 10·2 | | 16·3 | 1·6 | |
| 9·4 | | 20·5 | 38·5 | |

**2641—2700.**

| mag. | 11ʰ· m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 21·0 | 37·6 | |
| 10·0 | | 22·5 | 21·5 | |
| 9·6 | | 23·0 | 21·9 | |
| 10·0 | | 27·0 | 54·3 | |
| 10·2 | | 29·3 | 36·1 | |
| 10·2 | | 33·3 | 24·0 | |
| 10·0 | | 37·2 | 21·0 | |
| 9·8 | | 39·5 | 37·9 | |
| 9·0 | | 44·8 | 42·1 | 9·0 |
| 9·7 | | 46·5 | 52·4 | |
| 9·6 | | 50·7 | 36·4 | |
| 10·0 | | 58·0 | 47·5 | |
| 10·2 | | 58·5 | 2·1 | |
| 10·2 | 43 | 0·0 | 50·8 | |
| 10·0 | | 0·5 | 10·1 | |
| 10·0 | | 6·0 | 54·8 | |
| 9·2 | | 11·0 | 25·9 | 8·5 |
| 9·6 | | 11·5 | 12·9 | |
| 10·2 | | 15·5 | 14·8 | |
| 10·2 | | 16·5 | 49·9 | |
| 10·0 | | 30·0 | 49·8 | |
| 9·6 | | 31·5 | 15·2 | 9·0 |
| 9·1 | | 37·0 | 26·8 | |
| 9·0 | | 39·0 | 50·0 | 8·0 |
| 10·2 | | 39·3 | 56·4 | |
| 10·0 | | 41·0 | 15·6 | |
| 9·8 | | 41·0 | 53·4 | |
| 9·5 | | 41·5 | 27·8 | |
| 9·8 | | 42·0 | 12·1 | |
| 9·8 | | 45·0 | 23·8 | |
| 10·0 | | 46·2 | 57·2 | |
| 10·0 | | 55·5 | 1·9 | |
| 10·2 | | 57·0 | 19·0 | |
| 10·0 | 44 | 13·0 | 37·0 | |
| 10·2 | | 17·0 | 58·9 | |
| 9·4 | | 19·0 | 10·4 | |
| 6·8 | | 20·5 | 57·3 | 6·5 GSct |
| 9·6 | | 27·0 | 54·9 | |
| 10·0 | | 29·0 | 36·8 | |
| 9·6 | | 29·5 | 17·8 | |
| 8·4 | | 33·0 | 51·4 | 8·0 G |
| 10·0 | | 34·0 | 4·7 | |
| 10·0 | | 37·0 | 18·2 | |
| 9·2 | | 38·5 | 44·8 | |
| 9·3 | | 39·0 | 44·1 | |
| 9·6 | | 43·5 | 7·1 | |
| 9·5 | | 44·0 | 57·0 | 8·0 G |
| 10·2 | | 57·0 | 11·9 | |
| 9·7 | | 57·0 | 28·1 | |
| 9·3 | 45 | 1·0 | 56·8 | 8·0 G |
| 7·4 | | 4·5 | 9·0 | 7·0 GSt |
| 9·6 | | 6·5 | 3·5 | |
| 9·7 | | 7·5 | 35·5 | |
| 9·5 | | 9·0 | 8·3 | |
| 8·2 | | 10·0 | 6·7 | 9·0 G |
| 9·0 | | 10·0 | 18·0 | |
| 8·6 | | 11·0 | 1·5 | 9·5 |
| 9·4 | | 17·5 | 53·5 | 9·0 |
| 9·0 | | 19·0 | 53·9 | 9·0 |
| 9·2 | | 20·0 | 48·9 | |



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## 2701—2760.

| mag. | 11ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 45 | 24·0 | 36·8 | |
| 9·4 | | 28·0 | 12·0 | |
| 10·2 | | 30·0 | 39·9 | |
| 10·2 | | 36·0 | 12·6 | |
| 10·2 | | 38·5 | 12·2 | |
| 10·2 | | 39·0 | 49·9 | |
| 10·2 | | 41·0 | 22·7 | |
| 9·0 | | 43·0 | 13·8 | |
| 10·2 | | 43·0 | 51·1 | |
| 9·8 | | 46·0 | 23·7 | |
| 9·9 | | 46·5 | 58·3 | |
| 10·0 | | 49·0 | 42·0 | |
| 10·2 | | 50·0 | 51·3 | |
| 9·9 | | 51·0 | 14·1 | |
| 9·6 | | 53·0 | 58·9 | |
| 9·6 | | 57·0 | 5·9 | |
| 9·6 | | 58·5 | 35·7 | |
| 9·6 | 46 | 6·5 | 40·1 | |
| 9·3 | | 7·5 | 19·9 | 9·0 G |
| 9·0 | | 10·0 | 20·0 | 9·0 |
| 9·6 | | 11·0 | 43·0 | |
| 9·4 | | 13·0 | 59·3 | |
| 9·9 | | 18·0 | 33·7 | |
| 9·9 | | 23·0 | 33·4 | |
| 9·0 | | 23·0 | 45·1 | 7·0 |
| 10·2 | | 24·0 | 41·9 | |
| 9·8 | | 24·0 | 30·2 | |
| 9·9 | | 26·0 | 38·2 | |
| 7·6 | | 29·0 | 32·4 | 7·5 GS |
| 9·0 | | 29·5 | 17·9 | 9·2 |
| 9·7 | | 30·0 | 37·0 | |
| 9·6 | | 30·0 | 15·3 | |
| 9·7 | | 37·0 | 33·2 | 9·5 |
| 10·2 | | 38·0 | 27·2 | |
| 10·0 | | 43·0 | 14·4 | |
| 10·0 | | 50·0 | 49·3 | |
| 9·6 | | 50·0 | 34·3 | |
| 9·2 | | 50·5 | 59·5 | 9·0 |
| 9·9 | | 53·0 | 27·2 | |
| 10·0 | | 58·5 | 27·9 | |
| 9·6 | 47 | 0·0 | 27·6 | |
| 10·2 | | 0·1 | 31·8 | |
| 10·0 | | 7·0 | 59·9 | |
| 9·7 | | 10·5 | 41·4 | |
| 9·7 | | 13·0 | 19·0 | |
| 9·2 | | 13·5 | 29·2 | 9·5 |
| 9·6 | | 15·5 | 27·9 | |
| 9·8 | | 15·5 | 8·7 | |
| 9·9 | | 18·0 | 52·5 | |
| 9·6 | | 19·0 | 41·5 | |
| 8·8 | | 24·0 | 47·8 | |
| 9·8 | | 27·0 | 38·7 | |
| 9·3 | | 30·5 | 30·6 | 9·0 |
| 10·2 | | 32·5 | 29·4 | |
| 10·0 | | 33·0 | 23·0 | |
| 8·3 | | 36·5 | 30·0 | 8·0 G |
| 9·6 | | 37·0 | 49·9 | |
| 9·9 | | 40·0 | 22·1 | |
| 10·0 | | 42·5 | 44·9 | |
| 9·0 | | 44·0 | 13·3 | |

## 2761—2820.

| mag. | 11ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 9·7 | 47 | 45·0 | 5·3 | |
| 9·6 | | 48·0 | 28·8 | |
| 9·8 | | 50·0 | 30·1 | |
| 10·0 | | 57·0 | 46·0 | |
| 9·2 | 48 | 9·5 | 52·7 | |
| 9·8 | | 10·5 | 7·9 | |
| 10·2 | | 13·5 | 53·9 | |
| 9·6 | | 16·5 | 18·0 | |
| 10·2 | | 19·0 | 29·8 | |
| 10·0 | | 20·0 | 11·9 | |
| 10·2 | | 27·0 | 15·8 | |
| 8·7 | | 28·0 | 44·0 | 9·0 |
| 9·0 | | 30·0 | 47·6 | |
| 10·2 | | 30·5 | 13·1 | |
| 10·2 | | 30·5 | 12·0 | |
| 10·2 | | 32·0 | 46·3 | |
| 9·9 | | 38·5 | 44·6 | |
| 9·6 | | 40·0 | 11·1 | |
| 9·4 | | 47·5 | 53·0 | 8·5 GS |
| 9·0 | | 50·0 | 53·0 | 8·0 GS |
| 9·9 | | 54·0 | 27·1 | |
| 10·0 | | 55·5 | 35·1 | |
| 10·2 | | 58·5 | 58·4 | |
| 10·0 | | 59·5 | 25·2 | |
| 9·7 | 49 | 8·5 | 57·6 | |
| 9·7 | | 9·0 | 55·1 | 9·0 |
| 10·0 | | 11·5 | 57·2 | |
| 8·3 | | 17·0 | 30·0 | 8·0 G |
| 10·0 | | 28·0 | 25·9 | |
| 10·2 | | 30·0 | 17·2 | |
| 9·9 | | 30·0 | 24·5 | |
| 10·0 | | 47·0 | 23·0 | |
| 9·6 | | 47·5 | 12·9 | |
| 9·9 | | 49·0 | 54·0 | |
| 10·0 | | 50·0 | 52·9 | |
| 10·0 | | 52·5 | 59·6 | |
| 9·4 | | 53·0 | 23·2 | |
| 9·4 | | 53·0 | 42·7 | |
| 9·8 | | 58·0 | 31·1 | |
| 10·0 | | 59·5 | 2·3 | |
| 9·8 | 50 | 0·0 | 33·7 | |
| 9·8 | | 1·0 | 29·3 | |
| 9·7 | | 2·0 | 3·2 | |
| 9·5 | | 3·0 | 18·9 | |
| 9·5 | | 4·5 | 21·8 | |
| 9·8 | | 8·5 | 51·9 | |
| 10·0 | | 9·0 | 27·4 | |
| 9·7 | | 11·0 | 22·2 | |
| 9·8 | | 12·0 | 15·0 | 9·5 |
| 9·9 | | 12·5 | 18·7 | |
| 9·9 | | 18·0 | 22·8 | |
| 10·2 | | 21·8 | 58·2 | |
| 8·9 | | 35·0 | 6·2 | 9·5 |
| 9·0 | | 37·5 | 55·0 | 9·5 |
| 9·5 | | 38·0 | 41·3 | |
| 10·2 | | 41·0 | 5·5 | |
| 10·0 | | 47·0 | 41·5 | |
| 10·0 | | 50·0 | 57·9 | |
| 9·6 | | 52·5 | 19·1 | |
| 10·0 | | 53·5 | 48·9 | |

## 2821—2880.

| mag. | 11ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 50 | 54·0 | 43·0 | |
| 10·2 | | 57·0 | 42·8 | |
| 10·0 | 51 | 8·5 | 40·5 | |
| 9·3 | | 10·0 | 55·5 | |
| 9·6 | | 11·5 | 9·1 | |
| 9·6 | | 16·0 | 48·1 | |
| 10·2 | | 19·0 | 41·9 | |
| 9·5 | | 20·5 | 11·1 | |
| 5·6 | | 22·5 | 45·1 | 6·0 GSt |
| 9·4 | | 29·0 | 40·8 | 9·5 |
| 9·6 | | 36·5 | 46·1 | 9·5 |
| 9·9 | | 47·5 | 34·1 | |
| 9·8 | | 53·5 | 57·6 | |
| 10·0 | | 54·0 | 11·3 | |
| 9·9 | | 55·7 | 1·2 | |
| 9·3 | | 59·0 | 11·1 | |
| 9·8 | 52 | 1·5 | 33·2 | |
| 9·8 | | 2·0 | 21·4 | |
| 10·0 | | 3·0 | 42·0 | |
| 10·0 | | 3·0 | 49·5 | |
| 10·2 | | 14·3 | 58·0 | |
| 9·8 | | 18·0 | 15·8 | |
| 9·8 | | 19·8 | 45·7 | |
| 9·1 | | 21·0 | 7·1 | |
| 9·8 | | 23·0 | 39·7 | |
| 9·4 | | 27·0 | 2·0 | |
| 9·6 | | 27·8 | 41·7 | |
| 10·2 | | 31·8 | 39·5 | |
| 10·2 | | 35·8 | 33·1 | |
| 10·0 | | 36·5 | 26·5 | |
| 9·6 | | 40·5 | 1·1 | 9·5 |
| 8·3 | | 41·0 | 28·4 | 9·0 |
| 10·2 | | 50·5 | 35·7 | |
| 9·8 | | 53·0 | 31·8 | |
| 9·4 | | 53·5 | 34·4 | |
| 9·6 | | 58·8 | 16·6 | |
| 9·3 | 53 | 2·5 | 24·3 | |
| 10·2 | | 5·8 | 25·2 | |
| 9·0 | | 7·0 | 9·2 | 9·0 |
| 10·2 | | 8·5 | 56·8 | |
| 10·0 | | 9·5 | 32·4 | |
| 10·2 | | 12·0 | 56·3 | |
| 10·2 | | 13·0 | 55·0 | |
| 10·2 | | 17·0 | 53·7 | |
| 10·0 | | 28·8 | 48·1 | |
| 9·0 | | 38·5 | 18·2 | 10·0 |
| 10·0 | | 43·0 | 32·4 | |
| 9·6 | | 46·0 | 44·4 | |
| 9·0 | | 47·5 | 51·9 | 7·0 G |
| 10·0 | | 57·0 | 19·0 | |
| 9·5 | 54 | 3·0 | 21·4 | 9·5 |
| 9·8 | | 4·8 | 31·8 | |
| 9·6 | | 7·0 | 14·7 | |
| 10·0 | | 13·5 | 29·1 | |
| 9·0 | | 22·5 | 19·4 | 10·0 |
| 10·0 | | 24·8 | 26·3 | |
| 10·2 | | 26·4 | 58·4 | |
| 9·7 | | 33·0 | 23·4 | |
| 9·9 | | 34·5 | 42·0 | |
| 9·0 | | 38·5 | 2·0 | |

## 2881—2940.

| mag. | 11ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 54 | 41·0 | 58·6 | |
| 9·4 | | 46·5 | 5·7 | |
| 10·2 | | 47·5 | 59·0 | |
| 9·1 | | 50·5 | 55·1 | 9·5 |
| 10·0 | | 52·5 | 30·2 | |
| 9·9 | | 54·0 | 6·1 | |
| 10·0 | | 57·5 | 22·3 | |
| 8·5 | 55 | 3·5 | 54·9 | 8·5 G |
| 10·2 | | 11·0 | 52·1 | |
| 10·0 | | 11·8 | 50·5 | |
| 10·0 | | 12·8 | 58·6 | |
| 9·6 | | 13·0 | 36·3 | |
| 10·2 | | 14·8 | 53·2 | |
| 10·0 | | 16·8 | 25·8 | |
| 9·7 | | 20·0 | 52·3 | |
| 10·0 | | 20·2 | 58·0 | |
| 9·4 | | 21·5 | 15·3 | |
| 9·0 | | 24·5 | 49·8 | 8·5 G |
| 10·0 | | 33·0 | 37·9 | |
| 9·9 | | 36·0 | 46·6 | |
| 9·0 | | 37·0 | 40·1 | |
| 10·0 | | 37·8 | 49·4 | |
| 10·2 | | 47·0 | 19·3 | |
| 9·5 | | 50·0 | 46·0 | |
| 9·7 | 56 | 1·0 | 27·5 | |
| 7·6 | | 1·5 | 43·0 | 7·8 GSt |
| 9·0 | | 6·0 | 15·0 | |
| 9·8 | | 10·0 | 54·0 | |
| 10·2 | | 21·5 | 31·8 | |
| 10·2 | | 26·5 | 16·7 | |
| 9·6 | | 26·8 | 57·3 | |
| 10·2 | | 28·5 | 31·7 | |
| 9·3 | | 28·8 | 3·9 | |
| 7·1 | | 32·8 | 28·5 | 7·0 GSt |
| 7·8 | | 35·5 | 58·5 | 8·0 G |
| 10·2 | | 36·5 | 31·6 | |
| 10·0 | | 37·0 | 26·9 | |
| 8·6 | | 41·0 | 18·0 | 9·5 |
| 9·0 | | 44·0 | 7·2 | |
| 10·2 | | 46·8 | 24·3 | |
| 10·2 | | 50·0 | 53·2 | |
| 10·2 | 57 | 0·8 | 58·3 | |
| 9·2 | | 16·5 | 41·5 | |
| 9·2 | | 19·5 | 35·2 | |
| 9·3 | | 23·0 | 6·7 | |
| 10·2 | | 33·0 | 46·8 | |
| 10·0 | | 37·0 | 37·1 | |
| 10·2 | | 37·8 | 11·7 | |
| 9·6 | | 38·0 | 5·6 | |
| 9·7 | | 43·0 | 22·9 | |
| 9·0 | | 43·5 | 36·1 | |
| 9·5 | 58 | 1·0 | 19·8 | |
| 8·2 | | 20·5 | 17·9 | 7·8 GS |
| 9·3 | | 22·5 | 17·5 | 10·0 |
| 8·8 | | 22·5 | 18·2 | 8·2 GS |
| 9·3 | | 27·0 | 54·2 | |
| 9·4 | | 27·5 | 44·0 | |
| 10·2 | | 29·8 | 14·3 | |
| 9·6 | | 29·8 | 25·2 | |
| 9·4 | | 30·0 | 8·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |

## 2941—3000.

| mag. | 11h.–12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·2 | 58 | 40·0 | 42·7 | |
| 10·0 | | 43·5 | 9·2 | |
| 9·5 | | 47·5 | 16·7 | |
| 9·4 | | 51·5 | 34·0 | |
| 9·6 | | 52·0 | 21·1 | |
| 8·5 | | 54·5 | 4·0 | |
| 10·2 | 59 | 4·0 | 13·4 | |
| 9·9 | | 9·5 | 28·0 | |
| 10·2 | | 18·0 | 25·9 | |
| 9·8 | | 20·0 | 52·2 | |
| 10·2 | | 27·0 | 50·7 | |
| 10·0 | | 28·0 | 50·1 | |
| 10·0 | | 40·5 | 56·9 | |
| 10·2 | | 47·8 | 11·8 | |
| 10·2 | | 52·8 | 25·6 | |
| 9·6 | | 59·0 | 14·1 | |
| 9·4 | 0 | 17·5 | 8·7 | |
| 9·4 | | 23·0 | 37·1 | |
| 9·0 | | 33·0 | 49·2 | |
| 9·6 | | 35·5 | 33·7 | 9·0 |
| 9·3 | | 59·0 | 2·4 | 8·5 |
| 10·2 | 1 | 0·5 | 23·0 | |
| 10·0 | | 5·5 | 33·0 | |
| 10·0 | | 8·4 | 0·3 | |
| 10·2 | | 14·0 | 59·0 | |
| 10·2 | | 44·0 | 12·2 | |
| 10·0 | | 45·8 | 44·2 | |
| 9·6 | | 46·5 | 58·9 | |
| 9·8 | | 47·5 | 21·2 | |
| 9·3 | | 55·5 | 51·5 | |
| 9·4 | | 58·5 | 37·4 | 9·0 |
| 8·6 | 2 | 3·0 | 40·3 | 9·0 |
| 10·2 | | 12·0 | 54·3 | |
| 10·2 | | 13·0 | 24·2 | |
| 10·2 | | 15·5 | 44·9 | |
| 10·2 | | 23·0 | 0·2 | |
| 9·7 | | 24·5 | 25·5 | |
| 9·8 | | 38·8 | 58·0 | 9·0 |
| 8·9 | | 43·0 | 20·2 | |
| 9·5 | | 44·5 | 9·3 | |
| 8·6 | | 50·5 | 31·0 | 9·0 |
| 9·2 | | 51·5 | 43·5 | |
| 9·9 | 3 | 2·5 | 12·2 | |
| 10·0 | | 3·5 | 32·0 | |
| 9·0 | | 3·5 | 14·9 | |
| 9·3 | | 4·5 | 29·9 | |
| 8·2 | | 12·0 | 53·2 | 8·0 G |
| 9·4 | | 39·0 | 29·9 | |
| 10·2 | | 45·8 | 35·5 | |
| 9·4 | | 51·5 | 37·0 | |
| 8·6 | | 54·5 | 31·1 | 9·0 |
| 10·2 | | 55·0 | 29·0 | |
| 10·2 | 4 | 4·0 | 39·4 | |
| 10·2 | | 7·0 | 15·9 | |
| 9·6 | | 7·0 | 11·1 | |
| 10·0 | | 11·0 | 48·5 | |
| 10·0 | | 13·5 | 38·1 | |
| 9·6 | | 25·0 | 57·8 | |
| 8·1 | | 27·0 | 14·3 | 8·8 |
| 9·8 | | 37·0 | 46·5 | |

## 3001—3060.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 4 | 38·5 | 29·6 | |
| 10·2 | | 45·3 | 57·5 | |
| 9·4 | | 59·5 | 46·8 | |
| 9·3 | 5 | 16·5 | 19·1 | 9·0 |
| 9·0 | | 18·5 | 23·7 | 9·0 |
| 8·0 | | 29·0 | 25·8 | 8·5 G |
| 9·0 | | 30·0 | 5·1 | |
| 9·0 | | 34·5 | 11·9 | 9·0 |
| 10·2 | | 48·0 | 30·3 | |
| 10·0 | | 48·0 | 32·2 | |
| 9·1 | | 50·5 | 3·7 | |
| 9·6 | | 54·5 | 4·9 | |
| 10·2 | | 57·0 | 36·7 | |
| 10·2 | | 59·0 | 51·8 | |
| 10·2 | | 59·0 | 17·3 | |
| 9·9 | 6 | 0·0 | 22·5 | |
| 10·2 | | 11·5 | 44·3 | |
| 10·2 | | 12·5 | 42·9 | |
| 9·0 | | 13·0 | 12·2 | 8·5 G |
| 10·2 | | 13·0 | 40·4 | |
| 9·6 | | 17·5 | 11·3 | 10·0 |
| 8·0 | | 24·5 | 37·0 | 8·2 G |
| 9·7 | | 29·0 | 54·3 | |
| 9·6 | | 30·7 | 0·4 | |
| 9·8 | | 34·0 | 36·1 | |
| 9·5 | | 48·5 | 37·2 | |
| 10·2 | | 50·0 | 27·9 | |
| 8·7 | | 54·0 | 38·5 | 9·5 |
| 9·5 | | 54·5 | 49·9 | 9·0 |
| 10·0 | | 57·0 | 28·5 | |
| 10·0 | | 58·7 | 1·1 | |
| 9·0 | 7 | 1·0 | 32·6 | 9·0 |
| 9·8 | | 17·2 | 2·2 | |
| 9·3 | | 20·0 | 58·9 | |
| 10·2 | | 28·0 | 27·1 | |
| 8·2 | | 29·5 | 35·8 | 8·5 G |
| 10·0 | | 38·5 | 46·8 | 9·0 |
| 10·2 | | 49·5 | 47·4 | |
| 8·8 | | 52·0 | 12·3 | 9·0 |
| 9·6 | | 56·0 | 39·1 | |
| 10·2 | 8 | 10·0 | 24·7 | |
| 10·0 | | 16·0 | 59·4 | |
| 8·9 | | 17·0 | 10·4 | 8·2 |
| 9·2 | | 24·0 | 32·9 | 8·5 |
| 9·3 | | 30·0 | 50·5 | |
| 10·2 | | 37·0 | 37·9 | |
| 9·7 | | 43·0 | 33·6 | 9·0 |
| 9·8 | | 48·5 | 57·9 | |
| 8·6 | | 48·5 | 50·6 | 8·8 |
| 10·2 | | 49·0 | 25·7 | |
| 10·2 | | 54·0 | 43·3 | |
| 10·0 | | 57·0 | 24·8 | |
| 10·2 | 9 | 4·5 | 2·3 | |
| 9·8 | | 5·5 | 34·3 | |
| 9·4 | | 23·5 | 56·1 | |
| 9·4 | | 25·5 | 5·5 | |
| 10·2 | | 34·0 | 7·1 | |
| 9·8 | | 40·0 | 27·1 | |
| 8·8 | | 47·0 | 59·3 | |
| 9·7 | | 58·0 | 15·6 | |

## 3061—3120.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 10 | 0·0 | 40·9 | |
| 9·3 | | 6·5 | 26·1 | |
| 10·2 | | 14·5 | 34·9 | |
| 9·2 | | 15·5 | 46·8 | |
| 10·2 | | 16·0 | 42·4 | |
| 10·2 | | 29·5 | 47·1 | |
| 10·0 | | 30·0 | 25·9 | |
| 10·2 | | 46·0 | 7·0 | |
| 9·4 | | 46·5 | 9·2 | |
| 10·0 | | 55·0 | 2·2 | |
| 10·0 | | 56·0 | 19·9 | |
| 9·8 | 11 | 11·0 | 22·4 | |
| 9·8 | | 16·0 | 36·8 | |
| 9·4 | | 20·0 | 43·0 | |
| 8·4 | | 27·5 | 28·9 | 8·8 |
| 10·2 | | 30·0 | 19·0 | |
| 9·7 | | 30·0 | 16·1 | |
| 9·1 | | 32·3 | 56·9 | 8·5 |
| 10·2 | | 48·5 | 12·1 | |
| 10·2 | | 58·3 | 56·9 | |
| 9·4 | 12 | 11·0 | 46·9 | 9·0 |
| 9·4 | | 17·0 | 19·9 | 9·5 |
| 9·7 | | 22·5 | 7·1 | |
| 9·0 | | 30·5 | 16·2 | 9·5 |
| 9·8 | 13 | 15·0 | 53·3 | |
| 10·2 | | 20·0 | 52·2 | |
| 9·8 | | 27·0 | 41·3 | |
| 8·3 | | 27·5 | 50·1 | 9·2 |
| 9·7 | | 32·5 | 16·6 | |
| 10·2 | | 42·0 | 17·0 | |
| 9·4 | | 45·0 | 15·8 | |
| 10·0 | 14 | 0·5 | 38·9 | |
| 9·2 | | 0·5 | 24·1 | |
| 10·2 | | 12·5 | 38·6 | |
| 8·9 | | 15·5 | 21·0 | 9·5 |
| 9·6 | | 17·5 | 37·5 | |
| 8·7 | | 20·0 | 44·0 | |
| 10·2 | | 28·0 | 17·9 | |
| 9·2 | | 30·0 | 33·9 | |
| 7·8 | | 32·0 | 35·2 | 7·0 GSt |
| 10·2 | | 46·0 | 29·0 | |
| 9·7 | | 47·0 | 12·1 | |
| 9·8 | | 48·0 | 30·1 | |
| 10·0 | | 54·0 | 48·2 | |
| 9·5 | | 54·0 | 28·5 | |
| 10·0 | 15 | 1·3 | 58·2 | |
| 10·2 | | 12·0 | 58·4 | |
| 9·0 | | 19·5 | 42·2 | |
| 9·2 | | 20·0 | 54·0 | |
| 10·0 | | 34·0 | 27·2 | 9·5 |
| 9·9 | | 34·5 | 52·7 | |
| 8·2 | | 47·0 | 31·2 | 8·0 G |
| 10·0 | | 48·0 | 21·3 | |
| 9·0 | | 50·5 | 53·8 | |
| 9·6 | 16 | 4·5 | 25·7 | |
| 10·2 | | 11·0 | 18·6 | |
| 9·1 | | 11·0 | 37·2 | |
| 9·4 | | 18·0 | 50·4 | |
| 9·9 | | 19·0 | 2·0 | |
| 9·2 | | 24·5 | 34·2 | |

## 3121—3180.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 16 | 29·2 | 2·2 | |
| 10·2 | | 38·0 | 7·5 | |
| 10·0 | | 39·0 | 40·5 | |
| 10·2 | | 39·0 | 51·6 | |
| 9·2 | | 54·0 | 48·5 | 9·0 |
| 9·6 | 17 | 0·0 | 41·0 | |
| 10·0 | | 3·5 | 46·6 | |
| 8·6 | | 6·0 | 24·9 | 9·0 |
| 10·2 | | 9·5 | 31·3 | |
| 9·6 | | 13·0 | 31·6 | |
| 9·0 | | 13·5 | 28·4 | |
| 8·9 | | 16·0 | 24·6 | |
| 10·0 | | 18·5 | 27·2 | |
| 10·0 | | 20·5 | 33·9 | |
| 10·2 | | 30·0 | 15·4 | |
| 10·2 | | 31·5 | 48·2 | |
| 10·2 | | 35·0 | 46·2 | |
| 8·6 | | 41·0 | 13·2 | 8·5 |
| 9·3 | | 43·5 | 11·3 | |
| 10·1 | | 44·5 | 10·4 | |
| 9·5 | | 46·7 | 23·9 | |
| 9·1 | | 47·6 | 56·8 | |
| 9·8 | | 48·8 | 7·8 | |
| 10·0 | | 53·8 | 55·9 | |
| 9·8 | 18 | 1·3 | 34·5 | |
| 9·7 | | 1·3 | 36·9 | |
| 10·1 | | 2·5 | 31·6 | |
| 10·1 | | 3·0 | 4·7 | |
| 9·8 | | 16·8 | 16·0 | |
| 10·0 | | 19·5 | 49·6 | |
| 9·2 | | 19·8 | 19·3 | |
| 10·1 | | 22·5 | 19·3 | |
| 10·0 | | 27·0 | 37·9 | |
| 10·0 | | 28·0 | 26·7 | |
| 9·8 | | 38·0 | 12·9 | |
| 9·2 | | 38·0 | 30·1 | |
| 10·1 | | 41·5 | 33·7 | |
| 9·0 | | 43·3 | 36·6 | 9·0 |
| 10·1 | | 43·5 | 41·6 | |
| 8·8 | | 45·5 | 3·3 | 9·5 |
| 10·1 | | 48·5 | 42·9 | |
| 10·1 | | 50·5 | 43·4 | |
| 9·0 | | 54·0 | 40·5 | 9·5 |
| 9·7 | | 58·0 | 30·5 | |
| 10·1 | 19 | 0·5 | 39·9 | |
| 8·8 | | 0·5 | 33·4 | 8·5 |
| 9·7 | | 1·5 | 38·3 | |
| 10·0 | | 1·5 | 39·7 | |
| 10·1 | | 2·0 | 48·7 | |
| 9·0 | | 2·5 | 47·5 | 9·5 |
| 9·8 | | 8·0 | 46·3 | |
| 9·7 | | 21·0 | 11·0 | |
| 10·0 | | 25·5 | 44·4 | |
| 10·1 | | 27·0 | 2·3 | |
| 10·1 | | 28·0 | 19·0 | |
| 9·2 | | 31·5 | 12·9 | |
| 10·1 | | 32·5 | 23·9 | |
| 9·3 | | 41·5 | 7·8 | |
| 9·2 | | 42·5 | 31·7 | |
| 10·1 | | 46·5 | 3·5 | |



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### 3181—3240.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 19 | 51·5 | 12·7 | |
| 9·9 | | 52·0 | 58·5 | |
| 9·9 | | 59·5 | 41·8 | |
| 9·4 | 20 | 5·0 | 23·3 | |
| 10·1 | | 10·0 | 14·8 | |
| 9·5 | | 12·5 | 0·0 | |
| 10·1 | | 13·0 | 56·8 | |
| 9·5 | | 14·0 | 22·9 | |
| 10·2 | | 20·0 | 57·7 | |
| 9·8 | | 22·0 | 50·5 | |
| 9·0 | | 22·0 | 31·1 | |
| 10·0 | | 23·5 | 44·7 | 9·5 |
| 10·2 | | 27·5 | 16·4 | |
| 10·2 | | 38·5 | 2·4 | |
| 9·0 | | 42·0 | 46·6 | 9·0 |
| 10·0 | | 45·0 | 42·5 | |
| 10·2 | | 50·5 | 3·1 | |
| 8·8 | | 52·5 | 20·2 | 9·0 |
| 9·2 | | 53·5 | 21·1 | |
| 9·9 | | 57·5 | 3·5 | |
| 9·8 | 21 | 9·5 | 29·1 | |
| 9·7 | | 11·0 | 57·3 | |
| 9·7 | | 14·5 | 29·5 | |
| 8·2 | | 18·5 | 4·2 | 7·5 GSt |
| 10·0 | | 20·0 | 0·1 | |
| 8·8 | | 20·5 | 7·0 | 9·5 |
| 9·7 | | 28·0 | 23·9 | |
| 8·4 | | 28·0 | 22·9 | 8·5 G |
| 8·3 | | 29·0 | 6·3 | 6·5 GSt |
| 10·1 | | 31·5 | 42·1 | |
| 10·1 | | 39·0 | 21·5 | |
| 8·8 | | 39·0 | 9·7 | 10·0 |
| 10·0 | | 41·5 | 28·1 | |
| 10·1 | | 48·0 | 23·9 | |
| 10·0 | | 51·0 | 37·5 | |
| 10·2 | | 53·5 | 5·9 | |
| 10·0 | | 54·5 | 52·8 | |
| 7·9 | | 57·0 | 10·7 | 8·0 GSt |
| 10·1 | 22 | 1·0 | 9·2 | |
| 9·2 | | 7·0 | 46·5 | 9·0 |
| 9·7 | | 19·5 | 23·3 | 9·0 |
| 10·2 | | 24·0 | 45·1 | |
| 10·0 | | 29·5 | 22·3 | |
| 10·2 | | 30·0 | 44·9 | |
| 10·2 | | 42·0 | 36·5 | |
| 10·0 | | 50·5 | 27·4 | |
| 10·2 | | 59·5 | 20·9 | |
| 9·8 | 23 | 2·0 | 12·7 | |
| 10·2 | | 2·5 | 9·2 | |
| 9·8 | | 14·5 | 47·5 | |
| 10·2 | | 21·5 | 49·3 | |
| 9·4 | | 22·5 | 53·7 | |
| 9·3 | | 24·5 | 19·4 | 9·5 |
| 10·2 | | 25·5 | 3·4 | |
| 10·2 | | 26·5 | 16·1 | |
| 9·5 | | 31·0 | 11·1 | |
| 8·6 | | 32·0 | 7·7 | 8·5 |
| 10·2 | | 34·0 | 47·3 | |
| 9·5 | | 36·5 | 5·9 | |
| 9·7 | | 43·0 | 18·2 | |

### 3241—3300.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 23 | 51·5 | 16·5 | |
| 10·2 | | 52·0 | 5·1 | |
| 10·2 | | 57·5 | 22·3 | |
| 9·3 | 24 | 1·0 | 59·0 | |
| 10·0 | | 2·5 | 46·6 | |
| 9·9 | | 10·5 | 57·0 | |
| 8·6 | | 11·5 | 13·1 | 8·0 G |
| 10·2 | | 14·0 | 14·3 | |
| 9·1 | | 14·2 | 58·9 | 9·5 |
| 10·1 | | 19·5 | 16·5 | |
| 10·2 | | 23·0 | 17·1 | |
| 10·0 | | 26·0 | 13·3 | |
| 10·2 | | 36·0 | 17·3 | |
| 10·0 | | 37·0 | 3·3 | |
| 9·2 | | 48·0 | 32·5 | |
| 8·8 | | 53·0 | 8·2 | |
| 10·2 | 25 | 0·0 | 18·3 | |
| 9·2 | | 2·0 | 0·8 | |
| 10·2 | | 4·5 | 0·0 | |
| 9·8 | | 7·0 | 54·5 | |
| 9·0 | | 11·5 | 48·5 | 9·5 S |
| 9·4 | | 11·5 | 2·9 | |
| 8·4 | | 15·5 | 2·3 | 8·5 |
| 10·1 | | 21·5 | 1·2 | |
| 9·1 | | 23·0 | 16·9 | |
| 10·2 | | 34·0 | 29·8 | |
| 9·6 | | 40·5 | 1·0 | |
| 9·8 | | 44·5 | 5·5 | |
| 8·8 | | 46·5 | 11·1 | 9·5 |
| 9·4 | | 47·5 | 12·8 | |
| 9·7 | | 48·5 | 11·6 | |
| 9·2 | | 54·0 | 26·1 | |
| 10·2 | 26 | 9·5 | 34·5 | |
| 9·8 | | 16·5 | 37·5 | |
| 10·0 | | 17·5 | 0·0 | |
| 9·8 | | 17·5 | 27·3 | |
| 10·2 | | 22·0 | 37·9 | |
| 9·2 | | 23·5 | 26·3 | |
| 9·6 | | 26·0 | 18·4 | |
| 9·9 | | 28·5 | 12·3 | |
| 9·8 | | 32·0 | 14·5 | |
| 10·1 | | 50·5 | 15·7 | |
| 8·7 | | 51·5 | 4·8 | 9·2 |
| 9·4 | | 58·0 | 47·3 | |
| 9·8 | 27 | 5·0 | 22·5 | |
| 9·4 | | 22·5 | 59·4 | 9·2 |
| 9·6 | | 23·5 | 24·6 | |
| 9·5 | | 28·5 | 41·3 | |
| 9·2 | | 39·5 | 25·5 | |
| 10·2 | | 43·0 | 42·8 | |
| 10·2 | | 50·0 | 37·7 | |
| 9·8 | | 55·0 | 7·3 | |
| 9·5 | | 59·5 | 8·7 | 9·5 |
| 10·1 | 28 | 4·0 | 8·5 | |
| 9·8 | | 19·5 | 37·9 | |
| 7·8 | | 23·5 | 3·1 | 7·5 GSt |
| 9·1 | | 27·0 | 40·1 | |
| 7·5 | | 27·5 | 9·1 | 7·0 GSt |
| 9·9 | | 29·5 | 45·7 | |
| 10·0 | | 34·0 | 12·1 | |

### 3301—3360.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·2 | 28 | 34·5 | 23·6 | |
| 9·3 | | 38·5 | 24·3 | |
| 8·6 | | 42·5 | 9·1 | 8·8 |
| 10·1 | | 43·0 | 20·5 | |
| 9·6 | | 45·5 | 48·2 | |
| 10·2 | | 56·0 | 11·6 | |
| 9·3 | 29 | 20·5 | 26·9 | |
| 9·2 | | 24·0 | 32·7 | 9·0 |
| 10·2 | | 33·0 | 28·4 | |
| 10·0 | | 42·0 | 35·5 | |
| 10·1 | | 53·5 | 26·6 | |
| 8·8 | | 53·5 | 58·5 | 9·5 |
| 10·2 | 30 | 8·0 | 40·5 | |
| 9·4 | | 37·0 | 37·9 | |
| 9·7 | | 55·5 | 0·0 | |
| 10·2 | 31 | 2·5 | 11·4 | |
| 9·0 | | 5·0 | 7·1 | |
| 8·8 | | 38·5 | 20·6 | 8·0 G |
| 8·5 | | 48·5 | 50·4 | 9·0 |
| 10·0 | | 49·5 | 6·2 | |
| 10·1 | | 51·0 | 29·1 | |
| 9·6 | | 51·5 | 26·5 | |
| 9·4 | | 51·5 | 5·3 | 9·5 |
| 10·1 | 32 | 2·0 | 7·3 | |
| 9·7 | | 6·5 | 6·3 | |
| 9·4 | | 24·0 | 34·7 | |
| 8·8 | | 24·5 | 44·7 | 9·0 |
| 10·2 | | 29·0 | 27·5 | |
| 10·2 | | 47·5 | 8·7 | |
| 9·9 | | 48·5 | 3·3 | 9·5 |
| 10·2 | | 49·0 | 17·9 | |
| 9·8 | 33 | 0·0 | 47·8 | |
| 9·8 | | 13·0 | 4·5 | |
| 9·5 | | 13·5 | 28·5 | |
| 8·8 | | 19·5 | 18·5 | 9·5 |
| 9·5 | | 20·5 | 2·5 | |
| 9·3 | | 27·8 | 2·7 | 9·5 |
| 10·0 | | 31·0 | 52·8 | |
| 10·2 | | 36·0 | 51·1 | |
| 9·0 | | 38·0 | 18·1 | 9·0 |
| 9·1 | | 42·5 | 38·9 | 10·0 |
| 9·9 | | 52·5 | 0·9 | |
| 9·6 | | 58·0 | 45·7 | |
| 10·2 | 34 | 20·0 | 33·3 | |
| 10·1 | | 41·5 | 4·3 | |
| 10·2 | | 47·0 | 32·8 | |
| 10·2 | 35 | 2·5 | 5·9 | |
| 10·2 | | 4·0 | 32·9 | |
| 9·9 | | 22·5 | 20·3 | |
| 10·1 | | 34·0 | 7·5 | |
| 10·1 | 36 | 17·5 | 3·2 | |
| 9·2 | | 53·5 | 48·2 | |
| 9·4 | 37 | 34·0 | 4·2 | |
| 10·0 | | 37·5 | 49·9 | |
| 9·0 | | 37·5 | 31·7 | 9·0 |
| 8·6 | | 54·0 | 32·0 | 8·0 G |
| 9·4 | 38 | 1·5 | 43·6 | |
| 9·3 | | 5·5 | 5·7 | |
| 9·1 | | 18·5 | 30·3 | 9·5 |
| 9·2 | | 21·5 | 24·1 | 8·5 G |

### 3361—3420.

| mag. | 12h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·5 | 38 | 29·5 | 22·6 | |
| 10·2 | | 46·5 | 31·5 | |
| 8·8 | | 56·5 | 37·0 | 9·5 |
| 9·9 | 39 | 4·5 | 37·2 | |
| 9·2 | | 15·0 | 39·6 | |
| 10·2 | | 21·5 | 22·5 | |
| 9·0 | 40 | 1·5 | 51·6 | 9·5 |
| 10·2 | | 18·5 | 15·4 | |
| 9·4 | | 35·0 | 19·6 | 10·0 |
| 9·9 | | 52·0 | 26·2 | |
| 9·1 | | 55·0 | 29·3 | 9·5 |
| 10·0 | 41 | 17·5 | 2·9 | |
| 10·1 | | 40·0 | 5·5 | |
| 9·2 | 42 | 4·0 | 50·8 | 9·5 |
| 9·5 | | 41·5 | 45·8 | |
| 8·4 | | 45·0 | 57·6 | 7·0 GSt |
| 10·2 | | 45·5 | 40·5 | 9·5 |
| 10·2 | 43 | 7·0 | 38·5 | |
| 9·0 | | 43·5 | 42·6 | 9·5 |
| 9·5 | 44 | 17·5 | 37·8 | |
| 9·5 | | 46·2 | 59·9 | |
| 9·7 | 45 | 1·0 | 41·6 | 9·5 |
| 10·2 | | 31·0 | 2·9 | |
| 9·9 | | 40·5 | 21·0 | |
| 8·9 | 46 | 30·0 | 5·6 | 9·0 |
| 9·2 | | 44·5 | 57·7 | |
| 10·2 | | 44·5 | 55·0 | 9·5 |
| 9·0 | | 52·0 | 7·4 | 9·5 |
| 9·1 | 47 | 2·0 | 8·6 | |
| 10·2 | | 11·0 | 30·2 | |
| 8·1 | | 28·0 | 52·7 | 7·5 G |
| 9·5 | | 59·5 | 10·4 | |
| 10·1 | 48 | 1·5 | 56·9 | |
| 9·3 | | 18·5 | 56·4 | 9·5 |
| 10·0 | | 29·5 | 46·1 | |
| 8·5 | | 41·5 | 4·6 | 9·0 G |
| 9·6 | 49 | 37·5 | 42·6 | |
| 10·2 | | 53·0 | 49·8 | |
| 9·8 | 50 | 49·0 | 48·1 | |
| 9·9 | 51 | 24·5 | 52·1 | |
| 9·1 | | 41·5 | 36·7 | 9·0 |
| 10·2 | | 47·5 | 41·6 | |
| 9·4 | | 52·5 | 57·4 | |
| 10·0 | | 53·0 | 31·4 | |
| 10·2 | 52 | 4·5 | 1·9 | |
| 9·2 | | 29·2 | 44·6 | 9·5 |
| 9·9 | | 38·3 | 47·8 | |
| 9·2 | | 43·5 | 47·7 | |
| 9·8 | | 54·3 | 54·2 | |
| 8·7 | | 59·3 | 59·3 | 8·8 G |
| 10·1 | 53 | 0·5 | 7·3 | |
| 9·6 | | 10·5 | 54·6 | 9·0 G |
| 10·1 | | 23·0 | 55·7 | |
| 10·1 | | 35·5 | 44·7 | |
| 10·1 | | 49·5 | 51·1 | |
| 9·7 | | 52·5 | 22·0 | |
| 9·6 | 54 | 3·7 | 29·6 | |
| 9·0 | | 5·3 | 48·4 | |
| 8·9 | | 5·5 | 30·4 | 9·0 |
| 9·8 | | 7·0 | 23·7 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 12 | 10 | 79 | 8·3 |
| | 20 | 82 | 8·3 |
| | 30 | 85 | 8·3 |
| | 40 | 87 | 8·2 |
| | 50 | 90 | 8·2 |
| 13 | 0 | 93 | 8·1 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 50 | 90 | 8·2 |
| 13 | 0 | 93 | 8·1 |
| | 10 | 95 | 8·0 |
| | 20 | 98 | 7·9 |

## 3421—3480.

| mag. | 12h.–13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·2 | 54 | 12·0 | 9·5 | 9·0 |
| 10·1 | | 29·5 | 16·0 | |
| 9·9 | | 44·0 | 49·1 | |
| 9·9 | | 44·3 | 13·0 | |
| 9·4 | | 47·0 | 52·1 | |
| 9·7 | | 48·5 | 9·9 | |
| 9·7 | 55 | 3·5 | 33·5 | |
| 9·8 | | 11·0 | 33·9 | |
| 10·1 | | 12·0 | 11·7 | 9·0 |
| 9·8 | | 20·5 | 47·7 | |
| 9·7 | | 28·5 | 11·7 | |
| 9·3 | | 40·5 | 36·9 | |
| 10·0 | | 52·5 | 44·7 | |
| 9·8 | 56 | 3·0 | 23·7 | |
| 10·1 | | 23·0 | 43·5 | |
| 10·1 | | 45·5 | 35·4 | |
| ·96 | | 48·0 | 43·3 | |
| ·93 | | 52·0 | 0·0 | 10·0 |
| 8·6 | | 52·0 | 2·3 | 8·5 G |
| 9·6 | | 53·0 | 13·0 | |
| 9·8 | 57 | 20·5 | 54·7 | |
| 9·8 | | 23·0 | 4·1 | |
| 10·1 | | 59·5 | 36·2 | |
| 10·1 | 58 | 10·0 | 37·0 | |
| 9·0 | | 11·5 | 33·9 | 10·0 G |
| 9·2 | | 27·0 | 13·3 | |
| 10·1 | | 36·0 | 45·7 | |
| 10·1 | | 43·5 | 32·1 | |
| 9·2 | | 51·5 | 16·9 | 8·5 G |
| 9·4 | | 52·0 | 11·3 | |
| 9·0 | 59 | 2·5 | 26·4 | 9·0 G |
| 9·2 | | 2·5 | 6·8 | 8·5 G |
| 9·8 | | 5·0 | 43·3 | 9·5 |
| 9·0 | | 6·0 | 16·4 | 8·8 G |
| 10·1 | | 8·5 | 13·6 | |
| 9·9 | | 20·0 | 22·8 | |
| 9·8 | | 20·0 | 48·5 | |
| 10·1 | | 23·5 | 42·0 | |
| 10·1 | | 33·0 | 48·1 | |
| 10·1 | | 35·5 | 26·8 | |
| 9·8 | | 37·0 | 26·8 | |
| 9·0 | | 43·0 | 42·1 | 9·0 |
| 9·4 | | 47·0 | 44·7 | |
| 9·0 | | 48·0 | 4·1 | 9·0 |
| 9·4 | | 56·0 | 19·6 | 9·5 |
| 9·6 | 0 | 2·0 | 20·2 | |
| 10·1 | | 4·5 | 37·7 | |
| 10·1 | | 18·0 | 20·5 | |
| 9·0 | | 31·5 | 30·6 | 9·5 |
| 10·1 | | 42·0 | 28·4 | |
| 10·1 | | 52·0 | 52·7 | |
| 9·1 | 1 | 7·0 | 26·8 | 9·5 |
| 10·1 | | 14·5 | 44·8 | |
| 9·4 | | 34·5 | 32·9 | |
| 9·7 | | 41·5 | 42·9 | |
| 10·0 | 2 | 10·0 | 41·5 | |
| 10·0 | | 12·5 | 22·5 | |
| 10·1 | | 17·0 | 0·2 | |
| 9·6 | | 17·5 | 45·9 | |
| 10·0 | | 28·5 | 41·8 | |

## 3481—3540.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 2 | 32·0 | 1·5 | |
| 9·4 | | 34·0 | 33·8 | |
| 8·8 | | 37·5 | 9·9 | 8·0 |
| 10·1 | | 42·5 | 47·9 | |
| 10·1 | 3 | 2·0 | 42·4 | |
| 9·5 | | 4·0 | 8·9 | |
| 8·8 | | 5·0 | 25·1 | 8·5 |
| 10·1 | | 6·0 | 23·8 | |
| 9·9 | | 17·0 | 49·4 | |
| 9·8 | | 33·5 | 28·8 | |
| 10·1 | | 34·0 | 56·1 | |
| 10·1 | | 41·5 | 33·8 | |
| 10·1 | | 43·5 | 28·8 | |
| 9·8 | | 44·5 | 10·8 | |
| 9·3 | | 49·0 | 41·2 | |
| 8·9 | | 51·5 | 37·8 | |
| 9·2 | | 56·0 | 34·1 | |
| 9·4 | 4 | 30·0 | 53·6 | |
| 10·1 | | 35·0 | 53·3 | |
| 9·8 | | 40·0 | 15·7 | |
| 9·0 | | 42·0 | 21·7 | 9·0 |
| 9·7 | | 43·5 | 45·4 | |
| 10·1 | | 45·5 | 24·5 | |
| 10·1 | | 48·5 | 2·5 | |
| 8·8 | 5 | 13·0 | 51·7 | 9·0 G |
| 8·9 | | 14·5 | 13·6 | 8·8 G |
| 10·1 | | 27·0 | 32·0 | |
| 9·9 | | 29·5 | 9·6 | |
| 10·1 | | 36·0 | 1·1 | |
| 9·2 | | 37·0 | 0·7 | |
| 9·0 | | 40·0 | 2·8 | 9·5 |
| 9·1 | | 42·0 | 55·9 | |
| 10·1 | | 46·0 | 15·5 | |
| 10·1 | | 59·0 | 7·7 | |
| 10·1 | 6 | 2·0 | 59·9 | |
| 8·1 | | 2·5 | 59·4 | 7·5 GS |
| 10·1 | | 8·0 | 2·7 | |
| 10·1 | | 10·5 | 39·2 | |
| 9·2 | | 19·0 | 28·6 | |
| 10·1 | | 20·5 | 3·3 | |
| 9·5 | | 24·5 | 32·9 | |
| 10·1 | | 46·5 | 59·0 | |
| 9·8 | | 50·5 | 5·5 | |
| 9·0 | | 52·5 | 21·8 | 9·5 |
| 10·1 | | 54·5 | 16·5 | |
| 9·1 | | 56·5 | 33·8 | 8·5 |
| 9·4 | 7 | 2·5 | 34·9 | |
| 9·8 | | 5·0 | 51·9 | |
| 9·2 | | 7·0 | 29·0 | |
| 9·7 | | 17·5 | 17·6 | |
| 9·8 | | 19·0 | 27·9 | |
| 8·9 | | 29·5 | 43·4 | |
| 9·8 | | 29·5 | 30·7 | |
| 10·1 | | 33·5 | 8·4 | |
| 8·8 | | 40·5 | 23·7 | 9·0 |
| 9·4 | | 40·5 | 1·7 | |
| 10·1 | | 43·0 | 16·8 | |
| 9·8 | | 45·5 | 10·0 | |
| 9·0 | | 46·0 | 12·1 | 9·2 |
| 9·4 | | 48·0 | 19·6 | |

## 3541—3600.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 7 | 50·5 | 16·7 | |
| 9·8 | | 56·0 | 38·4 | |
| 10·1 | | 57·5 | 28·1 | |
| 8·1 | 8 | 3·0 | 55·4 | 8·2 G |
| 9·0 | | 10·5 | 39·4 | |
| 9·0 | | 16·5 | 6·0 | |
| 10·0 | | 17·0 | 15·0 | |
| 10·0 | | 19·5 | 6·8 | |
| 9·7 | | 23·5 | 53·8 | |
| 9·6 | | 26·5 | 25·8 | |
| 9·4 | | 36·0 | 33·0 | |
| 8·9 | | 54·0 | 8·6 | 8·5 |
| 9·8 | | 56·0 | 23·8 | |
| 9·9 | 9 | 2·5 | 53·9 | |
| 10·0 | | 4·0 | 12·5 | |
| 9·9 | | 5·5 | 4·1 | |
| 9·7 | | 9·0 | 43·6 | |
| 9·4 | | 10·0 | 57·8 | |
| 9·5 | | 13·5 | 47·8 | |
| 9·5 | | 16·0 | 46·8 | |
| 9·8 | | 16·0 | 14·1 | |
| 10·0 | | 21·5 | 53·5 | |
| 10·1 | | 24·5 | 38·1 | |
| 10·1 | | 33·5 | 35·6 | |
| 10·1 | | 34·5 | 59·9 | |
| 9·0 | | 41·0 | 47·6 | 9·5 |
| 10·0 | | 49·5 | 11·7 | |
| 8·9 | | 53·5 | 47·7 | 9·5 |
| 9·8 | | 59·0 | 17·2 | |
| 10·1 | 10 | 0·5 | 50·8 | |
| 9·1 | | 8·0 | 27·7 | |
| 10·1 | | 19·0 | 23·7 | |
| 8·7 | | 19·5 | 33·4 | |
| 10·1 | | 20·0 | 23·7 | |
| ? 8·4 | | 30·5 | 49·8 | 8·5 |
| 9·0 | | 33·5 | 52·2 | 9·5 |
| 9·8 | | 35·5 | 41·1 | |
| 9·0 | | 36·0 | 18·1 | |
| 9·3 | | 37·0 | 51·2 | |
| 10·1 | | 40·5 | 51·2 | |
| 9·2 | | 40·5 | 50·5 | |
| 10·0 | | 41·0 | 20·4 | |
| 10·1 | | 43·0 | 51·4 | |
| 9·6 | | 43·5 | 0·9 | |
| 9·0 | | 53·5 | 43·3 | 8·5 |
| 9·2 | | 57·5 | 14·0 | |
| 9·5 | | 58·5 | 54·7 | |
| 10·1 | 11 | 0·5 | 11·8 | |
| 9·8 | | 2·5 | 39·9 | |
| 10·0 | | 2·5 | 26·4 | |
| 10·1 | | 8·0 | 16·0 | |
| 10·0 | | 11·0 | 6·9 | |
| 9·8 | | 13·5 | 58·3 | |
| 10·1 | | 16·0 | 18·2 | |
| 10·1 | | 23·0 | 8·7 | |
| 9·4 | | 24·5 | 33·6 | |
| 9·2 | | 26·0 | 0·9 | |
| 9·4 | | 26·5 | 59·3 | |
| 9·6 | | 36·0 | 40·0 | |
| 8·0 | | 46·0 | 18·6 | 8·2 G |

## 3601—3660.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·1 | 11 | 49·5 | 3·4 | |
| 9·5 | | 52·5 | 42·9 | |
| 8·6 | | 53·5 | 22·3 | 8·2 G |
| 8·5 | | 54·5 | 52·1 | 7·0 GSg |
| 9·1 | | 58·5 | 5·5 | |
| 10·1 | | 58·5 | 20·0 | |
| 9·8 | 12 | 1·5 | 8·0 | |
| 8·6 | | 8·0 | 20·8 | 8·2 G |
| 10·1 | | 16·5 | 48·8 | |
| 9·8 | | 20·0 | 6·9 | |
| 10·1 | | 21·5 | 20·1 | |
| 10·1 | | 27·0 | 41·9 | |
| 9·4 | | 34·0 | 43·3 | 9·5 |
| 9·4 | | 35·0 | 25·9 | |
| 8·6 | | 43·0 | 20·7 | 8·5 G |
| 9·2 | | 46·0 | 4·9 | |
| 10·1 | | 57·5 | 43·9 | |
| 9·6 | 13 | 0·5 | 31·9 | |
| 9·8 | | 4·5 | 50·9 | |
| 9·8 | | 10·0 | 23·9 | |
| 10·1 | | 22·5 | 8·8 | |
| 10·1 | | 22·5 | 25·1 | |
| 9·4 | | 24·5 | 59·9 | |
| 9·0 | | 31·0 | 23·1 | : |
| 9·9 | | 43·0 | 51·9 | |
| 9·8 | | 43·5 | 17·7 | |
| 10·1 | | 48·0 | 45·5 | |
| 10·1 | | 49·5 | 4·2 | |
| 10·1 | | 57·5 | 44·8 | |
| 9·9 | 14 | 6·0 | 26·9 | : |
| 9·8 | | 11·5 | 53·2 | |
| 9·6 | | 13·0 | 49·8 | |
| 9·8 | | 24·0 | 31·2 | |
| 9·8 | | 31·0 | 31·9 | |
| 9·6 | | 31·5 | 55·9 | |
| 9·6 | | 35·5 | 52·5 | |
| 9·4 | | 46·5 | 14·1 | |
| 8·4 | | 47·0 | 21·4 | 8·0 G |
| 9·6 | | 51·5 | 47·2 | |
| 9·2 | | 55·0 | 57·9 | |
| 10·1 | | 57·5 | 3·8 | |
| 10·1 | | 58·5 | 54·9 | |
| 9·0 | | 59·5 | 12·0 | |
| 10·1 | 15 | 2·5 | 25·8 | |
| 10·1 | | 5·0 | 29·3 | |
| 10·0 | | 9·5 | 53·6 | |
| 10·1 | | 10·5 | 41·0 | |
| 9·7 | | 12·5 | 57·2 | |
| 9·2 | | 18·0 | 7·0 | |
| 9·8 | | 28·5 | 13·0 | |
| 9·8 | | 43·0 | 14·9 | |
| 10·1 | | 44·5 | 25·8 | |
| 10·0 | | 48·5 | 34·2 | |
| 9·7 | 16 | 1·0 | 12·9 | |
| 10·0 | | 2·5 | 17·2 | |
| 10·0 | | 3·5 | 47·8 | |
| 10·1 | | 3·5 | 54·8 | |
| 9·7 | | 3·7 | 36·3 | 9·5 |
| 8·9 | | 8·5 | 55·9 | |
| 9·6 | | 10·5 | 50·3 | |



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### 3661—3720.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 16 | 11·0 | 52·8 | |
| 10·1 | | 18·0 | 8·5 | |
| 10·1 | | 22·0 | 19·8 | |
| 10·0 | | 25·5 | 48·0 | |
| 10·1 | | 28·0 | 3·5 | |
| 9·5 | | 28·5 | 39·3 | 9·5 |
| 9·2 | | 28·5 | 38·0 | 9·5 |
| 9·7 | | 30·0 | 55·8 | |
| 8·8 | | 32·5 | 42·2 | 9·0 |
| 9·8 | | 37·0 | 49·5 | |
| 9·8 | | 38·5 | 42·1 | |
| 9·8 | | 40·0 | 55·4 | |
| 9·4 | | 42·0 | 55·9 | |
| 9·9 | | 43·0 | 42·9 | |
| 9·4 | | 44·0 | 55·1 | |
| 10·1 | | 45·5 | 3·0 | |
| 9·7 | | 47·0 | 20·0 | |
| 9·2 | 17 | 2·0 | 53·8 | |
| 9·8 | | 3·0 | 58·6 | |
| 10·1 | | 10·5 | 1·3 | |
| 9·8 | | 11·5 | 22·1 | |
| 8·4 | | 17·0 | 2·7 | 9·0 |
| 10·0 | | 18·0 | 44·9 | |
| 9·8 | | 36·0 | 25·0 | |
| 10·0 | | 43·0 | 37·6 | |
| 8·8 | | 50·0 | 45·0 | |
| 9·9 | | 52·0 | 53·0 | |
| 8·4 | | 54·0 | 54·6 | 9·0 G |
| 9·2 | | 56·0 | 41·8 | |
| 10·1 | | 58·5 | 25·0 | |
| 10·1 | 18 | 3·5 | 23·8 | |
| 9·6 | | 14·5 | 24·1 | |
| 9·8 | | 21·5 | 39·9 | |
| 10·1 | | 25·5 | 21·4 | |
| 9·6 | | 29·5 | 43·6 | |
| 10·1 | | 31·0 | 27·0 | |
| 9·8 | | 40·5 | 43·7 | |
| 10·1 | | 41·0 | 25·8 | |
| 9·8 | | 46·5 | 43·9 | |
| 10·0 | | 48·5 | 44·6 | |
| 10·1 | | 55·0 | 19·7 | |
| 9·4 | 19 | 8·0 | 33·0 | |
| 10·0 | | 10·0 | 41·9 | |
| 9·0 | | 10·5 | 13·5 | |
| 10·1 | | 16·0 | 39·0 | |
| 9·0 | | 21·0 | 28·1 | |
| 9·8 | | 21·0 | 39·1 | |
| 10·0 | | 21·0 | 57·0 | |
| 9·2 | | 23·5 | 23·2 | |
| 9·2 | | 31·0 | 38·3 | 9·0 |
| 9·8 | | 32·5 | 23·3 | |
| 9·9 | | 39·5 | 40·3 | |
| 10·0 | | 42·0 | 40·6 | |
| 9·6 | | 42·0 | 14·5 | |
| 9·8 | | 45·0 | 29·8 | |
| 10·0 | | 46·0 | 43·0 | |
| 10·1 | | 49·5 | 3·9 | |
| 9·2 | | 50·5 | 29·4 | |
| 10·1 | | 53·0 | 6·9 | |
| 9·8 | | 56·0 | 12·9 | |

### 3721—3780.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·2 | 19 | 56·5 | 40·0 | |
| 9·2 | 20 | 0·0 | 6·9 | |
| 10·1 | | 3·0 | 3·8 | |
| 9·0 | | 6·0 | 2·9 | |
| 9·4 | | 8·5 | 31·7 | |
| 9·4 | | 10·5 | 44·9 | |
| 9·4 | | 13·5 | 47·7 | |
| 10·1 | | 15·5 | 32·4 | |
| 9·2 | | 20·5 | 40·8 | 9·5 |
| 9·8 | | 22·0 | 31·0 | |
| 9·7 | | 23·5 | 11·0 | |
| 8·3 | | 38·5 | 27·2 | 7·5 GS |
| 10·1 | | 39·5 | 27·8 | |
| 10·0 | | 46·0 | 53·8 | |
| 9·4 | | 59·0 | 43·0 | |
| 9·0 | 21 | 5·0 | 23·3 | |
| 9·7 | | 10·5 | 37·2 | |
| 10·1 | | 12·5 | 12·4 | |
| 10·0 | | 14·5 | 8·5 | |
| 9·6 | | 22·5 | 1·4 | |
| 9·0 | | 39·0 | 46·1 | 9·0 G |
| 9·6 | | 44·5 | 38·8 | 9·2 |
| 9·8 | | 44·5 | 23·2 | |
| 9·7 | | 52·0 | 3·2 | |
| 9·2 | | 52·5 | 31·4 | |
| 9·0 | | 59·0 | 41·9 | 9·5 |
| 9·1 | 22 | 2·5 | 45·9 | |
| 9·2 | | 8·5 | 5·9 | |
| 9·8 | | 9·5 | 41·8 | |
| 9·3 | | 10·5 | 54·9 | |
| 8·9 | | 18·5 | 29·8 | 9·5 |
| 8·9 | | 32·5 | 6·5 | |
| 9·6 | | 34·5 | 25·9 | |
| 9·9 | | 34·5 | 56·9 | |
| 10·1 | | 35·5 | 31·0 | |
| 9·8 | | 36·0 | 29·0 | |
| 10·0 | | 47·2 | 59·1 | |
| 10·1 | | 51·5 | 23·5 | |
| 9·6 | | 52·5 | 10·1 | |
| 8·9 | | 58·5 | 5·1 | 9·0 |
| 10·1 | 23 | 2·5 | 40·8 | |
| 9·6 | | 18·0 | 39·9 | |
| 9·8 | | 42·0 | 21·8 | |
| 9·9 | | 43·5 | 20·9 | |
| 9·8 | | 46·0 | 23·8 | |
| 10·1 | | 47·5 | 28·2 | |
| 9·9 | | 50·0 | 31·9 | |
| 9·7 | | 53·5 | 34·8 | |
| 9·4 | | 54·0 | 20·7 | 9·0 G |
| 9·4 | | 54·5 | 30·8 | |
| 10·1 | | 55·5 | 42·2 | |
| 9·4 | | 59·0 | 43·1 | |
| 8·8 | 24 | 0·5 | 24·7 | |
| 10·0 | | 1·0 | 3·5 | |
| 10·1 | | 1·0 | 7·6 | |
| 10·0 | | 6·0 | 10·6 | |
| 8·1 | | 10·5 | 41·9 | 7·5 GSt |
| 10·1 | | 11·5 | 12·0 | |
| 10·1 | | 21·0 | 47·8 | |
| 10·1 | | 22·5 | 19·6 | |

### 3781—3840.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 24 | 29·0 | 7·0 | |
| 9·9 | | 29·5 | 52·2 | |
| 8·8 | | 35·5 | 27·4 | |
| 10·1 | | 39·5 | 37·7 | |
| 10·1 | | 40·5 | 38·6 | |
| 8·8 | | 41·0 | 44·5 | 8·5 |
| 9·7 | | 44·0 | 42·6 | |
| 10·1 | | 44·5 | 32·4 | |
| 10·1 | 25 | 1·0 | 14·0 | |
| 9·1 | | 6·0 | 57·2 | 9·0 |
| 9·6 | | 6·5 | 40·3 | |
| 10·1 | | 10·0 | 56·9 | |
| 8·6 | | 13·0 | 40·4 | 8·5 |
| 8·9 | | 16·0 | 6·1 | 10·0 |
| 10·1 | | 20·5 | 53·9 | |
| 8·8 | | 26·5 | 11·3 | 8·3 |
| 8·9 | | 27·0 | 7·5 | |
| 9·7 | | 27·5 | 2·8 | |
| 10·1 | | 38·5 | 29·8 | |
| 9·2 | | 38·5 | 11·3 | |
| 10·0 | | 42·5 | 54·5 | |
| 9·8 | | 45·5 | 59·2 | |
| 9·1 | | 47·5 | 46·4 | 8·5 G |
| 9·4 | | 48·5 | 45·6 | 9·0 G |
| 10·1 | | 50·5 | 21·0 | |
| 9·8 | | 53·5 | 15·0 | |
| 9·2 | 26 | 1·0 | 30·5 | |
| 10·0 | | 4·5 | 42·9 | |
| 9·8 | | 14·5 | 55·9 | |
| 9·8 | | 16·0 | 35·1 | |
| 9·0 | | 23·0 | 8·9 | 9·0 G |
| 9·7 | | 23·5 | 23·8 | |
| 9·6 | | 26·0 | 56·8 | |
| 10·1 | | 30·0 | 24·1 | ? |
| 9·6 | | 31·0 | 23·8 | |
| 9·6 | | 31·5 | 22·2 | |
| 9·2 | | 37·0 | 19·8 | |
| 10·1 | | 39·0 | 11·9 | |
| 8·0 | | 43·5 | 59·2 | 8·0 GSt |
| 9·6 | 27 | 1·0 | 21·7 | : |
| 8·4 | | 3·0 | 18·7 | 8·0 |
| 9·6 | | 12·0 | 53·4 | |
| 10·1 | | 14·5 | 57·1 | |
| 9·2 | | 15·5 | 15·9 | 9·5 |
| 8·3 | | 16·0 | 13·6 | 8·0 |
| 9·8 | | 23·5 | 36·9 | |
| 9·7 | | 39·5 | 9·0 | |
| 10·1 | | 43·5 | 10·9 | |
| 9·6 | | 57·0 | 44·5 | |
| 8·5 | 28 | 6·0 | 42·2 | 7·5 GSt |
| 8·6 | | 9·0 | 7·1 | 9·5 |
| 10·0 | | 14·5 | 45·7 | |
| 10·1 | | 21·0 | 0·2 | |
| 10·1 | | 30·5 | 55·7 | |
| 9·3 | | 34·0 | 5·1 | 8·5 G |
| 10·1 | | 35·0 | 14·0 | |
| 10·1 | | 35·0 | 6·8 | |
| 10·0 | | 35·5 | 54·6 | |
| 9·2 | | 42·5 | 48·9 | |
| 9·9 | | 42·5 | 25·0 | |

### 3841—3900.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 7·1 | 28 | 44·7 | 2·9 | 6·5 GSct |
| 9·7 | | 49·5 | 56·0 | |
| 9·4 | | 53·0 | 0·2 | |
| 9·2 | 29 | 11·5 | 43·7 | 9·0 |
| 9·8 | | 19·0 | 18·8 | |
| 10·1 | | 22·0 | 54·2 | |
| 9·1 | | 23·5 | 5·8 | |
| 9·5 | | 31·7 | 22·0 | |
| 10·1 | | 33·0 | 40·0 | |
| 9·6 | | 34·8 | 3·7 | |
| 10·1 | | 36·5 | 15·0 | |
| 10·0 | | 49·0 | 24·6 | |
| 10·0 | | 50·3 | 12·3 | |
| 9·0 | | 53·2 | 26·4 | |
| 9·8 | | 59·5 | 16·3 | |
| 10·3 | 30 | 0·0 | 25·6 | |
| 9·8 | | 1·0 | 7·2 | |
| 9·6 | | 7·3 | 53·4 | |
| 9·7 | | 9·0 | 34·0 | |
| 9·0 | | 13·0 | 6·1 | 8·0 |
| 9·7 | | 14·0 | 37·5 | |
| 10·1 | | 18·0 | 38·0 | |
| 9·2 | | 25·3 | 23·9 | |
| 10·1 | | 28·5 | 5·9 | |
| 9·8 | | 38·0 | 19·5 | |
| 9·6 | | 47·5 | 4·1 | |
| 9·3 | | 48·0 | 5·3 | |
| 9·4 | | 50·0 | 17·5 | |
| 10·1 | | 55·0 | 0·4 | |
| 10·0 | | 58·0 | 17·4 | |
| 9·4 | | 59·0 | 32·2 | |
| 10·0 | 31 | 0·0 | 53·9 | |
| 10·1 | | 7·0 | 50·4 | |
| 10·0 | | 7·0 | 49·1 | |
| 10·0 | | 10·0 | 55·5 | |
| 10·1 | | 15·0 | 50·1 | |
| 9·0 | | 16·5 | 6·1 | |
| 10·1 | | 18·0 | 48·0 | |
| 9·0 | | 20·5 | 51·3 | |
| 10·1 | | 21·0 | 50·1 | |
| 10·0 | | 22·0 | 48·7 | |
| 9·8 | | 26·5 | 6·6 | |
| 9·8 | | 39·5 | 29·9 | |
| 10·1 | | 40·0 | 47·8 | |
| 10·0 | | 43·0 | 29·2 | |
| 9·9 | | 43·5 | 38·1 | |
| 9·0 | | 49·5 | 47·2 | |
| 10·0 | | 57·0 | 41·2 | |
| 10·0 | 32 | 2·0 | 7·0 | |
| 9·8 | | 6·5 | 34·5 | |
| 9·8 | | 11·0 | 30·1 | |
| 10·1 | | 12·0 | 33·9 | |
| 9·7 | | 12·0 | 8·4 | 9·0 |
| 10·1 | | 12·0 | 29·0 | |
| 10·0 | | 13·0 | 30·4 | |
| 10·0 | | 32·0 | 19·5 | 9·5 |
| 8·8 | | 33·0 | 51·9 | 7·5 |
| 9·8 | | 33·0 | 12·0 | |
| 9·8 | | 33·0 | 41·4 | |
| 9·0 | | 33·0 | 0·9 | |

'25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 13 | 10 | 95 | 8·0 |
| | 20 | 98 | 7·9 |
| | 30 | 100 | 7·7 |
| | 40 | 103 | 7·6 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 13 | 30 | 100 | 7.7 |
| | 40 | 103 | 7.6 |
| | 50 | 105 | 7.4 |

## 3901—3960.

| mag. | 13ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 9.7 | 32 | 37.0 | 21.1 | |
| 9.1 | | 50.0 | 54.3 | |
| 10.1 | | 51.5 | 34.0 | |
| 9.9 | | 52.5 | 15.4 | |
| 10.1 | | 52.5 | 1.7 | |
| 9.0 | | 56.5 | 14.0 | 8.2 G |
| 10.1 | 33 | 2.0 | 33.3 | |
| 10.1 | | 3.0 | 16.0 | |
| 9.6 | | 5.5 | 33.6 | |
| 9.9 | | 10.0 | 23.5 | |
| 9.0 | | 13.5 | 32.1 | 9.0 G |
| 9.6 | | 22.0 | 8.1 | |
| 9.7 | | 22.0 | 6.6 | |
| 9.8 | | 23.0 | 41.2 | |
| 10.1 | | 25.7 | 58.0 | |
| 9.6 | | 30.0 | 59.2 | |
| 9.6 | | 32.0 | 1.1 | |
| 9.6 | | 35.5 | 7.0 | |
| 9.4 | | 38.0 | 45.4 | |
| 10.0 | | 44.0 | 23.8 | |
| 9.2 | | 47.0 | 47.3 | |
| 10.0 | | 50.5 | 31.4 | |
| 9.6 | | 56.5 | 36.1 | |
| 9.8 | 34 | 0.5 | 10.1 | |
| 9.7 | | 4.5 | 7.1 | |
| 7.8 | | 9.5 | 6.4 | 7.0 GSt |
| 8.4 | | 12.0 | 15.5 | 7.0 GSt |
| 9.8 | | 16.0 | 57.0 | |
| 10.0 | | 16.5 | 54.9 | |
| 10.0 | | 29.5 | 13.3 | |
| 9.1 | | 30.0 | 38.4 | |
| 10.1 | | 41.0 | 58.1 | |
| 8.5 | | 43.0 | 4.7 | 7.5 GSt |
| 10.0 | | 43.0 | 3.1 | |
| 9.6 | | 47.0 | 37.8 | |
| 9.6 | | 51.0 | 48.4 | 9.5 |
| 9.4 | | 53.0 | 22.4 | |
| 10.1 | 35 | 1.0 | 41.2 | |
| 10.1 | | 3.0 | 37.4 | |
| 9.6 | | 7.0 | 20.0 | |
| 9.4 | | 9.0 | 11.0 | 9.0 |
| 9.8 | | 9.5 | 44.4 | |
| 10.1 | | 13.5 | 21.1 | |
| 9.6 | | 19.5 | 53.1 | |
| 10.0 | | 26.3 | 2.3 | |
| 9.2 | | 30.0 | 13.2 | |
| 9.6 | | 32.0 | 53.6 | |
| 10.0 | | 40.0 | 0.7 | |
| 10.1 | | 40.0 | 34.7 | |
| 9.8 | | 42.0 | 1.0 | |
| 8.8 | | 47.5 | 28.7 | 9.5 |
| 10.0 | | 48.0 | 13.8 | |
| 10.0 | | 52.0 | 49.4 | |
| 10.0 | 36 | 0.0 | 34.4 | |
| 9.4 | | 2.0 | 57.8 | |
| 9.9 | | 3.0 | 23.2 | |
| 9.6 | | 9.0 | 42.0 | |
| 9.6 | | 12.5 | 32.4 | |
| 10.1 | | 13.5 | 0.0 | |
| 9.0 | | 22.0 | 40.8 | 9.5 |

## 3961—4020.

| mag. | 13ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 9.9 | 36 | 23.0 | 33.0 | |
| 10.0 | | 25.0 | 55.4 | |
| 9.4 | | 25.5 | 41.3 | |
| 10.1 | | 30.0 | 30.0 | |
| 9.7 | | 30.5 | 10.1 | |
| 10.1 | | 34.5 | 2.9 | |
| 10.1 | | 35.5 | 55.0 | |
| 10.0 | | 40.0 | 21.8 | |
| 9.1 | | 41.0 | 54.8 | |
| 8.3 | | 42.0 | 16.9 | 8.2 |
| 10.0 | | 42.0 | 32.0 | |
| 8.9 | | 43.0 | 36.6 | |
| 9.7 | | 43.0 | 47.9 | |
| 10.0 | | 44.5 | 23.8 | |
| 10.0 | | 52.0 | 12.0 | |
| 9.6 | | 53.5 | 25.1 | |
| 10.0 | | 54.0 | 59.0 | |
| 10.0 | | 59.0 | 47.7 | |
| 9.2 | 37 | 0.0 | 45.3 | 8.8 |
| 10.1 | | 3.0 | 20.5 | |
| 10.0 | | 3.0 | 24.7 | |
| 9.2 | | 24.5 | 50.5 | |
| 10.0 | | 27.0 | 48.0 | |
| 10.0 | | 29.5 | 7.5 | |
| 10.0 | | 32.0 | 7.5 | |
| 10.1 | | 34.5 | 17.6 | |
| 7.6 | | 39.0 | 49.4 | 7.0 GSt |
| 9.7 | | 42.5 | 50.1 | |
| 9.0 | | 43.0 | 20.3 | |
| 9.6 | | 43.0 | 52.8 | |
| 10.1 | | 45.5 | 47.7 | |
| 10.1 | | 49.5 | 47.0 | |
| 10.1 | | 53.0 | 27.0 | |
| 8.4 | | 58.5 | 26.4 | G |
| 10.1 | | 59.5 | 54.0 | |
| 10.1 | 38 | 0.0 | 34.9 | |
| 10.1 | | 4.5 | 6.9 | |
| 10.1 | | 8.0 | 53.9 | |
| 10.0 | | 21.0 | 6.4 | |
| 10.1 | | 22.0 | 50.3 | |
| 10.1 | | 26.5 | 27.3 | |
| 9.6 | | 29.0 | 46.0 | |
| 8.3 | | 29.5 | 57.8 | 6.8 GSt |
| 8.8 | | 31.0 | 9.1 | |
| 9.6 | | 31.0 | 47.0 | |
| 9.0 | | 32.5 | 53.5 | 9.5 |
| 10.0 | | 38.5 | 6.3 | |
| 10.1 | | 39.3 | 59.6 | |
| 8.5 | | 43.0 | 48.3 | 9.0 |
| 9.8 | | 43.5 | 58.6 | |
| 10.0 | | 47.0 | 7.0 | |
| 9.6 | | 47.5 | 24.1 | |
| 9.7 | | 49.5 | 36.5 | |
| 9.8 | | 49.5 | 54.0 | |
| 8.8 | | 51.5 | 43.0 | 9.5 |
| 10.1 | | 59.0 | 45.4 | |
| 10.1 | 39 | 1.5 | 59.0 | |
| 10.0 | | 9.5 | 47.1 | |
| 10.0 | | 9.5 | 7.5 | |
| 9.8 | | 13.0 | 1.1 | |

## 4021—4080.

| mag. | 13ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 10.1 | 39 | 13.0 | 28.6 | |
| 10.0 | | 17.5 | 48.4 | |
| 9.0 | | 28.5 | 51.0 | |
| 10.1 | | 29.5 | 58.3 | |
| 9.6 | | 33.0 | 51.0 | |
| 10.1 | | 37.5 | 18.2 | |
| 10.0 | | 45.0 | 48.0 | |
| 10.0 | | 45.0 | 45.1 | |
| 10.1 | | 48.0 | 17.0 | |
| 9.6 | | 49.0 | 30.0 | |
| 9.5 | | 58.0 | 27.3 | |
| 9.6 | | 59.0 | 48.8 | |
| 10.1 | 40 | 0.0 | 34.0 | |
| 10.0 | | 1.0 | 13.3 | |
| 8.9 | | 13.0 | 58.0 | |
| 9.0 | | 19.5 | 38.4 | 9.0 G |
| 10.1 | | 21.5 | 20.0 | |
| 9.7 | | 26.5 | 44.1 | |
| 10.1 | | 27.0 | 3.6 | |
| 9.6 | | 32.5 | 11.0 | |
| 7.9 | | 33.0 | 28.5 | 7.0 GSt |
| 10.1 | | 35.0 | 31.7 | |
| 9.8 | | 44.0 | 10.6 | |
| 9.4 | | 53.0 | 33.2 | |
| 10.0 | 41 | 7.0 | 36.3 | |
| 8.1 | | 13.5 | 39.1 | 8.0 GSt |
| 9.7 | | 17.0 | 29.5 | |
| 9.6 | | 20.0 | 55.5 | |
| 8.8 | | 20.5 | 47.1 | 9.0 |
| 9.2 | | 26.0 | 6.7 | |
| 10.0 | | 27.0 | 38.9 | |
| 10.0 | | 30.0 | 31.0 | |
| 10.1 | | 35.5 | 55.9 | |
| 10.1 | | 37.5 | 35.9 | |
| 10.1 | | 42.5 | 5.0 | |
| 10.1 | | 42.5 | 53.5 | |
| 9.4 | | 49.5 | 57.3 | |
| 9.7 | | 50.5 | 45.2 | |
| 10.1 | | 54.5 | 9.9 | |
| 9.6 | | 55.5 | 8.9 | |
| 10.1 | | 59.0 | 43.1 | |
| 10.1 | 42 | 4.5 | 50.0 | |
| 10.0 | | 12.5 | 30.7 | |
| 9.2 | | 12.5 | 48.6 | |
| 10.0 | | 21.5 | 22.1 | |
| 9.4 | | 22.5 | 12.7 | |
| 10.0 | | 26.5 | 19.2 | |
| 10.0 | | 26.5 | 39.3 | |
| 9.5 | | 31.5 | 3.0 | |
| 9.7 | | 39.5 | 54.4 | |
| 10.1 | | 39.5 | 55.1 | |
| 9.6 | | 43.0 | 45.0 | |
| 10.1 | | 48.0 | 45.0 | |
| 9.1 | | 56.0 | 30.2 | 7.5 G |
| 10.1 | 43 | 0.0 | 36.0 | |
| 9.7 | | 2.0 | 36.1 | |
| 9.5 | | 7.0 | 36.5 | |
| 9.8 | | 9.5 | 13.1 | |
| 9.6 | | 10.0 | 58.1 | |
| 10.0 | 43 | 18.0 | 39.5 | |

## 4081—4140.

| mag. | 13ʰ m | s | −61° ′ | |
|---|---|---|---|---|
| 10.1 | | 26.5 | 12.0 | |
| 9.8 | | 29.5 | 54.5 | |
| 10.1 | | 30.0 | 10.6 | |
| 9.7 | | 32.0 | 8.3 | |
| 9.6 | | 32.5 | 49.4 | |
| 10.1 | | 36.5 | 32.7 | |
| 9.8 | | 36.5 | 59.5 | |
| 8.8 | | 45.0 | 12.2 | 8.2 |
| 8.7 | | 47.5 | 59.5 | |
| 9.4 | | 49.0 | 55.4 | 9.0 |
| 9.0 | | 49.5 | 45.7 | 9.5 |
| 10.0 | 44 | 2.5 | 15.5 | |
| 10.1 | | 7.0 | 47.0 | |
| 10.1 | | 13.0 | 10.6 | |
| 10.1 | | 16.5 | 18.1 | |
| 9.4 | | 19.5 | 22.1 | |
| 9.4 | | 31.5 | 49.3 | |
| 9.7 | | 32.5 | 9.1 | |
| 9.8 | | 36.5 | 20.9 | |
| 9.4 | | 40.0 | 17.5 | |
| 10.0 | | 40.5 | 47.3 | |
| 8.8 | | 42.0 | 0.8 | 8.0 G |
| 9.6 | | 46.5 | 14.8 | 9.2 |
| 9.7 | | 47.5 | 21.2 | |
| 8.7 | | 48.8 | 2.1 | 9.0 |
| 9.6 | | 49.0 | 13.1 | 9.0 G |
| 9.6 | | 49.5 | 16.0 | |
| 9.8 | | 53.5 | 14.9 | |
| 9.8 | | 59.5 | 57.9 | |
| 10.0 | | 59.5 | 16.1 | |
| 10.0 | | 59.5 | 41.0 | |
| 10.1 | 45 | 2.0 | 29.1 | |
| 9.1 | | 6.5 | 17.4 | |
| 10.0 | | 8.0 | 18.4 | |
| 9.9 | | 8.5 | 24.6 | |
| 10.0 | | 9.0 | 50.8 | |
| 9.7 | | 9.0 | 14.4 | 9.5 |
| 10.1 | | 9.5 | 13.2 | |
| 9.7 | | 10.0 | 15.3 | |
| 9.8 | | 11.0 | 59.1 | |
| 9.6 | | 11.5 | 53.6 | |
| 9.7 | | 12.5 | 15.0 | |
| 9.0 | | 12.5 | 37.0 | |
| 9.6 | | 16.5 | 17.0 | |
| 9.7 | | 16.5 | 13.7 | 9.5 |
| 10.0 | | 19.5 | 11.2 | |
| 9.6 | | 20.0 | 6.0 | |
| 10.1 | | 30.0 | 52.6 | |
| 9.6 | | 32.0 | 15.2 | |
| 9.6 | | 37.5 | 14.4 | |
| 10.0 | | 39.0 | 35.0 | |
| 10.0 | | 40.0 | 50.1 | |
| 9.2 | | 42.5 | 14.9 | |
| 10.1 | | 46.5 | 59.9 | |
| 9.8 | | 49.5 | 55.1 | |
| 9.6 | | 52.0 | 11.0 | |
| 10.0 | | 52.5 | 51.9 | ? |
| 10.1 | | 52.5 | 34.4 | |
| 8.9 | | 52.5 | 18.5 | 9.5 |
| 9.0 | | 55.0 | 45.0 | |



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## 4141—4200.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 55·0 | 10·8 | |
| 9·4 | | 58·0 | 58·1 | |
| 10·0 | | 58·5 | 22·3 | |
| 9·3 | | 59·5 | 37·9 | |
| 10·0 | 46 | 6·5 | 15·1 | |
| 10·0 | | 7·0 | 50·0 | |
| 9·4 | | 11·0 | 18·7 | 9·5 |
| 8·8 | | 12·5 | 35·4 | |
| 10·0 | | 15·5 | 9·1 | |
| 9·9 | | 18·0 | 2·0 | |
| 9·6 | | 25·5 | 54·2 | |
| 9·6 | | 26·0 | 0·7 | |
| 10·0 | | 26·5 | 33·5 | |
| 9·8 | | 27·0 | 4·2 | |
| 10·0 | | 27·0 | 54·3 | |
| 8·6 | | 27·5 | 36·8 | |
| 9·8 | | 32·5 | 47·1 | |
| 9·6 | | 37·0 | 51·2 | |
| 9·9 | | 37·0 | 14·5 | |
| 10·0 | | 39·0 | 55·8 | |
| 10·1 | | 39·5 | 29·8 | |
| 10·0 | | 40·0 | 6·3 | |
| 9·9 | | 43·5 | 44·8 | |
| 8·9 | | 46·5 | 22·0 | 9·5 |
| 9·7 | | 51·0 | 39·7 | |
| 9·9 | | 51·5 | 25·7 | |
| 10·1 | | 51·5 | 26·3 | |
| 10·1 | | 51·5 | 56·0 | |
| 8·8 | | 52·5 | 44·5 | 8·5 GSg |
| 9·8 | | 53·0 | 51·5 | |
| 8·8 | | 58·0 | 45·7 | S |
| 10·0 | 47 | 2·0 | 55·3 | |
| 9·8 | | 3·0 | 11·8 | |
| 9·8 | | 9·0 | 51·9 | |
| 10·1 | | 11·5 | 14·1 | |
| 10·1 | | 12·5 | 34·0 | |
| 9·7 | | 16·0 | 26·9 | |
| 9·8 | | 19·5 | 15·9 | |
| 9·6 | | 26·0 | 59·7 | |
| 10·1 | | 33·0 | 59·0 | |
| 10·1 | | 42·5 | 24·5 | |
| 9·5 | | 43·0 | 55·7 | |
| 10·0 | | 46·0 | 57·5 | |
| 9·4 | | 48·5 | 37·8 | 9·5 |
| 9·0 | | 52·5 | 38·9 | 9·0 |
| 9·5 | | 54·0 | 52·9 | |
| 10·1 | | 58·5 | 54·0 | |
| 10·1 | | 59·5 | 56·9 | |
| 9·6 | 48 | 1·0 | 1·7 | |
| 10·1 | | 6·0 | 51·5 | |
| 9·6 | | 13·0 | 14·6 | |
| 9·6 | | 13·0 | 38·0 | 9·5 |
| 9·1 | | 19·0 | 31·2 | |
| 7·9 | | 30·0 | 52·4 | 7·0 GS |
| 10·1 | | 33·0 | 36·9 | |
| 10·0 | | 40·0 | 33·0 | |
| 9·4 | | 40·5 | 26·9 | |
| 10·1 | | 42·0 | 36·9 | |
| 9·8 | | 43·5 | 48·6 | |
| 9·6 | | 44·0 | 14·7 | |

## 4201—4260.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·1 | 48 | 53·0 | 38·2 | |
| 9·7 | | 53·0 | 26·8 | |
| 10·0 | | 54·0 | 13·2 | |
| 10·0 | | 54·5 | 18·1 | |
| 9·7 | | 57·5 | 55·5 | |
| 10·0 | | 59·5 | 57·7 | |
| 9·8 | 49 | 24·0 | 10·6 | |
| 10·0 | | 29·0 | 11·3 | |
| 10·0 | | 33·0 | 38·0 | |
| 10·0 | | 37·5 | 9·0 | |
| 9·6 | | 42·0 | 37·0 | |
| 10·1 | | 43·0 | 21·0 | |
| 10·1 | | 45·5 | 17·0 | |
| 9·5 | | 46·5 | 32·7 | 9·5 |
| 10·0 | | 50·0 | 7·4 | |
| 9·6 | | 58·0 | 37·0 | |
| 10·1 | | 59·0 | 42·1 | |
| 10·1 | | 59·0 | 57·0 | |
| 9·8 | 50 | 0·0 | 6·1 | |
| 10·1 | | 2·0 | 19·9 | |
| 9·6 | | 6·5 | 46·4 | |
| 8·5 | | 13·7 | 0·0 | 8·5 |
| 10·0 | | 21·5 | 21·1 | |
| 8·5 | | 23·0 | 51·0 | 8·5 |
| 9·5 | | 26·0 | 55·2 | |
| 9·5 | | 30·0 | 32·6 | |
| 9·6 | | 30·0 | 55·3 | |
| 9·9 | | 31·5 | 17·8 | |
| 9·5 | | 34·0 | 22·0 | |
| 9·8 | | 34·5 | 56·1 | |
| 9·8 | | 41·5 | 45·3 | |
| 8·6 | | 43·0 | 21·0 | |
| 10·0 | | 43·5 | 14·4 | |
| 8·9 | | 47·0 | 6·9 | 8·0 G |
| 10·0 | | 49·0 | 15·2 | |
| 10·0 | | 49·0 | 43·2 | |
| 10·1 | | 51·0 | 11·1 | |
| 9·0 | | 57·0 | 26·3 | 9·5 |
| 10·1 | | 59·5 | 14·0 | |
| 9·1 | 51 | 0·0 | 44·7 | |
| 9·7 | | 2·5 | 32·3 | |
| 9·6 | | 3·5 | 27·0 | |
| 10·0 | | 9·5 | 52·0 | |
| 10·0 | | 13·0 | 55·1 | |
| 9·2 | | 15·0 | 25·3 | |
| 9·8 | | 17·0 | 39·0 | |
| 9·8 | | 20·5 | 32·0 | |
| 10·0 | | 23·0 | 57·1 | |
| 10·0 | | 23·5 | 12·0 | |
| 9·2 | | 30·5 | 8·1 | |
| 9·7 | | 36·0 | 17·9 | |
| 10·1 | | 41·5 | 49·1 | |
| 10·1 | | 48·0 | 45·0 | |
| 9·6 | | 53·0 | 40·7 | |
| 9·8 | | 54·5 | 45·7 | |
| 10·0 | | 56·5 | 22·0 | |
| 9·9 | 52 | 2·0 | 43·7 | |
| 10·1 | | 2·0 | 58·1 | |
| 10·1 | | 2·5 | 48·1 | |
| 10·1 | | 3·5 | 53·3 | |

## 4261—4320.

| mag. | 13h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·1 | 52 | 7·0 | 24·5 | |
| 10·0 | | 7·0 | 38·7 | |
| 10·1 | | 9·0 | 25·1 | |
| 10·1 | | 9·5 | 58·5 | |
| 9·4 | | 16·0 | 55·5 | |
| 9·4 | | 20·0 | 55·6 | |
| 9·5 | | 20·5 | 31·2 | |
| 9·6 | | 27·0 | 43·0 | |
| 10·1 | | 42·0 | 52·0 | |
| 8·7 | | 43·0 | 13·7 | 7·5 GS |
| 9·9 | | 46·0 | 52·1 | |
| 10·1 | | 58·0 | 6·0 | |
| 9·7 | 53 | 0·5 | 55·4 | |
| 8·7 | | 1·0 | 33·9 | 8·0 |
| 9·2 | | 7·5 | 56·9 | 9·0 |
| 8·3 | | 14·0 | 21·0 | 8·0 |
| 9·1 | | 16·5 | 38·1 | |
| 9·0 | | 28·0 | 19·1 | 9·5 |
| 10·0 | | 40·0 | 55·0 | |
| 9·2 | | 40·0 | 40·3 | |
| 10·1 | | 53·0 | 30·6 | |
| 10·0 | 54 | 3·0 | 6·5 | |
| 10·1 | | 7·5 | 37·4 | |
| 9·0 | | 12·0 | 6·3 | |
| 9·4 | | 12·0 | 53·1 | |
| 9·0 | | 13·0 | 39·2 | 9·5 |
| 10·1 | | 19·0 | 44·0 | |
| 10·1 | | 22·0 | 22·2 | |
| 10·1 | | 22·0 | 50·7 | |
| 10·1 | | 25·5 | 9·1 | |
| 10·1 | | 41·5 | 29·1 | |
| 8·6 | | 50·5 | 42·4 | 9·0 |
| 9·0 | | 51·0 | 20·3 | |
| 10·0 | | 51·5 | 0·9 | |
| 9·2 | | 52·5 | 11·9 | |
| 8·9 | | 52·5 | 43·0 | 9·5 |
| 10·1 | | 53·0 | 25·7 | |
| 10·0 | | 54·0 | 14·0 | |
| 9·1 | | 55·5 | 43·6 | 9·5 |
| 9·8 | | 55·5 | 50·8 | |
| 10·0 | | 56·0 | 0·9 | |
| 10·1 | 55 | 0·0 | 58·7 | |
| 10·0 | | 1·0 | 39·2 | |
| 10·0 | | 3·0 | 14·6 | |
| 9·2 | | 7·5 | 46·1 | |
| 10·1 | | 12·5 | 17·5 | |
| 9·6 | | 17·0 | 16·7 | |
| 9·6 | | 18·5 | 59·5 | |
| 9·8 | | 25·5 | 40·0 | |
| 9·2 | | 41·5 | 57·5 | |
| 9·6 | | 42·0 | 50·4 | |
| 9·3 | | 43·0 | 42·2 | |
| 9·9 | | 46·0 | 30·0 | |
| 10·0 | | 53·0 | 47·0 | |
| 10·1 | 56 | 11·0 | 15·9 | |
| 10·0 | | 14·5 | 54·1 | |
| 8·6 | | 19·0 | 54·3 | 9·0 |
| 8·8 | | 21·0 | 59·2 | 9·0 |
| 9·1 | | 31·0 | 20·1 | |
| 9·4 | | 45·5 | 54·0 | |

## 4321—4380.

| mag. | 13h.–14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 56 | 51·0 | 19·9 | 7·5 G |
| 8·7 | | 57·0 | 8·0 | |
| 10·0 | 57 | 3·0 | 47·2 | |
| 9·6 | | 7·0 | 32·5 | |
| 9·5 | | 10·0 | 25·2 | |
| 9·5 | | 14·0 | 15·9 | |
| 10·0 | | 22·0 | 15·3 | |
| 9·6 | | 23·5 | 12·4 | |
| 9·4 | | 32·5 | 2·0 | |
| 9·0 | | 36·5 | 3·2 | |
| 9·4 | | 40·0 | 11·2 | |
| 8·8 | | 42·5 | 46·3 | 7·5 GS |
| 10·1 | | 43·5 | 4·7 | |
| 8·6 | 58 | 1·5 | 40·7 | 8·5 G |
| 9·6 | | 9·5 | 1·9 | |
| 10·1 | | 10·5 | 5·4 | |
| 9·8 | | 13·0 | 5·0 | |
| 10·1 | | 14·0 | 46·0 | |
| 10·0 | | 19·5 | 5·9 | |
| 9·2 | | 20·0 | 20·6 | |
| 9·4 | | 24·5 | 7·2 | |
| 9·2 | | 26·0 | 56·9 | |
| 9·2 | | 33·0 | 8·9 | 8·5 |
| 9·8 | | 35·0 | 23·3 | |
| 8·9 | | 37·0 | 18·0 | |
| 10·0 | | 44·0 | 29·6 | |
| 9·5 | | 46·0 | 12·7 | |
| 9·6 | | 49·5 | 2·8 | |
| 9·8 | | 50·0 | 51·0 | |
| 9·6 | | 55·0 | 5·5 | |
| 10·1 | | 55·5 | 35·7 | |
| 10·0 | | 59·0 | 19·0 | |
| 8·9 | | 59·0 | 44·8 | |
| 9·0 | 59 | 6·5 | 40·4 | 9·5 |
| 9·6 | | 13·0 | 16·4 | |
| 9·2 | | 15·5 | 44·6 | |
| 10·1 | | 21·0 | 6·3 | |
| 9·5 | | 21·0 | 6·6 | |
| 9·0 | | 23·5 | 43·7 | 9·0 |
| 10·1 | | 27·5 | 14·6 | |
| 10·1 | | 29·5 | 45·4 | |
| 10·1 | | 39·5 | 10·1 | |
| 9·6 | | 40·5 | 5·0 | |
| 10·1 | | 52·5 | 29·1 | |
| 9·6 | | 53·0 | 40·3 | |
| 10·0 | | 54·5 | 41·9 | |
| 10·1 | 0 | 11·0 | 10·9 | |
| 10·1 | | 17·0 | 27·9 | |
| 10·1 | | 20·5 | 45·3 | |
| 10·1 | | 25·0 | 6·6 | |
| 10·1 | | 47·0 | 46·7 | |
| 9·3 | | 51·5 | 34·7 | |
| 10·1 | | 52·5 | 10·9 | |
| 9·4 | | 58·5 | 9·5 | |
| 10·1 | 1 | 3·5 | 19·0 | |
| 8·8 | | 6·5 | 46·9 | 9·0 |
| 9·7 | | 9·5 | 30·0 | |
| 9·6 | | 13·5 | 29·0 | |
| 9·7 | | 21·5 | 36·9 | |
| 9·8 | | 29·0 | 30·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 40 | 103 | 7·6 |
| | 50 | 105 | 7·4 |
| 14 | 0 | 108 | 7·2 |
| | 10 | 110 | 7·0 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 14 | 0 | 108 | 7·2 |
| | 10 | 110 | 7·0 |
| | 20 | 112 | 6·8 |
| | 30 | 114 | 6·6 |

## 4381—4440.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·1 | 1 | 30·5 | 30·5 | |
| 8·0 | | 33·5 | 53·1 | 8·2 |
| 9·5 | | 36·5 | 46·5 | |
| 10·0 | | 37·0 | 16·9 | |
| 9·2 | | 40·5 | 43·9 | 9·5 |
| 8·7 | | 41·5 | 50·1 | 9·0 |
| 9·0 | | 49·0 | 45·7 | |
| 9·6 | | 50·0 | 33·6 | |
| 8·8 | | 50·5 | 47·9 | 9·5 |
| 9·5 | | 59·0 | 3·9 | 9·5 |
| 10·0 | | 59·5 | 24·1 | |
| 8·8 | 2 | 4·5 | 1·8 | 9·5 |
| 10·0 | | 7·5 | 25·8 | |
| 8·8 | | 7·5 | 4·5 | |
| 10·1 | | 11·5 | 35·0 | |
| 10·1 | | 15·0 | 34·9 | |
| 9·9 | | 18·0 | 33·1 | |
| 9·0 | | 18·0 | 41·9 | 9·0 |
| 10·1 | | 18·5 | 31·8 | |
| 9·7 | | 25·5 | 52·5 | |
| 10·0 | | 31·0 | 51·9 | |
| 9·8 | | 31·5 | 46·7 | |
| 7·9 | | 40·5 | 26·0 | 8·0 GS |
| 9·6 | | 41·5 | 30·9 | |
| 9·8 | | 51·0 | 40·9 | |
| 9·8 | | 56·0 | 46·6 | |
| 9·6 | | 58·0 | 26·1 | |
| 10·1 | | 58·0 | 39·5 | |
| 10·0 | 3 | 1·5 | 21·5 | |
| 10·0 | | 8·5 | 11·1 | |
| 9·8 | | 23·0 | 37·9 | |
| 10·1 | | 40·5 | 32·0 | |
| 9·6 | | 40·5 | 19·9 | 9·5 |
| 9·8 | | 42·5 | 31·9 | |
| 9·6 | 4 | 3·5 | 53·9 | |
| 9·7 | | 11·5 | 20·5 | |
| 10·1 | | 23·0 | 8·1 | |
| 8·6 | | 27·5 | 54·2 | 8·5 |
| 10·0 | | 36·5 | 53·9 | 9·0 |
| 9·0 | | 43·5 | 33·5 | 10·0 |
| 8·8 | | 51·5 | 38·5 | 8·0 G |
| 8·8 | | 59·5 | 17·7 | |
| 10·0 | 5 | 3·5 | 6·3 | |
| 10·0 | | 3·5 | 28·1 | |
| 10·0 | | 18·5 | 36·3 | |
| 9·0 | | 24·0 | 24·1 | |
| 8·9 | | 24·0 | 12·8 | 9·5 |
| 10·1 | | 30·5 | 32·4 | |
| 9·2 | | 49·3 | 17·0 | |
| 10·1 | | 49·5 | 16·3 | |
| 7·8 | | 51·7 | 7·4 | 7·0 GS |
| 10·3* | | 56·0 | 26·5 | |
| 8·4 | | 57·0 | 4·1 | G |
| 8·6 | | 57·0 | 19·9 | 7·2 GS |
| 9·8 | | 57·8 | 3·7 | |
| 10·1 | 6 | 0·5 | 55·9 | |
| 9·7 | | 7·5 | 47·8 | |
| 10·3 | | 9·5 | 7·5 | |
| 10·2 | | 12·0 | 31·3 | |
| 9·9 | | 20·0 | 12·5 | |

## 4441—4500.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 6 | 24·0 | 3·9 | |
| 10·0 | | 26·0 | 15·9 | |
| 8·9 | | 26·0 | 37·5 | 9·5 |
| 10·0 | | 26·5 | 23·5 | |
| 8·4 | | 42·5 | 54·3 | 7·8 G |
| 10·3 | | 43·5 | 57·6 | |
| 10·3 | | 51·0 | 55·0 | |
| 10·2 | | 54·0 | 26·5 | |
| 9·6 | | 56·0 | 4·2 | |
| 8·6 | | 59·5 | 53·7 | |
| 8·6 | | 59·5 | 42·5 | 9·0 |
| 10·3 | 7 | 7·5 | 2·7 | |
| 9·5 | | 19·5 | 32·5 | |
| 10·2 | | 21·5 | 31·2 | |
| 10·0 | | 23·0 | 3·5 | |
| 8·7 | | 25·0 | 31·7 | 8·5 |
| 8·6 | | 33·5 | 46·4 | 8·8 |
| 10·2 | 8 | 11·5 | 36·3 | |
| 9·9 | | 12·0 | 3·5 | |
| 9·8 | | 17·0 | 4·5 | |
| 10·0 | | 21·0 | 37·4 | |
| 9·0 | | 21·5 | 33·6 | |
| 10·2 | | 26·5 | 4·1 | |
| 9·7 | | 27·0 | 5·1 | |
| 10·2 | | 27·5 | 5·0 | |
| 10·0 | | 38·0 | 44·1 | 8·8 |
| 8·8 | | 48·0 | 44·0 | 9·0 |
| 8·7 | 9 | 8·0 | 33·6 | |
| 9·4 | | 11·5 | 37·3 | |
| 10·2 | | 18·0 | 42·6 | |
| 10·2 | | 24·5 | 17·2 | |
| 9·7 | | 27·5 | 48·4 | |
| 9·7 | | 28·5 | 39·9 | |
| 9·7 | | 53·5 | 47·6 | 10·0 |
| 9·5 | 10 | 1·5 | 9·9 | |
| 10·2 | | 17·5 | 15·3 | |
| 10·3 | | 39·0 | 54·5 | |
| 10·2 | | 42·0 | 35·2 | |
| 10·0 | | 55·0 | 33·5 | |
| 8·9 | 11 | 2·0 | 50·4 | 9·5 |
| 10·2 | | 7·0 | 11·6 | |
| 9·4 | | 19·0 | 34·0 | |
| 8·9 | | 21·0 | 15·6 | 9·5 |
| 9·0 | | 27·5 | 1·2 | 9·5 |
| 10·0 | | 31·5 | 9·4 | |
| 10·0 | | 39·0 | 5·2 | |
| 10·2 | | 55·5 | 24·2 | |
| 10·0 | | 56·5 | 43·6 | |
| 9·7 | | 59·5 | 44·6 | |
| 8·5 | 12 | 3·5 | 4·4 | 9·0 |
| 9·7 | | 18·5 | 30·3 | |
| 9·2 | | 20·0 | 2·9 | 9·5 |
| 10·3 | | 30·5 | 48·0 | |
| 10·0 | | 39·5 | 10·6 | |
| 9·8 | | 45·0 | 11·2 | |
| 10·2 | | 48·5 | 17·0 | |
| 9·4 | | 51·0 | 25·6 | 8·2 G |
| 8·8 | | 54·0 | 50·2 | 9·5 |
| 9·7 | | 58·5 | 58·4 | |
| 8·7 | | 59·0 | 40·2 | 9·5 |

## 4501—4560.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·4 | 13 | 29·0 | 49·6 | |
| 9·4 | | 41·0 | 59·6 | |
| 10·2 | | 47·5 | 14·5 | |
| 10·0 | | 53·0 | 40·6 | |
| 9·4 | | 54·5 | 15·4 | |
| 9·8 | 14 | 8·0 | 57·0 | |
| 10·3 | | 12·5 | 45·4 | |
| 10·2 | | 16·5 | 4·9 | |
| 9·5 | | 28·5 | 51·9 | 9·5 |
| 10·2 | | 33·0 | 31·2 | |
| 10·3 | | 36·0 | 21·8 | |
| 10·3 | | 37·0 | 0·7 | |
| 10·3 | | 44·0 | 23·7 | |
| 9·2 | | 46·0 | 12·3 | |
| 10·3 | | 52·0 | 59·1 | |
| 9·0 | | 52·5 | 48·6 | 9·5 |
| 9·0 | | 57·5 | 36·7 | |
| 10·2 | | 58·5 | 53·3 | |
| 10·3 | 15 | 14·5 | 24·3 | |
| 10·3 | | 15·5 | 36·1 | |
| 10·3 | | 24·5 | 14·2 | |
| 10·2 | | 31·2 | 1·8 | 9·5 |
| 9·6 | | 35·0 | 14·7 | 9·5 |
| 9·4 | | 40·5 | 0·9 | 8·5 |
| 8·8 | | 48·5 | 1·5 | |
| 9·6 | | 48·5 | 19·4 | 10·0 |
| 10·2 | | 53·0 | 9·0 | |
| 9·4 | 16 | 2·5 | 10·7 | 9·0 |
| 9·6 | | 3·0 | 27·7 | 9·5 |
| 9·9 | | 6·5 | 30·6 | |
| 10·0 | | 8·5 | 1·0 | |
| 10·2 | | 12·0 | 5·5 | |
| 10·0 | | 26·5 | 53·3 | 9·5 |
| 10·0 | | 51·0 | 34·3 | |
| 10·2 | | 52·0 | 18·9 | |
| 10·2 | 17 | 15·0 | 6·6 | |
| 10·2 | | 26·5 | 9·1 | |
| 10·3 | | 33·0 | 44·7 | |
| 10·3 | | 37·0 | 45·9 | |
| 9·0 | | 40·5 | 58·8 | 10·0 |
| 10·3 | | 47·5 | 47·3 | |
| 8·9 | | 49·0 | 29·7 | 9·2 |
| 9·9 | | 50·5 | 31·7 | |
| 9·4 | | 54·0 | 32·3 | 8·8 |
| 9·8 | | 54·0 | 48·1 | |
| 9·7 | 18 | 0·5 | 50·7 | |
| 7·7 | | 5·0 | 25·7 | 8·0 G |
| 9·2 | | 7·0 | 33·3 | 10·0 |
| 9·3 | | 16·5 | 11·5 | |
| 10·2 | | 28·0 | 30·3 | |
| 10·2 | | 29·0 | 38·3 | |
| 9·4 | | 42·0 | 11·7 | |
| 9·9 | | 43·5 | 42·8 | |
| 10·2 | | 45·0 | 23·0 | |
| 10·0 | | 45·5 | 13·7 | |
| 8·2 | 19 | 8·0 | 38·7 | 8·8 |
| 10·0 | | 10·0 | 17·7 | |
| 10·2 | | 18·5 | 14·3 | |
| 10·2 | | 31·0 | 29·8 | |
| 9·6 | | 52·0 | 36·5 | |

## 4561—4620.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 19 | 52·5 | 30·5 | 9·0 |
| 8·0 | | 54·0 | 29·7 | 8·5 |
| 9·0 | 20 | 5·5 | 4·4 | |
| 10·3 | | 12·5 | 29·8 | |
| 9·8 | | 19·0 | 25·5 | |
| 9·2 | | 37·5 | 43·7 | |
| 8·2 | | 37·5 | 24·7 | 9·0 G |
| 10·2 | | 47·5 | 12·5 | |
| 8·6 | | 52·5 | 37·1 | |
| 9·4 | | 54·5 | 35·7 | 9·0 |
| 10·2 | | 58·5 | 18·9 | |
| 9·9 | 21 | 8·0 | 39·7 | |
| 10·2 | | 12·5 | 5·6 | |
| 9·3 | | 20·5 | 35·9 | |
| 9·4 | | 21·0 | 31·3 | |
| 10·3 | | 42·5 | 42·9 | |
| 9·4 | | 52·5 | 25·7 | 9·5 |
| 10·2 | | 58·0 | 49·6 | |
| 8·8 | 22 | 1·5 | 59·7 | 9·3 |
| 10·0 | | 5·0 | 28·8 | |
| 9·6 | | 9·0 | 3·3 | |
| 10·2 | | 19·0 | 24·9 | |
| 9·9 | | 25·0 | 26·0 | |
| 9·4 | | 31·0 | 25·0 | 9·2 |
| 10·2 | | 38·0 | 14·0 | |
| 9·8 | | 38·5 | 5·9 | |
| 10·3 | | 41·0 | 51·9 | |
| 9·9 | | 59·5 | 15·9 | |
| 10·3 | 23 | 9·0 | 43·8 | |
| 10·3 | | 15·5 | 41·1 | |
| 10·3 | | 17·0 | 6·8 | |
| 10·2 | | 19·0 | 4·0 | |
| 9·4 | | 20·0 | 46·7 | |
| 10·0 | | 39·0 | 20·1 | |
| 9·5 | | 56·0 | 41·7 | |
| 10·2 | | 57·0 | 28·7 | |
| 10·3 | | 57·5 | 26·3 | |
| 10·3 | | 59·0 | 26·0 | |
| 10·2 | 24 | 2·0 | 36·8 | |
| 9·6 | | 4·0 | 26·3 | |
| 10·0 | | 11·0 | 11·2 | |
| 8·2 | | 20·0 | 18·6 | 9·0 |
| 9·4 | | 30·0 | 8·4 | |
| 8·7 | | 38·0 | 44·0 | |
| 8·6 | | 40·0 | 49·8 | |
| 9·0 | | 45·5 | 48·6 | |
| 10·2 | | 45·5 | 8·0 | |
| 10·2 | 25 | 7·5 | 42·8 | |
| 8·6 | | 8·0 | 11·3 | 10·0 |
| 8·7 | | 9·0 | 11·8 | 8·0 |
| 9·2 | | 15·5 | 19·8 | |
| 8·2 | | 23·5 | 16·4 | 9·0 |
| 9·8 | | 24·0 | 18·8 | |
| 10·3 | | 27·5 | 50·9 | |
| 9·3 | | 30·5 | 29·8 | |
| 9·6 | | 40·0 | 40·5 | |
| 9·2 | | 44·5 | 19·8 | |
| 8·2 | | 45·5 | 49·6 | 9·0 |
| 10·2 | | 57·5 | 58·8 | |
| 10·3 | | 58·0 | 6·9 | |



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### 4621—4680.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·3 | 25 | 59·0 | 1·3 | |
| 9·2 | 26 | 5·0 | 42·0 | |
| 9·7 | | 6·0 | 1·3 | |
| 9·6 | | 13·0 | 38·2 | |
| 9·6 | | 16·5 | 12·0 | |
| 9·0 | | 30·5 | 18·8 | |
| 9·4 | | 37·5 | 27·2 | |
| 9·3 | | 52·0 | 16·8 | |
| 9·7 | | 57·0 | 8·1 | |
| 9·6 | | 59·5 | 28·4 | |
| 9·9 | 27 | 5·0 | 54·4 | |
| 10·2 | | 8·5 | 14·6 | |
| 10·2 | | 11·5 | 50·4 | |
| 9·6 | | 18·5 | 16·7 | |
| 9·9 | | 20·5 | 45·0 | |
| 8·3 | | 23·0 | 57·8 | 8·2 |
| 10·2 | | 26·0 | 41·3 | |
| 10·2 | | 29·5 | 54·8 | |
| 10·2 | | 31·5 | 7·8 | |
| 10·0 | | 31·5 | 0·0 | |
| 10·0 | | 32·5 | 15·8 | |
| 7·8 | | 36·5 | 27·7 | 7·0 GS |
| 9·2 | | 46·5 | 32·8 | |
| 8·2 | | 46·5 | 8·8 | |
| 9·9 | | 58·0 | 12·8 | |
| 10·0 | 28 | 2·5 | 16·6 | |
| 10·2 | | 20·0 | 28·8 | |
| 10·2 | | 20·8 | 16·2 | |
| 7·8 | | 38·0 | 17·2 | 8·0 G |
| 9·7 | | 41·0 | 31·1 | |
| 10·2 | | 47·0 | 35·6 | |
| 10·2 | | 48·8 | 6·3 | |
| 10·3 | | 55·0 | 36·4 | |
| 10·2 | | 57·8 | 43·0 | |
| 9·0 | | 58·0 | 21·8 | 9·0 |
| 10·2 | 29 | 6·8 | 37·8 | |
| 9·3 | | 28·0 | 29·7 | |
| 10·3 | | 35·8 | 54·6 | |
| 9·4 | | 58·0 | 26·4 | |
| 10·0 | 30 | 21·0 | 37·0 | |
| 9·7 | | 25·5 | 50·4 | |
| 10·0 | | 31·0 | 31·8 | |
| 8·6 | 31 | 20·0 | 24·4 | |
| 10·3 | | 22·0 | 5·9 | |
| 8·9 | | 42·5 | 58·0 | |
| 9·5 | | 43·0 | 10·8 | |
| 9·7 | 32 | 7·5 | 54·2 | |
| 9·0 | | 17·5 | 13·3 | 9·5 |
| 9·4 | | 22·0 | 30·9 | |
| 10·0 | | 24·5 | 29·8 | |
| 9·7 | | 30·0 | 24·6 | |
| 9·6 | | 58·5 | 10·0 | |
| 9·5 | 33 | 20·0 | 10·2 | |
| 7·4 | | 20·5 | 40·1 | 8·0 GS |
| 9·3 | | 31·5 | 42·5 | |
| 9·0 | | 59·0 | 20·5 | |
| 9·8 | 34 | 36·0 | 11·9 | |
| 10·2 | | 44·5 | 27·1 | |
| 8·6 | | 50·5 | 23·7 | 8·0 G |
| 10·2 | | 51·5 | 20·1 | |

### 4681—4740.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8·3 | 35 | 0·0 | 39·9 | |
| 10·3 | | 0·0 | 10·7 | |
| 10·3 | | 1·5 | 11·9 | |
| 9·8 | | 5·0 | 47·9 | |
| 9·6 | | 5·5 | 47·3 | |
| 9·8 | | 7·5 | 13·2 | |
| 10·2 | | 11·0 | 17·7 | |
| 10·0 | | 13·5 | 28·0 | |
| 10·3 | | 23·5 | 10·5 | |
| 10·2 | | 27·0 | 10·9 | |
| 8·9 | | 37·0 | 20·0 | 9·5 |
| 9·2 | | 43·5 | 35·5 | |
| 10·3 | | 47·5 | 34·7 | |
| 8·9 | | 49·5 | 30·1 | |
| 10·2 | | 56·5 | 10·5 | |
| 9·8 | 36 | 18·5 | 37·6 | |
| 10·3 | | 23·5 | 32·7 | |
| 10·2 | | 39·5 | 19·5 | |
| 10·2 | | 40·0 | 1·1 | |
| 8·7 | | 49·0 | 18·2 | |
| 10·2 | | 52·8 | 56·9 | |
| 10·3 | 37 | 8·5 | 53·9 | |
| 9·7 | | 9·0 | 47·7 | |
| 9·8 | | 29·5 | 4·9 | |
| 9·2 | | 39·5 | 15·9 | |
| 10·3 | | 45·0 | 19·3 | |
| 9·4 | 38 | 0·0 | 14·5 | |
| 8·6 | | 4·5 | 3·7 | 8·0 |
| 9·0 | | 22·5 | 27·7 | |
| 10·2 | | 41·0 | 3·5 | |
| 10·2 | | 44·5 | 25·5 | |
| 10·2 | | 50·0 | 52·4 | |
| 8·1 | | 51·0 | 34·9 | 9·0 |
| 10·0 | | 51·3 | 58·8 | |
| 9·7 | | 52·0 | 36·0 | |
| 9·0 | | 54·5 | 44·1 | 9·5 |
| 8·4 | | 56·5 | 10·0 | |
| 10·3 | 39 | 13·0 | 45·9 | |
| 9·7 | | 13·5 | 34·3 | |
| 10·2 | | 22·5 | 47·7 | |
| 10·2 | | 28·5 | 34·1 | |
| 10·3 | | 31·5 | 37·9 | |
| 10·3 | | 40·0 | 19·6 | |
| 10·0 | 40 | 8·5 | 25·9 | |
| 7·4 | | 9·5 | 48·5 | 7·5 GS |
| 10·2 | | 13·5 | 23·7 | |
| 10·3 | | 15·0 | 48·1 | |
| 9·7 | | 27·0 | 7·1 | |
| 10·3 | | 29·0 | 19·4 | |
| 10·3 | | 41·0 | 8·3 | |
| 8·6 | | 51·2 | 39·4 | |
| 9·6 | 41 | 3·0 | 1·7 | |
| 9·4 | | 4·0 | 14·0 | |
| 10·2 | | 4·0 | 48·9 | |
| 9·0 | | 13·2 | 24·7 | 9·5 |
| 9·7 | | 22·0 | 45·9 | |
| 9·4 | | 28·2 | 2·1 | |
| 8·6 | | 35·2 | 2·8 | 8·5 |
| 9·2 | | 42·8 | 47·6 | |
| 9·1 | | 59·7 | 36·0 | |

### 4741—4800.

| mag. | 14h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 42 | 1·5 | 44·7 | |
| 9·5 | | 2·7 | 56·3 | |
| 9·7 | | 23·5 | 7·8 | |
| 8·1 | | 48·0 | 3·1 | 8·5 |
| 9·8 | 43 | 5·5 | 59·6 | |
| 8·7 | | 12·5 | 53·3 | |
| 9·9 | | 27·0 | 2·7 | |
| 9·4 | | 33·0 | 15·9 | |
| 8·3 | | 39·5 | 50·4 | 9·0 |
| 8·8 | | 43·0 | 32·6 | 8·5 |
| 9·8 | | 51·7 | 38·3 | |
| 9·7 | | 54·5 | 4·4 | |
| 9·5 | | 56·0 | 48·5 | |
| 9·9 | | 59·5 | 47·8 | |
| 9·8 | 44 | 6·5 | 9·9 | |
| 9·5 | | 9·5 | 53·9 | |
| 9·2 | | 18·5 | 37·2 | 9·0 |
| 9·4 | | 25·5 | 24·4 | |
| 8·7 | | 49·5 | 28·8 | 9·0 |
| 7·5 | 45 | 13·0 | 21·4 | 7·5 GScr |
| 9·4 | | 16·0 | 23·6 | 9·5 |
| 9·1 | | 25·0 | 3·9 | |
| 9·4 | | 25·5 | 20·7 | |
| 9·7 | 46 | 3·0 | 10·9 | |
| 9·2 | | 9·5 | 51·9 | |
| 9·6 | | 19·5 | 38·1 | |
| 9·6 | | 37·5 | 30·1 | |
| 7·1 | | 39·0 | 51·2 | 7·0 GS |
| 9·2 | | 43·0 | 19·9 | |
| 9·7 | | 52·5 | 32·9 | |
| 9·4 | | 54·7 | 13·8 | |
| 9·4 | 47 | 11·0 | 17·7 | |
| 9·9 | | 47·0 | 39·7 | |
| 9·4 | | 56·5 | 36·0 | |
| 8·9 | 48 | 11·5 | 41·8 | |
| 9·4 | | 14·0 | 19·8 | |
| 9·6 | | 24·0 | 26·0 | |
| 8·9 | | 24·0 | 20·8 | |
| 9·2 | | 57·5 | 57·2 | |
| 9·2 | 49 | 12·0 | 36·9 | |
| 8·9 | | 23·0 | 16·6 | |
| 9·9 | | 41·5 | 40·2 | |
| 9·6 | | 55·0 | 48·0 | |
| 9·4 | | 59·4 | 0·9 | |
| 9·9 | 50 | 13·0 | 16·9 | |
| 9·7 | | 52·5 | 42·1 | |
| 9·7 | | 55·0 | 27·9 | |
| 9·4 | 51 | 4·5 | 25·9 | |
| 8·8 | | 7·5 | 9·9 | 9·5 |
| 9·8 | | 29·5 | 33·4 | |
| 9·6 | | 59·0 | 6·7 | 9·0 |
| 9·7 | 52 | 5·8 | 57·7 | |
| 9·2 | | 10·5 | 0·1 | |
| 8·9 | | 13·0 | 22·6 | |
| 9·8 | | 23·7 | 33·4 | |
| 9·6 | | 25·5 | 13·6 | |
| 8·7 | | 31·5 | 7·8 | 9·2 |
| 9·7 | | 40·0 | 30·3 | |
| 9·8 | | 40·7 | 1·1 | |
| 9·4 | | 42·0 | 9·8 | |

### 4801—4860.

| mag. | 14h.—15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 8·9 | 52 | 51·5 | 18·8 | |
| 9·9 | | 56·0 | 12·2 | |
| 8·7 | 53 | 1·0 | 14·8 | 9·5 |
| 9·2 | | 46·0 | 25·2 | |
| 9·5 | | 53·5 | 25·9 | |
| 9·8 | | 58·0 | 39·8 | |
| 9·8 | 54 | 14·0 | 22·7 | |
| 9·7 | | 43·5 | 22·9 | |
| 9·7 | | 51·5 | 6·8 | |
| 9·9 | | 53·5 | 9·9 | |
| 9·7 | 55 | 2·0 | 19·0 | |
| 9·9 | | 10·0 | 15·8 | |
| 9·4 | | 30·0 | 36·1 | |
| 9·2 | | 30·5 | 56·9 | |
| 9·6 | | 43·5 | 20·2 | |
| 9·0 | | 58·0 | 12·9 | |
| 9·6 | 56 | 8·0 | 37·9 | |
| 9·2 | | 9·0 | 37·0 | |
| 9·7 | | 12·0 | 11·3 | |
| 9·6 | | 13·5 | 41·8 | |
| 9·6 | | 16·0 | 33·0 | |
| 9·0 | | 20·5 | 38·7 | |
| 9·6 | | 22·0 | 6·7 | |
| 9·9 | | 31·5 | 24·9 | |
| 8·9 | | 33·5 | 54·7 | 8·0 G |
| 9·9 | | 39·5 | 51·4 | |
| 8·7 | | 40·5 | 56·8 | 9·5 |
| 9·8 | | 50·0 | 18·6 | |
| 9·8 | 57 | 10·5 | 9·8 | |
| 9·2 | | 13·5 | 12·6 | |
| 9·4 | | 32·5 | 19·6 | |
| 9·6 | 58 | 0·5 | 32·5 | |
| 9·2 | | 23·0 | 30·4 | |
| 9·7 | | 29·5 | 4·9 | |
| 9·6 | | 38·0 | 16·0 | |
| 9·9 | | 38·0 | 49·2 | |
| 6·8 | | 40·5 | 8·9 | 7·0 GSt |
| 6·9 | | 55·5 | 24·1 | 7·0 GS |
| 9·7 | 59 | 3·0 | 49·6 | |
| 8·9 | | 34·5 | 30·8 | |
| 8·9 | | 36·0 | 0·3 | 8·0 |
| 9·5 | | 54·0 | 17·1 | |
| 9·4 | 0 | 4·5 | 18·5 | |
| 8·0 | | 19·0 | 42·7 | 8·0 G |
| 9·8 | | 32·0 | 12·3 | |
| 9·8 | | 41·5 | 47·6 | |
| 9·4 | 1 | 22·0 | 21·6 | |
| 9·9 | | 26·0 | 19·2 | |
| 9·4 | | 29·0 | 25·6 | |
| 9·8 | | 46·5 | 4·3 | |
| 9·8 | | 55·5 | 24·8 | |
| 9·6 | 2 | 14·5 | 32·0 | |
| 9·4 | | 36·0 | 41·9 | |
| 9·1 | | 50·0 | 10·2 | 9·0 |
| 9·4 | | 52·0 | 32·9 | |
| 8·6 | | 52·0 | 16·0 | 6·5 GSt |
| 9·6 | | 56·5 | 54·7 | |
| 9·8 | 3 | 5·0 | 15·6 | |
| 9·8 | | 19·0 | 28·8 | |
| 9·8 | | 24·0 | 11·0 | 9·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 112 | 6·8 |
| | 30 | 114 | 6·6 |
| | 40 | 116 | 6·4 |
| | 50 | 118 | 6·2 |
| 15 | 0 | 120 | 5·9 |
| | 10 | 122 | 5·6 |



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| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 0 | 120 | 5.9 |
| | 10 | 122 | 5.6 |
| | 20 | 124 | 5.4 |
| | 30 | 126 | 5.1 |

### 4861—4920.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9.8 | 3 | 30.0 | 28.2 | |
| 9.9 | 4 | 6.5 | 55.0 | |
| 9.1 | | 18.0 | 28.8 | |
| 9.7 | | 29.0 | 7.6 | |
| 9.0 | | 51.5 | 50.7 | |
| 9.4 | 5 | 17.5 | 45.3 | |
| 9.9 | | 32.0 | 34.2 | |
| 8.4 | | 33.5 | 18.4 | |
| 9.9 | | 37.0 | 34.1 | |
| 9.6 | | 38.5 | 8.1 | |
| 9.4 | | 43.5 | 23.8 | |
| 8.9 | | 48.5 | 54.4 | |
| 9.4 | | 50.0 | 50.1 | 9.5 |
| 9.9 | | 55.5 | 25.0 | |
| 7.5 | 6 | 3.0 | 53.7 | 7.5 GS |
| 9.4 | | 3.5 | 39.3 | |
| 8.9 | | 7.5 | 34.0 | |
| 9.6 | 7 | 18.0 | 45.5 | |
| 8.9 | | 18.0 | 3.8 | |
| 9.7 | | 20.0 | 2.1 | |
| 9.2 | | 21.5 | 37.3 | |
| 9.2 | | 39.0 | 1.7 | |
| 9.9 | | 49.0 | 42.3 | |
| 9.0 | | 53.0 | 44.2 | |
| 8.6 | | 55.5 | 55.0 | 8.5 |
| 9.9 | | 57.0 | 10.1 | |
| 9.9 | 8 | 4.0 | 30.0 | |
| 9.2 | | 6.0 | 21.5 | |
| 9.0 | | 9.5 | 25.0 | |
| 9.0 | | 15.5 | 17.6 | |
| 8.9 | | 20.5 | 33.1 | |
| 9.5 | | 30.0 | 28.9 | |
| 9.4 | 9 | 15.0 | 55.7 | |
| 9.4 | | 16.5 | 31.8 | |
| 9.4 | | 28.5 | 39.0 | |
| 9.2 | | 49.0 | 47.6 | |
| 7.7 | | 49.5 | 43.5 | 8.5 |
| 9.4 | | 50.0 | 58.2 | |
| 9.9 | | 54.0 | 57.1 | |
| 8.8 | 10 | 7.0 | 38.8 | 9.0 |
| 9.9 | | 11.0 | 34.0 | |
| 9.9 | | 15.0 | 39.4 | |
| 9.7 | | 25.5 | 38.1 | |
| 8.9 | | 28.5 | 35.3 | |
| 8.9 | | 34.5 | 53.9 | |
| 9.9 | | 43.5 | 17.6 | |
| 9.9 | | 47.0 | 23.0 | |
| 9.9 | | 53.0 | 28.0 | |
| 9.4 | 11 | 11.5 | 22.9 | |
| 9.8 | | 16.5 | 13.2 | |
| 9.4 | | 40.0 | 41.2 | |
| 9.1 | 12 | 14.5 | 28.0 | 9.0 |
| 9.4 | | 22.0 | 26.1 | |
| 9.7 | | 25.5 | 3.9 | |
| 8.4 | | 29.5 | 22.1 | 9.0 |
| 9.8 | | 30.0 | 57.3 | |
| 9.9 | | 33.0 | 20.2 | |
| 9.9 | | 37.0 | 8.8 | |
| 9.2 | 13 | 2.0 | 23.3 | |
| 9.2 | | 2.0 | 43.8 | |

### 4921—4980.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9.9 | 13 | 30.0 | 7.8 | |
| 9.9 | | 37.0 | 8.0 | |
| 9.9 | | 41.0 | 16.3 | |
| 9.5 | | 42.0 | 17.3 | |
| 8.9 | | 44.5 | 38.0 | |
| 9.4 | | 46.5 | 23.0 | |
| 9.7 | | 57.0 | 9.3 | |
| 9.5 | | 59.5 | 30.6 | |
| 9.5 | 14 | 4.5 | 8.0 | |
| 8.5 | | 16.5 | 18.3 | 9.5 |
| 9.8 | | 21.5 | 11.8 | |
| 9.2 | | 23.5 | 53.0 | 9.5 |
| 9.4 | | 25.5 | 59.6 | |
| 9.8 | | 28.0 | 36.8 | |
| 9.1 | | 32.0 | 19.8 | |
| 8.2 | | 37.0 | 29.8 | 9.0 |
| 9.0 | | 48.0 | 16.7 | 9.5 |
| 9.4 | 15 | 13.0 | 44.0 | |
| 8.9 | | 32.5 | 57.0 | 9.0 |
| 9.9 | | 33.0 | 6.0 | |
| 9.5 | 16 | 0.0 | 37.8 | |
| 8.9 | | 16.0 | 56.7 | |
| 8.9 | | 21.0 | 48.3 | |
| 8.9 | | 24.5 | 36.0 | |
| 8.9 | | 25.5 | 15.6 | 9.5 |
| 9.5 | | 35.5 | 14.6 | |
| 9.9 | | 42.0 | 45.9 | |
| 9.9 | | 48.0 | 24.5 | |
| 10.0 | 17 | 26.1 | 21.6 | |
| 10.1 | | 26.1 | 56.3 | |
| 9.5 | | 27.4 | 35.3 | |
| 9.3 | | 28.1 | 36.6 | |
| 9.3 | | 33.1 | 43.6 | |
| 8.8 | | 42.6 | 58.2 | 8.8 |
| 9.6 | | 43.3 | 1.8 | |
| 10.0 | | 46.1 | 21.7 | |
| 9.6 | | 49.6 | 6.8 | |
| 9.6 | 18 | 0.6 | 13.6 | |
| 9.5 | | 1.0 | 4.0 | |
| 9.6 | | 6.1 | 19.7 | |
| 9.7 | | 7.5 | 0.3 | |
| 10.0 | | 8.1 | 23.6 | |
| 9.8 | | 8.1 | 5.5 | |
| 10.0 | | 11.6 | 11.1 | |
| 10.1 | | 12.6 | 15.7 | |
| 9.5 | | 39.7 | 56.7 | |
| 8.4 | | 40.1 | 9.8 | 9.2 |
| 10.1 | | 49.6 | 46.8 | |
| 9.7 | 19 | 4.6 | 34.3 | |
| 10.0 | | 6.1 | 28.1 | |
| 10.0 | | 11.1 | 48.3 | |
| 9.9 | | 21.1 | 39.6 | |
| 10.1 | | 22.1 | 59.4 | |
| 9.8 | | 25.1 | 10.9 | |
| 9.7 | | 27.6 | 51.7 | |
| 9.5 | | 32.1 | 20.6 | |
| 10.1 | | 34.6 | 20.3 | |
| 8.9 | | 37.6 | 21.5 | 9.0 |
| 9.8 | | 46.1 | 10.8 | |
| 9.9 | | 49.1 | 13.7 | |

### 4981—5040.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10.0 | 19 | 53.6 | 40.4 | |
| 9.5 | | 54.1 | 5.6 | |
| 9.6 | | 56.1 | 33.5 | |
| 9.9 | 20 | 0.6 | 46.6 | |
| 9.8 | | 7.1 | 48.8 | |
| 10.0 | | 9.1 | 46.4 | |
| 9.9 | | 10.1 | 12.8 | |
| 9.6 | | 13.6 | 30.5 | |
| 9.9 | | 14.1 | 10.0 | |
| 9.8 | | 17.1 | 19.7 | |
| 9.7 | | 21.1 | 19.7 | |
| 10.0 | | 22.1 | 32.7 | |
| 9.4 | | 25.3 | 0.9 | |
| 9.5 | | 27.6 | 55.3 | |
| 8.6 | | 30.6 | 14.8 | 8.5 |
| 10.0 | | 32.6 | 41.1 | |
| 9.3 | | 35.6 | 35.6 | |
| 9.6 | | 36.4 | 54.7 | |
| 9.7 | | 44.4 | 57.2 | |
| 9.4 | | 49.6 | 10.0 | |
| 9.5 | | 52.6 | 22.3 | |
| 10.1 | 21 | 0.6 | 25.9 | |
| 9.8 | | 8.1 | 25.8 | |
| 10.1 | | 8.6 | 52.7 | |
| 9.4 | | 10.1 | 19.5 | |
| 9.6 | | 10.2 | 58.7 | |
| 9.3 | | 21.6 | 23.3 | |
| 10.1 | | 22.6 | 16.3 | |
| 9.7 | | 23.1 | 41.3 | |
| 9.7 | | 27.1 | 13.9 | |
| 9.6 | | 30.1 | 43.5 | |
| 10.1 | | 32.3 | 6.3 | |
| 9.6 | | 36.6 | 15.7 | |
| 9.5 | | 42.1 | 8.3 | |
| 9.5 | | 42.1 | 39.7 | |
| 9.9 | | 46.6 | 14.9 | |
| 9.1 | | 49.6 | 19.7 | |
| 9.8 | | 52.6 | 46.2 | |
| 10.0 | | 52.6 | 40.2 | |
| 10.1 | | 55.6 | 56.0 | |
| 9.5 | | 56.1 | 28.8 | |
| 8.6 | | 58.1 | 31.6 | 9.5 |
| 9.5 | 22 | 3.6 | 14.3 | |
| 10.1 | | 5.1 | 35.5 | |
| 9.6 | | 19.1 | 37.7 | |
| 9.6 | | 20.1 | 56.7 | 10.0 |
| 9.9 | | 20.6 | 3.8 | |
| 9.8 | | 27.1 | 35.5 | |
| 8.9 | | 31.6 | 11.5 | 9.0 |
| 10.1 | | 31.6 | 6.2 | |
| 9.5 | | 35.6 | 36.3 | |
| 9.5 | | 35.6 | 44.8 | |
| 9.6 | | 36.6 | 54.8 | |
| 9.5 | | 38.9 | 24.8 | |
| 9.8 | | 44.9 | 22.0 | |
| 9.6 | | 46.9 | 49.4 | |
| 10.0 | | 49.9 | 40.2 | |
| 10.1 | | 56.9 | 52.8 | |
| 10.1 | | 57.4 | 20.6 | |
| 10.0 | 23 | 0.4 | 17.3 | |

### 5041—5100.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10.1 | 23 | 0.9 | 54.0 | |
| 8.9 | | 1.9 | 31.4 | |
| 9.6 | | 2.9 | 40.3 | |
| 10.0 | | 6.4 | 31.3 | |
| 10.0 | | 6.9 | 31.7 | |
| 8.4 | | 9.4 | 25.2 | 9.5 |
| 10.1 | | 9.9 | 59.3 | |
| 9.9 | | 12.9 | 44.8 | |
| 10.0 | | 17.4 | 10.4 | |
| 9.8 | | 17.9 | 43.4 | |
| 9.2 | | 21.9 | 31.9 | |
| 7.7 | | 22.4 | 39.3 | 8.0 G |
| 8.9 | | 23.4 | 22.6 | |
| 10.1 | | 30.4 | 26.4 | |
| 9.8 | | 33.9 | 47.2 | |
| 9.2 | | 35.9 | 9.8 | |
| 9.5 | | 42.9 | 33.7 | |
| 10.1 | | 47.9 | 43.0 | |
| 9.9 | | 50.4 | 42.7 | |
| 10.1 | | 52.4 | 42.4 | |
| 9.2 | | 59.9 | 6.4 | |
| 9.5 | 24 | 1.4 | 51.1 | |
| 10.0 | | 5.9 | 51.4 | |
| 9.8 | | 12.3 | 59.3 | |
| 10.0 | | 25.4 | 45.9 | |
| 9.2 | | 25.8 | 59.0 | |
| 9.2 | | 26.4 | 26.3 | |
| 10.0 | | 26.4 | 45.3 | |
| 10.1 | | 34.9 | 49.8 | |
| 10.1 | | 38.0 | 23.3 | |
| 10.1 | | 39.0 | 23.1 | |
| 10.1 | | 56.9 | 59.4 | |
| 9.8 | 25 | 0.9 | 48.2 | |
| 9.3 | | 6.4 | 14.4 | |
| 9.1 | | 10.4 | 25.6 | |
| 9.6 | | 11.9 | 51.1 | |
| 10.0 | | 13.4 | 37.4 | |
| 9.8 | | 19.4 | 26.6 | |
| 9.1 | | 20.4 | 5.3 | |
| 9.8 | | 22.4 | 14.8 | |
| 8.4 | | 25.4 | 33.7 | 8.7 |
| 9.0 | | 47.4 | 8.1 | |
| 10.1 | | 49.9 | 39.5 | |
| 8.7 | 26 | 1.4 | 15.5 | |
| 10.1 | | 5.9 | 45.8 | |
| 9.6 | | 6.9 | 16.5 | |
| 9.4 | | 7.4 | 11.9 | |
| 9.6 | | 19.4 | 23.7 | |
| 10.0 | | 22.4 | 18.8 | |
| 9.6 | | 22.9 | 22.6 | |
| 9.6 | | 31.4 | 38.7 | |
| 10.1 | | 34.6 | 58.5 | |
| 9.4 | | 34.9 | 23.6 | |
| 10.0 | | 40.9 | 25.5 | |
| 10.1 | | 42.9 | 25.2 | |
| 8.6 | | 44.4 | 35.4 | 9.0 |
| 9.4 | | 48.4 | 13.5 | |
| 9.2 | | 50.4 | 27.7 | |
| 9.8 | | 52.1 | 57.7 | |
| 10.1 | | 56.4 | 42.4 | |



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## 5101—5160.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 26 | 57·9 | 42·4 | |
| 9·9 | 27 | 6·9 | 5·7 | |
| 10·0 | | 6·9 | 34·2 | |
| 9·9 | | 7·1 | 57·2 | |
| 9·8 | | 10·4 | 20·6 | |
| 9·7 | | 16·9 | 18·9 | |
| 9·9 | | 18·4 | 48·8 | |
| 9·2 | | 23·4 | 30·0 | 9·0 |
| 9·5 | | 32·4 | 19·9 | |
| 9·4 | | 39·4 | 40·9 | |
| 9·5 | | 42·4 | 11·1 | |
| 9·7 | | 44·4 | 39·7 | |
| 10·0 | | 45·4 | 37·5 | |
| 9·9 | | 46·4 | 33·9 | |
| 10·0 | | 48·9 | 17·7 | |
| 10·0 | | 53·9 | 16·9 | |
| 10·1 | 28 | 7·9 | 21·4 | |
| 8·9 | | 12·4 | 24·7 | 8·8 |
| 9·5 | | 13·4 | 37·1 | |
| 9·7 | | 19·7 | 2·0 | |
| 9·0 | | 26·4 | 43·5 | |
| 9·7 | | 27·9 | 50·8 | |
| 10·1 | | 37·9 | 12·3 | |
| 9·9 | | 51·9 | 36·4 | |
| 9·8 | | 55·9 | 47·5 | |
| 10·0 | | 58·9 | 8·3 | |
| 9·7 | 29 | 4·9 | 45·3 | |
| 9·8 | | 6·4 | 54·9 | |
| 9·4 | | 7·9 | 40·2 | |
| 9·9 | | 9·9 | 29·1 | |
| 9·3 | | 16·4 | 42·1 | |
| 10·1 | | 19·9 | 14·8 | |
| 8·9 | | 20·4 | 23·1 | |
| 9·4 | | 21·9 | 16·4 | |
| 10·0 | | 26·4 | 44·5 | |
| 9·2 | | 33·7 | 2·9 | |
| 10·0 | | 35·9 | 31·0 | |
| 9·3 | | 37·4 | 11·5 | |
| 9·9 | | 42·4 | 14·9 | |
| 10·1 | | 42·9 | 28·3 | |
| 9·2 | | 46·9 | 3·1 | |
| 9·8 | 30 | 11·9 | 49·8 | |
| 10·1 | | 12·9 | 55·8 | |
| 9·8 | | 13·4 | 12·7 | |
| 10·1 | | 16·9 | 0·0 | |
| 8·6 | | 17·9 | 19·0 | 9·2 |
| 10·0 | | 25·9 | 13·5 | |
| 9·6 | | 28·4 | 19·9 | 9·0 |
| 9·8 | | 28·4 | 53·8 | |
| 9·7 | | 35·9 | 40·6 | |
| 9·8 | | 40·4 | 26·9 | |
| 9·5 | | 51·9 | 39·1 | |
| 10·1 | | 54·9 | 53·3 | |
| 9·4 | | 56·9 | 0·8 | |
| 9·8 | | 56·9 | 42·6 | |
| 9·6 | | 57·9 | 12·1 | |
| 8·2 | | 59·9 | 59·7 | 8·8 |
| 10·1 | 31 | 2·4 | 54·1 | |
| 10·0 | | 2·9 | 8·9 | |
| 9·8 | | 12·4 | 26·6 | |

## 5161—5220.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 31 | 17·4 | 26·8 | |
| 9·9 | | 21·9 | 0·9 | |
| 9·7 | | 27·4 | 40·6 | |
| 9·7 | | 28·9 | 22·4 | |
| 10·0 | | 31·4 | 41·6 | |
| 9·5 | | 31·9 | 28·5 | |
| 10·1 | | 41·9 | 8·5 | |
| 9·5 | | 43·4 | 28·9 | |
| 10·1 | | 45·4 | 41·3 | |
| 10·0 | | 46·7 | 57·1 | |
| 10·1 | 32 | 9·4 | 48·5 | |
| 9·2 | | 10·4 | 52·6 | |
| 8·8 | | 16·9 | 22·3 | 9·0 |
| 8·8 | | 23·9 | 20·5 | 8·5 |
| 10·0 | | 27·4 | 3·9 | |
| 9·2 | | 27·9 | 41·3 | |
| 9·7 | | 33·9 | 25·0 | |
| 9·1 | | 35·4 | 11·3 | |
| 10·1 | | 36·4 | 56·4 | |
| 9·8 | | 40·9 | 41·1 | |
| 10·0 | | 42·4 | 9·5 | |
| 10·0 | | 45·9 | 13·1 | |
| 9·1 | | 47·9 | 10·0 | |
| 10·1 | | 52·4 | 46·0 | |
| 9·2 | | 53·9 | 39·8 | |
| 10·0 | | 58·9 | 20·5 | |
| 10·1 | 33 | 8·4 | 42·8 | |
| 9·9 | | 10·9 | 42·0 | |
| 9·5 | | 18·4 | 27·7 | |
| 9·7 | | 18·9 | 20·5 | |
| 10·1 | | 20·4 | 15·7 | |
| 9·7 | | 21·9 | 47·0 | |
| 9·2 | | 23·9 | 46·0 | |
| 10·0 | | 24·4 | 4·9 | |
| 10·0 | | 27·9 | 29·9 | |
| 9·4 | | 30·4 | 43·8 | |
| 8·6 | | 30·9 | 45·4 | 8·0 G |
| 9·3 | | 32·9 | 49·1 | |
| 9·6 | | 38·9 | 21·6 | |
| 9·8 | | 40·9 | 10·8 | |
| 9·4 | | 58·4 | 1·5 | |
| 10·0 | | 58·9 | 30·5 | |
| 9·3 | 34 | 0·4 | 57·8 | |
| 9·7 | | 4·9 | 8·4 | |
| 10·0 | | 9·9 | 21·2 | |
| 9·2 | | 14·4 | 35·8 | 9·0 |
| 9·0 | | 14·5 | 59·5 | 9·0 |
| 9·2 | | 22·9 | 43·5 | |
| 9·9 | | 26·4 | 17·7 | |
| 9·6 | | 29·4 | 13·2 | |
| 9·1 | | 39·4 | 21·8 | |
| 10·0 | | 42·9 | 34·8 | |
| 9·4 | | 45·9 | 21·8 | |
| 9·9 | | 46·9 | 47·5 | |
| 9·7 | | 52·9 | 8·1 | |
| 9·8 | 35 | 0·9 | 38·0 | |
| 9·4 | | 0·9 | 58·7 | |
| 9·0 | | 2·9 | 31·2 | |
| 9·8 | | 2·9 | 51·2 | |
| 9·6 | | 6·9 | 28·0 | |

## 5221—5280.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 35 | 7·9 | 14·8 | |
| 10·0 | | 9·9 | 3·1 | |
| 10·0 | | 13·4 | 54·0 | |
| 10·0 | | 13·9 | 44·6 | |
| 9·4 | | 15·4 | 23·4 | |
| 9·4 | | 15·9 | 34·8 | |
| 9·6 | | 17·9 | 9·6 | |
| 9·5 | | 26·4 | 29·9 | |
| 9·8 | | 32·9 | 6·8 | |
| 9·9 | | 33·9 | 16·9 | |
| 9·8 | | 40·9 | 10·2 | |
| 9·8 | | 47·5 | 59·4 | |
| 9·2 | | 51·9 | 6·3 | |
| 9·4 | | 51·9 | 31·0 | |
| 10·0 | | 55·9 | 30·0 | |
| 9·2 | | 58·9 | 34·0 | |
| 10·1 | 36 | 0·4 | 35·0 | |
| 9·4 | | 2·4 | 3·9 | |
| 9·8 | | 5·4 | 42·1 | |
| 9·6 | | 8·4 | 18·0 | |
| 9·2 | | 9·4 | 13·0 | |
| 8·9 | | 15·9 | 32·3 | |
| 10·0 | | 17·9 | 30·0 | |
| 10·1 | | 21·9 | 47·5 | |
| 9·6 | | 21·9 | 47·8 | |
| 8·7 | | 23·4 | 23·0 | 8·8 |
| 9·8 | | 24·9 | 10·7 | |
| 10·0 | | 33·9 | 1·7 | |
| 9·4 | | 36·9 | 49·4 | |
| 10·0 | | 37·4 | 15·1 | |
| 9·2 | | 40·4 | 20·5 | 9·0 |
| 8·5 | | 40·9 | 45·2 | 8·0 |
| 8·2 | | 41·5 | 56·4 | 8·4 |
| 9·8 | | 44·9 | 43·4 | |
| 9·5 | | 56·9 | 44·0 | |
| 9·5 | 37 | 7·9 | 23·6 | |
| 8·9 | | 7·9 | 31·6 | |
| 10·0 | | 17·4 | 15·8 | |
| 10·1 | | 19·9 | 1·0 | |
| 9·8 | | 19·9 | 37·5 | |
| 9·4 | | 20·9 | 54·8 | |
| 9·7 | | 23·6 | 1·8 | |
| 10·0 | | 25·4 | 48·7 | |
| 9·4 | | 26·9 | 42·4 | |
| 10·0 | | 38·9 | 21·2 | |
| 10·1 | | 44·9 | 30·6 | |
| 9·2 | | 46·5 | 57·2 | |
| 9·6 | | 47·9 | 9·2 | |
| 9·2 | | 52·9 | 36·8 | |
| 9·6 | | 55·4 | 28·5 | |
| 9·8 | | 59·9 | 55·3 | |
| 10·1 | 38 | 1·4 | 50·0 | |
| 9·6 | | 2·9 | 18·4 | |
| 9·4 | | 6·9 | 34·8 | 9·0 |
| 10·0 | | 10·9 | 17·2 | |
| 9·8 | | 19·9 | 4·2 | |
| 10·1 | | 23·9 | 51·8 | |
| 10·1 | | 27·4 | 50·6 | |
| 10·0 | | 33·5 | 58·7 | |
| 9·5 | | 34·9 | 8·6 | |

## 5281—5340.

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 38 | 38·9 | 18·9 | |
| 9·8 | | 40·9 | 55·7 | |
| 9·1 | | 44·4 | 7·2 | |
| 9·9 | | 45·4 | 20·0 | |
| 10·1 | | 46·9 | 28·2 | |
| 10·1 | | 47·4 | 39·3 | |
| 8·6 | | 47·9 | 42·2 | 9·0 |
| 9·6 | | 51·4 | 8·7 | |
| 9·3 | | 55·9 | 53·6 | |
| 9·8 | 39 | 4·4 | 19·4 | |
| 9·1 | | 4·9 | 43·7 | |
| 9·8 | | 12·4 | 7·6 | |
| 9·8 | | 20·9 | 14·4 | |
| 9·8 | | 24·4 | 38·6 | |
| 9·5 | | 30·5 | 58·2 | |
| 9·6 | | 30·9 | 9·0 | |
| 9·5 | | 46·9 | 12·2 | |
| 10·1 | | 54·4 | 7·6 | |
| 10·0 | | 55·9 | 43·8 | |
| 9·8 | | 59·9 | 49·9 | |
| 9·9 | 40 | 2·4 | 8·2 | |
| 9·2 | | 13·9 | 32·4 | |
| 9·6 | | 14·4 | 7·9 | |
| 9·6 | | 18·9 | 56·3 | |
| 9·4 | | 22·9 | 51·1 | |
| 9·8 | | 26·9 | 31·0 | |
| 9·6 | | 33·9 | 16·2 | |
| 9·3 | | 37·9 | 40·4 | |
| 10·1 | | 41·4 | 46·9 | |
| 9·8 | | 49·4 | 10·2 | |
| 9·8 | | 49·9 | 31·9 | |
| 9·1 | | 56·4 | 28·1 | 9·0 |
| 9·2 | 41 | 1·4 | 38·8 | |
| 9·2 | | 7·4 | 42·3 | |
| 8·6 | | 7·9 | 21·7 | 9·0 |
| 9·7 | | 9·9 | 56·6 | |
| 9·9 | | 12·4 | 50·9 | |
| 9·4 | | 14·9 | 7·6 | |
| 9·6 | | 16·7 | 57·3 | G |
| 9·5 | | 17·4 | 55·9 | |
| 10·1 | | 26·4 | 11·4 | |
| 10·1 | | 42·4 | 8·8 | |
| 9·6 | | 43·4 | 53·8 | |
| 9·8 | | 43·9 | 50·4 | |
| 9·8 | | 53·9 | 21·9 | |
| 10·1 | | 56·9 | 36·2 | |
| 8·9 | | 56·9 | 35·6 | |
| 9·8 | 42 | 2·9 | 5·4 | |
| 9·8 | | 4·9 | 11·3 | |
| 10·0 | | 4·9 | 38·1 | |
| 9·9 | | 5·9 | 0·4 | |
| 9·5 | | 10·4 | 5·7 | |
| 9·9 | | 11·4 | 4·6 | |
| 10·1 | | 16·9 | 53·8 | |
| 9·8 | | 17·7 | 59·6 | |
| 9·8 | | 18·9 | 29·9 | |
| 10·0 | | 22·4 | 15·2 | |
| 9·6 | | 22·9 | 28·4 | |
| 9·8 | | 23·9 | 39·7 | |
| 9·4 | | 24·7 | 59·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 20 | 124 | 5·4 |
| | 30 | 126 | 5·1 |
| | 40 | 127 | 4·8 |
| | 50 | 129 | 4·5 |

| 25 prec. | a | δ |
|---|---|---|
| | + | − |
| h m | s | ′ |
| 15 40 | 127 | 4·8 |
| 50 | 129 | 4·5 |
| 16 0 | 130 | 4·2 |
| 10 | 131 | 3·9 |

**5341—5400.**

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 28·4 | 10·1 | |
| 10·0 | | 36·4 | 30·7 | |
| 9·6 | | 36·9 | 54·8 | |
| 9·6 | | 42·4 | 27·5 | |
| 9·5 | | 46·9 | 17·3 | |
| 10·1 | | 49·4 | 12·4 | |
| 10·1 | | 49·4 | 38·1 | |
| 9·2 | | 54·9 | 34·0 | |
| 10·0 | | 57·9 | 29·7 | |
| 10·1 | 43 | 1·4 | 27·4 | |
| 9·0 | | 3·9 | 17·2 | |
| 10·0 | | 3·9 | 40·1 | |
| 9·2 | | 4·4 | 25·1 | |
| 10·1 | | 4·4 | 14·2 | |
| 9·8 | | 10·9 | 38·4 | |
| 9·8 | | 17·4 | 53·6 | |
| 10·1 | | 17·4 | 45·3 | |
| 9·8 | | 29·4 | 47·1 | |
| 9·8 | | 35·9 | 7·1 | |
| 9·8 | | 38·6 | 1·6 | |
| 9·0 | | 43·2 | 22·6 | |
| 9·0 | | 43·9 | 8·6 | 9·0 |
| 9·6 | | 44·9 | 9·7 | |
| 9·6 | 44 | 4·2 | 57·6 | |
| 9·6 | | 4·4 | 28·7 | |
| 9·4 | | 6·9 | 48·6 | |
| 9·8 | | 15·4 | 28·2 | |
| 9·6 | | 15·9 | 2·2 | |
| 10·1 | | 16·9 | 34·8 | |
| 9·2 | | 16·9 | 52·9 | |
| 10·1 | | 23·9 | 12·8 | |
| 9·2 | | 36·0 | 46·0 | |
| 9·0 | | 37·0 | 49·8 | |
| 10·1 | | 37·0 | 35·5 | |
| 9·6 | | 37·5 | 33·8 | |
| 9·8 | | 47·0 | 21·8 | |
| 10·1 | | 48·0 | 4·4 | |
| 10·0 | | 52·5 | 20·5 | |
| 9·6 | | 52·5 | 45·4 | |
| 9·4 | | 56·5 | 14·9 | |
| 10·0 | | 58·7 | 58·2 | |
| 10·1 | 45 | 11·0 | 44·6 | |
| 9·9 | | 11·0 | 54·6 | |
| 9·2 | | 18·5 | 16·1 | |
| 9·4 | | 18·5 | 8·3 | |
| 10·0 | | 20·5 | 52·5 | |
| 10·0 | | 32·5 | 26·1 | |
| 9·0 | | 37·0 | 49·0 | 8·8 |
| 9·8 | | 41·0 | 7·3 | |
| 10·0 | | 42·0 | 5·1 | |
| 9·8 | | 42·5 | 10·7 | |
| 9·8 | | 48·0 | 54·3 | |
| 9·6 | | 56·0 | 4·7 | |
| 9·8 | 46 | 0·0 | 43·9 | |
| 10·0 | | 0·0 | 32·0 | |
| 10·1 | | 5·5 | 0·3 | |
| 10·0 | | 7·5 | 31·7 | |
| 9·9 | | 8·0 | 15·4 | |
| 10·1 | | 13·0 | 42·0 | |
| 9·8 | | 14·5 | 28·3 | |

**5401—5460.**

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·1 | 46 | 15·7 | 2·0 | |
| 9·8 | | 17·0 | 9·3 | |
| 10·1 | | 19·5 | 42·5 | |
| 9·7 | | 22·0 | 27·0 | |
| 10·1 | | 25·5 | 22·8 | |
| 9·5 | | 37·0 | 50·7 | |
| 9·9 | | 37·5 | 43·1 | |
| 9·2 | | 42·5 | 14·3 | |
| 10·1 | | 43·5 | 18·1 | |
| 9·7 | | 54·0 | 49·5 | |
| 9·8 | | 57·0 | 35·2 | |
| 9·9 | 47 | 0·5 | 27·6 | : |
| 9·8 | | 2·5 | 27·1 | |
| 9·6 | | 4·0 | 48·1 | |
| 10·0 | | 6·0 | 42·1 | |
| 9·8 | | 11·5 | 3·2 | |
| 9·5 | | 12·0 | 48·1 | |
| 9·5 | | 17·0 | 22·7 | |
| 9·8 | | 17·0 | 21·0 | |
| 9·7 | | 18·2 | 59·1 | |
| 9·6 | | 22·5 | 50·9 | |
| 9·6 | | 24·0 | 46·1 | : |
| 10·0 | | 24·0 | 51·9 | |
| 9·6 | | 28·0 | 5·5 | |
| 8·9 | | 32·5 | 14·3 | 9·5 |
| 9·5 | | 34·0 | 4·7 | |
| 9·8 | | 36·0 | 22·7 | |
| 8·4 | | 38·0 | 41·6 | 8·5 |
| 9·4 | | 44·5 | 7·7 | |
| 9·6 | | 54·5 | 40·0 | |
| 10·0 | | 55·5 | 41·8 | |
| 9·9 | 48 | 0·0 | 27·5 | |
| 10·1 | | 1·0 | 42·2 | |
| 9·3 | | 4·5 | 29·6 | |
| 10·0 | | 7·0 | 45·6 | |
| 10·0 | | 9·5 | 4·8 | |
| 10·0 | | 20·0 | 23·8 | |
| 10·0 | | 31·0 | 5·8 | |
| 10·1 | | 33·0 | 19·9 | |
| 9·8 | | 34·5 | 4·8 | |
| 9·7 | | 37·5 | 46·6 | |
| 10·1 | | 42·0 | 14·9 | |
| 9·8 | | 55·5 | 47·9 | |
| 10·1 | 49 | 0·5 | 23·9 | |
| 10·0 | | 1·5 | 44·4 | |
| 10·1 | | 3·0 | 16·4 | |
| 9·4 | | 7·5 | 54·0 | |
| 9·8 | | 11·0 | 26·4 | |
| 10·1 | | 11·5 | 2·5 | |
| 10·1 | | 18·5 | 38·5 | |
| 9·6 | | 21·0 | 54·1 | |
| 9·6 | | 28·0 | 32·6 | |
| 10·1 | | 31·0 | 53·8 | |
| 9·0 | | 32·7 | 58·0 | 9·0 |
| 10·0 | | 35·5 | 33·7 | |
| 9·2 | | 38·5 | 58·4 | 9·0 |
| 9·6 | | 43·5 | 43·3 | |
| 10·1 | | 50·5 | 42·5 | |
| 10·1 | | 52·5 | 39·0 | |
| 10·1 | | 54·7 | 56·7 | |

**5461—5520.**

| mag. | 15h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·9 | 50 | 4·5 | 19·8 | |
| 10·1 | | 9·5 | 22·7 | |
| 8·4 | | 26·2 | 57·2 | 9·0 |
| 9·2 | | 36·5 | 58·7 | : |
| 9·1 | | 38·0 | 28·0 | |
| 9·6 | | 38·5 | 0·8 | |
| 9·1 | | 44·0 | 58·0 | |
| 9·0 | | 48·5 | 0·9 | |
| 9·6 | | 51·0 | 31·1 | |
| 9·8 | 51 | 3·2 | 58·1 | |
| 9·7 | | 5·0 | 38·1 | |
| 10·1 | | 6·0 | 57·0 | |
| 9·6 | | 10·0 | 57·0 | |
| 10·0 | | 11·5 | 55·5 | |
| 10·1 | | 13·0 | 11·1 | |
| 10·1 | | 20·5 | 35·9 | |
| 9·5 | | 21·5 | 15·9 | |
| 9·6 | | 25·0 | 54·0 | |
| 9·8 | | 30·0 | 28·1 | |
| 9·6 | | 30·5 | 9·0 | |
| 9·5 | | 32·0 | 6·9 | |
| 9·7 | | 40·0 | 1·9 | |
| 9·6 | | 44·0 | 26·0 | |
| 9·9 | | 54·0 | 22·1 | |
| 10·0 | | 57·5 | 7·6 | |
| 9·6 | | 57·5 | 45·2 | |
| 10·1 | | 59·0 | 47·6 | |
| 9·6 | 52 | 1·2 | 57·1 | |
| 9·0 | | 2·5 | 37·2 | |
| 9·8 | | 7·5 | 5·0 | |
| 9·8 | | 12·0 | 18·5 | |
| 9·6 | | 14·0 | 40·1 | |
| 9·6 | | 18·0 | 24·0 | |
| 9·8 | | 19·0 | 43·6 | |
| 9·6 | | 25·0 | 15·2 | |
| 10·1 | | 31·0 | 6·5 | |
| 9·3 | | 38·5 | 52·7 | |
| 10·1 | | 53·0 | 45·2 | |
| 8·0 | | 53·0 | 7·1 | 8·0 G |
| 9·8 | | 58·0 | 5·0 | |
| 10·1 | | 59·5 | 5·7 | |
| 9·6 | 53 | 4·5 | 43·3 | |
| 9·3 | | 7·5 | 29·5 | : |
| 10·0 | | 12·0 | 6·7 | |
| 9·6 | | 21·0 | 4·2 | |
| 9·6 | | 24·5 | 17·0 | |
| 9·8 | | 25·5 | 53·1 | |
| 9·8 | | 27·5 | 52·8 | |
| 9·4 | | 29·5 | 22·5 | |
| 8·6 | | 31·5 | 24·4 | 8·5 |
| 9·2 | | 36·0 | 22·2 | 9·0 |
| 9·3 | | 50·8 | 44·1 | |
| 9·6 | | 54·0 | 13·4 | |
| 9·5 | 54 | 2·8 | 44·5 | |
| 9·7 | | 6·0 | 52·1 | |
| 10·1 | | 7·0 | 30·0 | |
| 9·6 | | 7·5 | 44·6 | |
| 9·8 | | 10·0 | 28·8 | |
| 9·3 | | 10·8 | 33·4 | |
| 10·1 | | 16·0 | 39·8 | |

**5521—5580.**

| mag. | 15h.–16h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·8 | 54 | 16·8 | 58·6 | |
| 9·4 | | 18·8 | 15·9 | |
| 10·1 | | 19·5 | 39·5 | |
| 9·6 | | 20·8 | 50·4 | |
| 10·0 | | 22·0 | 39·3 | |
| 9·8 | | 23·3 | 49·6 | |
| 8·7 | | 23·3 | 46·5 | 9·0 |
| 10·0 | | 25·0 | 10·8 | |
| 10·0 | | 32·5 | 58·7 | |
| 10·1 | | 42·5 | 22·6 | |
| 10·0 | | 43·5 | 7·4 | |
| 9·8 | | 53·0 | 53·2 | |
| 10·0 | | 54·0 | 16·5 | |
| 9·8 | | 56·5 | 56·5 | |
| 9·0 | | 56·8 | 53·3 | 8·5 |
| 9·5 | 55 | 22·0 | 32·1 | |
| 9·8 | | 24·0 | 41·1 | |
| 9·8 | | 32·0 | 59·8 | |
| 8·6 | | 36·5 | 45·4 | 9·0 |
| 9·6 | | 44·0 | 47·6 | |
| 10·0 | | 56·0 | 8·1 | |
| 9·0 | | 57·0 | 41·8 | 9·5 |
| 8·8 | 56 | 6·5 | 29·4 | 9·0 G |
| 9·3 | | 7·0 | 39·1 | |
| 9·6 | | 14·0 | 1·5 | |
| 9·4 | | 21·0 | 57·7 | |
| 10·0 | | 34·5 | 35·1 | |
| 9·0 | | 37·6 | 57·1 | |
| 8·6 | | 50·5 | 13·4 | 8·5 |
| 9·8 | | 54·0 | 46·3 | |
| 10·0 | 57 | 0·0 | 9·1 | |
| 9·2 | | 5·5 | 53·1 | 9·0 |
| 10·0 | | 6·0 | 50·9 | |
| 8·9 | | 17·5 | 13·4 | 8·5 |
| 9·6 | | 19·0 | 0·9 | 9·0 |
| 9·6 | | 19·5 | 34·1 | |
| 9·4 | | 25·0 | 36·5 | |
| 10·0 | | 26·5 | 16·7 | |
| 9·6 | | 30·0 | 59·8 | |
| 9·8 | | 30·5 | 59·1 | |
| 8·5 | | 37·0 | 10·0 | 8·5 |
| 9·8 | | 47·5 | 37·5 | |
| 8·8 | | 56·0 | 27·7 | 8·0 GS |
| 10·0 | | 57·8 | 45·2 | |
| 10·0 | 58 | 15·5 | 27·7 | |
| 10·0 | | 16·8 | 46·6 | |
| 9·6 | | 36·0 | 29·9 | 8·5 |
| 9·4 | | 38·0 | 28·8 | |
| 10·0 | | 46·5 | 47·3 | |
| 9·8 | | 49·5 | 13·6 | |
| 9·6 | | 56·0 | 13·2 | |
| 10·0 | 59 | 1·8 | 47·1 | |
| 8·8 | | 5·0 | 58·8 | |
| 9·6 | | 6·0 | 18·5 | |
| 9·6 | | 15·5 | 34·7 | |
| 9·6 | | 23·5 | 1·9 | |
| 9·8 | | 25·8 | 38·6 | |
| 8·4 | | 27·5 | 23·1 | 8·0 GS |
| 9·1 | 0 | 2·5 | 32·1 | 8·5 |
| 9·3 | | 4·0 | 50·9 | |



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### 5581—5640.

| mag. | 16h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·2 | 0 | 27·0 | 36·1 | |
| 10·0 | | 32·5 | 32·1 | |
| 10·0 | | 34·8 | 29·1 | |
| 8·8 | | 36·5 | 50·3 | 8·8 |
| 9·4 | | 42·5 | 13·7 | |
| 9·6 | | 48·5 | 43·4 | |
| 9·8 | | 56·5 | 14·9 | |
| 10·0 | 1 | 20·0 | 47·1 | |
| 10·0 | | 20·8 | 3·5 | |
| 9·1 | | 23·5 | 9·0 | |
| 7·4 | | 24·0 | 35·9 | 7·8 GSr |
| 9·0 | | 32·5 | 46·2 | |
| 9·1 | | 33·0 | 16·0 | |
| 10·0 | | 50·0 | 45·5 | |
| 10·0 | | 51·5 | 45·1 | |
| 10·0 | 2 | 5·5 | 22·4 | |
| 9·8 | | 23·5 | 31·2 | |
| 10·0 | | 29·5 | 42·5 | |
| 9·0 | | 41·5 | 14·9 | 9·0 |
| 9·3 | | 53·5 | 55·1 | 9·0 |
| 10·0 | 3 | 11·0 | 18·1 | |
| 10·0 | | 29·0 | 45·1 | |
| 10·0 | | 29·8 | 3·2 | |
| 10·0 | | 43·0 | 34·5 | |
| 9·0 | | 43·5 | 24·6 | |
| 9·6 | | 52·0 | 37·3 | |
| 10·0 | | 55·8 | 34·8 | |
| 9·0 | 4 | 6·0 | 52·7 | 9·0 |
| 10·0 | | 6·8 | 46·1 | |
| 9·8 | | 9·5 | 55·8 | |
| 9·8 | | 12·5 | 31·7 | |
| 9·8 | | 24·0 | 51·1 | |
| 10·0 | | 30·5 | 50·5 | |
| 10·0 | | 30·5 | 50·7 | |
| 8·9 | | 59·5 | 33·8 | |
| 9·8 | 5 | 6·8 | 51·1 | |
| 9·3 | | 25·0 | 16·0 | |
| 9·1 | | 26·5 | 4·1 | |
| 9·8 | | 30·5 | 24·3 | |
| 9·6 | 6 | 11·0 | 29·4 | |
| 9·4 | | 12·0 | 37·4 | |
| 9·8 | | 36·0 | 42·1 | |
| 8·8 | | 49·5 | 38·2 | 8·5 G |
| 10·0 | | 56·5 | 21·8 | |
| 9·2 | 7 | 4·5 | 14·1 | |
| 10·0 | | 22·5 | 40·1 | |
| 9·3 | | 22·5 | 32·3 | 8·5 |
| 9·0 | | 24·0 | 47·3 | |
| 10·0 | | 36·0 | 37·5 | |
| 10·0 | | 36·5 | 18·4 | |
| 9·0 | | 43·5 | 41·1 | |
| 10·0 | | 55·5 | 40·9 | |
| 10·0 | 8 | 30·0 | 48·5 | |
| 8·8 | | 54·5 | 3·2 | 9·0 |
| 9·1 | 9 | 10·0 | 49·3 | |
| 9·1 | | 19·5 | 12·8 | 9·5 |
| 8·4 | | 26·0 | 17·9 | 8·5 |
| 10·0 | | 33·0 | 47·2 | |
| 9·4 | | 41·0 | 5·6 | |
| 10·0 | 10 | 0·0 | 39·6 | |

### 5641—5700.

| mag. | 16h. m | s | −61° ′ | |
|---|---|---|---|---|
| 10·0 | 10 | 3·0 | 55·2 | |
| 9·8 | | 25·0 | 25·9 | |
| 9·8 | | 38·0 | 7·6 | |
| 9·3 | | 45·5 | 59·0 | |
| 10·0 | | 45·5 | 22·5 | |
| 9·5 | | 45·5 | 19·7 | |
| 8·9 | | 54·5 | 18·5 | 8·5 |
| 10·0 | 11 | 4·0 | 42·8 | |
| 10·0 | | 4·5 | 48·8 | |
| 10·0 | | 11·5 | 30·9 | |
| 10·0 | | 16·0 | 50·9 | |
| 9·1 | | 17·0 | 3·9 | 9·0 |
| 10·0 | | 19·0 | 47·6 | |
| 8·6 | | 44·5 | 0·9 | 9·0 |
| 8·5 | 12 | 1·5 | 22·6 | 8·5 |
| 9·0 | | 2·5 | 37·9 | 8·5 |
| 9·6 | | 6·5 | 14·5 | |
| 9·6 | | 18·5 | 31·9 | |
| 10·0 | | 27·5 | 49·5 | |
| 8·6 | | 59·0 | 52·1 | 9·5 |
| 8·9 | 13 | 23·5 | 50·6 | 9·0 |
| 10·0 | | 24·5 | 25·7 | |
| 10·0 | | 24·5 | 26·5 | |
| 9·3 | | 31·5 | 28·2 | |
| 9·4 | | 54·0 | 1·1 | |
| 8·8 | 14 | 2·5 | 54·9 | 8·5 |
| 9·0 | | 13·5 | 33·4 | |
| 9·2 | | 23·5 | 26·9 | |
| 9·0 | | 26·5 | 2·9 | 9·0 |
| 10·0 | | 26·5 | 37·2 | |
| 10·0 | | 49·5 | 48·9 | |
| 9·0 | | 57·0 | 31·9 | |
| 9·3 | | 58·5 | 19·3 | |
| 9·2 | 15 | 1·0 | 47·9 | |
| 8·6 | | 3·5 | 17·5 | |
| 10·0 | | 6·5 | 28·3 | |
| 9·6 | | 29·5 | 14·9 | |
| 10·0 | 16 | 6·0 | 17·6 | |
| 9·2 | | 22·0 | 32·9 | |
| 9·3 | | 23·0 | 41·3 | |
| 10·0 | | 39·5 | 29·3 | |
| 9·0 | | 49·0 | 8·9 | |
| 8·5 | | 52·5 | 20·2 | 8·0 G |
| 9·0 | 17 | 17·0 | 25·7 | |
| 10·0 | | 18·5 | 31·5 | |
| 9·6 | | 20·0 | 10·4 | |
| 9·8 | | 25·5 | 31·3 | |
| 9·6 | | 31·0 | 13·9 | |
| 9·6 | | 36·0 | 39·5 | |
| 9·2 | | 39·5 | 12·2 | 9·0 |
| 9·0 | | 42·0 | 46·8 | |
| 9·4 | | 42·5 | 9·1 | |
| 9·0 | | 48·0 | 5·9 | |
| 9·1 | 18 | 5·0 | 1·4 | |
| 10·0 | | 28·5 | 8·2 | |
| 10·0 | | 31·0 | 1·3 | |
| 9·8 | | 34·0 | 10·9 | |
| 8·4 | | 37·5 | 55·5 | |
| 8·6 | | 39·5 | 44·1 | |
| 9·5 | | 40·0 | 31·9 | |

### 5701—5760.

| mag. | 16h. m | s | −61° ′ | |
|---|---|---|---|---|
| 7·4 | 19 | 44·5 | 21·2 | 5·8 GSc |
| 9·0 | | 46·5 | 53·8 | 8·2 |
| 9·6 | | 55·5 | 25·5 | |
| 9·6 | 20 | 1·5 | 57·7 | |
| 10·0 | | 1·5 | 34·0 | |
| 10·0 | | 6·5 | 32·9 | |
| 9·2 | | 30·0 | 1·7 | |
| 9·8 | | 56·5 | 21·9 | |
| 9·8 | 21 | 5·0 | 36·0 | |
| 9·6 | | 11·5 | 40·8 | |
| 9·8 | | 13·0 | 38·9 | |
| 10·0 | | 22·5 | 38·9 | |
| 8·0 | | 49·5 | 35·1 | 8·0 |
| 10·0 | | 59·5 | 47·8 | |
| 10·0 | 22 | 2·5 | 0·6 | |
| 9·0 | | 9·5 | 47·5 | 9·0 |
| 8·6 | | 11·0 | 42·9 | |
| 9·8 | | 16·0 | 9·9 | |
| 10·0 | | 18·5 | 37·2 | |
| 8·3 | | 21·0 | 50·9 | 7·5 G |
| 8·8 | | 23·5 | 59·6 | |
| 9·5 | | 25·5 | 51·2 | |
| 10·0 | | 29·0 | 7·9 | |
| 9·8 | | 31·5 | 11·9 | |
| 9·8 | | 46·0 | 49·5 | |
| 9·1 | | 49·0 | 3·0 | |
| 9·6 | 23 | 4·8 | 3·2 | |
| 9·8 | | 10·0 | 13·8 | |
| 10·0 | | 19·5 | 22·8 | |
| 9·0 | | 24·0 | 6·8 | |
| 9·8 | | 26·0 | 38·7 | |
| 9·2 | | 41·5 | 14·8 | |
| 9·6 | | 59·0 | 18·2 | |
| 8·5 | 24 | 3·0 | 37·6 | 8·5 |
| 10·0 | | 9·0 | 35·6 | |
| 9·4 | | 24·0 | 9·7 | |
| 9·6 | | 24·5 | 5·2 | 9·5 |
| 9·6 | | 34·5 | 21·7 | |
| 10·0 | | 55·5 | 1·9 | |
| 9·3 | | 58·5 | 27·5 | |
| 9·3 | 25 | 4·0 | 17·3 | |
| 10·0 | | 15·5 | 7·8 | |
| 10·0 | | 20·5 | 18·2 | |
| 8·8 | | 48·0 | 58·7 | 8·2 |
| 9·4 | 26 | 4·5 | 22·0 | 9·0 |
| 8·0 | | 15·5 | 17·5 | *8·0* |
| 10·0 | | 22·5 | 11·8 | |
| 9·1 | | 32·5 | 19·4 | |
| 8·8 | | 51·0 | 46·9 | |
| 10·0 | | 56·0 | 52·0 | |
| 10·0 | 27 | 0·5 | 51·6 | |
| 10·0 | | 12·5 | 32·2 | |
| 10·0 | | 14·5 | 35·7 | |
| 10·0 | | 37·5 | 49·6 | |
| 10·0 | 28 | 32·0 | 20·0 | |
| 10·0 | 29 | 29·0 | 35·8 | |
| 9·4 | | 50·0 | 11·8 | |
| 9·2 | | 57·1 | 56·9 | |
| 9·2 | | 57·2 | 37·9 | 9·0 |
| 8·4 | 30 | 35·8 | 49·5 | 8·8 |

### 5761—5820.

| mag. | 16h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 30 | 46·5 | 37·0 | 8·2 |
| 8·6 | | 56·0 | 4·4 | 9·0 |
| 9·6 | 31 | 17·5 | 25·7 | |
| 9·0 | | 17·5 | 11·8 | 9·5 |
| 9·3 | | 21·0 | 28·2 | |
| 7·8 | | 24·5 | 32·3 | 7·0 GSc |
| 9·2 | | 38·5 | 18·4 | |
| 9·3 | | 50·0 | 56·9 | |
| 8·4 | | 58·0 | 4·4 | 8·5 |
| 9·3 | 32 | 15·5 | 53·9 | 8·8 |
| 9·8 | | 28·0 | 41·1 | |
| 9·4 | | 34·5 | 11·0 | 8·5 G |
| 9·8 | | 42·0 | 57·7 | |
| 9·7 | 33 | 31·0 | 15·8 | |
| 6·9 | 34 | 43·0 | 25·4 | 7·0 GSc |
| 9·6 | 35 | 1·0 | 29·1 | |
| 9·7 | | 23·0 | 24·2 | 9·0 |
| 8·9 | 36 | 17·0 | 55·1 | 8·8 |
| 9·7 | | 29·0 | 48·0 | |
| 8·6 | | 38·0 | 34·1 | 9·0 |
| 9·4 | | 46·5 | 44·2 | |
| 9·5 | 37 | 1·5 | 52·7 | |
| 9·6 | | 11·0 | 51·2 | |
| 8·2 | | 18·0 | 15·6 | GS |
| 9·6 | | 24·0 | 20·7 | |
| 9·6 | | 33·5 | 24·0 | |
| 7·5 | | 44·5 | 9·5 | 7·2 GS |
| 9·3 | | 55·5 | 4·5 | 8·8 |
| 9·6 | 38 | 7·0 | 20·2 | |
| 9·2 | | 48·0 | 40·2 | |
| 9·1 | 39 | 8·5 | 52·1 | |
| 9·4 | | 34·0 | 17·1 | 10·0 |
| 9·4 | | 36·0 | 11·2 | |
| 9·8 | 40 | 0·0 | 5·9 | |
| 9·3 | | 50·0 | 37·3 | |
| 9·6 | 41 | 21·0 | 18·9 | |
| 9·7 | | 23·0 | 16·9 | |
| 9·7 | | 24·0 | 56·0 | |
| 9·6 | 42 | 22·0 | 22·2 | |
| 9·7 | | 41·0 | 27·1 | |
| 8·6 | 43 | 18·5 | 34·3 | 9·0 |
| 9·8 | | 47·0 | 1·6 | |
| 9·2 | | 52·5 | 39·4 | 9·0 |
| 9·6 | 44 | 2·0 | 35·0 | |
| 9·8 | | 3·5 | 34·6 | |
| 9·4 | | 9·5 | 53·9 | |
| 9·6 | | 39·0 | 3·6 | |
| 7·0 | | 58·5 | 26·0 | 7·0 GSg |
| 8·9 | 45 | 1·5 | 34·0 | 9·0 |
| 8·0 | | 30·0 | 47·4 | |
| 9·0 | 46 | 15·0 | 57·4 | |
| 9·4 | | 23·5 | 17·1 | |
| 9·8 | | 44·5 | 55·0 | |
| 9·8 | | 47·0 | 51·0 | |
| 9·8 | | 53·0 | 27·0 | |
| 9·7 | 47 | 12·5 | 39·2 | |
| 7·5 | | 20·0 | 32·3 | 7·5 GS |
| 8·6 | | 24·5 | 57·7 | 9·2 |
| 9·8 | | 33·0 | 8·1 | |
| 8·8 | 49 | 19·5 | 12·6 | 8·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 130 | 4·2 |
| | 10 | 131 | 3·9 |
| | 20 | 133 | 3·5 |
| | 30 | 134 | 3·2 |
| | 40 | 135 | 2·9 |
| | 50 | 136 | 2·5 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 40 | 135 | 2·9 |
| | 50 | 136 | 2·5 |
| 17 | 0 | 136 | 2·2 |
| | 10 | 137 | 1·8 |
| | 20 | 137 | 1·5 |
| | 30 | 138 | 1·1 |
| | 40 | 138 | 0·7 |

## 5821—5880.

| | 16h.–17h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·2 | 49 | 30·5 | 27·0 | |
| 9·0 | | 43·5 | 22·8 | |
| 9·4 | 50 | 7·5 | 32·3 | |
| 7·6 | | 26·5 | 56·9 | 8·0 GS |
| 9·0 | | 57·0 | 22·2 | 8·5 |
| 9·1 | 51 | 10·5 | 35·7 | |
| 8·5 | | 54·0 | 49·2 | 8·2 |
| 9·0 | 52 | 7·0 | 33·3 | 8·8 |
| 9·0 | | 17·5 | 45·9 | 8·0 |
| 9·8 | | 17·8 | 38·5 | |
| 9·6 | 53 | 35·0 | 34·2 | |
| 9·7 | | 54·5 | 43·6 | |
| 9·6 | 54 | 0·0 | 5·1 | |
| 8·6 | 55 | 1·0 | 6·0 | 9·0 |
| 9·3 | | 15·5 | 50·6 | |
| 8·9 | 56 | 16·5 | 46·8 | |
| 9·0 | | 56·0 | 57·9 | 10·0 |
| 8·8 | | 59·5 | 6·3 | |
| 9·2 | 57 | 19·5 | 45·2 | |
| 9·8 | | 21·5 | 27·0 | |
| 9·0 | | 34·5 | 28·0 | |
| 6·6 | 58 | 42·5 | 30·4 | 6·5 GS |
| 9·8 | | 56·5 | 56·7 | |
| 9·4 | 59 | 26·5 | 35·5 | |
| 9·6 | 0 | 32·0 | 48·9 | |
| 9·7 | 1 | 37·5 | 52·3 | |
| 9·7 | | 46·5 | 3·9 | 10·0 |
| 9·2 | | 54·5 | 11·3 | |
| 9·7 | 2 | 27·5 | 23·7 | |
| 8·4 | | 28·5 | 57·4 | 9·0 |
| 8·8 | | 31·5 | 23·4 | |
| 8·6 | | 56·5 | 0·1 | 9·0 |
| 9·2 | 3 | 40·0 | 24·1 | |
| 9·2 | 4 | 49·5 | 2·2 | 8·5 |
| 9·4 | 5 | 2·8 | 58·9 | |
| 8·4 | | 9·9 | 16·5 | |
| 10·0 | | 25·4 | 23·3 | |
| 9·9 | | 28·3 | 41·0 | |
| 9·1 | | 32·5 | 55·0 | |
| 10·0 | | 35·6 | 2·7 | |
| 9·4 | | 37·8 | 49·8 | |
| 9·5 | | 38·1 | 55·4 | |
| 9·3 | 6 | 0·4 | 12·9 | |
| 9·5 | | 11·8 | 47·6 | |
| 9·5 | | 24·4 | 17·9 | |
| 9·6 | | 25·8 | 42·8 | |
| 8·8 | | 34·3 | 44·0 | |
| 10·0 | | 45·3 | 36·2 | |
| 9·6 | | 56·3 | 43·5 | |
| 10·0 | 7 | 1·8 | 56·8 | |
| 9·8 | | 11·8 | 48·3 | |
| 9·6 | | 24·3 | 44·3 | |
| 9·9 | | 27·8 | 37·0 | |
| 9·4 | | 32·8 | 54·8 | |
| 10·0 | | 38·3 | 47·1 | |
| 9·4 | | 43·3 | 58·9 | |
| 9·6 | | 47·9 | 18·7 | |
| 9·6 | | 56·9 | 23·3 | |
| 9·8 | | 59·9 | 14·8 | |
| 9·1 | 8 | 12·3 | 35·5 | |

## 5881—5940.

| | 17h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·9 | 8 | 14·4 | 23·3 | |
| 9·6 | | 22·3 | 55·9 | |
| 9·8 | | 23·9 | 22·3 | |
| 9·8 | | 24·7 | 39·9 | |
| 8·6 | | 25·9 | 58·5 | 8·7 |
| 10·0 | | 39·8 | 1·4 | |
| 9·3 | 9 | 7·4 | 18·8 | |
| 9·9 | | 22·4 | 8·4 | |
| 9·5 | | 28·1 | 2·9 | |
| 9·0 | | 33·3 | 34·4 | 9·5 |
| 9·6 | | 41·8 | 40·5 | 9·0 |
| 10·0 | | 43·4 | 16·6 | |
| 9·8 | | 47·4 | 27·1 | |
| 9·6 | 10 | 11·8 | 1·5 | |
| 9·8 | | 20·8 | 40·3 | |
| 9·8 | | 22·3 | 47·6 | |
| 9·6 | | 26·3 | 44·6 | |
| 9·6 | 11 | 13·4 | 8·3 | |
| 9·0 | | 14·6 | 58·2 | |
| 9·9 | | 30·9 | 18·2 | |
| 10·0 | | 33·4 | 27·3 | |
| 8·2 | | 38·3 | 36·0 | |
| 10·0 | | 51·4 | 7·3 | |
| 9·0 | | 51·9 | 14·0 | 9·5 |
| 9·8 | | 52·3 | 48·1 | |
| 9·6 | | 52·4 | 9·7 | |
| 9·8 | 12 | 2·9 | 14·9 | |
| 9·4 | | 6·4 | 15·5 | |
| 9·9 | | 8·4 | 39·2 | |
| 9·2 | | 21·9 | 14·1 | 9·0 |
| 10·0 | | 36·9 | 12·1 | |
| 9·6 | | 53·8 | 32·9 | |
| 8·4 | | 54·3 | 30·5 | |
| 9·5 | 13 | 21·3 | 30·9 | |
| 9·8 | | 25·3 | 49·5 | |
| 8·5 | | 37·3 | 39·5 | |
| 9·6 | | 52·9 | 17·7 | |
| 9·5 | 14 | 4·3 | 37·6 | |
| 9·9 | | 21·3 | 55·2 | |
| 8·9 | | 41·9 | 21·0 | 9·0 |
| 8·2 | | 52·9 | 21·4 | 8·5 |
| 9·5 | | 59·3 | 38·5 | |
| 9·4 | 15 | 1·3 | 45·9 | |
| 9·0 | | 5·9 | 24·1 | 9·0 |
| 9·6 | | 14·3 | 50·6 | |
| 9·6 | | 17·3 | 34·2 | |
| 9·9 | | 44·4 | 24·9 | |
| 9·4 | | 47·8 | 35·2 | |
| 9·6 | | 48·3 | 51·5 | |
| 9·8 | 16 | 23·8 | 35·9 | |
| 9·2 | | 25·8 | 33·4 | |
| 9·1 | | 32·4 | 19·7 | |
| 9·0 | | 35·9 | 3·8 | 9·5 |
| 9·8 | | 51·3 | 0·7 | |
| 9·8 | 17 | 10·9 | 27·9 | |
| 9·3 | | 47·4 | 10·9 | 9·0 |
| 7·2 | | 57·8 | 39·2 | 7·2 GS |
| 10·0 | 18 | 1·9 | 2·9 | |
| 8·9 | | 18·8 | 2·3 | 9·5 |
| 9·8 | | 18·9 | 16·0 | |

## 5941—6000.

| | 17h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8·8 | 18 | 31·3 | 40·4 | 8·2 |
| 9·2 | | 33·3 | 38·8 | |
| 10·0 | | 40·2 | 4·8 | |
| 10·0 | | 42·4 | 10·9 | |
| 10·0 | | 55·9 | 16·9 | |
| 8·8 | | 58·8 | 39·9 | 8·5 |
| 9·9 | 19 | 6·3 | 41·2 | |
| 9·5 | | 9·3 | 58·1 | |
| 8·9 | | 9·4 | 58·5 | 8·7 |
| 9·5 | | 16·3 | 55·2 | |
| 9·6 | | 23·8 | 56·4 | |
| 9·8 | | 27·9 | 13·9 | |
| 9·6 | | 45·4 | 14·9 | |
| 10·0 | | 45·8 | 42·6 | |
| 9·8 | 20 | 5·3 | 42·8 | |
| 9·8 | | 13·8 | 54·6 | |
| 8·5 | | 27·4 | 10·5 | 9·0 |
| 8·5 | | 32·3 | 50·8 | 8·3 |
| 9·4 | | 45·8 | 53·2 | |
| 9·6 | | 47·4 | 29·0 | |
| 9·9 | 21 | 0·3 | 49·2 | |
| 9·8 | | 14·9 | 24·9 | |
| 9·9 | | 24·4 | 15·3 | |
| 9·4 | | 34·3 | 51·1 | 9·0 |
| 9·4 | | 45·9 | 20·5 | |
| 10·0 | 22 | 0·4 | 1·5 | |
| 9·3 | | 4·2 | 30·9 | |
| 8·9 | | 5·3 | 32·3 | 9·0 |
| 8·6 | | 29·4 | 26·0 | 7·5 G |
| 9·5 | 23 | 18·8 | 30·4 | |
| 9·6 | | 37·4 | 58·5 | |
| 9·8 | 24 | 4·4 | 10·1 | |
| 9·4 | | 13·8 | 30·5 | |
| 9·8 | | 18·9 | 21·6 | |
| 8·7 | | 22·3 | 40·5 | 8·5 |
| 10·0 | | 30·4 | 5·9 | |
| 9·2 | | 43·9 | 16·6 | 9·0 |
| 9·0 | | 50·3 | 38·6 | |
| 9·6 | | 55·3 | 44·4 | |
| 9·6 | 25 | 7·8 | 41·0 | |
| 8·5 | | 8·9 | 19·6 | 8·5 |
| 9·6 | | 28·9 | 26·2 | |
| 9·1 | | 34·9 | 18·9 | 9·5 |
| 9·6 | | 58·1 | 58·5 | |
| 10·0 | 26 | 4·3 | 46·0 | |
| 10·0 | | 12·3 | 32·1 | |
| 9·8 | | 19·4 | 11·0 | |
| 9·1 | | 20·8 | 41·8 | 9·5 |
| 9·8 | | 38·8 | 34·4 | |
| 10·0 | | 45·9 | 11·7 | |
| 9·6 | | 58·9 | 10·5 | |
| 9·8 | 27 | 5·8 | 38·6 | |
| 9·8 | | 6·3 | 37·7 | |
| 10·0 | | 30·9 | 19·7 | |
| 9·2 | | 30·9 | 3·0 | |
| 10·0 | | 44·8 | 32·9 | |
| 9·4 | | 46·9 | 58·2 | |
| 9·5 | | 51·3 | 49·9 | |
| 9·8 | | 56·4 | 28·8 | |
| 9·8 | 28 | 7·4 | 9·3 | |

## 6001—6060.

| | 17h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·4 | 28 | 13·4 | 6·9 | |
| 9·4 | | 39·8 | 51·4 | 10·0 |
| 9·6 | | 43·4 | 12·9 | |
| 9·0 | | 45·3 | 58·3 | |
| 9·8 | 29 | 14·9 | 10·2 | |
| 8·8 | | 16·3 | 53·9 | |
| 9·3 | | 24·9 | 11·5 | |
| 10·0 | | 44·4 | 28·9 | |
| 8·9 | | 44·9 | 17·8 | 9·5 |
| 10·0 | | 48·8 | 46·9 | |
| 9·8 | | 55·8 | 0·7 | |
| 9·6 | | 58·8 | 35·6 | |
| 9·1 | 30 | 7·9 | 7·6 | 9·5 |
| 10·0 | | 18·8 | 57·1 | |
| 9·4 | 31 | 13·4 | 4·8 | |
| 10·0 | | 53·4 | 9·5 | |
| 9·6 | | 54·3 | 37·8 | |
| 9·1 | 32 | 11·9 | 28·7 | 8·3 G |
| 9·5 | | 27·3 | 31·9 | |
| 9·2 | 33 | 31·3 | 35·5 | 9·3 |
| 10·0 | | 33·3 | 57·0 | |
| 9·2 | | 49·4 | 6·6 | |
| 10·0 | | 55·3 | 36·9 | |
| 9·6 | | 59·9 | 13·9 | |
| 9·8 | 34 | 18·9 | 24·3 | |
| 9·4 | | 22·4 | 0·7 | G |
| 9·4 | | 53·4 | 58·1 | |
| 8·4 | 35 | 1·2 | 2·2 | 8·5 G |
| 9·0 | | 3·3 | 34·2 | 9·0 |
| 10·0 | | 3·3 | 58·9 | |
| 9·4 | | 5·3 | 57·9 | 9·5 |
| 9·6 | | 5·9 | 11·3 | |
| 9·8 | | 18·9 | 16·1 | |
| 9·4 | | 29·3 | 46·5 | |
| 9·6 | | 29·8 | 29·7 | |
| 9·2 | | 32·8 | 31·7 | 9·0 |
| 9·6 | | 46·8 | 42·5 | |
| 9·8 | | 51·4 | 9·4 | |
| 9·1 | | 58·4 | 20·8 | |
| 8·4 | 36 | 5·1 | 58·7 | 7·8 G |
| 9·6 | | 27·3 | 47·0 | |
| 9·2 | | 46·4 | 11·4 | |
| 9·6 | | 57·3 | 33·1 | |
| 8·9 | | 59·9 | 25·3 | |
| 9·9 | 37 | 3·1 | 58·1 | |
| 10·0 | | 6·9 | 17·9 | |
| 9·8 | | 32·8 | 47·5 | |
| 9·9 | | 44·4 | 8·8 | |
| 10·0 | | 55·4 | 11·4 | |
| 9·6 | 38 | 8·9 | 21·4 | |
| 6·8 | | 17·8 | 40·0 | 6·5 GSct |
| 10·0 | | 26·9 | 4·4 | |
| 9·6 | | 45·2 | 0·7 | |
| 7·5 | | 49·8 | 52·7 | 7·0 GScr |
| 9·3 | 39 | 0·9 | 10·3 | |
| 10·0 | | 15·4 | 1·1 | |
| 10·0 | | 18·8 | 44·3 | |
| 9·8 | | 20·8 | 39·3 | |
| 10·0 | | 36·8 | 36·5 | |
| 9·6 | | 38·4 | 10·1 | |



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### 6061—6120.

| mag. | $17^h$–$18^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9.4 | 39 | 45.8 | 46.3 | |
| 9.6 | 40 | 13.4 | 1.9 | |
| 9.3 | | 14.7 | 38.5 | 8.5 |
| 9.2 | | 45.2 | 13.0 | |
| 9.9 | | 48.8 | 37.8 | |
| 9.4 | | 54.2 | 14.9 | |
| 9.8 | 41 | 6.3 | 47.7 | |
| 10.0 | | 15.8 | 36.6 | |
| 9.4 | | 27.2 | 9.9 | |
| 9.8 | | 36.5 | 11.1 | |
| 9.4 | 42 | 12.3 | 37.8 | |
| 9.8 | | 20.9 | 11.1 | |
| 9.0 | | 37.5 | 40.9 | |
| 9.4 | | 40.9 | 55.3 | |
| 9.2 | 43 | 22.9 | 19.8 | 9.0 |
| 9.0 | 44 | 22.5 | 55.1 | 9.0 |
| 9.1 | | 40.5 | 35.6 | |
| 9.6 | | 59.5 | 47.7 | |
| 8.8 | 45 | 24.0 | 24.7 | 8.5 |
| 9.2 | | 28.5 | 35.3 | |
| 9.0 | | 52.0 | 2.5 | |
| 8.8 | 46 | 13.0 | 22.5 | 9.5 |
| 9.8 | 47 | 44.0 | 9.8 | |
| 9.0 | 48 | 12.5 | 41.8 | |
| 9.6 | | 33.0 | 12.9 | |
| 9.2 | | 33.5 | 42.1 | |
| 9.8 | | 53.0 | 40.3 | |
| 9.8 | 49 | 5.5 | 44.5 | |
| 9.8 | | 14.5 | 23.8 | |
| 9.2 | | 41.0 | 44.8 | |
| 8.6 | | 44.5 | 21.1 | 9.0 |
| 9.2 | 50 | 4.5 | 58.1 | |
| 9.8 | | 11.5 | 2.5 | |
| 9.2 | | 34.5 | 10.6 | 9.0 |
| 9.8 | 51 | 2.5 | 16.2 | |
| 9.6 | | 33.0 | 52.2 | |
| 9.2 | | 40.0 | 14.4 | |
| 9.8 | 52 | 55.0 | 51.0 | |
| 9.1 | | 59.0 | 7.7 | |
| 9.2 | 53 | 7.5 | 28.4 | 8.5 |
| 9.8 | | 23.5 | 30.1 | |
| 8.8 | | 28.5 | 6.0 | 9.2 |
| 9.6 | 54 | 24.5 | 15.6 | |
| 9.8 | 55 | 13.0 | 40.7 | |
| 9.8 | 56 | 15.0 | 4.4 | |
| 9.0 | | 24.0 | 23.8 | |
| 9.8 | 57 | 8.5 | 30.8 | |
| 9.8 | | 23.0 | 31.3 | |
| 9.8 | | 28.5 | 15.7 | |
| 9.8 | | 48.5 | 41.0 | |
| 9.8 | 59 | 32.0 | 47.2 | |
| 9.8 | | 45.5 | 47.8 | |
| 7.6 | 0 | 56.0 | 15.3 | 8.2 |
| 9.8 | 1 | 26.5 | 15.1 | |
| 9.5 | | 43.0 | 26.2 | |
| 9.8 | 2 | 8.5 | 14.5 | 9.5 |
| 9.8 | | 30.5 | 20.0 | |
| 9.8 | 3 | 9.0 | 54.1 | |
| 8.2 | | 9.0 | 39.9 | 8.5 |
| 9.1 | | 30.5 | 47.3 | 10.0 |

### 6121—6180.

| mag. | $18^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9.8 | 5 | 53.0 | 29.3 | |
| 8.6 | 6 | 8.0 | 44.3 | 9.0 |
| 9.8 | | 18.0 | 34.5 | |
| 7.7 | | 51.5 | 14.8 | 7.5 GS |
| 8.6 | 7 | 7.0 | 58.5 | 9.0 |
| 9.8 | | 8.0 | 6.2 | |
| 9.8 | | 24.5 | 58.8 | 9.5 |
| 9.0 | | 51.0 | 50.8 | 8.5 |
| 9.0 | | 54.5 | 40.5 | 8.5 |
| 9.5 | 8 | 21.5 | 33.1 | |
| 9.4 | | 23.5 | 33.3 | |
| 9.6 | | 27.2 | 47.2 | |
| 9.8 | 9 | 13.0 | 44.7 | |
| 9.5 | | 19.0 | 53.2 | |
| 9.8 | | 44.0 | 31.1 | |
| 9.8 | | 58.0 | 25.3 | |
| 8.8 | 10 | 1.5 | 43.0 | |
| 8.0 | | 9.0 | 11.8 | |
| 9.8 | | 44.2 | 46.3 | |
| 5.9 | 11 | 42.0 | 32.8 | 4.0 GSctr |
| 9.8 | 12 | 3.0 | 23.1 | |
| 9.6 | | 47.0 | 34.9 | |
| 8.7 | 13 | 51.5 | 4.8 | 8.0 G |
| 9.8 | 14 | 0.0 | 26.1 | |
| 8.7 | | 13.0 | 1.1 | 9.0 |
| 7.8 | 15 | 2.0 | 43.3 | G |
| 8.6 | | 21.2 | 20.9 | 7.5 G |
| 9.4 | 16 | 1.5 | 17.2 | 8.5 |
| 8.4 | 17 | 1.5 | 39.1 | |
| 10.0 | | 38.1 | 50.9 | |
| 9.6 | | 45.2 | 10.0 | |
| 9.4 | | 49.2 | 9.1 | |
| 9.3 | 18 | 2.9 | 8.7 | |
| 9.8 | | 7.7 | 9.5 | |
| 10.0 | | 15.7 | 8.1 | |
| 8.8 | | 25.4 | 7.0 | |
| 10.0 | | 33.1 | 50.8 | |
| 9.8 | | 37.7 | 4.7 | |
| 9.3 | | 43.2 | 56.4 | |
| 9.8 | | 51.1 | 48.2 | |
| 9.4 | 19 | 1.2 | 20.4 | |
| 9.4 | | 27.7 | 17.5 | |
| 9.4 | | 29.1 | 33.4 | |
| 9.0 | | 29.1 | 43.4 | |
| 8.6 | | 33.6 | 13.9 | |
| 9.6 | | 56.2 | 10.0 | |
| 9.8 | | 57.6 | 45.0 | |
| 9.6 | | 57.6 | 30.9 | |
| 9.6 | | 57.7 | 5.1 | |
| 10.0 | 20 | 10.6 | 38.4 | |
| 9.8 | | 11.7 | 17.0 | |
| 9.8 | | 19.2 | 10.3 | |
| 9.8 | | 20.1 | 0.2 | |
| 9.6 | | 38.7 | 11.1 | |
| 9.0 | | 48.7 | 17.3 | 8.5 |
| 8.8 | | 50.7 | 10.3 | 9.5 |
| 10.0 | 21 | 16.1 | 1.9 | |
| 9.3 | | 24.1 | 55.3 | |
| 9.6 | | 29.2 | 9.6 | |
| 9.4 | | 49.1 | 47.9 | |

### 6181—6240.

| mag. | $18^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 9.8 | 21 | 59.7 | 28.5 | |
| 9.8 | 22 | 11.7 | 1.7 | |
| 10.0 | | 23.2 | 8.7 | |
| 8.6 | | 31.7 | 26.8 | 9.5 |
| 9.0 | | 58.2 | 57.8 | |
| 9.8 | 23 | 4.6 | 38.1 | |
| 10.0 | | 8.1 | 48.5 | |
| 9.1 | | 8.7 | 25.6 | |
| 9.1 | | 12.7 | 15.3 | |
| 10.0 | | 33.6 | 44.8 | |
| 10.0 | | 56.6 | 56.3 | |
| 9.6 | 24 | 5.7 | 12.2 | |
| 9.0 | | 25.7 | 18.3 | 9.5 |
| 9.8 | | 27.2 | 6.6 | |
| 9.8 | 25 | 5.6 | 51.0 | |
| 8.4 | | 27.6 | 35.2 | 9.0 |
| 9.8 | 26 | 8.2 | 0.7 | |
| 8.2 | | 19.1 | 31.0 | |
| 10.0 | | 35.1 | 37.6 | |
| 9.0 | 27 | 10.7 | 9.2 | |
| 9.2 | | 32.1 | 42.6 | |
| 9.4 | | 34.1 | 42.8 | |
| 9.6 | | 40.9 | 57.3 | |
| 10.0 | | 46.6 | 50.3 | |
| 9.2 | | 47.2 | 1.6 | |
| 10.0 | 28 | 3.7 | 29.7 | |
| 9.4 | | 10.7 | 16.5 | |
| 9.8 | | 39.2 | 22.6 | |
| 10.0 | | 42.2 | 22.9 | |
| 9.3 | | 50.1 | 41.9 | |
| 10.0 | 29 | 17.6 | 53.4 | |
| 8.8 | | 34.6 | 31.0 | 9.5 |
| 10.0 | | 38.6 | 30.7 | |
| 9.8 | | 57.2 | 20.1 | |
| 9.4 | 30 | 6.6 | 43.4 | |
| 9.3 | | 7.4 | 56.8 | |
| 9.4 | | 46.1 | 31.5 | |
| 10.0 | 31 | 31.3 | 13.7 | |
| 9.8 | | 36.0 | 47.9 | |
| 9.2 | | 44.1 | 24.6 | |
| 9.6 | 32 | 9.0 | 52.9 | 9.5 |
| 10.0 | | 24.0 | 43.4 | |
| 7.6 | | 38.0 | 34.7 | 8.5 |
| 9.6 | 33 | 16.1 | 19.1 | |
| 9.2 | | 21.6 | 24.2 | |
| 9.8 | | 34.5 | 56.3 | |
| 9.6 | | 37.9 | 1.0 | |
| 9.4 | | 46.4 | 2.7 | |
| 7.5 | | 48.1 | 12.9 | 6.5 GSc |
| 9.6 | 34 | 19.1 | 23.7 | |
| 8.8 | | 19.1 | 14.1 | 9.0 |
| 10.0 | | 26.5 | 38.9 | |
| 9.4 | | 37.5 | 42.2 | |
| 9.8 | 35 | 38.0 | 38.2 | |
| 9.4 | | 43.1 | 28.9 | |
| 10.0 | 36 | 11.0 | 41.0 | |
| 9.3 | | 38.6 | 28.3 | |
| 9.1 | | 50.6 | 8.0 | |
| 9.4 | | 51.6 | 20.8 | |
| 9.4 | 37 | 17.1 | 15.8 | |

### 6241—6300.

| mag. | $18^h$ m | s | −61° ′ | |
|---|---|---|---|---|
| 10.0 | 37 | 41.6 | 6.2 | |
| 9.3 | | 49.5 | 33.7 | |
| 9.7 | 38 | 4.1 | 56.2 | |
| 9.7 | | 6.6 | 28.7 | |
| 10.0 | | 17.6 | 5.2 | |
| 9.7 | | 34.3 | 58.9 | |
| 9.2 | | 47.1 | 4.9 | |
| 9.1 | | 49.1 | 11.9 | |
| 9.3 | | 51.1 | 28.8 | |
| 9.2 | | 52.1 | 4.2 | |
| 10.0 | 39 | 1.6 | 27.8 | |
| 9.4 | | 17.1 | 16.5 | |
| 9.8 | | 20.6 | 5.6 | |
| 10.0 | | 35.0 | 40.2 | |
| 9.8 | | 39.0 | 38.5 | |
| 10.0 | | 39.5 | 50.6 | |
| 10.0 | | 47.1 | 7.6 | |
| 9.4 | | 58.1 | 18.0 | |
| 8.8 | 40 | 1.6 | 28.4 | |
| 7.6 | | 15.6 | 2.1 | 7.5 GSg |
| 9.0 | | 33.9 | 21.0 | |
| 9.8 | | 43.6 | 57.1 | |
| 8.4 | | 46.1 | 14.7 | 8.5 |
| 9.4 | | 57.6 | 14.6 | 9.5 |
| 10.0 | | 59.6 | 3.4 | |
| 8.4 | 41 | 3.1 | 19.0 | 8.0 G |
| 9.3 | | 7.0 | 55.9 | |
| 9.8 | | 10.1 | 59.5 | |
| 10.0 | | 40.8 | 59.1 | |
| 10.0 | 42 | 4.1 | 22.7 | |
| 10.0 | | 6.0 | 42.2 | |
| 8.8 | | 17.0 | 35.8 | |
| 9.8 | | 29.1 | 14.9 | |
| 8.8 | | 39.1 | 6.6 | 8.5 |
| 9.6 | 43 | 7.1 | 25.2 | |
| 10.0 | | 7.1 | 9.3 | |
| 9.3 | | 28.5 | 37.5 | 9.5 |
| 10.0 | | 40.0 | 49.9 | |
| 9.4 | | 49.0 | 50.1 | |
| 10.0 | 44 | 17.0 | 36.5 | |
| 9.8 | | 34.5 | 31.6 | |
| 7.3 | | 54.0 | 58.4 | 7.5 GS |
| 9.6 | 45 | 17.5 | 41.5 | |
| 9.4 | | 46.5 | 43.1 | |
| 9.8 | 46 | 4.6 | 11.1 | |
| 9.8 | | 7.2 | 59.7 | |
| 10.0 | | 42.1 | 27.1 | |
| 10.0 | 47 | 24.0 | 38.7 | |
| 9.0 | 48 | 7.5 | 41.5 | |
| 9.6 | | 21.0 | 42.6 | |
| 8.8 | | 28.6 | 1.7 | |
| 10.0 | | 41.0 | 36.2 | |
| 9.0 | | 52.6 | 26.2 | |
| 9.4 | | 59.6 | 4.0 | |
| 9.3 | 49 | 42.6 | 25.2 | |
| 9.8 | | 57.1 | 28.4 | |
| 9.8 | | 57.1 | 4.7 | |
| 8.6 | 50 | 6.1 | 56.5 | |
| 8.8 | | 6.5 | 46.3 | |
| 10.0 | | 21.0 | 31.3 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 17 | 30 | 138 | 1.1 |
| | 40 | 138 | 0.7 |
| | 50 | 138 | 0.4 |
| 18 | 0 | 138 | 0.0 |
| | | | + |
| | 10 | 138 | 0.4 |
| | 20 | 138 | 0.7 |
| | 30 | 138 | 1.1 |
| | 40 | 137 | 1.5 |
| | 50 | 137 | 1.8 |
| 19 | 0 | 136 | 2.2 |



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| | | 25 prec. α + | δ + |
|---|---|---|---|
| h | m | s | ′ |
| 18 | 50 | 137 | 1·8 |
| 19 | 0 | 136 | 2·2 |
| | 10 | 136 | 2·5 |
| | 20 | 135 | 2·9 |
| | 30 | 134 | 3·2 |
| | 40 | 133 | 3·5 |
| | 50 | 131 | 3·9 |
| 20 | 0 | 130 | 4·2 |
| | 10 | 129 | 4·5 |
| | 20 | 127 | 4·8 |
| | 30 | 126 | 5·1 |
| | 40 | 124 | 5·4 |
| | 50 | 122 | 5·6 |
| 21 | 0 | 120 | 5·9 |
| | 10 | 118 | 6·2 |

## 6301—6360.

| | 18h.–19h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·2 | 50 | 30·1 | 58·4 | |
| 9·0 | | 50·5 | 33·2 | |
| 8·8 | 51 | 37·1 | 26·2 | |
| 9·3 | | 40·0 | 31·8 | |
| 8·3 | | 50·1 | 17·2 | 8·5 |
| 10·0 | | 58·5 | 34·3 | |
| 10·0 | 52 | 1·1 | 13·6 | |
| 9·6 | | 6·5 | 57·1 | |
| 10·0 | | 19·6 | 20·5 | |
| 9·2 | | 37·1 | 12·1 | 9·0 |
| 9·6 | | 54·0 | 53·3 | |
| 9·4 | | 54·5 | 1·9 | |
| 9·3 | 53 | 1·6 | 9·8 | |
| 10·0 | | 16·5 | 45·8 | |
| 8·0 | | 41·4 | 41·1 | 7·5 G |
| 9·8 | | 48·6 | 17·6 | |
| 10·0 | | 52·5 | 47·1 | |
| 7·9 | | 54·7 | 52·3 | 8·0 |
| 9·4 | | 56·1 | 27·4 | |
| 9·6 | 54 | 10·0 | 57·4 | |
| 9·6 | | 31·7 | 31·8 | |
| 10·0 | | 39·1 | 4·8 | |
| 10·0 | | 52·0 | 47·7 | |
| 9·6 | | 53·5 | 52·2 | |
| 8·8 | 55 | 27·2 | 38·5 | |
| 10·0 | | 29·1 | 9·6 | |
| 9·8 | | 29·5 | 7·9 | |
| 9·4 | | 38·1 | 17·9 | |
| 9·1 | 56 | 7·7 | 51·6 | |
| 9·3 | | 11·9 | 0·2 | |
| 9·1 | | 27·7 | 49·9 | |
| 9·6 | | 52·5 | 50·8 | |
| 9·4 | 57 | 1·5 | 13·3 | |
| 9·8 | | 2·5 | 52·1 | |
| 9·8 | | 17·0 | 42·8 | |
| 10·0 | | 24·1 | 12·1 | |
| 8·8 | | 31·7 | 53·5 | 9·0 |
| 9·6 | | 55·5 | 43·2 | |
| 9·0 | 58 | 15·0 | 53·9 | 9·0 |
| 8·2 | | 47·5 | 54·7 | 8·5 GSt |
| 9·4 | 59 | 13·5 | 49·9 | 9·0 |
| 9·0 | | 21·0 | 33·7 | |
| 9·6 | | 29·0 | 43·8 | |
| 9·4 | | 43·0 | 52·6 | |
| 9·6 | 0 | 0·5 | 58·2 | |
| 9·0 | | 7·5 | 1·9 | |
| 9·4 | | 21·0 | 9·7 | |
| 9·2 | | 29·5 | 51·7 | |
| 9·2 | 1 | 11·0 | 58·0 | |
| 9·2 | | 55·5 | 3·1 | 8·5 |
| 9·6 | 2 | 1·5 | 25·1 | |
| 9·6 | | 19·0 | 16·3 | |
| 9·0 | | 28·5 | 1·5 | 9·0 |
| 9·2 | 3 | 20·0 | 7·7 | |
| 9·4 | | 21·5 | 58·1 | |
| 8·8 | | 48·0 | 38·9 | 8·5 |
| 9·4 | 4 | 31·5 | 19·0 | |
| 9·6 | | 43·0 | 59·0 | |
| 9·4 | 5 | 49·0 | 17·3 | |
| 8·8 | 6 | 38·0 | 30·9 | 9·5 G |

## 6361—6420.

| | 19h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·0 | 7 | 22·0 | 33·6 | 8·5 G |
| 9·0 | | 57·0 | 12·0 | 10·0 |
| 9·6 | 8 | 11·5 | 39·1 | |
| 8·6 | | 14·0 | 4·3 | 9·0 |
| 9·2 | | 22·5 | 10·1 | |
| 9·6 | | 43·0 | 21·3 | |
| 9·2 | 10 | 1·5 | 19·4 | 8·5 |
| 9·0 | | 16·0 | 6·6 | 9·0 |
| 9·4 | 11 | 7·5 | 30·1 | |
| 9·2 | 12 | 43·0 | 54·5 | |
| 9·6 | | 54·5 | 37·1 | |
| 8·8 | 13 | 48·5 | 23·3 | 9·5 |
| 9·0 | 14 | 21·5 | 10·9 | |
| 9·4 | 15 | 48·5 | 48·1 | |
| 9·6 | 16 | 13·0 | 6·9 | |
| 9·2 | 17 | 0·5 | 39·4 | |
| 9·4 | | 16·5 | 13·5 | |
| 8·8 | 18 | 19·0 | 49·3 | |
| 9·6 | 19 | 1·5 | 13·1 | |
| 9·6 | 20 | 29·0 | 49·0 | |
| 9·2 | | 36·0 | 15·1 | |
| 9·6 | 21 | 54·5 | 21·9 | |
| 9·4 | 23 | 8·5 | 17·4 | |
| 7·8 | 24 | 33·5 | 53·9 | 8·0 GS |
| 9·2 | 25 | 28·0 | 12·5 | 8·5 |
| 9·6 | 26 | 22·0 | 59·0 | |
| 9·6 | 27 | 0·0 | 11·9 | 10·0 |
| 8·5 | | 1·0 | 12·2 | 9·0 |
| 9·0 | | 21·7 | 43·6 | |
| 9·6 | | 43·5 | 32·4 | |
| 8·8 | 28 | 25·8 | 7·1 | |
| 10·0 | 29 | 24·0 | 40·6 | |
| 9·1 | 30 | 51·3 | 4·4 | 9·2 |
| 9·2 | 31 | 9·3 | 14·1 | |
| 10·0 | | 26·0 | 36·9 | |
| 9·3 | | 32·0 | 37·8 | 9·0 |
| 9·2 | | 57·5 | 22·3 | |
| 9·2 | 32 | 6·0 | 1·5 | |
| 9·6 | | 9·5 | 3·9 | |
| 8·7 | | 21·0 | 54·4 | 9·0 |
| 10·0 | 34 | 11·0 | 10·9 | |
| 8·7 | 36 | 12·5 | 0·5 | |
| 10·0 | 37 | 9·5 | 10·2 | |
| 9·8 | | 49·0 | 24·9 | |
| 8·7 | | 56·0 | 1·9 | |
| 10·0 | | 58·5 | 30·0 | |
| 10·0 | 38 | 1·5 | 39·8 | |
| 9·0 | | 17·5 | 55·9 | 9·0 |
| 10·0 | | 18·5 | 19·9 | |
| 9·2 | | 45·5 | 40·2 | 9·0 |
| 10·0 | | 52·5 | 23·5 | |
| 8·2 | 39 | 15·0 | 13·9 | 8·5 |
| 6·9 | | 25·0 | 22·0 | 6·5 GSc |
| 8·8 | | 56·5 | 2·9 | 9·0 |
| 9·1 | 40 | 12·0 | 52·9 | |
| 9·1 | | 22·5 | 1·0 | |
| 9·9 | | 50·5 | 56·9 | |
| 9·9 | 42 | 2·0 | 1·4 | |
| 10·0 | | 22·5 | 31·9 | |
| 8·6 | | 26·5 | 48·3 | 8·5 |

## 6421—6480.

| | 19h.–20h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·6 | 42 | 28·5 | 13·6 | |
| 9·8 | | 32·0 | 27·9 | 9·0 |
| 10·0 | | 42·5 | 15·1 | |
| 9·8 | 43 | 17·5 | 36·2 | |
| 10·0 | | 39·0 | 6·2 | |
| 6·5 | | 44·5 | 29·4 | 6·5 GSct |
| 9·5 | | 56·5 | 40·5 | |
| 9·5 | 44 | 2·0 | 58·5 | |
| 9·4 | | 13·5 | 16·8 | |
| 9·0 | 45 | 46·0 | 14·9 | 9·0 |
| 8·8 | 46 | 6·0 | 57·0 | 8·5 |
| 10·0 | | 21·5 | 28·6 | |
| 9·6 | | 25·5 | 7·3 | |
| 9·9 | 48 | 0·5 | 33·7 | |
| 10·0 | | 7·0 | 29·8 | |
| 9·8 | | 21·5 | 8·8 | |
| 8·8 | | 49·5 | 21·5 | |
| 10·0 | 50 | 13·8 | 45·1 | |
| 9·8 | | 15·5 | 25·4 | |
| 7·3 | | 38·0 | 4·5 | 8·0 GS |
| 9·0 | | 42·5 | 35·7 | |
| 9·9 | | 46·8 | 30·3 | |
| 9·4 | 51 | 11·0 | 44·3 | |
| 9·6 | | 34·5 | 2·7 | |
| 10·0 | | 44·5 | 0·3 | |
| 9·6 | 52 | 40·5 | 12·8 | |
| 9·0 | | 43·5 | 43·9 | |
| 10·0 | 53 | 56·8 | 35·7 | |
| 9·8 | 54 | 18·0 | 51·2 | |
| 9·4 | 55 | 15·5 | 32·6 | |
| 9·4 | | 47·0 | 23·8 | |
| 9·9 | 56 | 31·0 | 7·8 | |
| 8·8 | | 33·5 | 49·8 | 8·5 |
| 10·0 | 57 | 36·5 | 48·4 | |
| 9·1 | | 44·5 | 13·8 | |
| 10·0 | 58 | 13·5 | 8·8 | |
| 9·9 | | 33·5 | 3·3 | |
| 9·6 | | 33·8 | 51·8 | |
| 9·6 | | 44·5 | 39·1 | |
| 9·9 | 59 | 1·0 | 3·4 | |
| 9·6 | | 13·0 | 20·9 | |
| 9·8 | | 37·0 | 3·6 | |
| 9·9 | 0 | 5·0 | 11·4 | |
| 10·0 | | 33·5 | 2·7 | |
| 8·8 | | 52·5 | 18·9 | |
| 9·9 | 2 | 42·5 | 51·4 | |
| 7·0 | | 54·2 | 55·2 | 7·0 GSc |
| 10·0 | 3 | 38·0 | 48·7 | |
| 9·9 | 4 | 43·8 | 13·3 | |
| 9·9 | 5 | 50·8 | 42·5 | |
| 9·4 | 6 | 18·3 | 19·6 | |
| 9·0 | | 32·0 | 17·8 | 9·0 |
| 10·0 | | 38·5 | 49·5 | |
| 10·0 | | 41·5 | 46·4 | |
| 9·4 | 7 | 51·0 | 20·0 | |
| 9·0 | 10 | 36·0 | 47·7 | 9·5 |
| 9·4 | 11 | 11·0 | 22·0 | |
| 9·7 | 13 | 12·0 | 41·3 | |
| 9·7 | | 16·5 | 17·1 | |
| 9·6 | | 18·5 | 22·6 | |

## 6481—6540.

| | 20h.–21h. | | −61° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8·6 | 13 | 23·5 | 0·4 | 8·5 |
| 9·4 | | 24·0 | 42·1 | |
| 9·0 | 15 | 25·0 | 10·0 | |
| 9·7 | 16 | 14·0 | 8·6 | |
| 9·4 | | 39·0 | 22·0 | |
| 9·4 | 17 | 49·5 | 39·4 | |
| 9·0 | 18 | 52·5 | 53·1 | 9·0 |
| 9·7 | 19 | 20·5 | 0·6 | |
| 9·4 | 21 | 54·5 | 27·9 | |
| 9·6 | 22 | 43·0 | 23·9 | |
| 9·7 | 24 | 30·5 | 51·2 | |
| 6·0 | 25 | 13·5 | 0·0 | 5·0 GSct |
| 9·0 | | 59·5 | 50·1 | |
| 9·6 | 26 | 39·5 | 33·5 | |
| 6·3 | 27 | 5·0 | 57·5 | 5·0 GSg |
| 8·9 | | 19·0 | 30·0 | |
| 8·2 | | 35·0 | 3·8 | 8·0 G |
| 8·9 | 28 | 5·5 | 2·5 | 8·5 G |
| 9·2 | | 24·0 | 34·0 | |
| 9·3 | | 41·0 | 15·5 | 9·0 G |
| 7·6 | | 53·7 | 58·1 | GSg |
| 9·6 | 30 | 8·0 | 56·7 | |
| 8·9 | | 54·5 | 0·0 | |
| 9·7 | 31 | 4·5 | 40·6 | |
| 9·6 | 37 | 45·0 | 18·1 | 9·0 |
| 9·2 | 39 | 54·0 | 30·0 | |
| 9·0 | 40 | 33·3 | 53·0 | 9·0 |
| 9·7 | | 48·0 | 55·0 | |
| 9·6 | | 58·0 | 5·7 | |
| 8·3 | 41 | 25·5 | 52·8 | 8·5 GS |
| 9·7 | 42 | 53·0 | 11·8 | |
| 9·5 | | 54·0 | 41·7 | |
| 9·6 | 43 | 23·0 | 26·6 | |
| 9·0 | 44 | 21·2 | 27·4 | |
| 9·3 | | 21·7 | 28·7 | |
| 9·2 | | 48·5 | 20·8 | |
| 8·6 | 47 | 44·0 | 12·6 | 9·5 |
| 9·4 | 48 | 51·0 | 19·2 | |
| 9·5 | 49 | 41·5 | 7·2 | |
| 9·6 | 51 | 18·0 | 16·5 | |
| 8·5 | | 57·5 | 17·5 | 9·0 |
| 9·2 | 52 | 41·0 | 3·5 | |
| 9·4 | 53 | 16·0 | 6·8 | |
| 9·4 | 54 | 0·0 | 23·7 | |
| 9·4 | | 2·5 | 10·8 | |
| 9·7 | 55 | 23·0 | 47·7 | |
| 9·4 | 56 | 44·5 | 40·0 | |
| 9·2 | 57 | 11·0 | 26·8 | 8·5 G |
| 9·2 | 58 | 15·5 | 8·8 | |
| 8·8 | 59 | 4·5 | 34·2 | 8·5 G |
| 8·7 | | 35·0 | 1·6 | 9·0 |
| 9·3 | | 56·5 | 27·7 | 8·8 |
| 8·9 | 2 | 8·5 | 45·8 | 8·5 |
| 9·6 | 4 | 22·5 | 26·7 | |
| 9·4 | 5 | 39·5 | 8·8 | |
| 8·6 | 7 | 54·5 | 30·1 | 8·5 GS |
| 7·4 | 8 | 47·0 | 51·6 | 7·0 GS |
| 8·8 | | 53·0 | 27·0 | S |
| 9·1 | 9 | 59·5 | 1·6 | |
| 9·2 | 10 | 22·5 | 29·4 | |

## 6541—6600.

| mag. | 21h. m s | −61° ′ | |
|---|---|---|---|
| 9.4 | 10 45.0 | 4.5 | |
| 9.8 | 11 52.5 | 42.0 | 9.5 |
| 9.2 | 56.0 | 25.3 | |
| 9.2 | 12 5.5 | 39.4 | 9.0 |
| 9.6 | 52.0 | 58.8 | |
| 9.7 | 13 2.5 | 36.8 | |
| 8.5 | 14 49.0 | 12.4 | 9.0 |
| 9.8 | 50.5 | 14.8 | |
| 8.6 | 56.0 | 43.1 | 8.5 GS |
| 9.8 | 15 32.5 | 38.4 | 10.0 |
| 9.6 | 16 36.2 | 51.9 | |
| 9.4 | 17 15.2 | 50.9 | |
| 10.1 | 38.0 | 46.7 | |
| 8.9 | 59.8 | 24.0 | 9.5 |
| 9.2 | 18 20.8 | 11.5 | |
| 8.4 | 19 51.3 | 35.2 | G |
| 9.2 | 20 1.5 | 11.1 | |
| 9.6 | 13.0 | 43.3 | |
| 8.8 | 52.0 | 0.6 | |
| 8.4 | 22 13.0 | 41.0 | 8.0 G |
| 10.0 | 59.5 | 47.8 | |
| 10.0 | 23 42.0 | 48.0 | |
| 9.0 | 43.5 | 51.7 | |
| 9.3 | 54.0 | 54.4 | |
| 8.7 | 24 16.5 | 14.7 | 9.0 |
| 9.3 | 25 13.5 | 31.0 | 9.5 |
| 10.1 | 48.5 | 24.1 | |
| 9.2 | 26 6.5 | 23.9 | 10.0 G |
| 8.9 | 30.5 | 33.4 | 9.5 |
| 9.8 | 45.0 | 32.3 | 10.0 |
| 9.6 | 27 43.0 | 57.0 | |
| 10.0 | 28 30.5 | 4.7 | |
| 10.1 | 29 38.5 | 19.3 | |
| 9.8 | 32 30.5 | 0.1 | |
| 9.8 | 53.0 | 35.0 | |
| 10.0 | 33 32.5 | 12.7 | |
| 9.5 | 47.5 | 5.0 | |
| 8.8 | 34 22.5 | 58.4 | 9.0 |
| 9.6 | 36.0 | 47.8 | |
| 9.6 | 35 6.0 | 15.0 | |
| 9.6 | 33.5 | 51.0 | |
| 10.1 | 36 33.0 | 40.2 | |
| 9.4 | 37 34.5 | 1.0 | |
| 10.1 | 38.0 | 15.4 | |
| 10.1 | 43.5 | 44.0 | |
| 9.2 | 38 57.0 | 7.8 | 9.5 G |
| 9.2 | 39 11.0 | 24.6 | 9.5 G |
| 9.8 | 40 37.0 | 50.7 | |
| 10.0 | 41 1.0 | 24.0 | |
| 9.4 | 1.0 | 4.9 | |
| 8.8 | 57.0 | 18.1 | |
| 9.8 | 44 9.5 | 16.2 | |
| 9.2 | 29.0 | 39.2 | |
| 8.4 | 43.0 | 27.7 | 9.5 |
| 10.1 | 46.5 | 13.3 | |
| 10.0 | 46 11.5 | 47.5 | |
| 9.8 | 47 25.5 | 9.4 | |
| 8.2 | 27.0 | 44.1 | 9.0 |
| 9.3 | 51.5 | 40.5 | 10.0 |
| 9.6 | 48 28.5 | 43.0 | |

## 6601—6660.

| mag. | 21h.–22h. m s | −61° ′ | |
|---|---|---|---|
| 9.2 | 49 2.5 | 33.0 | |
| 8.9 | 3.0 | 28.9 | |
| 10.1 | 53.0 | 36.7 | |
| 7.8 | 50 9.5 | 12.0 | G |
| 9.6 | 10.0 | 48.5 | 9.5 |
| 9.8 | 31.0 | 31.3 | |
| 8.4 | 51.0 | 21.5 | 7.5 G |
| 10.1 | 51 11.2 | 54.6 | |
| 9.2 | 39.3 | 15.0 | 9.0 |
| 10.0 | 53 16.2 | 7.4 | |
| 10.0 | 26.2 | 8.0 | |
| 10.0 | 40.2 | 25.1 | |
| 7.8 | 54 46.9 | 2.5 | 8.0 |
| 9.6 | 55 1.2 | 11.0 | |
| 8.8 | 1.7 | 27.0 | 9.0 |
| 8.8 | 51.5 | 4.1 | 9.5 |
| 9.6 | 56 8.8 | 42.3 | |
| 10.0 | 57 52.5 | 58.1 | |
| 9.8 | 59 44.0 | 20.0 | |
| 10.0 | 0 37.2 | 10.9 | |
| 8.8 | 2 17.0 | 17.0 | 9.0 |
| 7.5 | 29.5 | 9.7 | 8.0 G |
| 9.4 | 31.5 | 54.3 | 9.0 |
| 9.6 | 51.2 | 17.1 | |
| 9.2 | 3 51.5 | 27.1 | 10.0 |
| 8.4 | 4 15.5 | 49.1 | |
| 9.8 | 19.0 | 9.3 | |
| 10.0 | 40.5 | 52.7 | |
| 8.8 | 6 52.0 | 25.7 | 9.5 |
| 10.0 | 52.2 | 26.1 | |
| 8.7 | 59.0 | 46.7 | |
| 10.0 | 7 25.2 | 40.7 | |
| 9.4 | 34.5 | 11.0 | |
| 9.8 | 50.0 | 13.1 | |
| 9.8 | 8 45.2 | 11.3 | |
| 10.0 | 54.2 | 25.7 | |
| 10.0 | 9 6.2 | 3.7 | |
| 10.0 | 11.0 | 2.5 | |
| 8.4 | 10 49.5 | 25.3 | 9.0 |
| 8.2 | 51.0 | 25.1 | 8.5 |
| 9.4 | 11 2.2 | 16.0 | |
| 9.1 | 28.0 | 38.7 | 9.0 |
| 9.6 | 12 17.0 | 13.2 | |
| 7.5 | 22.0 | 3.6 | GS |
| 9.2 | 13 6.0 | 9.6 | |
| 8.5 | 44.0 | 8.0 | 9.0 |
| 10.0 | 14 13.5 | 4.2 | |
| 9.2 | 24.0 | 0.4 | |
| 8.8 | 15 41.0 | 19.1 | 9.0 |
| 10.0 | 16 7.0 | 1.6 | |
| 9.8 | 21.5 | 37.6 | |
| 8.4 | 17 1.0 | 28.8 | 9.5 |
| 9.8 | 18 6.5 | 57.6 | |
| 9.8 | 22 24.0 | 5.2 | G |
| 9.4 | 23 6.5 | 57.2 | |
| 7.5 | 24 50.5 | 4.7 | 7.0 GSg |
| 8.0 | 59.5 | 27.4 | 8.8 G |
| 8.8 | 26 20.7 | 46.2 | |
| 10.0 | 29.5 | 56.2 | |
| 10.0 | 44.5 | 35.7 | G |

## 6661—6720.

| mag. | 22h. m s | −61° ′ | |
|---|---|---|---|
| 8.8 | 27 32.5 | 43.4 | |
| 10.0 | 28 29.5 | 39.0 | G |
| 9.8 | 29 49.5 | 39.1 | |
| 9.4 | 30 2.0 | 12.3 | |
| 9.4 | 15.0 | 17.5 | |
| 8.7 | 37.8 | 18.1 | |
| 9.4 | 31 8.0 | 56.4 | |
| 8.9 | 43.8 | 54.8 | |
| 9.3 | 51.0 | 38.8 | |
| 8.8 | 58.3 | 53.2 | G |
| 8.8 | 32 20.5 | 36.1 | |
| 8.2 | 33 26.5 | 22.1 | 8.5 |
| 8.9 | 34 14.5 | 43.6 | |
| 8.6 | 21.5 | 38.3 | |
| 7.5 | 35 35.0 | 22.5 | 7.0 GS |
| 7.2 | 36 11.0 | 9.3 | 6.5 GSc |
| 9.4 | 31.0 | 16.8 | |
| 9.4 | 59.0 | 11.3 | |
| 9.4 | 37 37.0 | 3.8 | 9.0 G |
| 8.7 | 46.0 | 1.5 | 8.5 G |
| 8.4 | 38 17.0 | 8.3 | 9.0 |
| 9.4 | 28.5 | 15.3 | |
| 8.8 | 39 3.0 | 26.2 | 9.5 |
| 9.4 | 56.0 | 26.0 | |
| 9.4 | 40 50.5 | 29.7 | |
| 8.9 | 41 9.0 | 16.5 | |
| 9.4 | 33.0 | 1.3 | |
| 9.3 | 42 18.5 | 27.3 | |
| 8.1 | 23.5 | 58.5 | 9.0 |
| 8.2 | 29.5 | 43.0 | 8.2 G |
| 9.4 | 43.5 | 46.3 | |
| 8.8 | 43 35.5 | 18.9 | 9.0 |
| 8.9 | 58.5 | 15.7 | 9.5 |
| 9.4 | 44 52.5 | 35.7 | |
| 8.6 | 45 45.5 | 39.3 | 9.0 |
| 9.0 | 46 23.0 | 44.1 | |
| 9.4 | 48 3.0 | 49.7 | |
| 9.2 | 49 35.5 | 20.7 | |
| 9.4 | 50 13.0 | 45.3 | |
| 8.8 | 29.0 | 50.6 | 9.5 |
| 9.4 | 30.0 | 17.2 | |
| 9.4 | 30.0 | 51.0 | |
| 9.4 | 32.0 | 7.3 | |
| 9.4 | 48.0 | 0.3 | |
| 8.1 | 51 3.5 | 42.3 | 8.5 |
| 8.8 | 9.5 | 8.9 | |
| 9.4 | 10.0 | 35.1 | |
| 8.8 | 32.8 | 2.1 | |
| 9.3 | 33.8 | 2.0 | |
| 7.7 | 46.0 | 20.9 | 8.0 |
| 7.8 | 52 8.5 | 29.6 | 8.0 |
| 8.7 | 22.0 | 13.7 | 9.0 |
| 9.4 | 27.5 | 30.3 | |
| 9.0 | 53 30.5 | 15.8 | |
| 9.0 | 33.5 | 36.9 | |
| 8.6 | 54 23.0 | 44.7 | |
| 9.4 | 55 8.5 | 28.3 | |
| 8.8 | 25.5 | 6.9 | |
| 9.0 | 59.0 | 57.2 | |
| 8.8 | 56 25.0 | 43.9 | |

## 6721—6780.

| mag. | 22h.–23h. m s | −61° ′ | |
|---|---|---|---|
| 9.3 | 56 29.0 | 2.8 | |
| 8.2 | 58 7.5 | 52.1 | 8.0 G |
| 8.2 | 23.0 | 15.1 | 9.5 |
| 7.8 | 59 40.0 | 33.1 | |
| 9.4 | 2 17.0 | 51.3 | |
| 9.4 | 23.0 | 5.5 | |
| 7.0 | 52.8 | 14.5 | 7.0 GScr |
| 9.4 | 54.0 | 31.7 | |
| 9.2 | 3 31.0 | 35.3 | |
| 9.4 | 4 56.0 | 27.1 | |
| 7.6 | 5 45.8 | 15.7 | 8.0 G |
| 8.4 | 53.5 | 7.4 | 8.0 G |
| 8.6 | 9 1.0 | 11.7 | |
| 7.8 | 10 30.0 | 40.8 | 8.0 GSc |
| 7.6 | 34.0 | 41.0 | 7.0 GSc |
| 9.0 | 11 44.0 | 12.2 | 8.2 |
| 9.4 | 13 40.5 | 12.4 | |
| 8.8 | 15 2.0 | 59.0 | 8.0 G |
| 9.4 | 5.5 | 25.0 | |
| 9.0 | 16 16.0 | 50.3 | |
| 7.7 | 23.0 | 42.1 | 7.5 G |
| 9.6 | 51.5 | 55.8 | |
| 9.4 | 19 37.0 | 36.5 | 9.0 |
| 9.4 | 51.7 | 2.7 | 9.0 |
| 9.0 | 20 12.5 | 22.8 | 8.2 G |
| 7.8 | 17.5 | 52.5 | 8.0 |
| 8.0 | 20.5 | 34.3 | 8.5 |
| 9.2 | 24.5 | 5.1 | 9.5 |
| 9.3 | 21 13.5 | 4.3 | |
| 9.6 | 22 0.0 | 28.1 | 8.8 |
| 7.7 | 19.0 | 26.1 | 7.5 G |
| 9.6 | 37.0 | 58.2 | 9.0 |
| 9.6 | 25 9.0 | 24.1 | |
| 9.6 | 47.0 | 16.1 | 8.8 |
| 8.8 | 27 27.0 | 32.1 | 7.8 G |
| 8.3 | 31.5 | 33.5 | 7.5 G |
| 7.3 | 30 3.0 | 31.5 | 8.0 G |
| 9.2 | 14.0 | 25.5 | 9.0 |
| 9.0 | 31 18.0 | 31.6 | 9.0 |
| 9.6 | 23.5 | 27.1 | 9.5 |
| 8.9 | 32 56.5 | 27.1 | |
| 7.8 | 35 33.5 | 45.3 | 7.3 GS |
| 9.0 | 37 39.5 | 50.1 | 8.8 G |
| 8.0 | 39 48.2 | 27.1 | 8.5 G |
| 8.2 | 40 48.8 | 12.9 | 8.5 G |
| 9.2 | 41 59.5 | 54.1 | 8.5 |
| 8.4 | 42 26.8 | 27.6 | 8.2 G |
| 8.4 | 43 14.8 | 49.8 | 7.2 Gcr |
| 9.6 | 38.0 | 47.9 | |
| 9.6 | 53.0 | 27.3 | |
| 9.0 | 44 20.0 | 58.4 | 8.8 |
| 9.6 | 55.5 | 22.0 | |
| 9.1 | 45 20.8 | 26.4 | |
| 8.8 | 23.8 | 13.3 | 8.5 |
| 9.6 | 29.5 | 51.9 | |
| 9.2 | 46 4.5 | 35.4 | |
| 9.4 | 40.5 | 56.7 | 9.2 |
| 8.6 | 47 59.5 | 2.7 | 9.0 |
| 9.5 | 48 3.0 | 33.0 | |
| 9.6 | 20.5 | 30.3 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 0 | 120 | 5.9 |
| | 10 | 118 | 6.2 |
| | 20 | 116 | 6.4 |
| | 30 | 114 | 6.6 |
| | 40 | 112 | 6.8 |
| | 50 | 110 | 7.0 |
| 22 | 0 | 108 | 7.2 |
| | 10 | 105 | 7.4 |
| | 20 | 103 | 7.6 |
| | 30 | 100 | 7.7 |
| | 40 | 98 | 7.9 |
| | 50 | 95 | 8.0 |
| 23 | 0 | 93 | 8.1 |
| | 10 | 90 | 8.2 |
| | 20 | 87 | 8.2 |
| | 30 | 85 | 8.3 |
| | 40 | 82 | 8.3 |
| | 50 | 79 | 8.3 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 50 | 79 | 8·3 |
| 0 | 0 | 77 | 8·4 |

**6781—6784.**

| mag. | 23h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·0 | 49 | 5·5 | 40·5 | 9·0 G |
| 9·8 | | 15·7 | 20·3 | |
| 9·2 | | 20·0 | 17·4 | |
| 8·5 | | 29·0 | 8·8 | 8·5 |

**6785—6788.**

| mag. | 23h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·1 | 49 | 32·5 | 34·0 | |
| 8·8 | 50 | 32·0 | 6·0 | 8·8 |
| 9·5 | 51 | 52·0 | 45·5 | 9·0 |
| 9·6 | 52 | 22·5 | 46·2 | 9·5 |

**6789—6792.**

| mag. | 23h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·2 | 54 | 50·0 | 18·9 | |
| 9·5 | 56 | 1·7 | 50·7 | |
| 9·6 | | 29·5 | 33·2 | |
| 8·0 | | 36·5 | 23·2 | 8·2 G |

**6793—6795.**

| mag. | 23h. m | s | −61° ′ | |
|---|---|---|---|---|
| 9·5 | 56 | 42·5 | 27·9 | |
| 9·6 | 58 | 6·7 | 26·6 | |
| 8·5 | 59 | 5·5 | 55·1 | 8·8 |

# ZONE—62°.

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 71 | 8·3 |
| | 30 | 68 | 8·3 |
| | 40 | 66 | 8·2 |
| | 50 | 63 | 8·2 |
| 1 | 0 | 60 | 8·1 |
| | 10 | 57 | 8·0 |
| | 20 | 55 | 7·9 |
| | 30 | 52 | 7·7 |

**1—30.**

| mag. | 0h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8† | 0 | 5·1 | 55·0 | |
| 9·2 | | 30·4 | 36·7 | |
| 9·6† | 1 | 32·6 | 46·5 | |
| 9·7 | | 49·4 | 28·5 | |
| 9·6 | | 49·4 | 22·1 | |
| 9·8† | 2 | 7·2 | 46·2 | |
| 9·6 | | 12·9 | 27·3 | |
| 9·3 | | 39·9 | 6·0 | |
| 6·7† | 3 | 36·3 | 59·6 | 6·5 GSc |
| 9·7 | 4 | 22·9 | 2·7 | |
| 9·6 | | 26·9 | 34·1 | |
| 9·6 | | 45·4 | 26·3 | 9·5 |
| 8·5 | 6 | 13·4 | 18·1 | 8·8 |
| 8·4 | | 28·9 | 0·7 | 8·2 G |
| 9·5 | 7 | 20·9 | 4·6 | |
| 9·7 | | 40·9 | 29·3 | |
| 9·6 | 9 | 29·4 | 26·3 | |
| 9·1 | | 42·4 | 14·1 | 9·5 |
| 9·0 | | 49·9 | 29·4 | |
| 9·5 | 10 | 8·4 | 9·3 | |
| 9·6† | 11 | 19·2 | 47·4 | |
| 8·7 | 12 | 30·4 | 3·8 | 9·0 |
| 10·2† | 13 | 29·2 | 44·8 | |
| 9·5 | 14 | 4·4 | 17·5 | 9·5 |
| 8·6 | | 28·2 | 23·6 | 8·5 |
| 8·8 | | 37·4 | 3·4 | 9·0 |
| 9·8† | 16 | 12·7 | 43·1 | |
| 9·3 | 17 | 10·9 | 22·0 | |
| 10·2† | 18 | 11·2 | 56·2 | |
| 9·5 | | 32·7 | 23·0 | |

**31—60.**

| mag. | 0h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·2† | 19 | 3·2 | 54·0 | 8·2 G |
| 9·0‡ | | 30·3 | 48·4 | 9·0 |
| 9·0 | 20 | 12·2 | 13·7 | 8·5 |
| 9·4 | | 41·7 | 15·1 | |
| 10·2‡ | 22 | 35·5 | 42·6 | |
| 10·8‡ | | 48·0 | 39·8 | |
| 10·2‡ | 23 | 46·5 | 39·0 | |
| 8·8 | | 54·0 | 10·5 | |
| 10·0‡ | | 59·0 | 46·2 | |
| 9·4 | 24 | 37·0 | 2·5 | |
| 10·4‡ | 25 | 38·5 | 49·5 | |
| 10·2‡ | | 39·0 | 54·5 | |
| 8·8 | | 49·9 | 2·2 | |
| 10·2‡ | 27 | 37·0 | 33·6 | |
| 9·1 | | 52·5 | 34·6 | |
| 10·6‡ | 28 | 10·0 | 35·0 | |
| 9·5 | 29 | 9·9 | 36·0 | |
| 10·0‡ | | 24·0 | 39·6 | |
| 9·4‡ | | 31·0 | 46·2 | 9·0 |
| 9·5‡ | | 51·5 | 53·2 | |
| 8·3 | 30 | 6·2 | 1·7 | G |
| 9·1 | | 34·9 | 7·7 | |
| 10·4‡ | | 48·5 | 55·0 | |
| 9·4 | 32 | 1·9 | 13·8 | |
| 9·1 | 35 | 55·4 | 12·0 | 9·5 |
| 9·2 | 36 | 35·4 | 3·0 | 9·0 |
| 10·2‡ | 38 | 12·5 | 49·1 | |
| 9·4 | | 46·4 | 8·1 | |
| 10·4‡ | 39 | 0·5 | 54·0 | |
| 10·0‡ | | 46·0 | 50·9 | |

**61—90.**

| mag. | 0h.–1h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·5‡ | 39 | 56·0 | 59·4 | |
| 10·8‡ | 40 | 16·2 | 53·1 | |
| 9·0‡ | 41 | 5·0 | 45·5 | 8·5 |
| 9·5 | | 42·4 | 21·9 | |
| 10·8‡ | 42 | 59·0 | 52·2 | |
| 8·8 | 43 | 22·6 | 24·6 | |
| 9·2 | | 33·1 | 6·8 | |
| 9·5‡ | 44 | 30·0 | 58·9 | |
| 9·4‡ | 46 | 0·0 | 36·1 | |
| 9·4 | 47 | 14·6 | 14·6 | 9·5 G |
| 10·2‡ | 48 | 13·5 | 44·7 | |
| 10·0 | 50 | 1·6 | 29·2 | |
| 9·8‡ | | 30·0 | 56·7 | |
| 10·4 | 51 | 17·6 | 5·5 | |
| 10·0‡ | | 56·0 | 55·5 | |
| 10·2 | 54 | 42·1 | 30·8 | |
| 9·4‡ | | 51·0 | 53·6 | |
| 9·0 | 55 | 0·1 | 7·7 | |
| 9·0 | 56 | 16·6 | 26·5 | 9·0 |
| 9·0 | | 24·1 | 25·7 | |
| 8·4‡ | | 35·0 | 50·1 | |
| 9·9 | 57 | 42·1 | 14·4 | |
| 10·3 | 58 | 30·6 | 14·6 | |
| 10·2 | | 30·6 | 13·8 | |
| 8·6 | 0 | 39·1 | 1·7 | 9·0 |
| 9·4‡ | | 43·0 | 48·4 | G |
| 9·9 | 1 | 16·2 | 10·6 | |
| 9·7† | | 43·2 | 59·5 | |
| 6·2 | 2 | 21·2 | 26·6 | 6·0 GScr |
| 7·1 | 3 | 7·0 | 32·4 | 7·5 GS |

**91—120.**

| mag. | 1h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·1† | 3 | 9·0 | 49·2 | |
| 9·6† | 5 | 14·7 | 57·2 | |
| 9·6† | | 20·0 | 54·1 | |
| 9·9 | 6 | 55·8 | 36·6 | |
| 10·3 | | 58·2 | 5·2 | |
| 10·2 | 7 | 31·2 | 23·8 | |
| 9·0† | | 51·5 | 56·7 | 8·0 G |
| 9·8 | 8 | 4·7 | 12·8 | |
| 8·7† | 10 | 38·5 | 46·2 | 8·0 G |
| 10·2 | 11 | 7·2 | 25·9 | |
| 10·3 | | 9·2 | 9·8 | |
| 10·2 | | 27·7 | 25·9 | |
| 8·9 | 12 | 15·5 | 18·9 | 9·5 |
| 9·2 | | 23·0 | 28·9 | |
| 8·6 | | 40·0 | 13·9 | 9·0 |
| 9·5† | | 43·0 | 40·1 | |
| 10·0 | | 54·0 | 0·3 | |
| 10·0 | 14 | 0·0 | 27·6 | |
| 9·7† | 16 | 7·0 | 41·2 | |
| 10·2 | | 51·5 | 14·1 | |
| 10·2 | 17 | 25·5 | 0·9 | |
| 9·7† | 19 | 9·0 | 56·2 | |
| 9·2† | | 16·0 | 52·7 | |
| 9·8† | | 29·5 | 54·7 | |
| 9·0 | | 43·4 | 29·2 | |
| 9·6 | 21 | 5·8 | 32·9 | |
| 10·3 | | 11·3 | 34·1 | |
| 10·2 | | 24·3 | 9·1 | |
| 9·9 | 22 | 22·8 | 6·7 | |
| 9·9 | 24 | 15·3 | 7·9 | |



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## 121—180.

| mag. | 1h.–2h. m s | −62° ′ | |
|---|---|---|---|
| 9·1† | 25 42·0 | 43·7 | |
| 9·2 | 26 1·7 | 0·2 | 9·5 |
| 9·0 | 28 40·5 | 15·8 | |
| 10·6 | 29 48·9 | 38·1 | |
| 10·4 | 31 47·4 | 36·3 | |
| 10·4 | 32 46·5 | 25·5 | |
| 8·2 | 53·4 | 34·4 | 9·0 G |
| 10·4 | 59·2 | 18·6 | |
| 9·8 | 34 9·9 | 37·9 | |
| 10·6 | 40·4 | 50·3 | |
| 10·6 | 45·4 | 47·4 | |
| 8·2 | 37 18·1 | 37·3 | |
| 10·6 | 38 12·5 | 9·4 | |
| 9·7 | 42·4 | 45·2 | |
| 9·4 | 47·4 | 33·7 | |
| 9·8 | 39 51·7 | 19·4 | |
| 10·2 | 41 32·4 | 32·0 | |
| 9·4 | 42 5·2 | 11·0 | |
| 7·8 | 32·5 | 0·9 | 8·0 GS |
| 10·6 | 51·0 | 31·0 | |
| 9·0 | 57·8 | 39·2 | |
| 10·6 | 44 30·0 | 50·0 | |
| 10·6 | 35·0 | 47·1 | |
| 10·2 | 52·5 | 51·6 | |
| 8·8 | 45 3·8 | 51·0 | |
| 9·0 | 46 37·5 | 41·3 | |
| 9·2 | 47 13·8 | 56·4 | |
| 10·6 | 25·5 | 55·4 | |
| 10·6 | 49·8 | 4·2 | |
| 8·9 | 49 9·8 | 17·9 | 9·0 |
| 10·4 | 50 9·8 | 15·8 | |
| 10·6 | 16·0 | 48·3 | |
| 9·7 | 36·8 | 4·6 | |
| 10·6 | 51 5·0 | 40·2 | |
| 10·2 | 27·3 | 24·5 | |
| 10·4 | 56·5 | 39·4 | |
| 9·7 | 52 20·0 | 48·0 | |
| 9·7 | 46·8 | 49·9 | |
| 10·6 | 53 0·3 | 15·1 | |
| 10·0 | 7·8 | 5·6 | |
| 10·6 | 54 47·0 | 17·1 | |
| 3·5 | 49·7 | 10·6 | 3·0 GScgtλr |
| 10·2 | 56 0·8 | 7·2 | |
| 9·6 | 36·0 | 39·8 | |
| 10·6 | 48·8 | 8·4 | |
| 9·7 | 57 6·0 | 44·4 | |
| 10·2 | 42·0 | 43·0 | |
| 9·9 | 58 6·0 | 43·4 | |
| 9·9 | 29·8 | 4·3 | |
| 8·8 | 0 50·8 | 7·1 | 9·0 G |
| 10·6 | 1 7·0 | 31·2 | ? |
| 10·6 | 2 43·0 | 39·5 | |
| 9·9 | 55·3 | 22·7 | |
| 9·2 | 3 3·8 | 21·9 | |
| 10·4 | 26·8 | 28·3 | |
| 10·6 | 4 11·8 | 11·7 | |
| 9·0 | 5 6·0 | 1·8 | 9·5 |
| 9·0 | 52·5 | 19·9 | 9·5 |
| 7·8 | 6 19·5 | 51·3 | |
| 10·6 | 7 0·0 | 37·7 | |

## 181—240.

| mag. | 2h. m s | −62° ′ | |
|---|---|---|---|
| 9·9 | 7 39·9 | 10·9 | |
| 10·6 | 41·5 | 37·7 | |
| 10·6 | 8 34·3 | 15·1 | |
| 7·7 | 49·0 | 14·5 | 8·2 G |
| 9·6 | 10 14·1 | 23·8 | |
| 9·4 | 13 7·6 | 0·7 | 10·0 |
| 9·6 | 29·1 | 37·8 | |
| 8·6 | 57·1 | 2·1 | 8·5 G |
| 9·6 | 15 28·6 | 33·5 | |
| 9·4 | 48·6 | 19·3 | |
| 7·6 | 57·1 | 30·9 | 8·0 G |
| 9·2† | 16 1·0 | 52·3 | |
| 9·2 | 10·7 | 12·7 | |
| 9·5† | 34·5 | 27·9 | |
| 8·2 | 17 9·2 | 49·2 | 8·5 G |
| 9·4† | 10·0 | 38·3 | |
| 9·6 | 52·2 | 6·0 | |
| 9·0 | 18 8·2 | 27·9 | 9·0 G |
| 8·9 | 20 36·2 | 20·0 | 8·2 G |
| 9·6 | 21 11·2 | 0·0 | |
| 9·4 | 24·5 | 24·0 | 9·0 |
| 7·8 | 26·7 | 1·7 | 8·3 GS |
| 9·4 | 36·4 | 27·9 | |
| 9·4† | 22 31·5 | 31·7 | |
| 9·3† | 23 9·5 | 28·0 | |
| 7·8 | 24 32·2 | 32·7 | 8·8 G |
| 9·1† | 25 51·0 | 39·2 | 9·5 G |
| 9·6 | 29 23·0 | 2·2 | |
| 9·0† | 30 35·0 | 53·2 | |
| 8·0† | 32 2·0 | 56·9 | 8·2 G |
| 9·0† | 20·5 | 51·4 | 9·2 |
| 8·6 | 48·5 | 10·0 | 9·0 |
| 9·3† | 33 22·0 | 57·9 | |
| 9·4 | 34 3·0 | 9·0 | 9·0 |
| 7·4 | 36 31·0 | 4·2 | 8·8 |
| 8·6† | 37 0·0 | 41·3 | 8·5 G |
| 8·8 | 13·5 | 25·1 | |
| 9·0† | 38 59·3 | 57·2 | |
| 9·6 | 39 8·6 | 30·2 | |
| 9·4 | 39·1 | 22·8 | |
| 9·6 | 40 15·2 | 9·7 | |
| 9·4 | 27·4 | 7·3 | |
| 9·0† | 42 12·5 | 49·1 | |
| 9·5 | 18·4 | 14·1 | |
| 9·2 | 44·9 | 1·9 | |
| 9·5 | 46·3 | 15·6 | |
| 9·7 | 51·2 | 0·2 | |
| 9·1† | 43 47·5 | 47·0 | |
| 9·7 | 44 5·3 | 26·8 | |
| 9·5† | 15·5 | 43·0 | |
| 9·3† | 42·5 | 39·4 | |
| 9·4 | 46 42·7 | 33·1 | |
| 9·0† | 47 10·0 | 43·3 | |
| 8·7† | 23·5 | 43·2 | |
| 8·9† | 34·0 | 57·5 | |
| 8·9† | 48 28·0 | 44·7 | |
| 8·9† | 52·5 | 54·3 | |
| 8·6 | 59·3 | 8·0 | 9·0 |
| 9·6 | 49 3·3 | 12·8 | 10·0 G |
| 9·3† | 45·5 | 57·1 | |

## 241—300.

| mag. | 2h.–3h. m s | −62° ′ | |
|---|---|---|---|
| 9·1† | 51 28·5 | 44·5 | |
| 9·4 | 53 26·3 | 12·8 | |
| 8·8 | 54 11·3 | 18·7 | 8·5 |
| 9·6 | 48·5 | 26·0 | |
| 8·8 | 55 40·5 | 17·6 | |
| 8·6† | 56 15·5 | 58·5 | 9·0 G |
| 8·0† | 21·0 | 57·3 | 8·5 G |
| 9·4† | 39·0 | 49·1 | 9·5 |
| 9·5 | 57 11·5 | 4·7 | |
| 9·1† | 59 0·3 | 56·3 | 9·0 |
| 9·6‡ | 0 26·0 | 26·3 | ? |
| 9·6‡ | 2 22·5 | 33·8 | |
| 9·0 | 56·5 | 28·0 | 9·5 |
| 9·0 | 3 10·0 | 33·0 | 9·0 G |
| 9·1 | 15·0 | 31·8 | 9·5 |
| 8·2 | 4 53·5 | 39·8 | 8·5 |
| 7·7 | 5 1·5 | 11·9 | 7·0 GS |
| 7·4 | 16·0 | 19·9 | 7·5 GS |
| 9·2 | 51·8 | 15·1 | 9·0 G |
| 8·1‡ | 7 41·5 | 49·6 | 8·5 GSt |
| 9·6 | 8 45·8 | 13·1 | 10·0 |
| 8·4‡ | 9 48·5 | 45·2 | 9·0 |
| 9·6‡ | 12 25·5 | 52·7 | |
| 9·6‡ | 13 7·0 | 37·1 | |
| 5·6‡ | 15 32·5 | 59·0 | 6·0 GS |
| 9·8 | 37·0 | 2·8 | |
| 9·4‡ | 18 22·5 | 43·4 | |
| 8·2 | 50·7 | 31·3 | 9·0 S |
| 9·6 | 19 29·0 | 14·8 | |
| 8·9‡ | 20 53·0 | 48·1 | 8·5 |
| 8·8 | 22 10·8 | 16·0 | 8·8 |
| 9·6‡ | 44·5 | 45·2 | |
| 9·3‡ | 23 16·5 | 50·1 | |
| 9·4‡ | 25 6·5 | 38·0 | |
| 9·3‡ | 27 1·2 | 57·7 | |
| 7·1 | 28 39·6 | 26·0 | 7·0 GS |
| 9·4 | 29 54·2 | 10·0 | |
| 9·6‡ | 30 52·5 | 29·4 | |
| 8·2 | 31 39·6 | 35·0 | 7·5 G |
| 6·6‡ | 32 33·5 | 58·4 | 6·5 GS |
| 9·0‡ | 39·5 | 52·4 | |
| 9·6‡ | 56·0 | 50·2 | |
| 8·9‡ | 33 27·0 | 52·3 | |
| 10·1† | 53·5 | 57·9 | |
| 9·8 | 34 50·4 | 2·9 | |
| 9·4 | 35 49·7 | 18·4 | |
| 9·2 | 36 2·4 | 24·2 | |
| 9·0 | 44·2 | 7·8 | |
| 9·8† | 38 15·0 | 31·7 | |
| 10·1† | 39 26·0 | 40·0 | |
| 10·1† | 41 2·5 | 30·2 | |
| 7·7 | 24·4 | 1·2 | 7·5 GS |
| 10·1† | 25·5 | 43·5 | |
| 10·1† | 42 4·0 | 35·2 | |
| 10·0† | 22·5 | 48·1 | |
| 10·1† | 44 9·0 | 43·8 | |
| 10·0† | 34·5 | 30·1 | |
| 9·2† | 48 20·5 | 47·4 | |
| 10·2† | 55·5 | 57·5 | |
| 9·5† | 51 44·0 | 58·2 | |

## 301—360.

| mag. | 3h.–4h. m s | −62° ′ | |
|---|---|---|---|
| 9·8 | 52 23·9 | 1·5 | |
| 8·6 | 56·5 | 27·3 | 9·0 G |
| 9·9 | 53 17·9 | 23·8 | |
| 9·6 | 25·9 | 32·6 | |
| 9·7† | 54 32·0 | 42·9 | |
| 9·6 | 39·1 | 4·2 | |
| 8·8† | 50·0 | 37·0 | |
| 9·8 | 55 57·9 | 13·8 | |
| 9·1 | 56 36·6 | 23·4 | |
| 7·6 | 58 7·4 | 14·7 | 6·5 GS |
| 9·2 | 35·9 | 15·5 | |
| 6·5 | 59 5·1 | 30·5 | 5·0 GSgct |
| 10·1† | 7·5 | 38·5 | |
| 9·5 | 24·4 | 20·4 | 9·5 |
| 8·0 | 48·9 | 18·3 | 8·5 |
| 9·7† | 0 19·0 | 56·9 | |
| 9·2† | 29·5 | 58·4 | |
| 10·1† | 36·0 | 52·9 | |
| 8·8† | 1 6·0 | 43·7 | |
| 9·9 | 3 58·7 | 26·6 | |
| 10·1† | 4 17·5 | 43·9 | |
| 9·4 | 6 5·4 | 26·9 | |
| 9·2† | 53·5 | 38·7 | |
| 8·7† | 7 19·0 | 53·3 | 9·0 |
| 9·9 | 27·5 | 30·2 | |
| 9·1† | 9 24·0 | 46·0 | |
| 10·1† | 10 9·0 | 29·0 | |
| 9·2 | 48·9 | 18·9 | |
| 9·0 | 49·4 | 14·0 | |
| 9·2 | 11 11·4 | 7·4 | |
| 10·1† | 43·5 | 57·9 | |
| 4·0† | 12 48·5 | 47·3 | 3·0 GScgtλ |
| 9·4 | 53·4 | 17·8 | 9·5 |
| 6·4 | 13 9·9 | 30·3 | 6·0 GS |
| 10·1† | 14 8·0 | 53·4 | |
| 9·0 | 16 41·9 | 18·4 | |
| 8·2† | 17 36·0 | 44·6 | 8·5 |
| 8·4 | 18 4·4 | 34·3 | 9·0 |
| 9·9 | 31·1 | 32·0 | |
| 9·8† | 31·8 | 50·6 | |
| 9·3‡ | 19 37·2 | 57·9 | |
| 8·9 | 46·9 | 9·9 | S |
| 8·8 | 20 1·9 | 24·9 | 9·5 |
| 9·8 | 29·4 | 12·0 | |
| 8·6 | 47·9 | 7·5 | S |
| 8·4‡ | 21 20·7 | 48·7 | 9·2 |
| 9·5‡ | 22 1·0 | 53·4 | |
| 9·9 | 9·7 | 34·0 | |
| 9·4‡ | 13·0 | 39·2 | |
| 9·5‡ | 22·5 | 30·0 | |
| 9·2 | 34·0 | 26·0 | |
| 9·9 | 24 15·7 | 32·9 | |
| 9·8 | 26·4 | 4·4 | |
| 9·0 | 32·4 | 27·2 | 9·5 |
| 9·8‡ | 33·3 | 49·7 | |
| 9·6 | 36·4 | 0·9 | |
| 6·5‡ | 26 19·0 | 47·7 | 5·5 GSc |
| 8·5 | 20·5 | 5·1 | |
| 9·2 | 29·3 | 28·4 | 9·5 G |
| 8·5 | 31·0 | 0·9 | 8·0 GS |

### Prec.

| h | m | δ + s | α + ′ |
|---|---|---|---|
| 1 | 20 | 55 | 7·9 |
| | 30 | 52 | 7·7 |
| | 40 | 50 | 7·6 |
| | 50 | 47 | 7·4 |
| 2 | 0 | 45 | 7·2 |
| | 10 | 42 | 7·0 |
| | 20 | 40 | 6·8 |
| | 30 | 38 | 6·6 |
| | 40 | 36 | 6·4 |
| | 50 | 33 | 6·2 |
| 3 | 0 | 31 | 5·9 |
| | 10 | 29 | 5·6 |
| | 20 | 28 | 5·4 |
| | 30 | 26 | 5·1 |
| | 40 | 24 | 4·8 |
| | 50 | 23 | 4·5 |
| 4 | 0 | 21 | 4·2 |
| | 10 | 20 | 3·9 |
| | 20 | 19 | 3·5 |
| | 30 | 17 | 3·2 |



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| 25 prec. | | α + | δ + |
|---|---|---|---|
| h | m | s | ′ |
| 4 | 20 | 19 | 3·5 |
| | 30 | 17 | 3·2 |
| | 40 | 16 | 2·9 |
| | 50 | 16 | 2·5 |
| 5 | 0 | 15 | 2·2 |
| | 10 | 14 | 1·8 |
| | 20 | 14 | 1·5 |
| | 30 | 13 | 1·1 |
| | 40 | 13 | 0·7 |
| | 50 | 13 | 0·4 |
| 6 | 0 | 13 | 0·0 |
| | | | − |
| | 10 | 13 | 0·4 |
| | 20 | 13 | 0·7 |

## 361—420.

| mag. | 4h.–5h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·9‡ | 28 | 20·5 | 35·2 | |
| 9·6 | | 45·1 | 28·9 | |
| 9·8‡ | 29 | 19·5 | 38·8 | |
| 9·8 | | 49·4 | 30·9 | |
| 9·2‡ | | 59·0 | 46·6 | |
| 8·6 | 30 | 4·9 | 6·4 | 9·0 |
| 9·9 | | 48·4 | 13·3 | |
| 9·6 | 31 | 33·2 | 32·1 | |
| 9·1‡ | 33 | 33·5 | 57·3 | |
| 9·3‡ | | 39·0 | 48·1 | |
| 9·2‡ | 34 | 14·0 | 54·0 | 9·0 |
| 6·9 | 35 | 18·7 | 19·3 | 5·8 GS |
| 9·8‡ | | 42·0 | 50·9 | |
| 9·5‡ | | 47·5 | 34·0 | |
| 8·8 | 36 | 55·2 | 25·5 | 9·5 |
| 6·5‡ | 37 | 26·0 | 37·4 | 7·0 GSg |
| 8·2‡ | 40 | 47·5 | 37·1 | 9·0 |
| 9·0 | 41 | 14·7 | 2·5 | |
| 9·3‡ | | 34·5 | 53·0 | |
| 9·9‡ | | 58·0 | 27·8 | |
| 9·9‡ | | 59·5 | 28·0 | |
| 9·8‡ | 42 | 40·0 | 51·8 | |
| 9·1‡ | 43 | 43·0 | 43·0 | 9·5 |
| 9·8 | 45 | 23·7 | 3·7 | |
| 9·4‡ | | 52·5 | 57·1 | G |
| 9·1‡ | 46 | 11·5 | 38·8 | |
| 9·9‡ | | 57·0 | 38·8 | G |
| 8·8‡ | 47 | 12·5 | 42·0 | 9·5 |
| 9·2 | | 59·2 | 5·8 | |
| 9·2 | 48 | 2·7 | 3·3 | |
| 8·7 | | 3·1 | 29·9 | |
| 8·9 | | 39·7 | 26·7 | |
| 9·5‡ | 49 | 36·0 | 44·8 | |
| 9·5 | 50 | 47·7 | 21·4 | |
| 9·7‡ | 51 | 5·5 | 37·4 | |
| 9·6 | | 41·7 | 5·6 | |
| 9·6 | 52 | 54·7 | 14·2 | |
| 7·2‡ | 53 | 56·0 | 59·8 | |
| 9·3‡ | 54 | 52·0 | 46·6 | |
| 8·6‡ | 55 | 28·0 | 38·7 | 8·5 |
| 9·6‡ | | 59·0 | 33·0 | |
| 9·9‡ | 56 | 33·0 | 42·3 | |
| 9·5‡ | 57 | 4·2 | 41·8 | |
| 9·9‡ | 58 | 0·5 | 49·1 | |
| 9·8 | | 46·2 | 21·8 | |
| 8·7 | | 52·7 | 27·5 | 9·0 |
| 9·5 | | 54·7 | 22·6 | |
| 9·8 | 59 | 5·7 | 8·7 | |
| 10·0† | | 44·0 | 39·3 | |
| 8·8 | 0 | 17·2 | 16·3 | |
| 9·5† | | 51·0 | 55·5 | |
| 9·6 | | 54·2 | 17·7 | |
| 9·8 | 1 | 11·7 | 6·9 | |
| 8·8 | | 20·2 | 5·1 | 10·0 |
| 9·8 | | 34·2 | 20·2 | |
| 9·5† | | 37·0 | 51·9 | |
| 9·8 | | 41·1 | 28·8 | |
| 8·7 | 3 | 7·7 | 26·0 | |
| 9·5† | 4 | 21·5 | 50·7 | |
| 8·8 | | 53·2 | 12·6 | |

## 421—480.

| mag. | 5h. m | s | −62° ′ | |
|---|---|---|---|---|
| 7·7† | 5 | 5·0 | 57·9 | 8·0 |
| 9·0 | | 21·5 | 33·0 | |
| 10·0† | | 23·0 | 59·6 | G |
| 9·6 | | 29·2 | 31·0 | |
| 8·4† | 6 | 20·5 | 54·9 | 8·5 |
| 9·0 | | 39·5 | 12·5 | |
| 9·4 | | 53·0 | 21·5 | |
| 9·4 | 7 | 11·5 | 39·0 | |
| 9·6† | 8 | 11·5 | 45·7 | |
| 8·7† | | 20·5 | 43·0 | |
| 9·3 | | 25·0 | 15·6 | |
| 9·5 | | 26·3 | 34·8 | |
| 9·3 | | 48·5 | 22·8 | |
| 9·6 | 9 | 2·5 | 7·8 | |
| 9·2† | | 11·5 | 50·3 | |
| 9·6 | | 56·5 | 5·9 | |
| 8·5† | 10 | 17·5 | 57·9 | 9·0 |
| 10·0† | | 45·5 | 53·9 | |
| 8·4 | | 53·0 | 11·3 | 9·5 |
| 9·3 | 11 | 11·0 | 7·7 | |
| 9·1 | 12 | 14·5 | 16·3 | |
| 10·0† | | 59·5 | 42·0 | |
| 9·2 | 13 | 8·5 | 8·9 | |
| 9·6 | | 15·5 | 34·8 | |
| 8·4 | 14 | 2·5 | 17·0 | 9·5 |
| 9·2 | | 36·8 | 31·4 | |
| 9·7 | | 55·0 | 7·8 | |
| 9·4 | 15 | 23·5 | 0·9 | |
| 9·6 | | 23·5 | 34·6 | |
| 8·7† | | 28·5 | 49·9 | 8·5 |
| 9·0† | | 36·0 | 55·9 | |
| 8·9† | | 53·5 | 44·4 | |
| 8·7 | 16 | 0·0 | 31·2 | |
| 9·7 | | 15·5 | 5·0 | |
| 9·8 | | 33·0 | 0·9 | |
| 8·4 | | 56·0 | 4·9 | 9·0 |
| 9·1 | 18 | 31·5 | 3·7 | |
| 9·7 | | 36·5 | 30·6 | |
| 9·3 | 19 | 22·5 | 9·9 | |
| 10·0† | | 35·8 | 59·0 | |
| 9·1† | | 56·0 | 44·3 | |
| 9·7 | 20 | 33·5 | 9·9 | |
| 9·4† | | 43·5 | 54·9 | |
| 9·7 | 21 | 58·0 | 19·9 | |
| 8·7 | 22 | 2·5 | 20·5 | 8·0 |
| 9·5 | | 7·3 | 26·0 | |
| 9·4† | | 31·0 | 38·8 | |
| 7·3† | | 40·5 | 41·5 | 8·0 G |
| 8·6 | 23 | 18·0 | 28·7 | |
| 9·8 | | 20·5 | 29·1 | |
| 9·6 | 24 | 14·5 | 33·1 | |
| 8·7† | | 40·0 | 53·1 | 9·0 |
| 8·8 | 25 | 57·0 | 35·3 | |
| 9·7 | 26 | 13·5 | 10·9 | |
| 9·2 | | 43·0 | 34·7 | |
| 9·3† | 27 | 11·5 | 46·8 | |
| 9·2 | | 36·5 | 11·0 | |
| 8·7 | 28 | 1·5 | 1·0 | 9·0Gt |
| 7·9 | | 9·5 | 24·4 | 7·5 GS |
| 10·0† | | 50·0 | 53·0 | |

## 481—540.

| mag. | 5h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·7 | 28 | 57·5 | 32·1 | |
| 9·7 | 30 | 38·5 | 22·8 | |
| 8·9† | 31 | 16·0 | 46·5 | |
| 9·5† | | 30·0 | 40·2 | |
| 9·5 | 32 | 22·5 | 11·5 | |
| 9·2 | | 23·5 | 19·9 | |
| 5·9 | | 32·0 | 34·2 | 4·0 GSctλ |
| 9·4 | 33 | 1·5 | 2·9 | |
| 9·3 | | 20·5 | 5·3 | |
| 10·0† | | 27·5 | 55·0 | |
| 9·8 | | 32·5 | 20·3 | |
| 9·7 | 34 | 22·0 | 30·9 | |
| 8·4 | | 27·5 | 7·5 | 9·0 |
| 9·4† | | 45·5 | 53·0 | |
| 9·3 | 35 | 18·5 | 23·4 | |
| 9·5 | 36 | 6·5 | 20·5 | |
| 10·0† | | 35·8 | 52·4 | |
| 9·8 | 38 | 20·5 | 17·5 | |
| 9·4 | | 25·0 | 35·1 | |
| 9·2 | 39 | 7·0 | 10·0 | |
| 8·9† | | 7·8 | 59·9 | 8·8 Gg |
| 8·9† | | 17·5 | 42·5 | 9·5 |
| 9·4‡ | | 22·2 | 36·9 | |
| 9·6‡ | 40 | 18·0 | 59·3 | |
| 9·8 | | 37·0 | 12·7 | |
| 6·9‡ | | 59·5 | 58·3 | 7·0 GSg |
| 10·0 | 41 | 2·0 | 32·6 | |
| 9·9 | 42 | 18·5 | 31·7 | |
| 9·5 | | 42·5 | 31·4 | g |
| 9·9 | | 58·8 | 12·9 | |
| 10·0 | 43 | 25·5 | 6·7 | |
| 8·4‡ | 44 | 14·5 | 57·9 | g |
| 9·9 | | 49·0 | 0·5 | |
| 10·0 | 45 | 6·0 | 28·7 | |
| 10·0 | | 19·5 | 2·7 | |
| 10·0 | | 34·0 | 34·7 | |
| 9·6 | | 58·5 | 5·8 | |
| 10·1‡ | 46 | 6·0 | 51·4 | |
| 9·8‡ | | 11·3 | 58·0 | g |
| 10·0 | | 20·5 | 13·1 | |
| 9·9 | | 24·5 | 14·1 | |
| 10·0 | | 25·5 | 30·3 | |
| 9·3‡ | | 33·7 | 57·3 | g |
| 10·1‡ | 47 | 0·5 | 42·9 | |
| 9·7‡ | | 15·0 | 47·3 | |
| 9·3 | | 52·5 | 15·7 | g |
| 10·0‡ | 48 | 33·0 | 49·4 | |
| 10·0 | | 51·0 | 15·5 | |
| 8·1 | 49 | 10·0 | 6·5 | 8·0 GS |
| 10·0 | | 23·5 | 16·8 | |
| 9·7 | | 34·5 | 13·8 | |
| 10·1‡ | | 55·0 | 55·7 | |
| 9·6‡ | 50 | 11·0 | 53·3 | g |
| 9·4 | | 19·5 | 1·1 | |
| 9·4 | | 52·5 | 3·6 | |
| 9·9 | | 54·0 | 35·4 | |
| 8·5 | | 58·0 | 32·6 | g |
| 9·4 | 51 | 29·0 | 34·4 | g |
| 9·0‡ | 52 | 25·5 | 49·6 | g |
| 9·4 | | 44·0 | 18·8 | |

## 541—600.

| mag. | 5h.–6h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0‡ | 52 | 52·5 | 49·2 | |
| 10·0 | | 56·0 | 7·5 | |
| 10·0 | 53 | 5·0 | 6·5 | |
| 9·4 | | 10·0 | 7·4 | |
| 9·7‡ | | 17·5 | 52·2 | |
| 9·9‡ | | 40·5 | 39·8 | |
| 10·0‡ | 54 | 11·5 | 59·4 | |
| 9·9 | 56 | 20·0 | 1·0 | |
| 9·4 | | 20·5 | 24·9 | g |
| 9·2 | | 39·0 | 5·4 | |
| 10·0 | | 43·5 | 23·7 | |
| 9·0‡ | 57 | 14·5 | 45·7 | 9·5 g |
| 10·0 | 58 | 14·0 | 11·3 | |
| 9·8 | | 34·5 | 8·8 | |
| 9·8 | | 36·5 | 10·8 | |
| 10·0 | | 50·5 | 21·0 | |
| 10·0 | | 51·0 | 13·7 | |
| 8·1‡ | | 55·5 | 48·7 | 8·5 Gg |
| 9·5 | 59 | 23·0 | 35·9 | |
| 9·5 | | 23·5 | 8·9 | |
| 9·0 | | 29·0 | 15·9 | g |
| 10·1‡ | | 31·5 | 42·5 | |
| 8·5‡ | | 38·0 | 48·7 | 9·0 g |
| 9·0‡ | | 49·5 | 52·0 | 9·0 g |
| 9·9‡ | | 53·0 | 48·6 | 9·5 g |
| 10·1‡ | | 58·0 | 47·1 | |
| 10·0 | 1 | 21·0 | 8·8 | |
| 10·1‡ | | 41·5 | 37·5 | |
| 8·8‡ | | 46·5 | 40·0 | g |
| 9·7 | | 48·5 | 15·8 | |
| 9·4 | 2 | 27·5 | 11·4 | 9·5 |
| 9·8 | | 31·0 | 30·9 | |
| 9·8 | | 45·0 | 8·7 | 9·5 |
| 8·5 | | 51·5 | 19·2 | 9·0 Gg |
| 10·0 | 3 | 5·0 | 33·5 | |
| 9·7 | | 29·0 | 29·9 | |
| 9·1 | | 34·5 | 6·9 | 9·0 |
| 10·1‡ | | 47·5 | 41·0 | |
| 8·6 | 4 | 9·5 | 16·9 | 8·5 Gg |
| 9·3‡ | 5 | 41·5 | 40·0 | g |
| 9·8 | | 52·0 | 15·1 | |
| 7·0 | | 54·5 | 7·9 | 6·0 GSg |
| 10·0 | 6 | 42·0 | 3·8 | |
| 9·4 | | 44·0 | 18·0 | |
| 9·0‡ | 7 | 35·0 | 57·6 | g |
| 10·0 | | 38·5 | 28·9 | |
| 9·4 | | 49·5 | 31·5 | |
| 9·7 | 8 | 13·5 | 21·1 | g |
| 9·1‡ | | 13·8 | 59·8 | g |
| 9·8 | 9 | 12·5 | 20·0 | |
| 10·0 | | 50·0 | 35·0 | |
| 10·0 | | 54·0 | 0·9 | |
| 9·8 | 10 | 26·0 | 23·9 | |
| 10·0 | | 31·0 | 3·9 | |
| 9·9 | 11 | 8·0 | 21·7 | |
| 9·9 | | 22·0 | 14·3 | |
| 10·0 | | 40·0 | 11·9 | |
| 8·2 | | 49·5 | 2·0 | 8·5 G |
| 10·1‡ | 12 | 2·0 | 41·4 | |
| 9·1‡ | | 35·5 | 46·8 | g |

## 601—660.

| mag. | 6h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·1 | 13 | 44·0 | 14·5 | 8·0 G*g* |
| 9·0 | | 58·0 | 15·0 | 9·5*g* |
| 9·0 | 14 | 5·0 | 19·5 | 8·0 G*g* |
| 10·1‡ | 15 | 3·0 | 51·3 | |
| 9·9 | | 54·0 | 17·9 | |
| 9·8 | 16 | 21·5 | 11·2 | |
| 10·0 | | 23·8 | 6·2 | |
| 9·2 | | 33·8 | 15·2 | *g* |
| 10·0 | | 40·0 | 9·2 | |
| 10·0 | | 52·3 | 0·7 | |
| 9·7 | 17 | 2·0 | 13·8 | |
| 9·0▬ | | 17·5 | 17·2 | *g* |
| 9·3‡ | | 52·0 | 57·4 | |
| 9·4‡ | | 56·7 | 55·1 | *g* |
| 9·8‡ | 18 | 6·8 | 39·0 | |
| 9·5 | | 29·8 | 23·0 | *g* |
| 9·3 | | 51·5 | 9·5 | |
| 9·7 | 19 | 12·7 | 29·6 | |
| 7·5 | | 48·2 | 17·5 | 7·5 G*g* |
| 9·2 | | 58·2 | 7·7 | |
| 8·4 | 20 | 39·5 | 19·1 | 8·5 *g* |
| 10·0† | | 51·5 | 39·3 | |
| 10·0† | 21 | 5·5 | 50·0 | |
| 9·7 | | 19·5 | 12·1 | |
| 9·7 | | 19·5 | 13·9 | |
| 9·4 | | 28·5 | 32·3 | 9·5 *g* |
| 9·3 | | 33·5 | 34·3 | 9·0 *g* |
| 10·0 | | 45·0 | 29·6 | |
| 9·6 | | 59·5 | 11·9 | |
| 9·8 | 22 | 7·5 | 22·4 | |
| 10·1 | | 37·5 | 33·6 | |
| 9·7† | | 59·0 | 54·1 | |
| 10·0 | 23 | 36·5 | 20·8 | |
| 8·4† | | 45·0 | 45·9 | 8·5 *g* |
| 9·9 | | 49·0 | 2·5 | |
| 7·9 | 24 | 18·5 | 20·9 | 8·5 *g* |
| 8·1 | | 27·0 | 5·7 | |
| 9·8 | | 28·0 | 0·0 | |
| 10·0† | | 40·2 | 59·2 | |
| 10·0 | 25 | 4·5 | 8·9 | |
| 9·9 | | 15·0 | 34·2 | |
| 10·0 | | 20·0 | 2·0 | |
| 10·0 | | 56·0 | 9·1 | |
| 9·2† | 26 | 7·5 | 53·3 | *g* |
| 9·9 | | 36·0 | 6·6 | |
| 7·1 | | 38·5 | 4·3 | 7·0 GSc |
| 9·4 | | 42·0 | 31·1 | |
| 9·3† | 27 | 0·0 | 52·3 | *g* |
| 9·8 | | 9·5 | 26·9 | *g* |
| 8·8 | | 36·5 | 28·2 | 8·0 *g* |
| 9·2 | | 46·5 | 28·9 | *g* |
| 9·9 | 28 | 29·5 | 4·0 | |
| 8·8† | 29 | 0·0 | 41·5 | *g* |
| 10·0† | | 3·5 | 53·9 | |
| 9·2 | | 21·0 | 21·2 | |
| 9·5† | | 43·5 | 55·0 | |
| 7·8 | 30 | 15·5 | 14·7 | G*g*t |
| 9·6 | | 40·5 | 21·3 | |
| 10·0† | | 42·0 | 39·2 | |
| 10·0 | | 43·5 | 13·5 | |

## 661—720.

| mag. | 6h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 30 | 46·0 | 32·1 | |
| 9·5† | 31 | 33·5 | 37·3 | 9·0 *g* |
| 10·0 | | 34·0 | 29·0 | |
| 9·6† | | 36·5 | 52·1 | |
| 9·8† | | 39·5 | 43·5 | |
| 9·6 | 32 | 2·0 | 28·3 | |
| 9·4† | | 53·5 | 43·5 | 8·5 *g* |
| 10·0 | 33 | 3·0 | 35·6 | |
| 9·6 | | 11·5 | 23·1 | |
| 8·8 | | 32·5 | 0·0 | 9·0 |
| 8·5 | | 39·5 | 27·5 | *g* |
| 9·8 | | 50·0 | 4·9 | |
| 9·5 | | 52·0 | 25·6 | *g* |
| 10·1 | | 55·5 | 25·6 | |
| 10·0 | | 57·5 | 14·1 | |
| 9·8 | 34 | 2·0 | 24·1 | |
| 8·7 | | 7·0 | 23·9 | *g* |
| 9·4† | | 29·5 | 49·0 | *g* |
| 9·9 | 35 | 20·5 | 31·7 | |
| 9·3 | | 44·5 | 25·8 | |
| 8·3 | | 45·5 | 14·3 | 9·0 *g* |
| 10·0† | | 53·5 | 58·2 | |
| 9·1† | 36 | 10·5 | 48·7 | *g* |
| 9·2 | | 21·0 | 25·9 | |
| 9·8 | | 23·0 | 1·0 | |
| 10·0† | | 49·5 | 38·3 | |
| 9·0 | 37 | 9·5 | 7·4 | |
| 10·0 | | 34·0 | 9·1 | |
| 10·0 | | 47·0 | 19·5 | |
| 9·8† | 38 | 8·5 | 40·9 | |
| 10·0† | | 11·0 | 56·7 | |
| 9·2† | | 11·5 | 40·5 | |
| 9·8† | 39 | 40·5 | 51·1 | |
| 10·0† | | 51·5 | 36·1 | |
| 9·0† | | 52·5 | 59·5 | *g* |
| 10·0 | | 54·0 | 2·4 | |
| 8·5† | 41 | 30·5 | 38·9 | 8·5 *g* |
| 10·0 | | 36·5 | 16·1 | |
| 10·0 | | 39·5 | 34·7 | |
| 9·4† | | 45·0 | 46·0 | 9·5 *g* |
| 9·6 | | 46·0 | 31·1 | |
| 9·9· | | 56·5 | 0·0 | |
| 8·8 | 42 | 13·0 | 29·1 | 8·5 *g* |
| 9·7† | | 22·5 | 53·9 | |
| 9·1 | 43 | 47·0 | 27·1 | |
| 10·0 | 44 | 4·5 | 2·9 | |
| 9·3† | | 43·0 | 53·1 | |
| 9·3† | 45 | 16·5 | 51·0 | *g* |
| 10·0 | | 27·5 | 2·1 | |
| 9·6 | | 46·0 | 10·1 | |
| 9·7 | | 47·5 | 14·0 | |
| 9·0 | 47 | 13·5 | 3·5 | 9·5 |
| 9·8 | | 13·5 | 7·1 | |
| 9·0 | | 16·5 | 3·4 | 9·5 |
| 9·8 | | 20·0 | 29·0 | |
| 10·0 | | 51·0 | 11·3 | |
| 10·0 | 48 | 7·5 | 20·1 | |
| 10·0 | | 14·5 | 17·9 | |
| 9·8† | 49 | 39·0 | 47·0 | |
| 9·6† | 50 | 0·5 | 47·7 | |

## 721—780.

| mag. | 6h.—7h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·3† | 50 | 1·5 | 53·8 | 9·5 *g* |
| 9·8† | | 5·5 | 43·3 | |
| 9·2† | | 7·5 | 55·4 | 8·8 *g* |
| 8·8 | | 11·0 | 27·1 | *g* |
| 9·8† | | 21·5 | 52·8 | |
| 9·8 | 51 | 11·7 | 30·7 | |
| 9·4† | | 43·5 | 48·3 | |
| 9·4▬ | 52 | 2·0 | 26·3 | |
| 9·4 | | 42·3 | 15·9 | |
| 9·1 | | 51·9 | 15·0 | |
| 9·1† | | 53·0 | 55·1 | 8·8 *g* |
| 8·2 | | 57·7 | 18·2 | 8·5 *g* |
| 9·7† | 53 | 3·0 | 55·8 | |
| 9·4 | | 8·3 | 15·6 | |
| 8·9 | | 29·1 | 2·0 | |
| 9·4 | 54 | 41·5 | 5·1 | |
| 9·0 | 55 | 1·3 | 2·9 | |
| 9·4 | | 31·5 | 0·2 | |
| 9·1 | | 35·5 | 26·1 | |
| 9·4† | | 57·0 | 36·3 | |
| 9·2 | | 59·0 | 19·1 | |
| 9·4 | 56 | 7·5 | 7·0 | |
| 9·0† | | 31·5 | 54·0 | |
| 10·0† | | 40·5 | 58·9 | |
| 9·8† | | 42·5 | 38·3 | |
| 9·0 | 57 | 47·5 | 11·0 | |
| 9·4† | 58 | 9·0 | 44·0 | *g* |
| 9·4 | | 38·5 | 13·1 | |
| 9·7‡ | | 43·0 | 55·3 | |
| 9·1‡ | 59 | 11·2 | 39·8 | *g* |
| 9·4 | | 25·0 | 13·1 | |
| 9·3 | | 32·5 | 7·1 | |
| 9·2 | | 43·5 | 24·7 | |
| 9·4 | | 49·5 | 3·7 | |
| 8·8 | 0 | 11·5 | 32·7 | *g* |
| 9·6‡ | | 37·5 | 47·5 | |
| 9·3 | 1 | 23·0 | 23·1 | S*g* |
| 9·7‡ | | 53·5 | 38·8 | |
| 9·4 | 2 | 18·3 | 23·7 | |
| 9·7‡ | | 57·5 | 39·0 | |
| 9·6‡ | 3 | 6·5 | 38·6 | |
| 9·1 | | 9·0 | 28·6 | *g* |
| 9·4‡ | | 54·5 | 59·1 | *g* |
| 8·9‡ | 4 | 49·0 | 55·2 | *g* |
| 9·7‡ | | 57·5 | 56·0 | |
| 9·4 | 5 | 5·5 | 34·5 | |
| 9·5‡ | | 40·3 | 59·0 | |
| 9·2‡ | | 45·0 | 40·1 | *g* |
| 9·4‡ | 6 | 51·5 | 37·1 | *g* |
| 9·4‡ | | 52·5 | 54·4 | *g* |
| 9·4 | 7 | 13·3 | 15·2 | |
| 9·4 | | 13·5 | 35·0 | *g* |
| 9·4‡ | | 14·5 | 51·0 | |
| 9·3‡ | | 24·5 | 45·4 | |
| 9·7‡ | | 37·5 | 54·0 | |
| 9·4 | | 42·0 | 27·1 | |
| 9·4 | | 45·0 | 11·1 | |
| 7·9 | 8 | 17·5 | 6·1 | 8·5 G |
| 9·3 | | 32·0 | 9·1 | |
| 9·2 | | 34·5 | 12·1 | |

## 781—840.

| mag. | 7h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·2 | 8 | 47·5 | 13·1 | |
| 8·9‡ | | 58·0 | 48·7 | *g* |
| 9·4 | 9 | 1·3 | 21·2 | |
| 9·4 | | 2·3 | 20·6 | |
| 9·0 | | 55·5 | 32·8 | *g* |
| 9·4 | 10 | 4·3 | 33·5 | |
| 9·1 | | 37·5 | 9·2 | |
| 9·5‡ | | 43·5 | 57·4 | |
| 6·7‡ | | 51·0 | 58·7 | 6·5 GSc*g* |
| 8·9‡ | 11 | 7·0 | 52·3 | 9·0 *g* |
| 9·4 | 12 | 15·5 | 15·4 | |
| 9·7‡ | | 17·0 | 53·7 | |
| 9·7‡ | | 19·0 | 41·0 | |
| 9·7‡ | | 26·0 | 47·8 | |
| 9·4 | | 41·5 | 31·8 | |
| 8·1‡ | | 42·5 | 49·0 | 8·5 *g* |
| 9·4 | | 53·3 | 14·0 | |
| 9·4‡ | | 56·5 | 52·8 | |
| 9·2 | 13 | 3·5 | 20·6 | *g* |
| 9·4 | | 9·5 | 5·2 | |
| 9·4 | | 13·0 | 6·2 | |
| 9·7‡ | | 27·0 | 49·8 | |
| 8·3‡ | | 29·0 | 50·7 | 8·5 *g* |
| 9·4 | | 49·0 | 25·1 | |
| 9·4‡ | 14 | 23·5 | 57·0 | |
| 9·1‡ | | 26·0 | 57·4 | 9·0 *g* |
| 9·7‡ | | 44·0 | 36·0 | |
| 9·4 | | 49·5 | 0·5 | |
| 9·4 | 15 | 49·5 | 30·0 | |
| 9·2 | | 52·5 | 12·8 | |
| 9·7‡ | 16 | 1·0 | 39·7 | *g* |
| 8·7‡ | | 6·5 | 47·5 | 8·8 G*g* |
| 9·4 | | 19·3 | 0·0 | |
| 8·6 | 17 | 25·0 | 14·8 | *g* |
| 9·7‡ | 18 | 25·5 | 41·7 | |
| 9·2‡ | | 29·5 | 39·0 | *g* |
| 9·2 | 19 | 44·5 | 32·6 | *g* |
| 9·3‡ | | 56·5 | 36·8 | *g* |
| 9·4‡ | 20 | 0·0 | 38·0 | |
| 9·4 | | 22·0 | 9·8 | |
| 9·4 | | 45·0 | 24·0 | |
| 9·3 | 21 | 8·0 | 35·1 | |
| 9·2 | | 15·0 | 29·6 | *g* |
| 8·0 | | 39·0 | 1·6 | 7·5 GSt |
| 9·6‡ | | 51·0 | 39·5 | |
| 9·4 | 22 | 3·0 | 1·5 | |
| 9·7‡ | | 21·5 | 56·8 | |
| 9·0 | 23 | 3·5 | 16·9 | |
| 9·4 | | 4·3 | 16·6 | |
| 9·4 | 24 | 5·0 | 20·5 | |
| 9·7‡ | | 9·0 | 37·9 | |
| 8·9‡ | | 16·5 | 48·5 | 9·0 *g* |
| 9·6‡ | 25 | 2·5 | 48·9 | 9·5 *g* |
| 9·2 | 26 | 25·5 | 31·3 | |
| 9·2 | 28 | 50·1 | 34·2 | *g* |
| 9·4▬ | 29 | 33·2 | 28·3 | |
| 9·2 | | 45·3 | 14·9 | |
| 9·0 | 30 | 5·5 | 32·9 | |
| 9·7‡ | 31 | 26·5 | 41·9 | |
| 9·1‡ | | 26·5 | 56·7 | *g* |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 6 | 10 | 13 | 0·4 |
| | 20 | 13 | 0·7 |
| | 30 | 13 | 1·1 |
| | 40 | 14 | 1·5 |
| | 50 | 14 | 1·8 |
| 7 | 0 | 15 | 2·2 |
| | 10 | 16 | 2·5 |
| | 20 | 16 | 2·9 |
| | 30 | 17 | 3·2 |
| | 40 | 19 | 3·5 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 7 | 30 | 17 | 3·2 |
| | 40 | 19 | 3·5 |
| | 50 | 20 | 3·9 |
| 8 | 0 | 21 | 4·2 |
| | 10 | 23 | 4·5 |
| | 20 | 24 | 4·8 |
| | 30 | 26 | 5·1 |
| | 40 | 28 | 5·4 |
| | 50 | 29 | 5·6 |

## 841—900.

| | 7h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·5 | 31 | 29·3 | 2·6 | |
| 9·6 | | 35·5 | 13·0 | |
| 9·0 | | 51·5 | 24·9 | |
| 8·4 | 32 | 46·3 | 8·3 | |
| 9·7 | 33 | 38·5 | 11·5 | |
| 8·4‡ | | 40·5 | 45·8 | 8·5 *g* |
| 9·7‡ | | 47·5 | 38·0 | *g* |
| 8·9‡ | | 56·5 | 40·7 | 9·0 *g* |
| 9·3 | | 58·0 | 32·6 | |
| 9·7 | 34 | 24·5 | 2·2 | |
| 9·4 | | 24·5 | 6·6 | |
| 9·5 | | 51·5 | 16·1 | |
| 9·6‡ | 35 | 57·5 | 59·0 | 9·5 *g* |
| 8·2 | 36 | 18·0 | 1·2 | 9·0 |
| 9·4 | | 20·5 | 19·9 | |
| 9·2 | | 31·0 | 8·8 | 9·0 |
| 8·8 | | 58·0 | 7·7 | 8·5 |
| 9·7 | 37 | 12·5 | 24·0 | |
| 9·7 | | 15·5 | 22·3 | |
| 9·4 | | 29·0 | 29·7 | *g* |
| 9·2 | | 32·5 | 22·6 | *g* |
| 9·5‡ | | 51·0 | 59·3 | |
| 9·6† | | 57·5 | 52·1 | |
| 9·7 | | 59·5 | 10·9 | |
| 9·4 | 38 | 33·0 | 2·0 | |
| 9·7† | 39 | 15·5 | 42·3 | |
| 8·6 | | 53·5 | 25·9 | 8·5 *g* |
| 8·7 | | 54·0 | 3·8 | 8·2 |
| 9·7 | 40 | 0·0 | 14·5 | |
| 9·4† | | 18·5 | 50·2 | |
| 8·8† | | 35·7 | 40·0 | 9·0 *g* |
| 8·8† | | 51·5 | 56·4 | 8·5 *g* |
| 9·2 | 41 | 6·5 | 11·0 | |
| 9·6 | | 28·0 | 3·9 | |
| 8·6† | 42 | 18·0 | 59·6 | 8·5 *g* |
| 9·6† | | 28·5 | 43·4 | |
| 9·6 | | 39·0 | 14·9 | |
| 8·3 | 43 | 8·0 | 8·9 | 8·0 G |
| 9·2 | | 35·0 | 2·9 | |
| 9·0 | | 38·5 | 4·9 | 8·2 |
| 9·2 | | 53·5 | 15·6 | |
| 9·0† | 44 | 6·2 | 59·5 | *g* |
| 9·6† | | 7·0 | 38·1 | |
| 9·0† | | 11·5 | 48·4 | *g* |
| 9·7 | 45 | 0·5 | 33·9 | |
| 9·0† | | 1·0 | 43·0 | 8·8 *g* |
| 9·3 | | 28·0 | 18·3 | |
| 9·7† | | 43·5 | 26·2 | |
| 9·6 | | 51·5 | 14·5 | |
| 9·1† | 46 | 3·0 | 40·3 | *g* |
| 9·7† | | 18·5 | 56·1 | |
| 9·6 | | 42·0 | 21·6 | |
| 9·7† | | 46·0 | 45·0 | |
| 8·9 | 47 | 4·5 | 6·0 | |
| 9·2 | | 19·0 | 25·0 | |
| 9·7 | 48 | 0·0 | 6·5 | |
| 9·2 | | 10·5 | 10·0 | |
| 9·7† | | 29·5 | 36·9 | |
| 9·6 | | 45·0 | 9·0 | |
| 9·6† | 49 | 5·0 | 34·9 | |

## 901—960.

| | 7h.—8h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·4 | 49 | 13·5 | 27·6 | *g* |
| 8·8 | | 19·0 | 30·4 | 9·0 G*g* |
| 7·8 | | 38·2 | 36·4 | 7·5 G*g* |
| 7·8 | 50 | 14·0 | 35·0 | 8·2 G*g* |
| 9·1† | 51 | 8·0 | 39·0 | *g* |
| 8·4 | | 32·0 | 2·0 | 8·0 |
| 9·3† | | 54·0 | 38·2 | *g* |
| 8·0 | 52 | 4·0 | 3·1 | 7·8 G |
| 9·7† | | 10·5 | 58·0 | |
| 9·7† | | 29·0 | 34·9 | |
| 9·7† | | 41·0 | 52·6 | |
| 9·2 | | 44·0 | 5·7 | 9·5 |
| 8·7 | | 57·5 | 33·9 | *g* |
| 9·1† | | 58·5 | 43·7 | *g* |
| 9·6 | 53 | 53·0 | 31·9 | |
| 9·7† | 54 | 5·0 | 43·1 | |
| 8·2 | | 6·5 | 0·8 | 9·0 |
| 9·5† | | 14·5 | 38·1 | *g* |
| 9·7 | | 16·5 | 19·7 | *g* |
| 8·9 | | 38·0 | 3·1 | 9·0 |
| 9·6 | | 51·5 | 0·3 | |
| 9·5† | 55 | 5·7 | 57·2 | |
| 9·7† | | 22·0 | 25·4 | |
| 9·4 | | 36·0 | 32·2 | |
| 6·4† | | 36·5 | 57·7 | 6·8 GS*g* |
| 9·7 | | 42·5 | 25·8 | |
| 9·1† | 56 | 9·0 | 52·3 | *g* |
| 9·7 | | 13·5 | 3·6 | |
| 9·7† | | 15·0 | 43·6 | |
| 8·9† | | 28·0 | 53·3 | 9·5 *g* |
| 9·7 | | 33·0 | 27·1 | |
| 8·0† | | 39·0 | 47·4 | 8·5 GS*g* |
| 9·7† | | 40·0 | 49·5 | |
| 9·7† | | 58·0 | 55·5 | |
| 9·7 | 57 | 34·0 | 35·4 | |
| 9·7† | 58 | 1·0 | 43·4 | |
| 9·6† | | 51·0 | 36·6 | |
| 9·4† | 59 | 20·0 | 40·4 | 10·0 *g* |
| 9·7 | | 27·5 | 32·4 | |
| 8·9† | | 42·0 | 38·2 | 9·5 *g* |
| 8·7 | | 53·0 | 30·3 | 9·0 *g* |
| 8·6 | | 58·5 | 4·6 | |
| 9·4† | | 59·5 | 45·0 | |
| 9·2 | 0 | 8·0 | 37·2 | *g* |
| 9·1† | | 36·0 | 58·5 | *g* |
| 9·7† | 2 | 2·5 | 25·4 | |
| 9·6 | | 5·0 | 17·1 | |
| 9·6† | | 14·5 | 54·9 | |
| 9·2 | | 14·5 | 31·0 | |
| 9·4† | | 16·0 | 41·4 | |
| 9·6 | | 24·5 | 22·1 | *g* |
| 8·5 | | 43·3 | 28·9 | 8·0 GS*g* |
| 6·8_ | | 55·0 | 28·7 | 6·5 GSc*g* |
| 9·4† | 3 | 12·0 | 43·0 | |
| 9·4† | 4 | 11·5 | 39·1 | |
| 9·6 | | 47·5 | 33·7 | |
| 9·6† | | 54·5 | 43·6 | |
| 9·5 | | 59·8 | 24·0 | |
| 9·6 | 6 | 39·8 | 33·6 | |
| 9·2 | | 50·7 | 16·7 | |

## 961—1020.

| | 8h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·6 | 7 | 26·0 | 15·5 | |
| 9·3† | | 54·5 | 54·6 | |
| 9·5† | | 57·5 | 35·1 | |
| 9·3 | | 57·7 | 5·9 | |
| 9·6 | 8 | 10·5 | 3·3 | |
| 9·4† | | 55·0 | 56·1 | |
| 8·5 | | 56·8 | 31·6 | 8·5 *g* |
| 9·2 | 9 | 4·5 | 29·9 | |
| 9·0 | | 7·5 | 27·7 | *g* |
| 9·6 | | 20·0 | 1·6 | |
| 9·6 | | 36·8 | 1·2 | |
| 9·2 | | 54·0 | 5·5 | |
| 9·2 | | 54·5 | 6·5 | 9·5 |
| 9·1† | 10 | 20·5 | 47·3 | |
| 9·6 | | 35·0 | 29·4 | |
| 9·3† | 11 | 0·5 | 57·2 | |
| 9·7† | | 11·0 | 51·6 | |
| 8·2 | | 32·5 | 6·5 | 8·2 G |
| 9·6 | | 35·0 | 24·7 | |
| 8·4 | 12 | 0·5 | 3·3 | 8·5 G |
| 9·7† | | 21·0 | 35·8 | |
| 8·9 | | 25·0 | 7·0 | |
| 9·7† | | 38·0 | 50·8 | |
| 9·6 | | 45·7 | 22·1 | |
| 6·0 | 13 | 21·5 | 31·8 | 5·5 GSc*g*gr |
| 9·6 | | 51·3 | 28·9 | |
| 9·4 | | 59·0 | 28·4 | 9·5 *g* |
| 9·2 | | 59·7 | 28·5 | 9·5 *g* |
| 9·4† | 14 | 36·0 | 49·8 | |
| 9·2 | 15 | 3·0 | 19·8 | *g* |
| 9·5 | | 24·5 | 11·2 | |
| 8·6 | | 32·5 | 28·4 | 9·2 *g* |
| 9·6 | 16 | 13·0 | 23·6 | |
| 9·4† | | 46·5 | 48·7 | |
| 9·6 | 17 | 39·5 | 29·0 | 9·5 *g* |
| 9·3 | | 41·0 | 9·9 | |
| 9·6 | 18 | 5·0 | 33·7 | *g* |
| 9·6 | | 9·0 | 23·2 | 9·5 *g* |
| 9·6 | | 36·5 | 13·2 | |
| 9·6† | | 36·8 | 27·2 | |
| 9·6 | | 50·1 | 0·2 | |
| 9·4‡ | 19 | 12·7 | 44·0 | |
| 10·0‡ | 20 | 9·5 | 47·0 | |
| 9·2 | | 13·5 | 34·0 | *g* |
| 9·4‡ | | 23·5 | 41·0 | |
| 9·2 | | 24·5 | 10·2 | |
| 10·0‡ | | 48·0 | 35·0 | |
| 9·6 | | 53·0 | 10·5 | |
| 9·0 | | 59·5 | 28·9 | *g* |
| 9·5 | 21 | 3·7 | 18·4 | |
| 9·4‡ | | 25·5 | 36·8 | *g* |
| 10·0‡ | | 29·5 | 41·1 | |
| 9·2 | | 56·0 | 21·3 | |
| 9·9‡ | 22 | 33·0 | 52·4 | |
| 9·4‡ | | 46·0 | 35·4 | |
| 10·0‡ | | 49·5 | 29·8 | |
| 9·1‡ | | 54·5 | 47·4 | *g* |
| 9·0‡ | | 56·5 | 42·0 | 9·5 *g* |
| 9·6 | 23 | 2·5 | 7·8 | |
| 9·0 | | 32·5 | 29·0 | 8·5 *g* |

## 1021—1080.

| | 8h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·0‡ | 24 | 12·5 | 41·2 | |
| 9·2 | | 43·0 | 2·0 | 9·0 |
| 9·4‡ | 25 | 34·5 | 57·1 | |
| 10·0‡ | | 46·5 | 45·2 | |
| 9·2 | 26 | 17·5 | 32·5 | |
| 10·0‡ | | 39·0 | 35·0 | |
| 9·8‡ | | 41·5 | 42·9 | |
| 9·6 | | 49·5 | 13·1 | |
| 9·8‡ | 27 | 15·0 | 42·1 | |
| 8·1‡ | | 22·5 | 51·4 | 8·0 G*g* |
| 8·8‡ | 28 | 25·0 | 39·3 | 7·5 G*g* |
| 9·7‡ | | 55·0 | 53·2 | |
| 9·4 | 29 | 4·7 | 35·5 | |
| 10·0‡ | | 6·5 | 40·0 | |
| 8·8 | | 7·0 | 33·9 | 8·5 *g* |
| 10·0‡ | | 8·5 | 45·4 | |
| 9·6‡ | | 17·0 | 46·9 | |
| 9·6 | 30 | 24·5 | 14·0 | |
| 9·6 | | 27·5 | 25·9 | |
| 9·5 | | 31·0 | 12·6 | |
| 9·5 | | 33·0 | 30·6 | *g* |
| 9·2 | | 39·5 | 5·0 | |
| 8·9‡ | 31 | 34·0 | 53·1 | 9·0 |
| 10·0‡ | | 34·5 | 32·6 | |
| 10·0‡ | | 41·5 | 24·8 | 9·5 *g* |
| 8·5 | 32 | 0·0 | 29·6 | 9·0 |
| 9·5 | | 3·5 | 17·4 | |
| 9·0 | | 5·0 | 14·8 | 9·5 |
| 9·6 | | 15·0 | 13·0 | |
| 9·5 | | 36·0 | 1·5 | |
| 9·6 | | 51·5 | 18·0 | |
| 9·3‡ | 33 | 5·5 | 48·6 | |
| 9·6 | | 7·0 | 17·0 | 9·2 |
| 9·2‡ | | 13·0 | 41·2 | *g* |
| 8·7 | 34 | 30·0 | 26·9 | 9·2 *g* |
| 9·6 | | 36·5 | 9·8 | |
| 10·0‡ | 35 | 3·5 | 57·9 | |
| 7·2 | | 5·0 | 24·8 | 6·0 GSc*g*r |
| 9·5‡ | | 11·0 | 49·9 | |
| 8·4 | | 21·5 | 5·3 | 8·8 G |
| 9·6 | | 44·7 | 30·0 | |
| 9·4‡ | 36 | 4·0 | 52·8 | |
| 8·8 | | 13·5 | 24·0 | 6·8 GSc*g* |
| 9·9‡ | | 45·5 | 55·6 | |
| 9·7‡ | | 52·0 | 44·9 | |
| 8·8 | 37 | 25·0 | 5·0 | 8·0 G |
| 10·0‡ | | 31·5 | 43·9 | |
| 9·1 | 38 | 3·3 | 8·4 | |
| 9·6 | | 3·8 | 6·8 | |
| 10·0‡ | | 10·5 | 35·4 | |
| 9·0 | | 14·3 | 0·3 | 9·5 |
| 7·8‡ | | 18·5 | 44·4 | 8·0 G*g* |
| 9·9‡ | | 19·5 | 41·0 | |
| 9·9‡ | | 27·5 | 40·2 | |
| 9·5 | | 33·0 | 8·2 | |
| 9·2_ | | 33·2 | 6·5 | |
| 9·1‡ | 40 | 12·5 | 43·6 | *g* |
| 9·9 | | 48·7 | 26·1 | |
| 8·8‡ | | 58·5 | 47·0 | *g* |
| 9·7‡ | 41 | 22·5 | 55·8 | |



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### 1081—1140.

| mag. | 8h. m s | − 62° ′ | |
|---|---|---|---|
| 9·2 | 41 32·8 | 11·3 | 9·0 |
| 9·2‡ | 52·5 | 37·2 | *g* |
| 10·0 | 53·5 | 3·8 | |
| 9·8 | 59·0 | 13·9 | 9·5 |
| 9·2‡ | 59·5 | 45·0 | *g* |
| 8·5 | 42 3·3 | 4·2 | 8·2 |
| 9·6 | 8·8 | 17·9 | |
| 9·6 | 10·2 | 1·5 | |
| 8·8 | 42·0 | 33·9 | 9·5 *g* |
| 9·8‡ | 43 9·5 | 38·8 | *g* |
| 10·0 | 18·0 | 11·1 | |
| 9·9‡ | 20·5 | 37·0 | |
| 9·2 | 29·5 | 33·5 | *g* |
| 9·2 | 44 9·5 | 24·2 | 9·5 |
| 8·1‡ | 25·0 | 43·8 | 7·5 GS*g* |
| 10·0 | 34·5 | 7·9 | |
| 10·0 | 49·0 | 17·8 | |
| 10·0 | 54·0 | 12·8 | |
| 9·6 | 55·7 | 33·5 | |
| 9·3‡ | 56·0 | 44·2 | |
| 9·9‡ | 45 43·5 | 55·0 | |
| 8·8‡ | 46 2·5 | 58·0 | 8·5 |
| 9·8‡ | 45·5 | 55·8 | |
| 8·0 | 47 9·0 | 2·5 | 7·5 G |
| 7·8‡ | 18·5 | 43·0 | 8·0 GSc*g* |
| 10·0‡ | 29·5 | 49·0 | |
| 10·0‡ | 40·5 | 39·8 | |
| 10·0 | 45·5 | 9·1 | |
| 8·5 | 56·0 | 16·4 | 8·5 |
| 10·0‡ | 48 1·5 | 47·1 | |
| 8·9‡ | 19·0 | 39·3 | *g* |
| 9·7 | 48·5 | 14·3 | |
| 9·8‡ | 55·5 | 53·0 | |
| 9·0 | 49 9·0 | 12·1 | |
| 9·0 | 20·0 | 14·0 | 9·8 |
| 9·9‡ | 27·0 | 49·0 | |
| 9·9‡ | 31·0 | 49·0 | |
| 8·8‡ | 48·7 | 59·9 | |
| 10·0 | 55·5 | 9·9 | |
| 7·8 | 50 5·0 | 23·2 | 8·3 *g* |
| 9·6‡ | 18·0 | 36·0 | |
| 10·0‡ | 31·5 | 41·0 | |
| 9·6‡ | 36·5 | 56·9 | |
| 10·0 | 50·0 | 12·5 | |
| 9·9 | 51 5·5 | 26·9 | |
| 9·6 | 52 13·5 | 21·0 | 9·2 *g* |
| 8·6 | 40·0 | 25·3 | 9·0 *g* |
| 10·0 | 40·5 | 26·3 | |
| 9·8 | 48·5 | 31·9 | |
| 9·7‡ | 53·5 | 43·4 | |
| 9·6 | 53 27·0 | 12·9 | |
| 9·6 | 34·0 | 33·0 | |
| 9·8 | 40·0 | 0·8 | |
| 9·8 | 42·5 | 35·4 | |
| 9·3‡ | 51·5 | 43·7 | *g* |
| 8·3‡ | 54·0 | 59·0 | 8·5 *g* |
| 9·3‡ | 54 2·5 | 56·4 | 9·0 |
| 7·6 | 13·0 | 34·0 | 7·5 GS*g* |
| 9·8‡ | 34·0 | 55·0 | |
| 9·7‡ | 36·5 | 42·0 | |

### 1141—1200.

| mag. | 8h.–9h. m s | − 62° ′ | |
|---|---|---|---|
| 8·6 | 54 59·0 | 24·8 | 9·0 *g* |
| 9·7 | 55 8·5 | 21·9 | |
| 9·8 | 56 37·0 | 5·9 | |
| 9·6 | 49·0 | 13·2 | |
| 6·8‡ | 52·5 | 58·7 | 7·0 GS*g* |
| 9·3 | 55·0 | 32·9 | *g* |
| 9·3 | 57 3·0 | 10·9 | |
| 7·9 | 33·5 | 30·2 | 8·5 *g* |
| 9·9 | 39·5 | 2·2 | |
| 9·6 | 48·5 | 30·4 | 10·0 *g* |
| 9·3‡ | 56·3 | 51·1 | |
| 9·7 | 58 39·0 | 33·5 | *g* |
| 9·7 | 59 45·0 | 7·9 | 10·0 |
| 9·7 | 53·5 | 13·5 | |
| 9·6 | 0 7·5 | 6·4 | |
| 9·8 | 10·0 | 13·7 | |
| 9·6 | 10·5 | 5·9 | |
| 10·0 | 13·0 | 31·9 | |
| 9·3 | 14·0 | 5·7 | |
| 9·7 | 58·0 | 32·8 | |
| 9·9 | 1 34·0 | 0·2 | |
| 9·8 | 44·5 | 2·4 | |
| 8·8† | 2 21·5 | 56·2 | |
| 8·9 | 25·0 | 16·9 | |
| 9·5† | 33·5 | 57·9 | |
| 9·4 | 53·0 | 20·4 | *g* |
| 9·6 | 3 23·5 | 20·7 | 9·5 *g* |
| 7·6 | 4 3·5 | 20·7 | 8·5 GS*gg* |
| 10·0 | 10·0 | 4·8 | |
| 9·5† | 32·5 | 53·2 | |
| 9·2 | 41·5 | 29·5 | 9·0 G*gg* |
| 9·7 | 58·5 | 26·6 | |
| 8·8 | 5 1·5 | 23·2 | 9·5 G*gg* |
| 9·8 | 3·0 | 14·0 | |
| 9·6 | 9·5 | 7·7 | |
| 9·8 | 45·5 | 0·7 | |
| 9·9 | 6 9·5 | 1·8 | |
| 9·9 | 18·5 | 15·0 | |
| 9·8 | 19·5 | 17·3 | |
| 10·0 | 7 19·5 | 16·9 | |
| 9·3 | 24·0 | 24·0 | *g* |
| 10·0 | 45·5 | 2·3 | |
| 10·0 | 49·5 | 1·3 | |
| 9·9 | 8 2·0 | 4·3 | |
| 9·6 | 6·0 | 16·2 | |
| 9·5† | 19·5 | 41·4 | |
| 9·8 | 28·0 | 17·2 | |
| 8·8 | 33·0 | 25·9 | 9·5 *g* |
| 10·0 | 45·0 | 15·6 | |
| 9·5† | 9 25·0 | 52·1 | |
| 9·2† | 33·0 | 40·4 | *g* |
| 8·0 | 35·5 | 23·9 | 9·0 *g* |
| 10·0 | 10 5·5 | 27·2 | |
| 8·6 | 19·0 | 8·7 | |
| 10·0 | 26·5 | 9·3 | |
| 9·6 | 32·0 | 18·1 | |
| 10·0 | 43·5 | 27·9 | |
| 9·3† | 11 14·5 | 41·2 | *g* |
| 9·6 | 19·5 | 18·0 | |
| 8·8 | 27·5 | 12·7 | |

### 1201—1260.

| mag. | 9h. m s | − 62° ′ | |
|---|---|---|---|
| 9·2 | 11 29·0 | 12·3 | |
| 9·0† | 48·0 | 39·2 | *g* |
| 9·9 | 12 38·0 | 2·8 | |
| 10·0 | 48·0 | 9·5 | |
| 9·0† | 50·0 | 42·4 | *g* |
| 9·5 | 13 2·5 | 29·5 | |
| 10·0 | 5·5 | 8·1 | |
| 10·0 | 8·0 | 6·8 | |
| 8·5 | 20·0 | 21·2 | *g* |
| 9·4 | 23·5 | 18·2 | |
| 10·0 | 28·5 | 25·9 | |
| 8·4 | 42·5 | 9·4 | 9·0 |
| 10·0 | 14 22·5 | 10·8 | |
| 8·2 | 25·7 | 23·4 | 9·0 *g* |
| 8·4† | 47·0 | 51·8 | 9·0 *g* |
| 9·8 | 15 25·0 | 1·5 | |
| 8·9 | 35·4 | 25·9 | *g* |
| 9·9 | 36·5 | 18·6 | |
| 8·0 | 16 24·8 | 12·2 | 8·5 |
| 9·6 | 28·0 | 15·2 | |
| 9·8 | 17 57·7 | 32·5 | *g* |
| 9·4† | 18 23·5 | 45·2 | |
| 8·7 | 30·0 | 28·9 | 9·5 *g* |
| 8·7 | 55·0 | 32·2 | 9·0 *g* |
| 9·8 | 56·0 | 22·0 | |
| 9·8 | 19 7·2 | 22·1 | *g* |
| 9·2† | 24·0 | 43·2 | |
| 9·5† | 30·5 | 44·9 | |
| 10·0 | 37·7 | 30·0 | |
| 9·9 | 39·5 | 17·0 | |
| 10·0 | 49·0 | 26·8 | |
| 9·3 | 49·3 | 7·0 | |
| 9·8 | 22 32·5 | 28·4 | |
| 9·3 | 35·0 | 18·6 | |
| 9·8 | 23 56·5 | 29·9 | |
| 9·3 | 24 10·5 | 7·9 | |
| 9·2 | 25·0 | 3·0 | 9·0 |
| 9·3 | 38·5 | 21·4 | *g* |
| 8·6† | 25 46·0 | 40·0 | 9·0 *g* |
| 9·7 | 48·5 | 33·5 | |
| 9·3† | 52·5 | 57·0 | |
| 8·1† | 26 2·5 | 53·6 | *g* |
| 9·4 | 18·5 | 19·5 | |
| 9·8 | 36·0 | 7·9 | |
| 9·1 | 58·0 | 24·2 | *g* |
| 9·5 | 59·0 | 9·4 | |
| 9·8 | 27 7·5 | 28·3 | |
| 9·8 | 9·5 | 27·9 | |
| 9·4† | 20·0 | 57·4 | 8·5 *g* |
| 9·8 | 23·0 | 6·3 | |
| 9·8 | 48·0 | 13·6 | |
| 9·4 | 28 40·0 | 21·8 | |
| var. | 29 6·5 | 14·1 | GS |
| 9·8 | 30 9·0 | 1·5 | |
| 9·4 | 18·5 | 9·9 | |
| 8·9† | 37·0 | 40·4 | 8·5 G*g* |
| 8·2† | 37·0 | 55·1 | 8·5 G*g* |
| 9·8 | 38·5 | 21·9 | *g* |
| 9·4 | 32 1·5 | 14·9 | |
| 9·5† | 53·0 | 57·1 | |

### 1261—1320.

| mag. | 9h. m s | − 62° ′ | |
|---|---|---|---|
| 9·6 | 32 59·0 | 24·0 | *g* |
| 9·1 | 33 8·5 | 6·7 | |
| 9·6 | 8·5 | 23·3 | *g* |
| 9·8 | 34 18·5 | 4·7 | |
| 9·8 | 28·0 | 22·0 | |
| 9·4† | 50·0 | 58·7 | |
| 8·7† | 35 2·0 | 46·1 | *g* |
| 9·8 | 14·0 | 24·1 | |
| 9·5† | 15·0 | 43·9 | |
| 9·1 | 37·5 | 34·2 | *g* |
| 9·8 | 40·0 | 18·1 | |
| 8·6† | 45·5 | 38·1 | *g* |
| 9·3 | 51·5 | 18·0 | 9·5 |
| 9·7 | 52·0 | 26·0 | |
| 9·7 | 53·0 | 35·0 | *g* |
| 9·8 | 36 12·5 | 31·2 | |
| 7·6† | 13·5 | 41·4 | 8·0 *g* |
| 9·0† | 21·5 | 40·2 | |
| 6·7 | 28·5 | 22·5 | 7·0 GS*g* |
| 8·2 | 37 8·0 | 26·1 | 8·5 G*g* |
| 9·8 | 34·0 | 19·4 | G |
| 9·8 | 39·0 | 23·0 | G |
| 9·8 | 51·5 | 21·0 | |
| 9·8 | 38 33·0 | 24·6 | |
| 8·0 | 40·0 | 7·2 | 8·2 |
| 9·7 | 44·0 | 15·0 | |
| 9·7 | 48·0 | 21·0 | G*g* |
| 9·4‡ | 39 13·0 | 54·8 | |
| 8·0 | 13·0 | 10·6 | 8·0 G |
| 9·8 | 16·0 | 7·5 | |
| 9·5‡ | 18·0 | 53·0 | |
| 9·5‡ | 50·2 | 58·3 | |
| 9·6‡ | 51·0 | 38·8 | |
| 9·3‡ | 53·7 | 42·0 | |
| 9·9‡ | 54·5 | 29·9 | |
| 9·8‡ | 40 1·5 | 33·6 | |
| 9·8‡ | 23·5 | 52·8 | |
| 9·9‡ | 57·5 | 45·6 | |
| 9·6‡ | 41 6·5 | 38·2 | |
| 9·8‡ | 9·5 | 41·9 | |
| 8·9 | 19·0 | 29·6 | *g* |
| 9·9‡ | 27·5 | 28·9 | |
| 9·9‡ | 38·0 | 57·3 | |
| 9·9‡ | 42 5·5 | 58·6 | |
| 9·9‡ | 8·5 | 42·8 | |
| 9·7‡ | 9·5 | 25·8 | |
| 9·3 | 16·0 | 29·0 | *g* |
| 9·8 | 18·0 | 15·0 | 9·5 |
| 9·9‡ | 33·0 | 51·0 | |
| 8·7 | 40·0 | 29·6 | *g* |
| 9·3 | 42·5 | 8·7 | 9·5 |
| 9·9‡ | 55·5 | 36·6 | |
| 9·6‡ | 43 11·0 | 41·0 | |
| 9·5‡ | 12·0 | 39·7 | |
| 7·9 | 16·5 | 7·9 | 8·0 G |
| 9·6‡ | 18·0 | 27·4 | *g* |
| 9·7‡ | 44 16·5 | 40·4 | |
| 9·9‡ | 22·5 | 28·4 | |
| 9·6‡ | 45 8·0 | 37·8 | 9·5 *g* |
| 8·9 | 8·5 | 16·3 | 9·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 8 | 40 | 28 | 5·4 |
| | 50 | 29 | 5·6 |
| 9 | 0 | 31 | 5·9 |
| | 10 | 33 | 6·2 |
| | 20 | 36 | 6·4 |
| | 30 | 38 | 6·6 |
| | 40 | 40 | 6·8 |
| | 50 | 42 | 7·0 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 9 | 40 | 40 | 6·8 |
| | 50 | 42 | 7·0 |
| 10 | 0 | 45 | 7·2 |
| | 10 | 47 | 7·4 |
| | 20 | 50 | 7·6 |

## 1321—1380.

| mag. | 9h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·3‡ | 45 | 17·0 | 47·0 | |
| 9·9‡ | | 32·0 | 56·3 | |
| 9·4 | | 34·0 | 5·9 | |
| 7·8 | | 37·0 | 26·2 | 8·0 G*g* |
| 9·8 | | 38·5 | 4·0 | |
| 9·9‡ | | 42·5 | 33·5 | |
| 8·2 | | 50·0 | 34·1 | 8·0 G*g* |
| 9·8 | | 52·5 | 25·7 | |
| 9·0‡ | 46 | 7·5 | 43·3 | 9·0 *g* |
| 9·8 | | 15·5 | 1·6 | |
| 9·7‡ | | 29·0 | 47·4 | |
| 9·6‡ | | 41·0 | 56·1 | 9·5 |
| 9·5‡ | | 46·0 | 57·6 | |
| 9·9‡ | | 58·5 | 33·5 | |
| 7·5 | 47 | 24·5 | 9·5 | 6·0 GSct |
| 9·9‡ | | 33·0 | 36·4 | |
| 8·2 | | 39·5 | 35·4 | 9·0 *g* |
| 9·0 | 48 | 3·5 | 25·8 | 9·5 *g* |
| 9·4 | | 14·5 | 24·1 | 9·5 *g* |
| 9·8 | | 25·5 | 1·8 | |
| 8·6 | | 40·0 | 4·1 | 9·0 |
| 9·6 | | 44·0 | 24·0 | |
| 8·6 | | 53·0 | 10·7 | 9·5 G |
| 9·4‡ | 49 | 0·0 | 57·1 | |
| 9·6‡ | | 7·0 | 58·0 | |
| 9·8 | | 9·0 | 19·7 | |
| 9·1‡ | | 33·5 | 55·4 | 9·1 *g* |
| 9·7 | | 47·5 | 21·7 | |
| 9·5‡ | 50 | 12·5 | 49·9 | |
| 9·6 | | 19·0 | 21·1 | Gg |
| 9·9‡ | | 22·0 | 29·6 | |
| 9·4‡ | | 37·0 | 48·8 | *g* |
| 9·9‡ | | 40·0 | 48·7 | *g* |
| 9·8 | | 43·5 | 31·0 | |
| 9·9‡ | | 47·0 | 29·9 | |
| 8·6‡ | 51 | 2·5 | 51·6 | 9·0 *g* |
| 9·4 | | 11·5 | 19·4 | Gg |
| 8·5‡ | | 22·0 | 40·3 | 9·2 Gg *g* |
| 9·8 | | 29·5 | 34·9 | |
| 9·0‡ | | 31·0 | 57·0 | 9·0 |
| 9·6‡ | | 34·0 | 59·1 | |
| 9·9‡ | | 38·0 | 43·5 | |
| 9·7‡ | | 59·0 | 52·0 | |
| 9·8‡ | 52 | 1·0 | 37·9 | |
| 9·0‡ | | 29·5 | 59·1 | 9·5 |
| 8·8 | | 30·8 | 31·0 | 9·3 Gg *g* |
| 10·0 | | 37·0 | 0·6 | |
| 9·9‡ | 53 | 10·5 | 49·9 | |
| 9·9‡ | | 11·0 | 48·1 | G |
| 7·7‡ | | 22·5 | 47·5 | 8·0 Gg *g* |
| 9·6 | | 28·5 | 2·4 | |
| 10·0 | | 45·5 | 2·8 | |
| 9·9‡ | | 54·5 | 51·0 | |
| 9·7‡ | 54 | 3·0 | 58·3 | |
| 8·9 | | 12·0 | 9·9 | 8·5 G |
| 9·9‡ | | 12·5 | 44·1 | |
| 10·0 | | 17·0 | 2·4 | |
| 9·8 | | 29·0 | 29·3 | |
| 9·6‡ | | 30·0 | 48·8 | |
| 9·2‡ | | 31·0 | 37·7 | *g* |

## 1381—1440.

| mag. | 9h.—10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·1‡ | 54 | 32·5 | 45·9 | 10·0 *g* |
| 10·0 | | 56·5 | 9·8 | |
| 9·4‡ | 55 | 0·0 | 59·3 | |
| 9·6 | | 7·5 | 5·9 | |
| 9·8 | | 11·7 | 0·0 | |
| 9·6‡ | | 28·0 | 44·0 | 10·0 *g* |
| 8·3‡ | | 29·0 | 44·8 | 7·8 GSc*g*r |
| 9·6 | | 32·5 | 27·9 | |
| 10·0 | | 42·3 | 1·8 | |
| 10·0 | | 52·5 | 3·0 | : |
| 9·5‡ | 56 | 0·5 | 37·2 | |
| 10·0 | | 16·5 | 0·8 | |
| 9·8‡ | | 22·0 | 52·0 | |
| 10·0 | | 31·5 | 12·0 | |
| 9·6‡ | | 49·0 | 56·0 | |
| 10·0 | | 55·5 | 27·7 | |
| 9·7 | 57 | 3·5 | 28·5 | |
| 9·7 | | 4·5 | 14·8 | |
| 9·5 | | 37·5 | 4·0 | |
| 9·6 | | 48·0 | 18·9 | |
| 9·1 | | 50·0 | 8·2 | 9·5 |
| 8·7 | | 50·0 | 14·9 | 9·0 |
| 9·2‡ | 58 | 3·0 | 54·0 | |
| 9·5‡ | | 9·0 | 50·8 | |
| 10·0 | | 16·5 | 8·8 | |
| 9·9‡ | | 18·5 | 46·2 | |
| 10·0 | | 19·5 | 11·5 | |
| 9·4‡ | | 22·0 | 47·1 | |
| 9·4 | | 24·2 | 25·6 | 9·0 *g* |
| 9·8‡ | | 29·5 | 46·5 | |
| 9·9‡ | | 58·0 | 51·1 | |
| 9·6 | 59 | 1·5 | 9·7 | |
| 9·9‡ | | 18·5 | 48·4 | |
| 9·9 | | 27·0 | 2·8 | |
| 8·9‡ | | 39·0 | 55·0 | 9·5 |
| 8·8 | | 42·5 | 34·8 | 9·5 *g* |
| 9·9‡ | | 42·5 | 42·1 | |
| 9·0‡ | | 49·0 | 45·1 | 8·8 *g* |
| 9·2‡ | | 52·0 | 42·6 | |
| 9·6‡ | 0 | 4·0 | 37·2 | |
| 9·8‡ | | 7·0 | 38·0 | |
| 9·8 | | 20·0 | 20·5 | |
| 9·5‡ | | 34·0 | 41·1 | |
| 9·4 | | 43·0 | 26·4 | |
| 9·2 | | 45·5 | 12·9 | |
| 8·8‡ | | 49·5 | 39·3 | 9·0 *g* |
| 9·2‡ | 1 | 3·0 | 36·9 | 9·5*g* |
| 10·0 | | 3·5 | 2·3 | |
| 8·6 | | 32·5 | 14·7 | 8·0 |
| 9·7 | 2 | 5·5 | 1·8 | |
| 9·8 | | 10·5 | 8·0 | |
| 9·6‡ | | 12·0 | 45·8 | |
| 9·2‡ | | 39·5 | 48·5 | *g* |
| 9·0‡ | | 48·5 | 51·0 | 9·5 *g* |
| 9·8‡ | 3 | 6·5 | 53·6 | |
| 9·9‡ | | 30·5 | 44·7 | |
| 9·1 | | 39·5 | 33·2 | |
| 8·3 | | 41·0 | 2·7 | 8·5 |
| 9·0 | | 49·0 | 0·8 | 9·0 |
| 9·6‡ | | 57·0 | 47·3 | |

## 1441—1500.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 4 | 6·5 | 22·9 | *g* |
| 9·6‡ | | 15·5 | 56·0 | 9·5 |
| 9·8 | | 24·5 | 19·3 | |
| 10·0 | | 27·5 | 17·4 | |
| 10·0 | | 41·8 | 7·8 | |
| 9·0‡ | | 44·0 | 53·9 | 10·0 G |
| 8·8 | | 48·5 | 10·6 | 9·0 |
| 10·0 | | 52·5 | 2·2 | |
| 9·6 | | 56·0 | 19·8 | |
| 10·0 | 5 | 32·0 | 3·3 | |
| 10·0 | | 43·8 | 6·9 | |
| 9·5 | 6 | 1·5 | 10·5 | |
| 10·0 | | 10·0 | 13·1 | |
| 9·6 | | 18·5 | 13·8 | |
| 10·0 | | 20·5 | 22·2 | |
| 10·0 | | 23·0 | 31·5 | |
| 9·8 | | 26·0 | 11·2 | |
| 9·8 | | 36·5 | 10·6 | |
| 8·9‡ | | 39·5 | 43·6 | 8·5 *g* |
| 9·2‡ | | 41·0 | 56·7 | 9·5 |
| 10·0 | | 46·5 | 19·7 | |
| 9·4 | 7 | 6·0 | 6·3 | |
| 10·0 | | 17·0 | 1·5 | |
| 9·9 | | 18·0 | 1·2 | |
| 10·0 | | 26·0 | 32·1 | ? |
| 9·9 | | 27·5 | 31·7 | ? |
| 10·0 | | 30·5 | 31·8 | ? |
| 10·0 | | 31·0 | 6·1 | |
| 9·9 | | 32·5 | 19·0 | |
| 10·0 | | 37·0 | 28·9 | |
| 9·0‡ | | 48·0 | 36·4 | 9·5 *g* |
| 9·5 | | 58·0 | 17·7 | |
| 9·5 | 8 | 32·5 | 8·3 | |
| 9·0‡ | | 36·0 | 55·0 | |
| 9·2 | | 40·0 | 2·9 | 9·5 |
| 9·4‡ | | 52·0 | 40·2 | 9·0 *g* |
| 9·8‡ | | 55·5 | 42·9 | |
| 10·0 | 9 | 2·5 | 28·6 | |
| 9·8 | | 37·5 | 4·8 | |
| 9·5 | | 39·5 | 22·9 | |
| 9·9‡ | | 48·5 | 56·0 | |
| 9·9 | | 51·5 | 10·9 | |
| 9·5 | | 57·0 | 0·2 | |
| 9·2 | 10 | 6·5 | 7·7 | |
| 9·2 | | 9·5 | 0·9 | |
| 9·2‡ | | 13·0 | 48·7 | 9·5 *g* |
| 10·0 | | 17·0 | 30·5 | |
| 9·6 | | 32·5 | 23·5 | |
| 9·8‡ | | 32·5 | 49·2 | |
| 9·6 | | 53·5 | 25·7 | |
| 10·0 | 11 | 19·5 | 9·9 | |
| 9·8 | | 37·0 | 31·3 | *g* |
| 10·0 | | 57·0 | 22·9 | |
| 9·4‡ | | 58·0 | 56·8 | |
| 9·7 | | 59·5 | 15·0 | 9·5 |
| 10·0 | 12 | 4·5 | 32·7 | |
| 9·7 | | 9·5 | 25·3 | |
| 8·7 | | 28·5 | 15·9 | 9·0 |
| 9·4‡ | | 28·5 | 54·9 | |
| 9·7 | | 49·5 | 13·1 | 9·5 |

## 1501—1560.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8‡ | 12 | 50·0 | 56·6 | |
| 10·0 | 13 | 3·0 | 4·5 | |
| 9·4‡ | | 6·5 | 54·8 | |
| 10·0 | | 6·8 | 18·4 | |
| 10·0 | | 9·5 | 16·3 | |
| 10·0 | | 20·5 | 21·1 | |
| 9·8‡ | | 32·5 | 58·1 | |
| 9·6 | | 41·0 | 7·2 | |
| 9·0‡ | | 45·5 | 46·0 | 9·0 *g* |
| 9·6 | | 47·0 | 16·4 | |
| 9·6 | | 53·5 | 27·8 | |
| 9·8 | | 56·5 | 20·5 | |
| 9·7‡ | | 58·0 | 45·0 | |
| 8·8‡ | | 59·0 | 42·4 | 9·5 *g* |
| 10·0 | 14 | 0·5 | 15·0 | |
| 9·5 | | 32·0 | 12·4 | |
| 9·1‡ | | 33·0 | 44·1 | 8·5 *g* |
| 9·4 | | 38·0 | 25·0 | 9·5 |
| 9·6 | | 40·5 | 1·1 | |
| 8·9‡ | | 41·0 | 40·5 | 9·5 *g* |
| 9·6‡ | | 46·5 | 41·5 | |
| 9·8‡ | | 52·0 | 39·8 | |
| 9·9‡ | 15 | 0·5 | 40·6 | |
| 9·9‡ | | 26·0 | 51·9 | |
| 9·4 | | 35·5 | 24·6 | |
| 10·0 | | 49·0 | 25·0 | |
| 9·9‡ | 16 | 9·0 | 45·6 | |
| 9·2 | | 10·5 | 2·4 | |
| 9·5 | | 11·0 | 4·4 | |
| 9·7‡ | | 13·0 | 47·2 | |
| 7·8‡ | | 20·0 | 42·5 | 8·2 *g* |
| 9·6 | | 38·0 | 19·0 | |
| 10·0 | | 45·5 | 0·1 | |
| 9·0‡ | | 46·5 | 41·6 | 9·5 *g* |
| 8·7‡ | | 50·5 | 49·3 | 8·8 *g* |
| 9·6‡ | | 50·5 | 57·9 | |
| 9·7‡ | | 57·0 | 47·9 | |
| 8·9 | | 59·5 | 24·1 | 9·0 *g* |
| 9·2 | 17 | 8·5 | 5·9 | |
| 9·4 | | 12·0 | 8·9 | |
| 9·7‡ | | 16·0 | 51·2 | |
| 10·0 | | 31·5 | 6·0 | |
| 9·9‡ | | 33·0 | 49·8 | |
| 9·9‡ | | 40·5 | 30·8 | |
| 9·2‡ | | 42·5 | 58·5 | |
| 9·7 | | 49·5 | 24·4 | |
| 8·8‡ | 18 | 3·0 | 58·4 | 9·5 |
| 10·0 | | 5·5 | 14·0 | |
| 9·7‡ | | 10·5 | 50·4 | |
| 10·0 | | 29·0 | 13·0 | |
| 9·1‡ | | 36·5 | 36·6 | *g* |
| 9·2 | | 43·5 | 23·8 | 9·5 *g* |
| 9·0‡ | | 51·0 | 46·1 | 9·5 *g* |
| 9·8 | | 59·0 | 21·0 | 10·0 |
| 9·3‡ | 19 | 15·3 | 52·0 | 9·5 *g* |
| 9·6† | | 16·5 | 48·0 | |
| 8·8† | | 23·2 | 48·8 | 10·0 *g* |
| 9·9† | | 27·0 | 48·6 | |
| 9·8† | | 30·5 | 37·6 | |
| 9·9† | | 32·0 | 30·4 | |



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1561—1620.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·1 | 19 | 35·7 | 27·7 | |
| 9·6 | 20 | 3·5 | 29·0 | |
| 9·1† | | 26·2 | 54·5 | |
| 9·6† | | 31·5 | 47·1 | |
| 10·0 | | 43·0 | 11·0 | |
| 9·1† | | 51·7 | 59·7 | |
| 9·0† | 21 | 2·5 | 42·9 | *g* |
| 9·6† | | 9·5 | 33·3 | |
| 9·7† | | 28·0 | 53·0 | |
| 9·9† | | 35·0 | 59·2 | |
| 9·8† | | 41·0 | 43·0 | |
| 8·8 | | 43·5 | 31·4 | 9·5 *g* |
| 8·9 | | 54·5 | 13·4 | 8·0 G*g* |
| 9·5† | 22 | 0·5 | 47·6 | |
| 9·4† | | 2·5 | 37·6 | 9·5 *g* |
| 9·4 | | 2·5 | 15·4 | |
| 7·5 | | 3·5 | 39·8 | 7·5 G*g* |
| 9·2† | | 4·5 | 55·5 | |
| 9·8† | | 35·0 | 30·5 | |
| 9·4 | | 39·0 | 15·1 | |
| 9·7† | | 41·5 | 48·0 | 9·5 |
| 9·0† | | 51·0 | 58·2 | |
| 9·6† | | 56·0 | 37·2 | |
| 10·0 | 23 | 0·5 | 13·2 | |
| 9·9† | | 10·0 | 43·7 | |
| 9·9† | | 11·0 | 43·7 | |
| 9·6† | | 19·5 | 44·6 | |
| 8·3† | | 20·0 | 53·2 | 9·0 GS*g* |
| 8·4 | | 21·0 | 23·0 | 7·0 GS*g* |
| 9·2 | | 30·5 | 3·2 | |
| 9·2 | | 38·0 | 10·0 | |
| 9·9† | | 38·5 | 42·6 | |
| 10·0 | | 46·5 | 0·3 | |
| 9·6 | | 51·0 | 34·3 | |
| 6·8 | 24 | 3·5 | 31·5 | 6·5 GS*g* |
| 9·9† | | 18·0 | 34·0 | |
| 9·0† | | 31·0 | 40·6 | |
| 10·0 | | 40·0 | 5·9 | |
| 10·0 | | 44·0 | 23·1 | |
| 9·4† | | 50·0 | 44·4 | |
| 9·6† | | 52·8 | 40·1 | |
| 9·9† | | 55·5 | 37·0 | |
| 9·6† | 25 | 0·5 | 38·6 | |
| 9·9† | | 7·0 | 41·4 | |
| 9·6† | | 8·0 | 50·0 | |
| 9·9 | | 8·5 | 6·9 | |
| 8·8 | | 20·5 | 0·2 | |
| 9·9† | | 23·5 | 55·0 | |
| 9·6† | | 28·5 | 38·0 | |
| 9·6† | | 34·0 | 54·0 | |
| 9·3 | | 38·0 | 3·3 | 10·0 |
| 8·3 | | 41·0 | 4·5 | 8·2 G |
| 9·4† | | 42·5 | 55·2 | |
| 9·8† | | 52·5 | 25·8 | |
| 8·8† | 26 | 11·0 | 55·0 | 9·0 *g* |
| 9·6 | | 15·0 | 6·9 | |
| 9·5† | | 22·0 | 55·2 | |
| 9·4† | | 44·0 | 55·9 | |
| 9·8† | | 49·5 | 28·2 | |
| 9·4 | | 52·5 | 29·0 | 9·0 *g* |

1621—1680.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·4 | 27 | 6·0 | 19·8 | 9·0 *g* |
| 8·8† | | 22·0 | 36·2 | 9·5 *g* |
| 9·9† | | 25·5 | 39·6 | |
| 8·8† | | 28·5 | 50·9 | 9·2 |
| 10·0 | | 30·5 | 2·1 | |
| 9·8† | | 31·0 | 39·8 | |
| 9·6 | | 33·0 | 7·5 | |
| 9·8† | | 54·5 | 32·0 | |
| 9·9† | 28 | 0·5 | 49·6 | |
| 10·0 | | 4·5 | 32·4 | |
| 9·7† | | 13·0 | 56·2 | |
| 9·7† | | 26·5 | 31·3 | |
| 9·9† | | 43·0 | 53·8 | |
| 9·6† | | 46·0 | 53·6 | |
| 9·8† | 29 | 0·0 | 56·0 | |
| 9·5 | | 12·5 | 6·9 | |
| 10·0 | | 15·4 | 33·9 | |
| 9·6† | | 18·5 | 42·2 | |
| 9·8† | | 24·0 | 45·4 | |
| 9·6 | | 29·0 | 17·8 | |
| 9·6† | | 29·5 | 55·0 | |
| 9·2† | | 51·0 | 57·0 | |
| 9·8 | | 52·5 | 4·3 | 8·2 G |
| 9·9† | | 53·0 | 34·1 | |
| 9·6† | | 56·0 | 58·8 | |
| 9·9 | 30 | 9·5 | 18·9 | |
| 9·7† | | 22·5 | 57·0 | |
| 9·7 | | 28·0 | 0·9 | 9·5 |
| 9·7† | | 35·5 | 33·0 | |
| 9·6† | | 38·5 | 36·6 | |
| 9·9 | | 40·0 | 19·4 | |
| 9·8† | | 43·0 | 45·1 | |
| 9·9 | | 49·5 | 28·5 | |
| 9·6† | | 51·0 | 42·2 | |
| 9·5† | 31 | 6·0 | 58·2 | |
| 9·9† | | 11·5 | 43·4 | |
| 9·8† | | 51·0 | 46·6 | |
| 9·8† | | 54·0 | 48·6 | |
| 9·1 | | 55·5 | 33·7 | 9·5 *g* |
| 9·8† | 32 | 0·5 | 37·6 | |
| 9·3† | | 0·5 | 40·6 | |
| 9·7† | | 8·5 | 59·8 | |
| 9·5 | | 24·0 | 26·6 | 8·8 *g* |
| 9·9† | | 30·5 | 37·0 | |
| 9·9 | | 34·0 | 21·8 | |
| 9·5† | | 49·5 | 45·2 | |
| 9·6† | | 59·0 | 53·9 | |
| 9·2† | 33 | 0·5 | 38·2 | *g* |
| 9·6 | | 4·0 | 13·8 | |
| 9·2† | | 6·0 | 54·8 | |
| 9·9† | | 7·0 | 27·0 | |
| 9·7 | | 9·5 | 29·2 | 9·5 *g* |
| 9·9 | | 11·7 | 34·9 | |
| 9·6† | | 12·5 | 41·3 | |
| 8·7† | | 13·3 | 59·0 | 9·0 |
| 9·9 | | 19·5 | 33·9 | |
| 9·6† | | 21·5 | 39·0 | |
| 9·9† | | 29·0 | 42·2 | |
| 8·2 | | 39·0 | 24·4 | 7·8 GS*g*t |
| 9·9† | | 40·5 | 31·1 | |

1681—1740.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·9† | 33 | 52·0 | 27·4 | |
| 9·4 | | 52·5 | 30·5 | *g* |
| 9·8 | 34 | 1·0 | 10·5 | |
| 9·9† | | 1·0 | 42·7 | |
| 9·6† | | 5·0 | 58·0 | |
| 9·8 | | 9·5 | 20·5 | |
| 9·7 | | 11·0 | 31·7 | *g* |
| 9·3† | | 13·5 | 55·4 | 9·2 |
| 9·9 | | 16·0 | 26·8 | |
| 9·0 | | 19·5 | 5·9 | 9·2 |
| 9·6† | | 20·5 | 54·2 | |
| 9·8 | | 22·0 | 9·8 | |
| 9·6 | | 29·5 | 34·9 | |
| 9·8 | | 43·0 | 13·1 | |
| 8·6 | | 44·0 | 6·0 | 8·7 |
| 9·6† | 35 | 9·0 | 43·6 | |
| 9·8† | | 10·5 | 40·6 | |
| 9·8† | | 21·5 | 35·9 | |
| 9·5† | | 27·0 | 56·2 | |
| 9·5† | | 31·0 | 36·0 | |
| 9·5† | | 32·0 | 39·6 | |
| 9·8 | | 33·5 | 21·8 | |
| 9·8† | | 34·5 | 42·2 | |
| 9·6 | | 36·5 | 5·9 | |
| 9·4 | | 51·2 | 27·8 | 9·2 *g* |
| 9·0 | 36 | 0·0 | 19·9 | 9·8 *g* |
| 9·6 | | 3·5 | 19·8 | |
| 9·6 | | 10·0 | 11·4 | |
| 9·7 | | 14·0 | 30·9 | |
| 9·8 | | 32·5 | 13·8 | |
| 9·6† | | 37·5 | 44·6 | |
| 9·6† | | 49·0 | 55·6 | |
| 9·7 | | 50·0 | 20·6 | 9·5 |
| 9·9 | | 52·0 | 17·9 | |
| 9·9 | | 52·0 | 32·3 | |
| 9·9† | | 57·0 | 31·0 | |
| 9·4† | 37 | 13·0 | 53·1 | |
| 8·9 | | 25·0 | 17·5 | 9·2 |
| 9·6† | | 26·5 | 43·6 | |
| 8·0† | | 29·5 | 51·2 | 7·9 GS*g* |
| 9·8 | | 53·5 | 8·9 | |
| 9·6† | 38 | 4·5 | 57·2 | |
| 9·9 | | 7·0 | 24·0 | |
| 9·2† | | 23·5 | 38·2 | |
| 9·6 | | 28·0 | 17·0 | |
| 9·1 | | 30·0 | 19·1 | 9·2 |
| 9·7 | | 39·5 | 3·0 | |
| 8·8 | | 44·0 | 21·1 | 9·0 *g* |
| 9·5† | | 45·0 | 44·2 | |
| 9·6† | 39 | 0·5 | 57·6 | |
| 8·8† | | 5·0 | 59·6 | 8·5 *g* |
| 9·2 | | 16·0 | 35·2 | *g* |
| 9·1 | | 29·0 | 30·9 | 9·0 *g* |
| 9·6 | 40 | 3·0 | 6·9 | |
| 8·9 | | 9·5 | 6·6 | 9·2 |
| 9·2† | | 22·0 | 38·3 | |
| 9·6 | | 30·0 | 3·7 | |
| 9·4† | | 41·5 | 40·0 | |
| 8·8 | | 45·0 | 5·5 | 9·5 |
| 9·9 | | 49·0 | 24·0 | |

1741—1800.

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8 | 40 | 50·0 | 6·1 | |
| 9·8† | | 55·5 | 30·2 | |
| 8·9 | 41 | 10·0 | 12·8 | 9·5 |
| 9·8 | | 14·0 | 17·3 | |
| 9·9 | | 29·0 | 6·6 | |
| 8·8 | | 30·0 | 10·7 | 8·5 |
| 9·3† | | 34·7 | 59·0 | |
| 9·8† | | 49·0 | 48·0 | |
| 8·1† | | 49·0 | 38·3 | 8·0 GS*g* |
| 9·9 | 42 | 46·0 | 3·8 | |
| 9·9† | | 47·5 | 56·2 | |
| 9·6† | | 50·5 | 57·9 | |
| 9·9 | 43 | 2·5 | 35·9 | |
| 9·1† | | 8·5 | 54·2 | |
| 9·2† | | 12·5 | 44·4 | |
| 9·7 | | 19·0 | 33·0 | |
| 9·2 | | 21·0 | 14·2 | 10·0 |
| 9·8 | | 34·0 | 16·8 | |
| 9·2† | | 35·5 | 58·0 | |
| 9·2† | | 36·0 | 58·1 | |
| 9·4† | | 44·5 | 44·0 | |
| 9·6 | | 49·5 | 18·4 | |
| 9·2† | | 52·0 | 52·0 | |
| 9·7 | | 54·5 | 25·9 | |
| 9·8 | 44 | 5·5 | 19·9 | |
| 9·9† | | 12·0 | 30·0 | |
| 9·5 | | 13·5 | 21·5 | |
| 9·9 | | 16·5 | 27·9 | |
| 9·8 | | 42·5 | 17·9 | |
| 9·6† | | 44·0 | 58·1 | |
| 9·2 | | 50·5 | 9·9 | |
| 9·6† | | 55·5 | 43·0 | |
| 9·6† | 45 | 4·5 | 55·0 | |
| 9·9† | | 9·5 | 54·7 | |
| 9·8† | | 23·0 | 43·2 | |
| 9·6 | | 37·0 | 0·8 | |
| 9·7 | | 41·0 | 13·4 | |
| 9·9† | | 41·5 | 59·7 | |
| 9·2† | | 56·0 | 43·0 | 10·0 *g* |
| 9·9† | | 59·0 | 33·0 | |
| 9·4 | 46 | 7·0 | 33·3 | *g* |
| 9·6† | | 15·5 | 58·2 | |
| 9·4† | | 30·0 | 55·2 | |
| 9·6 | | 44·5 | 1·5 | |
| 9·6† | | 48·0 | 43·0 | |
| 9·9 | | 53·5 | 3·2 | |
| 7·9 | | 54·5 | 14·5 | 8·0 GS |
| 9·9 | | 59·0 | 12·7 | |
| 9·9† | 47 | 28·0 | 57·0 | |
| 9·8† | | 39·5 | 53·0 | |
| 9·6 | | 49·5 | 18·5 | |
| 9·8 | 48 | 1·5 | 1·0 | |
| 9·8† | | 12·0 | 37·7 | |
| 7·9 | | 13·5 | 25·4 | 8·0 G*g* |
| 9·6† | | 15·5 | 49·9 | |
| 9·8† | | 19·0 | 31·5 | |
| 9·5† | | 22·0 | 58·5 | |
| 9·8† | | 30·0 | 30·9 | |
| 9·8 | | 32·0 | 5·4 | |
| 9·6† | | 54·5 | 49·8 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 10 | 10 | 47 | 7·4 |
| | 20 | 50 | 7·6 |
| | 30 | 52 | 7·7 |
| | 40 | 55 | 7·9 |
| | 50 | 57 | 8·0 |



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| | 25 prec. | |
|---|---|---|
| | a | δ |
| | + | − |
| h m | s | ′ |
| 10 40 | 55 | 7·9 |
| 50 | 57 | 8·0 |
| 11 0 | 60 | 8·1 |
| 10 | 63 | 8·2 |
| 20 | 66 | 8·2 |
| 30 | 68 | 8·3 |

**1801—1860.**

| mag. | 10h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·5† | 48 | 57·0 | 37·8 | |
| 9·9† | | 57·0 | 37·4 | |
| 9·2 | 49 | 0·0 | 16·2 | |
| 9·4† | | 10·5 | 50·5 | |
| 9·8 | | 16·0 | 23·5 | |
| 9·8† | | 35·5 | 42·0 | |
| 9·4 | | 39·0 | 16·1 | |
| 9·5† | | 40·0 | 45·0 | |
| 9·5† | | 42·5 | 54·8 | |
| 9·1† | | 51·0 | 40·0 | 10·0 *g* |
| 9·4 | | 52·5 | 24·8 | |
| 9·7† | | 52·5 | 38·9 | |
| 9·9 | | 52·8 | 25·1 | |
| 9·9† | | 54·0 | 40·0 | |
| 9·6† | 50 | 15·5 | 26·1 | |
| 9·4 | | 22·0 | 28·5 | |
| 9·7† | | 30·5 | 30·9 | |
| 9·8 | | 35·0 | 6·2 | |
| 9·9† | | 45·0 | 42·2 | |
| 9·2† | | 49·0 | 46·0 | |
| 9·7† | 51 | 13·0 | 53·1 | |
| 9·9 | | 40·0 | 20·8 | |
| 9·9 | | 47·0 | 21·0 | |
| 9·6 | | 49·5 | 21·2 | |
| 9·6† | | 51·5 | 50·8 | |
| 9·6 | | 55·5 | 14·2 | |
| 9·6† | | 57·5 | 48·2 | |
| 9·7 | 52 | 23·5 | 0·0 | |
| 9·9 | | 30·0 | 21·6 | |
| 9·6† | | 37·5 | 35·0 | |
| 9·9† | | 43·0 | 39·4 | |
| 8·8 | | 47·5 | 4·1 | 9·2 |
| 9·7† | | 52·0 | 59·2 | |
| 9·2 | 53 | 1·0 | 15·6 | 9·5 |
| 9·9† | | 8·0 | 27·2 | |
| 9·7† | | 19·0 | 36·2 | |
| 9·4 | | 20·0 | 12·0 | 9·5 |
| 9·6† | | 29·5 | 45·8 | |
| 9·6† | | 32·5 | 37·2 | |
| 9·7† | | 39·2 | 59·9 | |
| 9·2† | | 57·5 | 44·4 | 9·0 *g* |
| 9·9† | | 59·0 | 36·2 | |
| 9·5† | 54 | 16·0 | 42·5 | |
| 9·9† | | 39·0 | 48·2 | |
| 8·7† | | 41·0 | 50·2 | 9·0 *g* |
| 9·8† | | 43·5 | 51·0 | 10·0 |
| 9·6† | | 56·5 | 55·8 | |
| 9·9† | 55 | 3·0 | 59·6 | |
| 9·4† | | 16·5 | 40·9 | |
| 9·2† | | 30·0 | 42·4 | |
| 9·4† | | 41·0 | 42·5 | |
| 9·2 | | 41·5 | 2·1 | |
| 9·6 | 56 | 5·5 | 22·7 | |
| 9·6 | | 7·5 | 7·0 | 9·2 |
| 9·8† | | 7·5 | 45·0 | |
| 9·4† | | 31·0 | 49·6 | |
| 9·6† | | 34·0 | 49·6 | |
| 9·4† | | 50·0 | 52·2 | |
| 9·9† | 57 | 27·5 | 40·0 | |
| 9·2† | | 35·5 | 49·0 | 9·0 *g* |

**1861—1920.**

| mag. | 10h.—11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·9† | 57 | 46·0 | 49·4 | 9·2 *g* |
| 8·6 | 58 | 11·0 | 23·6 | 8·5 *g* |
| 9·8 | | 18·5 | 1·9 | |
| 9·7† | | 25·0 | 58·6 | |
| 9·4† | | 31·0 | 40·2 | |
| 9·7† | | 50·5 | 47·0 | |
| 9·9† | 59 | 21·5 | 34·7 | |
| 9·5 | | 25·5 | 17·2 | 9·0 |
| 9·2† | | 29·5 | 51·2 | 9·5 *g* |
| 9·4† | | 31·3 | 36·1 | |
| 9·4† | | 32·8 | 40·0 | |
| 9·7† | | 34·2 | 52·2 | |
| 9·6† | | 40·5 | 51·2 | |
| 9·7 | | 42·5 | 35·3 | |
| 9·7† | | 45·3 | 43·5 | |
| 9·6† | | 56·5 | 32·6 | |
| 9·9 | | 57·0 | 3·1 | |
| 9·8 | 0 | 25·9 | 32·1 | |
| 9·8† | | 31·0 | 41·6 | |
| 9·6† | | 50·0 | 41·4 | |
| 9·4‡ | | 58·0 | 55·4 | |
| 9·9 | 1 | 5·0 | 26·7 | |
| 9·6‡ | | 10·5 | 40·5 | |
| 9·8 | | 22·0 | 20·4 | |
| 8·9 | | 23·5 | 13·0 | 9·0 |
| 9·7† | | 37·0 | 38·0 | |
| 9·9 | | 45·5 | 34·8 | |
| 9·6 | | 51·0 | 25·2 | *g* |
| 9·1 | | 55·0 | 26·4 | 8·0 *g* |
| 9·8 | | 55·0 | 23·2 | |
| 9·5‡ | 2 | 0·5 | 46·3 | |
| 9·9 | | 10·0 | 26·9 | |
| 9·7‡ | | 13·0 | 32·4 | |
| 9·0‡ | | 26·0 | 43·7 | |
| 9·3‡ | | 54·5 | 42·0 | |
| 9·9 | | 59·0 | 3·9 | 9·8 |
| 9·8 | 3 | 22·0 | 8·4 | |
| 9·5 | | 28·5 | 14·2 | 9·5 |
| 9·4 | | 39·0 | 25·2 | 9·0 *g* |
| 9·0‡ | | 45·0 | 58·5 | 9·5 *g* |
| 9·2 | 4 | 0·0 | 32·5 | *g* |
| 9·2 | | 24·0 | 13·1 | |
| 9·4† | | 41·5 | 52·3 | |
| 9·7‡ | | 51·5 | 27·2 | |
| 10·0 | 5 | 0·5 | 1·4 | |
| 9·7‡ | | 8·0 | 59·8 | |
| 9·6 | | 9·0 | 3·2 | 9·2 |
| 9·5‡ | | 30·5 | 51·4 | |
| 9·2 | | 37·0 | 21·6 | |
| 9·7 | | 55·5 | 10·8 | |
| 10·0 | 6 | 0·2 | 34·4 | |
| 9·2 | | 15·1 | 31·6 | |
| 9·4‡ | | 16·5 | 39·3 | |
| 10·0 | | 24·5 | 25·6 | |
| 9·4 | | 33·0 | 22·9 | |
| 10·0 | | 36·0 | 14·8 | |
| 9·4‡ | 7 | 20·5 | 49·5 | 9·5 |
| 9·7‡ | | 43·0 | 39·8 | |
| 9·4‡ | | 50·5 | 58·4 | |
| 9·4‡ | | 51·5 | 48·1 | |

**1921—1980.**

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·8‡ | 7 | 53·0 | 47·8 | 9·0 *g* |
| 10·0 | | 54·5 | 27·5 | |
| 9·5 | 8 | 14·0 | 32·5 | |
| 10·0 | | 15·0 | 20·8 | |
| 10·0 | | 16·0 | 15·8 | |
| 10·0 | | 21·0 | 10·8 | |
| 10·0 | | 27·5 | 5·1 | |
| 9·2‡ | | 31·5 | 43·0 | 9·5 |
| 9·2‡ | | 40·0 | 41·0 | |
| 9·0 | | 40·0 | 22·8 | |
| 10·0 | | 40·0 | 30·6 | |
| 10·0 | | 42·5 | 27·5 | |
| 9·4‡ | | 47·5 | 45·3 | |
| 9·1‡ | | 49·5 | 39·0 | |
| 9·2‡ | 9 | 4·0 | 43·4 | |
| 9·2‡ | | 4·5 | 54·0 | |
| 9·1‡ | | 9·0 | 42·8 | 9·5 |
| 9·7 | | 11·0 | 27·5 | |
| 9·1‡ | | 15·0 | 59·9 | 9·5 |
| 9·7‡ | | 23·5 | 32·7 | |
| 9·5 | | 51·5 | 0·8 | 9·2 |
| 9·7 | 10 | 17·5 | 22·6 | |
| 9·7‡ | | 23·5 | 42·6 | |
| 9·7‡ | | 34·5 | 55·1 | |
| 9·8 | | 44·0 | 33·7 | |
| 9·0‡ | | 49·5 | 44·4 | 9·6 |
| 10·0 | | 53·5 | 17·0 | |
| 9·4 | | 54·0 | 16·3 | |
| 9·8 | | 54·5 | 32·2 | |
| 9·5 | 11 | 2·5 | 19·9 | |
| 9·7‡ | | 28·0 | 44·8 | |
| 9·8 | | 37·5 | 3·6 | |
| 8·2 | | 47·5 | 10·8 | 8·2 S |
| 9·5 | | 48·5 | 1·0 | |
| 10·0 | | 54·5 | 3·0 | |
| 10·0 | 12 | 8·5 | 4·1 | |
| 9·3‡ | | 10·0 | 49·9 | |
| 10·0 | | 10·8 | 3·8 | |
| 7·5‡ | | 11·5 | 47·6 | 8·0 GS*g* |
| 9·9 | | 14·0 | 2·8 | |
| 10·0 | | 31·0 | 5·4 | |
| 10·0 | | 33·0 | 5·5 | |
| 8·7 | | 48·0 | 17·5 | 8·0 S |
| 8·8 | | 57·0 | 17·4 | 9·0 |
| 9·8 | | 58·5 | 5·3 | |
| 9·2‡ | 13 | 22·5 | 38·8 | 9·0 |
| 9·4 | | 54·0 | 33·6 | 9·5 |
| 9·1‡ | 14 | 12·0 | 56·0 | 10·0 |
| 9·8 | 15 | 13·0 | 16·4 | |
| 9·5 | | 19·4 | 35·0 | 9·0 |
| 9·8 | | 28·5 | 31·5 | |
| 9·4 | | 32·0 | 4·5 | |
| 9·0‡ | 16 | 3·0 | 37·4 | 9·5 |
| 10·0 | | 16·0 | 15·0 | |
| 10·0 | | 23·0 | 24·8 | |
| 9·5 | | 27·5 | 15·8 | |
| 8·9‡ | | 29·5 | 48·1 | 9·2 |
| 9·5 | | 33·0 | 2·6 | |
| 9·3‡ | | 50·5 | 39·1 | |
| 9·5 | | 50·8 | 35·3 | |

**1981—2040.**

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 17 | 11·0 | 24·8 | |
| 8·6‡ | | 11·5 | 51·8 | 9·1 *g* |
| 9·4 | | 26·5 | 30·8 | 9·5 |
| 9·8 | | 40·0 | 12·3 | |
| 9·8 | | 48·5 | 24·1 | |
| 9·7‡ | | 51·0 | 47·4 | |
| 9·6 | 18 | 5·5 | 13·8 | |
| 9·6 | | 21·0 | 13·8 | |
| 9·9 | | 24·0 | 8·4 | |
| 8·5 | | 29·0 | 20·6 | 8·5 |
| 9·5‡ | | 30·5 | 36·4 | |
| 8·6‡ | | 37·5 | 59·8 | 9·0 |
| 9·8 | | 50·0 | 16·2 | |
| 9·5 | | 51·5 | 21·6 | |
| 8·8 | | 51·8 | 35·1 | 9·0 |
| 10·0 | | 52·8 | 29·9 | |
| 8·2‡ | 19 | 0·0 | 39·3 | 8·5 |
| 9·6 | | 4·2 | 34·8 | |
| 9·7‡ | | 7·0 | 49·1 | |
| 10·0 | | 20·5 | 1·9 | |
| 10·0 | | 22·5 | 33·3 | |
| 9·2 | | 24·0 | 3·8 | |
| 7·5‡ | | 26·0 | 44·8 | 8·0 *g* |
| 9·2 | | 34·5 | 16·4 | 9·0 |
| 9·6 | | 59·5 | 15·0 | |
| 9·4‡ | 20 | 11·0 | 40·8 | |
| 8·3 | | 12·8 | 26·5 | 8·5 |
| 9·4 | | 20·5 | 31·6 | |
| 9·6 | | 21·0 | 13·7 | |
| 10·0 | | 27·5 | 28·6 | |
| 9·7‡ | | 31·5 | 46·9 | |
| 9·7‡ | | 32·5 | 50·7 | |
| 9·5 | | 46·0 | 14·8 | 9·5 |
| 9·6‡ | | 46·5 | 53·9 | |
| 9·8 | 21 | 9·0 | 28·7 | |
| 9·7‡ | | 10·0 | 52·4 | |
| 9·6 | | 15·5 | 4·4 | |
| 8·2 | | 17·0 | 7·8 | 8·0 GS |
| 10·0 | | 28·5 | 16·7 | |
| 9·7‡ | | 29·0 | 40·4 | |
| 9·4 | | 30·5 | 15·2 | |
| 9·5 | | 38·0 | 22·4 | 9·5 |
| 9·7 | | 49·5 | 15·0 | |
| 8·5‡ | | 54·5 | 55·9 | 8·2 G*g* |
| 9·6 | 22 | 7·5 | 24·8 | |
| 8·4 | | 21·5 | 6·9 | 8·5 S |
| 9·5 | | 27·0 | 7·8 | |
| 10·0 | | 35·5 | 33·7 | |
| 10·0 | 23 | 1·0 | 3·4 | |
| 10·0 | | 2·5 | 16·6 | |
| 9·8 | | 4·0 | 1·9 | |
| 8·2‡ | | 11·0 | 53·3 | 8·5 G*g* |
| 8·9 | | 16·5 | 14·5 | 9·0 S |
| 10·0 | | 16·5 | 27·4 | |
| 8·6‡ | | 22·5 | 52·7 | 9·5 G |
| 10·0 | | 25·5 | 20·8 | |
| 9·9 | | 30·5 | 18·5 | |
| 10·0 | | 39·5 | 7·0 | |
| 7·1‡ | | 39·5 | 52·0 | 7·0 GS*g* |
| 9·7‡ | | 43·5 | 59·7 | |

## 2041—2100.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·7 | 23 | 46·0 | 9·6 | 9·5 |
| 8·6 | | 46·0 | 0·2 | 8·8 |
| 9·6 | | 47·0 | 10·8 | 9·5 |
| 9·7‡ | | 56·0 | 43·0 | |
| 10·0 | | 58·0 | 9·6 | |
| 9·0‡ | 24 | 6·5 | 41·9 | |
| 9·6 | | 7·5 | 25·6 | |
| 9·6 | | 11·0 | 10·5 | |
| 10·0 | | 18·0 | 29·5 | |
| 9·4‡ | | 19·5 | 39·9 | |
| 9·8 | | 19·5 | 20·5 | |
| 9·4‡ | | 28·0 | 52·2 | |
| 10·0 | | 30·0 | 1·8 | |
| 9·7 | | 31·5 | 9·9 | |
| 9·6‡ | | 33·5 | 50·8 | |
| 10·0 | | 37·5 | 22·8 | |
| 10·0 | | 37·5 | 24·5 | |
| 9·4‡ | | 40·0 | 41·0 | |
| 9·5 | | 41·7 | 35·0 | |
| 10·0 | | 42·5 | 6·0 | |
| 9·1 | | 45·0 | 20·6 | |
| 8·6‡ | | 45·5 | 37·0 | |
| 9·8 | | 50·0 | 0·3 | |
| 9·7‡ | | 51·0 | 45·0 | |
| 7·9 | 25 | 1·0 | 5·8 | 8·0 |
| 10·0 | | 5·5 | 19·6 | |
| 9·7‡ | | 6·5 | 46·2 | |
| 9·7‡ | | 11·0 | 47·2 | |
| 10·0 | | 11·5 | 21·8 | |
| 9·7‡ | | 12·0 | 45·9 | |
| 9·2 | | 18·5 | 26·1 | 9·5 |
| 9·1‡ | | 19·0 | 51·7 | |
| 9·7 | | 24·0 | 23·4 | |
| 9·6 | | 27·0 | 33·3 | |
| 8·0 | | 27·5 | 15·4 | 8·5 |
| 9·2 | | 31·0 | 16·8 | 9·0 |
| 8·7 | | 32·8 | 29·8 | 9·5 |
| 9·4 | | 39·5 | 20·2 | |
| 9·9 | | 40·5 | 20·0 | |
| 8·9 | | 51·0 | 32·4 | |
| 9·0‡ | 26 | 1·0 | 44·1 | |
| 9·5‡ | | 4·0 | 48·2 | |
| 9·4 | | 4·0 | 3·7 | |
| 9·3 | | 10·3 | 27·9 | 9·0 |
| 9·2‡ | | 13·0 | 44·1 | |
| 9·7 | | 19·0 | 5·8 | |
| 10·0 | | 31·5 | 14·9 | |
| 9·5 | | 33·0 | 4·0 | |
| 10·0 | | 33·5 | 12·8 | |
| 9·5 | | 51·0 | 3·0 | |
| 9·4‡ | 27 | 1·5 | 53·9 | |
| 10·0 | | 6·0 | 27·5 | |
| 9·2‡ | | 8·5 | 45·9 | |
| 8·5‡ | | 12·0 | 57·5 | 9·0 *g* |
| 9·8 | | 31·0 | 18·1 | |
| 8·9 | | 36·5 | 24·8 | 9·5 |
| 9·6 | | 46·5 | 34·5 | |
| 9·7‡ | | 50·5 | 53·9 | |
| 9·7‡ | | 53·0 | 39·2 | |
| 9·0 | | 56·0 | 15·9 | 9·5 |

## 2101—2160.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·7‡ | 27 | 59·5 | 44·1 | |
| 10·0 | 28 | 5·5 | 12·8 | |
| 9·6 | | 8·5 | 10·6 | |
| 9·9 | | 13·5 | 10·2 | |
| 9·8 | | 14·0 | 1·3 | |
| 9·8 | | 19·2 | 0·2 | |
| 10·0 | | 26·8 | 16·0 | |
| 10·0 | | 31·0 | 23·1 | |
| 9·7‡ | | 32·0 | 37·0 | |
| 9·2 | | 34·5 | 13·4 | |
| 9·8 | | 35·8 | 0·3 | |
| 9·5‡ | | 43·0 | 37·1 | |
| 9·7 | | 49·0 | 31·9 | |
| 9·7‡ | | 50·0 | 37·5 | |
| 10·0 | | 55·0 | 6·8 | |
| 10·0 | 29 | 3·5 | 10·6 | |
| 9·7 | | 13·0 | 26·6 | |
| 10·0 | | 14·0 | 35·0 | |
| 9·1 | | 18·0 | 23·8 | 10·0 |
| 10·0 | | 30·0 | 30·7 | |
| 9·4‡ | | 40·0 | 45·6 | 9·0 |
| 9·8 | | 44·5 | 25·2 | |
| 9·7‡ | | 47·0 | 36·5 | |
| 9·6 | | 52·5 | 34·3 | |
| 9·7 | | 54·0 | 34·4 | |
| 8·4 | | 54·5 | 13·4 | 9·0 |
| 4·5 | | 59·0 | 19·6 | 3·5 GStrλ |
| 9·5‡ | | 59·5 | 46·5 | 9·0 |
| 9·4‡ | 30 | 1·0 | 56·9 | |
| 9·8 | | 2·0 | 34·4 | |
| 10·0 | | 2·5 | 15·8 | |
| 9·8 | | 6·0 | 27·8 | |
| 10·0 | | 19·0 | 32·0 | |
| 10·0 | | 19·0 | 34·4 | |
| 9·2 | | 26·0 | 35·5 | 9·5 |
| 9·4 | | 30·0 | 14·5 | |
| 9·8 | | 30·0 | 15·6 | |
| 10·0 | | 32·5 | 16·0 | |
| 10·0 | | 53·5 | 30·4 | |
| 9·5 | 31 | 1·0 | 32·1 | |
| 9·4 | | 9·5 | 2·5 | |
| 8·8‡ | | 10·0 | 42·3 | 9·0 |
| 9·5‡ | | 27·0 | 38·1 | |
| 10·0 | | 27·0 | 16·9 | |
| 10·0 | | 32·0 | 13·0 | |
| 10·0 | | 34·0 | 16·8 | |
| 8·5 | | 35·0 | 27·4 | |
| 9·0 | | 37·0 | 34·9 | |
| 9·7 | | 37·0 | 20·8 | |
| 8·1‡ | | 41·0 | 59·6 | 8·5 *g* |
| 8·8‡ | | 44·2 | 39·3 | 9·0 |
| 9·6 | | 53·0 | 25·2 | |
| 9·1‡ | | 59·5 | 38·5 | |
| 7·4‡ | 32 | 0·5 | 37·9 | 7·5 GSg |
| 9·9 | | 7·5 | 1·8 | |
| 8·9‡ | | 7·8 | 40·2 | |
| 9·3‡ | | 8·0 | 39·2 | |
| 8·6‡ | | 10·5 | 37·5 | |
| 10·0 | | 12·0 | 29·6 | |
| 9·2‡ | | 12·3 | 41·0 | |

## 2161—2220.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·5 | 32 | 19·0 | 11·6 | |
| 9·7‡ | | 20·0 | 39·1 | |
| 7·4 | | 21·0 | 30·3 | 8·0 GSg |
| 8·4‡ | | 23·2 | 42·0 | 8·8 S |
| 10·0 | | 28·5 | 29·0 | |
| 9·5‡ | | 30·0 | 41·9 | |
| 9·4‡ | | 31·2 | 39·1 | |
| 7·2‡ | | 31·5 | 40·9 | 7·2 GSg |
| 9·8 | | 32·8 | 7·5 | |
| 9·7‡ | | 34·0 | 41·9 | |
| 8·4 | | 34·0 | 30·5 | 8·5 |
| 9·9 | | 39·5 | 2·8 | |
| 10·0 | | 47·0 | 29·8 | |
| 10·0 | | 50·5 | 13·0 | |
| 9·4 | | 51·8 | 7·6 | |
| 9·4 | | 52·0 | 3·5 | |
| 9·1 | | 57·5 | 0·9 | |
| 9·2 | | 59·0 | 10·8 | |
| 9·4‡ | 33 | 3·0 | 45·1 | |
| 9·8 | | 4·0 | 11·6 | |
| 9·8 | | 4·0 | 3·4 | |
| 9·8 | | 6·5 | 2·3 | |
| 9·6 | | 6·5 | 7·7 | |
| 9·5‡ | | 9·7 | 47·1 | |
| 9·0‡ | | 11·0 | 48·8 | |
| 7·9‡ | | 13·0 | 44·3 | 8·2 |
| 10·0 | | 16·0 | 11·8 | |
| 8·9‡ | | 20·5 | 37·3 | |
| 9·3‡ | | 20·5 | 43·7 | |
| 8·7‡ | | 22·0 | 49·7 | 9·0 |
| 7·6 | | 26·0 | 14·4 | S |
| 8·4 | | 27·0 | 9·7 | |
| 9·5‡ | | 29·5 | 40·5 | |
| 9·3 | | 31·0 | 35·3 | |
| 9·7‡ | | 32·3 | 40·6 | |
| 9·8 | | 36·5 | 25·9 | |
| 9·7‡ | | 37·5 | 45·4 | |
| 10·0 | | 37·5 | 29·6 | |
| 9·9 | | 40·5 | 0·7 | |
| 9·4 | | 46·5 | 3·2 | |
| 9·1‡ | | 49·5 | 47·3 | |
| 10·0 | | 50·8 | 7·4 | |
| 9·9 | | 51·5 | 32·9 | |
| 9·7‡ | | 51·5 | 59·0 | |
| 8·3‡ | | 54·5 | 47·2 | 8·5 G*g* |
| 7·8‡ | 34 | 0·0 | 47·2 | 8·0 G*g* |
| 9·8 | | 1·5 | 9·4 | |
| 9·0‡ | | 2·3 | 57·1 | 9·0 |
| 9·4 | | 5·0 | 22·4 | |
| 10·0 | | 7·0 | 9·0 | |
| 10·0 | | 9·5 | 2·7 | |
| 10·0 | | 10·5 | 21·1 | |
| 9·4‡ | | 11·0 | 45·1 | |
| 9·6 | | 13·5 | 15·5 | |
| 9·8 | | 17·0 | 28·6 | |
| 9·7‡ | | 21·0 | 48·1 | |
| 9·4 | | 21·0 | 3·8 | |
| 10·0 | | 22·5 | 2·3 | |
| 9·5 | | 29·0 | 21·8 | |
| 9·7 | | 31·5 | 11·6 | |

## 2221—2280.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 34 | 34·0 | 13·8 | |
| 9·0 | | 36·2 | 31·1 | |
| 8·6 | 35 | 5·0 | 0·1 | 9·0 |
| 9·5 | | 15·5 | 24·4 | |
| 9·6 | | 16·5 | 17·8 | |
| 9·2‡ | | 19·0 | 41·8 | 10·0 |
| 9·3 | | 24·5 | 24·2 | |
| 10·0 | | 24·5 | 20·6 | |
| 9·2‡ | | 31·0 | 53·4 | |
| 9·5‡ | | 31·5 | 43·2 | |
| 9·6‡ | | 33·0 | 41·6 | |
| 8·9 | | 34·5 | 4·4 | 8·8 |
| 9·4‡ | | 53·0 | 54·6 | |
| 9·0‡ | | 56·5 | 43·2 | 8·5 |
| 9·7 | 36 | 24·0 | 26·6 | |
| 9·6‡ | | 30·0 | 41·1 | |
| 7·5 | | 31·0 | 26·9 | 8·0 GS |
| 9·7 | | 41·5 | 32·0 | 9·5 |
| 9·7 | | 53·0 | 10·5 | |
| 10·0 | | 57·5 | 8·4 | |
| 9·4 | 37 | 0·5 | 6·8 | |
| 9·2 | | 2·5 | 0·0 | |
| 9·5 | | 11·7 | 2·5 | |
| 10·0 | | 12·0 | 2·3 | |
| 10·0 | | 14·0 | 3·2 | |
| 9·2 | | 25·0 | 29·8 | |
| 9·9 | | 41·5 | 28·9 | |
| 9·8 | | 43·5 | 33·2 | |
| 8·4 | | 44·5 | 32·4 | 8·5 |
| 7·0 | | 54·5 | 11·0 | 7·0 GSt |
| 8·8‡ | 38 | 1·0 | 41·2 | 9·0 |
| 9·4 | | 6·0 | 20·0 | |
| 9·2 | | 7·2 | 0·0 | |
| 9·4 | | 7·5 | 12·8 | |
| 9·2 | | 9·0 | 16·0 | |
| 10·0 | | 9·0 | 17·2 | |
| 9·4 | | 21·5 | 11·8 | |
| 10·0 | | 34·0 | 28·3 | |
| 10·0 | | 34·5 | 22·6 | |
| 9·7 | | 48·0 | 0·0 | |
| 10·0 | | 54·0 | 19·8 | |
| 9·6‡ | | 55·5 | 39·2 | |
| 10·0 | | 57·5 | 18·6 | |
| 8·5† | 39 | 7·5 | 50·9 | 8·5 *g* |
| 9·9† | | 8·5 | 56·0 | |
| 9·5 | | 11·5 | 5·0 | |
| 9·0† | | 13·3 | 53·0 | 8·8 *g* |
| 9·7 | | 16·0 | 14·8 | |
| 10·0 | | 19·5 | 21·0 | |
| 9·4 | | 20·5 | 4·4 | |
| 9·2 | | 26·0 | 29·7 | 9·5 |
| 9·9† | | 32·0 | 48·5 | |
| 9·8† | | 36·0 | 53·4 | |
| 9·2 | | 39·5 | 20·0 | |
| 9·3 | | 45·5 | 31·9 | |
| 9·4† | | 49·2 | 53·0 | |
| 9·2 | | 53·5 | 18·8 | 9·5 |
| 10·0 | | 56·5 | 28·2 | |
| 9·8 | 40 | 4·0 | 29·0 | |
| 9·5 | | 4·0 | 21·8 | |

25 prec

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 20 | 66 | 8·2 |
| | 30 | 68 | 8·3 |
| | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |



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| | 2 prec. | |
|---|---|---|
| | α | δ |
| | + | − |
| h m | s | ′ |
| 11 40 | 71 | 8·3 |
| 50 | 74 | 8·3 |
| 12 0 | 77 | 8·4 |

## 2281—2340.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·9† | 40 | 8·5 | 43·6 | |
| 10·0 | | 16·0 | 20·8 | |
| 9·8 | | 23·0 | 2·2 | |
| 10·0 | | 24·0 | 8·8 | |
| 9·7 | | 24·5 | 28·2 | |
| 9·1 | | 28·0 | 27·0 | 9·5 |
| 10·0 | | 28·0 | 21·8 | |
| 9·5† | | 32·2 | 55·8 | |
| 10·0 | | 41·0 | 8·8 | |
| 9·9† | | 44·0 | 48·9 | |
| 10·0 | | 45·0 | 16·2 | |
| 9·9 | | 53·0 | 9·1 | |
| 10·0 | 41 | 19·0 | 31·4 | |
| 8·6† | | 19·3 | 36·4 | 9·0 |
| 9·0† | | 19·5 | 44·1 | 9·5 |
| 9·8† | | 22·5 | 56·0 | |
| 9·5 | | 24·0 | 5·4 | |
| 10·0 | | 31·5 | 22·6 | |
| 10·0 | | 32·0 | 24·5 | |
| 9·5† | | 34·0 | 41·0 | |
| 10·0 | | 35·0 | 28·8 | |
| 10·0 | | 42·7 | 1·0 | |
| 9·2 | | 43·0 | 30·2 | 9·0 |
| 9·4 | | 46·3 | 13·6 | |
| 10·2 | | 48·0 | 22·8 | |
| 9·4† | | 50·5 | 40·2 | |
| 10·2 | 42 | 1·2 | 0·7 | |
| 9·8 | | 2·3 | 16·9 | |
| 9·9† | | 8·0 | 57·0 | |
| 9·0 | | 9·8 | 7·7 | 8·5 |
| 10·0 | | 13·8 | 12·7 | |
| 9·6† | | 26·5 | 42·0 | |
| 10·2 | | 29·5 | 4·3 | |
| 10·0 | | 39·5 | 30·2 | |
| 9·5 | | 39·5 | 19·6 | 9·5 |
| 9·2 | | 41·5 | 20·1 | 9·5 |
| 9·4 | | 43·5 | 10·7 | |
| 9·4 | | 47·0 | 28·0 | |
| 10·2 | | 59·5 | 33·5 | |
| 9·8 | 43 | 12·0 | 22·9 | |
| 9·3† | | 12·5 | 41·1 | 8·8 |
| 9·9† | | 13·0 | 40·9 | |
| 9·9 | | 15·5 | 4·6 | |
| 9·9† | | 15·5 | 51·1 | |
| 9·8† | | 24·5 | 39·6 | |
| 10·2 | | 27·0 | 1·3 | |
| 9·8 | | 28·0 | 19·7 | |
| 9·4 | | 30·0 | 20·2 | |
| 9·5 | | 33·0 | 2·0 | |
| 9·2 | | 33·0 | 23·1 | |
| 10·2 | | 40·5 | 18·7 | |
| 10·0 | | 45·5 | 15·0 | |
| 9·6 | | 50·0 | 13·7 | |
| 10·2 | | 53·0 | 11·6 | |
| 9·8† | | 53·5 | 35·7 | |
| 9·8 | 44 | 4·5 | 20·7 | |
| 9·6† | | 5·5 | 57·5 | |
| 9·5† | | 6·0 | 54·9 | |
| 10·2 | | 6·0 | 5·6 | |
| 9·5† | | 11·0 | 37·0 | |

## 2341—2400.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·2 | 44 | 11·0 | 1·5 | |
| 9·0 | | 12·5 | 4·1 | 9·5 |
| 10·2 | | 15·0 | 13·6 | |
| 9·2† | | 24·0 | 53·7 | |
| 9·8† | | 25·5 | 52·4 | 9·5 |
| 9·9 | | 30·0 | 0·2 | |
| 9·2 | | 33·0 | 30·7 | 9·5 |
| 9·7 | | 35·5 | 6·1 | |
| 9·7 | | 36·5 | 14·6 | |
| 8·5† | | 39·5 | 57·4 | 9·0 *y* |
| 9·9† | | 46·0 | 49·1 | |
| 9·9† | 45 | 0·5 | 47·1 | |
| 10·2 | | 1·0 | 0·8 | |
| 10·2 | | 5·0 | 23·2 | |
| 9·9† | | 12·5 | 46·8 | |
| 9·0 | | 16·0 | 13·2 | |
| 9·6 | | 28·0 | 2·4 | |
| 9·9 | | 30·5 | 15·7 | |
| 10·2 | | 33·5 | 10·7 | |
| 9·0 | | 36·0 | 11·7 | |
| 10·2 | | 38·0 | 18·2 | |
| 9·2 | | 39·0 | 31·8 | 10·0 |
| 9·7‡ | | 43·0 | 36·2 | |
| 10·2 | | 49·0 | 25·7 | |
| 10·2 | | 50·0 | 29·9 | |
| 10·0 | | 53·3 | 27·4 | |
| 9·7 | | 53·5 | 4·2 | |
| 10·0 | | 54·7 | 2·7 | |
| 10·2 | | 56·0 | 16·9 | |
| 10·2 | | 59·5 | 17·5 | |
| 10·2 | 46 | 3·0 | 5·1 | |
| 10·2 | | 10·5 | 10·8 | |
| 8·6 | | 25·3 | 28·5 | 8·0 G |
| 9·0 | | 26·0 | 5·2 | 9·5 |
| 10·2 | | 33·0 | 16·2 | |
| 9·6 | | 41·0 | 21·8 | |
| 9·4 | | 45·5 | 0·1 | |
| 9·4 | | 46·5 | 32·9 | |
| 9·6† | | 54·5 | 52·9 | |
| 9·9† | | 58·0 | 40·7 | |
| 9·8 | 47 | 0·0 | 17·2 | |
| 9·9† | | 1·5 | 59·9 | |
| 9·7 | | 3·0 | 9·2 | |
| 10·2 | | 18·0 | 4·8 | |
| 9·9† | | 20·0 | 32·1 | |
| 10·0 | | 20·0 | 3·7 | |
| 9·1 | | 21·5 | 6·5 | |
| 9·7 | | 23·0 | 9·5 | |
| 9·6 | | 23·5 | 2·8 | |
| 10·0 | | 23·5 | 12·8 | |
| 10·0 | | 25·0 | 12·7 | |
| 10·2 | | 29·0 | 13·8 | |
| 10·2 | | 30·0 | 35·1 | |
| 9·7 | | 34·5 | 12·2 | |
| 9·7 | | 35·0 | 10·4 | |
| 9·2 | | 37·0 | 14·4 | 9·5 |
| 9·4 | | 39·0 | 14·2 | 9·5 |
| 9·4 | | 39·5 | 23·7 | |
| 9·1† | | 41·5 | 50·0 | |
| 9·9† | | 51·5 | 46·7 | |

## 2401—2460.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·2 | 47 | 56·5 | 32·9 | |
| 10·2 | | 57·0 | 17·0 | |
| 8·9† | 48 | 1·5 | 53·3 | 10·0 |
| 10·2 | | 13·0 | 33·2 | |
| 9·6 | | 18·0 | 5·0 | |
| 9·0 | | 19·0 | 19·8 | 9·0 |
| 9·9† | | 47·5 | 42·7 | |
| 7·2 | | 48·0 | 35·0 | 7·0 GS |
| 10·0 | | 48·0 | 14·6 | |
| 9·4 | | 57·0 | 27·2 | |
| 10·2 | | 58·5 | 29·7 | |
| 9·6 | | 59·5 | 15·0 | |
| 10·0 | 49 | 3·0 | 16·2 | |
| 10·2 | | 5·0 | 13·5 | |
| 10·0 | | 10·0 | 4·1 | |
| 9·1 | | 11·0 | 13·5 | |
| 9·7 | | 13·0 | 31·0 | 9·5 |
| : 10·2 | | 14·5 | 9·7 | |
| 9·9† | | 18·0 | 37·1 | |
| 9·7 | | 19·0 | 15·6 | |
| 9·9† | | 19·5 | 31·1 | |
| 9·8 | | 21·5 | 28·4 | |
| 9·9 | | 22·0 | 18·0 | |
| 9·4 | | 25·3 | 30·8 | 9·5 |
| 10·0 | | 26·0 | 11·4 | |
| 9·4 | | 27·0 | 5·3 | |
| : 10·0 | | 29·0 | 32·7 | |
| 9·7 | | 35·0 | 4·0 | |
| 9·4 | | 36·5 | 21·8 | |
| 10·2 | | 37·0 | 1·7 | |
| 10·0 | | 37·0 | 5·6 | |
| 9·6 | | 40·5 | 32·2 | |
| 9·0 | | 44·5 | 11·3 | |
| 9·0 | | 45·0 | 29·9 | 9·5 |
| 10·0 | | 47·0 | 14·2 | |
| 9·2 | | 50·0 | 14·4 | |
| 9·2 | | 51·0 | 5·8 | |
| 10·2 | | 54·5 | 32·4 | |
| 10·2 | 50 | 0·0 | 30·8 | |
| 9·5 | | 13·0 | 18·8 | |
| 10·2 | | 17·0 | 6·8 | |
| 9·8 | | 18·0 | 9·0 | |
| 9·1 | | 21·0 | 31·7 | |
| 9·0 | | 21·2 | 34·0 | 9·0 |
| 10·2 | | 27·0 | 0·2 | |
| 9·7 | | 27·0 | 20·2 | |
| 9·4 | | 28·5 | 24·8 | |
| 10·2 | | 29·0 | 18·8 | |
| 10·2 | | 29·0 | 32·2 | |
| 9·4† | | 32·5 | 55·7 | |
| 9·7 | | 33·3 | 32·2 | |
| 9·6 | | 34·8 | 35·3 | |
| 9·9† | | 40·5 | 44·7 | |
| 10·0 | | 41·5 | 2·4 | |
| 7·8 | | 43·0 | 33·2 | 8·0 GS |
| 9·7 | | 46·5 | 14·0 | |
| 9·6 | | 49·0 | 26·1 | 9·5 |
| 10·2 | | 50·0 | 14 0 | |
| 8·2† | | 52·0 | 59·0 | G*y* |
| 9·4† | | 53·5 | 53·9 | |

## 2461—2520.

| mag. | 11h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·4† | 50 | 56·5 | 51·0 | |
| 9·0 | 51 | 5·8 | 26·9 | 9·0 |
| 9·7 | | 10·0 | 17·9 | |
| 9·3† | | 11·0 | 39·8 | |
| 9·8 | | 21·0 | 16·5 | |
| 9·6 | | 30·0 | 34·2 | |
| 9·6 | | 40·0 | 7·8 | |
| 10·2 | | 44·5 | 3·8 | |
| 10·2 | | 47·0 | 28·5 | |
| 9·4 | | 48·0 | 8·5 | |
| 9·7† | | 48·5 | 50·0 | |
| 9·5 | | 53·0 | 33·6 | |
| 10·2 | 52 | 17·0 | 11·2 | |
| 10·2 | | 21·0 | 24·4 | |
| 9·6 | | 30·0 | 4·9 | |
| 8·7 | | 34·0 | 16·7 | 9·0 |
| 10·2 | | 36·5 | 5·0 | |
| 10·2 | | 44·0 | 8·9 | |
| 9·4† | | 47·0 | 52·1 | |
| 8·4 | | 56·5 | 4·9 | *8·3* |
| 9·7† | | 57·0 | 59·5 | |
| 10·2 | | 58·0 | 11·6 | |
| 9·9† | 53 | 1·5 | 55·5 | |
| 9·7† | | 2·5 | 56·0 | |
| 7·3 | | 7·0 | 8·2 | 7·0 GSt |
| 9·6 | | 7·5 | 15·0 | |
| 9·5 | | 12·5 | 4·2 | |
| 10·2 | | 13·0 | 28·1 | |
| 10·2 | | 13·5 | 16·5 | |
| 10·2 | | 15·1 | 14·9 | |
| 9·9† | | 19·0 | 55·8 | |
| 8·8† | | 19·5 | 42·4 | |
| 9·4 | | 20·0 | 9·8 | |
| 10·0 | | 21·0 | 7·6 | |
| 9·2† | | 22·0 | 40·1 | |
| 9·8 | | 23·0 | 17·7 | |
| 10·2 | | 27·0 | 33·0 | |
| 9·0 | | 30·0 | 8·2 | 8·5 S |
| 9·7† | | 31·0 | 37·3 | |
| 9·7 | | 31·0 | 12·5 | 9·5 |
| 9·9† | | 41·0 | 44·5 | |
| 10·0 | | 41·0 | 32·9 | |
| 9·8 | | 41·0 | 3·0 | |
| 10·2 | | 44·0 | 8·2 | |
| 9·9† | | 45·5 | 46·0 | |
| 10·2 | | 48·5 | 30·5 | |
| 9·4† | | 50·5 | 43·1 | |
| 9·5 | | 52·0 | 34·8 | |
| 9·2 | 54 | 2·2 | 35·2 | |
| 10·2 | | 3·0 | 0·5 | |
| 9·7 | | 4·8 | 35·6 | |
| 9·0 | | 5·5 | 32·2 | 9·5 |
| 10·2 | | 10·0 | 4·9 | |
| 9·9† | | 21·5 | 37·1 | |
| 10·2 | | 24·0 | 26·9 | |
| 9·6 | | 27·0 | 25·3 | 9·5 |
| 9·1† | | 32·5 | 53·6 | |
| 10·2 | | 37·0 | 9·7 | |
| 10·2 | | 38·0 | 29·1 | |
| 9·2† | | 39·5 | 52·7 | |



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**2521—2580.**

| mag. | 11h.–12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·0 | 54 | 39·5 | 31·4 | |
| 9·8 | | 50·0 | 4·0 | |
| 9·5 | | 51·5 | 4·9 | |
| 9·8 | | 53·0 | 15·8 | |
| 9·2 | 55 | 10·0 | 32·0 | 9·5 S |
| 8·6† | | 16·5 | 52·1 | 9·0 |
| 9·4 | | 25·0 | 13·6 | |
| 9·5 | | 27·0 | 21·7 | |
| 10·2 | | 37·0 | 8·8 | |
| 9·5† | | 40·5 | 45·2 | |
| 9·0 | | 42·5 | 33·6 | |
| 9·2 | | 46·5 | 29·6 | |
| 9·6 | | 47·0 | 18·8 | |
| 8·8† | | 51·5 | 48·7 | 9·0 |
| 9·7 | | 52·0 | 30·7 | |
| 8·2† | | 53·3 | 46·5 | 8·5 |
| 8·2 | 56 | 8·0 | 22·4 | |
| 9·4 | | 11·2 | 29·6 | |
| 9·7 | | 13·0 | 4·7 | |
| 9·4 | | 19·5 | 27·9 | |
| 9·9† | | 30·5 | 48·1 | |
| 9·0† | | 37·0 | 57·8 | |
| 5·3† | | 39·0 | 37·0 | 5·0 GSr |
| 8·8† | | 41·0 | 44·9 | 9·0 |
| 9·8† | | 43·0 | 44·3 | |
| 9·3 | | 48·0 | 21·4 | |
| 9·6 | | 58·5 | 15·8 | |
| 9·4 | | 58·5 | 11·3 | |
| 8·0 | 57 | 0·0 | 0·0 | 7·5 G |
| 10·2 | | 3·0 | 17·7 | |
| 8·8† | | 4·0 | 45·9 | 8·0 |
| 9·2† | | 11·0 | 40·3 | |
| 10·2 | | 14·5 | 27·7 | |
| 10·2 | | 16·5 | 10·2 | |
| 9·0 | | 17·0 | 6·6 | |
| 9·1 | | 30·0 | 34·1 | |
| 10·0 | | 30·0 | 23·5 | |
| 9·0 | | 31·0 | 21·1 | |
| 9·9† | | 32·5 | 54·2 | |
| 9·9† | | 38·5 | 38·0 | |
| 5·3 | | 52·5 | 28·0 | 5·5 GS |
| 9·2 | | 53·5 | 31·7 | |
| 8·8† | 58 | 7·0 | 53·0 | 8·0 *g* |
| 9·0 | | 10·0 | 12·5 | |
| 9·3† | | 12·5 | 50·2 | 9·5 |
| 10·2 | | 12·5 | 0·8 | |
| 9·4 | | 20·0 | 23·3 | |
| 9·6† | | 27·5 | 50·0 | |
| 9·0† | | 29·0 | 51·8 | |
| 9·8 | | 39·0 | 5·1 | |
| 10·0 | | 41·5 | 6·0 | |
| 9·9† | | 50·0 | 57·2 | 9·5 |
| 7·7 | | 57·0 | 16·7 | 7·5 GS |
| 10·2 | 59 | 2·5 | 14·6 | |
| 8·8† | | 18·5 | 48·5 | 9·0 |
| 9·2† | | 31·0 | 39·4 | |
| 9·9† | 0 | 18·5 | 39·0 | |
| 9·7 | | 30·5 | 14·1 | 9·5 |
| 9·9† | | 43·0 | 43·0 | |
| 8·8 | | 44·5 | 26·9 | 9·2 |

**2581—2640.**

| mag. | 12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 49·5 | 30·0 | |
| 9·2† | | 57·0 | 52·3 | |
| 9·9† | 1 | 5·0 | 54·0 | |
| 9·3† | | 8·0 | 58·9 | |
| 9·2† | | 17·5 | 43·5 | |
| 9·4 | | 34·0 | 12·1 | |
| 9·4 | | 36·5 | 33·3 | |
| 9·6† | | 52·0 | 56·0 | |
| 9·9 | | 58·5 | 19·7 | |
| 9·6 | 2 | 4·0 | 0·5 | 9·5 |
| 9·6 | | 10·0 | 26·7 | 9·5 |
| 9·8† | | 21·5 | 47·6 | |
| 9·0 | | 41·5 | 29·9 | 9·5 |
| 10·0 | | 43·0 | 15·3 | |
| 9·9† | 3 | 8·0 | 49·2 | |
| 9·8 | | 8·0 | 3·1 | |
| 9·9† | | 10·5 | 53·6 | |
| 9·6 | | 14·5 | 9·3 | |
| 9·9† | | 18·0 | 40·9 | |
| 10·2 | | 19·0 | 7·5 | |
| 9·6 | | 20·0 | 22·8 | |
| 9·6 | | 23·0 | 8·9 | |
| 9·1 | | 37·0 | 6·9 | |
| 8·9† | | 49·5 | 54·8 | |
| 9·8 | 4 | 3·0 | 14·5 | |
| 10·0 | | 12·5 | 13·7 | |
| 9·4 | | 15·0 | 14·9 | |
| 9·5 | | 19·0 | 27·2 | |
| 9·2 | | 20·0 | 15·7 | |
| 9·3† | | 41·5 | 45·4 | |
| 9·3 | | 53·0 | 9·0 | |
| 10·2 | | 54·5 | 34·1 | ? |
| 9·9 | 5 | 0·0 | 6·5 | |
| 10·2 | | 9·0 | 9·7 | |
| 9·0† | | 10·0 | 49·3 | |
| 8·6† | | 10·0 | 40·6 | 9·0 G |
| 9·2† | | 20·5 | 53·6 | 9·5 |
| 9·5 | | 22·5 | 14·3 | |
| 7·9† | | 23·0 | 41·1 | 8·0 GS |
| 9·9 | | 27·0 | 0·1 | |
| 9·9 | | 28·0 | 14·2 | |
| 7·1† | | 33·5 | 45·5 | 7·5 GScr |
| 10·2 | | 37·0 | 16·3 | |
| 7·0 | | 46·0 | 15·3 | 7·0 GS |
| 9·6 | | 49·0 | 6·5 | |
| 8·9† | 6 | 5·5 | 54·2 | 9·5 |
| 9·9† | | 16·5 | 40·9 | |
| 9·4 | | 30·0 | 4·3 | |
| 9·5† | | 38·5 | 54·8 | |
| 10·2 | | 41·0 | 7·9 | |
| 9·8 | | 50·0 | 17·5 | |
| 10·2 | | 58·0 | 27·6 | |
| 7·8 | 7 | 7·0 | 14·1 | 8·5 |
| 9·9 | | 10·5 | 6·1 | |
| 9·2 | | 19·0 | 24·2 | 9·0 |
| 9·7 | | 25·0 | 24·1 | |
| 9·2 | | 36·0 | 5·5 | |
| 9·3 | | 43·0 | 33·3 | |
| 9·0 | | 53·0 | 4·9 | |
| 9·9† | 8 | 0·5 | 48·0 | |

**2641—2700.**

| mag. | 12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·9† | 8 | 1·0 | 48·9 | 9·5 |
| 9·1 | | 6·0 | 3·9 | 9·0 |
| 10·2 | | 10·5 | 23·3 | |
| 9·7 | | 25·8 | 25·9 | |
| 9·4 | | 35·5 | 23·9 | |
| 8·7 | | 37·0 | 11·6 | 8·5 |
| 8·3† | | 38·0 | 48·7 | 9·0 G |
| 8·4† | | 38·5 | 43·8 | 8·5 G |
| 10·2 | | 44·5 | 17·4 | |
| 10·2 | | 49·0 | 18·9 | |
| 9·9† | | 53·5 | 36·8 | |
| 9·9† | | 54·0 | 36·6 | |
| 9·9† | | 59·5 | 44·7 | |
| 9·4 | 9 | 3·0 | 20·5 | 9·5 |
| 9·2† | | 9·5 | 51·8 | |
| 10·0 | | 27·0 | 10·9 | |
| 9·7† | | 33·0 | 37·5 | |
| 8·7 | | 35·0 | 17·9 | 9·5 |
| 7·8† | | 48·5 | 50·2 | 8·5 |
| 9·2† | | 50·5 | 42·6 | |
| 7·8 | | 58·0 | 30·1 | 7·5 GS |
| 9·6 | 10 | 5·5 | 26·3 | |
| 9·2† | | 12·0 | 47·7 | 9·5 |
| 9·9† | | 21·0 | 52·1 | |
| 9·3 | | 21·0 | 25·7 | 9·5 |
| 10·0 | | 30·0 | 28·2 | |
| 8·8 | | 40·5 | 31·9 | 9·0 |
| 10·0 | | 47·5 | 11·9 | |
| 9·7† | | 49·5 | 49·7 | 9·0 |
| 8·7† | 11 | 1·0 | 55·3 | |
| 9·9† | | 2·5 | 42·6 | |
| 9·6† | | 13·0 | 56·1 | |
| 8·7 | | 25·5 | 19·5 | 9·0 |
| 9·0 | | 29·0 | 17·3 | 9·0 |
| 9·0 | | 37·0 | 18·7 | 9·0 |
| 10·2 | | 49·0 | 34·9 | |
| 9·7 | | 52·0 | 8·1 | |
| 9·4 | | 59·0 | 10·5 | |
| 10·0 | | 59·0 | 6·3 | |
| 9·0 | 12 | 6·0 | 33·5 | |
| 9·5 | | 21·0 | 9·1 | |
| 9·3 | | 22·8 | 28·1 | |
| 9·2 | | 26·0 | 23·0 | |
| 9·4 | | 28·5 | 21·7 | |
| 9·0† | | 32·5 | 39·7 | |
| 9·9 | | 48·2 | 1·0 | |
| 8·9 | | 58·0 | 4·8 | 9·2 |
| 7·6 | 13 | 6·5 | 9·6 | 7·0 GSt |
| 10·0 | | 14·0 | 10·9 | |
| 9·6† | | 16·5 | 53·0 | |
| 9·3† | | 16·5 | 45·5 | |
| 8·8† | | 25·5 | 59·4 | 9·2 |
| 10·2 | | 30·0 | 31·1 | |
| 9·5 | | 37·0 | 21·9 | |
| 9·8 | | 41·0 | 15·9 | |
| 9·8 | | 54·5 | 13·8 | |
| 10·2 | 14 | 13·0 | 10·0 | |
| 10·2 | | 19·5 | 13·9 | |
| 9·1 | | 27·7 | 27·9 | 9·5 |
| 8·0† | | 44·0 | 41·6 | 8·5 |

**2701—2760.**

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|---|---|---|---|---|
| 9·2 | 14 | 50·0 | 15·5 | |
| 10·2 | 15 | 0·5 | 0·2 | |
| 9·9† | | 7·5 | 53·8 | |
| 10·2 | | 12·5 | 13·3 | |
| 9·0 | | 17·2 | 29·7 | 9·c |
| 9·9† | | 18·0 | 54·7 | |
| 9·1† | | 22·0 | 39·1 | |
| 8·8† | | 28·5 | 58·0 | 9·5 |
| 8·9† | | 30·5 | 38·4 | 9·5 |
| 9·6 | | 43·0 | 27·9 | |
| 9·4† | | 46·0 | 43·9 | |
| 10·2 | | 50·5 | c·9 | |
| 9·6 | | 53·0 | 33·4 | 9·5 |
| 9·2 | | 57·0 | 22·7 | |
| 8·8† | | 59·0 | 40·9 | 9·0 |
| 9·4 | 16 | 1·0 | 0·0 | |
| 9·8 | | 20·5 | 34·9 | |
| 9·7 | | 22·8 | 35·2 | 10·0 |
| 9·2 | | 28·0 | 21·9 | |
| 9·6 | | 30·5 | 28·2 | |
| 9·1 | 17 | 7·0 | 10·7 | |
| 9·4 | | 26·3 | 16·1 | |
| 9·4 | | 33·8 | 25·1 | 10·0 |
| 10·2 | | 48·2 | 9·9 | 9·5 |
| 10·2 | | 49·0 | 17·0 | |
| 9·4 | 18 | 8·2 | 22·4 | |
| 10·2 | | 12·5 | 26·5 | |
| 9·5 | | 13·0 | 15·0 | |
| 10·1 | | 18·0 | 30·0 | |
| 9·9† | | 39·5 | 46·6 | |
| 10·2 | | 41·0 | 16·6 | |
| 8·8† | | 43·5 | 56·0 | |
| 9·8 | | 45·5 | 32·0 | |
| 9·9‡ | | 59·0 | 47·9 | |
| 9·4 | 19 | 4·5 | 20·3 | |
| 9·9 | | 7·3 | 21·8 | |
| 9·7‡ | | 7·5 | 45·7 | |
| 9·9 | | 10·8 | 25·5 | ? |
| 10·0‡ | | 19·0 | 49·4 | |
| 9·0 | | 25·7 | 35·0 | 9·0 |
| 9·8 | | 33·5 | 9·9 | |
| 7·9‡ | | 35·2 | 25·8 | 7·5 GSgt |
| 10·0‡ | | 36·5 | 34·1 | |
| 10·0‡ | | 38·0 | 53·0 | |
| 2·4 | | 38·0 | 24·3 | *2·0* GSgtrλ |
| 10·0‡ | | 38·0 | 44·3 | |
| 8·8 | | 39·8 | 6·5 | |
| 9·9 | | 46·0 | 14·5 | |
| 10·0‡ | | 46·5 | 42·1 | |
| 9·8 | | 46·5 | 10·9 | |
| 9·1 | | 51·8 | 12·1 | |
| 9·8 | 20 | 1·0 | 3·3 | |
| 9·9‡ | | 7·5 | 57·2 | |
| 10·0 | | 12·0 | 1·7 | |
| 9·8‡ | | 24·0 | 40·0 | |
| 8·8 | | 28·0 | 33·5 | 9·0 |
| 10·0‡ | | 28·5 | 39·2 | |
| 9·8 | | 31·0 | 1·8 | |
| 9·8 | | 32·5 | 23·3 | |
| 9·0‡ | | 39·0 | 52·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |
| | 20 | 82 | 8·3 |
| | 30 | 85 | 8·3 |



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| | | 25 prec. α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 12 | 20 | 82 | 8·3 |
| | 30 | 85 | 8·3 |
| | 40 | 88 | 8·2 |
| | 50 | 91 | 8·2 |
| 13 | 0 | 93 | 8·1 |

**2761—2820.**

| mag. | 12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·4 | 20 | 39·2 | 32·9 | |
| 10·0‡ | | 50·0 | 45·9 | |
| 9·8 | | 55·5 | 35·2 | |
| 10·2 | | 58·0 | 21·8 | |
| 10·0‡ | | 58·5 | 37·0 | |
| 10·0‡ | 21 | 2·0 | 59·9 | |
| 10·2 | | 3·0 | 20·6 | |
| 9·5‡ | | 7·0 | 43·1 | |
| 9·7 | | 14·0 | 26·9 | |
| 9·0 | | 22·0 | 15·9 | 9·5 |
| 10·2 | | 24·0 | 17·0 | |
| 9·4 | | 26·0 | 26·3 | |
| 10·2 | | 26·5 | 17·9 | |
| 9·2‡ | | 27·0 | 39·5 | 9·0 |
| 10·2 | | 28·5 | 17·6 | |
| 10·2 | | 28·5 | 15·8 | |
| 10·2 | | 31·0 | 25·7 | |
| 9·8‡ | | 37·5 | 44·6 | |
| 10·0‡ | | 50·5 | 38·6 | |
| 9·4‡ | | 51·0 | 40·8 | |
| 9·3 | | 55·0 | 17·5 | |
| 10·2 | 22 | 2·0 | 22·5 | |
| 10·0‡ | | 2·5 | 45·0 | |
| 9·8 | | 21·5 | 11·7 | |
| 10·0 | | 25·0 | 31·5 | |
| 10·0‡ | | 25·5 | 55·1 | |
| 10·0‡ | | 26·0 | 52·2 | |
| 9·2 | | 34·5 | 13·5 | 10·0 |
| 9·7 | | 37·0 | 34·9 | 10·0 |
| 10·1 | | 43·5 | 7·9 | |
| 10·0‡ | 23 | 8·0 | 42·1 | |
| 9·6‡ | | 8·5 | 39·3 | |
| 9·4 | | 14·5 | 4·8 | |
| 9·4‡ | | 32·5 | 53·3 | 10·0 |
| 10·0‡ | | 39·5 | 49·1 | |
| 10·1 | | 42·5 | 5·5 | |
| 9·8 | | 43·0 | 6·1 | |
| 9·2 | | 59·5 | 3·7 | 9·5 |
| 10·0‡ | 24 | 14·5 | 37·1 | |
| 10·2 | | 32·5 | 20·7 | |
| 10·2 | | 34·0 | 28·1 | |
| 9·7 | | 35·5 | 24·0 | |
| 9·5 | | 38·0 | 1·0 | |
| 10·0‡ | | 40·5 | 42·9 | |
| 6·7‡ | | 52·0 | 48·9 | 6·5 GS |
| 10·2 | 25 | 2·0 | 4·2 | |
| 9·3 | | 10·0 | 1·0 | |
| 9·7 | | 21·0 | 9·2 | |
| 9·5 | | 32·5 | 12·6 | |
| 9·2 | | 36·0 | 2·0 | 10·0 |
| 9·8 | | 39·0 | 15·6 | |
| 9·7‡ | | 41·5 | 36·2 | |
| 9·4‡ | | 48·0 | 42·2 | |
| 9·6 | | 55·0 | 4·7 | |
| 10·1 | 26 | 8·0 | 4·3 | |
| 9·2 | | 11·5 | 1·6 | |
| 9·5‡ | | 12·0 | 48·9 | 10·0 |
| 9·1 | | 20·0 | 20·8 | |
| 10·2 | | 30·5 | 23·5 | |
| 10·0‡ | | 37·5 | 40·5 | |

**2821—2880.**

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|---|---|---|---|---|
| 9·2 | 26 | 42·0 | 26·8 | |
| 9·8 | | 48·0 | 17·9 | |
| 9·8 | 27 | 2·0 | 2·8 | |
| 10·1 | | 17·5 | 20·2 | |
| 9·5 | | 30·0 | 13·6 | |
| 10·2 | | 33·0 | 28·1 | |
| 10·0‡ | | 35·0 | 39·5 | |
| 9·1 | | 42·0 | 11·2 | |
| 10·1 | | 47·0 | 32·0 | |
| 9·6 | 28 | 2·5 | 13·0 | 10·5 |
| 10·0‡ | | 5·5 | 41·1 | |
| 10·0 | | 10·5 | 17·4 | |
| 8·8 | | 12·0 | 16·9 | 10·0 |
| 8·8 | | 24·5 | 25·2 | |
| 8·8 | | 27·5 | 11·0 | |
| 10·2 | | 28·0 | 1·6 | |
| 9·7 | | 28·5 | 33·0 | |
| 8·6 | | 58·5 | 9·4 | 9·0 |
| 9·5 | 29 | 7·0 | 8·6 | |
| 9·8‡ | | 11·5 | 58·3 | |
| 10·0 | | 32·5 | 13·8 | |
| 10·2 | | 34·0 | 29·4 | |
| 8·7 | | 36·0 | 12·9 | 9·0 |
| 9·4 | 30 | 4·0 | 2·0 | 9·0 |
| 9·3 | | 18·5 | 27·0 | 10·0 |
| 10·0‡ | | 22·0 | 29·3 | |
| 9·6 | | 40·0 | 19·6 | |
| 9·4 | | 48·3 | 33·2 | |
| 10·0‡ | | 58·5 | 45·6 | |
| 9·8 | 31 | 5·5 | 12·0 | |
| 9·8‡ | | 9·0 | 50·7 | |
| 10·1 | | 10·0 | 10·6 | |
| 9·2 | | 13·5 | 13·6 | 9·5 |
| 10·2 | | 15·5 | 20·0 | |
| 9·9‡ | | 16·5 | 44·8 | |
| 10·0 | | 20·5 | 15·0 | |
| 9·8 | | 39·0 | 10·9 | |
| 10·0‡ | | 40·0 | 42·9 | |
| 9·5 | | 41·0 | 2·8 | |
| 9·8 | 32 | 1·0 | 10·4 | |
| 9·5 | | 3·5 | 23·3 | |
| 9·0‡ | | 5·0 | 40·4 | 9·5 G |
| 9·9 | | 7·0 | 9·0 | |
| 9·6‡ | | 19·0 | 59·1 | |
| 8·8‡ | | 52·5 | 45·9 | 8·9 G |
| 9·1 | | 55·0 | 13·6 | |
| 9·4‡ | | 57·0 | 47·6 | |
| 10·0 | 33 | 8·5 | 17·2 | |
| 9·6 | | 12·0 | 35·8 | |
| 10·2 | | 15·0 | 10·1 | |
| 9·4‡ | | 23·5 | 43·1 | 9·2 G |
| 9·4 | | 25·0 | 18·5 | |
| 10·2 | | 28·5 | 16·4 | |
| 9·8‡ | | 55·5 | 37·1 | |
| 9·7‡ | 34 | 2·5 | 43·1 | |
| 10·0‡ | | 8·5 | 53·9 | |
| 10·2 | | 11·0 | 14·6 | |
| 10·2 | | 21·5 | 10·7 | |
| 9·2 | | 29·0 | 0·2 | 9·5 |
| 10·0 | | 47·5 | 15·7 | |

**2881—2940.**

| mag. | 12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·2 | 34 | 50·0 | 31·2 | |
| 10·0‡ | | 51·5 | 41·8 | |
| 10·2 | | 51·5 | 18·0 | |
| 9·8 | | 55·0 | 16·9 | |
| 9·4 | | 55·0 | 17·0 | |
| 10·2 | | 55·5 | 20·6 | |
| 9·2 | | 57·0 | 19·7 | G |
| 9·0 | 35 | 2·0 | 18·4 | 9·5 G |
| 9·5 | | 5·0 | 20·2 | |
| 9·4 | | 5·0 | 19·7 | |
| 10·0 | | 5·0 | 13·2 | |
| 9·0 | | 5·5 | 17·2 | 9·5 G |
| 9·8 | | 6·5 | 18·4 | |
| 9·6‡ | | 9·0 | 50·5 | |
| 9·7 | | 19·0 | 4·2 | |
| 10·0 | | 24·5 | 22·7 | |
| 10·2 | | 28·5 | 7·0 | |
| 6·6 | | 31·0 | 22·3 | 6·0 GS |
| 9·0 | | 32·5 | 30·0 | 9·0 |
| 10·2 | | 39·5 | 34·7 | |
| 10·2 | | 48·5 | 31·0 | |
| 9·3 | | 49·5 | 13·6 | 9·5 |
| 9·4 | | 52·0 | 27·6 | |
| 10·0‡ | 36 | 24·0 | 44·7 | |
| 10·1 | | 26·0 | 18·8 | |
| 9·7 | | 39·0 | 16·9 | |
| 9·4 | | 48·5 | 17·1 | |
| 10·1 | | 58·5 | 25·2 | |
| 10·0 | 37 | 5·5 | 32·0 | |
| 10·1 | | 10·0 | 22·9 | |
| 9·7‡ | | 12·0 | 50·7 | |
| 10·0 | | 18·5 | 7·8 | |
| 10·0 | | 19·0 | 12·6 | |
| 8·8 | | 30·5 | 17·1 | 9·5 |
| 10·0‡ | 38 | 12·0 | 59·0 | |
| 9·6‡ | | 20·5 | 50·0 | 10·0 |
| 9·2 | | 32·0 | 0·6 | |
| 9·7‡ | | 42·5 | 55·5 | 9·0 |
| 9·0 | 39 | 12·0 | 27·6 | 9·5 |
| 10·1 | | 29·5 | 6·7 | |
| 8·8 | | 42·5 | 24·0 | 9·5 G |
| 9·2‡ | | 52·0 | 51·9 | 9·5 |
| 9·5‡ | | 59·7 | 59·1 | |
| 9·5‡ | 40 | 6·0 | 37·9 | |
| 9·6 | | 7·7 | 27·2 | |
| 9·6 | | 9·0 | 16·7 | |
| 9·2 | | 21·5 | 24·7 | |
| 9·2 | | 24·5 | 18·8 | 9·5 |
| 9·2‡ | | 28·0 | 46·0 | 10·0 |
| 10·2 | | 29·0 | 10·9 | |
| 9·5‡ | | 40·5 | 59·0 | |
| 8·4 | | 44·5 | 21·2 | 9·0 G |
| 9·9‡ | | 51·5 | 48·3 | |
| 10·2 | 41 | 15·2 | 31·9 | |
| 10·2 | | 17·5 | 9·0 | |
| 9·6‡ | | 30·0 | 53·9 | |
| 9·6‡ | | 39·0 | 51·0 | |
| 9·6‡ | | 49·5 | 52·8 | |
| 10·0 | | 50·5 | 28·8 | |
| 10·2 | 42 | 42·0 | 4·2 | |

**2941—3000.**

| mag. | 12h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 42·5 | 25·6 | |
| 9·2 | 43 | 24·5 | 18·6 | 9·5 |
| 9·4‡ | | 42·0 | 48·9 | |
| 9·2 | 44 | 27·0 | 27·7 | |
| 9·2‡ | | 33·5 | 45·5 | 8·5 |
| 9·7‡ | | 42·0 | 38·1 | |
| 9·2 | 45 | 3·0 | 22·2 | |
| 9·0‡ | | 20·5 | 39·3 | 9·5 |
| 9·0 | | 34·0 | 0·2 | 8·8 G |
| 10·2 | | 38·0 | 1·9 | |
| 9·9‡ | | 49·0 | 53·3 | |
| 10·0‡ | 46 | 19·5 | 45·4 | |
| 10·0‡ | | 32·0 | 51·0 | |
| 8·8 | | 32·2 | 29·0 | 9·0 |
| 9·5 | | 34·5 | 16·0 | |
| 9·7 | | 48·0 | 13·0 | |
| 10·0‡ | | 48·5 | 48·2 | |
| 9·8 | | 57·0 | 5·6 | |
| 9·8 | 47 | 11·5 | 7·4 | |
| 8·2‡ | | 27·0 | 57·8 | 8·5 |
| 9·2 | | 51·5 | 27·2 | 9·5 |
| 8·6‡ | 48 | 6·0 | 56·4 | 9·0 |
| 9·6 | | 13·0 | 26·0 | |
| 9·9 | 49 | 11·0 | 27·1 | |
| 8·2‡ | | 30·5 | 47·2 | 8·2 G |
| 9·8‡ | | 49·5 | 58·3 | |
| 9·8 | | 53·0 | 11·2 | |
| 10·2 | | 54·5 | 14·1 | |
| 8·7‡ | 50 | 5·7 | 58·9 | 9·0 |
| 10·0‡ | | 8·5 | 45·1 | |
| 9·4‡ | | 14·5 | 38·2 | |
| 9·8 | | 23·0 | 22·4 | |
| 9·8 | | 34·5 | 9·4 | G |
| 9·2‡ | | 54·5 | 49·3 | |
| 9·6‡ | 51 | 11·0 | 49·9 | |
| 9·7 | | 11·5 | 25·0 | |
| 8·0‡ | | 18·5 | 57·9 | 8·5 |
| 9·0 | | 27·5 | 15·1 | 9·5 |
| 9·0‡ | | 32·5 | 37·7 | |
| 10·0‡ | 52 | 51·0 | 36·3 | |
| 8·9 | 53 | 25·0 | 20·8 | 8·5 GS |
| 8·6 | | 39·7 | 15·1 | 9·0 GS |
| 10·0 | 54 | 24·5 | 22·8 | |
| 9·2‡ | 55 | 10·0 | 47·7 | |
| 10·1 | | 12·3 | 33·2 | |
| 9·8 | | 14·7 | 30·3 | 9·5 |
| 9·6 | | 47·0 | 17·9 | |
| 10·1 | | 55·5 | 20·5 | |
| 9·8 | 56 | 24·0 | 8·8 | |
| 9·5‡ | | 32·5 | 38·9 | |
| 10·1 | | 36·0 | 29·3 | |
| 9·8 | | 44·5 | 25·8 | |
| 8·9‡ | | 59·0 | 49·2 | 9·5 G |
| 9·5‡ | 57 | 18·0 | 57·8 | |
| 9·7 | | 34·5 | 9·9 | Gk |
| 9·4 | | 42·3 | 26·4 | |
| 9·2‡ | | 49·5 | 42·0 | 10·0 G |
| 9·8 | | 56·0 | 14·9 | k |
| 10·0‡ | | 58·5 | 41·5 | |
| 9·8 | 58 | 0·0 | 28·1 | |



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### 3001—3060.

| mag. | 12h.–13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8 | 58 | 15·0 | 17·5 | |
| 9·9† | | 34·5 | 44·3 | |
| 9·7† | | 39·5 | 59·9 | |
| 9·6 | | 41·0 | 16·9 | G |
| 9·9 | | 59·0 | 14·8 | |
| 9·4 | 59 | 6·5 | 9·0 | |
| 9·2 | | 13·0 | 19·2 | 9·5 |
| 9·5† | | 13·3 | 51·5 | |
| 9·9† | | 13·5 | 57·2 | |
| 9·3† | | 14·5 | 56·2 | |
| 9·8† | | 35·0 | 48·1 | |
| 9·4† | | 43·3 | 50·7 | |
| 10·1 | | 49·0 | 27·6 | |
| 9·9† | | 53·5 | 49·5 | |
| 10·1 | 0 | 4·5 | 32·9 | |
| 9·6 | | 20·0 | 3·0 | |
| 9·6† | | 27·5 | 35·8 | |
| 9·6† | | 29·3 | 57·8 | |
| 9·9† | | 33·0 | 57·1 | |
| 9·3† | | 33·0 | 50·0 | |
| 9·9† | | 42·0 | 57·1 | |
| 9·0 | | 46·0 | 32·6 | 9·5 |
| 9·2† | | 57·2 | 40·1 | |
| 9·8 | | 58·0 | 5·3 | |
| 9·9† | 1 | 13·0 | 43·1 | |
| 10·1 | | 22·0 | 25·5 | |
| 9·6 | | 22·5 | 19·0 | |
| 8·8 | | 39·5 | 12·2 | 9·5 G |
| 9·2 | | 54·5 | 19·0 | |
| 10·1 | 2 | 7·0 | 19·0 | |
| 9·0 | | 18·5 | 19·9 | 9·5 G |
| 10·1 | | 20·0 | 9·7 | |
| 9·2 | | 25·5 | 1·4 | 9·0 |
| 9·7 | | 44·0 | 13·2 | |
| 9·0 | | 45·0 | 21·5 | |
| 9·9† | | 47·0 | 54·2 | |
| 9·3† | | 47·0 | 54·8 | |
| 9·8† | | 58·5 | 41·6 | |
| 9·9† | 3 | 24·0 | 40·4 | |
| 9·8 | | 32·5 | 33·3 | |
| 9·9 | | 33·5 | 17·9 | G |
| 9·0 | | 40·0 | 11·6 | 9·5 |
| 10·1 | | 42·0 | 4·6 | |
| 10·1 | | 43·0 | 9·3 | |
| 9·7† | | 53·5 | 54·7 | |
| 7·3† | | 53·5 | 38·2 | 7·5 GSgcr |
| 9·9† | | 57·8 | 57·2 | |
| 8·6 | 4 | 1·0 | 9·0 | 9·0 G |
| 9·4 | | 1·0 | 34·4 | |
| 9·4 | | 6·5 | 5·1 | |
| 10·1 | | 16·5 | 31·1 | |
| 9·8 | | 17·5 | 31·6 | |
| 9·0 | | 18·5 | 3·0 | 9·0 |
| 10·1 | | 19·0 | 19·1 | |
| 9·8 | | 33·0 | 16·8 | |
| 9·2 | | 36·5 | 24·9 | |
| 10·1 | | 40·0 | 17·3 | |
| 10·0 | | 42·0 | 3·2 | |
| 10·1 | | 51·0 | 22·8 | |
| 9·6† | | 54·5 | 57·4 | |

### 3061—3120.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·1 | 4 | 56·0 | 29·9 | |
| 10·1 | | 58·7 | 16·0 | |
| 9·9† | 5 | 3·0 | 49·8 | |
| 8·5† | | 5·5 | 56·6 | 9·0 |
| 9·5† | | 8·5 | 47·1 | |
| 9·0† | | 15·0 | 38·1 | 9·5 |
| 9·0† | | 18·5 | 43·2 | 9·5 |
| 10·0 | | 20·5 | 32·0 | |
| 9·4† | | 25·0 | 54·6 | |
| 10·1 | | 25·5 | 13·7 | |
| 9·6† | | 26·5 | 52·6 | |
| 10·1 | | 31·0 | 16·9 | |
| 8·4 | | 34·0 | 26·2 | 9·0 |
| 9·8† | | 36·0 | 40·4 | |
| 9·4† | | 38·0 | 49·2 | |
| 9·9† | | 40·5 | 41·6 | |
| 9·8† | | 42·0 | 47·9 | |
| 9·6 | | 43·0 | 27·9 | |
| 8·0† | | 43·0 | 55·4 | 8·5 G |
| 9·0 | | 43·5 | 7·8 | 9·5 G |
| 8·8 | | 45·0 | 9·1 | G |
| 10·1 | | 48·0 | 27·9 | |
| 9·0† | | 49·5 | 55·3 | 9·5 |
| 9·5† | | 49·5 | 41·6 | |
| 10·0 | | 52·0 | 3·0 | |
| 9·6 | 6 | 0·0 | 13·1 | |
| 9·9† | | 1·0 | 44·9 | |
| 9·3† | | 4·0 | 51·4 | |
| 9·6† | | 8·0 | 52·4 | |
| 7·8† | | 8·5 | 42·6 | 8·5 G |
| 9·7† | | 16·5 | 38·2 | |
| 9·7 | | 19·5 | 28·9 | |
| 9·7 | | 27·5 | 23·4 | |
| 9·6† | | 32·0 | 53·8 | |
| 9·3 | | 36·0 | 30·5 | |
| 7·3† | | 40·0 | 55·2 | 8·0 GS |
| 9·9† | | 45·5 | 43·1 | |
| 9·7† | | 58·0 | 41·1 | |
| 9·7 | 7 | 4·5 | 20·0 | |
| 9·4† | | 4·5 | 50·7 | |
| 9·9† | | 7·5 | 52·7 | |
| 9·2 | | 11·0 | 26·9 | 9·5 |
| 9·2 | | 11·5 | 17·3 | |
| 10·1 | | 21·5 | 4·2 | |
| 9·7† | | 22·5 | 56·5 | |
| 9·9† | | 23·0 | 45·8 | |
| 10·1 | | 26·0 | 8·1 | |
| 9·8 | | 29·5 | 26·2 | |
| 9·7† | | 43·0 | 44·8 | |
| 10·0 | 8 | 3·5 | 9·1 | |
| 9·3 | | 10·0 | 3·4 | |
| 10·1 | | 19·0 | 21·8 | |
| 9·6† | | 22·0 | 50·8 | 9·5 |
| 9·8 | | 42·0 | 23·3 | 9·5 |
| 9·0 | | 44·0 | 23·8 | 9·5 |
| 9·9† | | 47·0 | 48·2 | |
| 9·3 | | 47·5 | 20·9 | |
| 9·8† | | 48·5 | 45·2 | |
| 9·6 | | 51·0 | 28·2 | |
| 9·9† | | 53·0 | 50·1 | |

### 3121—3180.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6† | 8 | 53·0 | 41·9 | |
| 9·7 | | 53·5 | 22·9 | |
| 9·0 | | 58·0 | 6·0 | 9·5 G |
| 9·8 | 9 | 5·5 | 16·4 | |
| 9·6 | | 10·0 | 20·9 | |
| 10·1 | | 11·5 | 15·2 | |
| 9·6† | | 18·5 | 37·8 | |
| 10·0 | | 22·0 | 30·5 | |
| 9·9† | | 23·0 | 48·5 | |
| 9·9† | | 25·5 | 44·5 | |
| 9·9† | | 30·0 | 41·5 | |
| 9·8 | | 33·0 | 17·3 | |
| 9·6 | | 43·0 | 15·4 | |
| 10·0 | | 46·0 | 26·1 | |
| 9·4 | 10 | 6·0 | 8·2 | 9·5 |
| 9·8† | | 10·5 | 48·4 | |
| 8·0† | | 11·5 | 47·3 | 7·5 GS |
| 9·9† | | 14·5 | 41·5 | |
| 9·9† | | 17·0 | 53·1 | |
| 8·8 | | 20·0 | 35·0 | |
| 9·6 | | 24·5 | 0·2 | |
| 9·8 | | 24·5 | 5·0 | |
| 9·6† | | 29·5 | 54·8 | |
| 10·0 | | 32·0 | 9·9 | |
| 9·7† | | 37·5 | 49·1 | |
| 9·9 | | 39·0 | 28·0 | |
| 9·2† | | 41·0 | 45·7 | |
| 9·8† | | 47·0 | 54·6 | |
| 10·1 | | 48·0 | 4·8 | |
| 10·1 | | 49·5 | 18·9 | |
| 10·1 | | 58·0 | 18·7 | |
| 10·0 | | 59·0 | 25·9 | |
| 10·1 | 11 | 13·5 | 17·1 | |
| 10·1 | | 18·5 | 16·0 | |
| 9·6† | | 21·5 | 53·9 | |
| 9·4† | | 28·0 | 53·9 | |
| 9·9 | | 28·0 | 7·9 | |
| 9·6 | | 31·0 | 8·2 | |
| 8·6 | | 34·0 | 22·6 | 9·5 |
| 9·5† | | 41·0 | 42·0 | |
| 9·4 | | 42·0 | 21·8 | |
| 10·1 | | 43·0 | 4·0 | |
| 9·6 | | 43·5 | 16·1 | |
| 10·1 | | 44·0 | 15·4 | |
| 9·4 | | 46·7 | 32·0 | |
| 9·6 | | 48·5 | 6·9 | |
| 10·1 | | 51·5 | 19·4 | |
| 9·6 | | 56·0 | 29·4 | |
| 9·8 | | 58·0 | 32·7 | |
| 9·8† | 12 | 2·5 | 42·1 | |
| 9·2† | | 10·5 | 57·2 | 9·5 |
| 9·8 | | 13·5 | 33·8 | |
| 10·1 | | 15·0 | 5·3 | |
| 9·0† | | 23·0 | 45·2 | 9·5 |
| 10·1 | | 28·0 | 31·4 | |
| 9·6† | | 29·0 | 45·2 | |
| 9·7† | | 30·0 | 51·6 | |
| 9·3† | | 41·0 | 42·0 | |
| 9·3† | | 45·0 | 45·0 | |
| 9·8† | | 50·0 | 53·0 | |

### 3181—3240.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 12 | 54·0 | 19·8 | 9·5 |
| 9·0 | 13 | 1·5 | 15·0 | 9·0 |
| 10·1 | | 3·0 | 34·6 | |
| 10·1 | | 11·0 | 20·3 | |
| 9·6† | | 13·5 | 49·2 | |
| 9·2 | | 14·5 | 34·0 | 9·0 |
| 10·1 | | 18·5 | 34·4 | |
| 9·5 | | 29·0 | 16·6 | |
| 9·2 | | 29·0 | 34·6 | 9·5 |
| 9·6 | | 33·5 | 23·0 | |
| 9·6 | | 38·0 | 20·0 | |
| 9·6 | | 39·0 | 33·3 | |
| 9·9† | | 40·5 | 57·3 | |
| 9·7† | | 50·0 | 56·4 | |
| 10·0 | | 56·0 | 33·2 | |
| 9·7† | | 57·5 | 51·2 | |
| 10·0 | 14 | 3·0 | 12·9 | |
| 10·0 | | 7·0 | 31·0 | |
| 9·0 | | 10·0 | 16·2 | G |
| 9·7† | | 16·0 | 41·2 | |
| 10·1 | | 17·5 | 31·0 | |
| 9·8 | | 20·5 | 17·0 | |
| 10·1 | | 21·5 | 19·7 | |
| 9·8 | | 29·0 | 1·9 | |
| 10·1 | | 36·5 | 24·3 | |
| 9·2 | | 42·5 | 13·9 | |
| 9·5 | | 47·5 | 12·7 | |
| 9·4 | | 48·5 | 31·9 | |
| 8·6 | | 50·5 | 24·3 | 9·5 |
| 8·9† | | 53·3 | 57·4 | 9·0 |
| 9·7† | 15 | 0·5 | 49·8 | |
| 10·0 | | 0·5 | 30·0 | |
| 10·1 | | 0·5 | 33·8 | |
| 8·6 | | 1·5 | 13·0 | 8·5 G |
| 9·3 | | 3·0 | 4·0 | |
| 9·9 | | 5·5 | 25·8 | |
| 10·1 | | 9·0 | 29·2 | |
| 10·0 | | 16·0 | 16·6 | |
| 9·7† | | 22·0 | 49·0 | |
| 9·9 | | 28·0 | 10·9 | |
| 9·8 | | 31·0 | 25·9 | |
| 10·0 | | 31·5 | 27·8 | |
| 10·1 | | 34·5 | 15·8 | |
| 9·7 | | 36·7 | 32·9 | |
| 9·6† | | 44·0 | 43·2 | |
| 9·9† | | 46·0 | 43·9 | |
| 9·8 | | 56·0 | 10·1 | |
| 9·9† | 16 | 1·0 | 43·9 | |
| 9·8† | | 2·5 | 45·1 | |
| 9·8 | | 10·5 | 19·9 | 9·5 |
| 9·8 | | 13·0 | 22·6 | |
| 10·0 | | 18·5 | 34·3 | |
| 9·7 | | 19·5 | 28·9 | |
| 10·1 | | 21·5 | 8·9 | |
| 9·2† | | 22·0 | 37·9 | |
| 9·6† | | 23·5 | 50·2 | |
| 9·8 | | 35·5 | 32·4 | |
| 9·7 | | 39·0 | 29·3 | G |
| 10·1 | | 47·0 | 27·5 | |
| 8·5 | | 47·5 | 31·2 | 9·0 G |

25 prec.

| h m | α + s | δ − ′ |
|---|---|---|
| 12 50 | 91 | 8·2 |
| 13 0 | 93 | 8·1 |
| 10 | 96 | 8·0 |
| 20 | 99 | 7·9 |



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25 prec.

| h. | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 10 | 96 | 8.0 |
| | 20 | 99 | 7.9 |
| | 30 | 101 | 7.7 |
| | 40 | 104 | 7.6 |

**3241—3300.**

| mag. | 13h m | s | −62° ′ | |
|---|---|---|---|---|
| 9.4 | 16 | 52.0 | 21.2 | |
| 10.0 | 17 | 8.5 | 26.9 | |
| 9.6† | | 12.0 | 46.1 | 9.2 |
| 9.4 | | 14.0 | 10.1 | |
| 9.3 | | 18.5 | 34.9 | |
| 9.8† | | 22.0 | 37.2 | |
| 9.4 | | 32.0 | 24.9 | |
| 9.5† | | 33.0 | 36.4 | |
| 9.9† | | 34.0 | 38.0 | |
| 9.8 | | 34.5 | 19.0 | |
| 9.8 | | 37.5 | 14.9 | |
| 9.6† | | 52.5 | 55.7 | |
| 10.1 | | 57.5 | 17.0 | |
| 9.7† | 18 | 0.0 | 56.1 | |
| 9.5† | | 5.5 | 45.2 | 9.5 |
| 9.8 | | 6.5 | 31.2 | |
| 10.1 | | 8.5 | 10.2 | |
| 9.9 | | 14.0 | 32.2 | |
| 10.0 | | 14.5 | 21.3 | |
| 9.8 | | 35.5 | 0.9 | |
| 10.1 | | 36.0 | 22.5 | |
| 9.9† | | 40.5 | 49.5 | |
| 9.7 | | 40.5 | 34.5 | |
| 10.1 | | 41.5 | 25.9 | |
| 8.6 | | 49.0 | 0.6 | 8.8 G |
| 9.3† | | 50.5 | 59.2 | |
| 9.6 | | 59.5 | 21.7 | |
| 9.7 | 19 | 1.0 | 20.8 | |
| 9.8† | | 3.5 | 54.1 | |
| 8.1 | | 7.5 | 0.0 | 8.2 GSt |
| 8.4† | | 11.5 | 53.2 | 9.0 |
| 10.1 | | 18.0 | 33.2 | |
| 10.1 | | 36.5 | 22.8 | |
| 8.8 | | 39.5 | 34.4 | 9.0 |
| 8.8† | 20 | 1.0 | 56.1 | |
| 9.7† | | 2.0 | 39.3 | |
| 9.8 | | 8.5 | 13.2 | |
| 9.9† | | 13.5 | 40.8 | |
| 9.2 | | 13.8 | 33.9 | 9.5 |
| 9.6† | | 15.0 | 56.1 | |
| 9.9 | | 18.0 | 11.0 | |
| 9.6 | | 22.0 | 10.9 | |
| 9.8 | | 28.5 | 22.5 | |
| 9.7† | | 33.0 | 40.0 | |
| 9.6 | | 34.0 | 12.3 | |
| 9.2† | | 42.0 | 45.7 | |
| 9.8 | | 44.5 | 33.2 | |
| 9.2 | | 46.5 | 28.7 | |
| 9.6 | | 52.0 | 1.8 | |
| 9.9† | | 57.0 | 51.3 | |
| 9.4 | | 59.0 | 33.8 | |
| 9.4† | 21 | 13.5 | 44.7 | 10.0 |
| 9.9† | | 31.0 | 47.1 | |
| 9.7† | | 35.3 | 57.0 | |
| 9.9† | | 35.5 | 59.2 | |
| 9.2 | | 37.0 | 6.8 | 9.5 G |
| 9.5† | | 47.5 | 43.2 | |
| 9.8 | | 52.5 | 19.8 | |
| 10.1 | 22 | 1.0 | 23.0 | |
| 9.3 | | 12.5 | 20.9 | |

**3301—3360.**

| mag. | 13h m | s | −62° ′ | |
|---|---|---|---|---|
| 9.4 | 22 | 12.5 | 29.1 | |
| 9.0† | | 13.0 | 45.0 | 9.2 |
| 10.1 | | 14.0 | 12.1 | |
| 9.6 | | 15.5 | 10.7 | |
| 9.3 | | 16.0 | 21.0 | |
| 9.8† | | 20.5 | 39.1 | |
| 10.1 | | 22.5 | 10.3 | |
| 9.2† | | 23.0 | 58.5 | 8.5 |
| 9.5† | | 26.5 | 41.2 | |
| 9.7 | | 43.0 | 21.0 | |
| 9.9† | | 47.5 | 26.5 | |
| 9.2 | | 51.5 | 24.4 | |
| 9.8† | | 53.0 | 42.1 | |
| 10.0 | | 54.0 | 1.8 | |
| 10.1 | | 59.0 | 1.9 | |
| 9.4 | 23 | 1.0 | 23.7 | |
| 9.8 | | 1.0 | 12.3 | |
| 9.7† | | 3.5 | 45.3 | |
| 9.7† | | 4.0 | 42.3 | 9.5 |
| 9.8 | | 4.5 | 20.2 | |
| 9.6 | | 8.5 | 20.3 | |
| 9.4† | | 18.5 | 51.0 | |
| 9.8 | | 20.5 | 29.7 | |
| 8.8† | | 22.5 | 43.6 | 9.0 |
| 9.8 | | 34.0 | 9.9 | |
| 7.7 | | 38.5 | 23.6 | *8.0* GS |
| 10.1 | | 40.5 | 7.9 | |
| 9.7† | | 43.0 | 44.4 | |
| 8.8 | | 46.0 | 8.2 | 8.0 |
| 9.5 | | 46.5 | 9.0 | |
| 9.3† | | 50.5 | 57.6 | 9.5 |
| 10.0 | | 50.5 | 8.6 | |
| 9.8 | | 50.5 | 35.0 | |
| 10.1 | | 51.5 | 22.9 | |
| 9.0 | | 52.5 | 9.0 | 8.8 |
| 9.5† | | 58.0 | 59.2 | |
| 9.9† | 24 | 3.5 | 40.2 | |
| 9.9† | | 5.0 | 43.7 | |
| 9.6† | | 10.5 | 41.4 | |
| 9.6 | | 13.0 | 0.8 | |
| 10.1 | | 15.2 | 32.0 | |
| 9.2 | | 21.0 | 13.0 | 9.5 |
| 9.9† | | 21.5 | 49.3 | |
| 10.1 | | 23.0 | 34.6 | |
| 10.1 | | 24.0 | 34.8 | |
| 9.1 | | 30.0 | 13.9 | 9.0 |
| 9.8 | | 35.2 | 34.7 | |
| 9.4† | | 35.3 | 58.3 | |
| 9.6 | | 38.0 | 32.0 | |
| 9.0 | | 39.0 | 16.0 | 9.5 |
| 10.1 | | 43.5 | 26.9 | |
| 9.9† | 25 | 3.0 | 44.2 | |
| 9.0 | | 3.0 | 35.3 | |
| 8.9 | | 6.0 | 31.5 | |
| 9.1† | | 8.0 | 51.0 | |
| 9.9† | | 8.5 | 51.6 | |
| 9.6 | | 12.5 | 6.6 | |
| 10.1 | | 14.0 | 16.2 | |
| 9.9† | | 19.0 | 45.7 | |
| 9.8 | | 20.0 | 20.7 | |

**3361—3420.**

| mag. | 13h m | s | −62° ′ | |
|---|---|---|---|---|
| 10.0 | 25 | 33.5 | 17.2 | |
| 9.3 | | 36.5 | 31.1 | |
| 9.9† | | 50.5 | 45.9 | |
| 10.1 | | 52.5 | 4.8 | |
| 9.7† | | 53.5 | 55.3 | |
| 10.1 | | 53.5 | 2.3 | |
| 9.8 | | 55.5 | 28.0 | |
| 9.5 | | 55.5 | 24.6 | 9.5 |
| 9.5† | 26 | 0.0 | 39.8 | |
| 9.1† | | 4.0 | 37.6 | 9.0 G |
| 9.7 | | 9.0 | 25.0 | |
| 9.0 | | 9.5 | 32.5 | G |
| 9.5† | | 12.0 | 49.1 | |
| 7.6† | | 12.5 | 41.5 | 8.5 |
| 10.0 | | 26.0 | 11.2 | |
| 8.9† | | 30.5 | 59.3 | |
| 9.9† | | 33.5 | 54.2 | |
| 9.8 | | 41.0 | 22.6 | |
| 9.7† | | 42.0 | 45.5 | |
| 9.4† | 27 | 3.5 | 45.9 | |
| 9.2† | | 6.5 | 37.8 | 9.5 |
| 9.7† | | 10.0 | 45.1 | |
| 9.8 | | 11.5 | 7.8 | |
| 9.8 | | 16.2 | 34.9 | |
| 10.1 | | 24.5 | 19.9 | |
| 9.9 | | 25.5 | 12.7 | |
| 10.0 | | 28.0 | 18.4 | |
| 9.8 | | 29.5 | 6.4 | |
| 10.1 | | 32.5 | 17.2 | |
| 10.0 | | 33.0 | 7.9 | |
| 9.3 | | 38.5 | 11.8 | |
| 9.7† | | 44.0 | 42.6 | |
| 9.2 | | 44.5 | 22.8 | 9.0 |
| 8.4 | | 49.5 | 30.2 | 8.5 |
| 9.9† | | 57.0 | 45.3 | |
| 10.1 | | 59.5 | 10.9 | |
| 9.1 | 28 | 1.0 | 8.2 | |
| 9.1† | | 12.0 | 58.7 | 9.5 |
| 10.1 | | 13.0 | 27.8 | |
| 8.6 | | 17.7 | 33.8 | 9.0 |
| 8.8 | | 21.0 | 27.2 | 9.5 |
| 9.9† | | 29.0 | 41.5 | |
| 9.5 | | 30.0 | 13.4 | |
| 10.0 | | 37.5 | 18.2 | |
| 9.8† | | 48.5 | 54.9 | |
| 9.8 | | 51.5 | 14.1 | |
| 9.7† | 29 | 1.0 | 38.2 | |
| 9.1† | | 8.0 | 50.4 | 8.5 G |
| 9.8 | | 11.0 | 1.2 | |
| 10.0 | | 12.0 | 27.0 | |
| 9.8 | | 22.0 | 3.9 | |
| 9.2† | | 32.0 | 55.4 | |
| 9.4 | | 35.5 | 15.9 | |
| 10.1 | | 39.0 | 27.9 | |
| 9.3 | | 40.5 | 6.8 | 9.5 |
| 9.6 | | 46.2 | 1.4 | 9.5 |
| 9.4 | | 56.5 | 24.0 | |
| 9.5† | | 57.0 | 55.6 | |
| 9.8 | 30 | 1.0 | 8.0 | |
| 9.4 | | 8.5 | 4.6 | |

**3421—3480.**

| mag. | 13h m | s | −62° ′ | |
|---|---|---|---|---|
| 10.0 | 30 | 11.5 | 20.9 | |
| 9.2 | | 21.2 | 31.9 | |
| 9.4 | | 26.5 | 10.8 | |
| 10.1 | | 27.5 | 2.0 | |
| 9.5 | | 30.5 | 29.6 | |
| 9.9† | | 37.5 | 46.4 | |
| 9.2† | | 42.0 | 48.2 | 9.5 |
| 8.8† | 31 | 3.5 | 38.4 | 9.5 |
| 10.1 | | 11.5 | 20.6 | |
| 9.6 | | 12.0 | 34.7 | |
| 9.5 | | 14.5 | 8.3 | |
| 10.1 | | 18.5 | 19.2 | |
| 9.9 | | 22.0 | 4.9 | |
| 10.0 | | 29.5 | 1.0 | |
| 10.1 | | 35.5 | 5.2 | |
| 9.9† | | 37.3 | 58.1 | |
| 9.9 | | 41.0 | 23.4 | |
| 9.4† | | 41.5 | 51.0 | 9.5 |
| 9.6 | | 46.5 | 0.0 | |
| 10.0 | | 47.0 | 35.0 | |
| 10.1 | | 47.5 | 1.0 | |
| 9.4 | | 49.0 | 11.0 | |
| 9.5 | | 50.0 | 30.9 | 9.5 |
| 10.0 | | 52.5 | 28.6 | |
| 10.1 | | 56.5 | 15.1 | |
| 9.4 | 32 | 1.0 | 8.0 | 8.8 |
| 9.7† | | 5.0 | 55.3 | |
| 9.2 | | 7.0 | 14.0 | |
| 9.8† | | 8.0 | 47.4 | |
| 9.6† | | 9.0 | 39.6 | |
| 10.0 | | 11.0 | 16.6 | |
| 8.6 | | 16.5 | 14.5 | 9.5 G |
| 9.6 | | 19.5 | 13.0 | |
| 9.7 | | 22.0 | 31.2 | |
| 9.6† | | 24.5 | 53.8 | |
| 9.8 | | 26.0 | 18.6 | |
| 9.4 | | 29.0 | 8.4 | 8.5 |
| 9.8 | | 31.0 | 1.8 | |
| 10.1 | | 43.5 | 23.4 | |
| 9.4† | | 46.0 | 49.2 | |
| 10.1 | | 49.5 | 25.0 | |
| 10.1 | | 54.0 | 20.0 | |
| 8.3† | 33 | 7.0 | 35.8 | 8.5 |
| 8.9† | | 8.5 | 43.5 | 9.5 |
| 9.6 | | 14.0 | 28.0 | |
| 9.9† | | 18.0 | 40.5 | |
| 9.7† | | 26.5 | 48.2 | |
| 9.9† | | 30.5 | 48.2 | |
| 9.8 | | 33.0 | 17.7 | |
| 10.0 | | 41.0 | 17.2 | |
| 8.8 | | 41.5 | 11.1 | |
| 9.6 | | 42.0 | 33.2 | |
| 9.4† | | 42.5 | 58.1 | |
| 9.6 | | 44.5 | 22.1 | |
| 9.1† | | 45.0 | 48.9 | |
| 9.5† | | 51.0 | 43.4 | |
| 10.1 | | 54.0 | 19.6 | |
| 9.1† | 34 | 6.0 | 53.2 | 10.0 |
| 9.7† | | 6.5 | 42.7 | |
| 9.6 | | 6.5 | 2.4 | |



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## 3481—3540.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8.7 | 34 | 9.0 | 15.3 | 9.5 |
| 10.0 | | 16.0 | 31.8 | |
| 10.1 | | 19.5 | 5.4 | |
| 9.5 | | 22.5 | 18.9 | |
| 9.1 | | 28.5 | 28.5 | |
| 9.6 | | 29.0 | 5.1 | |
| 9.7 | | 30.5 | 0.5 | |
| 9.5 | | 32.5 | 20.1 | |
| 9.8 | | 37.0 | 23.9 | |
| 8.8† | | 39.5 | 56.2 | 9.5 |
| 10.1 | | 43.0 | 31.0 | |
| 9.2 | | 43.5 | 8.5 | 9.5 |
| 9.8† | | 47.0 | 36.1 | |
| 9.4 | | 47.5 | 33.6 | |
| 9.9 | | 48.0 | 14.1 | |
| 9.8† | | 50.0 | 47.1 | |
| 9.2 | | 50.5 | 30.6 | |
| 9.6† | | 54.5 | 45.3 | |
| 9.2† | | 59.5 | 52.9 | |
| 9.2 | | 59.5 | 25.9 | |
| 10.0 | 35 | 1.0 | 7.5 | |
| 9.8† | | 2.0 | 46.4 | |
| 9.4 | | 5.0 | 27.5 | |
| 10.1 | | 7.5 | 26.1 | |
| 9.6 | | 8.0 | 20.9 | |
| 9.5† | | 12.0 | 41.6 | |
| 9.6 | | 17.5 | 5.0 | |
| 8.7 | | 21.5 | 19.0 | 9.0 |
| 10.1 | | 21.5 | 17.7 | |
| 10.1 | | 21.5 | 3.1 | |
| 9.6† | | 24.5 | 41.9 | |
| 10.0 | | 24.5 | 0.8 | |
| 9.3† | | 25.0 | 58.1 | |
| 10.1 | | 31.5 | 33.1 | |
| 10.1 | | 31.5 | 1.3 | |
| 9.5 | | 41.5 | 4.3 | |
| 9.7† | | 42.5 | 41.2 | |
| 9.5 | | 47.5 | 20.4 | |
| 9.0† | | 59.0 | 57.3 | |
| 10.0 | | 59.5 | 12.6 | |
| 9.7 | 36 | 11.0 | 11.3 | |
| 9.7 | | 21.0 | 34.5 | |
| 10.1 | | 26.5 | 22.1 | |
| 9.7 | | 36.0 | 12.2 | |
| 9.6 | | 37.5 | 29.7 | |
| 9.9† | | 41.0 | 48.2 | |
| 10.0 | | 41.5 | 31.9 | |
| 10.0 | | 41.5 | 17.5 | |
| 9.7† | | 42.0 | 56.2 | |
| 9.6 | | 44.0 | 9.3 | |
| 9.1† | | 44.5 | 53.5 | 10.0 |
| 9.9 | | 55.5 | 34.3 | |
| 9.7 | | 57.5 | 13.1 | |
| 9.1 | | 58.5 | 7.1 | 9.5 |
| 10.1 | 37 | 0.0 | 15.4 | |
| 9.9† | | 2.0 | 44.3 | |
| 9.8† | | 2.5 | 54.2 | |
| 10.1 | | 5.5 | 16.1 | |
| 10.1 | | 6.0 | 26.8 | |
| 9.2 | | 9.0 | 18.8 | |

## 3541—3600.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9.2 | 37 | 10.5 | 34.4 | |
| 10.0 | | 17.5 | 6.5 | |
| 10.1 | | 17.6 | 16.0 | |
| 9.7† | | 18.0 | 43.3 | |
| 9.2 | | 18.8 | 17.5 | |
| 9.7 | | 21.5 | 8.1 | |
| 9.6 | | 21.5 | 10.0 | |
| 8.6† | | 23.0 | 51.7 | 9.5 |
| 9.8 | | 24.0 | 13.3 | |
| 10.1 | | 27.0 | 13.9 | |
| 10.1 | | 29.0 | 13.1 | |
| 8.4† | | 32.0 | 56.1 | 9.0 |
| 9.9† | | 33.5 | 48.1 | |
| 9.8 | | 35.1 | 18.6 | |
| 9.7 | | 35.6 | 17.4 | |
| 10.0 | | 38.5 | 12.4 | |
| 9.6 | | 40.1 | 16.9 | |
| 9.5 | | 42.1 | 17.0 | 9.5 S |
| 9.5 | | 43.1 | 18.2 | 8.5 G |
| 10.1 | | 44.1 | 17.3 | |
| 9.7 | | 46.1 | 17.9 | G |
| 10.1 | | 48.5 | 29.1 | |
| 10.0 | | 49.0 | 5.4 | |
| 9.5 | | 49.0 | 26.5 | |
| 9.2 | | 50.1 | 17.8 | 8.5 G |
| 9.2 | | 50.5 | 5.0 | |
| 9.6 | | 51.1 | 15.6 | |
| 9.6 | | 51.6 | 17.5 | 9.0 G |
| 10.0 | | 53.1 | 18.1 | |
| 7.9 | | 53.1 | 16.9 | 7.5 GSg |
| 9.7 | | 54.5 | 28.2 | |
| 10.0 | | 58.0 | 13.5 | |
| 10.0 | 38 | 4.0 | 15.1 | |
| 9.5 | | 7.0 | 6.3 | |
| 9.6 | | 7.8 | 15.2 | |
| 9.4 | | 9.0 | 17.1 | 9.5 |
| 9.1† | | 12.5 | 49.5 | 9.5 |
| 9.6 | | 13.0 | 5.5 | |
| 9.0 | | 17.0 | 28.4 | |
| 9.7 | | 19.0 | 28.2 | |
| 10.1 | | 19.5 | 21.1 | |
| 10.1 | | 21.5 | 2.1 | |
| 9.1† | | 22.0 | 44.1 | |
| 10.1 | | 23.0 | 29.9 | |
| 10.0 | | 28.0 | 16.8 | |
| 8.8 | | 28.5 | 8.3 | |
| 9.6 | | 31.0 | 34.7 | |
| 9.2 | | 32.5 | 32.1 | |
| 9.6 | | 39.0 | 0.2 | |
| 9.2 | | 43.5 | 4.2 | |
| 9.8 | | 50.5 | 23.3 | |
| 10.0 | | 52.0 | 12.1 | |
| 9.1 | | 52.0 | 32.2 | |
| 9.7† | 39 | 7.0 | 41.3 | |
| 10.1 | | 10.0 | 23.1 | |
| 10.1 | | 10.5 | 24.1 | |
| 10.1 | | 12.5 | 9.9 | |
| 9.9‡ | | 15.5 | 48.8 | |
| 9.6‡ | | 16.0 | 44.0 | |
| 8.5‡ | | 19.3 | 49.3 | 9.0 |

## 3601—3660

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10.0‡ | 39 | 26.0 | 44.4 | |
| 10.0‡ | | 31.2 | 56.8 | |
| 9.8 | | 36.0 | 1.1 | |
| 10.0‡ | | 38.0 | 47.5 | |
| 10.0 | | 40.5 | 2.1 | |
| 9.3 | | 41.5 | 33.3 | |
| 9.8 | | 44.5 | 31.1 | 9.0 |
| 10.1 | | 45.0 | 13.0 | |
| 9.9† | | 48.8 | 35.1 | |
| 9.2 | | 50.0 | 10.4 | |
| 9.6 | | 50.5 | 17.0 | |
| 10.1 | | 58.5 | 20.8 | |
| 9.9 | 40 | 3.5 | 0.2 | |
| 9.4‡ | | 5.8 | 36.0 | 9.2 |
| 10.1 | | 6.0 | 14.6 | |
| 9.8 | | 6.0 | 26.7 | |
| 9.8‡ | | 9.8 | 50.0 | |
| 9.2‡ | | 11.3 | 49.7 | |
| 9.5‡ | | 12.5 | 53.9 | |
| 10.0‡ | | 16.5 | 38.1 | |
| 9.4 | | 33.0 | 3.5 | |
| 9.2‡ | | 33.5 | 46.0 | |
| 10.1 | | 37.0 | 0.5 | |
| 9.5‡ | | 39.5 | 58.3 | |
| 10.1 | | 44.5 | 17.7 | |
| 9.2 | | 48.0 | 24.1 | |
| 10.1 | | 49.0 | 17.9 | |
| 8.1 | | 51.5 | 26.3 | 9.0 |
| 9.5‡ | | 55.0 | 47.0 | |
| 10.1 | | 56.5 | 33.0 | |
| 10.1 | | 58.0 | 0.1 | |
| 8.8‡ | | 59.0 | 52.9 | 9.0 |
| 10.1 | 41 | 5.0 | 13.1 | |
| 9.5‡ | | 9.5 | 49.2 | |
| 8.5 | | 13.5 | 17.0 | 9.0 |
| 8.4 | | 16.5 | 26.3 | 9.0 |
| 10.1 | | 17.0 | 31.1 | |
| 10.1 | | 20.0 | 26.5 | |
| 9.8 | | 25.0 | 15.1 | |
| 8.7‡ | | 25.5 | 59.2 | 9.0 |
| 9.8 | | 27.0 | 19.3 | |
| 9.2 | | 34.3 | 1.9 | |
| 9.8 | | 36.0 | 17.9 | |
| 9.2‡ | | 39.0 | 59.6 | 9.5 |
| 9.9‡ | | 40.5 | 45.7 | |
| 10.1 | | 41.5 | 21.5 | |
| 8.7 | | 42.0 | 13.3 | 9.5 |
| 9.3‡ | | 42.5 | 44.9 | 9.0 |
| 9.5 | | 45.5 | 18.9 | |
| 9.2 | | 46.5 | 3.1 | |
| 9.2‡ | | 49.0 | 36.7 | |
| 9.4 | | 50.0 | 25.3 | |
| 8.9 | | 50.0 | 27.1 | |
| 9.8 | | 57.0 | 27.1 | |
| 9.8 | | 58.0 | 6.3 | |
| 8.6‡ | | 59.0 | 46.8 | 9.0 |
| 8.9 | 42 | 2.5 | 16.5 | 9.5 |
| 9.9‡ | | 6.0 | 35.5 | |
| 9.9‡ | | 8.5 | 53.0 | |
| 9.0 | | 9.5 | 31.5 | |

## 3661—3720.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10.1 | 42 | 11.0 | 34.1 | |
| 8.8 | | 11.5 | 24.1 | |
| 10.1 | | 14.5 | 14.5 | |
| 10.1 | | 19.5 | 5.4 | |
| 8.3‡ | | 22.0 | 53.5 | 9.0 |
| 9.8 | | 24.5 | 25.1 | |
| 9.3‡ | | 29.0 | 55.6 | |
| 9.4‡ | | 36.0 | 52.8 | 9.5 |
| 9.8 | | 38.5 | 4.5 | |
| 10.1 | | 40.0 | 25.1 | |
| 10.1 | | 40.0 | 25.2 | |
| 9.7 | | 41.0 | 23.6 | |
| 9.7 | | 49.0 | 17.0 | |
| 10.1 | | 51.5 | 33.1 | |
| 9.4‡ | | 56.5 | 50.9 | |
| 9.3 | | 57.0 | 4.9 | |
| 9.1‡ | | 59.0 | 41.4 | |
| 9.6 | 43 | 3.5 | 5.7 | |
| 9.8‡ | | 8.5 | 43.6 | |
| 9.9‡ | | 10.5 | 49.3 | |
| 10.1 | | 13.0 | 18.4 | |
| 10.0‡ | | 13.5 | 44.2 | |
| 9.2‡ | | 18.5 | 58.0 | |
| 10.1 | | 20.5 | 1.4 | |
| 10.1 | | 28.0 | 11.1 | |
| 9.1 | | 32.0 | 11.8 | |
| 9.6 | | 32.0 | 3.1 | |
| 8.0 | | 32.5 | 9.3 | |
| 9.7‡ | | 38.0 | 51.1 | |
| 8.0‡ | | 40.0 | 44.2 | 8.2 GSr |
| 8.0‡ | | 41.0 | 46.6 | 8.5 GSr |
| 10.1 | | 41.0 | 32.1 | |
| 9.4‡ | | 43.5 | 57.1 | |
| 9.9‡ | | 44.5 | 47.8 | |
| 8.8‡ | | 48.0 | 38.0 | 9.0 |
| 10.1 | | 48.0 | 1.0 | |
| 9.4‡ | | 49.5 | 38.7 | |
| 9.4‡ | | 59.5 | 58.0 | |
| 9.6‡ | | 59.5 | 42.1 | 9.5 |
| 9.2 | 44 | 0.0 | 0.4 | |
| 9.4‡ | | 2.5 | 54.0 | |
| 10.1 | | 4.0 | 11.7 | |
| 8.2 | | 7.0 | 6.1 | 8.5 G |
| 9.8‡ | | 11.0 | 52.7 | |
| 8.8 | | 12.5 | 16.1 | |
| 9.0‡ | | 18.0 | 43.2 | 9.5 |
| 9.8 | | 20.5 | 19.1 | |
| 9.8‡ | | 21.0 | 43.1 | |
| 9.1‡ | | 22.0 | 38.0 | |
| 9.8 | | 22.0 | 19.1 | |
| 10.0‡ | | 22.0 | 57.6 | |
| 9.6‡ | | 28.0 | 55.7 | |
| 9.0 | | 30.0 | 24.0 | |
| 9.4‡ | | 32.0 | 57.9 | |
| 9.1‡ | | 33.5 | 50.6 | |
| 9.6‡ | | 34.5 | 58.9 | |
| 10.0 | | 34.5 | 7.7 | |
| 10.0 | | 41.0 | 14.1 | |
| 10.0 | | 41.0 | 6.1 | |
| 10.1 | | 43.5 | 23.5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 30 | 101 | 7.7 |
| | 40 | 104 | 7.6 |
| | 50 | 106 | 7.4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 13 | 40 | 104 | 7·6 |
| | 50 | 106 | 7·4 |
| 14 | 0 | 109 | 7·2 |
| | 10 | 111 | 7·0 |

## 3721—3780.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·1 | 44 | 43·5 | 28·6 | |
| 10·0‡ | | 45·5 | 53·5 | |
| 9·6 | | 46·0 | 0·1 | |
| 10·0‡ | | 48·0 | 45·1 | |
| 8·8‡ | | 50·0 | 53·1 | 9·0 |
| 10·0‡ | | 52·2 | 53·5 | |
| 10·1 | | 54·0 | 31·8 | |
| 10·1 | | 54·0 | 14·5 | |
| 9·6 | | 55·5 | 13·5 | |
| 9·7 | | 56·3 | 1·1 | |
| 9·2 | 45 | 1·5 | 30·1 | |
| 10·0 | | 32·5 | 7·2 | |
| 9·6‡ | | 33·0 | 41·6 | |
| 10·0 | | 42·0 | 5·6 | |
| 9·7 | | 43·5 | 21·1 | |
| 10·0 | | 48·0 | 15·9 | |
| 9·6‡ | | 48·5 | 49·0 | |
| 8·5 | | 49·5 | 17·1 | 9·5 |
| 9·4 | | 50·0 | 28·5 | |
| 10·0‡ | | 50·5 | 48·8 | |
| 9·2 | 46 | 1·0 | 19·5 | |
| 10·0‡ | | 3·0 | 29·3 | |
| 9·8 | | 3·5 | 6·7 | |
| 9·6 | | 9·0 | 17·2 | |
| 9·8 | | 13·5 | 15·3 | |
| 9·9‡ | | 18·5 | 39·8 | |
| 9·9‡ | | 28·0 | 47·4 | |
| 10·1 | | 31·0 | 27·9 | |
| 9·7‡ | | 38·0 | 47·2 | |
| 9·2 | | 41·0 | 25·1 | |
| 9·2 | | 51·0 | 5·8 | |
| 9·4‡ | 47 | 0·0 | 51·1 | |
| 9·8 | | 8·0 | 4·1 | |
| 9·4‡ | | 18·5 | 59·2 | |
| 9·0‡ | | 19·5 | 57·1 | 8·5 |
| 9·9‡ | | 23·0 | 46·4 | |
| 9·6‡ | | 24·0 | 38·3 | |
| 9·8 | | 39·0 | 27·7 | |
| 9·2 | | 47·0 | 12·3 | |
| 9·8‡ | | 51·0 | 49·0 | |
| 9·9‡ | | 56·5 | 38·5 | |
| 9·7 | | 58·0 | 23·9 | |
| 9·4‡ | 48 | 2·5 | 36·5 | |
| 9·1 | | 16·5 | 33·7 | |
| 10·1 | | 16·5 | 11·1 | |
| 9·2‡ | | 21·0 | 49·2 | |
| 9·1‡ | | 22·5 | 58·8 | |
| 9·3‡ | | 26·0 | 59·8 | |
| 10·1 | | 29·5 | 8·5 | |
| 10·0‡ | | 31·0 | 54·5 | |
| 9·2 | | 32·0 | 4·0 | |
| 10·1 | | 36·5 | 15·6 | |
| 10·0‡ | | 38·0 | 35·9 | |
| 9·7 | | 42·0 | 11·9 | 9·5 |
| 10·0‡ | | 45·0 | 34·6 | |
| 9·2‡ | | 45·5 | 47·5 | |
| 9·2 | | 48·5 | 7·9 | |
| 10·0 | | 51·5 | 25·0 | |
| 8·9 | 49 | 1·0 | 21·1 | |
| 9·6 | | 2·0 | 0·4 | |

## 3781—3840.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0‡ | 49 | 3·5 | 59·8 | |
| 9·7‡ | | 5·0 | 47·1 | |
| 10·0 | | 5·5 | 23·8 | |
| 10·0 | | 11·0 | 34·7 | |
| 10·0‡ | | 19·0 | 43·0 | |
| 10·0‡ | | 19·0 | 46·1 | |
| 9·6‡ | | 32·0 | 51·1 | |
| 9·0‡ | | 36·0 | 37·9 | 9·5 |
| 8·8‡ | | 42·5 | 44·2 | 9·5 G |
| 8·0 | | 45·5 | 6·5 | 8·5 |
| 9·5‡ | | 46·0 | 54·1 | |
| 9·9‡ | | 51·8 | 58·3 | |
| 9·2 | 50 | 2·5 | 18·2 | |
| 10·0 | | 5·0 | 29·6 | |
| 9·2 | | 9·0 | 17·5 | |
| 9·4 | | 11·5 | 34·1 | |
| 9·6 | | 11·5 | 13·1 | |
| 9·8 | | 14·0 | 31·3 | |
| 9·6 | | 14·5 | 33·8 | |
| 9·2 | | 16·5 | 14·6 | |
| 9·6‡ | | 22·5 | 35·9 | |
| 10·0‡ | | 31·0 | 50·1 | |
| 9·1 | | 37·0 | 32·8 | |
| 10·1 | | 42·5 | 1·9 | |
| 9·0 | | 58·5 | 23·1 | |
| 8·9 | 51 | 5·5 | 16·8 | |
| 7·9 | | 7·0 | 10·3 | 8·0 GS |
| 9·8‡ | | 9·0 | 52·8 | |
| 9·1 | | 11·0 | 10·4 | 9·0 S |
| 9·6 | | 11·5 | 28·1 | |
| 10·0‡ | | 12·5 | 51·3 | |
| 9·4‡ | | 12·5 | 39·0 | |
| 10·1 | | 14·5 | 13·7 | |
| 9·6 | | 15·0 | 9·8 | |
| 10·0 | | 15·5 | 13·7 | |
| 9·6‡ | | 21·5 | 52·3 | |
| 10·0 | | 21·5 | 32·7 | |
| 9·6 | | 23·5 | 15·2 | |
| 10·1 | | 26·5 | 24·3 | |
| 10·1 | | 27·5 | 33·2 | |
| 9·2 | | 28·5 | 10·1 | |
| 10·1 | | 35·5 | 31·3 | |
| 10·0‡ | | 42·5 | 40·3 | |
| 8·8 | | 44·5 | 1·6 | 8·5 G |
| 9·9‡ | | 45·5 | 44·1 | |
| 9·5 | | 45·5 | 17·8 | |
| 9·4‡ | | 48·5 | 59·0 | |
| 10·0 | | 49·0 | 18·0 | |
| 9·4 | | 49·0 | 21·8 | |
| 9·2‡ | | 51·5 | 57·8 | |
| 9·2 | | 51·5 | 8·6 | |
| 9·1 | | 56·0 | 4·1 | |
| 9·2 | | 59·0 | 5·6 | |
| 10·1 | | 59·5 | 6·3 | |
| 9·0 | 52 | 4·5 | 6·9 | |
| 10·0‡ | | 6·0 | 44·2 | |
| 10·1 | | 14·5 | 33·6 | |
| 10·1 | | 15·0 | 17·7 | |
| 8·5 | | 28·0 | 20·4 | 8·0 G |
| 9·9‡ | | 32·5 | 44·5 | |

## 3841—3900.

| mag. | 13h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·1 | 52 | 34·5 | 19·4 | |
| 9·3 | | 36·5 | 1·2 | |
| 9·2‡ | | 39·0 | 49·0 | |
| 9·8 | | 39·0 | 12·3 | |
| 9·4 | | 41·0 | 12·1 | |
| 10·0‡ | | 53·0 | 52·2 | |
| 8·9 | | 59·0 | 20·9 | 8·5 |
| 8·6‡ | 53 | 1·5 | 51·0 | 9·0 |
| 10·1 | | 2·0 | 12·1 | |
| 10·0 | | 8·0 | 33·1 | |
| 10·1 | | 11·5 | 11·3 | |
| 10·0 | | 19·5 | 13·1 | |
| 9·8‡ | | 26·0 | 45·6 | |
| 9·1 | | 39·0 | 23·9 | |
| 10·1 | | 41·0 | 17·1 | |
| 8·4‡ | | 42·5 | 57·8 | 8·5 |
| 9·1 | | 47·0 | 33·5 | |
| 8·9 | | 48·0 | 7·1 | |
| 9·6 | | 55·8 | 0·0 | |
| 10·0‡ | | 58·5 | 48·3 | |
| 9·2 | 54 | 0·5 | 11·0 | |
| 9·2 | | 8·0 | 20·6 | |
| 9·3‡ | | 9·0 | 45·6 | |
| 9·8 | | 10·0 | 26·4 | |
| 9·3‡ | | 12·5 | 59·4 | 9·5 |
| 10·1 | | 16·0 | 20·6 | |
| 9·5 | | 19·0 | 23·1 | |
| 10·0‡ | | 28·5 | 41·3 | |
| 10·0‡ | | 29·5 | 42·7 | |
| 9·8 | | 31·0 | 29·7 | |
| 9·0 | | 47·0 | 1·1 | |
| 9·2 | | 48·0 | 15·1 | |
| 10·1 | | 49·0 | 8·9 | |
| 10·1 | | 50·0 | 28·8 | |
| 9·2‡ | | 53·5 | 36·1 | 9·0 |
| 10·1 | | 56·0 | 4·1 | |
| 9·2‡ | 55 | 9·0 | 42·1 | |
| 10·0 | | 16·0 | 30·1 | |
| 9·5 | | 30·2 | 27·4 | |
| 9·9 | | 31·5 | 9·5 | |
| 9·4 | | 35·5 | 25·4 | |
| 10·0‡ | | 42·0 | 50·4 | |
| 9·8‡ | | 46·0 | 55·0 | |
| 9·6 | | 58·0 | 16·1 | |
| 9·0 | 56 | 0·5 | 3·7 | |
| 10·1 | | 3·5 | 1·7 | |
| 10·1 | | 4·5 | 2·1 | |
| 9·7 | | 13·0 | 15·1 | |
| 10·1 | | 16·5 | 12·1 | |
| 10·1 | | 18·5 | 4·3 | |
| 9·6‡ | | 23·0 | 46·3 | |
| 10·1 | | 24·0 | 5·2 | |
| 10·0‡ | | 24·5 | 55·4 | |
| 9·9‡ | | 25·0 | 36·7 | |
| 8·4 | | 29·5 | 33·1 | 8·5 |
| 10·0 | | 30·0 | 18·1 | |
| 9·6 | | 30·0 | 0·5 | |
| 9·9 | | 34·5 | 23·8 | |
| 10·1 | | 38·0 | 14·1 | |
| 9·9 | | 45·0 | 11·3 | |

## 3901—3960.

| mag. | 13h.–14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 56 | 47·5 | 9·4 | |
| 9·2 | | 58·5 | 34·7 | |
| 10·0 | | 59·0 | 30·1 | |
| 10·0 | 57 | 7·0 | 2·7 | |
| 9·7 | | 8·0 | 7·7 | |
| 10·0 | | 12·5 | 6·0 | |
| 10·1 | | 13·5 | 1·0 | |
| 9·6 | | 15·0 | 26·8 | 9·0 |
| 9·3‡ | | 22·5 | 56·8 | |
| 10·0 | | 22·5 | 27·1 | |
| 9·9‡ | | 24·5 | 36·1 | |
| 9·9 | | 29·5 | 33·3 | |
| 10·0‡ | | 31·5 | 58·2 | |
| 9·6 | | 31·5 | 15·7 | |
| 10·0 | | 36·0 | 23·1 | |
| 8·8 | | 40·5 | 3·1 | 9·0 |
| 10·1 | | 43·5 | 22·1 | |
| 9·3‡ | | 47·5 | 47·1 | |
| 9·4‡ | | 51·0 | 50·4 | |
| 8·0‡ | | 52·5 | 50·9 | 7·5 GS |
| 9·2‡ | 58 | 0·0 | 58·9 | |
| 8·4‡ | | 7·0 | 50·2 | 8·8 |
| 9·9‡ | | 7·0 | 47·2 | |
| 9·9 | | 11·5 | 27·1 | |
| 10·0 | | 16·0 | 33·0 | |
| 10·0 | | 16·5 | 35·0 | |
| 10·1 | | 18·0 | 23·5 | |
| 9·8‡ | | 22·5 | 43·0 | |
| : 9·2‡ | | 25·5 | 42·0 | |
| 9·5 | | 25·5 | 25·5 | |
| 9·7 | | 29·5 | 3·5 | |
| 10·1 | | 30·0 | 3·2 | |
| 9·0 | | 31·5 | 26·5 | |
| 10·0 | | 36·0 | 28·9 | |
| 9·7‡ | | 40·5 | 42·1 | |
| 10·1 | | 41·5 | 1·5 | |
| 9·2 | | 49·5 | 2·5 | |
| 9·6 | | 52·5 | 30·4 | |
| 9·9‡ | | 58·0 | 56·3 | |
| 8·8‡ | | 59·0 | 40·9 | 9·2 S |
| 7·6‡ | 59 | 1·5 | 36·7 | 7·0 GS |
| 9·7 | | 7·5 | 20·3 | |
| 10·1 | | 11·0 | 15·1 | |
| 9·3‡ | | 12·0 | 35·6 | 9·5 |
| 10·1 | | 12·5 | 14·1 | |
| 8·1 | | 14·0 | 16·0 | 8·5 |
| 10·1 | | 15·0 | 30·9 | |
| 10·1 | | 28·5 | 30·5 | |
| 8·6‡ | | 29·0 | 49·1 | 9·5 |
| 9·7‡ | | 29·0 | 56·4 | |
| 9·6‡ | | 40·0 | 55·8 | |
| 9·6‡ | | 43·0 | 50·8 | |
| 9·2 | | 49·0 | 11·5 | |
| 8·7 | | 55·5 | 28·2 | |
| 9·7‡ | | 55·5 | 52·1 | |
| 9·5 | 0 | 1·0 | 19·3 | |
| 9·8 | | 5·0 | 6·5 | |
| 10·1 | | 8·0 | 10·0 | |
| 10·1 | | 8·5 | 28·7 | |
| 9·8 | | 10·5 | 26·6 | |



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## 3961—4020.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 14·0 | 21·2 | |
| 8·8 | | 14·0 | 14·4 | 9·0 |
| 9·4‡ | | 26·0 | 51·9 | |
| 9·4‡ | | 31·2 | 56·5 | 9·5 |
| 9·4‡ | | 36·5 | 58·5 | |
| 10·1 | | 38·5 | 28·6 | |
| 8·8 | | 49·0 | 12·2 | 8·5 |
| 9·7 | 1 | 6·5 | 1·5 | |
| 10·1 | | 8·0 | 23·1 | |
| 9·5 | | 8·0 | 18·2 | |
| 10·1 | | 9·5 | 14·2 | |
| 9·8 | | 19·5 | 14·2 | |
| 10·0‡ | | 31·5 | 51·5 | |
| 8·8 | | 37·0 | 27·0 | 8·2 G |
| 8·8‡ | | 39·0 | 59·8 | 9·5 |
| 10·1 | | 55·5 | 10·1 | |
| 9·4 | | 56·0 | 32·8 | |
| 8·6 | | 57·5 | 32·0 | 9·0 |
| 9·3‡ | 2 | 2·0 | 36·7 | |
| 9·8 | | 5·0 | 1·5 | |
| 9·2 | | 12·0 | 33·1 | |
| 9·1 | | 14·0 | 14·9 | |
| 9·4‡ | | 32·5 | 56·4 | |
| 10·1 | | 40·0 | 3·2 | |
| 9·7‡ | | 59·5 | 47·9 | |
| 9·0‡ | 3 | 4·0 | 55·8 | 8·8 |
| 10·0‡ | | 4·0 | 45·9 | |
| 9·5 | | 11·0 | 25·4 | |
| 9·8‡ | | 19·5 | 41·1 | |
| 8·3‡ | | 30·5 | 55·5 | 9·0 |
| 10·0 | | 32·0 | 1·6 | |
| 10·1 | | 32·0 | 15·4 | |
| 9·6‡ | | 35·5 | 53·7 | |
| 9·6‡ | | 39·0 | 50·3 | |
| 10·0 | | 39·0 | 23·9 | |
| 9·5‡ | | 40·0 | 55·9 | |
| 10·0 | | 40·5 | 30·2 | |
| 10·0 | 4 | 8·5 | 3·2 | |
| 9·9 | | 10·5 | 14·2 | |
| 10·1 | | 18·0 | 30·0 | |
| 9·9 | | 18·0 | 14·4 | |
| 9·8‡ | | 21·0 | 54·0 | |
| 9·9‡ | | 22·0 | 38·0 | |
| 9·6‡ | | 28·5 | 58·9 | |
| 10·0‡ | | 46·0 | 57·7 | |
| 10·0‡ | | 47·0 | 58·0 | |
| 9·0 | | 48·8 | 26·4 | |
| 9·7‡ | | 54·5 | 48·7 | |
| 9·8‡ | | 56·5 | 36·5 | |
| 9·8‡ | 5 | 0·5 | 50·9 | |
| 9·1‡ | | 44·5 | 41·9 | |
| 9·0 | | 56·0 | 22·7 | 9·0 |
| 9·9 | 6 | 2·5 | 9·8 | |
| 9·0 | | 3·5 | 32·6 | 9·5 |
| 9·8‡ | | 12·2 | 37·9 | |
| 8·3 | | 17·5 | 31·6 | 8·0 G |
| 8·4 | | 19·8 | 28·0 | 8·8 |
| 10·0‡ | | 23·5 | 41·9 | |
| 10·2 | | 25·5 | 0·1 | |
| 10·0‡ | | 37·5 | 51·3 | |

## 4021—4080.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·2 | 6 | 39·5 | 3·6 | |
| 10·0‡ | | 42·5 | 50·3 | |
| 10·0‡ | | 45·5 | 40·3 | |
| 8·8‡ | | 59·2 | 59·5 | |
| 10·3 | 7 | 3·0 | 11·7 | |
| 9·7 | | 7·0 | 2·2 | |
| 8·5 | | 13·0 | 17·6 | 9·0 |
| 8·3 | | 13·0 | 7·6 | 8·2 |
| 9·6 | | 26·5 | 0·6 | |
| 9·7 | | 28·5 | 21·2 | |
| 9·4 | | 37·0 | 5·6 | |
| 10·2 | | 38·5 | 16·8 | |
| 9·2 | | 47·0 | 1·2 | |
| 9·9‡ | | 56·5 | 50·8 | |
| 8·9 | | 56·5 | 33·4 | 8·5 |
| 9·6‡ | 8 | 2·5 | 37·7 | |
| 8·9 | | 3·0 | 12·8 | |
| 10·0‡ | | 10·5 | 34·3 | |
| 7·4‡ | | 27·0 | 49·9 | 8·0 G |
| 10·0‡ | | 30·5 | 27·9 | |
| 9·8‡ | | 31·0 | 35·5 | |
| 10·2 | | 36·5 | 9·1 | |
| 10·2 | | 37·0 | 3·9 | |
| 10·0 | | 49·5 | 23·8 | |
| 10·0‡ | | 51·0 | 47·9 | |
| 8·6 | | 52·5 | 17·2 | |
| 10·2 | | 57·5 | 18·2 | |
| 9·4 | | 57·5 | 7·0 | 8·0 G |
| 8·5 | 9 | 4·3 | 25·5 | |
| 10·3 | | 17·5 | 4·6 | |
| 10·3 | | 20·5 | 5·6 | |
| 10·3 | | 27·5 | 6·6 | |
| 9·5 | | 37·5 | 20·6 | |
| 10·2 | | 46·5 | 19·2 | |
| 9·8 | | 47·0 | 10·2 | |
| 9·9‡ | | 49·0 | 54·9 | |
| 10·3 | | 52·0 | 13·8 | |
| 9·8‡ | | 54·5 | 51·0 | |
| 9·4‡ | 10 | 2·5 | 55·0 | |
| 9·6‡ | | 5·5 | 42·4 | |
| 9·8‡ | | 16·0 | 48·9 | |
| 10·0‡ | | 20·0 | 48·1 | |
| 10·0‡ | | 22·5 | 39·9 | |
| 9·3‡ | | 22·5 | 37·9 | |
| 9·6 | | 28·5 | 28·1 | |
| 9·5‡ | | 28·5 | 41·9 | |
| 9·7‡ | | 42·0 | 35·1 | |
| 10·2 | | 45·0 | 14·4 | |
| 9·3‡ | 11 | 0·0 | 57·8 | |
| 9·6‡ | | 4·5 | 52·9 | |
| 10·0 | | 22·5 | 15·4 | |
| 9·3‡ | | 28·0 | 49·9 | |
| 10·3 | | 31·0 | 7·4 | |
| 8·5 | | 41·0 | 0·6 | 8·5 |
| 9·5 | | 47·0 | 0·0 | 10·0 |
| 8·8‡ | | 52·5 | 52·9 | 8·5 |
| 10·2 | | 53·5 | 28·8 | |
| 10·2 | 12 | 4·5 | 9·1 | |
| 9·8‡ | | 12·0 | 50·3 | |
| 10·2 | | 17·0 | 12·5 | |

## 4081—4140.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0‡ | 12 | 22·5 | 59·9 | |
| 10·2 | | 23·5 | 13·9 | |
| 7·7 | | 28·0 | 35·0 | 8·0 G |
| 9·9‡ | | 29·5 | 37·6 | |
| 9·9 | | 44·0 | 30·4 | |
| 10·2 | | 44·0 | 16·7 | |
| 10·3 | 13 | 8·0 | 32·3 | |
| 10·3 | | 13·0 | 8·7 | |
| 9·9 | | 16·8 | 26·7 | |
| 10·0‡ | | 26·5 | 43·9 | |
| 9·8‡ | | 28·0 | 41·3 | |
| 9·2‡ | | 35·5 | 39·1 | |
| 9·2‡ | | 42·5 | 40·1 | 8·5 G |
| 9·0 | | 45·3 | 28·4 | |
| 9·9‡ | | 49·0 | 49·8 | |
| 9·9 | | 56·5 | 31·2 | |
| 10·0 | | 58·0 | 25·7 | |
| 10·0‡ | 14 | 6·0 | 36·7 | |
| 8·6 | | 16·0 | 28·9 | |
| 10·0‡ | | 19·0 | 45·5 | |
| 10·2 | | 21·5 | 21·7 | |
| 9·6 | | 27·0 | 31·9 | |
| 9·8 | | 30·0 | 15·3 | |
| 9·2‡ | | 48·0 | 36·5 | 9·0 |
| 9·6‡ | | 56·0 | 47·4 | |
| 9·7 | 15 | 13·5 | 11·7 | |
| 10·2 | | 31·5 | 15·1 | |
| 9·7 | | 32·0 | 9·7 | |
| 9·7 | | 43·0 | 5·3 | |
| 10·3 | | 45·0 | 9·4 | |
| 9·5‡ | | 56·5 | 41·8 | |
| 9·9‡ | 16 | 3·0 | 37·2 | |
| 9·9 | | 3·0 | 9·5 | |
| 10·0 | | 6·5 | 27·5 | |
| 9·8‡ | | 18·5 | 53·2 | |
| 9·8‡ | | 21·5 | 53·3 | |
| 10·2 | | 23·3 | 25·9 | |
| 8·7 | | 25·0 | 13·7 | 9·0 |
| 8·9‡ | | 29·0 | 43·0 | |
| 10·2 | | 47·5 | 17·7 | |
| 9·9 | | 52·5 | 32·4 | |
| 9·0‡ | 17 | 4·5 | 49·5 | 8·5 |
| 10·3 | | 7·5 | 10·5 | |
| 10·3 | | 13·0 | 25·2 | |
| 10·3 | | 33·5 | 13·7 | |
| 9·3 | | 35·0 | 12·9 | |
| 9·9‡ | | 42·0 | 39·9 | |
| 10·2 | | 44·0 | 15·7 | |
| 9·4 | | 48·5 | 11·7 | |
| 9·8 | | 50·5 | 0·7 | |
| 9·7‡ | | 58·0 | 37·7 | |
| 9·9 | 18 | 16·0 | 22·7 | |
| 9·9 | | 33·0 | 13·8 | |
| 10·2 | | 34·0 | 12·5 | |
| 10·2 | | 40·9 | 31·7 | |
| 10·2 | | 43·4 | 28·4 | |
| 9·2 | 19 | 5·5 | 5·4 | |
| 9·8‡ | | 14·3 | 49·6 | |
| 9·8‡ | | 16·8 | 51·8 | |
| 9·6‡ | | 20·3 | 40·6 | |

## 4141—4200.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·5 | 19 | 37·0 | 12·7 | |
| 10·2 | | 37·0 | 1·7 | |
| 9·6 | | 42·7 | 26·4 | |
| 9·7 | | 55·5 | 3·1 | |
| 10·0 | 20 | 0·0 | 34·5 | |
| 9·4† | | 0·2 | 41·8 | |
| 10·2 | | 7·5 | 3·7 | |
| 8·9† | | 14·5 | 43·5 | 9·5 |
| 9·0 | | 23·0 | 23·8 | 9·0 |
| 10·0† | | 30·5 | 41·9 | |
| 10·3 | | 38·0 | 13·7 | |
| 8·1 | | 38·5 | 17·9 | 8·0 |
| 9·6 | | 56·5 | 13·3 | |
| 10·3 | 21 | 8·5 | 6·5 | |
| 9·0 | | 24·5 | 4·8 | |
| 9·2† | | 31·0 | 52·9 | |
| 9·7 | | 34·5 | 7·9 | |
| 10·0 | | 37·0 | 2·5 | |
| 10·0 | | 37·5 | 34·1 | |
| 10·2 | | 40·0 | 12·1 | |
| 10·0† | | 50·0 | 39·8 | |
| 9·6† | | 50·5 | 44·1 | |
| 10·2 | | 50·5 | 29·5 | |
| 9·2† | | 51·5 | 52·1 | |
| 10·3 | | 53·0 | 27·7 | |
| 10·3 | | 58·0 | 30·3 | |
| 10·2 | 22 | 5·0 | 23·2 | |
| 9·6† | | 8·0 | 51·5 | |
| 10·0† | | 10·0 | 51·1 | |
| 9·8 | | 15·5 | 22·3 | |
| 9·8 | | 18·5 | 31·7 | |
| 9·9† | | 23·0 | 55·4 | |
| 8·0 | | 40·0 | 27·4 | |
| 10·2 | | 47·5 | 0·7 | |
| 8·8† | | 49·0 | 36·6 | |
| 9·0 | 23 | 0·0 | 8·7 | |
| 9·0† | | 6·0 | 49·7 | |
| 9·8 | | 15·7 | 1·7 | |
| 10·0 | | 29·5 | 33·8 | |
| 9·6† | | 36·0 | 39·1 | |
| 10·0 | | 59·5 | 20·4 | |
| 9·2† | 24 | 26·0 | 44·4 | |
| 9·2† | | 32·0 | 54·5 | |
| 9·9† | | 34·0 | 55·1 | |
| 9·9† | | 34·5 | 59·7 | |
| 8·5† | | 49·0 | 43·3 | 8·2 |
| 9·2 | 25 | 0·5 | 9·6 | |
| 9·0† | | 2·5 | 40·5 | |
| 9·8 | | 9·0 | 30·7 | |
| 9·9 | | 36·0 | 33·7 | |
| 9·9† | | 40·5 | 45·5 | |
| 9·7 | | 40·5 | 33·1 | |
| 9·0† | | 46·5 | 52·6 | 9·0 |
| 10·2 | | 53·0 | 24·9 | |
| 9·6† | 26 | 5·5 | 37·0 | |
| 10·0 | | 39·5 | 11·5 | |
| 10·0† | | 52·0 | 43·7 | |
| 9·9 | | 59·0 | 19·0 | |
| 8·7 | | 59·5 | 0·8 | |
| 9·7 | 27 | 6·5 | 6·4 | |

25 prec.

| h | m | α + | δ − ′ |
|---|---|---|---|
| 14 | 0 | 109 | 7·2 |
| | 10 | 111 | 7·0 |
| | 20 | 114 | 6·8 |
| | 30 | 116 | 6·6 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 114 | 6.8 |
| | 30 | 116 | 6.6 |
| | 40 | 118 | 6.4 |
| | 50 | 120 | 6.2 |
| 15 | 0 | 122 | 5.9 |
| | 10 | 124 | 5.6 |

## 4201—4260.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9.2† | 27 | 8.0 | 45.3 | |
| 10.0 | | 16.0 | 20.2 | |
| 10.0† | | 28.2 | 58.3 | |
| 9.4 | | 29.5 | 10.3 | |
| 9.0† | | 42.0 | 53.9 | |
| 9.0† | | 57.5 | 38.8 | |
| 10.3 | | 58.5 | 17.8 | |
| 9.2 | 28 | 20.5 | 14.7 | |
| 8.9† | | 27.5 | 42.3 | |
| 9.7 | | 28.0 | 10.3 | |
| 9.4† | | 39.5 | 48.9 | |
| 9.9† | | 49.5 | 50.0 | |
| 8.2 | | 49.5 | 0.1 | 9.0 |
| 10.2 | | 52.5 | 0.8 | |
| 10.3 | 29 | 8.5 | 30.8 | |
| 8.5 | | 9.5 | 23.8 | |
| 9.8 | | 26.0 | 11.6 | |
| 10.2 | | 32.5 | 31.9 | |
| 9.8 | | 38.5 | 4.8 | 9.0 |
| 8.9 | | 40.5 | 6.8 | 9.5 |
| 9.9 | | 56.0 | 9.2 | 9.5 |
| 9.4† | | 56.5 | 36.4 | |
| 9.4† | | 59.0 | 52.3 | |
| 9.3† | 30 | 3.0 | 36.2 | |
| 10.0† | | 22.5 | 59.0 | |
| 9.8 | | 30.5 | 19.6 | |
| 9.9† | | 31.5 | 50.1 | |
| 9.6† | | 39.5 | 42.4 | |
| 9.6† | | 46.0 | 52.0 | |
| 8.6 | | 51.0 | 7.8 | |
| 9.0 | | 53.0 | 4.8 | |
| 9.3† | | 54.0 | 56.3 | |
| 9.9 | | 55.0 | 0.0 | |
| 9.3 | 31 | 9.5 | 23.5 | |
| 9.9† | | 24.5 | 30.9 | |
| 9.2† | | 29.0 | 51.0 | |
| 10.2 | | 29.5 | 11.8 | |
| 10.2 | | 32.0 | 29.9 | |
| 10.2 | | 33.5 | 17.8 | |
| 9.2 | | 36.0 | 30.7 | |
| 9.2 | | 37.5 | 34.6 | |
| 8.7 | | 41.0 | 23.7 | |
| 9.6† | | 41.5 | 28.1 | |
| 10.3 | | 57.5 | 24.6 | |
| 9.9 | 32 | 13.0 | 20.8 | |
| 8.7 | | 13.0 | 29.7 | |
| 9.8 | | 21.5 | 12.1 | |
| 10.2 | | 30.5 | 22.8 | |
| 9.6† | | 38.5 | 31.1 | |
| 9.6† | | 42.0 | 47.6 | |
| 9.6 | | 42.5 | 32.4 | |
| 9.8† | | 51.5 | 55.9 | |
| 9.7† | | 52.0 | 55.7 | |
| 8.6† | 33 | 7.0 | 37.9 | |
| 8.8† | | 34.0 | 49.2 | |
| 9.6† | | 37.5 | 55.9 | |
| 6.5 | | 38.0 | 25.7 | 7.0 GS |
| 9.7 | | 44.0 | 33.3 | |
| 9.3† | | 49.0 | 51.1 | |
| 9.8 | | 57.0 | 22.1 | |

## 4261—4320.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9.2 | 34 | 6.0 | 0.4 | |
| 10.3 | | 8.0 | 5.9 | |
| 8.8† | | 18.5 | 43.9 | |
| 9.4† | | 26.5 | 52.6 | |
| 10.2 | | 29.0 | 34.8 | |
| 8.9 | | 30.5 | 15.8 | |
| 10.3 | | 33.0 | 1.8 | |
| 10.3 | | 38.5 | 2.1 | |
| 9.2† | | 41.0 | 57.9 | |
| 10.2 | | 53.0 | 23.8 | |
| 9.3† | | 57.0 | 50.9 | |
| 10.2 | 35 | 1.0 | 24.8 | |
| 8.6† | | 8.5 | 56.6 | 9.5 |
| 10.3 | | 11.0 | 24.1 | |
| 6.2 | | 23.0 | 20.3 | 6.0 GScr |
| 9.3† | | 32.5 | 54.3 | |
| 9.2 | | 37.5 | 18.6 | 9.5 |
| 9.3† | | 57.5 | 36.0 | |
| 9.3† | 36 | 0.5 | 36.9 | |
| 10.2 | | 1.0 | 30.8 | |
| 7.9 | | 13.0 | 0.3 | 8.0 G |
| 9.0 | | 14.0 | 25.7 | |
| 8.7† | | 16.0 | 57.8 | 9.0 |
| 9.2† | | 30.0 | 50.0 | |
| 9.4 | 37 | 3.5 | 30.0 | |
| 9.2† | | 14.0 | 41.1 | |
| 9.6† | | 28.0 | 57.6 | |
| 10.0 | | 48.0 | 25.8 | |
| 9.6† | | 57.5 | 43.1 | |
| 10.0 | 38 | 4.0 | 1.1 | |
| 9.5 | | 4.5 | 0.8 | |
| 9.2† | | 5.5 | 47.1 | |
| 10.2 | | 24.5 | 22.8 | |
| 8.8† | | 36.5 | 49.8 | 7.5 G |
| 9.2† | | 51.7 | 57.3 | |
| 9.4 | | 54.0 | 17.8 | |
| 9.7† | 39 | 9.5 | 41.8 | |
| 10.2 | | 21.0 | 19.2 | |
| 9.2† | | 53.5 | 39.8 | |
| 9.8† | 40 | 0.5 | 51.9 | |
| 9.2 | | 15.0 | 0.9 | 9.5 |
| 10.0 | | 16.2 | 14.7 | |
| 9.8† | | 20.0 | 42.5 | |
| 9.4† | | 36.0 | 44.8 | |
| 10.3 | | 49.5 | 0.0 | |
| 8.5† | | 58.0 | 58.4 | |
| 9.2† | 41 | 3.5 | 55.8 | |
| 9.8 | | 3.7 | 12.8 | |
| 9.7† | | 5.0 | 47.6 | |
| 8.9† | | 13.5 | 43.8 | |
| 9.9 | | 22.0 | 22.6 | |
| 10.0† | | 42.5 | 35.5 | |
| 9.3† | | 45.5 | 35.9 | |
| 9.9 | | 46.2 | 10.0 | |
| 8.6 | 42 | 25.5 | 11.4 | |
| 8.4 | | 26.0 | 3.2 | 8.5 |
| 9.9 | | 34.0 | 16.0 | |
| 8.8† | 43 | 0.0 | 59.0 | |
| 9.9 | | 11.5 | 15.5 | |
| 9.2† | | 13.0 | 38.5 | |

## 4321—4380.

| mag. | 14h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8.9 | 43 | 24.0 | 11.9 | |
| 9.0 | | 30.5 | 0.2 | 8.5 |
| 9.4 | | 42.0 | 28.9 | |
| 9.7 | 44 | 7.0 | 12.4 | |
| 10.0† | | 29.0 | 44.0 | |
| 9.0 | | 51.0 | 28.9 | 9.5 |
| 8.6 | | 55.5 | 34.6 | 9.0 |
| 9.4 | 45 | 12.5 | 2.8 | 9.5 |
| 9.3† | | 20.5 | 44.0 | |
| 9.2 | | 21.0 | 3.9 | |
| 9.2† | | 43.5 | 46.8 | |
| 9.9 | | 49.5 | 12.9 | |
| 10.0† | | 50.0 | 44.3 | |
| 9.9† | 46 | 19.0 | 58.9 | |
| 9.9 | | 26.0 | 12.3 | |
| 9.2 | | 38.0 | 19.4 | |
| 5.9 | | 41.5 | 16.3 | 5.5 GScr |
| 8.2† | 47 | 6.0 | 44.9 | 9.0 |
| 8.4† | | 50.0 | 46.7 | 8.5 |
| 8.4 | | 52.5 | 2.9 | |
| 9.9† | 48 | 14.5 | 40.9 | |
| 9.4 | | 44.5 | 17.0 | |
| 8.9† | | 50.0 | 36.3 | |
| 9.4† | 49 | 9.0 | 40.7 | |
| 8.4 | | 18.7 | 0.3 | 8.5 |
| 9.3† | | 37.0 | 44.1 | |
| 9.7 | | 44.0 | 28.5 | |
| 9.3† | | 46.5 | 35.3 | |
| 9.6 | | 57.5 | 33.2 | |
| 9.9 | 50 | 2.5 | 2.7 | |
| 9.8 | | 4.5 | 23.9 | |
| 9.5 | | 12.5 | 11.9 | |
| 9.0 | | 23.5 | 13.5 | |
| 9.9 | | 26.0 | 8.4 | |
| 9.4† | | 35.0 | 47.7 | |
| 10.0† | | 36.0 | 34.4 | |
| 9.2 | | 37.5 | 24.1 | 9.0 |
| 9.9 | | 52.0 | 1.6 | |
| 9.4† | 51 | 2.8 | 57.3 | |
| 9.8† | | 59.0 | 36.0 | |
| 9.4† | 52 | 3.0 | 47.7 | |
| 9.4† | | 27.0 | 41.5 | |
| 9.2 | | 35.0 | 28.9 | 9.0 |
| 10.0† | | 42.5 | 51.1 | |
| 9.9† | | 56.0 | 54.2 | |
| 9.8† | 53 | 3.0 | 39.3 | |
| 9.8 | | 24.5 | 6.9 | |
| 9.2 | | 43.0 | 34.5 | |
| 10.0† | | 44.0 | 56.5 | |
| 9.6† | | 46.5 | 48.3 | |
| 9.5 | | 54.7 | 34.6 | |
| 9.4 | | 55.5 | 28.9 | 9.0 |
| 8.9† | 54 | 1.5 | 42.6 | 8.5 |
| 9.2 | | 17.5 | 19.8 | |
| 9.9† | | 23.0 | 41.7 | |
| 8.6 | | 23.0 | 23.7 | |
| 8.9 | | 34.5 | 16.9 | |
| 7.4† | | 37.0 | 50.0 | 8.0 G |
| 8.3† | | 42.0 | 38.2 | 9.0 |
| 9.7 | 55 | 10.5 | 25.8 | |

## 4381—4440.

| mag. | 14h.–15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9.8 | 55 | 15.2 | 31.9 | |
| 9.8 | | 21.5 | 20.9 | |
| 8.8† | | 29.0 | 53.8 | 9.0 |
| 9.7 | | 38.5 | 7.5 | |
| 9.4 | 56 | 7.7 | 25.5 | |
| 9.9 | | 17.5 | 7.8 | |
| 8.3 | | 29.5 | 11.1 | 9.2 |
| 9.7 | | 30.5 | 35.1 | |
| 9.3† | | 41.5 | 48.4 | |
| 9.6 | | 56.7 | 30.1 | |
| 9.0† | 57 | 15.2 | 59.0 | |
| 8.4 | | 24.0 | 20.2 | 8.0 |
| 9.9 | 58 | 17.5 | 12.7 | |
| 9.5 | | 19.5 | 16.9 | |
| 9.2† | | 54.5 | 54.1 | |
| 9.2† | | 58.8 | 40.8 | |
| 10.0† | 59 | 18.5 | 33.6 | |
| 10.0‡ | | 28.5 | 53.7 | |
| 9.5 | | 32.5 | 20.9 | |
| 9.4‡ | | 37.7 | 41.7 | |
| 9.6 | | 59.5 | 21.2 | |
| 8.3‡ | 0 | 29.5 | 48.1 | 9.0 |
| 9.5‡ | | 34.7 | 41.8 | |
| 9.7 | | 37.5 | 19.8 | |
| 9.6 | | 38.5 | 18.3 | |
| 9.2 | 1 | 26.5 | 23.9 | |
| 8.3‡ | | 37.5 | 48.6 | 9.0 |
| 9.5‡ | | 39.5 | 46.3 | |
| 9.9 | | 41.5 | 32.9 | |
| 9.5 | 2 | 7.5 | 15.8 | |
| 8.4 | | 8.5 | 33.2 | 7.0 GS |
| 9.4 | | 24.5 | 24.9 | |
| 8.9 | | 32.0 | 10.9 | 9.0 |
| 9.8 | | 40.5 | 21.2 | |
| 8.9‡ | | 41.0 | 49.4 | |
| 9.0‡ | | 57.5 | 47.2 | |
| 9.2‡ | | 58.5 | 46.8 | |
| 9.7 | 3 | 10.5 | 3.8 | 9.0 |
| 10.0‡ | | 12.5 | 33.8 | |
| 8.4 | | 13.5 | 27.9 | 8.5 |
| 9.6 | | 20.5 | 7.3 | |
| 9.9 | | 30.5 | 9.5 | |
| 8.4 | 4 | 19.5 | 17.6 | 8.5 |
| 9.6‡ | | 49.0 | 52.0 | |
| 8.2‡ | 5 | 5.0 | 50.8 | 8.5 |
| 9.5‡ | | 11.0 | 53.6 | |
| 9.8‡ | | 14.8 | 58.5 | |
| 10.0‡ | | 52.5 | 36.5 | |
| 9.7‡ | | 57.0 | 41.0 | |
| 9.9 | 6 | 13.5 | 5.8 | |
| 7.6‡ | | 17.0 | 52.9 | 8.5 |
| 9.4‡ | | 17.0 | 56.9 | |
| 9.8‡ | | 22.0 | 41.8 | |
| 10.0‡ | | 42.5 | 52.4 | 10.0 |
| 10.0‡ | 7 | 15.5 | 54.8 | |
| 8.1‡ | | 21.0 | 55.5 | 9.0 |
| 9.2 | | 24.5 | 5.8 | |
| 8.6 | | 30.5 | 28.0 | |
| 9.7 | | 50.0 | 6.1 | |
| 9.4‡ | 8 | 13.5 | 43.9 | |

### 4441—4500.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·7 | 8 | 29·5 | 8·9 | |
| 9·4‡ | | 33·0 | 54·6 | |
| 8·6‡ | | 39·0 | 40·8 | |
| 9·8 | | 51·0 | 22·6 | |
| 8·9 | | 58·0 | 19·7 | 9·0 |
| 9·9 | 9 | 4·5 | 17·2 | |
| 9·9 | | 5·3 | 11·3 | 9·5 |
| 9·7 | | 13·5 | 1·9 | |
| 9·8 | | 32·5 | 7·9 | |
| 9·2‡ | | 57·5 | 47·0 | 8·0 G |
| 9·2 | 10 | 3·5 | 29·4 | |
| 9·7 | | 12·5 | 5·2 | |
| 8·9 | | 30·5 | 31·8 | |
| 8·9 | | 30·5 | 2·2 | 8·8 |
| 9·5‡ | | 47·0 | 54·5 | |
| 9·9 | | 56·5 | 15·6 | |
| 9·6‡ | 11 | 9·0 | 40·9 | |
| 9·4‡ | | 17·0 | 50·3 | |
| 9·8 | | 39·5 | 5·0 | |
| 8·8‡ | | 57·5 | 45·9 | |
| 8·0 | 12 | 12·5 | 6·8 | 10·0 |
| 8·9 | | 29·0 | 14·7 | 9·0 |
| 9·9 | | 52·5 | 23·9 | |
| 9·6‡ | | 53·0 | 49·9 | |
| 9·9 | 13 | 4·0 | 16·0 | |
| 9·9 | | 4·5 | 16·2 | 10·0 |
| 8·9 | | 15·0 | 3·8 | |
| 8·8‡ | | 29·0 | 42·0 | |
| 9·0 | | 42·2 | 34·2 | |
| 8·8 | | 42·5 | 13·7 | 9·0 |
| 9·9 | | 43·0 | 0·0 | |
| 9·5 | | 54·0 | 4·9 | |
| 9·0 | 14 | 45·5 | 8·9 | 9·0 |
| 9·9 | 15 | 2·0 | 13·9 | 9·5 |
| 8·9‡ | | 17·0 | 47·2 | |
| 10·0‡ | | 19·5 | 54·0 | |
| 8·2‡ | | 29·0 | 58·9 | |
| 9·9 | | 51·5 | 21·8 | |
| 9·6 | | 57·5 | 27·0 | 9·5 |
| 10·0‡ | 16 | 8·5 | 55·7 | |
| 8·0 | | 23·0 | 19·2 | 8·5 |
| 8·6 | 17 | 11·2 | 34·7 | 8·0 |
| 10·0 | | 16·9 | 45·0 | |
| 10·0 | | 17·9 | 40·7 | |
| 10·1 | | 19·9 | 39·0 | |
| 9·7 | | 20·7 | 12·8 | |
| 9·8 | | 22·9 | 40·0 | |
| 9·8 | | 27·2 | 26·3 | |
| 9·8 | | 27·9 | 53·6 | |
| 9·7 | | 28·2 | 4·8 | |
| 10·1 | | 29·5 | 36·4 | |
| 9·6 | | 34·2 | 20·1 | |
| 9·7 | | 36·4 | 0·1 | |
| 9·9 | | 38·7 | 24·2 | |
| 10·1 | | 42·4 | 40·8 | |
| 10·0 | | 46·4 | 55·0 | |
| 10·1 | | 46·4 | 54·5 | |
| 9·8 | | 57·9 | 42·2 | |
| 10·1 | | 59·4 | 57·1 | |
| 9·8 | 18 | 5·4 | 2·1 | |

### 4501—4560.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 18 | 5·7 | 17·0 | |
| 9·7 | | 8·4 | 48·4 | |
| 9·8 | | 10·4 | 0·5 | |
| 10·1 | | 19·7 | 11·3 | |
| 10·0 | | 19·9 | 59·0 | |
| 10·0 | | 23·9 | 54·6 | |
| 10·1 | | 41·2 | 14·0 | |
| 9·4 | | 43·4 | 49·8 | |
| 10·1 | | 43·7 | 6·7 | |
| 9·6 | | 45·7 | 12·5 | |
| 9·4 | | 48·3 | 28·0 | 9·0 |
| 10·1 | | 51·5 | 40·9 | |
| 10·1 | | 55·7 | 26·5 | |
| 9·6 | | 56·9 | 28·9 | |
| 9·0 | | 58·0 | 59·6 | |
| 9·8 | | 58·7 | 31·4 | |
| 9·0 | 19 | 9·4 | 49·8 | |
| 10·1 | | 10·2 | 2·6 | |
| 10·1 | | 10·2 | 22·2 | |
| 9·4 | | 10·5 | 53·0 | |
| 9·2 | | 10·5 | 57·3 | |
| 10·1 | | 12·7 | 26·5 | |
| 8·9 | | 14·4 | 9·0 | 9·5 |
| 9·8 | | 18·2 | 8·8 | |
| 10·0 | | 18·4 | 47·3 | |
| 10·0 | | 21·9 | 53·8 | |
| 10·1 | | 25·7 | 10·2 | |
| 9·6 | | 27·4 | 37·4 | |
| 10·1 | | 32·7 | 9·2 | |
| 8·7 | | 33·3 | 28·1 | |
| 9·2 | | 44·9 | 39·1 | |
| 9·4 | | 46·6 | 25·2 | 10·0 |
| 9·8 | | 50·7 | 27·5 | |
| 9·2 | | 52·4 | 43·3 | 9·5 |
| 9·4 | | 53·4 | 47·6 | |
| 10·0 | | 53·9 | 59·7 | |
| 9·0 | 20 | 0·7 | 24·2 | 9·5 |
| 9·4 | | 4·9 | 37·0 | 9·5 |
| 10·0 | | 6·9 | 33·0 | |
| 10·0 | | 10·7 | 10·2 | |
| 9·8 | | 11·2 | 4·7 | |
| 9·6 | | 11·7 | 21·2 | |
| 10·1 | | 12·4 | 40·1 | |
| 8·8 | | 13·5 | 54·9 | |
| 10·0 | | 24·2 | 8·6 | |
| 10·1 | | 25·7 | 6·7 | |
| 10·1 | | 26·4 | 51·7 | |
| 9·8 | | 29·9 | 54·1 | |
| 10·1 | | 31·2 | 24·6 | |
| 10·0 | | 31·9 | 40·3 | |
| 10·0 | | 36·7 | 16·1 | |
| 9·9 | | 38·7 | 13·1 | |
| 9·3 | | 39·9 | 38·6 | |
| 10·1 | | 45·4 | 39·4 | |
| 9·9 | | 51·7 | 6·2 | |
| 9·4 | | 54·7 | 21·2 | |
| 10·0 | | 55·7 | 15·9 | |
| 9·9 | 21 | 3·9 | 50·7 | |
| 9·0 | | 5·7 | 38·0 | |
| 10·0 | | 6·4 | 59·9 | |

### 4561—4620.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 21 | 9·4 | 44·0 | |
| 9·4 | | 14·4 | 44·5 | |
| 9·6 | | 14·7 | 27·7 | |
| 10·0 | | 17·7 | 13·2 | |
| 9·4 | | 18·9 | 38·2 | |
| 10·1 | | 21·4 | 55·5 | |
| 9·6 | | 22·9 | 56·0 | |
| 10·1 | | 26·2 | 22·5 | |
| 9·8 | | 26·9 | 33·8 | |
| 9·8 | | 27·7 | 13·8 | |
| 9·2 | | 30·5 | 31·7 | |
| 9·9 | | 43·7 | 28·7 | |
| 9·5 | | 49·5 | 36·5 | |
| 9·0 | | 50·7 | 9·8 | |
| 9·8 | | 55·7 | 19·1 | |
| 10·1 | 22 | 0·4 | 56·9 | |
| 9·2 | | 2·9 | 35·6 | |
| 10·1 | | 6·7 | 7·5 | |
| 10·1 | | 13·7 | 18·6 | |
| 10·1 | | 13·9 | 57·2 | |
| 10·1 | | 15·1 | 1·2 | |
| 10·1 | | 17·2 | 18·9 | |
| 10·0 | | 19·9 | 45·2 | |
| 9·8 | | 21·9 | 36·0 | |
| 9·8 | | 24·2 | 14·9 | |
| 9·6 | | 24·4 | 52·4 | |
| 9·9 | | 27·9 | 46·6 | |
| 9·2 | | 32·2 | 55·7 | |
| 9·8 | | 32·4 | 36·8 | |
| 9·6 | | 34·7 | 5·3 | |
| 9·9 | | 37·7 | 10·0 | |
| 9·4 | | 39·7 | 57·8 | |
| 9·7 | | 51·2 | 28·0 | |
| 10·0 | | 52·9 | 58·9 | |
| 9·7 | | 53·7 | 29·2 | |
| 9·6 | 23 | 1·4 | 39·2 | |
| 9·9 | | 7·4 | 49·1 | |
| 9·6 | | 10·2 | 21·7 | |
| 10·0 | | 13·9 | 52·6 | |
| 9·4 | | 21·4 | 53·3 | |
| 9·8 | | 30·9 | 41·5 | |
| 9·9 | | 31·7 | 3·3 | |
| 9·8 | | 35·9 | 51·1 | |
| 10·1 | | 54·5 | 17·8 | |
| 9·9 | | 56·7 | 8·3 | |
| 9·6 | 24 | 2·7 | 18·4 | |
| 10·1 | | 3·4 | 52·7 | |
| 9·0 | | 5·2 | 46·4 | |
| 9·8 | | 9·8 | 1·3 | |
| 9·2 | | 11·7 | 13·8 | |
| 9·9 | | 13·9 | 55·2 | |
| 9·0 | | 16·4 | 31·8 | 10·0 |
| 9·8 | | 16·7 | 8·7 | |
| 10·1 | | 23·9 | 51·0 | |
| 9·0 | | 30·5 | 53·4 | |
| 10·1 | | 33·7 | 3·9 | |
| 10·1 | | 42·7 | 18·7 | |
| 10·1 | | 42·9 | 55·9 | |
| 9·2 | | 45·7 | 41·0 | |
| 9·7 | | 52·9 | 31·6 | |

### 4621—4680.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8 | 24 | 54·7 | 28·1 | |
| 8·7 | | 56·2 | 38·3 | 8·5 |
| 10·1 | 25 | 14·2 | 27·8 | |
| 8·6 | | 14·2 | 49·6 | |
| 10·0 | | 16·9 | 46·1 | |
| 10·0 | | 17·7 | 9·8 | |
| 9·6 | | 18·5 | 0·1 | |
| 10·1 | | 19·4 | 35·6 | |
| 9·4 | | 22·3 | 17·7 | |
| 10·1 | | 26·7 | 2·2 | |
| 9·6 | | 28·4 | 53·4 | |
| 9·8 | | 32·4 | 32·0 | |
| 9·9 | | 32·7 | 9·7 | |
| 9·2 | | 36·2 | 19·3 | |
| 9·9 | | 37·2 | 7·3 | |
| 8·9 | | 41·7 | 56·6 | 9·5 |
| 9·6 | | 42·4 | 42·9 | |
| 9·9 | | 43·9 | 58·2 | |
| 10·1 | | 43·9 | 31·1 | |
| 9·4 | | 48·2 | 11·1 | |
| 10·0 | | 48·9 | 58·4 | |
| 9·0 | | 51·7 | 34·3 | |
| 9·5 | | 53·2 | 16·6 | |
| 10·0 | | 54·4 | 50·6 | |
| 9·7 | | 56·9 | 49·5 | |
| 9·7 | | 59·9 | 48·0 | |
| 8·9 | 26 | 2·2 | 4·8 | 9·8 |
| 8·6 | | 2·9 | 51·2 | 9·5 |
| 9·6 | | 4·7 | 6·5 | |
| 9·9 | | 6·7 | 10·0 | |
| 9·3 | | 9·9 | 33·7 | |
| 8·4 | | 10·7 | 6·2 | 8·8 |
| 9·2 | | 11·7 | 29·8 | |
| 9·8 | | 11·9 | 37·8 | |
| 9·9 | | 15·4 | 32·8 | |
| 9·7 | | 21·7 | 8·2 | |
| 9·5 | | 21·8 | 1·4 | |
| 8·6 | | 22·4 | 36·9 | |
| 9·0 | | 22·7 | 41·9 | |
| 10·1 | | 33·7 | 16·2 | |
| 10·1 | | 37·7 | 5·4 | |
| 10·1 | | 38·9 | 43·2 | |
| 10·1 | | 42·9 | 45·4 | |
| 9·8 | | 45·2 | 3·4 | |
| 7·7 | | 54·2 | 15·8 | G |
| 10·1 | | 54·7 | 25·4 | |
| 9·8 | | 58·7 | 49·4 | |
| 9·8 | | 58·9 | 34·4 | |
| 9·7 | 27 | 2·2 | 16·1 | |
| 10·0 | | 2·9 | 59·6 | |
| 9·6 | | 4·7 | 21·0 | |
| 9·4 | | 8·9 | 48·1 | |
| 10·1 | | 11·7 | 10·4 | |
| 9·8 | | 13·9 | 47·2 | |
| 10·0 | | 17·7 | 10·9 | |
| 8·8 | | 20·2 | 36·2 | |
| 10·1 | | 25·4 | 42·8 | |
| 9·2 | | 25·4 | 30·8 | |
| 10·0 | | 25·7 | 5·4 | |
| 10·1 | | 28·9 | 42·8 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 0 | 122 | 5·9 |
| | 10 | 124 | 5·6 |
| | 20 | 126 | 5·4 |
| | 30 | 128 | 5·1 |

| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − " |
| 15 | 20 | 126 | 5·4 |
| | 30 | 128 | 5·1 |
| | 40 | 129 | 4·8 |

## 4681—4740.

| mag. | 15h m s | −62° ′ | |
|---|---|---|---|
| 10·0 | 27 31·9 | 39·9 | |
| 10·0 | 32·7 | 14·9 | |
| 10·1 | 38·9 | 39·2 | |
| 10·1 | 44·7 | 8·2 | |
| 9·6 | 45·2 | 15·0 | |
| 10·1 | 58·2 | 6·1 | |
| 10·0 | 28 0·2 | 7·0 | |
| 10·1 | 3·9 | 52·6 | |
| 10·0 | 5·2 | 15·4 | |
| 10·0 | 5·4 | 53·1 | |
| 10·1 | 13·9 | 46·6 | |
| 8·5 | 15·4 | 38·4 | 9·5 |
| 10·1 | 17·9 | 58·1 | |
| 9·0 | 20·2 | 4·4 | 9·5 |
| 9·8 | 25·2 | 22·0 | |
| 9·1 | 26·2 | 34·4 | |
| 10·1 | 26·9 | 53·9 | |
| 9·8 | 27·7 | 22·6 | |
| 9·2 | 28·2 | 54·2 | |
| 9·6 | 28·2 | 26·6 | |
| 9·8 | 31·9 | 36·2 | |
| 9·8 | 32·2 | 5·0 | |
| 9·6 | 33·4 | 40·8 | |
| 10·0 | 36·9 | 39·2 | |
| 10·1 | 37·2 | 9·1 | |
| 10·1 | 40·4 | 46·0 | |
| 9·2 | 41·2 | 5·0 | |
| 8·1 | 47·4 | 37·5 | 9·0 |
| 10·1 | 47·9 | 45·3 | |
| 10·1 | 29 6·7 | 1·8 | |
| 9·6 | 10·4 | 48·7 | |
| 9·6 | 17·2 | 13·1 | |
| 9·8 | 18·2 | 17·8 | |
| 9·8 | 25·2 | 9·0 | |
| 9·0 | 25·7 | 58·0 | |
| 9·7 | 28·7 | 19·1 | |
| 9·8 | 29·7 | 24·7 | |
| 9·8 | 33·7 | 7·9 | |
| 9·8 | 34·4 | 54·0 | |
| 9·8 | 35·2 | 27·2 | |
| 9·0 | 39·7 | 50·6 | |
| 9·6 | 42·3 | 8·2 | |
| 9·9 | 48·9 | 59·1 | |
| 10·0 | 52·3 | 16·0 | |
| 10·1 | 52·9 | 39·4 | |
| 9·2 | 53·4 | 44·0 | |
| 10·0 | 30 0·2 | 15·6 | |
| 10·1 | 1·2 | 24·0 | |
| 10·0 | 2·2 | 22·0 | |
| 9·6 | 4·2 | 3·1 | |
| 10·0 | 4·7 | 21·7 | |
| 9·6 | 4·7 | 3·9 | |
| 9·7 | 6·7 | 7·0 | |
| 7·2 | 7·4 | 47·0 | 7·0 GScr |
| 9·8 | 8·2 | 3·1 | |
| 10·1 | 12·2 | 40·1 | |
| 10·1 | 24·2 | 50·1 | |
| 9·8 | 31·2 | 35·1 | |
| 9·6 | 31·7 | 58·6 | |
| 9·8 | 34·2 | 32·5 | |

## 4741—4800.

| mag. | 15h m s | −62° ′ | |
|---|---|---|---|
| 9·6 | 30 37·5 | 29·0 | |
| 9·9 | 38·5 | 23·5 | |
| 10·0 | 39·5 | 22·6 | |
| 10·0 | 43·5 | 15·6 | |
| 9·9 | 45·5 | 22·4 | |
| 8·9 | 45·6 | 41·5 | 9·0 |
| 10·1 | 48·2 | 43·2 | |
| 9·8 | 55·5 | 5·0 | |
| 10·1 | 31 12·0 | 11·0 | |
| 10·0 | 14·2 | 48·9 | |
| 10·0 | 27·0 | 11·1 | |
| 10·1 | 29·5 | 13·5 | |
| 9·2 | 29·7 | 46·2 | |
| 9·4 | 35·5 | 10·3 | |
| 9·6 | 41·2 | 48·4 | |
| 9·2 | 42·0 | 12·9 | |
| 9·8 | 43·0 | 4·8 | |
| 9·5 | 44·0 | 18·6 | |
| 9·0 | 45·7 | 2·6 | 9·5 |
| 9·6 | 47·0 | 15·0 | |
| 9·6 | 52·7 | 44·7 | |
| 10·1 | 53·0 | 10·7 | |
| 10·0 | 54·2 | 53·1 | |
| 10·1 | 57·7 | 45·2 | |
| 10·1 | 59·2 | 48·1 | |
| 9·9 | 32 3·0 | 27·7 | |
| 9·7 | 3·2 | 47·0 | |
| 9·6 | 4·7 | 48·1 | |
| 9·7 | 8·0 | 54·6 | |
| 10·1 | 17·2 | 37·5 | |
| 9·4 | 19·2 | 40·1 | |
| 9·6 | 23·7 | 52·4 | |
| 10·1 | 28·0 | 24·4 | |
| 9·9 | 31·4 | 0·1 | |
| 10·0 | 34·2 | 42·6 | |
| 10·1 | 37·5 | 28·6 | |
| 10·0 | 37·5 | 9·9 | |
| 10·0 | 38·0 | 10·2 | |
| 8·9 | 47·0 | 27·7 | 9·5 |
| 10·0 | 48·0 | 21·3 | |
| 10·1 | 49·0 | 20·5 | |
| 10·0 | 33 1·7 | 40·0 | |
| 8·8 | 4·6 | 32·4 | |
| 9·7 | 15·4 | 0·4 | |
| 9·4 | 16·0 | 21·2 | |
| 10·1 | 22·2 | 33·5 | |
| 10·0 | 24·0 | 20·3 | |
| 9·3 | 27·8 | 36·7 | |
| 10·0 | 32·0 | 6·6 | |
| 9·9 | 35·7 | 59·3 | |
| 9·6 | 40·0 | 7·3 | |
| 9·6 | 40·5 | 5·1 | |
| 9·8 | 41·2 | 49·9 | |
| 9·9 | 43·0 | 7·2 | |
| 9·6 | 54·2 | 38·8 | |
| 8·9 | 55·5 | 6·8 | |
| 9·9 | 56·0 | 27·0 | |
| 10·1 | 34 0·7 | 33·1 | |
| 9·4 | 1·0 | 28·1 | |
| 8·8 | 1·3 | 27·3 | |

## 4801—4860.

| mag. | 15h m s | −62° ′ | |
|---|---|---|---|
| 9·9 | 34 2·0 | 14·2 | |
| 9·7 | 3·5 | 24·3 | |
| 9·2 | 5·7 | 59·2 | |
| 7·7 | 8·4 | 48·4 | 8·0 |
| 8·9 | 13·0 | 24·9 | |
| 9·8 | 13·0 | 21·3 | |
| 9·7 | 13·0 | 16·1 | |
| 9·5 | 13·5 | 13·0 | |
| 9·8 | 19·7 | 55·5 | |
| 10·0 | 20·2 | 44·6 | |
| 8·8 | 20·4 | 43·8 | 8·5 |
| 9·2 | 22·5 | 10·2 | |
| 9·8 | 23·0 | 13·5 | |
| 9·8 | 23·9 | 0·3 | |
| 10·1 | 24·2 | 53·5 | |
| 10·0 | 27·7 | 45·5 | |
| 9·0 | 28·6 | 37·4 | |
| 9·8 | 29·0 | 9·1 | |
| 9·7 | 32·0 | 25·3 | |
| 9·6 | 34·0 | 10·0 | |
| 9·8 | 37·0 | 16·5 | |
| 9·1 | 37·6 | 33·5 | |
| 10·1 | 39·2 | 44·8 | |
| 10·1 | 40·2 | 48·0 | |
| 9·8 | 40·7 | 34·6 | |
| 10·1 | 42·7 | 53·9 | |
| 8·7 | 44·0 | 10·3 | |
| 10·1 | 46·0 | 29·4 | |
| 10·1 | 49·7 | 48·0 | |
| 9·6 | 50·5 | 22·3 | |
| 9·6 | 53·0 | 16·1 | |
| 9·8 | 54·2 | 56·5 | |
| 10·1 | 59·2 | 41·2 | |
| 9·1 | 35 0·6 | 57·0 | |
| 10·0 | 0·7 | 52·7 | |
| 9·2 | 4·0 | 8·6 | |
| 9·8 | 7·7 | 36·3 | |
| 8·8 | 18·0 | 2·0 | 8·5 G |
| 10·1 | 18·2 | 41·3 | |
| 9·4 | 18·7 | 55·1 | |
| 10·1 | 19·0 | 6·0 | |
| 10·0 | 19·7 | 40·0 | |
| 10·1 | 26·5 | 27·0 | |
| 9·8 | 26·7 | 50·0 | |
| 10·1 | 28·8 | 18·5 | |
| 9·7 | 31·2 | 52·6 | |
| 10·0 | 34·2 | 34·9 | |
| 9·7 | 35·2 | 50·4 | |
| 8·2 | 36·1 | 44·7 | 8·5 |
| 8·4 | 42·5 | 8·9 | 9·0 G |
| 10·1 | 44·0 | 7·8 | |
| 9·4 | 44·2 | 59·9 | |
| 8·8 | 46·2 | 58·8 | |
| 9·0 | 52·4 | 56·9 | |
| 9·1 | 56·5 | 13·0 | |
| 9·9 | 36 2·7 | 37·0 | |
| 7·9 | 9·0 | 24·2 | 7·5 GS |
| 9·9 | 23·2 | 50·3 | |
| 9·6 | 23·7 | 54·4 | |
| 10·1 | 27·0 | 20·7 | |

## 4861—4920.

| mag. | 15h m s | −62° ′ | |
|---|---|---|---|
| 9·8 | 36 30·7 | 35·9 | |
| 9·9 | 34·5 | 13·7 | |
| 10·1 | 36·0 | 19·0 | |
| 10·0 | 43·5 | 26·3 | |
| 9·6 | 51·5 | 24·6 | |
| 9·5 | 52·5 | 22·6 | |
| 9·8 | 55·2 | 37·7 | |
| 9·3 | 57·0 | 25·0 | |
| 9·5 | 37 0·5 | 22·0 | 9·2 |
| 10·1 | 0·7 | 36·2 | |
| 9·7 | 6·7 | 30·1 | |
| 9·2 | 9·0 | 20·3 | |
| 9·6 | 14·0 | 9·5 | |
| 9·6 | 15·0 | 10·2 | |
| 10·1 | 16·0 | 8·5 | |
| 9·5 | 16·5 | 15·6 | |
| 10·0 | 18·5 | 4·5 | |
| 9·8 | 19·5 | 20·8 | |
| 10·0 | 22·2 | 52·3 | |
| 9·6 | 34·4 | 2·5 | |
| 9·6 | 40·0 | 8·2 | |
| 9·6 | 44·0 | 23·1 | 9·5 |
| 9·3 | 48·0 | 22·3 | |
| 9·8 | 48·5 | 24·4 | |
| 9·6 | 52·7 | 51·5 | |
| 10·1 | 55·5 | 9·5 | |
| 9·4 | 56·9 | 2·5 | |
| 10·1 | 58·2 | 46·1 | |
| 9·9 | 38 0·0 | 4·6 | |
| 9·5 | 3·7 | 49·9 | |
| 9·7 | 11·2 | 34·3 | |
| 9·2 | 15·2 | 55·6 | |
| 9·6 | 15·5 | 16·0 | |
| 9·4 | 21·2 | 36·4 | |
| 10·0 | 22·5 | 8·9 | |
| 9·2 | 26·0 | 13·6 | 9·2 |
| 9·2 | 26·7 | 30·6 | |
| 9·7 | 26·7 | 52·1 | |
| 9·6 | 30·0 | 10·8 | |
| 10·1 | 30·2 | 54·8 | |
| 9·9 | 31·0 | 27·0 | |
| 9·6 | 31·0 | 20·6 | |
| 9·9 | 32·2 | 45·3 | |
| 9·8 | 33·5 | 18·2 | |
| 9·6 | 36·0 | 21·2 | |
| 10·1 | 36·5 | 4·7 | |
| 9·8 | 36·5 | 29·4 | |
| 9·2 | 37·7 | 54·6 | |
| 10·0 | 38·7 | 32·2 | |
| 9·8 | 43·0 | 20·6 | |
| 9·9 | 44·9 | 0·8 | |
| 9·1 | 53·6 | 26·6 | |
| 9·9 | 39 4·2 | 53·7 | |
| 10·1 | 7·2 | 32·7 | |
| 9·8 | 7·2 | 55·4 | |
| 9·9 | 8·7 | 36·7 | |
| 9·8 | 8·7 | 31·6 | |
| 10·1 | 9·7 | 35·3 | |
| 9·6 | 10·7 | 51·8 | |
| 10·1 | 18·2 | 33·0 | |



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## 4921—4980.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·1 | 39 | 19·0 | 1·3 | |
| 10·1 | | 22·0 | 1·1 | |
| 9·7 | | 28·2 | 53·0 | |
| 9·6 | | 35·0 | 9·4 | |
| 9·8 | | 40·7 | 30·6 | |
| 8·8 | | 44·0 | 8·2 | 8·5 |
| 10·0 | | 47·2 | 40·3 | |
| 9·8 | | 50·0 | 26·2 | |
| 9·3 | | 52·5 | 22·6 | |
| 9·6 | | 54·2 | 37·4 | |
| 10·1 | | 57·0 | 19·6 | |
| 8·8 | | 57·0 | 28·2 | |
| 10·0 | | 57·5 | 27·5 | |
| 9·6 | | 59·2 | 50·3 | |
| 10·1 | 40 | 2·7 | 50·0 | |
| 9·6 | | 4·5 | 0·3 | |
| 9·4 | | 5·2 | 44·0 | |
| 10·1 | | 9·2 | 39·8 | |
| 10·0 | | 12·7 | 53·7 | |
| 9·9 | | 13·7 | 52·8 | |
| 10·1 | | 17·7 | 40·0 | |
| 9·8 | | 22·7 | 53·8 | |
| 9·5 | | 26·0 | 16·4 | |
| 9·8 | | 29·0 | 13·7 | |
| 9·5 | | 30·0 | 4·5 | 9·0 |
| 9·8 | | 31·2 | 55·0 | |
| 9·7 | | 32·5 | 16·6 | |
| 9·8 | | 34·5 | 21·4 | |
| 9·8 | | 35·5 | 5·9 | |
| 10·0 | | 36·2 | 55·7 | |
| 10·1 | | 39·2 | 45·1 | |
| 9·5 | | 49·2 | 14·6 | |
| 10·1 | | 49·7 | 30·1 | |
| 9·6 | | 57·1 | 0·6 | 9·0 G |
| 9·4 | | 58·9 | 21·6 | |
| 9·6 | 41 | 0·9 | 21·2 | |
| 10·0 | | 1·2 | 6·2 | |
| 9·8 | | 1·4 | 22·3 | |
| 9·2 | | 2·9 | 14·0 | G |
| 9·6 | | 6·1 | 36·0 | |
| 9·7 | | 7·4 | 4·6 | |
| 9·8 | | 12·4 | 7·0 | |
| 8·8 | | 12·4 | 4·4 | 9·0 |
| 8·9 | | 13·8 | 51·0 | 9·5 |
| 9·8 | | 19·1 | 50·2 | |
| 9·2 | | 21·3 | 33·5 | |
| 8·6 | | 29·6 | 43·2 | 9·0 |
| 9·5 | | 30·4 | 13·8 | |
| 10·0 | | 32·4 | 7·3 | |
| 9·1 | | 33·9 | 4·2 | 9·5 |
| 10·0 | | 34·1 | 36·0 | |
| 9·6 | | 44·9 | 11·2 | |
| 9·5 | | 45·6 | 44·4 | |
| 9·6 | | 49·4 | 3·2 | 9·0 |
| 10·0 | | 49·9 | 19·8 | |
| 9·5 | | 50·6 | 38·6 | |
| 10·0 | | 51·1 | 1·8 | |
| 10·0 | | 52·9 | 10·3 | |
| 10·0 | | 55·1 | 56·8 | |
| 8·6 | | 59·0 | 43·7 | |

## 4981—5040.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 42 | 4·4 | 19·9 | |
| 9·2 | | 9·2 | 27·2 | |
| 9·6 | | 10·1 | 42·2 | |
| 10·1 | | 19·4 | 16·4 | |
| 10·0 | | 22·6 | 31·0 | |
| 10·1 | | 27·2 | 24·9 | |
| 10·0 | | 27·4 | 2·4 | |
| 9·5 | | 28·4 | 23·1 | |
| 10·0 | | 29·9 | 2·5 | |
| 8·0 | | 30·4 | 13·6 | GS |
| 9·6 | | 30·9 | 29·6 | |
| 8·9 | | 41·6 | 47·7 | 8·5 |
| 9·5 | | 50·1 | 31·8 | |
| 10·1 | 43 | 10·6 | 54·6 | |
| 9·5 | | 10·9 | 25·5 | |
| 10·1 | | 12·6 | 0·0 | |
| 9·7 | | 14·6 | 34·8 | |
| 9·6 | | 22·9 | 20·6 | |
| 9·2 | | 26·3 | 52·0 | |
| 9·7 | | 27·1 | 53·8 | |
| 9·8 | | 28·4 | 27·2 | |
| 9·2 | | 31·6 | 38·6 | |
| 9·9 | | 32·6 | 40·2 | |
| 9·5 | | 41·8 | 54·8 | |
| 9·4 | | 45·1 | 2·0 | |
| 8·9 | | 47·1 | 53·3 | |
| 9·2 | | 50·8 | 52·7 | |
| 10·1 | | 53·1 | 59·2 | |
| 10·0 | | 58·4 | 16·4 | |
| 10·0 | 44 | 6·9 | 29·4 | |
| 10·1 | | 16·9 | 11·8 | |
| 10·1 | | 24·9 | 4·0 | |
| 10·1 | | 26·2 | 14·5 | |
| 9·7 | | 26·4 | 17·2 | |
| 10·1 | | 28·2 | 15·2 | |
| 10·1 | | 34·6 | 47·6 | |
| 10·0 | | 36·4 | 29·6 | |
| 9·4 | | 38·9 | 17·1 | |
| 9·5 | | 39·9 | 4·8 | |
| 10·0 | | 45·6 | 53·5 | |
| 10·0 | | 46·4 | 7·7 | |
| 10·0 | | 49·6 | 45·8 | |
| 10·0 | | 51·1 | 34·1 | |
| 10·0 | | 51·6 | 53·3 | |
| 9·3 | | 55·2 | 29·6 | |
| 9·2 | | 59·1 | 46·8 | |
| 9·6 | 45 | 0·9 | 22·6 | |
| 9·8 | | 3·9 | 20·3 | |
| 9·6 | | 4·9 | 13·0 | |
| 9·4 | | 7·1 | 39·4 | |
| 9·5 | | 7·6 | 32·0 | 8·5 |
| 10·1 | | 10·1 | 46·2 | |
| 9·8 | | 11·6 | 54·9 | |
| 9·6 | | 16·5 | 33·7 | 8·5 |
| 10·0 | | 31·6 | 47·6 | |
| 9·6 | | 35·1 | 36·8 | |
| 9·9 | | 40·1 | 44·6 | |
| 9·8 | | 46·9 | 21·8 | |
| 9·9 | | 52·1 | 59·9 | |
| 10·1 | | 56·1 | 53·3 | |

## 5041—5100.

| mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·8 | 45 | 57·1 | 36·0 | 8·0 |
| 10·0 | 46 | 4·9 | 11·2 | |
| 10·1 | | 7·9 | 11·1 | |
| 10·0 | | 12·4 | 6·4 | |
| 9·6 | | 16·9 | 15·6 | |
| 9·7 | | 20·4 | 23·2 | |
| 10·0 | | 25·9 | 11·1 | |
| 9·1 | | 26·9 | 6·2 | |
| 9·4 | | 28·3 | 44·9 | |
| 10·0 | | 32·1 | 56·1 | |
| 9·8 | | 33·6 | 43·0 | |
| 10·0 | | 35·1 | 50·6 | |
| 9·8 | | 35·6 | 31·0 | |
| 10·0 | | 41·4 | 7·0 | |
| 9·8 | | 46·1 | 51·9 | |
| 10·0 | | 58·9 | 3·2 | |
| 10·1 | 47 | 0·6 | 48·0 | |
| 10·0 | | 3·9 | 7·8 | |
| 10·0 | | 17·6 | 49·0 | |
| 9·5 | | 24·6 | 57·2 | 9·5 |
| 10·0 | | 32·9 | 22·8 | |
| 9·2 | | 35·9 | 6·4 | |
| 9·9 | | 38·4 | 24·7 | |
| 10·1 | | 49·6 | 56·7 | |
| 9·8 | 48 | 3·6 | 56·1 | |
| 9·2 | | 3·9 | 10·3 | 8·5 |
| 9·1 | | 4·4 | 7·5 | |
| 10·1 | | 9·9 | 29·4 | |
| 8·6 | | 14·3 | 42·4 | 9·0 |
| 10·1 | | 16·9 | 28·8 | |
| 10·0 | | 26·4 | 17·2 | |
| 10·0 | | 36·1 | 50·2 | |
| 8·4 | | 36·9 | 27·1 | 7·5 Gg |
| 9·7 | | 42·1 | 52·3 | |
| 9·0 | | 47·4 | 16·2 | 9·0 |
| 9·4 | | 51·8 | 54·2 | |
| 8·6 | | 52·9 | 20·4 | 9·0 |
| 9·8 | | 59·1 | 45·8 | |
| 10·0 | 49 | 1·4 | 22·5 | |
| 9·0 | | 3·8 | 38·2 | |
| 9·3 | | 3·8 | 41·8 | |
| 9·8 | | 4·6 | 36·5 | |
| 10·1 | | 6·9 | 3·4 | |
| 9·6 | | 8·2 | 28·9 | |
| 10·0 | | 10·9 | 3·4 | |
| 9·7 | | 11·6 | 42·2 | |
| 9·8 | | 13·4 | 15·1 | |
| 9·5 | | 23·4 | 9·1 | |
| 9·7 | | 27·6 | 38·9 | |
| 10·1 | | 29·6 | 45·9 | |
| 10·1 | | 35·4 | 26·4 | |
| 9·5 | | 40·9 | 16·1 | |
| 9·7 | | 41·9 | 18·2 | |
| 10·1 | | 43·4 | 10·2 | |
| 10·1 | | 44·9 | 8·7 | |
| 10·1 | | 53·4 | 47·4 | |
| 10·0 | | 58·6 | 47·4 | |
| 10·0 | 50 | 4·1 | 43·6 | |
| 10·0 | | 8·4 | 18·4 | |
| 9·3 | | 15·4 | 12·2 | |

## 5101—5160.

| | mag. | 15h. m | s | −62° ′ | |
|---|---|---|---|---|---|
| | 10·0 | 50 | 21·4 | 10·8 | |
| | 9·8 | | 26·4 | 4·5 | |
| | 10·0 | | 28·1 | 39·9 | |
| | 8·9 | | 39·5 | 40·4 | |
| | 10·1 | | 44·4 | 10·6 | |
| | 9·7 | | 53·4 | 13·8 | |
| | 9·7 | 51 | 5·9 | 1·0 | |
| | 9·6 | | 16·9 | 9·8 | |
| | 8·5 | | 19·0 | 32·0 | |
| | 10·0 | | 24·1 | 31·0 | |
| | 9·8 | | 26·6 | 36·8 | |
| | 10·1 | | 27·4 | 15·3 | |
| | 8·2 | | 28·4 | 21·9 | |
| ? | 9·6 | | 31·9 | 6·8 | |
| | 10·0 | | 34·4 | 16·3 | |
| | 10·0 | | 35·4 | 8·2 | |
| | 9·7 | | 39·2 | 26·8 | |
| | 9·6 | | 39·8 | 33·4 | |
| | 9·6 | | 42·4 | 29·8 | |
| | 8·4 | | 46·5 | 46·4 | 7·5 G |
| | 9·6 | | 49·4 | 8·6 | |
| | 6·6 | | 54·4 | 11·2 | 7·0 GS |
| | 10·0 | | 55·6 | 41·3 | |
| | 9·4 | | 59·4 | 0·3 | |
| | 10·1 | 52 | 6·1 | 37·0 | |
| | 9·9 | | 7·4 | 11·1 | |
| | 9·8 | | 7·9 | 1·3 | |
| | 9·6 | | 16·4 | 12·2 | |
| | 9·6 | | 20·6 | 36·4 | |
| | 9·6 | | 21·1 | 46·1 | |
| | 9·8 | | 25·1 | 41·3 | |
| | 10·1 | | 27·1 | 51·8 | |
| | 10·1 | | 27·1 | 55·5 | |
| | 9·6 | | 30·4 | 11·8 | |
| | 9·5 | | 33·2 | 1·9 | |
| | 9·8 | | 33·9 | 8·2 | |
| | 10·0 | | 38·1 | 45·2 | |
| | 10·1 | | 40·1 | 51·5 | |
| | 9·9 | | 45·1 | 32·3 | |
| | 10·0 | | 46·6 | 35·7 | |
| | 8·8 | | 48·2 | 20·3 | |
| | 10·0 | | 52·4 | 29·6 | |
| | 10·0 | 53 | 5·1 | 35·3 | |
| | 9·6 | | 6·0 | 57·9 | |
| | 10·0 | | 7·1 | 46·0 | |
| | 9·8 | | 7·8 | 56·5 | |
| | 8·9 | | 11·1 | 36·8 | |
| | 9·9 | | 11·6 | 48·9 | |
| | 9·6 | | 12·3 | 42·0 | |
| | 9·6 | | 17·5 | 45·9 | |
| | 10·0 | | 20·6 | 53·5 | |
| | 9·6 | | 21·2 | 3·4 | |
| | 9·6 | | 26·6 | 29·8 | |
| | 10·1 | | 29·4 | 28·7 | |
| | 9·6 | | 34·1 | 38·0 | |
| | 10·0 | | 38·6 | 41·8 | |
| | 10·0 | | 44·9 | 16·2 | |
| | 10·1 | | 49·1 | 51·4 | |
| | 9·6 | | 51·2 | 19·9 | |
| | 8·9 | | 56·1 | 30·7 | |

25 proc.

| h | m | α + s | δ − |
|---|---|---|---|
| 15 | 30 | 128 | 5·1 |
| | 40 | 129 | 4·8 |
| | 50 | 131 | 4·5 |
| 16 | 0 | 132 | 4·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 50 | 131 | 4·5 |
| 16 | 0 | 132 | 4·2 |
| | 10 | 134 | 3·9 |
| | 20 | 135 | 3·5 |
| | 30 | 136 | 3·2 |

**5161—5220.**

| | 15h.–16h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·9 | 53 | 56·4 | 10·0 | |
| 9·9 | | 59·1 | 50·2 | |
| 10·0 | | 59·6 | 46·9 | |
| 10·1 | | 59·6 | 44·8 | |
| 9·6 | 54 | 9·1 | 29·8 | |
| 10·1 | | 10·1 | 55·4 | |
| 9·8 | | 16·9 | 3·8 | |
| 9·8 | | 22·1 | 36·7 | |
| 9·6 | | 22·6 | 28·4 | |
| 9·5 | | 22·6 | 49·9 | |
| 9·7 | | 23·5 | 26·1 | |
| 8·6 | | 32·6 | 21·6 | |
| 9·6 | | 33·1 | 49·9 | |
| 9·2 | | 37·3 | 40·9 | |
| 9·1 | | 40·8 | 36·4 | |
| 10·0 | | 46·1 | 57·8 | |
| 8·7 | | 53·2 | 4·9 | |
| 9·5† | 55 | 1·0 | 58·7 | |
| 7·6† | | 17·5 | 59·8 | 7·5 G |
| 9·0† | | 21·5 | 46·2 | 9·0 |
| 9·0 | | 30·5 | 18·2 | G |
| 9·7† | | 41·0 | 58·3 | |
| 9·0† | | 45·0 | 42·1 | |
| 7·9 | | 57·7 | 25·1 | 7·5 G |
| 10·0 | 56 | 1·0 | 21·4 | |
| 9·7† | | 5·0 | 49·7 | |
| 8·4 | | 12·5 | 34·0 | 8·0 G |
| 9·5† | | 20·0 | 55·1 | |
| 9·5† | | 40·5 | 43·1 | |
| 9·4† | 57 | 0·5 | 41·1 | |
| 9·1† | | 5·5 | 57·1 | |
| 8·8 | | 5·5 | 27·0 | 9·0 |
| 6·9† | | 25·5 | 38·5 | 8·0 GS |
| 9·7† | | 30·0 | 37·1 | |
| 8·9 | | 40·0 | 23·6 | |
| 8·6† | | 45·5 | 58·1 | |
| 9·5 | | 52·7 | 34·8 | |
| 9·0† | | 59·5 | 51·9 | |
| 9·4 | 58 | 19·0 | 22·9 | |
| 9·8 | | 29·5 | 16·2 | |
| 9·0 | | 32·5 | 28·9 | |
| 6·9† | | 50·5 | 37·7 | 7·0 GSc |
| 9·6 | | 54·0 | 27·2 | |
| 9·8 | | 57·0 | 24·1 | |
| 9·6 | 59 | 1·0 | 27·4 | 9·0 |
| 9·1† | | 1·5 | 56·1 | |
| 7·7 | | 18·5 | 35·2 | 7·5 GSc |
| 9·5† | | 31·0 | 59·1 | |
| 9·5† | | 31·5 | 47·5 | |
| 10·0 | | 31·5 | 21·8 | |
| 8·8† | | 42·0 | 36·5 | 9·0 |
| 9·4 | | 51·0 | 13·0 | |
| 10·0 | 0 | 7·5 | 13·6 | |
| 10·0 | | 7·5 | 15·8 | |
| 10·0 | | 34·5 | 24·6 | |
| 9·2 | | 35·0 | 32·3 | |
| 8·9 | | 36·5 | 28·7 | |
| 9·0† | | 51·5 | 53·1 | |
| 9·2 | 1 | 20·0 | 19·1 | 9·5 |
| 9·6† | | 47·5 | 55·8 | |

**5221—5280.**

| | 16h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9·1† | 2 | 3·5 | 52·1 | 8·0 |
| 9·8 | | 3·5 | 31·2 | |
| 9·6 | | 12·0 | 20·0 | 9·0 |
| 8·0† | | 42·5 | 43·9 | 7·5 G |
| 9·0† | | 42·5 | 40·9 | 9·0 G |
| 10·0 | | 47·0 | 14·0 | |
| 9·1† | | 58·5 | 40·5 | 7·5 G |
| 9·4 | 3 | 11·0 | 26·8 | |
| 8·1 | | 18·0 | 26·8 | |
| 10·0 | | 21·5 | 20·1 | |
| 9·4† | | 28·5 | 48·9 | |
| 8·9 | | 40·0 | 21·6 | |
| 9·5† | | 45·0 | 43·5 | |
| 9·8 | | 51·5 | 34·0 | |
| 9·1 | 4 | 3·0 | 5·6 | 9·0 |
| 9·2† | | 12·5 | 56·1 | 8·5 |
| 9·8 | | 22·0 | 8·4 | |
| 10·0 | | 23·3 | 1·0 | |
| 9·3† | | 31·0 | 46·0 | |
| 10·0 | | 34·0 | 18·2 | |
| 9·4 | | 46·5 | 7·0 | 8·8 |
| 9·3 | | 50·0 | 23·8 | |
| 9·3 | | 52·0 | 32·0 | 8·5 |
| 9·6† | | 55·5 | 55·9 | |
| 9·4† | 5 | 11·5 | 38·6 | |
| 10·0 | | 12·0 | 5·5 | |
| 9·6† | | 17·0 | 57·1 | |
| 9·6 | | 21·5 | 28·8 | |
| 9·0 | | 30·0 | 8·8 | 9·5 |
| 9·8 | | 35·5 | 17·0 | |
| 10·0 | | 48·0 | 21·9 | |
| 10·0 | 6 | 10·0 | 23·2 | |
| 9·8 | | 17·0 | 8·0 | |
| 9·6 | | 22·5 | 12·0 | 9·0 |
| 9.2 | | 24·0 | 22·0 | |
| 10·0 | | 26·0 | 19·8 | |
| 9·6 | | 29·0 | 15·6 | |
| 9·4† | | 30·5 | 48·3 | |
| 9·1† | | 40·5 | 48·4 | 9·0 |
| 10·0 | | 43·5 | 20·8 | |
| 9·1 | | 43·5 | 14·8 | |
| 10·0 | | 44·5 | 8·6 | |
| 9·1† | | 49·0 | 37·1 | |
| 9·6† | | 55·5 | 58·3 | |
| 9·3† | 7 | 11·0 | 25·3 | |
| 8·6† | | 17·0 | 44·1 | 8·5 |
| 8·6 | | 19·5 | 10·8 | 8·5 |
| 9·7† | | 35·0 | 39·7 | |
| 9·7† | | 45·0 | 51·3 | |
| 9·6† | 8 | 1·0 | 57·3 | |
| 9·6 | | 1·5 | 3·0 | |
| 9·6† | | 4·5 | 45·1 | |
| 9·6 | | 5·5 | 23·6 | |
| 8·5 | | 6·5 | 19·4 | |
| 8·4 | | 6·5 | 8·9 | 8·2 |
| 9·3† | | 11·5 | 35·5 | |
| 8·9 | | 40·5 | 32·8 | |
| 10·0 | | 42·5 | 3·1 | |
| 9·2 | | 45·5 | 34·2 | |
| 9·1† | | 57·0 | 40·1 | |

**5281—5340.**

| | 16h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·0 | 9 | 2·5 | 5·5 | |
| 10·0 | | 7·5 | 25·5 | |
| 10·0 | | 30·5 | 30·2 | |
| 9·1† | | 32·5 | 59·7 | |
| 9·3 | | 36·5 | 6·1 | |
| 8·8 | | 39·0 | 20·6 | 8·5 |
| 9·6† | 10 | 10·0 | 37·9 | |
| 9·0 | | 13·5 | 34·6 | |
| 8·5 | | 17·0 | 17·5 | 8·5 |
| 9·6† | | 37·0 | 35·7 | |
| 9·4 | | 45·0 | 16·2 | 8·5 |
| 9·1 | | 45·5 | 17·0 | 9·5 |
| 9·4† | | 49·5 | 39·4 | |
| 9·0† | | 51·0 | 41·1 | |
| 9·1† | 11 | 15·0 | 42·1 | |
| 9·3† | | 18·5 | 37·1 | |
| 9·2† | | 20·0 | 55·1 | |
| 9·2† | | 21·0 | 45·3 | |
| 8·2 | | 34·0 | 16·0 | 7·5 GS |
| 9·0 | | 43·5 | 14·6 | 10·0 |
| 9·1† | | 49·5 | 42·5 | |
| 10·0 | | 57·5 | 27·0 | |
| 9·6† | | 58·5 | 25·2 | |
| 10·0 | 12 | 5·5 | 5·0 | |
| 8·6† | | 10·5 | 50·0 | |
| 10·0 | | 19·5 | 18·1 | |
| 9·7† | | 44·5 | 53·2 | |
| 8·5† | | 47·5 | 38·3 | |
| 8·8† | | 48·0 | 47·8 | 9·0 |
| 9·6 | | 52·5 | 15·2 | |
| 9·3† | | 53·5 | 55·6 | |
| 10·0 | 13 | 3·0 | 3·2 | |
| 9·2† | | 8·5 | 39·6 | |
| 10·0 | | 12·0 | 21·7 | |
| 9·4 | | 14·0 | 21·9 | |
| 10·0 | | 22·0 | 24·8 | |
| 9·6† | | 26·5 | 38·2 | |
| 9·6 | | 27·0 | 26·7 | |
| 9·3† | | 29·5 | 50·0 | |
| 10·0 | | 34·0 | 24·7 | 9·0 |
| 9·8 | | 35·0 | 8·2 | |
| 9·3† | | 44·5 | 54·3 | 8·5 |
| 8·9 | | 52·5 | 10·3 | |
| 10·0 | | 59·5 | 17·8 | |
| 6·3† | 14 | 0·5 | 49·8 | 7·0 GS |
| 9·5† | | 7·0 | 45·6 | |
| 9·0 | | 25·5 | 12·6 | |
| 9·8 | | 32·5 | 15·4 | |
| 9·4† | | 38·5 | 45·8 | |
| 9·0 | | 45·5 | 28·0 | |
| 8·8 | | 45·5 | 7·8 | 8·5 |
| 10·0 | 15 | 1·5 | 28·3 | |
| 8·6† | | 28·0 | 59·7 | 8·5 |
| 9·2† | | 29·5 | 40·8 | |
| 9·5 | 16 | 13·5 | 28·4 | |
| 9·1 | | 27·0 | 0·5 | 8·5 |
| 9·7† | | 34·5 | 32·5 | |
| 8·1 | | 42·0 | 18·6 | 8·0 |
| 9·3 | | 46·0 | 11·2 | 9·0 |
| 9·0 | | 58·5 | 33·0 | |

**5341—5400.**

| | 16h. | | −62° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10·0 | 17 | 14·0 | 16·5 | |
| 8·5† | | 18·0 | 51·4 | |
| 8·8 | | 19·3 | 2·7 | 8·5 |
| 8·5 | | 32·0 | 19·8 | 9·0 |
| 10·0 | | 32·5 | 19·0 | |
| 9·6 | | 39·5 | 21·0 | |
| 9·2 | | 47·0 | 10·8 | |
| 9·4 | | 51·5 | 9·9 | |
| 10·0 | 18 | 2·0 | 6·6 | |
| 8·2† | | 4·0 | 36·8 | 8·0 G |
| 9·1† | | 12·3 | 51·9 | |
| 9·1 | | 18·5 | 27·0 | |
| 9·6† | | 31·5 | 36·1 | |
| 10·0 | | 40·0 | 4·8 | |
| 9·6† | | 53·2 | 57·9 | |
| 9·4† | 19 | 20·0 | 52·9 | |
| 9·6 | | 29·0 | 23·2 | |
| 9·7† | | 59·5 | 48·7 | |
| 9·6 | 20 | 1·0 | 18·8 | |
| 8·8 | | 17·0 | 2·6 | 9·2 |
| 9·6† | | 31·5 | 36·6 | |
| 7·2 | | 36·5 | 1·0 | 7·5 GS |
| 9·8 | | 40·0 | 7·4 | |
| 10·0 | | 43·0 | 8·8 | |
| 9·5 | 21 | 5·0 | 25·0 | |
| 9·6‡ | | 9·2 | 42·3 | |
| 10·0 | | 11·5 | 8·8 | |
| 9·7‡ | | 18·7 | 42·3 | |
| 9·7‡ | | 20·7 | 58·0 | |
| 10·0 | | 32·0 | 8·2 | |
| 10·0 | | 38·5 | 25·2 | 9·5 |
| 8·9‡ | 22 | 2·0 | 43·4 | |
| 9·0 | | 10·0 | 24·0 | 9·0 |
| 9·6 | | 18·0 | 15·6 | |
| 10·0 | | 39·5 | 16·2 | |
| 9·6 | | 51·0 | 21·6 | |
| 9·7‡ | 23 | 3·5 | 52·0 | |
| 7·4 | | 5·5 | 0·5 | 7·5 G |
| 9·8 | | 38·0 | 6·2 | |
| 9·7‡ | | 42·5 | 51·0 | |
| 9·0 | | 46·5 | 27·0 | |
| 10·0 | | 55·0 | 13·3 | |
| 9·6 | 24 | 9·5 | 13·4 | |
| 10·0 | | 10·0 | 3·7 | |
| 9·0‡ | | 18·5 | 41·9 | |
| 9·7‡ | | 32·0 | 40·1 | |
| 8·5 | | 42·5 | 16·5 | 8·0 |
| 9·7‡ | 25 | 1·0 | 38·0 | |
| 8·4 | | 17·0 | 22·9 | 8·5 |
| 9·1 | | 21·0 | 22·0 | 8·5 |
| 9·7‡ | | 52·5 | 56·9 | |
| 9·0‡ | 26 | 1·0 | 40·7 | |
| 8·9‡ | | 32·0 | 53·3 | 8·0 |
| 10·0 | | 39·5 | 27·2 | |
| 9·6 | 27 | 8·5 | 10·6 | 9·5 |
| 10·0 | | 10·0 | 10·9 | |
| 10·0 | | 27·0 | 20·6 | |
| 9·2‡ | | 30·0 | 42·4 | |
| 8·9 | | 36·1 | 27·9 | 8·8 |
| 9·7‡ | | 39·0 | 43·4 | |



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### 5401—5460.

| mag. | 16h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 28 | 1·0 | 14·2 | |
| 9·0 | | 19·8 | 14·7 | |
| 9·4 | | 36·0 | 21·2 | |
| 8·9‡ | | 38·5 | 40·7 | 8·5 |
| 9·8 | 29 | 1·0 | 17·3 | |
| 7·7 | | 21·0 | 18·1 | 8·0 |
| 9·0 | | 25·8 | 10·8 | |
| 10·0 | | 47·0 | 15·8 | |
| 8·6– | | 48·3 | 27·9 | 9·0 |
| 8·9‡ | | 51·0 | 38·0 | 8·0 |
| 8·6 | 30 | 17·0 | 21·7 | 9·0 |
| 8·6 | | 19·5 | 20·2 | |
| 9·7‡ | | 33·0 | 53·5 | |
| 9·0 | | 56·0 | 18·6 | 9·5 |
| 9·8 | | 58·5 | 23·7 | |
| 8·6 | 31 | 0·5 | 21·9 | 9·0 |
| 8·8 | | 2·0 | 0·6 | |
| 8·6 | | 4·0 | 1·1 | 9·2 |
| 9·2‡ | | 5·5 | 47·4 | |
| 9·6‡ | | 20·5 | 57·8 | |
| 8·0 | | 24·0 | 7·4 | 7·3 GS |
| 7·8 | | 24·0 | 18·3 | 7·0 G |
| 9·7‡ | | 32·5 | 48·6 | |
| 9·6 | | 33·0 | 26·7 | |
| 9·4 | 32 | 12·5 | 33·1 | |
| 9·6 | | 29·5 | 25·2 | |
| 9·4 | | 46·5 | 11·6 | 9·1 |
| 9·0‡ | 33 | 6·5 | 38·9 | |
| 9·3 | | 28·0 | 9·9 | 9·2 |
| 9·7 | 34 | 51·0 | 3·6 | 8·6 |
| 9·7 | 35 | 21·5 | 6·1 | 9·5 |
| 8·2‡ | | 46·5 | 43·0 | 9·0 |
| 8·6 | 36 | 2·0 | 30·2 | |
| 9·7‡ | | 3·0 | 43·2 | |
| 9·7 | | 8·0 | 19·3 | |
| 9·8 | | 19·5 | 5·8 | 9·5 |
| 9·3 | | 54·0 | 9·3 | 9·2 |
| 9·3 | 37 | 4·5 | 23·0 | 9·5 |
| 9·7 | | 29·5 | 9·8 | |
| 9·3 | | 29·5 | 4·8 | 9·5 |
| 9·7 | | 34·5 | 28·0 | |
| 9·4 | | 35·5 | 6·1 | |
| 9·0‡ | 38 | 5·5 | 51·1 | |
| 9·7 | | 17·0 | 7·0 | |
| 9·0 | | 21·5 | 10·2 | 8·7 |
| 9·6 | | 24·0 | 22·2 | |
| 9·7 | | 35·0 | 26·2 | |
| 9·8 | | 52·0 | 3·0 | |
| 8·6 | | 53·5 | 10·9 | 9·5 |
| 9·8 | 39 | 24·0 | 18·8 | |
| 8·3‡ | | 33·5 | 44·2 | 8·8 |
| 9·8 | 40 | 3·0 | 11·6 | |
| 9·3 | | 16·5 | 28·1 | |
| 8·0 | | 42·3 | 30·9 | 8·2 GS |
| 9·7‡ | | 51·5 | 37·2 | 9·5 |
| 9·3 | | 56·0 | 31·0 | 9·2 |
| 9·4‡ | 43 | 9·2 | 59·9 | |
| 8·8 | | 11·0 | 29·5 | |
| 9·8 | | 24·5 | 7·0 | |
| 9·0‡ | | 45·0 | 50·8 | |

### 5461—5520.

| mag. | 16h.—17h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·7‡ | 43 | 46·5 | 56·0 | |
| 9·7‡ | | 54·0 | 52·5 | 9·0 |
| 9·2 | 44 | 1·0 | 6·2 | 8·8 |
| 9·2 | | 30·5 | 15·0 | |
| 9·8 | | 45·0 | 14·9 | |
| 8·4 | | 54·5 | 20·0 | 9·0 |
| 9·3 | 45 | 13·5 | 1·1 | |
| 9·7‡ | | 36·0 | 52·8 | |
| 9·8 | 46 | 1·5 | 12·5 | |
| 8·6‡ | | 16·8 | 57·7 | |
| 9·0 | | 27·0 | 21·7 | 8·8 |
| 9·5‡ | | 30·0 | 48·4 | |
| 9·4 | | 33·0 | 11·0 | |
| 9·6 | 47 | 47·0 | 24·9 | |
| 9·1 | 48 | 15·0 | 22·1 | |
| 9·7 | 49 | 7·0 | 13·3 | |
| 9·6 | | 10·0 | 17·7 | |
| 9·8 | | 14·0 | 12·2 | |
| 9·8 | 50 | 34·0 | 7·1 | 9·5 |
| 8·7 | 51 | 47·5 | 23·2 | 8·5 |
| 9·0 | | 57·0 | 14·6 | |
| 9·8 | 52 | 35·5 | 17·1 | |
| 8·6 | | 47·0 | 22·2 | 9·5 |
| 9·7 | | 53·5 | 24·0 | |
| 8·2 | 53 | 54·5 | 28·2 | 8·8 |
| 9·4 | 54 | 2·0 | 13·2 | |
| 9·7 | | 8·0 | 24·8 | |
| 8·6 | | 41·0 | 7·6 | 8·5 |
| 9·7 | 55 | 26·0 | 20·4 | |
| 8·8 | | 42·0 | 26·2 | |
| 8·9 | | 44·5 | 20·3 | |
| 8·8 | 56 | 6·5 | 9·6 | |
| 9·7‡ | | 20·0 | 37·2 | |
| 9·1 | 57 | 42·2 | 25·2 | |
| 9·6 | 58 | 14·2 | 33·0 | |
| 9·9† | | 24·5 | 56·0 | |
| 9·8 | 0 | 21·5 | 34·2 | |
| 9·9† | | 38·0 | 41·4 | |
| 9·9† | 1 | 19·5 | 49·5 | |
| 7·2 | 2 | 36·9 | 34·7 | 7·5 GScg |
| 8·5† | | 41·5 | 41·0 | 8·8 G |
| 8·5† | | 48·0 | 54·0 | 8·5 G |
| 9·2† | 3 | 8·5 | 40·9 | |
| 9·8 | 4 | 2·5 | 1·7 | |
| 7·8 | | 7·0 | 29·9 | 8·0 G |
| 9·6– | | 32·2 | 28·5 | 9·0 |
| 10·0 | 5 | 16·8 | 50·7 | |
| 9·3 | | 16·9 | 58·4 | |
| 10·0 | | 27·2 | 13·1 | |
| 10·0 | | 47·4 | 1·6 | |
| 9·8 | | 56·4 | 28·6 | |
| 8·5 | 6 | 15·8 | 33·4 | 7·8 G |
| 10·0 | | 31·8 | 52·7 | |
| 9·1 | | 57·2 | 27·1 | 9·0 |
| 9·5 | | 57·4 | 21·9 | |
| 9·4 | | 59·4 | 22·4 | 8·0 |
| 9·6 | 7 | 6·8 | 33·6 | |
| 7·9 | | 10·3 | 43·9 | 7·0 GSc |
| 8·8 | | 28·1 | 38·0 | 9·2 |
| 9·8 | | 35·8 | 47·4 | |

### 5521—5580.

| mag. | 17h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8 | 7 | 42·3 | 30·7 | |
| 9·8 | | 52·3 | 49·2 | |
| 8·7 | 8 | 28·2 | 21·7 | |
| 9·6 | | 33·8 | 37·0 | |
| 9·8 | | 34·8 | 50·8 | |
| 9·5 | | 53·0 | 58·2 | |
| 9·3 | | 57·4 | 3·4 | 8·8 |
| 9·5 | 9 | 4·3 | 37·3 | |
| 9·4 | | 17·4 | 28·9 | |
| 9·1 | | 23·4 | 17·5 | |
| 8·7 | | 35·3 | 46·9 | |
| 9·4 | | 42·4 | 7·9 | 9·2 |
| 9·6 | 10 | 4·3 | 35·9 | |
| 9·0 | | 13·2 | 39·5 | 9·5 |
| 10·0 | | 24·9 | 19·9 | |
| 9·8 | | 27·4 | 28·2 | |
| 9·6 | | 47·3 | 44·2 | |
| 9·6 | | 50·4 | 11·7 | |
| 10·0 | | 54·8 | 56·0 | |
| 9·9 | | 55·9 | 26·6 | |
| 9·6 | | 58·3 | 32·6 | |
| 8·8 | 11 | 9·9 | 20·5 | 8·8 |
| 9·9 | | 10·4 | 26·8 | |
| 8·4 | | 16·3 | 57·9 | |
| 9·0 | | 18·4 | 3·6 | |
| 10·0 | | 19·8 | 31·9 | |
| 9·6 | | 23·8 | 49·9 | |
| 9·8 | | 24·9 | 28·8 | |
| 10·0 | | 35·8 | 31·4 | |
| 8·6 | | 37·4 | 11·2 | G |
| 9·4 | | 41·1 | 33·3 | |
| 8·6 | | 45·8 | 30·8 | |
| 9·4 | | 48·3 | 44·4 | |
| 9·8 | | 50·8 | 45·4 | |
| 8·0 | | 58·3 | 42·8 | 8·2 G |
| 9·4 | 12 | 1·8 | 49·6 | |
| 9·6 | | 4·4 | 12·1 | |
| 5·9 | | 16·8 | 44·2 | 6·0 GSc |
| 9·1 | | 32·9 | 41·9 | |
| 9·2 | | 38·9 | 13·8 | |
| 8·7 | | 44·9 | 6·2 | 9·5 |
| 9·0 | | 58·6 | 2·8 | 9·5 |
| 9·4 | 13 | 5·9 | 18·8 | |
| 9·8 | | 29·4 | 15·6 | |
| 9·6 | | 34·9 | 20·0 | |
| 9·0 | | 39·9 | 13·6 | |
| 9·6 | | 47·8 | 44·0 | |
| 9·9 | | 52·8 | 40·0 | |
| 9·9 | 14 | 27·4 | 18·0 | |
| 10·0 | | 27·8 | 58·3 | |
| 10·0 | | 28·8 | 59·0 | |
| 8·9 | | 32·9 | 22·8 | |
| 9·3 | | 32·9 | 42·0 | |
| 9·8 | | 48·3 | 36·2 | |
| 9·6 | | 48·8 | 30·8 | |
| 8·6 | | 50·9 | 23·6 | 8·8 |
| 8·0 | | 51·3 | 48·1 | 7·5 GS |
| 9·6 | | 51·3 | 46·6 | |
| 9·6 | | 55·3 | 47·2 | |
| 9·8 | 15 | 0·3 | 42·0 | |

### 5581—5640.

| mag. | 17h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·9 | 15 | 5·8 | 0·1 | 8·0 |
| 10·0 | | 10·9 | 25·0 | |
| 9·6 | | 49·4 | 15·0 | |
| 9·2 | | 51·1 | 2·4 | 10·0 |
| 9·4 | 16 | 2·9 | 7·1 | 9·5 |
| 9·6 | | 5·8 | 30·6 | |
| 9·5 | | 8·4 | 30·8 | |
| 10·0 | | 12·9 | 10·4 | |
| 9·6 | | 14·4 | 28·6 | |
| 6·7 | | 21·3 | 55·3 | 6·5 GS |
| 7·8 | | 27·1 | 49·8 | 8·0 G |
| 9·8 | | 30·9 | 5·0 | |
| 9·6 | | 34·8 | 38·3 | |
| 9·4 | | 59·3 | 43·5 | |
| 10·0 | 17 | 3·4 | 21·7 | |
| 9·6 | | 5·8 | 42·3 | |
| 9·9 | | 6·9 | 16·8 | |
| 9·8 | | 27·3 | 2·1 | |
| 10·0 | | 35·3 | 46·5 | |
| 9·2 | | 43·9 | 24·2 | |
| 10·0 | | 47·9 | 0·8 | |
| 9·9 | | 53·2 | 54·8 | |
| 9·1 | 18 | 12·3 | 38·4 | |
| 10·0 | | 14·9 | 18·5 | |
| 10·0 | | 55·4 | 22·5 | |
| 9·9 | | 59·8 | 36·0 | |
| 9·1 | 19 | 1·8 | 56·6 | |
| 9·8 | | 16·3 | 44·8 | |
| 9·6 | | 33·4 | 17·8 | |
| 10·0 | | 41·8 | 56·6 | |
| 9·0 | | 42·4 | 36·3 | |
| 9·5 | 20 | 1·4 | 15·6 | |
| 9·8 | | 9·4 | 27·2 | |
| 9·6 | | 23·4 | 15·8 | |
| 9·8 | | 26·8 | 55·2 | |
| 9·6 | | 31·8 | 39·2 | |
| 10·0 | | 37·9 | 16·9 | |
| 9·1 | | 40·4 | 3·8 | 8·7 |
| 9·8 | | 43·4 | 23·9 | |
| 9·4 | | 44·4 | 42·2 | |
| 8·2 | 21 | 5·4 | 8·1 | 7·7 G |
| 9·8 | | 8·8 | 56·4 | |
| 9·3 | | 41·9 | 40·8 | |
| 9·2 | | 58·6 | 34·0 | |
| 9·8 | 22 | 28·9 | 29·3 | |
| 9·2 | | 29·9 | 18·8 | |
| 7·5 | 23 | 26·3 | 1·1 | 7·5 G |
| 8·8 | | 28·3 | 53·9 | 8·2 |
| 10·0 | | 31·9 | 14·0 | |
| 9·6 | | 37·3 | 58·5 | |
| 9·0 | | 53·2 | 51·7 | 9·5 |
| 9·1 | 24 | 25·7 | 25·7 | |
| 9·4 | | 32·4 | 5·9 | 9·5 |
| 10·0 | | 33·2 | 33·9 | |
| 9·9 | | 33·4 | 25·8 | |
| 9·8 | | 45·9 | 28·3 | |
| 10·0 | | 51·4 | 6·5 | |
| 9·5 | | 59·8 | 53·4 | |
| 9·6 | 25 | 9·3 | 45·2 | |
| 8·9 | | 11·4 | 50·8 | 9·2 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 20 | 135 | 3·5 |
| | 30 | 136 | 3·2 |
| | 40 | 137 | 2·9 |
| | 50 | 138 | 2·5 |
| 17 | 0 | 139 | 2·2 |
| | 10 | 139 | 1·8 |
| | 20 | 140 | 1·5 |
| | 30 | 140 | 1·1 |



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| | | 25 prec. α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 17 | 20 | 140 | 1·5 |
| | 30 | 140 | 1·1 |
| | 40 | 141 | 0·7 |
| | 50 | 141 | 0·4 |
| 18 | 0 | 141 | 0·0 |
| | | | + |
| | 10 | 141 | 0·4 |
| | 20 | 141 | 0·7 |

**5641—5700.**

| mag. | 17ʰ m | s | −62° ′ | |
|---|---|---|---|---|
| 9·5 | 26 | 0·3 | 45·0 | |
| 9·9 | | 2·9 | 8·7 | |
| 9·8 | | 7·8 | 59·5 | |
| 9·5 | | 19·4 | 17·9 | |
| 10·0 | | 24·6 | 0·9 | |
| 9·8 | 27 | 3·8 | 46·8 | |
| 9·6 | | 4·8 | 47·7 | |
| 9·9 | | 13·3 | 42·8 | |
| 9·9 | | 26·9 | 11·0 | |
| 9·9 | | 45·4 | 22·4 | |
| 10·0 | 28 | 1·4 | 28·0 | |
| 9·8 | | 3·8 | 47·2 | |
| 9·6 | | 19·3 | 33·4 | |
| 9·4 | | 31·8 | 52·3 | |
| 9·6 | | 34·4 | 7·6 | |
| 9·4 | | 43·3 | 56·8 | |
| 9·0 | 29 | 2·4 | 5·1 | 8·8 G |
| 9·6 | | 5·8 | 33·5 | |
| 9·8 | | 33·4 | 24·8 | |
| 9·6 | | 41·8 | 30·0 | |
| 9·4 | | 50·3 | 35·9 | |
| 9·8 | 30 | 0·9 | 8·2 | |
| 8·6 | | 6·9 | 16·3 | 9·5 |
| 10·0 | | 14·4 | 12·0 | |
| 10·0 | | 34·9 | 11·4 | |
| 9·9 | | 35·3 | 40·6 | |
| 9·4 | | 40·4 | 51·9 | |
| 9·9 | | 54·9 | 12·1 | |
| 9·9 | 31 | 25·3 | 48·7 | |
| 9·6 | | 28·8 | 42·7 | 9·5 |
| 9·3 | | 41·3 | 1·2 | |
| 9·4 | | 46·3 | 42·9 | |
| 10·0 | 32 | 27·4 | 19·5 | |
| 9·8 | | 34·8 | 55·7 | |
| 9·8 | | 38·4 | 22·9 | |
| 9·8 | | 39·9 | 7·9 | |
| 9·5 | | 41·1 | 1·2 | |
| 9·4 | | 55·6 | 1·1 | |
| 9·2 | 33 | 14·4 | 15·9 | |
| 9·8 | | 17·8 | 50·5 | |
| 9·5 | | 22·4 | 45·2 | 9·5 |
| 9·4 | | 35·3 | 54·7 | |
| 9·9 | | 37·8 | 57·6 | |
| 9·9 | | 57·4 | 17·9 | |
| 10·0 | 34 | 1·9 | 38·7 | |
| 10·0 | | 5·4 | 19·3 | |
| 9·1 | | 34·9 | 27·0 | |
| 9·2 | | 37·9 | 25·3 | |
| 9·5 | | 48·2 | 36·2 | |
| 8·0 | | 49·4 | 40·8 | 8·0 G |
| 9·4 | 35 | 4·9 | 11·6 | G |
| 10·0 | | 24·4 | 23·5 | |
| 9·2 | 36 | 30·8 | 29·9 | |
| 8·8 | | 45·4 | 53·0 | |
| 9·8 | | 49·3 | 36·3 | |
| 10·0 | | 52·4 | 27·7 | |
| 8·4 | 37 | 2·4 | 5·7 | 8·2 G |
| 9·3 | | 5·3 | 36·9 | |
| 9·8 | | 9·9 | 7·7 | |
| 9·3 | | 14·9 | 10·0 | 9·0 |

**5701—5760.**

| mag. | 17ʰ m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8 | 37 | 18·4 | 16·6 | |
| 9·9 | | 28·3 | 31·8 | |
| 10·0 | | 34·4 | 9·7 | |
| 8·2 | 38 | 26·5 | 37·9 | 8·0 |
| 9·8 | | 28·9 | 10·7 | |
| 10·3‡ | | 31·1 | 56·4 | |
| 9·8 | | 32·0 | 37·9 | |
| 9·8 | | 35·3 | 37·7 | |
| 9·9 | | 43·4 | 14·0 | |
| 10·2‡ | | 47·6 | 59·9 | |
| 10·0‡ | 39 | 12·6 | 45·1 | |
| 10·0‡ | | 30·6 | 47·1 | |
| 9·5 | | 33·4 | 3·9 | |
| 8·9 | | 38·4 | 22·7 | 8·8 |
| 8·4 | | 48·1 | 35·5 | 7·8 G |
| 9·1‡ | | 50·8 | 58·3 | |
| 10·2‡ | | 57·1 | 48·6 | |
| 10·0‡ | | 57·5 | 51·9 | |
| 10·0 | 40 | 6·6 | 37·0 | |
| 9·6 | | 7·4 | 15·6 | |
| 9·4 | | 18·0 | 1·5 | |
| 10·2‡ | | 38·9 | 41·5 | |
| 10·2‡ | | 55·1 | 44·2 | |
| 9·9 | 41 | 28·8 | 30·0 | |
| 9·8 | | 34·8 | 16·1 | |
| 10·2‡ | | 56·1 | 31·7 | |
| 9·9‡ | 42 | 18·1 | 39·4 | |
| 9·6 | | 18·5 | 32·0 | |
| 9·0 | | 32·8 | 4·2 | 9·0 |
| 9·8 | | 43·9 | 29·1 | |
| 10·0 | | 44·4 | 23·8 | |
| 9·4‡ | | 56·9 | 59·4 | |
| 10·2‡ | 43 | 5·6 | 53·4 | |
| 10·2‡ | | 13·1 | 52·1 | |
| 10·3‡ | | 21·1 | 41·2 | |
| 9·2 | | 23·2 | 22·0 | |
| 9·8 | | 24·1 | 27·2 | |
| 9·2‡ | | 26·1 | 40·7 | |
| 10·3‡ | | 26·4 | 46·9 | |
| 9·8 | | 27·8 | 6·8 | |
| 10·0 | | 36·4 | 26·1 | |
| 8·6‡ | | 38·6 | 57·7 | 9·2 |
| 10·0‡ | | 44·1 | 39·8 | |
| 9·7‡ | | 44·1 | 47·7 | |
| 9·8 | 44 | 58·7 | 1·5 | |
| 9·9‡ | 45 | 3·6 | 54·5 | |
| 8·8 | | 14·7 | 20·1 | |
| 9·8 | | 15·2 | 21·1 | |
| 10·2‡ | | 55·6 | 49·9 | |
| 9·7‡ | | 56·6 | 47·5 | |
| 9·8 | 46 | 8·7 | 8·3 | |
| 9·2 | | 30·2 | 8·1 | 9·0 |
| 10·3‡ | | 35·1 | 46·1 | |
| 9·2‡ | | 59·4 | 59·5 | |
| 10·3‡ | 47 | 40·1 | 41·2 | |
| 9·0‡ | 48 | 8·1 | 37·0 | |
| 9·2‡ | | 16·6 | 43·3 | |
| 9·9‡ | | 34·1 | 54·5 | |
| 10·c‡ | | 43·6 | 38·7 | |
| 8·0 | 49 | 2·2 | 8·7 | 8·5 G |

**5761—5820.**

| mag. | 17ʰ—18ʰ m | s | −62° ′ | |
|---|---|---|---|---|
| 8·8 | 49 | 14·5 | 18·4 | 8·8 |
| 8·0 | | 16·2 | 29·5 | 8·2 |
| 10·3‡ | | 32·6 | 35·2 | |
| 9·8 | | 42·7 | 18·1 | |
| 9·8 | | 43·2 | 4·2 | |
| 9·0 | | 47·7 | 4·4 | |
| 10·3‡ | | 58·6 | 51·5 | |
| 10·2‡ | 50 | 10·1 | 54·5 | |
| 9·8 | | 12·7 | 32·0 | |
| 8·8 | | 23·2 | 26·1 | 9·0 |
| 10·0‡ | | 36·6 | 40·5 | |
| 9·9‡ | | 37·1 | 47·5 | |
| 10·2‡ | | 47·1 | 45·2 | |
| 10·0‡ | | 49·4 | 57·7 | |
| 10·3‡ | 51 | 18·1 | 48·9 | |
| 9·8 | | 19·2 | 13·1 | |
| 8·4 | | 43·2 | 7·7 | 8·5 |
| 10·3‡ | | 46·6 | 46·9 | |
| 10·2‡ | 52 | 19·6 | 32·8 | |
| 9·9‡ | | 28·6 | 50·1 | |
| 9·8 | | 32·2 | 16·9 | |
| 10·2‡ | | 54·1 | 49·5 | |
| 9·2‡ | | 58·6 | 45·8 | |
| 10·0‡ | | 59·1 | 34·5 | |
| 10·3‡ | 53 | 22·1 | 44·2 | |
| 9·0 | | 43·2 | 19·5 | |
| 8·7 | 54 | 13·9 | 22·2 | |
| 9·6 | | 24·9 | 10·9 | |
| 9·9‡ | | 37·0 | 58·6 | |
| 9·8 | 55 | 24·4 | 30·4 | |
| 8·5‡ | 56 | 8·3 | 53·4 | 9·5 |
| 8·2 | | 35·9 | 22·3 | 8·2 |
| 9·0‡ | 57 | 8·8 | 47·1 | |
| 10·2‡ | | 22·0 | 57·2 | |
| 8·6 | | 34·4 | 20·2 | 9·2 |
| 10·3‡ | 58 | 38·3 | 50·2 | |
| 6·2 | | 49·4 | 1·6 | 6·0 GSct |
| 8·7‡ | 59 | 33·3 | 49·0 | 9·5 |
| 10·0‡ | | 41·8 | 47·4 | |
| 9·7‡ | | 42·3 | 48·2 | 10·0 |
| 9·5‡ | 0 | 2·3 | 55·8 | |
| 9·6 | | 23·1 | 31·9 | 9·5 |
| 9·9‡ | | 39·3 | 34·5 | |
| 9·2 | 1 | 24·9 | 17·5 | |
| 10·0‡ | | 27·3 | 37·3 | |
| 9·6 | | 33·1 | 32·5 | |
| 9·5 | 2 | 10·1 | 32·4 | |
| 8·6‡ | | 12·8 | 58·2 | |
| 10·2‡ | | 16·8 | 54·4 | |
| 10·3‡ | | 18·8 | 48·8 | |
| 9·0‡ | | 21·1 | 57·9 | |
| 9·0‡ | | 33·3 | 43·9 | |
| 9·9‡ | | 46·3 | 52·9 | |
| 9·9‡ | | 59·8 | 33·1 | |
| 9·6 | 3 | 23·9 | 7·2 | |
| 9·6 | | 54·9 | 0·2 | |
| 9·0 | | 59·1 | 34·1 | 9·5 |
| 9·1‡ | 4 | 48·8 | 47·0 | |
| 9·4‡ | | 51·8 | 41·0 | |
| 10·3‡ | 5 | 10·3 | 54·5 | |

**5821—5880.**

| mag. | 18ʰ m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0‡ | 5 | 18·8 | 51·4 | |
| 9·6 | | 23·6 | 33·4 | |
| 10·2‡ | | 25·3 | 47·9 | |
| 9·8 | | 31·9 | 19·8 | |
| 9·4‡ | 6 | 13·8 | 44·5 | |
| 9·4 | | 19·4 | 9·5 | |
| 8·3‡ | | 41·8 | 53·6 | |
| 9·0‡ | 7 | 10·8 | 51·0 | |
| 10·2† | | 29·8 | 35·0 | |
| 10·3‡ | | 42·8 | 40·9 | |
| 9·1‡ | 8 | 12·8 | 59·4 | |
| 7·9‡ | 9 | 0·3 | 59·3 | 8·5 |
| 9·6 | | 12·4 | 5·4 | |
| 9·7‡ | | 18·8 | 35·5 | |
| 10·0‡ | | 24·3 | 52·4 | |
| 7·8 | | 31·4 | 14·2 | 8·5 |
| 9·9‡ | 10 | 35·3 | 49·2 | |
| 9·4‡ | | 37·3 | 51·8 | |
| 9·4 | | 52·9 | 21·2 | |
| 10·3‡ | | 54·1 | 51·7 | |
| 9·7‡ | 11 | 12·8 | 34·6 | |
| 7·9‡ | | 18·3 | 38·2 | |
| 9·8‡ | | 59·3 | 43·2 | |
| 9·8 | 12 | 17·8 | 32·2 | |
| 10·3‡ | | 30·8 | 57·8 | |
| 9·8 | | 33·9 | 22·6 | |
| 9·6 | | 41·4 | 22·2 | |
| 10·3‡ | 13 | 0·3 | 46·8 | |
| 10·3‡ | | 3·3 | 36·8 | |
| 9·9‡ | | 4·8 | 59·2 | |
| 10·2‡ | | 15·3 | 30·4 | |
| 9·8 | | 28·4 | 29·6 | |
| 7·8 | | 28·9 | 33·5 | 8·0 G |
| 9·9‡ | 14 | 1·8 | 39·1 | |
| 10·2‡ | | 15·8 | 31·9 | |
| 9·4 | | 23·9 | 24·0 | |
| 10·3‡ | | 42·3 | 49·4 | |
| 8·6 | | 52·4 | 15·6 | 9·0 |
| 10·3‡ | | 54·3 | 56·0 | |
| 10·3‡ | 15 | 12·1 | 53·1 | |
| 10·2‡ | | 27·3 | 37·4 | |
| 8·8‡ | | 29·8 | 40·7 | |
| 9·5‡ | | 53·8 | 58·0 | |
| 10·3‡ | | 57·8 | 32·2 | |
| 10·0‡ | 16 | 6·3 | 39·0 | |
| 9·6 | | 7·4 | 3·2 | |
| 9·8 | | 8·9 | 5·3 | |
| 9·0 | | 34·9 | 4·2 | |
| 8·8‡ | 17 | 2·0 | 52·6 | |
| 9·8 | | 32·7 | 5·0 | |
| 9·8 | | 53·7 | 10·9 | |
| 10·2‡ | 18 | 14·1 | 59·3 | |
| 10·3‡ | | 31·8 | 49·9 | |
| 9·1 | | 34·5 | 0·7 | |
| 9·3 | 19 | 21·1 | 35·2 | |
| 10·0 | | 21·6 | 31·2 | |
| 10·0‡ | | 24·5 | 44·5 | |
| 9·4 | | 31·7 | 26·5 | |
| 4·7 | | 41·6 | 21·2 | 5·0 GSct |
| 9·3 | | 51·2 | 6·1 | |

### 5881—5940.

| mag. | 18h. m | s | −62° ′ | |
|---|---|---|---|---|
| 7·4 | 19 | 51·3 | 22·5 | 8·0 GS |
| 8·8‡ | | 57·9 | 56·6 | 8·5 |
| 9·4 | 20 | 31·7 | 23·0 | 9·5 |
| 10·0‡ | 21 | 20·3 | 56·9 | |
| 9·4 | | 41·7 | 24·2 | |
| 9·3 | 22 | 3·2 | 10·2 | |
| 9·6 | | 20·2 | 30·4 | |
| 9·6‡ | | 21·3 | 49·8 | |
| 10·2‡ | | 25·7 | 50·4 | |
| 9·8 | 23 | 27·1 | 27·4 | |
| 8·8 | | 28·1 | 16·3 | |
| 9·6 | | 30·0 | 38·0 | |
| 8·2 | | 38·8 | 47·8 | 9·0 |
| 9·2 | 24 | 9·0 | 41·7 | |
| 9.2 | | 20·4 | 0·3 | |
| 9·1 | | 49·8 | 59·5 | |
| 10·0 | 25 | 23·1 | 17·1 | |
| 9·8 | | 26·5 | 46·5 | |
| 9·6 | 26 | 22·6 | 10·8 | |
| 10·0 | | 29·0 | 34·7 | |
| 9·4 | | 35·1 | 27·1 | |
| 9·8 | | 54·5 | 46·6 | |
| 9·4 | 27 | 19·5 | 32·9 | |
| 9·1 | | 43·3 | 1·2 | |
| 10·0 | | 53·1 | 26·3 | |
| 10·0 | | 53·5 | 53·8 | |
| 9·0 | 28 | 16·2 | 54·3 | |
| 10·0 | | 23·5 | 59·9 | |
| 8·8 | | 25·0 | 43·1 | |
| 9·4 | | 36·1 | 1·0 | |
| 8·0 | | 37·6 | 14·0 | 8·5 |
| 10·0 | | 46·1 | 21·9 | |
| 9·6 | | 46·6 | 3·3 | |
| 8·8 | | 51·0 | 50·1 | |
| 9·6 | | 57·6 | 23·3 | |
| 10·0 | | 58·6 | 1·9 | |
| 8·8 | 29 | 1·3 | 34·0 | |
| 10·0 | | 11·6 | 20·6 | |
| 9·8 | | 18·6 | 27·0 | |
| 9·8 | | 38·6 | 6·9 | |
| 10·0 | | 42·5 | 50·5 | |
| 8·8 | | 48·2 | 7·0 | |
| 9·8 | | 53·2 | 7·6 | |
| 8·8 | 30 | 3·6 | 53·0 | 9·0 |
| 9·4 | | 5·1 | 50·5 | |
| 8·8 | | 9·6 | 2·8 | |
| 9·1 | | 19·6 | 31·3 | |
| 10·0 | | 23·3 | 20·0 | |
| 9·6 | | 24·1 | 55·6 | |
| 8·8 | | 34·8 | 31·0 | |
| 8·8 | | 49·7 | 26·0 | 9·0 |
| 9·4 | | 51·7 | 6·4 | |
| 10·0 | | 52·6 | 46·5 | |
| 9·4 | | 52·7 | 22·6 | |
| 9·6 | 31 | 7·1 | 2·8 | |
| 10·0 | | 11·7 | 5·0 | |
| 9·4 | | 14·1 | 57·6 | |
| 8·6 | | 20·2 | 16·2 | |
| 9·6 | | 24·1 | 50·5 | |
| 8·8 | | 25·6 | 35·7 | |

### 5941—6000.

| mag. | 18h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 31 | 50·1 | 31·5 | |
| 9·3 | | 59·2 | 10·3 | |
| 9·4 | 32 | 4·6 | 40·8 | |
| 9·6 | | 7·7 | 17·7 | |
| 10·0 | | 22·2 | 11·4 | |
| 9·8 | | 34·3 | 0·3 | |
| 9·6 | 33 | 23·2 | 10·7 | |
| 10·0 | | 26·8 | 2·6 | |
| 9·4 | | 30·1 | 54·9 | |
| 9·3 | | 34·3 | 3·3 | |
| 8·3 | | 38·6 | 32·3 | 9·0 |
| 9·4 | 34 | 7·2 | 12·3 | |
| 9·4 | | 11·2 | 14·1 | |
| 9·8 | | 40·6 | 53·6 | |
| 9·4 | | 43·2 | 3·5 | |
| 9·4 | | 48·2 | 3·7 | |
| 10·0 | | 49·2 | 18·8 | |
| 9·4 | 35 | 24·6 | 35·7 | |
| 8·2 | | 25·8 | 51·3 | |
| 8·8 | | 54·0 | 39·1 | |
| 8·4 | | 56·6 | 6·0 | 9·5 |
| 9·8 | | 59·0 | 33·7 | |
| 7·5 | 36 | 29·1 | 21·2 | 7·5 GS |
| 10·0 | | 38·6 | 27·1 | |
| 9·6 | | 41·6 | 10·4 | |
| 9·8 | | 45·8 | 7·2 | |
| 9·8 | 37 | 13·1 | 23·4 | |
| 9·0 | | 25·7 | 56·1 | |
| 8·6 | | 33·8 | 30·1 | 8·5 |
| 9·2 | | 44·8 | 29·1 | |
| 8·4 | 38 | 15·6 | 18·0 | |
| 9·4 | | 25·6 | 19·1 | |
| 9·2 | 39 | 11·5 | 50·4 | |
| 10·0 | | 18·0 | 0·1 | |
| 9·2 | | 25·5 | 39·7 | |
| 9·0 | | 36·1 | 19·5 | |
| 8·5 | | 38·4 | 58·0 | |
| 10·0 | | 49·1 | 19·9 | |
| 7·4 | | 50·3 | 47·0 | 8·5 GS |
| 10·0 | 40 | 1·5 | 51·1 | |
| 9·4 | | 9·0 | 40·1 | |
| 10·0 | | 11·6 | 6·4 | |
| 4·1 | | 37·1 | 19·6 | 4·5 GSct |
| 9·1 | | 47·8 | 59·6 | |
| 9·6 | | 58·1 | 12·2 | |
| 9·6 | 41 | 16·1 | 19·5 | |
| 9·6 | | 30·8 | 2·2 | |
| 9·8 | | 38·1 | 24·8 | |
| 9·4 | | 56·5 | 41·8 | |
| 9·3 | | 57·8 | 53·3 | |
| 9·4 | 43 | 44·5 | 45·8 | |
| 9·2 | 44 | 0·0 | 37·8 | |
| 9·4 | | 3·1 | 9·9 | |
| 8·8 | | 3·6 | 16·0 | |
| 9·4 | | 8·1 | 10·3 | |
| 9·4 | | 15·5 | 30·8 | |
| 9·8 | | 30·0 | 43·9 | |
| 9·8 | | 48·0 | 50·2 | |
| 10·0 | | 50·1 | 22·2 | |
| 10·0 | 45 | 2·0 | 40·5 | |

### 6001—6060.

| mag. | 18h.–19h. m | s | −62° ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 7·1 | 29·6 | |
| 7·7 | | 12·3 | 57·4 | 7·0 G |
| 10·0 | | 36·1 | 21·8 | |
| 9·3 | 46 | 58·0 | 36·8 | |
| 9·4 | 47 | 22·5 | 35·9 | |
| 10·0 | | 29·0 | 49·1 | |
| 10·0 | 48 | 6·5 | 31·4 | |
| 9·6 | | 12·0 | 59·1 | |
| 7·9 | | 19·2 | 44·5 | 8·5 |
| 9·2 | | 20·2 | 51·0 | |
| 10·0 | | 24·6 | 11·1 | |
| 9·3 | | 37·0 | 42·8 | |
| 9·4 | 49 | 6·0 | 58·9 | |
| 10·0 | | 8·6 | 4·4 | |
| 9·6 | | 59·5 | 38·0 | |
| 8·9 | 50 | 28·4 | 3·7 | |
| 9·0 | | 29·5 | 56·1 | |
| 8·0 | 51 | 56·7 | 47·9 | 9·0 |
| 8·4 | | 58·2 | 29·8 | |
| 10·0 | 52 | 0·0 | 46·2 | |
| 10·0 | | 14·0 | 56·1 | |
| 9·6 | | 27·5 | 34·7 | |
| 9·8 | | 38·1 | 11·4 | |
| 10·0 | 53 | 49·6 | 11·4 | |
| 10·0 | | 51·1 | 15·4 | |
| 10·0 | 54 | 8·5 | 54·8 | |
| 10·0 | | 38·6 | 3·3 | |
| 9·8 | | 41·5 | 10·9 | |
| 9·8 | 55 | 5·0 | 30·1 | |
| 9·2 | | 17·7 | 15·7 | |
| 9·8 | | 39·6 | 6·5 | |
| 9·4 | | 49·0 | 38·3 | |
| 7·7 | | 50·2 | 19·9 | 8·0 GS |
| 8·2 | | 51·5 | 40·1 | 9·0 |
| 9·6 | | 52·0 | 40·6 | |
| 9·6 | 56 | 12·5 | 46·0 | |
| 9·8 | | 22·1 | 24·1 | |
| 9·6 | | 58·6 | 18·7 | |
| 9·6 | 57 | 22·2 | 21·6 | |
| 9·6 | | 47·5 | 13·0 | |
| 9·4 | 58 | 10·0 | 9·8 | |
| 9·6 | 59 | 0·3 | 29·7 | |
| 9·6 | | 12·3 | 13·8 | |
| 9·2 | | 14·3 | 11·8 | 9·0 |
| 9·2 | | 31·3 | 29·3 | |
| 8·8 | | 46·8 | 8·8 | 8·5 |
| 9·6 | 0 | 31·3 | 24·1 | |
| 9·4 | | 41·3 | 11·7 | |
| 8·5‡ | 2 | 11·3 | 46·9 | 8·5 |
| 9·6 | | 36·3 | 20·6 | |
| 8·5 | 3 | 2·4 | 26·0 | 8·5 |
| 9·5‡ | | 3·0 | 41·9 | |
| 9·2‡ | | 22·0 | 52·5 | |
| 9·5‡ | | 48·0 | 45·6 | |
| 9·1‡ | 4 | 23·5 | 59·5 | |
| 9·4‡ | | 26·0 | 46·8 | |
| 8·5‡ | | 35·0 | 36·0 | 8·5 |
| 9·0 | | 59·8 | 12·7 | |
| 7·5 | 5 | 47·8 | 1·6 | 7·5 GS |
| 9·5‡ | 6 | 4·5 | 38·8 | |

### 6061—6120.

| mag. | 19h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·4 | 6 | 14·3 | 7·6 | |
| 9·4 | | 31·8 | 6·4 | |
| 8·9‡ | | 33·0 | 58·1 | |
| 9·2 | 7 | 4·2 | 27·2 | |
| 8·9‡ | | 48·5 | 50·4 | |
| 8·2‡ | | 49·5 | 55·7 | |
| 8·8‡ | | 54·0 | 51·4 | |
| 8·7‡ | 8 | 17.0 | 59·6 | |
| 9·6 | | 31·8 | 21·9 | |
| 9·2 | | 33·1 | 27·6 | |
| 9·4 | 9 | 18·3 | 22·9 | |
| 9·4 | | 18·8 | 11·3 | |
| 9·6 | 11 | 35·2 | 33·5 | |
| 9·0 | | 35·3 | 3·4 | |
| 9·4 | | 44·8 | 27·2 | |
| 9·6‡ | | 45·5 | 45·8 | |
| 8·9‡ | | 52·5 | 50·1 | |
| 8·8‡ | | 54·5 | 52·6 | |
| 8·7‡ | 13 | 11·5 | 54·3 | 10·0 |
| 8·8‡ | | 35·0 | 48·3 | |
| 7·8 | 14 | 20·1 | 25·1 | 8·0 G |
| 9·4 | | 41·3 | 33·7 | |
| 9·0 | | 49·8 | 19·9 | 9·5 |
| 9·6 | 15 | 12·8 | 27·1 | |
| 9·0 | | 13·1 | 34·2 | |
| 9·4 | 16 | 21·6 | 34·9 | |
| 9·4 | | 35·3 | 12·7 | |
| 9·5‡ | 17 | 6·5 | 36·0 | 9·0 |
| 8·2‡ | 23 | 11·5 | 38·7 | 8·5 |
| 9·4 | | 55·8 | 6·8 | |
| 9·5‡ | 25 | 5·5 | 51·1 | 9·0 |
| 9·4 | 26 | 38·3 | 24·7 | |
| 9·6 | | 43·4 | 8·0 | |
| 8·8 | | 57·1 | 3·7 | |
| 9·9 | 27 | 2·9 | 18·8 | |
| 8·2 | 30 | 14·9 | 6·2 | 8·5 |
| 9·5‡ | 31 | 42·0 | 42·1 | |
| 9·4 | | 47·1 | 20·0 | |
| 9·6 | 32 | 56·9 | 13·1 | |
| 9·6 | 33 | 39·4 | 5·6 | |
| 10·0 | | 43·9 | 13·9 | |
| 9·6 | 34 | 58·4 | 28·0 | |
| 7·9‡ | 35 | 50·5 | 45·0 | 7·0 GS |
| 9·0 | | 52·4 | 5·7 | |
| 9·6 | 36 | 22·4 | 25·1 | |
| 9·0 | 37 | 39·4 | 32·0 | 8·5 |
| 9·6 | | 42·9 | 26·0 | 9·0 |
| 7·3 | 38 | 0·4 | 7·0 | 7·5 GS |
| 7·8‡ | | 40·8 | 52·4 | G |
| 9·4‡ | | 43·0 | 49·6 | |
| 9·9 | 39 | 4·8 | 13·2 | |
| 8·1† | | 4·8 | 40·2 | G |
| 9·3† | | 8·2 | 53·3 | |
| 9·2† | | 9·7 | 54·2 | |
| 9·8 | 40 | 16·8 | 5·9 | |
| 9·9 | 43 | 20·3 | 12·3 | |
| 9·9† | 44 | 14·0 | 53·4 | |
| 9·3† | 45 | 53·5 | 37·9 | |
| 9·0† | | 57·5 | 38·3 | |
| 10·0 | 47 | 28·8 | 29·4 | |

25 prec

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 18 | 10 | 141 | 0·4 |
| | 20 | 141 | 0·7 |
| | 30 | 140 | 1·1 |
| | 40 | 140 | 1·5 |
| | 50 | 139 | 1·8 |
| 19 | 0 | 139 | 2·2 |
| | 10 | 138 | 2·5 |
| | 20 | 137 | 2·9 |
| | 30 | 136 | 3·2 |
| | 40 | 135 | 3·5 |
| | 50 | 134 | 3·9 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 19 | 40 | 135 | 3·5 |
| | 50 | 134 | 3·9 |
| 20 | 0 | 132 | 4·2 |
| | 10 | 131 | 4·5 |
| | 20 | 129 | 4·8 |
| | 30 | 128 | 5·1 |
| | 40 | 126 | 5·4 |
| | 50 | 124 | 5·6 |
| 21 | 0 | 122 | 5·9 |
| | 10 | 120 | 6·2 |
| | 20 | 118 | 6·4 |
| | 30 | 116 | 6·6 |
| | 40 | 114 | 6·8 |
| | 50 | 111 | 7·0 |
| 22 | 0 | 109 | 7·2 |
| | 10 | 106 | 7·4 |
| | 20 | 104 | 7·6 |
| | 30 | 101 | 7·7 |
| | 40 | 99 | 7·9 |

## 6121—6180.

| mag. | $19^{h}$–$20^{h}$ m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 47 | 40·6 | 35·3 | |
| 9·6 | 48 | 18·8 | 30·0 | |
| 9·6 | | 35·8 | 19·8 | |
| 9·8 | | 58·8 | 26·0 | |
| 9·5† | 49 | 52·5 | 52·3 | |
| 10·0 | 50 | 58·8 | 2·0 | |
| 9·0† | 51 | 31·0 | 55·0 | |
| 10·0 | 52 | 24·6 | 15·9 | |
| 9·6 | | 28·3 | 13·6 | |
| 8·7 | | 34·6 | 35·2 | |
| 8·6† | 53 | 16·5 | 40·0 | |
| 9·9 | 54 | 6·4 | 25·8 | |
| 10·0 | | 26·7 | 32·2 | 9·0 G |
| 10·0 | | 50·3 | 15·9 | |
| 9·4 | | 56·2 | 17·6 | |
| 9·5† | 56 | 3·5 | 58·1 | |
| 10·0 | | 12·2 | 2·8 | |
| 9·4 | | 42·2 | 23·4 | |
| 10·0 | | 43·7 | 21·6 | |
| 9·4 | 57 | 49·7 | 23·9 | |
| 9·9 | | 52·2 | 9·9 | |
| 9·0 | 58 | 14·7 | 31·5 | |
| 9·2 | 0 | 44·7 | 31·5 | |
| 9·9 | 2 | 33·7 | 19·8 | |
| 9·8 | | 35·1 | 29·1 | |
| 7·7† | 3 | 10·0 | 51·7 | 7·5 GS |
| 8·6 | | 31·2 | 39·1 | 7·0 GS |
| 10·0 | | 54·2 | 1·0 | |
| 10·0 | 4 | 31·2 | 14·8 | |
| 8·3– | 5 | 13·3 | 32·4 | 8·5 |
| 9·6 | 6 | 23·8 | 12·5 | |
| 7·8 | 7 | 54·8 | 17·2 | 7·0 GSc |
| 9·7 | 8 | 2·0 | 1·0 | |
| 9·2 | | 11·9 | 17·1 | 9·0 |
| 9·4 | 9 | 45·4 | 34·0 | |
| 9·7 | 11 | 22·9 | 27·4 | |
| 9·4 | 14 | 34·9 | 13·6 | |
| 9·6 | 17 | 16·9 | 24·9 | |
| 9·0† | | 25·5 | 48·6 | |
| 8·4† | 18 | 4·5 | 51·8 | 8·5 G |
| 9·4 | | 47·9 | 5·7 | |
| 9·6 | 19 | 39·7 | 27·8 | |
| 8·8‡ | 20 | 31·2 | 39·6 | 8·5 |
| 9·4‡ | 21 | 17·5 | 57·2 | |
| 8·4‡ | | 31·4 | 58·4 | 9·0 |
| 8·4‡ | 22 | 17·5 | 54·4 | 9·0 |
| 9·6‡ | 24 | 7·0 | 55·4 | |
| 9·2 | | 38·4 | 21·9 | |
| 8·9 | | 41·9 | 10·3 | 9·0 |
| 9·4‡ | | 50·5 | 38·9 | 9·0 |
| 9·4 | 25 | 29·7 | 33·2 | |
| 8·9‡ | 26 | 4·0 | 58·6 | |
| 9·6‡ | | 33·0 | 59·3 | |
| 8·4 | | 41·9 | 35·7 | 8·5 |
| 8·5 | 30 | 40·4 | 1·9 | 8·5 GS |
| 7·9‡ | 32 | 41·0 | 58·8 | 8·5 |
| 9·4– | 33 | 23·9 | 26·5 | 9·0 |
| 9·8 | 37 | 21·2 | 25·9 | |
| 9·8 | 41 | 0·2 | 25·9 | |
| 5·7‡ | | 11·0 | 53·5 | 6·0 GScr |

## 6181—6240.

| mag. | $20^{h}$–$21^{h}$ m | s | −62° ′ | |
|---|---|---|---|---|
| 9·6 | 41 | 54·2 | 12·8 | |
| 9·8 | 42 | 9·2 | 15·4 | |
| 9·6‡ | | 38·5 | 46·0 | |
| 9·1 | 43 | 40·1 | 25·9 | 9·0 |
| 9·8 | 44 | 32·7 | 7·8 | |
| 8·9 | 46 | 16·2 | 2·3 | G |
| 9·0‡ | | 19·5 | 40·6 | |
| 9·6 | 47 | 11·7 | 24·2 | |
| 8·7 | | 57·7 | 5·2 | 9·5 |
| 9·4 | 48 | 33·7 | 17·3 | |
| 8·7 | 52 | 29·2 | 21·8 | G |
| 9·6 | | 50·6 | 25·7 | |
| 9·6‡ | 53 | 41·5 | 39·9 | |
| 9·0 | 55 | 32·2 | 13·3 | 9·0 |
| 9·3 | 56 | 0·2 | 3·3 | |
| 9·2 | | 33·2 | 17·2 | 8·5 G |
| 9·6 | 57 | 58·7 | 15·1 | |
| 9·6† | 58 | 25·7 | 59·0 | |
| 10·4† | | 28·0 | 46·2 | |
| 9·8 | | 56·7 | 26·0 | |
| 10·4† | 59 | 45·0 | 28·7 | |
| 9·5 | 0 | 4·2 | 20·1 | |
| 9·4 | | 54·2 | 21·3 | |
| 9·4 | 1 | 31·2 | 23·0 | |
| 9·2 | 2 | 30·2 | 28·1 | 10·0 |
| 9·7 | | 37·2 | 7·0 | |
| 10·4† | | 47·0 | 49·0 | |
| 10·2† | 3 | 17·0 | 44·1 | |
| 9·4 | | 37·7 | 18·0 | |
| 9·0† | 5 | 24·0 | 53·5 | 9·8 |
| 9·3† | | 38·0 | 59·1 | 10·0 |
| 10·4† | 6 | 19·5 | 25·7 | |
| 10·4† | 7 | 20·0 | 56·4 | |
| 9·6† | 8 | 15·0 | 42·7 | |
| 9·7 | | 19·2 | 1·2 | |
| 10·4† | | 27·5 | 43·0 | |
| 9·7 | | 37·2 | 19·5 | |
| 9·6† | | 45·0 | 56·7 | |
| 10·2† | 9 | 23·5 | 39·6 | |
| 8·7† | | 30·0 | 40·4 | 9·0 G |
| 9·6† | 10 | 45·0 | 37·8 | |
| 10·4† | | 53·5 | 58·3 | |
| 9·0† | 11 | 4·5 | 52·6 | 9·0 |
| 10·2† | 12 | 18·0 | 56·1 | |
| 9·7 | | 52·7 | 1·6 | |
| 9·6† | 13 | 53·0 | 47·0 | |
| 9·5– | 14 | 9·7 | 5·4 | |
| 9·0† | | 51·5 | 42·0 | |
| 10·1 | 15 | 4·6 | 29·2 | |
| 9·2† | | 31·0 | 41·3 | |
| 9·3 | 18 | 10·2 | 25·8 | |
| 9·4† | | 12·0 | 38·2 | |
| 9·8† | | 41·5 | 34·5 | |
| 9·6† | 19 | 17·0 | 34·2 | |
| 10·2† | 20 | 4·0 | 37·5 | |
| 7·1† | 21 | 2·0 | 42·6 | 7·0 GS |
| 9·2† | | 6·5 | 47·0 | 9·0 GS |
| 10·4† | | 7·0 | 59·2 | |
| 10·2† | | 20·0 | 56·9 | |
| 10·4† | | 20·8 | 41·2 | |

## 6241—6300.

| mag. | $21^{h}$ m | s | −62° ′ | |
|---|---|---|---|---|
| 10·2† | 21 | 35·0 | 33·1 | |
| 8·7 | 23 | 50·4 | 17·0 | |
| 10·0† | 24 | 8·0 | 53·2 | |
| 9·4 | | 52·6 | 10·7 | |
| 10·4† | | 53·5 | 56·9 | |
| 9·6 | 26 | 58·6 | 14·5 | |
| 10·4† | 28 | 14·0 | 39·1 | |
| 8·4† | | 21·5 | 48·7 | 8·5 GS |
| 10·4† | | 50·5 | 52·7 | |
| 9·2† | 29 | 24·0 | 43·4 | 9·5 |
| 10·2† | | 53·0 | 37·6 | |
| 10·4† | 31 | 21·5 | 42·9 | |
| 9·6 | | 37·1 | 8·0 | |
| 10·4† | 32 | 14·0 | 51·7 | |
| 9·9† | | 14·0 | 50·0 | |
| 10·4† | | 38·0 | 41·0 | |
| 10·2† | 33 | 10·0 | 40·6 | |
| 9·2 | 34 | 20·1 | 13·8 | 9·0 |
| 7·2† | | 45·8 | 41·0 | 7·5 GSc |
| 10·2† | 35 | 31·0 | 50·6 | |
| 7·8 | | 35·7 | 25·1 | 8·5 |
| 9·4 | | 44·7 | 4·5 | |
| 9·8† | 36 | 2·5 | 58·6 | |
| 8·7 | 37 | 2·1 | 23·2 | GS |
| 7·8† | | 40·8 | 47·4 | 8·0 GS |
| 9·6† | 39 | 39·4 | 36·4 | |
| 9·6 | | 59·2 | 4·8 | |
| 10·2‡ | 40 | 10·8 | 22·7 | |
| 8·4 | | 16·4 | 2·6 | 9·0 |
| 10·0 | | 48·2 | 12·0 | |
| 7·3‡ | 42 | 51·2 | 37·9 | 7·0 GSr |
| 10·2‡ | 43 | 37·6 | 47·1 | |
| 10·2‡ | | 44·2 | 36·6 | |
| 10·2‡ | 44 | 19·6 | 21·6 | |
| 10·2‡ | | 20·2 | 33·5 | |
| 9·6‡ | 45 | 44·2 | 39·6 | |
| 6·9 | | 57·2 | 28·2 | 6·5 GS |
| 10·0 | 46 | 31·7 | 15·7 | |
| 10·0 | | 38·5 | 1·0 | |
| 10·0‡ | | 49·9 | 55·8 | |
| 7·4 | 47 | 44·7 | 26·1 | 7·5 GS |
| 9·5 | 48 | 5·1 | 2·7 | |
| 10·0‡ | | 38·7 | 37·3 | |
| 10·0 | | 54·2 | 28·3 | |
| 8·4 | 50 | 11·3 | 8·0 | 9·0 |
| 8·1‡ | | 57·6 | 42·4 | 9·0 GS |
| 10·1– | 51 | 1·9 | 0·8 | |
| 9·8‡ | | 38·1 | 44·9 | |
| 9·2‡ | 52 | 2·6 | 41·4 | |
| 9·2 | | 39·3 | 15·2 | |
| 9·4‡ | 53 | 24·7 | 38·8 | 9·5 |
| 10·0 | 54 | 15·0 | 16·6 | |
| 9·8 | 55 | 12·5 | 23·6 | |
| 8·1 | | 14·6 | 28·4 | 8·0 |
| 10·0‡ | | 43·2 | 37·9 | |
| 10·2‡ | 56 | 27·7 | 35·4 | |
| 10·0‡ | | 30·5 | 58·2 | |
| 10·2‡ | | 42·1 | 47·0 | |
| 8·4 | 57 | 3·3 | 2·7 | 10·0 |
| 9·4 | | 34·5 | 12·3 | |

## 6301—6360.

| mag. | $21^{h}$–$22^{h}$ m | s | −62° ′ | |
|---|---|---|---|---|
| 8·8 | 58 | 21·5 | 8·9 | 9·5 |
| 10·1‡ | | 38·2 | 38·4 | |
| 9·6 | 59 | 5·0 | 8·0 | |
| 8·0 | | 13·5 | 14·6 | 8·5 |
| 9·2 | | 48·0 | 12·8 | |
| 8·7 | | 59·1 | 21·3 | |
| 10·0 | 0 | 8·1 | 19·2 | |
| 10·1‡ | | 45·6 | 43·4 | |
| 10·1‡ | 2 | 46·1 | 48·1 | |
| 8·8 | 4 | 6·7 | 25·5 | |
| 8·8 | | 6·9 | 35·8 | 9·5 |
| 9·6‡ | | 37·7 | 38·0 | |
| 9·3 | | 50·1 | 5·8 | 9·5 |
| 9·2‡ | | 56·9 | 53·8 | 9·5 |
| 8·8 | 5 | 9·6 | 3·9 | 8·5 G |
| 10·2‡ | | 10·3 | 29·8 | |
| 10·2‡ | | 11·4 | 59·2 | |
| 9·4‡ | 6 | 14·4 | 59·1 | |
| 10·2‡ | 7 | 8·8 | 22·6 | |
| 10·1‡ | 8 | 27·4 | 56·1 | |
| 9·1‡ | | 56·9 | 59·3 | 9·5 |
| 8·4 | 9 | 21·6 | 11·1 | 9·0 |
| 10·2‡ | | 37·4 | 53·1 | |
| 9·7‡ | | 57·6 | 44·6 | |
| 9·8 | 10 | 24·1 | 18·7 | |
| 9·8‡ | 11 | 4·4 | 58·5 | |
| 10·0 | | 19·1 | 2·8 | |
| 9·2 | | 32·1 | 23·5 | |
| 9·6 | | 39·0 | 31·8 | |
| 8·8 | 12 | 9·1 | 17·8 | 9·5 |
| 9·3‡ | | 26·6 | 43·5 | |
| 10·2‡ | 14 | 33·8 | 25·7 | |
| 9·6‡ | | 48·4 | 57·2 | |
| 9·3 | 17 | 7·2 | 24·4 | 9·0 |
| 10·2‡ | | 33·2 | 34·9 | |
| 10·2‡ | | 33·2 | 34·7 | |
| 9·1 | 19 | 32·6 | 34·1 | |
| 9·2 | | 41·1 | 9·8 | 9·0 |
| 9·8 | 20 | 30·6 | 28·3 | |
| 8·8 | 21 | 24·1 | 13·8 | 10·0 |
| 8·2† | | 45·2 | 55·3 | 8·5 |
| 9·8† | 22 | 9·5 | 46·7 | |
| 9·8 | 23 | 14·2 | 3·8 | |
| 9·6 | | 22·2 | 2·9 | |
| 9·2† | | 53·0 | 52·6 | |
| 8·6† | 24 | 6·5 | 43·9 | 8·8 |
| 10·0 | | 7·1 | 30·9 | |
| 6·9 | | 31·6 | 37·3 | 5·2 GScr |
| 9·4 | | 35·1 | 22·6 | |
| 10·0† | | 45·0 | 48·7 | |
| 9·6† | 26 | 54·0 | 45·6 | |
| 7·9 | 27 | 2·2 | 17·0 | 7·5 G |
| 8·4 | 28 | 1·7 | 26·9 | 8·5 |
| 10·0† | | 32·5 | 55·0 | |
| 9·6– | 29 | 3·7 | 18·4 | |
| 9·6† | | 39·3 | 59·3 | |
| 9·4 | | 58·9 | 12·6 | |
| 8·0 | 32 | 17·9 | 12·2 | |
| 9·4 | | 31·9 | 23·2 | |
| 8·8 | 33 | 11·9 | 32·0 | 8·5 |



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### 6361—6387.

| mag. | 22h. m | s | −62° ′ | |
|---|---|---|---|---|
| 8·8 | 34 | 26·4 | 29·7 | |
| 8·8† | | 43·5 | 43·1 | 7·5 G |
| 10·0† | | 46·5 | 46·3 | 9·5 |
| 9·2† | 35 | 51·0 | 50·4 | |
| 9·0† | 36 | 24·0 | 52·9 | |
| 9·2† | 38 | 17·8 | 57·8 | |
| 9·8† | 39 | 39·0 | 39·3 | |
| 10·0† | | 57·3 | 43·4 | |
| 7·2 | 40 | 13·4 | 20·6 | 6·5 GSc |
| 9·4† | | 30·0 | 58·1 | |
| 10·0† | 45 | 3·3 | 47·0 | |
| 9·3 | | 16·9 | 25·9 | |
| 9·0 | | 32·9 | 11·3 | 9·0 |
| 9·2 | | 44·9 | 23·4 | |
| 8·8 | 47 | 7·4 | 22·4 | |
| 8·7 | 49 | 0·4 | 20·4 | 8·5 G |
| 8·6 | | 0·9 | 16·4 | |
| 8·4 | | 45·9 | 31·7 | 8·0 G |
| 10·0† | 50 | 22·5 | 58·8 | |
| 9·4 | | 51·9 | 1·4 | |
| 8·2† | 51 | 40·0 | 39·2 | Gk |
| 9·4 | 52 | 7·2 | 20·9 | |
| 9·3 | | 16·7 | 15·9 | |
| 9·4 | | 28·7 | 19·9 | |
| 8·7† | 54 | 35·5 | 52·0 | 9·0 |
| 8·6 | 55 | 47·2 | 5·9 | |
| 9·0 | 56 | 33·7 | 18·0 | 9·5 G |

### 6388—6414.

| mag. | 22h.–23h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·4† | 56 | 44·0 | 58·6 | |
| 9·4† | 57 | 10·0 | 49·3 | |
| 10·0† | 58 | 31·3 | 48·0 | |
| 8·2 | 0 | 11·7 | 27·8 | |
| 9·4 | | 43·2 | 23·0 | |
| 9·2 | 1 | 1·7 | 15·1 | |
| 9·4 | | 57·2 | 16·5 | |
| 9·4 | 2 | 11·6 | 30·1 | |
| 9·0 | | 12·7 | 5·6 | |
| 9·6‡ | | 13·5 | 47·4 | |
| 10·0‡ | 4 | 13·0 | 36·1 | |
| 9·6‡ | | 40·5 | 39·0 | |
| 9·6‡ | | 40·5 | 47·1 | |
| 9·3 | | 40·8 | 26·9 | |
| 7·5 | | 43·1 | 9·9 | 8·0 G |
| 7·8 | | 44·5 | 0·8 | 8·0 G |
| 9·4 | | 57·7 | 30·1 | |
| 8·8 | 5 | 3·3 | 18·5 | |
| 8·4 | | 11·3 | 29·1 | |
| 8·6 | | 49·8 | 28·8 | 9·0 |
| 9·4‡ | 6 | 24·0 | 52·6 | |
| 8·3 | | 24·3 | 30·3 | 8·5 |
| 9·1‡ | 7 | 51·0 | 57·0 | 9·0 |
| 8·8 | 9 | 19·8 | 32·4 | 8·5 |
| 6·4‡ | | 25·0 | 40·9 | 6·0 GScr |
| 9·1 | 11 | 52·4 | 17·0 | |
| 8·6 | 12 | 8·9 | 25·1 | |

### 6415—6441.

| mag. | 23h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8‡ | 12 | 21·5 | 46·0 | |
| 8·8 | 14 | 20·9 | 29·6 | 8·5 G |
| 8·1 | 15 | 21·9 | 6·7 | 7·2 G |
| 8·8 | | 46·9 | 19·0 | 8·0 G |
| 9·8‡ | 17 | 31·0 | 52·0 | |
| 10·1‡ | 19 | 5·0 | 35·8 | |
| 10·1‡ | | 26·0 | 27·0 | |
| 8·6‡ | 23 | 43·5 | 54·0 | 8·0 G |
| 9·1‡ | 24 | 16·5 | 45·2 | |
| 9·0‡ | | 47·5 | 38·2 | |
| 9·6‡ | 26 | 40·5 | 55·0 | |
| 9·6 | | 47·9 | 22·7 | |
| 8·1 | | 49·9 | 20·5 | 7·5 G |
| 8·8 | 28 | 5·4 | 9·1 | 8·8 G |
| 10·0‡ | | 53·0 | 45·0 | |
| 9·1‡ | 29 | 43·5 | 37·2 | |
| 9·3 | | 47·4 | 0·2 | |
| 10·1‡ | 30 | 9·5 | 48·0 | |
| 8·8 | | 41·4 | 25·2 | 8·5 G |
| 9·4‡ | 32 | 29·0 | 40·4 | |
| 8·8 | 33 | 54·4 | 0·7 | 9·2 |
| 9·6 | | 55·5 | 1·1 | 10·0 |
| 8·2 | 36 | 58·0 | 25·3 | 7·5 G |
| 10·1‡ | 37 | 39·5 | 52·9 | |
| 9·1‡ | | 43·0 | 55·3 | |
| 9·6 | 38 | 14·0 | 0·9 | 9·0 G |
| 8·8‡ | | 24·5 | 36·1 | 8·5 |

### 6442—6468.

| mag. | 23h. m | s | −62° ′ | |
|---|---|---|---|---|
| 9·8‡ | 41 | 16·5 | 56·9 | |
| 8·3‡ | | 39·3 | 42·1 | |
| 9·6 | | 58·7 | 25·0 | |
| 9·6 | 44 | 51·4 | 26·1 | |
| 9·3 | 45 | 32·2 | 5·8 | 9·0 |
| 10·4† | | 39·6 | 54·1 | |
| 10·2† | | 43·1 | 49·8 | |
| 9·1 | | 49·9 | 35·6 | 8·8 |
| 9·6† | 46 | 42·6 | 56·0 | 9·5 |
| 8·8 | 47 | 0·4 | 25·2 | 9·0 |
| 9·6 | | 2·4 | 14·1 | |
| 9·2† | 48 | 17·1 | 49·7 | 9·0 |
| 10·4† | | 20·6 | 54·5 | |
| 9·4 | 50 | 17·4 | 6·5 | |
| 7·6 | | 54·9 | 27·5 | 8·5 G |
| 9·4 | 51 | 14·4 | 14·1 | |
| 9·5 | 52 | 17·4 | 30·0 | |
| 7·9 | | 20·9 | 17·0 | 8·0 G |
| 9·1 | | 22·9 | 10·3 | 9·5 |
| 9·6 | | 36·9 | 25·1 | |
| 9·6† | 53 | 24·6 | 43·7 | |
| 9·6 | | 34·9 | 19·8 | |
| 9·2† | 55 | 2·1 | 44·4 | 9·5 |
| 9·0 | 56 | 7·9 | 5·3 | 9·5 |
| 9·6 | 57 | 11·4 | 28·1 | |
| 10·1† | | 49·9 | 59·1 | |
| 8·0 | 59 | 14·4 | 0·5 | 7·5 GS |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 22 | 30 | 101 | 7·7 |
| | 40 | 99 | 7·9 |
| | 50 | 96 | 8·0 |
| 23 | 0 | 93 | 8·1 |
| | 10 | 91 | 8·2 |
| | 20 | 88 | 8·2 |
| | 30 | 85 | 8·3 |
| | 40 | 82 | 8·3 |
| | 50 | 80 | 8·3 |
| 0 | 0 | 77 | 8·4 |

## ZONE—63°

### 1—15.

| mag. | 0h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 31·6 | 16·5 | |
| 9·6 | | 38·6 | 23·3 | |
| 9·6 | | 40·6 | 37·1 | |
| 10·4 | 1 | 10·6 | 35·6 | |
| 8·8 | | 19·4 | 0·7 | 8·0 GSg |
| 10·0 | 2 | 40·1 | 26·0 | |
| 10·4 | 3 | 13·0 | 57·4 | |
| 9·2 | | 22·1 | 2·1 | 8·8 |
| 10·1 | | 36·1 | 3·2 | |
| 8·2 | | 49·1 | 59·5 | 8·5 |
| 9·6 | 4 | 37·6 | 6·5 | |
| 9·8 | 6 | 8·6 | 3·6 | |
| 9·8 | | 23·1 | 24·1 | ? |
| 10·4 | | 35·1 | 50·3 | |
| 10·4 | | 49·1 | 6·9 | |

### 16—30.

| mag. | 0h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·6 | 6 | 58·6 | 5·9 | |
| 10·0 | 7 | 8·6 | 42·4 | |
| 9·8 | | 38·7 | 56·6 | |
| 8·4 | 8 | 13·1 | 28·0 | 7·0 G |
| 10·2 | 9 | 2·6 | 5·6 | |
| 10·2 | | 4·1 | 4·9 | |
| 10·4 | | 5·6 | 48·8 | |
| 9·1 | 10 | 5·6 | 51·3 | 9·0 |
| 10·0 | | 11·6 | 4·3 | |
| 9·6 | | 19·1 | 50·5 | 10·0 |
| 9·5 | | 32·1 | 12·8 | |
| 10·2 | 11 | 56·6 | 40·0 | |
| 10·4 | 13 | 43·1 | 37·1 | |
| 10·6 | | 49·4 | 57·0 | |
| 10·4 | 14 | 20·6 | 51·5 | |

### 31—45.

| mag. | 0h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·2 | 14 | 50·4 | 59·9 | |
| 10·0 | 15 | 45·6 | 33·8 | |
| 9·2 | 16 | 8·4 | 58·8 | |
| 10·1 | | 23·4 | 59·6 | |
| 7·8 | 17 | 44·6 | 7·3 | 8·0 G |
| 10·6 | | 45·4 | 57·2 | |
| 10·2 | 18 | 8·9 | 10·8 | |
| 10·9 | 20 | 28·2 | 54·0 | |
| 10·9 | | 57·7 | 55·3 | |
| 10·2 | 21 | 3·7 | 8·2 | |
| 9·8 | | 5·6 | 34·1 | |
| 10·0 | | 8·2 | 58·0 | |
| 9·4 | | 33·9 | 34·8 | |
| 9·4 | 24 | 23·7 | 24·5 | |
| 10·9 | | 45·7 | 20·5 | |

### 46—60.

| mag. | 0h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 25 | 9·7 | 58·0 | |
| 10·9 | | 12·2 | 40·6 | |
| 10·4 | | 13·2 | 18·1 | |
| 10·8 | | 41·2 | 25·9 | |
| 3·8 | | 49·2 | 38·9 | 3·7 GSctrλ |
| 10·0 | 26 | 26·2 | 46·6 | 9·5 G |
| 5·1 | 27 | 1·2 | 43·1 | 5·8 GScgtr |
| 10·4 | | 29·2 | 19·2 | |
| 10·0 | | 44·2 | 27·6 | |
| 9·6 | 28 | 0·2 | 47·8 | |
| 8·8 | | 44·2 | 45·1 | 9·5 G |
| 9·6 | 30 | 20·2 | 13·1 | |
| 10·4 | | 24·7 | 0·3 | |
| 10·2 | | 41·2 | 30·1 | |
| 10·0 | 31 | 8·7 | 26·9 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 71 | 8·3 |
| | 30 | 68 | 8·3 |
| | 40 | 65 | 8·2 |



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| | | 25 prec. | |
|---|---|---|---|
| | | a | δ |
| | | + | + |
| h | m | s | ′ |
| 0 | 30 | 68 | 8.3 |
| | 40 | 65 | 8.2 |
| | 50 | 62 | 8.2 |
| 1 | 0 | 59 | 8.1 |
| | 10 | 57 | 8.0 |
| | 20 | 54 | 7.9 |
| | 30 | 51 | 7.7 |
| | 40 | 48 | 7.6 |
| | 50 | 46 | 7.4 |
| 2 | 0 | 43 | 7.2 |
| | 10 | 41 | 7.0 |
| | 20 | 38 | 6.8 |
| | 30 | 36 | 6.6 |
| | 40 | 34 | 6.4 |
| | 50 | 32 | 6.2 |
| 3 | 0 | 29 | 5.9 |
| | 10 | 27 | 5.6 |
| | 20 | 25 | 5.4 |
| | 30 | 24 | 5.1 |
| | 40 | 22 | 4.8 |
| | 50 | 20 | 4.5 |
| 4 | 0 | 19 | 4.2 |
| | 10 | 17 | 3.9 |

## 61—120.

| | 0h.—1h. | | −63° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 10.2 | 31 | 14.2 | 22.6 | |
| 10.4 | 32 | 4.7 | 45.9 | |
| 10.4 | | 25.2 | 37.1 | |
| 9.0 | | 40.7 | 10.0 | 9.5 |
| 10.8 | 33 | 26.7 | 3.3 | |
| 9.8 | | 34.2 | 30.0 | 9.5 |
| 10.2 | | 55.2 | 48.2 | |
| 10.2 | 36 | 24.7 | 0.9 | |
| 9.8 | 37 | 39.2 | 26.9 | |
| 9.4 | | 47.2 | 11.9 | |
| 10.2 | | 47.2 | 45.5 | |
| 6.6 | 39 | 4.0 | 10.9 | 6.5 G |
| 8.3 | | 32.0 | 52.8 | 8.0 G |
| 9.2 | 40 | 39.7 | 58.3 | 9.5 |
| 7.5 | | 53.5 | 21.5 | 8.0 G |
| 8.6 | 41 | 32.0 | 24.5 | 8.2 |
| 10.8 | | 51.0 | 2.2 | |
| 10.2 | 45 | 5.5 | 9.6 | |
| 10.8 | 47 | 27.5 | 54.2 | |
| 9.2 | | 56.0 | 14.4 | |
| 8.8 | 48 | 3.5 | 36.5 | 9.5 |
| 10.8 | | 8.5 | 48.7 | |
| 7.8 | | 26.0 | 33.0 | 6.0 GScr |
| 10.4 | | 48.5 | 28.2 | |
| 10.2 | 49 | 15.0 | 31.5 | |
| 9.0 | | 23.0 | 46.1 | |
| 10.6 | 50 | 3.5 | 54.0 | |
| 10.2 | | 15.5 | 10.5 | 9.0 |
| 10.6 | | 20.5 | 13.0 | |
| 10.8 | | 41.2 | 23.9 | |
| 8.8 | 51 | 57.2 | 57.2 | |
| 9.2 | 53 | 40.0 | 7.7 | 8.5 |
| 9.8 | 54 | 39.5 | 42.0 | |
| 9.8 | | 55.0 | 32.6 | |
| 9.8 | 55 | 36.0 | 48.7 | |
| 10.4 | | 43.0 | 57.9 | |
| 10.2 | | 55.5 | 4.8 | |
| 9.3 | 57 | 38.5 | 29.8 | |
| 10.4 | 58 | 4.5 | 51.1 | |
| 9.5 | | 6.5 | 55.1 | |
| 10.8 | 0 | 37.2 | 13.0 | |
| 10.0 | | 39.3 | 23.9 | |
| 9.8 | 1 | 35.0 | 13.2 | |
| 9.8 | 2 | 5.0 | 21.9 | |
| 9.5 | 8 | 25.5 | 54.8 | |
| 9.2 | | 59.0 | 5.8 | |
| 9.0 | 10 | 43.5 | 48.4 | S |
| 9.7 | 14 | 30.5 | 20.0 | |
| 9.4 | | 54.5 | 47.4 | |
| 9.6 | 16 | 19.5 | 55.3 | |
| 9.6 | | 38.5 | 38.1 | 9.0 |
| 9.8 | | 46.0 | 33.6 | |
| 9.6 | 19 | 0.0 | 31.1 | |
| 9.2 | | 47.0 | 6.1 | 9.0 |
| 9.6 | 20 | 24.0 | 8.2 | |
| 9.4 | 22 | 32.5 | 36.9 | 9.5 G |
| 9.7 | 23 | 4.5 | 1.8 | |
| 9.8 | 24 | 2.5 | 43.2 | |
| 9.4 | | 27.5 | 12.1 | |
| 9.0 | 26 | 37.0 | 17.8 | 9.0 |

## 121—180.

| | 1h.—2h. | | −63° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 9.5 | 27 | 48.5 | 41.4 | |
| 9.1 | 28 | 12.0 | 29.1 | 9.0 |
| 9.7 | | 46.0 | 32.1 | |
| 6.8 | 29 | 43.0 | 7.1 | 7.0 GSr |
| 9.7 | 30 | 28.5 | 12.1 | |
| 9.7 | 33 | 57.0 | 29.1 | |
| 8.7 | 37 | 50.0 | 55.5 | 9.0 G |
| 9.4 | 39 | 49.5 | 49.8 | |
| 9.1 | 41 | 51.0 | 56.6 | |
| 9.0 | 42 | 6.7 | 26.1 | 10.0 |
| 10.0† | 43 | 9.5 | 2.9 | |
| 8.2 | 46 | 31.5 | 34.6 | 7.2 G |
| 8.6 | | 41.0 | 26.8 | 8.8 |
| 9.1 | 47 | 18.0 | 51.3 | 9.5 |
| 8.9 | | 24.0 | 54.4 | |
| 9.3 | 48 | 11.0 | 52.8 | |
| 8.2 | 51 | 42.5 | 41.3 | 9.0 G |
| 9.2 | 52 | 51.0 | 16.8 | |
| 9.2 | 53 | 10.0 | 29.8 | |
| 10.0† | 55 | 26.5 | 1.7 | |
| 9.2 | 56 | 34.0 | 1.6 | |
| 9.1 | | 44.0 | 21.8 | |
| 7.8 | | 48.5 | 22.2 | 8.0 GS |
| 8.1 | 58 | 30.5 | 11.7 | 8.5 G |
| 10.0† | | 58.0 | 1.7 | |
| 9.2 | 1 | 14.5 | 25.0 | 10.0 G |
| 9.2 | 2 | 11.5 | 17.1 | |
| 9.1 | 7 | 51.0 | 36.9 | |
| 9.3 | 10 | 21.0 | 48.4 | |
| 9.2 | 11 | 5.0 | 33.1 | 9.0 G |
| 7.8 | 13 | 27.7 | 58.3 | 8.0 GS |
| 8.2 | 14 | 20.5 | 18.9 | 8.4 G |
| 8.5 | 15 | 4.0 | 49.2 | 8.8 G |
| 9.1 | 16 | 37.5 | 17.0 | |
| 8.9 | | 38.0 | 43.9 | 10.0 |
| 8.3 | 17 | 21.7 | 7.1 | 7.7 GS |
| 9.0 | 20 | 11.5 | 32.1 | |
| 8.9 | | 38.0 | 1.2 | 9.5 |
| 8.6 | 22 | 38.8 | 45.3 | 9.5 |
| 8.3 | 23 | 3.3 | 28.8 | 8.4 G |
| 9.5 | 25 | 8.5 | 20.7 | |
| 8.9 | 27 | 15.5 | 25.5 | 9.5 G |
| 8.4 | | 49.0 | 8.8 | 7.8 GS |
| 9.1 | | 57.0 | 9.8 | 8.8 G |
| 8.9 | 28 | 17.5 | 23.0 | |
| 8.9 | | 18.0 | 30.7 | 10.0 |
| 8.5 | 29 | 11.0 | 33.3 | 8.2 G |
| 9.4 | 30 | 24.0 | 6.1 | 9.5 G |
| 6.5 | | 29.0 | 8.2 | 6.8 GSt |
| 9.1 | | 38.5 | 32.8 | |
| 9.0 | 32 | 8.5 | 31.6 | |
| 9.5 | | 34.5 | 57.7 | |
| 9.5 | 34 | 33.0 | 36.3 | 9.5 |
| 9.5 | 35 | 10.0 | 39.2 | |
| 8.2 | 36 | 49.0 | 13.8 | 8.5 GS |
| 9.4 | | 50.5 | 38.4 | |
| 9.4 | 39 | 4.0 | 8.6 | |
| 9.4 | | 22.5 | 40.9 | |
| 7.7 | 40 | 46.5 | 26.8 | 7.8 GS |
| 9.4 | 41 | 25.0 | 23.9 | 9.2 |

## 181—240.

| | 2h.—3h. | | −63° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8.9 | 42 | 2.5 | 13.9 | 9.0 G |
| 9.4 | | 43.5 | 9.1 | |
| 8.1 | 43 | 0.5 | 14.9 | 7.5 G |
| 9.1 | | 12.5 | 35.8 | 8.8 |
| 7.9 | 45 | 18.5 | 28.9 | 8.5 S |
| 9.0 | | 25.0 | 35.5 | |
| 9.0 | | 29.0 | 46.0 | |
| 5.5 | 46 | 14.5 | 19.6 | 5.0 Gr |
| 9.5 | | 55.5 | 39.8 | |
| 9.3 | | 56.5 | 3.9 | |
| 9.5 | 48 | 1.5 | 1.0 | |
| 9.1 | | 20.5 | 13.8 | |
| 8.6 | | 38.5 | 22.0 | |
| 9.4 | | 39.5 | 12.2 | |
| 9.5 | | 59.0 | 13.9 | |
| 9.1 | 49 | 9.0 | 38.9 | |
| 7.1 | | 38.0 | 25.3 | GS |
| 8.2 | 51 | 45.5 | 30.7 | S |
| 9.4 | 53 | 15.5 | 43.7 | |
| 9.4 | | 44.0 | 30.0 | |
| 7.7 | 54 | 27.5 | 32.1 | GS |
| 9.3 | 55 | 25.0 | 9.9 | 9.5 |
| 8.6 | | 50.0 | 6.1 | 10.0 |
| 8.6 | 59 | 1.5 | 59.4 | 8.0 G |
| 9.4 | | 50.2 | 33.8 | |
| 9.0 | 0 | 46.0 | 28.9 | 9.0 |
| 8.0 | 1 | 1.0 | 51.7 | 9.0 |
| 9.6 | 2 | 22.5 | 52.9 | |
| 9.4 | | 53.0 | 3.4 | |
| 8.9 | 3 | 42.0 | 21.2 | |
| 9.6 | 7 | 51.5 | 55.9 | |
| 7.8 | 8 | 4.0 | 43.5 | |
| 9.6 | 11 | 59.0 | 8.0 | |
| 8.9 | 13 | 33.0 | 26.6 | |
| 8.3 | 14 | 3.0 | 44.2 | |
| 8.2 | | 49.5 | 47.4 | |
| 6.4 | 15 | 6.0 | 3.2 | 6.0 GS |
| 9.1 | | 14.0 | 55.0 | |
| 8.0 | | 30.0 | 31.7 | 8.5 G |
| 9.0 | 16 | 22.5 | 2.8 | |
| 8.8 | 17 | 53.5 | 14.1 | |
| 9.6 | 19 | 5.0 | 32.0 | |
| 9.0 | 20 | 0.5 | 7.3 | 8.8 G |
| 8.9 | 22 | 35.5 | 28.6 | 8.5 |
| 7.9 | | 43.0 | 0.2 | 8.2 GS |
| 9.1 | 23 | 5.5 | 29.2 | 9.0 |
| 9.4 | | 26.5 | 42.1 | |
| 9.6 | 24 | 20.5 | 21.5 | |
| 9.6 | | 32.0 | 29.2 | 9.0 |
| 7.9 | | 36.0 | 15.5 | 8.5 |
| 8.3 | | 53.0 | 55.5 | 8.0 G |
| 8.8 | | 58.0 | 56.2 | 9.0 |
| 9.3 | 25 | 42.5 | 7.0 | |
| 5.4 | 27 | 12.5 | 22.5 | 5.2 GS |
| 9.1 | 29 | 26.5 | 36.3 | |
| 7.2 | 31 | 30.5 | 3.7 | 7.5 G |
| 8.9 | | 59.5 | 11.2 | |
| 9.6 | 32 | 38.0 | 37.5 | |
| 9.0 | | 39.0 | 3.0 | 9.0 |
| 9.3 | 33 | 34.5 | 2.8 | 9.0 |

## 241—300.

| | 3h.—4h. | | −63° | |
|---|---|---|---|---|
| mag. | m | s | ′ | |
| 8.7 | 35 | 14.0 | 11.6 | |
| 9.1 | | 20.0 | 8.9 | |
| 9.1 | | 23.0 | 13.3 | |
| 9.4 | 36 | 4.0 | 49.6 | |
| 9.4 | | 18.5 | 19.3 | |
| 8.9 | | 24.5 | 23.3 | |
| 9.2 | | 36.5 | 3.0 | |
| 10.1 | 37 | 5.0 | 35.5 | |
| 9.7 | | 29.0 | 19.8 | |
| 9.2 | 39 | 56.7 | 9.8 | |
| 9.5 | 40 | 1.0 | 18.1 | |
| 10.1 | 41 | 16.5 | 13.0 | |
| 9.0 | | 20.5 | 50.6 | 9.0 G |
| 9.4 | | 20.5 | 34.4 | |
| 9.4 | 42 | 11.0 | 55.1 | 9.0 |
| 10.1 | | 51.0 | 54.1 | |
| 10.1 | 43 | 30.5 | 34.3 | |
| 9.5 | | 31.0 | 38.4 | |
| 8.8 | 44 | 29.0 | 32.9 | 9.0 |
| 10.1 | | 30.5 | 35.4 | |
| 10.1 | 46 | 20.0 | 1.9 | |
| 10.1 | | 40.5 | 8.4 | |
| 10.1 | | 58.0 | 22.4 | |
| 10.1 | 47 | 4.0 | 19.8 | |
| 9.2 | 48 | 31.5 | 36.2 | |
| 10.1 | | 34.5 | 57.1 | |
| 8.7 | 49 | 0.5 | 32.1 | 8.1 G |
| 10.1 | 51 | 0.0 | 41.5 | |
| 10.1 | | 11.0 | 1.9 | |
| 9.1 | | 18.5 | 0.5 | |
| 9.2 | 52 | 20.0 | 33.0 | 10.0 |
| 10.1 | 53 | 15.5 | 27.4 | |
| 10.1 | | 19.0 | 39.1 | |
| 9.5 | | 30.0 | 38.1 | |
| 6.6 | 54 | 27.5 | 49.5 | 6.5 GSc |
| 9.1 | | 34.0 | 18.8 | |
| 10.1 | 55 | 2.0 | 2.9 | |
| 9.5 | | 7.5 | 1.0 | |
| 10.1 | | 11.5 | 47.4 | |
| 9.2 | | 39.5 | 31.7 | |
| 10.1 | | 53.5 | 27.4 | |
| 10.1 | 56 | 5.0 | 31.2 | |
| 10.1 | 57 | 33.0 | 8.3 | |
| 9.8 | | 56.5 | 23.6 | |
| 8.1 | 58 | 33.0 | 15.2 | 8.5 |
| 8.8 | 59 | 4.0 | 33.2 | |
| 9.7 | | 12.5 | 33.2 | |
| 10.1 | 0 | 3.0 | 45.1 | |
| 9.5 | | 34.5 | 37.1 | |
| 9.5 | 1 | 33.0 | 26.6 | |
| 9.5 | | 49.0 | 55.7 | |
| 9.2 | 2 | 21.5 | 7.4 | 9.0 |
| 8.7 | | 30.5 | 27.0 | 9.5 |
| 9.0 | 3 | 14.5 | 3.9 | 9.0 |
| 10.1 | | 59.5 | 9.0 | |
| 9.8 | 5 | 1.0 | 9.0 | |
| 10.1 | | 39.5 | 58.5 | |
| 10.1 | | 50.5 | 34.0 | |
| 8.4 | 6 | 14.5 | 5.5 | 9.0 |
| 9.1 | | 32.5 | 39.7 | |



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## 301—360.

| mag. | 4h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 6 | 44·0 | 26·2 | |
| 10·1 | 7 | 19·0 | 34·1 | |
| 10·1 | 8 | 6·5 | 16·1 | |
| 10·1 | | 7·0 | 22·0 | |
| 8·5 | 9 | 34·5 | 28·8 | 8·8 GS |
| 10·1 | 10 | 9·5 | 31·0 | |
| 10·1 | | 16·5 | 27·3 | |
| 9·5 | 11 | 10·0 | 46·9 | |
| 10·1 | 13 | 9·0 | 35·1 | |
| 10·1 | 14 | 15·0 | 20·0 | |
| 10·1 | | 43·5 | 10·9 | |
| 10·1 | 15 | 21·5 | 52·2 | |
| 10·1 | | 26·5 | 38·1 | |
| 8·3 | | 53·0 | 23·8 | 9·0 G |
| 10·1 | 16 | 8·5 | 36·4 | |
| 5·4 | | 17·0 | 33·5 | 7·0 GSct |
| 9·5 | | 29·5 | 32·1 | |
| 9·2 | | 41·5 | 33·1 | G |
| 9·5 | 18 | 53·5 | 55·5 | |
| 8·2 | | 55·5 | 28·0 | 8·0 GS |
| 9·1 | 20 | 17·0 | 54·9 | 9·0 |
| 9·9 | | 21·5 | 40·0 | |
| 9·8 | | 27·0 | 57·1 | |
| 6·4 | | 31·5 | 40·9 | 6·0 GSct |
| 9·8 | 21 | 13·2 | 30·9 | |
| 9·9 | | 21·0 | 35·7 | |
| 8·8 | 22 | 34·3 | 35·0 | 9·0 |
| 9·9 | | 40·0 | 11·5 | |
| 9·8 | 24 | 6·0 | 0·3 | |
| 8·6 | | 49·0 | 2·0 | 8·0 G |
| 9·5 | 25 | 36·5 | 21·5 | |
| 6·7 | | 42·0 | 4·6 | 7·0 GS |
| 9·2 | 26 | 15·5 | 27·1 | |
| 9·1 | 28 | 38·5 | 5·9 | |
| 9·5 | | 54·5 | 39·6 | |
| 9·9 | 29 | 19·5 | 39·9 | |
| 9·7 | 30 | 10·5 | 11·8 | |
| 9·6 | | 39·0 | 38·3 | |
| 9·9 | | 39·5 | 14·5 | |
| 9·9 | | 54·5 | 5·2 | |
| 9·8 | 31 | 21·5 | 15·1 | |
| 6·9 | 32 | 15·5 | 4·9 | 6·5 GS |
| 9·1 | | 20·0 | 4·9 | 9·8 |
| 9·9 | | 52·0 | 31·1 | |
| 9·8 | 33 | 15·0 | 27·9 | |
| 9·4 | 34 | 11·5 | 33·9 | |
| 9·3 | | 44·5 | 25·3 | 9·5 |
| 9·6 | 35 | 8·5 | 57·7 | |
| 9·4 | | 24·5 | 9·9 | |
| 9·9 | | 26·5 | 37·9 | |
| 9·8 | 36 | 26·5 | 52·9 | |
| 9·8 | 37 | 0·5 | 43·9 | |
| 9·5 | | 29·5 | 23·1 | |
| 9·3 | 38 | 41·0 | 35·9 | |
| 9·0 | 39 | 20·0 | 14·5 | 9·5 G |
| 8·2 | | 31·5 | 2·3 | 8·0 G |
| 9·8 | 41 | 5·5 | 2·9 | |
| 7·6 | | 10·5 | 26·9 | 8·2 S |
| 9·2 | | 22·0 | 6·7 | |
| 9·0 | | 23·0 | 11·6 | |

## 361—420.

| mag. | 4h.–5h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 41 | 27·5 | 13·7 | |
| 9·1 | 42 | 13·5 | 23·5 | |
| 9·2 | 43 | 15·5 | 47·8 | |
| 9·0 | | 47·5 | 32·0 | 9·0 |
| 7·3 | | 49·0 | 27·2 | 7·0 GS |
| 8·8 | 44 | 18·0 | 54·8 | 9·0 |
| 9·9 | | 43·0 | 23·1 | |
| 9·9 | | 44·0 | 18·9 | |
| 8·5 | | 54·0 | 46·9 | 8·0 GS |
| 7·5 | 46 | 2·0 | 2·9 | 8·5 GS |
| 9·5 | | 39·5 | 25·9 | |
| 7·7 | 47 | 2·5 | 41·7 | 7·2 GS |
| 8·8 | | 8·0 | 57·7 | 8·2 |
| 8·2 | | 29·0 | 11·7 | 9·0 |
| 9·6 | 48 | 48·5 | 46·9 | |
| 8·6 | | 51·5 | 22·5 | 9·0 G |
| 9·8 | 49 | 6·0 | 58·9 | |
| 8·7 | 51 | 42·0 | 24·1 | 9·0 |
| 8·6 | 52 | 9·0 | 48·9 | 7·5 GS |
| 9·6 | | 50·5 | 7·2 | |
| 9·3 | 53 | 38·5 | 49·1 | |
| 9·5 | | 48·0 | 53·5 | |
| 9·8 | 54 | 32·0 | 47·9 | |
| 9·8 | | 58·0 | 7·9 | |
| 9·6 | | 59·5 | 11·8 | |
| 9·3 | 55 | 17·5 | 17·9 | |
| 8·8 | | 24·5 | 44·3 | |
| 9·2 | 56 | 6·5 | 19·0 | |
| 9·1 | | 17·5 | 40·1 | |
| 9·3 | | 25·0 | 23·5 | |
| 7·9 | 57 | 19·5 | 23·9 | 8·5 G |
| 9·8 | | 29·5 | 25·9 | |
| 9·2 | 58 | 4·0 | 36·7 | |
| 9·8 | | 16·7 | 21·2 | |
| 8·7 | | 27·8 | 12·8 | 9·5 |
| 9·1 | 59 | 28·5 | 48·7 | 8·5 |
| 9·8 | | 31·2 | 13·6 | |
| 9·6 | 0 | 3·5 | 48·3 | |
| 9·5 | | 15·7 | 17·0 | |
| 8·7 | | 18·8 | 15·3 | 9·5 |
| 10·0 | | 35·5 | 30·8 | |
| 10·0 | 1 | 19·0 | 4·3 | |
| 10·0 | | 31·0 | 8·4 | |
| 10·0 | | 52·5 | 45·8 | |
| 8·8 | 2 | 18·8 | 22·6 | 7·8 G |
| 10·0 | | 27·5 | 51·6 | |
| 9·8 | | 27·5 | 7·6 | |
| 10·0 | | 35·5 | 21·0 | |
| 10·0 | 3 | 35·0 | 27·1 | |
| 8·9 | | 41·5 | 45·8 | |
| 9·7 | 4 | 5·0 | 22·9 | |
| 9·5 | | 6·5 | 11·8 | |
| 9·2 | | 27·5 | 18·6 | 9·5 |
| 9·8 | | 49·5 | 28·8 | |
| 8·9 | | 59·5 | 45·2 | |
| 8·9 | 5 | 27·0 | 32·8 | |
| 7·9 | | 36·0 | 18·6 | 8·5 |
| 10·0 | | 51·5 | 53·6 | |
| 10·0 | 6 | 3·0 | 40·2 | |
| 7·1 | | 34·5 | 33·4 | 5·2 GS |

## 421—480.

| mag. | 5h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·3 | 7 | 44·5 | 37·2 | |
| 9·5 | | 53·5 | 22·6 | |
| 10·0 | 8 | 20·0 | 6·7 | |
| 10·0 | | 28·5 | 49·9 | |
| 10·0 | | 44·0 | 34·2 | |
| 7·5 | | 44·5 | 56·0 | 7·5 GS |
| 9·8 | 9 | 9·0 | 5·2 | |
| 9·8 | | 17·5 | 17·8 | |
| 9·4 | | 41·5 | 31·2 | |
| 10·0 | 10 | 21·5 | 55·0 | |
| 9·3 | 11 | 43·5 | 45·8 | |
| 9·7 | 12 | 30·5 | 25·0 | |
| 10·0 | | 55·5 | 48·4 | |
| 10·0 | 13 | 12·0 | 2·8 | |
| 9·4 | | 27·0 | 22·6 | |
| 8·1 | | 30·5 | 40·8 | 8·0 G |
| 9·2 | | 32·5 | 44·8 | |
| 8·4 | | 49·0 | 12·7 | 9·0 |
| 9·1 | 14 | 22·0 | 18·1 | |
| 9·3 | | 48·5 | 4·5 | |
| 8·7 | | 54·5 | 28·6 | 7·8 G |
| 9·8 | 15 | 29·0 | 4·4 | |
| 9·5 | 16 | 13·0 | 45·9 | |
| 9·5 | | 29·5 | 19·0 | |
| 9·2 | | 41·0 | 19·9 | |
| 9·5 | 17 | 8·0 | 25·0 | |
| 10·0 | | 20·0 | 18·0 | |
| 8·4 | | 42·5 | 6·6 | 8·0 GS |
| 8·8 | 19 | 5·0 | 11·7 | 9·0 |
| 8·7 | | 57·5 | 38·7 | 9·0 |
| 10·0 | 20 | 17·0 | 41·3 | |
| 9·8 | | 48·5 | 49·5 | |
| 10·0 | 21 | 18·0 | 55·7 | |
| 8·2 | | 37·0 | 0·7 | 9·0 |
| 9·1 | 22 | 49·5 | 43·5 | |
| 10·0 | 23 | 26·5 | 6·7 | |
| 8·8 | 25 | 32·0 | 17·2 | 9·5 |
| 8·9 | | 46·5 | 47·8 | |
| 10·0 | 30 | 14·0 | 58·4 | g |
| 7·1 | 32 | 1·0 | 32·3 | 8·2 GS |
| 10·0 | | 11·0 | 41·9 | |
| 10·0 | | 56·0 | 20·6 | |
| 8·7 | 33 | 0·5 | 37·8 | 8·8 |
| 10·0 | | 12·0 | 59·0 | |
| 9·3 | 35 | 50·0 | 54·9 | g |
| 9·3 | | 58·5 | 13·7 | |
| 10·0 | 36 | 42·0 | 15·7 | |
| 9·2 | 37 | 4·0 | 31·8 | |
| 9·8 | | 15·5 | 10·2 | |
| 10·0 | | 57·0 | 13·4 | |
| 9·9 | 38 | 13·0 | 48·9 | |
| 9·3 | | 30·3 | 47·4 | |
| 10·1 | 40 | 14·0 | 12·3 | |
| 9·7 | | 42·5 | 38·0 | |
| 9·3 | 41 | 13·0 | 21·0 | |
| 10·0 | | 21·5 | 49·3 | |
| 10·1 | 44 | 51·0 | 56·8 | |
| 9·6 | 45 | 38·0 | 55·9 | |
| 9·7 | | 50·5 | 5·9 | |
| 10·1 | | 52·7 | 57·8 | |

## 481—540.

| mag. | 5h.–6h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8·9 | 45 | 58·5 | 18·7 | g |
| 9·1 | 47 | 27·0 | 26·5 | g |
| 10·1 | 48 | 7·0 | 21·9 | |
| 9·3 | | 20·0 | 24·0 | g |
| 10·0 | | 29·5 | 49·3 | |
| 9·3 | | 34·0 | 3·2 | g |
| 9·4 | | 47·0 | 44·0 | |
| 10·1 | 49 | 3·5 | 4·5 | |
| 10·1 | | 4·0 | 29·9 | |
| 9·9 | | 44·0 | 48·8 | |
| 8·5 | | 48·0 | 36·6 | 9·0 g |
| 8·8 | 50 | 5·5 | 21·3 | 9·5 g |
| 9·7 | | 7·5 | 17·1 | |
| 9·7 | | 13·5 | 30·4 | |
| 7·9 | | 42·5 | 33·4 | 8·0 Gg |
| 9·5 | 51 | 50·5 | 21·9 | |
| 7·7 | 52 | 39·0 | 20·2 | 8·8 g |
| 6·2 | 53 | 9·5 | 7·6 | 5·0 GSg |
| 10·1 | | 27·0 | 40·0 | |
| 9·7 | | 54·0 | 43·2 | |
| 9·7 | 54 | 3·5 | 59·4 | |
| 9·0 | | 52·5 | 6·0 | g |
| 9·6 | 56 | 9·5 | 8·8 | |
| 9·9 | | 54·0 | 14·4 | |
| 9·3 | 58 | 9·5 | 44·0 | g |
| 9·0 | | 17·5 | 23·0 | g |
| 9·4 | | 42·0 | 23·9 | g |
| 9·9 | 59 | 23·5 | 27·0 | |
| 9·4 | | 53·5 | 57·2 | |
| 9·4 | 0 | 6·5 | 22·1 | |
| 9·1 | | 19·5 | 43·7 | 8·5 g |
| 10·1 | | 22·0 | 31·8 | |
| 9·4 | | 28·0 | 56·7 | |
| 9·4 | | 41·3 | 58·9 | |
| 10·1 | | 47·5 | 7·9 | |
| 10·1 | | 51·5 | 2·9 | |
| 8·6 | 1 | 21·0 | 32·2 | 9·0 g |
| 10·1 | 2 | 9·5 | 10·9 | |
| 8·7 | | 24·5 | 44·6 | 8·5 g |
| 8·5 | | 28·5 | 20·7 | 8·0 Gg |
| 9·1 | | 43·0 | 29·4 | |
| 9·8 | | 57·0 | 31·3 | |
| 10·1 | 3 | 16·5 | 32·9 | |
| 8·8 | 5 | 30·5 | 2·7 | 9·5 g |
| 9·7 | | 36·5 | 17·7 | |
| 9·6 | | 45·5 | 12·9 | |
| 9·6 | 6 | 9·0 | 4·3 | |
| 8·8 | 7 | 19·0 | 17·0 | 9·5 g |
| 9·4 | | 26·5 | 11·9 | 9·2 g |
| 9·7 | | 32·0 | 13·8 | |
| 8·7 | | 42·0 | 34·3 | 9·0 g |
| 9·3 | 8 | 25·5 | 56·0 | g |
| 9·1 | 10 | 10·0 | 14·4 | g |
| 9·1 | | 28·5 | 16·9 | |
| 9·0 | 11 | 5·5 | 53·7 | g |
| 10·1 | | 31·5 | 49·3 | |
| 9·3 | 13 | 49·5 | 15·4 | g |
| 8·8 | 14 | 36·5 | 23·2 | g |
| 10·1 | | 50·5 | 17·1 | |
| 9·3 | 16 | 42·5 | 13·9 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 0 | 19 | 4·2 |
| | 10 | 17 | 3·9 |
| | 20 | 16 | 3·5 |
| | 30 | 15 | 3·2 |
| | 40 | 14 | 2·9 |
| | 50 | 13 | 2·5 |
| 5 | 0 | 12 | 2·2 |
| | 10 | 11 | 1·8 |
| | 20 | 11 | 1·5 |
| | 30 | 10 | 1·1 |
| | 40 | 10 | 0·7 |
| | 50 | 10 | 0·4 |
| 6 | 0 | 10 | 0·0 |
| | | | − |
| | 10 | 10 | 0·4 |
| | 20 | 10 | 0·7 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 6. | 10 | 10 | 0.4 |
| | 20 | 10 | 0.7 |
| | 30 | 10 | 1.1 |
| | 40 | 11 | 1.5 |
| | 50 | 11 | 1.8 |
| 7 | 0 | 12 | 2.2 |
| | 10 | 13 | 2.5 |
| | 20 | 14 | 2.9 |
| | 30 | 15 | 3.2 |
| | 40 | 16 | 3.5 |
| | 50 | 17 | 3.9 |

**541—600.**

| mag. | $6^h$ m | s | −63° ′ | |
|---|---|---|---|---|
| 6.9 | 17 | 6.7 | 58.7 | 7.5 GS*g* |
| 8.8 | | 38.5 | 5.0 | 9.0 *g* |
| 10.1 | 18 | 4.5 | 13.1 | |
| 9.7 | | 15.5 | 48.3 | |
| 10.1 | | 22.5 | 45.4 | |
| 10.0 | | 29.5 | 8.9 | |
| 9.0 | | 43.5 | 37.0 | |
| 7.7 | | 51.7 | 46.0 | 7.0 GSc*g* |
| 10.0 | | 53.5 | 16.0 | |
| 9.3 | 19 | 9.5 | 3.0 | *g* |
| 10.0 | | 19.5 | 5.1 | |
| 10.0 | | 22.0 | 7.2 | |
| 10.0 | | 26.0 | 31.1 | |
| 9.1 | 20 | 1.0 | 52.2 | 8.0 *g* |
| 8.5 | | 17.3 | 59.8 | 8.5 *g* |
| 9.4 | | 50.0 | 45.9 | |
| 10.0 | 21 | 13.5 | 46.1 | |
| 10.0 | | 46.5 | 26.2 | |
| 9.4 | | 57.0 | 58.9 | |
| 9.5 | 22 | 8.5 | 37.1 | |
| 8.4 | | 13.5 | 36.9 | 6.5 GS*g* |
| 9.7 | | 23.5 | 47.3 | . |
| 9.6 | | 31.5 | 15.9 | |
| 9.2 | | 42.5 | 8.0 | |
| 9.3 | | 46.5 | 5.4 | |
| 9.8 | 23 | 21.5 | 40.8 | |
| 8.9 | | 27.5 | 43.0 | 9.5 G*g* |
| 7.4 | | 33.5 | 21.1 | 6.8 GS*g* |
| 9.7 | | 51.0 | 54.5 | |
| 9.6 | | 53.5 | 31.3 | |
| 10.0 | | 55.5 | 59.1 | |
| 6.1 | 24 | 9.5 | 45.2 | 6.8 GS*g* |
| 10.0 | | 20.5 | 46.7 | |
| 9.6 | | 30.3 | 59.0 | |
| 9.1 | | 30.5 | 14.3 | *g* |
| 9.4 | | 51.5 | 22.4 | *g* |
| 9.6 | 25 | 11.0 | 13.8 | |
| 9.6 | | 23.5 | 0.6 | |
| 9.8 | | 25.5 | 37.2 | |
| 10.0 | | 41.5 | 36.2 | |
| 10.0 | | 53.5 | 51.1 | |
| 9.4 | 26 | 30.7 | 2.1 | |
| 10.0 | | 48.5 | 50.0 | |
| 9.2 | 27 | 1.5 | 6.3 | |
| 9.5 | 28 | 29.5 | 43.0 | |
| 8.6 | 29 | 12.5 | 6.2 | *g* |
| 9.5 | 30 | 8.3 | 59.5 | |
| 10.0 | | 17.5 | 10.0 | |
| 9.1 | | 31.0 | 37.2 | |
| 8.9 | | 36.5 | 26.5 | *g* |
| 9.5 | | 53.0 | 31.0 | |
| 10.0 | | 54.5 | 50.3 | |
| 9.3 | 31 | 3.5 | 44.7 | |
| 9.5 | | 7.5 | 3.2 | |
| 10.0 | | 22.0 | 6.7 | |
| 10.0 | | 33.0 | 39.0 | |
| 9.6 | | 36.0 | 34.8 | |
| 9.3 | | 53.0 | 58.4 | |
| 9.6 | | 58.0 | 50.4 | |
| 10.0 | | 59.0 | 1.1 | |

**601—660.**

| mag. | $6^h$ m | s | −63° ′ | |
|---|---|---|---|---|
| 10.0 | 32 | 10.0 | 5.0 | |
| 9.2 | | 25.0 | 12.6 | |
| 10.0 | | 29.0 | 51.2 | |
| 10.0 | | 46.5 | 24.7 | |
| 7.9 | 33 | 27.5 | 49.0 | 9.0 *g* |
| 9.6 | | 44.5 | 31.7 | |
| 7.5 | | 50.5 | 9.5 | GS*g* |
| 10.0 | 34 | 34.5 | 43.0 | |
| 9.4 | | 37.0 | 46.3 | |
| 9.2 | 35 | 37.5 | 41.0 | |
| 10.0 | 36 | 26.5 | 17.4 | |
| 9.2 | | 30.5 | 45.1 | *g* |
| 10.0 | | 51.0 | 58.2 | |
| 10.0 | | 56.5 | 42.1 | |
| 9.7 | 37 | 8.5 | 8.6 | |
| 9.7 | | 19.5 | 15.3 | |
| 9.0 | | 30.5 | 55.8 | *g* |
| 8.4 | | 43.0 | 26.1 | 9.0 *g* |
| 9.6 | | 47.0 | 34.9 | |
| 9.7 | | 51.5 | 47.4 | |
| 10.0 | | 55.5 | 44.4 | |
| 8.7 | | 59.5 | 21.1 | 8.5 *g* |
| 10.0 | 38 | 2.5 | 0.5 | |
| 9.4 | | 20.3 | 56.7 | |
| 9.4 | 39 | 28.0 | 13.1 | |
| 10.0 | 41 | 11.0 | 1.4 | |
| 9.1 | | 20.5 | 35.3 | |
| 8.7 | 42 | 16.5 | 0.5 | 8.0 G*g* |
| 9.4 | | 31.5 | 25.9 | *g* |
| 9.2 | | 33.0 | 46.2 | *g* |
| 9.8 | 43 | 14.5 | 50.1 | |
| 9.2 | | 30.5 | 39.7 | 9.5 |
| 9.8 | | 34.5 | 24.1 | |
| 8.9 | 44 | 20.5 | 12.1 | 9.5 *g* |
| 9.5 | 45 | 25.0 | 15.1 | |
| 9.5 | | 36.5 | 52.1 | |
| 9.6 | 46 | 35.0 | 3.9 | |
| 9.1 | | 36.5 | 20.2 | *g* |
| 9.1 | 47 | 13.0 | 18.0 | *g* |
| 10.0 | 49 | 53.5 | 16.8 | |
| 8.8 | 50 | 52.5 | 52.5 | *g* |
| 10.0 | | 57.5 | 6.4 | |
| 9.6 | 51 | 5.5 | 4.5 | |
| 9.2 | 52 | 22.5 | 53.4 | *g* |
| 9.2 | | 22.5 | 44.5 | *g* |
| 9.2 | | 55.5 | 12.5 | *g* |
| 8.8 | 53 | 33.5 | 0.4 | 9.0 *g* |
| 10.0 | | 50.0 | 47.5 | |
| 9.2 | 54 | 12.5 | 5.5 | *g* |
| 10.0 | | 14.5 | 21.2 | |
| 8.8 | | 49.5 | 9.1 | *g* |
| 9.5 | 55 | 11.5 | 21.9 | |
| 9.7 | | 12.0 | 41.6 | |
| 10.0 | | 21.0 | 40.1 | |
| 10.0 | | 39.5 | 14.6 | |
| 9.8 | 56 | 0.0 | 15.7 | |
| 9.7 | | 14.0 | 35.6 | |
| 9.5 | | 17.5 | 7.9 | *g* |
| 9.3 | 57 | 21.5 | 22.2 | *g* |
| 10.0 | 58 | 43.8 | 22.1 | |

**661—720.**

| mag. | $6^h$–$7^h$ m | s | −63° ′ | |
|---|---|---|---|---|
| 10.0 | 58 | 47.5 | 43.1 | |
| 9.7 | 59 | 13.0 | 11.9 | |
| 9.5 | | 22.2 | 11.9 | |
| 9.3 | | 46.0 | 51.9 | |
| 9.6 | | 51.0 | 18.9 | |
| 9.5 | 0 | 9.5 | 6.7 | |
| 9.6 | | 40.0 | 45.1 | |
| 8.9 | | 43.2 | 26.1 | 8.2 *g* |
| 9.7 | 1 | 11.0 | 52.9 | |
| 9.2 | | 24.3 | 8.7 | |
| 9.4 | | 27.0 | 7.5 | |
| 9.1 | | 36.2 | 56.9 | *g* |
| 9.4 | | 58.0 | 13.6 | |
| 9.2 | 2 | 7.0 | 44.1 | *g* |
| 9.7 | | 12.0 | 58.3 | |
| 9.7 | | 29.0 | 53.5 | |
| 9.1 | | 34.0 | 20.1 | *g* |
| 9.1 | 3 | 3.0 | 14.5 | |
| 9.5 | | 12.8 | 1.9 | |
| 9.5 | | 14.5 | 31.1 | |
| 9.1 | | 58.0 | 5.3 | *g* |
| 9.7 | 5 | 5.0 | 38.3 | |
| 8.6 | | 7.5 | 53.1 | 9.0 *g* |
| 9.3 | | 17.0 | 36.8 | |
| 9.7 | | 20.0 | 20.7 | |
| 9.0 | | 56.5 | 48.3 | 9.5 *g* |
| 9.4 | 6 | 17.0 | 7.3 | |
| 9.4 | | 27.0 | 46.2 | |
| 8.9 | 7 | 6.0 | 16.5 | 9.5 *g* |
| 9.7 | | 14.5 | 10.2 | |
| 9.6 | | 33.5 | 19.6 | |
| 8.8 | 8 | 0.5 | 33.3 | 8.5 *g* |
| 9.3 | | 4.0 | 6.3 | |
| 9.7 | | 29.5 | 2.2 | |
| 9.0 | | 39.0 | 36.1 | 9.5 *g* |
| 9.7 | | 52.0 | 55.9 | |
| 9.7 | 9 | 11.0 | 25.7 | |
| 9.2 | | 25.0 | 25.3 | 9.5 *g* |
| 9.1 | 10 | 1.0 | 44.9 | |
| 9.7 | | 27.0 | 20.1 | |
| 9.7 | 11 | 8.5 | 33.9 | |
| 9.7 | | 27.0 | 31.1 | |
| 9.2 | 12 | 2.5 | 8.8 | *g* |
| 9.0 | | 8.0 | 0.1 | 9.0 *g* |
| 8.9 | | 16.0 | 43.6 | *g* |
| 9.7 | | 45.5 | 37.7 | |
| 9.7 | | 57.0 | 37.4 | |
| 9.0 | 13 | 26.0 | 15.5 | *g* |
| 9.5 | 14 | 39.0 | 0.7 | |
| 9.7 | 15 | 22.0 | 47.1 | |
| 7.9 | | 37.0 | 54.2 | 7.5 GS*g* |
| 8.1 | | 58.0 | 15.1 | 8.2 GS*g* |
| 9.6 | 16 | 8.5 | 57.7 | |
| 9.2 | | 30.5 | 56.5 | *g* |
| 9.0 | | 42.5 | 12.0 | 9.0 *g* |
| 9.5 | | 43.0 | 38.3 | *g* |
| 7.3 | 17 | 28.0 | 9.3 | 7.5 GS*g* |
| 8.7 | | 30.5 | 49.9 | *g* |
| 9.5 | | 55.5 | 34.3 | |
| 9.7 | 18 | 4.5 | 8.1 | |

**721—780.**

| mag. | $7^h$ m | s | −63° ′ | |
|---|---|---|---|---|
| 9.6 | 18 | 9.5 | 43.7 | |
| 9.7 | | 29.5 | 24.5 | |
| 9.7 | | 34.5 | 26.7 | |
| 9.7 | 19 | 35.5 | 57.5 | |
| 9.5 | | 36.0 | 56.2 | |
| 8.7 | | 45.5 | 30.9 | 9.2 *g* |
| 9.7 | | 51.5 | 30.1 | |
| 9.7 | 20 | 19.0 | 24.7 | |
| 8.9 | | 46.5 | 39.3 | 9.0 *g* |
| 9.7 | | 56.0 | 18.6 | |
| 9.6 | 21 | 2.5 | 3.9 | |
| 9.5 | 22 | 18.5 | 32.7 | *g* |
| 9.7 | 23 | 8.0 | 0.0 | |
| 9.0 | | 43.0 | 24.8 | *g* |
| 9.7 | 24 | 45.0 | 23.1 | |
| 9.1 | 25 | 50.0 | 28.7 | *g* |
| 9.2 | | 51.0 | 5.9 | |
| 8.8 | 26 | 8.7 | 59.0 | 8.0 *g* |
| 8.6 | | 35.5 | 17.7 | 8.5 *g* |
| 9.4 | 27 | 0.5 | 33.9 | |
| 8.3 | | 20.0 | 12.0 | 8.0 *g* |
| 9.7 | | 40.0 | 40.6 | |
| 9.2 | | 53.5 | 4.9 | *g* |
| 9.2 | 28 | 27.0 | 40.9 | *g* |
| 9.7 | | 54.0 | 10.1 | |
| 9.3 | 29 | 11.0 | 24.0 | |
| 9.6 | | 23.0 | 43.3 | |
| 9.4 | | 33.0 | 30.1 | *g* |
| 8.7 | 30 | 3.0 | 9.7 | 8.0 *g* |
| 9.4 | | 9.5 | 52.1 | *g* |
| 8.3 | 31 | 23.5 | 3.3 | 8.5 *g* |
| 9.7 | | 39.5 | 56.0 | |
| 9.7 | 33 | 0.0 | 15.7 | |
| 9.0 | | 13.0 | 12.9 | 9.0 *g* |
| 9.4 | | 42.0 | 1.6 | |
| 9.5 | | 43.0 | 27.1 | |
| 9.4 | 34 | 16.5 | 34.9 | *g* |
| 9.5 | 35 | 16.5 | 43.2 | |
| 8.3 | | 24.5 | 55.9 | 8.8 G*g* |
| 8.2 | | 27.5 | 1.2 | 8.5 S*g* |
| 9.0 | 36 | 18.0 | 58.1 | *g* |
| 9.0 | | 31.0 | 45.9 | 9.0 *g* |
| 7.9 | | 51.0 | 39.4 | 8.0 G*g* |
| 8.8 | | 54.5 | 17.0 | |
| 9.7 | 37 | 0.5 | 12.7 | |
| 9.1 | | 10.0 | 8.6 | *g* |
| 9.6 | | 38.0 | 42.7 | |
| 8.6 | | 43.5 | 8.2 | 8.0 *g* |
| 9.7 | | 44.5 | 11.1 | |
| 9.3 | 38 | 1.8 | 25.9 | |
| 9.7 | | 29.3 | 50.0 | |
| 9.7 | | 29.5 | 49.8 | |
| 9.4 | 39 | 15.5 | 54.4 | |
| 8.8 | | 41.0 | 4.0 | 8.0 G*g* |
| 9.4 | | 42.5 | 28.3 | |
| 9.4 | | 51.2 | 50.9 | 9.5 *g* |
| 9.6 | | 54.0 | 19.4 | |
| 8.8 | 40 | 5.0 | 56.6 | 8.5 *g* |
| 9.7 | | 29.0 | 14.0 | |
| 9.4 | | 36.2 | 43.2 | |



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## 781—840.

| mag. | 7h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·1 | 40 | 42·2 | 53·9 | *g* |
| 9·1 | 41 | 3·0 | 11·1 | 8·0 *g* |
| 9·2 | | 16·8 | 18·1 | |
| 8·9 | | 36·8 | 24·0 | *g* |
| 9·7 | | 41·5 | 3·1 | |
| 9·1 | | 48·7 | 27·1 | *g* |
| 9·4 | | 55·0 | 38·1 | |
| 8·1 | 42 | 11·0 | 5·8 | 8·2 G*g* |
| 9·7 | | 16·8 | 8·5 | |
| 9·3 | | 24·0 | 10·4 | |
| 9·7 | | 40·0 | 55·4 | |
| 9·7 | 43 | 24·0 | 47·3 | |
| 9·5 | | 25·0 | 49·4 | |
| 9·5 | 44 | 1·5 | 10·1 | |
| 9·1 | | 4·0 | 3·1 | *g* |
| 9·4 | | 8·5 | 4·9 | *g* |
| 8·0 | | 11·5 | 53·3 | 7·5 GS*g* |
| 9·7 | | 22·5 | 6·9 | |
| 9·3 | | 36·0 | 51·0 | 9·5 *g* |
| 9·3 | 45 | 6·5 | 55·0 | *g* |
| 9·1 | | 8·0 | 45·0 | *g* |
| 9·7 | | 32·0 | 37·9 | |
| 9·7 | | 34·0 | 29·0 | |
| 9·6 | | 52·8 | 21·2 | |
| 9·5 | | 53·5 | 30·0 | |
| 9·6 | 46 | 1·5 | 27·0 | 9·5 |
| 8·7 | | 7·0 | 11·1 | 8·5 *g* |
| 9·7 | | 14·5 | 13·3 | |
| 8·8 | | 20·0 | 24·3 | 8·5 *g* |
| 9·5 | | 24·5 | 0·8 | |
| 9·6 | | 44·2 | 58·0 | |
| 9·4 | | 49·5 | 26·4 | |
| 9·6 | | 51·5 | 49·1 | |
| 9·5 | 47 | 11·0 | 14·5 | |
| 7·9 | | 14·0 | 22·4 | 7·6 G*g* |
| 9·0 | | 27·5 | 24·1 | 9·5 |
| 9·0 | | 31·5 | 25·1 | 9·2 |
| 9·7 | | 41·5 | 51·1 | |
| 9·4 | 48 | 11·0 | 8·2 | |
| 9·6 | | 27·8 | 43·3 | |
| 8·4 | | 55·0 | 49·3 | 9·0 *g* |
| 9·1 | 49 | 1·0 | 41·0 | |
| 9·4 | | 1·0 | 33·1 | 9·5 *g* |
| 9·6 | | 9·0 | 39·1 | |
| 9·4 | | 10·0 | 0·4 | |
| 9·7 | | 55·0 | 53·1 | |
| 9·2 | 50 | 42·5 | 28·9 | |
| 7·9 | | 48·2 | 58·2 | 7·7 GS*g* |
| 9·1 | | 53·0 | 25·8 | |
| 9·4 | 51 | 15·0 | 24·1 | |
| 9·7 | | 43·0 | 1·8 | |
| 8·8 | 52 | 6·0 | 26·4 | 9·0 *g* |
| 9·5 | | 14·0 | 21·2 | |
| 8·5 | | 15·0 | 19·3 | 8·0 *g* |
| 9·2 | | 17·5 | 27·6 | |
| 9·5 | | 23·5 | 47·3 | |
| 9·4 | | 28·0 | 41·6 | |
| 9·7 | | 41·0 | 13·1 | |
| 9·6 | | 45·5 | 39·1 | |
| 9·4 | | 53·0 | 40·9 | |

## 841—900.

| mag. | 7h.–8h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·7 | 52 | 57·0 | 45·5 | |
| 9·2 | 53 | 33·5 | 13·7 | |
| 9·1 | 54 | 12·5 | 53·0 | 9·5 *g* |
| 9·2 | | 24·0 | 51·5 | 9·0 *g* |
| 9·7 | | 35·0 | 47·2 | |
| 9·7 | | 44·5 | 17·2 | |
| 9·1 | | 56·0 | 40·4 | 10·0 *g* |
| 9·3 | 55 | 9·0 | 50·3 | 9·0 *g* |
| 9·1 | | 17·5 | 44·5 | *g* : |
| 9·7 | | 19·0 | 45·9 | |
| 9·7 | | 20·5 | 11·9 | |
| 8·9 | | 42·5 | 38·5 | 9·7 *g* |
| 8·5 | | 51·0 | 22·4 | 8·8 *g* |
| 9·7 | | 56·0 | 38·4 | |
| 8·8 | 56 | 14·3 | 59·0 | *g* |
| 9·7 | | 25·0 | 52·4 | |
| 8·9 | | 29·0 | 26·6 | *g* |
| 9·6 | | 38·5 | 36·6 | |
| 9·7 | | 51·0 | 17·9 | |
| 9·6 | 57 | 9·5 | 22·1 | |
| 9·0 | | 28·0 | 17·5 | 10·0 *g* |
| 9·3 | | 50·0 | 12·4 | |
| 9·4 | 58 | 1·5 | 50·3 | |
| 9·6 | | 21·0 | 27·3 | |
| 9·0 | | 30·0 | 8·5 | 10·0 *g* |
| 5·5 | | 44·5 | 13·3 | 5·0 GScg*g* |
| 9·4 | | 53·0 | 38·1 | |
| 9·4 | 59 | 20·5 | 44·3 | |
| 9·7 | | 29·0 | 19·5 | |
| 9·7 | | 29·0 | 9·1 | |
| 9·7 | | 32·0 | 28·2 | |
| 9·7 | | 35·0 | 10·5 | |
| 8·9 | 0 | 23·0 | 9·5 | 9·5 *g* |
| 9·0 | | 38·0 | 18·3 | 9·5 |
| 9·4 | | 45·5 | 16·6 | |
| 9·3 | | 55·0 | 18·1 | |
| 9·3 | 1 | 42·5 | 30·2 | 9·0 *g* |
| 9·2 | | 55·5 | 41·4 | 9·0 *g* |
| 9·6 | 2 | 4·0 | 34·5 | |
| 9·1 | | 18·0 | 20·5 | 10·0 |
| 9·3 | | 20·5 | 26·0 | |
| 9·4 | | 40·5 | 9·4 | 9·5 |
| 9·5 | | 55·0 | 28·9 | |
| 9·2 | | 55·5 | 25·9 | |
| 9·0 | 3 | 13·5 | 25·8 | |
| 9·0 | | 44·5 | 59·1 | 9·5 |
| 9·4 | | 45·5 | 26·9 | |
| 9·3 | 4 | 20·0 | 32·4 | 9·0 *g* |
| 9·7 | | 21·5 | 49·2 | |
| 9·1 | | 45·5 | 25·4 | 8·8 *g* |
| 9·1 | | 49·0 | 32·6 | 9·5 *g* |
| 7·9 | | 57·0 | 9·4 | 7·5 GS*g* |
| 9·7 | 5 | 15·0 | 34·9 | |
| 9·4 | | 41·0 | 50·3 | |
| 9·7 | | 49·0 | 6·7 | |
| 6·3 | 6 | 46·0 | 26·0 | 6·5 GSg*g* |
| 9·4 | | 48·5 | 5·1 | |
| 9·7 | 7 | 1·0 | 41·5 | |
| 9·4 | | 15·5 | 34·1 | |
| 9·6 | | 38·0 | 17·0 | |

## 901—960.

| mag. | 8h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8·9 | 7 | 47·8 | 57·3 | 9·0 *g* |
| 9·6 | 8 | 0·3 | 58·2 | |
| 9·3 | | 20·5 | 56·1 | |
| 9·4 | | 41·0 | 22·2 | |
| 8·6 | 9 | 0·0 | 40·4 | 9·0 G |
| 9·7 | | 53·5 | 14·2 | |
| 9·7 | 10 | 4·5 | 6·2 | |
| 9·7 | | 31·0 | 1·8 | |
| 8·0 | 11 | 11·0 | 36·0 | 8·5 G*g* |
| 9·1 | | 12·0 | 32·6 | 10·0 |
| 9·4 | | 25·0 | 51·9 | |
| 8·9 | | 58·0 | 42·8 | |
| 9·4 | 12 | 34·5 | 19·2 | |
| 9·6 | | 46·5 | 47·3 | |
| 8·5 | 13 | 2·0 | 51·1 | *g* |
| 9·4 | | 19·8 | 57·5 | |
| 9·7 | | 46·0 | 29·7 | |
| 9·7 | 14 | 19·0 | 32·1 | |
| 9·4 | | 35·0 | 19·3 | 9·5 *g* |
| 9·7 | | 35·5 | 1·5 | |
| 9·4 | | 55·5 | 53·5 | |
| 6·8 | 15 | 12·0 | 47·9 | 7·0 GS*g* |
| 9·5 | | 49·0 | 9·2 | G |
| 9·0 | 16 | 15·0 | 48·7 | 9·0 G |
| 9·1 | | 19·0 | 52·0 | 9·0 |
| 9·7 | 17 | 13·5 | 43·6 | |
| 9·6 | | 26·5 | 10·4 | |
| 9·6 | 18 | 0·5 | 28·8 | |
| 8·8 | | 8·5 | 30·1 | 9·5 |
| 9·1 | | 14·0 | 30·0 | |
| 9·3 | | 16·0 | 50·3 | |
| 8·5 | | 21·0 | 6·4 | 8·5 *g* |
| 9·0 | | 31·0 | 8·8 | |
| 8·9 | | 31·5 | 56·8 | |
| 9·7 | | 45·0 | 22·1 | |
| 8·8 | | 47·0 | 36·6 | 8·0 G*g* |
| 9·3 | | 54·6 | 58·9 | |
| 8·5 | | 58·8 | 40·3 | 8·5 *g* |
| 9·5 | 19 | 11·3 | 49·8 | |
| 7·5 | | 22·5 | 42·4 | 6·5 GS*g* |
| 10·0 | | 28·0 | 6·5 | |
| 9·8 | | 36·5 | 34·2 | |
| 9·6 | 20 | 7·5 | 59·6 | |
| 9·3 | | 7·5 | 5·6 | |
| 9·2 | | 11·7 | 55·1 | |
| 10·0 | | 20·0 | 26·5 | |
| 9·8 | | 24·0 | 46·0 | |
| 9·4 | | 29·2 | 44·2 | |
| 9·2 | | 39·0 | 56·2 | |
| 9·1 | | 39·5 | 38·7 | |
| 10·0 | | 41·0 | 37·6 | |
| 8·9 | 21 | 14·0 | 20·2 | 8·0 G*g* |
| 9·6 | | 21·0 | 6·9 | |
| 10·0 | | 27·0 | 1·5 | |
| 10·0 | | 32·5 | 51·8 | |
| 10·0 | | 38·0 | 42·1 | |
| 9·1 | | 49·0 | 19·6 | 8·8 *g* |
| 9·6 | 22 | 0·0 | 58·9 | |
| 9·7 | | 1·0 | 55·0 | |
| 9·2 | | 12·0 | 9·7 | |

## 961—1020.

| mag. | 8h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·8 | 22 | 22·5 | 52·5 | |
| 9·8 | | 30·0 | 28·5 | |
| 9·8 | | 47·0 | 6·2 | |
| 10·0 | 23 | 8·2 | 58·3 | |
| 9·3 | | 13·0 | 40·6 | 9·0 |
| 9·8 | | 38·0 | 35·5 | |
| 9·2 | | 41·5 | 42·8 | 9·5 |
| 10·0 | | 50·0 | 45·2 | |
| 8·8 | | 50·5 | 18·6 | 10·0 |
| 9·1 | 24 | 30·0 | 43·8 | |
| 10·0 | | 56·5 | 21·9 | |
| 9·6 | 25 | 12·5 | 4·0 | |
| 9·4 | 26 | 0·0 | 0·5 | |
| 10·0 | | 5·0 | 23·2 | |
| 9·2 | | 5·5 | 33·0 | |
| 9·6 | | 7·5 | 25·4 | |
| 9·1 | | 19·0 | 12·8 | 9·5 *g* |
| 9·8 | | 25·0 | 46·7 | |
| 9·3 | | 39·0 | 8·0 | |
| 10·0 | | 42·0 | 59·7 | |
| 9·8 | 27 | 1·0 | 19·8 | |
| 10·0 | | 52·0 | 14·0 | |
| 10·0 | | 59·0 | 10·0 | |
| 8·8 | 28 | 3·5 | 20·4 | 9·2 |
| 9·9 | | 10·0 | 44·1 | |
| 10·0 | | 28·0 | 18·1 | |
| 10·0 | 29 | 30·2 | 58·9 | |
| 9·1 | 30 | 9·0 | 16·4 | 9·0 *g* |
| 10·0 | | 44·5 | 8·5 | |
| 10·0 | | 51·0 | 55·0 | |
| 8·5 | 31 | 20·5 | 24·9 | 8·2 *g* |
| 10·0 | | 21·5 | 37·2 | |
| 10·0 | | 36·5 | 18·6 | |
| 9·7 | | 41·5 | 29·0 | |
| 9·6 | | 44·0 | 9·2 | |
| 10·0 | 32 | 26·0 | 27·2 | |
| 10·0 | | 47·5 | 3·2 | |
| 9·6 | 33 | 2·0 | 40·9 | |
| 9·8 | | 5·0 | 44·4 | |
| 10·0 | | 11·0 | 12·3 | |
| 9·3 | | 12·0 | 31·9 | |
| 8·8 | | 12·0 | 0·5 | 8·0 G*g* |
| 10·0 | | 17·0 | 6·8 | |
| 10·0 | | 22·0 | 13·8 | |
| 9·3 | | 39·0 | 39·0 | |
| 9·6 | | 45·5 | 2·6 | |
| 9·2 | | 53·0 | 10·9 | |
| 9·2 | 34 | 0·0 | 32·2 | |
| 9·8 | | 20·5 | 18·6 | |
| 9·2 | | 40·0 | 50·2 | 8·8 *g* |
| 10·0 | | 41·0 | 37·0 | |
| 7·5 | | 49·0 | 11·4 | *g* |
| 10·0 | 35 | 1·5 | 15·6 | |
| 8·9 | | 4·0 | 49·4 | 9·0 *g* |
| 8·9 | 37 | 17·0 | 6·5 | |
| 10·0 | | 21·0 | 52·3 | |
| 9·8 | | 52·5 | 0·6 | |
| 10·0 | | 59·5 | 15·0 | |
| 9·6 | 38 | 12·5 | 30·7 | |
| 9·2 | | 21·0 | 6·6 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 40 | 16 | 3·5 |
| | 50 | 17 | 3·9 |
| 8 | 0 | 19 | 4·2 |
| | 10 | 20 | 4·5 |
| | 20 | 22 | 4·8 |
| | 30 | 24 | 5·1 |
| | 40 | 25 | 5·4 |



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| h. | m | 25 prec. α + s | δ − ′ |
|---|---|---|---|
| 8 | 30 | 24 | 5.1 |
| | 40 | 25 | 5.4 |
| | 50 | 27 | 5.6 |
| 9 | 0 | 29 | 5.9 |
| | 10 | 32 | 6.2 |
| | 20 | 34 | 6.4 |
| | 30 | 36 | 6.6 |
| | 40 | 38 | 6.8 |
| | 50 | 41 | 7.0 |
| 10 | 0 | 43 | 7.2 |

**1021—1080.**

| mag. | 8h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.8 | 38 | 31.0 | 59.8 | |
| 9.4 | | 55.5 | 53.0 | |
| 7.4 | 39 | 3.5 | 53.4 | 8.5 GS*g* |
| 9.6 | | 15.0 | 15.2 | |
| 9.7 | | 15.5 | 27.9 | |
| 9.2 | 41 | 7.5 | 51.5 | |
| 9.2 | | 14.0 | 18.4 | 9.5 |
| 10.0 | | 16.0 | 41.4 | |
| 9.8 | | 29.0 | 7.7 | |
| 9.3 | | 46.0 | 12.4 | |
| 10.0 | 42 | 16.0 | 35.0 | |
| 10.0 | 43 | 13.5 | 42.6 | |
| 8.1 | | 29.0 | 26.2 | 8.0 G*g* |
| 10.0 | | 31.5 | 1.6 | |
| 8.4 | 44 | 11.0 | 7.0 | 9.0 |
| 10.0 | | 24.0 | 44.9 | |
| 9.8 | | 52.5 | 5.0 | |
| 7.6 | | 59.0 | 21.0 | 8.0 *g* |
| 10.0 | 45 | 11.5 | 29.7 | |
| 9.2 | | 44.5 | 28.5 | 9.5 |
| 10.0 | | 57.0 | 1.0 | |
| 10.0 | 46 | 0.0 | 41.8 | |
| 8.6 | | 24.0 | 24.3 | 9.2 |
| 10.0 | | 43.0 | 15.0 | |
| 9.7 | | 56.5 | 7.8 | |
| 9.8 | 47 | 2.0 | 7.9 | |
| 9.6 | | 9.0 | 41.0 | 9.5 |
| 9.6 | | 13.5 | 11.5 | |
| 10.0 | 48 | 23.0 | 2.0 | |
| 9.2 | | 30.0 | 31.8 | |
| 9.9 | 49 | 18.0 | 49.4 | |
| 9.3 | | 24.0 | 5.0 | |
| 9.2 | | 25.0 | 52.0 | |
| 8.8 | | 36.0 | 12.5 | *g* |
| 8.8 | 50 | 4.0 | 5.2 | 9.5 *g* |
| 8.6 | | 15.0 | 8.0 | 8.0 *g* |
| 10.0 | | 31.2 | 0.1 | |
| 10.0 | | 53.0 | 59.2 | |
| 9.9 | 51 | 5.5 | 24.6 | |
| 8.7 | 52 | 15.0 | 15.7 | |
| 10.0 | | 21.0 | 9.8 | |
| 9.2 | | 32.0 | 13.2 | |
| 10.0 | | 49.0 | 11.2 | |
| 10.0 | 53 | 18.5 | 40.0 | |
| 9.2 | | 27.5 | 42.9 | |
| 10.0 | | 34.0 | 23.0 | |
| 8.4 | | 38.0 | 17.4 | |
| 9.8 | | 45.5 | 51.0 | |
| 7.6 | 54 | 16.5 | 4.0 | 7.0 GS*g* |
| 10.0 | | 31.0 | 21.1 | |
| 9.9 | | 46.5 | 24.8 | 10.0 |
| 8.1 | | 57.5 | 0.9 | 8.5 *g* |
| 9.5 | 55 | 11.5 | 52.2 | 9.5 *g* |
| 8.4 | | 13.5 | 26.5 | 9.5 *g* |
| 8.4 | | 18.0 | 13.2 | *g* |
| 10.0 | | 41.0 | 3.0 | |
| 10.0 | 56 | 0.0 | 34.0 | |
| 8.9 | | 42.0 | 27.7 | 9.5 |
| 9.4 | 57 | 48.5 | 34.2 | |
| 9.4 | 58 | 3.7 | 19.0 | |

**1081—1140.**

| mag. | 8h.—9h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10.0 | 58 | 43.0 | 21.0 | |
| 9.8 | 59 | 32.5 | 2.3 | 9.0 |
| 9.8 | 0 | 19.7 | 22.2 | |
| 8.2 | | 25.0 | 13.1 | 8.5 *g* |
| 9.2 | | 28.7 | 12.3 | 9.0 *g* |
| 9.2 | | 54.0 | 1.9 | |
| 9.4 | | 56.0 | 41.1 | |
| 8.8 | 2 | 37.0 | 47.3 | 8.0 *g* |
| 9.5 | | 46.5 | 51.5 | 9.5 *g* |
| 9.5 | 3 | 1.0 | 22.6 | |
| 9.2 | | 20.0 | 34.8 | |
| 9.5 | | 32.5 | 33.5 | |
| 8.2 | | 42.5 | 59.9 | 7.0 GSc*g* |
| 9.1 | 4 | 25.0 | 18.0 | |
| 8.9 | 5 | 16.5 | 25.6 | |
| 9.5 | | 20.0 | 6.0 | |
| 9.1 | | 27.0 | 31.7 | 9.8 G*g* |
| 9.1 | | 28.5 | 31.7 | 9.0 G*g* |
| 9.5 | | 55.0 | 33.1 | |
| 8.9 | 7 | 8.5 | 17.7 | |
| 9.5 | | 30.5 | 34.6 | |
| 9.5 | 8 | 29.5 | 15.9 | |
| 8.9 | | 51.5 | 21.0 | |
| 9.5 | 9 | 2.8 | 2.8 | *g* |
| 9.5 | | 54.0 | 49.4 | |
| 8.9 | 10 | 54.5 | 40.8 | 8.8 *g* |
| 9.2 | 11 | 9.5 | 9.9 | 9.0 *g* |
| 8.7 | | 23.5 | 40.7 | 9.0 *g* |
| 8.9 | | 24.5 | 51.4 | |
| 8.3 | | 30.5 | 10.6 | 8.0 *g* |
| 9.1 | | 53.5 | 20.5 | |
| 8.2 | | 59.5 | 37.9 | 8.8 |
| 9.1 | 13 | 1.0 | 27.0 | |
| 7.2 | 14 | 11.5 | 15.1 | GSc*g* |
| 9.5 | | 22.5 | 3.8 | |
| 9.2 | | 45.0 | 1.9 | |
| 9.5 | 16 | 37.5 | 9.2 | |
| 9.5 | 18 | 40.5 | 58.6 | *g* |
| 8.9 | 19 | 1.5 | 6.3 | *g* |
| 9.2 | 20 | 18.0 | 7.8 | |
| 9.3 | | 21.5 | 7.5 | |
| 8.7 | 21 | 29.5 | 10.6 | 9.0 *g* |
| 9.3 | | 56.5 | 4.8 | |
| 8.2 | 23 | 8.5 | 11.7 | 8.5 *g* |
| 9.5 | | 12.0 | 10.8 | 9.5 *g* |
| 8.6 | | 57.0 | 5.1 | 8.8 *g* |
| 9.4 | 24 | 38.0 | 42.5 | G*g* |
| 9.1 | 25 | 15.5 | 47.6 | G*g* |
| 9.4 | | 35.5 | 22.5 | 8.5 *g* |
| 9.5 | 26 | 15.0 | 37.5 | |
| 9.5 | | 23.5 | 38.8 | |
| 9.2 | 27 | 27.0 | 42.4 | |
| 9.2 | | 30.0 | 31.9 | 9.0 *g* |
| 9.5 | | 51.5 | 3.7 | 9.0 |
| 8.1 | 28 | 46.5 | 41.1 | 8.0 *g* |
| 8.9 | 29 | 4.0 | 25.8 | |
| 7.3 | 31 | 33.0 | 28.3 | 7.8 GS*g* |
| 9.1 | 32 | 27.5 | 52.8 | *g* |
| 7.2 | | 55.2 | 59.7 | 8.0 GS*g* |
| 9.2 | 33 | 3.5 | 20.3 | 9.5 *g* |

**1141—1200.**

| mag. | 9h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.2 | 33 | 13.5 | 57.9 | G |
| 9.5 | | 54.5 | 10.9 | |
| 8.1 | 35 | 7.0 | 13.5 | 9.0 G*g* |
| 7.0 | | 19.0 | 50.4 | 7.0 GS*g*r |
| 8.8 | | 27.0 | 32.7 | G*g* |
| 8.3 | | 47.0 | 55.6 | 8.0 GS*g*tr |
| 9.5 | 37 | 11.0 | 24.9 | |
| 9.4 | 38 | 8.0 | 2.5 | S*g* |
| 9.4 | | 54.5 | 51.8 | |
| 9.8 | 39 | 26.5 | 25.4 | |
| 9.7 | | 29.5 | 37.6 | |
| 9.7 | | 44.0 | 32.9 | |
| 9.9 | | 51.0 | 58.4 | |
| 9.2 | | 53.0 | 0.4 | |
| 9.3 | 40 | 2.0 | 5.8 | |
| 8.9 | | 18.2 | 18.7 | 9.5 *g* |
| 9.9 | | 19.0 | 35.9 | |
| 9.4 | 41 | 4.5 | 1.7 | |
| 9.1 | | 9.5 | 40.9 | G*g* |
| 9.6 | | 20.0 | 46.1 | |
| 9.9 | | 20.5 | 35.6 | |
| 9.8 | | 36.5 | 48.1 | |
| 9.0 | | 40.0 | 46.1 | |
| 9.9 | | 41.0 | 11.6 | |
| 9.6 | | 43.5 | 34.9 | G |
| 9.9 | | 49.5 | 34.9 | |
| 9.0 | | 52.5 | 34.9 | G |
| 9.2 | | 52.5 | 8.4 | |
| 9.9 | 42 | 4.0 | 45.5 | |
| 9.4 | | 10.5 | 32.8 | |
| 8.0 | | 15.5 | 55.4 | G*g* |
| 9.4 | | 15.5 | 26.2 | |
| 9.4 | | 23.5 | 57.7 | |
| 9.4 | | 50.5 | 51.2 | |
| 9.9 | 43 | 5.0 | 23.7 | |
| 9.4 | | 19.5 | 47.9 | |
| 9.9 | | 26.5 | 25.4 | |
| 9.8 | | 29.5 | 1.5 | |
| 8.4 | | 35.5 | 39.7 | G*g* |
| 9.8 | | 46.5 | 29.2 | |
| 9.9 | | 53.0 | 8.6 | |
| 9.4 | | 59.5 | 39.5 | |
| 9.9 | 44 | 3.0 | 8.8 | |
| 8.8 | | 7.8 | 1.4 | 8.0 G*g* |
| 9.9 | | 11.3 | 1.9 | |
| 9.9 | | 31.5 | 43.7 | |
| 9.9 | | 35.0 | 4.9 | |
| 9.0 | | 39.5 | 5.6 | 9.5 |
| 8.9 | 45 | 9.5 | 24.0 | 8.5 *g* |
| 9.4 | | 21.5 | 1.4 | 9.8 G |
| 9.4 | | 32.0 | 57.2 | |
| 9.2 | | 39.5 | 3.1 | 9.5 |
| 9.9 | | 47.0 | 12.9 | |
| 9.4 | | 53.5 | 59.5 | |
| 9.3 | | 58.5 | 18.2 | |
| 9.3 | 46 | 2.5 | 51.1 | *g* |
| 9.4 | | 58.0 | 13.6 | |
| 9.5 | | 58.0 | 54.3 | |
| 9.7 | 47 | 6.0 | 35.9 | |
| 9.9 | | 26.7 | 58.8 | |

**1201—1260.**

| mag. | 9h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8.8 | 47 | 44.5 | 39.9 | 8.5 *g* |
| 9.6 | | 45.0 | 22.8 | |
| 9.9 | | 49.0 | 13.4 | |
| 9.9 | | 50.5 | 35.4 | |
| 9.9 | 48 | 33.5 | 15.9 | |
| 9.9 | | 44.5 | 26.1 | |
| 9.7 | | 58.5 | 24.8 | |
| 9.9 | 49 | 29.5 | 29.3 | |
| 9.3 | | 39.0 | 30.4 | |
| 9.9 | | 56.5 | 37.4 | |
| 9.3 | | 59.5 | 7.7 | |
| 9.5 | 50 | 6.0 | 46.8 | |
| 9.0 | | 12.5 | 36.0 | 9.2 G*g* |
| 9.6 | | 22.5 | 40.0 | |
| 9.9 | | 31.5 | 33.1 | |
| 9.6 | | 44.0 | 55.8 | |
| 9.2 | | 50.0 | 10.9 | |
| 9.9 | 51 | 0.0 | 57.8 | |
| 9.7 | | 8.5 | 59.9 | |
| 9.9 | | 10.5 | 33.0 | |
| 9.9 | | 16.0 | 32.6 | |
| 9.3 | | 39.5 | 27.9 | |
| 9.7 | | 46.0 | 28.8 | |
| 9.9 | | 50.0 | 5.2 | |
| 9.9 | | 54.5 | 44.8 | |
| 9.6 | 52 | 1.5 | 13.0 | |
| 9.9 | | 14.0 | 7.1 | |
| 9.7 | | 48.0 | 39.3 | |
| 9.3 | 53 | 3.0 | 37.5 | |
| 9.4 | | 32.0 | 6.1 | |
| 8.8 | | 46.5 | 3.9 | 9.0 |
| 9.7 | | 51.0 | 26.1 | |
| 8.0 | | 52.0 | 53.8 | 7.2 GS*g* |
| 9.8 | | 53.5 | 29.7 | |
| 9.7 | | 54.5 | 4.9 | |
| 9.5 | | 59.5 | 27.1 | |
| 9.5 | 54 | 9.5 | 38.8 | |
| 9.2 | | 26.0 | 20.9 | 9.2 *g* |
| 9.5 | | 33.5 | 30.2 | |
| 9.8 | | 36.5 | 53.3 | |
| 9.4 | | 39.0 | 8.9 | |
| 8.3 | | 49.5 | 44.1 | 8.0 G*g* |
| 9.9 | | 50.5 | 17.9 | |
| 9.7 | | 50.5 | 55.9 | |
| 9.6 | | 55.0 | 34.9 | |
| 9.5 | | 56.5 | 45.9 | |
| 9.5 | 55 | 2.5 | 37.6 | |
| 9.6 | | 4.5 | 33.0 | |
| 9.9 | | 9.5 | 44.0 | |
| 9.6 | | 11.5 | 28.4 | |
| 9.0 | | 30.5 | 45.9 | 9.0 |
| 9.9 | | 32.0 | 6.5 | |
| 9.4 | | 35.5 | 6.5 | |
| 9.7 | | 44.5 | 6.0 | |
| 9.3 | | 52.5 | 49.7 | |
| 9.9 | 56 | 7.0 | 38.7 | |
| 8.2 | | 11.0 | 51.6 | 8.0 G*g* |
| 9.2 | | 22.0 | 17.7 | |
| 9.4 | | 35.5 | 10.1 | |
| 9.8 | | 42.0 | 28.9 | |



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### 1261—1320.

| mag. | 9h·–10h· m s | −63° ′ | |
|---|---|---|---|
| 9·9 | 56 52·0 | 3·9 | |
| 9·5 | 57 19·5 | 18·9 | |
| 9·9 | 31·5 | 51·5 | |
| 9·6 | 32·5 | 37·9 | |
| 9·9 | 33·5 | 34·5 | |
| 9·2 | 41·5 | 18·4 | |
| 9·5 | 43·0 | 20·2 | |
| 9·4 | 59·0 | 55·9 | |
| 9·4 | 58 10·0 | 46·8 | |
| 9·9 | 39·5 | 13·0 | |
| 9·4 | 50·5 | 5·5 | |
| 9·4 | 59 22·0 | 7·3 | |
| 9·9 | 22·0 | 16·9 | |
| 9·3 | 38·5 | 22·1 | 8·5 g |
| 9·9 | 49·5 | 53·9 | |
| 9·9 | 54·5 | 31·0 | |
| 9·9 | 0 14·5 | 30·9 | |
| 9·5 | 25·5 | 17·0 | |
| 9·1 | 31·0 | 49·6 | Gg |
| 9·5 | 31·5 | 1·0 | |
| 9·0 | 1 52·0 | 2·2 | |
| 8·0 | 2 11·0 | 13·6 | 8·0 GSg |
| 8·7 | 29·0 | 19·0 | 9·0 g |
| 9·1 | 3 1·0 | 41·4 | |
| 9·9 | 1·5 | 47·8 | |
| 9·9 | 13·5 | 15·4 | |
| 8·3 | 27·5 | 58·6 | 9·0 g |
| 9·4 | 39·5 | 47·6 | |
| 9·9 | 39·5 | 30·8 | |
| 9·5 | 42·0 | 36·8 | |
| 9·6 | 46·5 | 50·8 | |
| 9·7 | 51·5 | 14·5 | |
| 8·5 | 4 2·5 | 37·1 | 9·0 g |
| 9·9 | 4·0 | 10·9 | |
| 9·3 | 5·5 | 42·9 | |
| 9·2 | 5·7 | 59·1 | |
| 9·7 | 18·5 | 33·9 | |
| 9·7 | 20·0 | 28·9 | |
| 9·8 | 28·0 | 11·7 | |
| 9·9 | 29·5 | 32·8 | |
| 9·9 | 31·5 | 23·9 | |
| 9·5 | 35·5 | 20·9 | |
| 9·3 | 43·5 | 1·9 | 9·5 G |
| 9·2 | 49·0 | 46·1 | |
| 9·7 | 5 2·0 | 27·1 | |
| 9·8 | 8·5 | 17·1 | |
| 9·9 | 15·8 | 2·3 | |
| 9·4 | 16·0 | 9·8 | 9·0 g |
| 9·0 | 31·5 | 36·9 | |
| 9·9 | 41·5 | 43·9 | |
| 8·7 | 55·5 | 54·2 | 9·0 G |
| 9·6 | 6 4·0 | 48·7 | |
| 9·1 | 11·0 | 58·4 | |
| 9·9 | 13·5 | 6·9 | 9·0 |
| 9·9 | 18·0 | 33·1 | |
| 8·9 | 18·5 | 9·4 | 9·5 |
| 9·9 | 33·0 | 20·4 | |
| 9·5 | 40·0 | 11·9 | |
| 7·1 | 40·0 | 46·1 | 7·5 GSg |
| 9·4 | 42·0 | 40·2 | |

### 1321—1380.

| mag. | 10h· m s | −63° ′ | |
|---|---|---|---|
| 8·1 | 6 59·5 | 22·4 | 8·5 Gg |
| 9·3 | 7 0·5 | 42·1 | |
| 9·4 | 10·5 | 24·5 | |
| 9·2 | 12·0 | 17·5 | g |
| 8·3 | 19·0 | 47·2 | 8·5 g |
| 9·9 | 39·0 | 16·7 | |
| 8·0 | 59·5 | 12·3 | 8·5 g |
| 9·5 | 8 0·0 | 57·6 | |
| 8·5 | 0·5 | 47·6 | 8·5 g |
| 9·5 | 1·0 | 32·0 | |
| 9·7 | 1·0 | 17·9 | |
| 9·2 | 1·5 | 11·0 | |
| 9·6 | 53·0 | 31·6 | |
| 8·9 | 55·0 | 35·9 | 8·5 g |
| 8·4 | 59·5 | 46·7 | 7·5 Gg |
| 9·4 | 9 12·0 | 12·5 | |
| 9·4 | 18·5 | 21·9 | 9·0 |
| 9·8 | 20·5 | 33·9 | |
| 9·9 | 40·0 | 12·2 | |
| 9·2 | 47·0 | 39·8 | |
| 8·8 | 55·5 | 16·8 | 9·0 g |
| 9·4 | 10 10·0 | 8·5 | |
| 9·6 | 29·0 | 24·5 | |
| 8·0 | 33·0 | 55·2 | 8·5 g |
| 9·9 | 55·0 | 7·7 | |
| 9·6 | 11 10·0 | 10·5 | |
| 9·1 | 49·0 | 5·5 | 9·5 |
| 8·0 | 12 1·0 | 8·6 | 8·5 g |
| 9·6 | 10·5 | 52·0 | |
| 9·9 | 22·0 | 0·3 | |
| 9·0 | 29·0 | 17·5 | |
| 9·5 | 13 4·5 | 10·0 | |
| 9·4 | 11·5 | 36·5 | |
| 9·9 | 23·5 | 2·5 | |
| 9·4 | 45·0 | 8·8 | |
| 9·9 | 14 0·5 | 54·1 | |
| 9·5 | 27·0 | 13·9 | |
| 9·5 | 29·5 | 44·9 | |
| 9·9 | 34·5 | 35·0 | |
| 9·7 | 40·0 | 20·8 | |
| 9·4 | 42·5 | 8·9 | |
| 9·2 | 43·0 | 30·3 | |
| 9·2 | 53·7 | 59·8 | |
| 9·9 | 15 4·0 | 14·9 | |
| 9·2 | 13·0 | 51·5 | 9·0 g |
| 9·9 | 21·5 | 36·4 | |
| 9·8 | 38·5 | 57·9 | |
| 9·4 | 16 28·0 | 19·8 | |
| 9·5 | 35·0 | 28·2 | |
| 9·4 | 36·0 | 32·0 | |
| 9·6 | 17 17·5 | 8·4 | |
| 9·6 | 34·0 | 50·5 | |
| 9·9 | 18 9·0 | 3·1 | |
| 9·1 | 18·5 | 1·6 | |
| 9·9 | 41·0 | 8·5 | |
| 9·9 | 55·0 | 2·6 | |
| 9·6 | 19 16·3 | 17·3 | g |
| 9·4 | 16·5 | 43·9 | |
| 9·6 | 22·5 | 29·0 | |
| 9·7 | 22·5 | 14·2 | |

### 1381—1440.

| mag. | 10h· m s | −63° ′ | |
|---|---|---|---|
| 9·6 | 19 27·5 | 11·4 | |
| 9·8 | 28·5 | 36·1 | |
| 9·9 | 46·0 | 35·4 | |
| 9·9 | 51·7 | 59·9 | |
| 9·4 | 54·5 | 39·8 | |
| 9·8 | 20 0·5 | 50·5 | |
| 9·1 | 0·7 | 35·8 | |
| 9·9 | 5·0 | 21·3 | |
| 9·3 | 10·2 | 16·8 | |
| 9·9 | 15·5 | 6·4 | |
| 9·2 | 27·5 | 8·9 | |
| 9·2 | 33·5 | 9·0 | |
| 9·9 | 38·0 | 5·3 | |
| 9·4 | 52·7 | 0·2 | |
| 9·8 | 58·0 | 46·4 | |
| 9·7 | 21 2·5 | 23·1 | |
| 9·5 | 6·0 | 20·1 | |
| 9·9 | 6·5 | 16·9 | |
| 9·9 | 7·5 | 20·1 | |
| 9·8 | 10·5 | 17·1 | |
| 9·8 | 14·5 | 7·5 | |
| 9·2 | 15·2 | 0·8 | |
| 8·3 | 21·7 | 28·8 | 9·0 g |
| 9·9 | 40·0 | 5·1 | |
| 9·5 | 40·5 | 20·3 | |
| 9·2 | 46·5 | 16·2 | |
| 9·9 | 55·0 | 20·1 | |
| 9·5 | 22 0·5 | 35·2 | |
| 9·5 | 11·5 | 4·9 | |
| 9·4 | 23·5 | 53·1 | |
| 7·8 | 39·0 | 43·0 | GSg |
| 9·8 | 39·5 | 31·2 | |
| 9·8 | 43·5 | 21·0 | |
| 9·9 | 45·5 | 24·3 | |
| 9·7 | 49·5 | 53·5 | |
| 9·1 | 23 1·0 | 50·5 | |
| 9·3 | 2·5 | 22·0 | |
| 9·9 | 11·5 | 52·1 | |
| 9·4 | 13·5 | 14·7 | |
| 9·2 | 23·0 | 22·1 | |
| 9·2 | 23·5 | 2·2 | |
| 9·2 | 24·5 | 25·2 | |
| 9·7 | 30·0 | 26·4 | |
| 9·7 | 31·5 | 14·8 | |
| 9·5 | 37·5 | 26·8 | 9·0 |
| 9·5 | 42·5 | 44·0 | |
| 9·8 | 45·5 | 40·0 | |
| 9·8 | 46·5 | 11·1 | |
| 9·6 | 51·5 | 13·1 | |
| 9·6 | 53·0 | 26·4 | |
| 9·7 | 54·0 | 9·2 | |
| 9·2 | 58·5 | 23·1 | 9·5 |
| 9·8 | 59·5 | 40·2 | |
| 9·2 | 24 0·5 | 21·1 | |
| 9·5 | 2·0 | 52·1 | |
| 9·8 | 12·5 | 12·9 | |
| 9·7 | 14·0 | 11·1 | |
| 9·9 | 19·0 | 24·0 | |
| 9·0 | 37·0 | 57·4 | 9·0 |
| 8·1 | 42·5 | 31·9 | 6·0 GSg |

### 1441—1500.

| mag. | 10h· m s | −63° ′ | |
|---|---|---|---|
| 9·2 | 24 52·0 | 36·2 | |
| 9·4 | 25 1·0 | 36·8 | |
| 9·3 | 1·5 | 43·1 | |
| 9·9 | 1·5 | 1·3 | |
| 9·9 | 3·5 | 10·8 | |
| 9·7 | 11·5 | 45·5 | |
| 9·9 | 21·0 | 10·9 | |
| 9·6 | 22·5 | 48·1 | |
| 9·2 | 48·0 | 13·6 | 9·0 |
| 9·8 | 49·5 | 25·8 | |
| 9·2 | 26 0·5 | 3·2 | |
| 9·8 | 10·0 | 46·1 | |
| 9·3 | 30·0 | 29·7 | |
| 9·4 | 31·5 | 34·5 | |
| 9·2 | 37·0 | 19·4 | |
| 9·3 | 41·0 | 56·2 | |
| 9·8 | 48·5 | 30·2 | |
| 9·0 | 50·5 | 8·9 | |
| 9·0 | 51·0 | 32·3 | 9·2 g |
| 9·0 | 55·5 | 32·3 | 9·2 g |
| 9·5 | 27 3·5 | 7·9 | |
| 9·0 | 11·5 | 44·6 | |
| 9·2 | 25·0 | 51·5 | |
| 9·6 | 32·5 | 18·5 | |
| 7·8 | 35·5 | 17·8 | 8·5 GSg |
| 9·4 | 38·5 | 10·2 | |
| 9·9 | 41·5 | 14·1 | |
| 9·4 | 42·0 | 6·9 | |
| 9·9 | 45·0 | 1·7 | |
| 9·7 | 28 0·5 | 13·5 | |
| 9·9 | 5·5 | 21·5 | |
| 9·4 | 9·5 | 21·0 | |
| 9·2 | 12·0 | 22·1 | |
| 9·2 | 14·5 | 33·6 | |
| 9·8 | 16·5 | 23·1 | |
| 9·6 | 20·0 | 23·8 | |
| 9·6 | 21·5 | 32·1 | |
| 9·6 | 28·5 | 41·6 | |
| 9·9 | 36·5 | 40·0 | |
| 9·8 | 36·5 | 17·0 | |
| 9·4 | 40·0 | 13·9 | |
| 9·5 | 45·5 | 21·9 | |
| 9·7 | 46·5 | 30·5 | |
| 9·7 | 51·0 | 9·1 | |
| 9·9 | 58·5 | 3·7 | |
| 9·9 | 29 2·5 | 30·1 | |
| 9·2 | 6·0 | 24·2 | |
| 9·8 | 9·5 | 49·0 | |
| 9·6 | 12·5 | 14·3 | |
| 9·6 | 31·5 | 19·3 | |
| 9·0 | 35·0 | 10·1 | 9·5 |
| 9·9 | 36·5 | 10·3 | |
| 8·9 | 44·5 | 14·7 | 9·5 |
| 9·7 | 55·5 | 32·0 | |
| 9·2 | 30 0·5 | 45·8 | |
| 9·2 | 3·0 | 42·3 | |
| 9·6 | 4·0 | 47·2 | |
| 9·9 | 7·5 | 46·7 | |
| 9·0 | 9·5 | 3·9 | |
| 9·8 | 22·0 | 7·2 | |

25 prec.

| h m | a + s | δ − ′ |
|---|---|---|
| 9 50 | 41 | 7·0 |
| 10 0 | 43 | 7·2 |
| 10 | 46 | 7·4 |
| 20 | 48 | 7·6 |
| 30 | 51 | 7·7 |
| ·40 | 54 | 7·9 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 51 | 7.7 |
|  | 40 | 54 | 7.9 |
|  | 50 | 57 | 8.0 |

## 1501—1560.

| mag. | 10h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8.1 | 30 | 39.5 | 29.2 | 8.0 GS*g* |
| 9.1 | | 40.5 | 33.8 | |
| 8.4 | | 40.5 | 28.9 | 8.8 GS*g* |
| 9.5 | | 41.5 | 38.4 | |
| 9.6 | | 42.5 | 35.8 | |
| 9.7 | | 48.5 | 36.4 | |
| 8.4 | | 56.5 | 34.3 | 8.8 *g* |
| 9.8 | | 59.0 | 54.7 | |
| 8.8 | | 59.5 | 20.5 | 9.0 *g* |
| 8.5 | 31 | 16.5 | 38.5 | 9.0 *g* |
| 8.8 | | 19.5 | 4.5 | *g* |
| 9.2 | | 22.7 | 59.8 | |
| 8.2 | | 40.0 | 35.6 | 8.5 G*g* |
| 9.8 | | 52.5 | 39.9 | |
| 9.5 | | 57.5 | 43.5 | |
| 9.8 | 32 | 6.0 | 2.6 | |
| 9.9 | | 7.5 | 2.8 | |
| 9.2 | | 35.0 | 28.2 | |
| 9.6 | | 45.0 | 17.2 | |
| 9.0 | | 58.5 | 0.1 | 9.5 |
| 9.9 | 33 | 22.0 | 59.2 | |
| 9.6 | | 27.0 | 42.3 | |
| 9.4 | | 36.0 | 44.0 | |
| 9.6 | | 46.5 | 17.2 | |
| 9.3 | | 50.5 | 7.2 | |
| 9.4 | | 55.5 | 29.1 | |
| 8.8 | 34 | 0.5 | 10.8 | |
| 9.2 | | 3.5 | 7.6 | |
| 9.6 | | 10.0 | 20.1 | |
| 9.6 | | 10.5 | 21.3 | |
| 9.8 | | 13.5 | 28.5 | |
| 9.9 | | 22.0 | 21.6 | |
| 9.8 | | 29.5 | 44.5 | |
| 7.3 | | 30.5 | 50.9 | GS*g* |
| 9.6 | | 32.5 | 38.1 | |
| 9.9 | | 38.5 | 40.0 | |
| 9.4 | | 39.5 | 16.2 | |
| 9.8 | | 39.5 | 46.8 | |
| 8.7 | | 42.0 | 0.8 | 9.0 |
| 9.9 | | 43.0 | 15.5 | |
| 9.4 | | 46.5 | 1.2 | |
| 7.0 | | 59.5 | 27.6 | GS*g* |
| 9.2 | | 59.5 | 14.9 | |
| 8.1 | | 59.5 | 7.6 | 8.5 *g* |
| 9.2 | 35 | 1.5 | 0.0 | |
| 9.4 | | 1.5 | 53.3 | |
| 9.6 | | 4.5 | 26.3 | |
| 9.4 | | 4.5 | 30.6 | |
| 9.7 | | 6.5 | 24.0 | |
| 9.2 | | 8.5 | 45.4 | |
| 9.6 | | 8.5 | 16.6 | |
| 8.7 | | 9.0 | 2.5 | 9.0 *g* |
| 9.7 | | 18.5 | 12.2 | |
| 9.9 | | 19.5 | 31.9 | |
| 9.6 | | 25.0 | 28.3 | |
| 9.6 | | 35.5 | 47.8 | |
| 9.9 | | 45.5 | 52.1 | |
| 8.9 | | 55.5 | 21.2 | G*g* |
| 9.4 | | 58.5 | 22.1 | *g* |
| 9.2 | 36 | 1.0 | 51.8 | |

## 1561—1620.

| mag. | 10h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.2 | 36 | 2.5 | 49.0 | |
| 9.8 | | 2.5 | 54.3 | |
| 9.4 | | 6.0 | 53.3 | |
| 9.9 | | 8.0 | 37.2 | |
| 9.4 | | 9.3 | 57.0 | |
| 9.7 | | 11.0 | 43.2 | |
| 9.6 | | 16.0 | 27.0 | |
| 9.9 | | 21.5 | 36.9 | |
| 9.6 | | 25.0 | 55.2 | |
| 9.6 | | 28.5 | 53.5 | |
| 9.4 | | 36.5 | 6.8 | |
| 9.9 | | 39.0 | 33.3 | |
| 7.0 | | 41.5 | 49.4 | 7.5 GS*g* |
| 9.8 | | 41.5 | 33.3 | |
| 9.6 | | 49.0 | 21.8 | |
| 9.6 | | 52.5 | 44.1 | |
| 9.7 | | 57.5 | 26.1 | |
| 9.0 | | 58.5 | 7.5 | 9.0 *g* |
| 9.6 | 37 | 3.0 | 54.1 | |
| 9.8 | | 4.5 | 45.9 | |
| 9.0 | | 5.0 | 55.6 | 9.5 |
| 9.9 | | 7.0 | 8.1 | |
| 7.5 | | 8.5 | 27.1 | GS*g* |
| 9.5 | | 9.5 | 7.2 | |
| 9.2 | | 25.0 | 14.6 | 9.0 *g* |
| 9.5 | | 28.0 | 47.2 | |
| 9.2 | | 39.5 | 18.5 | |
| 9.5 | | 43.0 | 9.7 | |
| 5.0 | | 46.0 | 48.7 | 6.0 GSc*g*t |
| 9.8 | | 49.5 | 27.7 | |
| 9.5 | | 50.0 | 20.7 | |
| 7.4 | | 58.5 | 44.7 | 8.0 GS*g* |
| 9.5 | | 58.5 | 20.5 | |
| 9.4 | 38 | 9.5 | 31.8 | |
| 9.4 | | 14.0 | 41.8 | |
| 9.6 | | 15.7 | 2.4 | |
| 9.7 | | 24.0 | 26.5 | |
| 9.8 | | 24.7 | 3.1 | |
| 3.8 | | 29.0 | 44.5 | 3.0 GS*g*trλ |
| 9.6 | | 29.5 | 50.6 | |
| 9.9 | | 32.0 | 12.0 | |
| 9.6 | | 32.5 | 32.4 | |
| 9.9 | | 35.5 | 5.3 | |
| 9.9 | | 38.0 | 18.1 | |
| 8.8 | | 45.0 | 37.4 | |
| 9.9 | | 46.0 | 11.1 | |
| 8.6 | | 47.5 | 31.7 | 9.0 *g* |
| 9.8 | | 48.5 | 23.6 | |
| : 9.3 | | 48.5 | 44.6 | |
| 9.6 | | 49.0 | 49.3 | |
| 9.6 | | 52.0 | 59.8 | |
| 9.6 | | 57.0 | 33.8 | |
| 7.7 | 39 | 0.0 | 24.8 | 8.2 GS*g* |
| 9.2 | | 2.0 | 47.1 | |
| 9.8 | | 8.5 | 1.8 | |
| 9.4 | | 8.5 | 48.3 | |
| 9.8 | | 9.0 | 26.6 | |
| 9.8 | | 22.0 | 21.2 | |
| 6.9 | | 22.0 | 35.7 | 6.5 GS*g* |
| 9.5 | | 23.5 | 28.4 | |

## 1621—1680.

| mag. | 10h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.9 | 39 | 32.0 | 8.1 | |
| 9.7 | | 35.0 | 27.2 | |
| 5.6 | | 35.5 | 18.3 | 5.2 GS*g* |
| 9.5 | | 36.5 | 20.2 | |
| 9.0 | | 38.5 | 22.3 | : |
| 9.5 | | 53.0 | 36.2 | |
| 9.2 | | 55.5 | 8.8 | |
| 9.8 | | 59.5 | 2.4 | |
| 8.8 | 40 | 8.5 | 9.2 | 8.5 *g* |
| 9.6 | | 12.5 | 32.7 | |
| 9.6 | | 14.5 | 53.8 | |
| 9.9 | | 18.0 | 9.5 | |
| 9.7 | | 22.0 | 12.3 | |
| 9.9 | | 32.0 | 23.4 | |
| 9.5 | | 32.5 | 53.6 | |
| 9.5 | | 48.5 | 24.2 | |
| 9.0 | | 57.0 | 34.3 | *g* |
| 9.7 | 41 | 0.5 | 46.0 | |
| 9.8 | | 29.5 | 12.2 | |
| 9.5 | | 33.0 | 40.9 | |
| 9.2 | | 35.5 | 23.0 | 8.5 Gg |
| 8.0 | | 39.5 | 56.3 | 8.5 G*g* |
| 9.5 | | 41.0 | 23.4 | |
| 9.3 | | 42.0 | 48.3 | |
| 9.5 | | 42.5 | 10.6 | Gg |
| 5.9 | | 44.5 | 51.4 | 6.0 GS*g* |
| 9.9 | | 45.5 | 27.8 | |
| 9.8 | | 52.0 | 53.0 | |
| 5.8 | | 55.5 | 36.2 | 6.0 GSg*g* |
| 9.0 | | 56.0 | 40.4 | G |
| 9.2 | | 56.0 | 28.4 | G |
| 9.8 | | 58.5 | 25.9 | |
| 9.8 | 42 | 8.5 | 50.0 | |
| 8.6 | | 10.5 | 57.5 | *g* |
| 5.2 | | 17.5 | 43.5 | 6.0 GS*g* |
| 9.1 | | 19.5 | 51.4 | |
| 9.6 | | 21.5 | 4.2 | |
| 9.8 | | 26.0 | 5.2 | |
| 9.9 | | 26.5 | 45.0 | |
| 8.1 | | 35.5 | 36.3 | 8.0 GSg*g* |
| 9.8 | | 42.5 | 43.3 | |
| 9.6 | | 49.5 | 43.4 | |
| 9.2 | | 49.5 | 21.0 | |
| 9.6 | | 51.0 | 45.5 | |
| 9.8 | | 53.0 | 36.1 | |
| 9.5 | | 57.0 | 43.3 | |
| 9.8 | 43 | 2.0 | 5.2 | |
| 9.9 | | 2.5 | 15.8 | |
| 9.9 | | 6.0 | 17.9 | |
| 7.0 | | 6.5 | 53.5 | 7.5 GS*g* |
| 9.9 | | 14.0 | 54.6 | |
| 7.0 | | 18.5 | 36.3 | 7.0 GSg*g* |
| 9.2 | | 27.0 | 52.3 | |
| 9.6 | | 29.5 | 2.2 | |
| 9.0 | | 30.5 | 13.2 | 8.5 Gg*g* |
| 9.3 | | 36.5 | 11.4 | |
| 9.8 | | 42.0 | 6.2 | |
| 9.3 | | 42.5 | 30.2 | |
| 9.6 | | 47.5 | 30.6 | |
| 9.7 | | 49.0 | 32.4 | |

## 1681—1740.

| mag. | 10h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.8 | 43 | 51.0 | 59.9 | |
| 8.3 | 44 | 3.5 | 10.4 | 8.0 Gg*g* |
| 9.5 | | 5.5 | 50.2 | |
| 8.9 | | 10.5 | 23.4 | 9.0 *g* |
| 9.9 | | 16.0 | 4.2 | |
| 9.1 | | 16.5 | 20.2 | |
| 9.9 | | 19.5 | 4.2 | |
| 8.7 | | 27.5 | 35.6 | |
| 9.5 | | 36.0 | 58.4 | |
| 9.9 | | 42.0 | 23.4 | |
| 9.9 | | 42.0 | 43.1 | |
| 9.7 | | 46.0 | 35.2 | |
| 9.8 | | 53.5 | 2.1 | |
| 9.7 | | 55.5 | 6.6 | |
| 9.9 | 45 | 11.5 | 17.0 | |
| 9.1 | | 15.5 | 17.9 | 9.5 *g* |
| 9.2 | | 16.5 | 0.0 | 9.0 |
| 9.8 | | 20.0 | 57.2 | |
| 8.0 | | 22.5 | 52.9 | 8.0 G*g* |
| 9.6 | | 27.5 | 22.6 | |
| 9.9 | | 30.5 | 23.9 | |
| 9.1 | | 44.5 | 19.2 | 9.0 *g* |
| 9.7 | | 45.0 | 48.1 | |
| 8.8 | | 50.5 | 0.5 | |
| 9.9 | | 51.0 | 47.8 | |
| 9.1 | 46 | 5.5 | 0.8 | 9.0 |
| 9.6 | | 7.0 | 3.1 | |
| 8.1 | | 8.5 | 49.0 | 8.0 G*g* |
| 9.8 | | 9.5 | 0.6 | |
| 9.9 | | 20.0 | 35.4 | |
| 9.8 | | 47.5 | 53.2 | |
| 9.8 | | 47.5 | 6.2 | |
| 9.6 | | 51.0 | 4.2 | |
| 9.6 | | 59.0 | 0.4 | |
| 9.6 | 47 | 0.5 | 0.7 | |
| 9.6 | | 7.8 | 58.0 | |
| 9.6 | | 8.5 | 19.6 | |
| 9.8 | | 15.0 | 26.8 | |
| 9.5 | | 18.0 | 25.7 | |
| 9.6 | | 23.0 | 47.8 | |
| 9.9 | | 27.0 | 47.1 | |
| 9.8 | | 28.5 | 3.1 | |
| 9.4 | | 43.5 | 12.2 | |
| 8.1 | | 52.5 | 44.9 | G*g* |
| 9.8 | | 54.5 | 46.7 | |
| 9.4 | 48 | 8.5 | 32.2 | 9.5 |
| 9.8 | | 18.0 | 20.6 | |
| 9.8 | | 20.0 | 56.0 | |
| 9.3 | | 37.0 | 33.4 | |
| 9.5 | | 40.0 | 3.9 | 9.5 |
| 9.5 | | 43.5 | 6.8 | 9.5 |
| 9.7 | | 48.5 | 6.7 | |
| 9.4 | | 48.5 | 44.3 | |
| 9.2 | | 50.5 | 42.3 | |
| 9.9 | | 56.5 | 8.5 | |
| 9.8 | 49 | 0.0 | 5.8 | |
| 9.9 | | 1.5 | 20.9 | |
| 9.6 | | 2.0 | 51.6 | |
| 9.6 | | 5.5 | 30.8 | |
| 9.6 | | 6.5 | 31.7 | |



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## 1741—1800.

| mag. | 10h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·0 | 49 | 26·0 | 57·4 | |
| 9·9 | | 35·0 | 42·7 | |
| 8·9 | | 42·5 | 18·3 | 9·0 *g* |
| 9·7 | | 43·5 | 18·1 | |
| 9·8 | | 48·0 | 19·8 | |
| 9·2 | 50 | 16·5 | 22·5 | |
| 9·4 | | 22·5 | 38·9 | |
| 8·9 | | 38·0 | 33·8 | 9·0 |
| 9·3 | | 45·0 | 3·1 | |
| 9·7 | | 46·0 | 6·1 | |
| 9·7 | | 46·5 | 13·0 | |
| 9·6 | | 49·5 | 9·8 | |
| 9·8 | 51 | 4·0 | 21·7 | |
| 9·6 | | 8·0 | 13·1 | |
| 9·9 | | 14·0 | 56·3 | |
| 9·8 | | 17·5 | 41·8 | |
| 9·9 | | 41·5 | 10·1 | |
| 9·1 | | 53·5 | 32·8 | 9·5 |
| 9·5 | 52 | 18·0 | 28·2 | |
| 9·4 | | 19·5 | 53·7 | |
| 9·9 | | 22·5 | 29·3 | |
| 9·2 | | 34·5 | 36·3 | |
| 9·6 | | 38·5 | 34·9 | |
| 9·8 | | 42·0 | 54·1 | |
| 9·8 | | 51·0 | 20·7 | |
| 9·6 | 53 | 2·5 | 43·3 | |
| 8·9 | | 16·5 | 43·1 | |
| 9·2 | | 19·0 | 19·6 | 9·5 |
| 9·9 | | 25·0 | 11·9 | |
| 9·2 | | 26·0 | 32·9 | |
| 9·1 | | 29·5 | 48·5 | |
| 9·7 | | 32·0 | 40·3 | |
| 9·9 | | 35·0 | 26·6 | |
| 9·6 | | 45·0 | 31·3 | |
| 9·9 | | 50·5 | 5·4 | |
| 9·7 | 54 | 7·0 | 15·8 | |
| 9·2 | | 21·0 | 10·9 | 9·0 *g* |
| 9·6 | | 27·0 | 11·0 | *g* |
| 9·9 | | 54·5 | 27·0 | |
| 9·6 | 55 | 11·0 | 59·6 | |
| 9·7 | | 15·0 | 48·1 | |
| 9·7 | | 22·5 | 12·2 | |
| 9·9 | | 56·0 | 44·2 | |
| 9·5 | 56 | 14·5 | 15·1 | |
| 9·6 | | 24·0 | 28·5 | |
| 9·4 | | 25·5 | 50·0 | |
| 9·9 | | 31·5 | 1·1 | |
| 9·8 | | 38·0 | 15·3 | |
| 9·6 | | 39·0 | 30·4 | |
| 9·3 | | 45·0 | 32·8 | 9·5 |
| 9·6 | | 46·5 | 47·1 | |
| 9·6 | | 50·0 | 47·1 | |
| 9·9 | | 54·0 | 56·8 | |
| 7·8 | | 54·5 | 37·8 | 8·0 GS*g* |
| 9·8 | 57 | 1·5 | 3·8 | |
| 9·8 | | 5·5 | 11·9 | |
| 9·9 | | 6·0 | 16·1 | |
| 9·2 | | 21·0 | 35·3 | 9·0 *g* |
| 9·3 | | 30·0 | 7·5 | |
| 9·6 | | 44·5 | 2·2 | |

## 1801—1860.

| mag. | 10h.—11h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 57 | 45·0 | 17·0 | |
| 9·8 | | 50·0 | 56·7 | |
| 9·6 | | 51·5 | 14·6 | |
| 9·6 | | 56·5 | 28·9 | |
| 9·8 | | 58·5 | 28·4 | |
| 9·8 | | 59·0 | 35·6 | |
| 9·7 | 58 | 0·0 | 3·1 | |
| 9·6 | | 2·5 | 1·1 | |
| 9·8 | | 11·0 | 29·6 | |
| 9·5 | | 15·5 | 50·3 | |
| 9·9 | | 29·0 | 31·1 | |
| 9·6 | | 34·8 | 14·2 | |
| 9·6 | | 43·5 | 53·4 | |
| 9·8 | 59 | 12·3 | 48·4 | |
| 9·4 | | 17·3 | 50·0 | |
| 9·2 | | 41·3 | 10·6 | |
| 9·9 | | 43·0 | 46·1 | |
| 9·9 | | 43·0 | 32·1 | |
| 7·3 | | 52·4 | 56·6 | 8·0 GS*g* |
| 9·8 | | 55·0 | 41·4 | |
| 9·4 | | 56·8 | 53·5 | |
| 9·2 | 0 | 18·8 | 53·5 | 9·5 |
| 9·8 | | 21·0 | 24·7 | |
| 9·2 | | 21·8 | 5·8 | 9·5 |
| 9·3 | | 22·5 | 56·1 | |
| 9·9 | | 29·0 | 34·8 | |
| 9·8 | | 30·0 | 38·4 | |
| 9·9 | | 30·0 | 4·0 | |
| 9·2 | | 33·8 | 5·6 | |
| 9·4 | 1 | 4·0 | 6·0 | |
| 9·4 | | 10·0 | 6·1 | |
| 9·6 | | 12·0 | 17·2 | |
| 9·4 | | 28·0 | 16·6 | |
| 9·4 | | 28·0 | 54·0 | |
| 9·6 | | 33·5 | 33·7 | |
| 9·7 | | 48·5 | 31·0 | |
| 9·7 | 2 | 26·5 | 25·6 | |
| 9·6 | | 36·5 | 54·4 | |
| 9·4 | | 38·5 | 46·0 | |
| 9·2 | | 39·0 | 50·4 | |
| 9·4 | | 52·0 | 46·7 | |
| 9·6 | 3 | 4·0 | 9·4 | |
| 8·8 | | 8·0 | 48·6 | 9·0 *g* |
| 9·2 | | 13·5 | 42·1 | |
| 8·6 | | 17·0 | 55·5 | 9·0 G*g* |
| 9·0 | | 20·0 | 17·0 | *g* |
| 9·0 | | 46·0 | 30·3 | 9·5 |
| 9·4 | | 52·0 | 8·2 | |
| 9·4 | 4 | 2·0 | 12·4 | |
| 9·4 | | 19·0 | 26·5 | |
| 9·4 | | 30·0 | 36·9 | |
| 8·9 | | 40·0 | 7·0 | 9·0 |
| 9·7 | | 40·5 | 2·8 | |
| 9·6 | | 49·0 | 43·6 | |
| 9·7 | 5 | 7·5 | 23·0 | |
| 8·9 | | 22·5 | 11·6 | 9·0 *g* |
| 9·4 | | 32·0 | 19·0 | |
| 9·6 | 6 | 36·5 | 32·9 | |
| 9·0 | | 38·5 | 12·6 | 9·5 |
| 5·7 | 7 | 33·0 | 29·3 | 6·0 GSc*g* |

## 1861—1920.

| mag. | 11h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·3 | 8 | 1·0 | 24·1 | |
| 9·7 | | 34·5 | 11·6 | |
| 9·2 | | 40·0 | 23·7 | 10·0 |
| 9·4 | | 42·0 | 45·6 | |
| 9·0 | 9 | 18·5 | 4·2 | 9·5 |
| 9·7 | | 47·0 | 47·4 | |
| 9·5 | 10 | 27·0 | 12·4 | |
| 9·6 | | 30·5 | 15·4 | |
| 9·5 | | 30·5 | 53·0 | |
| 9·6 | | 55·5 | 13·2 | |
| 9·7 | 11 | 28·0 | 28·4 | |
| 9·6 | | 59·0 | 21·6 | |
| 9·6 | 12 | 10·0 | 6·2 | |
| 9·0 | | 12·0 | 21·5 | 9·2 *g* |
| 9·6 | | 20·0 | 47·0 | |
| 7·9 | | 40·5 | 21·6 | 8·5 *g* |
| 9·5 | 13 | 2·0 | 3·2 | |
| 9·4 | | 2·0 | 6·2 | |
| 9·7 | | 2·5 | 33·0 | |
| 8·6 | | 33·0 | 34·8 | 8·6 *g* |
| 6·8 | 14 | 2·5 | 54·0 | 7·0 GSc*g* |
| 9·6 | | 18·0 | 31·2 | |
| 8·8 | | 32·5 | 4·0 | 9·0 *g* |
| 9·2 | | 39·0 | 13·5 | |
| 8·8 | 15 | 30·5 | 27·2 | 9·1 *g* |
| 9·5 | 18 | 3·0 | 0·2 | 10·0 |
| 9·7 | | 9·0 | 46·4 | |
| 9·7 | | 51·5 | 42·1 | |
| 9·0 | 19 | 18·5 | 54·4 | 9·0 *g* |
| 9·6 | | 20·0 | 44·0 | |
| 8·8 | | 20·0 | 24·6 | 9·0 *g* |
| 8·3 | 20 | 15·0 | 7·3 | 8·0 G*g* |
| 6·0 | | 19·0 | 17·0 | 5·8 GS*g* |
| 9·7 | | 37·0 | 23·3 | |
| 9·4 | 21 | 57·0 | 27·1 | |
| 9·0 | 22 | 30·5 | 30·1 | 9·3 *g* |
| 9·7 | | 43·0 | 25·9 | |
| 9·6 | | 58·5 | 7·6 | |
| 9·2 | 23 | 34·5 | 20·5 | |
| 8·8 | | 37·5 | 10·3 | 9·0 |
| 9·7 | | 39·0 | 20·3 | |
| 9·0 | | 59·5 | 21·3 | 9·5 |
| 9·4 | 24 | 22·5 | 29·3 | |
| 8·0 | | 48·5 | 7·9 | 8·5 GS |
| 8·9 | | 50·0 | 29·5 | 9·0 *g* |
| 9·5 | | 59·5 | 20·1 | |
| 9·5 | 25 | 28·0 | 21·1 | 9·2 *g* |
| 9·2 | | 31·0 | 35·9 | |
| 9·6 | 26 | 6·5 | 32·7 | |
| 8·8 | | 10·5 | 12·9 | 9·0 |
| 8·3 | | 26·0 | 13·1 | 8·5 *g* |
| 9·3 | | 30·5 | 18·4 | |
| 9·5 | | 31·0 | 15·3 | |
| 9·4 | | 31·0 | 15·7 | |
| 9·7 | 27 | 25·5 | 17·9 | |
| 9·2 | | 34·5 | 3·9 | 9·5 |
| 9·4 | | 40·0 | 45·3 | |
| 9·5 | | 52·0 | 12·1 | |
| 8·8 | | 52·0 | 12·3 | |
| 9·7 | 28 | 6·0 | 31·2 | |

## 1921—1980.

| mag. | 11h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 28 | 40·5 | 24·1 | |
| 9·6 | | 42·0 | 30·1 | |
| 8·4 | | 49·5 | 15·9 | 9·0 *g* |
| 9·4 | | 50·0 | 28·9 | |
| 9·4 | 29 | 19·5 | 27·1 | |
| 9·3 | | 42·5 | 21·5 | |
| 9·5 | | 59·0 | 1·0 | |
| 9·7 | 30 | 48·0 | 34·9 | *g* |
| 9·7 | 31 | 0·5 | 42·0 | 9·5 |
| 9·7 | | 2·0 | 44·1 | |
| 9·4 | | 4·0 | 39·8 | |
| 9·3 | | 5·5 | 6·5 | |
| 9·7 | 32 | 2·0 | 52·1 | |
| 9·3 | | 4·5 | 51·5 | |
| 9·5 | | 36·5 | 45·3 | |
| 9·4 | | 52·5 | 49·7 | 9·0 |
| 9·3 | 34 | 20·5 | 2·2 | |
| 9·2 | | 21·5 | 4·8 | 9·5 |
| 9·4 | | 21·5 | 10·0 | |
| 8·6 | | 37·5 | 46·1 | 8·0 *g* |
| 9·4 | 35 | 34·0 | 22·0 | |
| 9·7 | | 42·5 | 37·9 | |
| 8·2 | | 44·5 | 8·2 | 7·5 GS*g* |
| 7·8 | 36 | 1·5 | 6·2 | 8·0 GS*g* |
| 9·6 | | 40·5 | 20·1 | 9·2 *g* |
| 9·2 | | 41·5 | 33·2 | |
| 7·8 | | 56·0 | 23·4 | 8·2 G*g* |
| 9·7 | 37 | 1·5 | 59·8 | 9·5 |
| 9·7 | | 56·0 | 5·8 | |
| 9·9 | 38 | 28·5 | 53·0 | |
| 9·4 | | 30·3 | 9·7 | |
| 9·9 | 39 | 37·0 | 45·0 | |
| 9·9 | | 45·5 | 4·0 | |
| 9·7 | | 52·3 | 35·9 | |
| 9·9 | | 53·5 | 27·7 | |
| 9·9 | | 56·0 | 39·9 | |
| 9·7 | 40 | 5·5 | 59·0 | |
| 9·9 | | 5·5 | 2·0 | |
| 9·9 | | 8·5 | 28·0 | |
| 9·4 | | 13·5 | 10·0 | |
| 9·4 | | 17·7 | 23·0 | |
| 9·9 | | 20·0 | 6·9 | |
| 9·2 | | 29·0 | 22·0 | 10·0 |
| 9·1 | | 39·0 | 28·2 | |
| 9·7 | | 58·8 | 22·8 | |
| 9·9 | 41 | 1·5 | 31·1 | |
| 9·5 | | 1·7 | 38·3 | |
| 9·6 | | 15·0 | 50·6 | |
| 9·2 | | 35·5 | 33·7 | |
| 9·9 | | 37·0 | 51·2 | |
| 9·2 | | 40·5 | 36·3 | *g* |
| 9·9 | | 41·0 | 6·0 | |
| 9·9 | | 42·8 | 21·2 | |
| 9·7 | | 54·0 | 31·0 | |
| 9·5 | | 54·0 | 17·1 | |
| 9·9 | 42 | 2·8 | 3·9 | |
| 9·9 | | 19·5 | 3·3 | |
| 9·9 | | 27·0 | 22·0 | |
| 9·7 | | 31·0 | 55·7 | |
| 9·9 | | 35·5 | 11·6 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 54 | 7·9 |
| | 50 | 57 | 8·0 |
| 11 | 0 | 59 | 8·1 |
| | 10 | 62 | 8·2 |
| | 20 | 65 | 8·2 |
| | 30 | 68 | 8·3 |
| | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |



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| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |

## 1981—2040.

| mag. | 11h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·9 | 42 | 35·8 | 21·5 | |
| 9·8 | | 41·0 | 39·4 | |
| 9·9 | | 58·8 | 7·0 | |
| 9·4 | 43 | 1·5 | 5·2 | |
| 9·5 | | 4·5 | 43·4 | |
| 9·2 | | 26·5 | 55·7 | |
| 9·9 | | 33·5 | 29·4 | |
| 5·1 | | 35·5 | 5·6 | 5·0 GS*g* |
| 9·3 | | 38·5 | 22·6 | |
| 9·9 | | 50·5 | 19·0 | |
| 9·2 | | 55·0 | 15·1 | |
| 9·9 | 44 | 2·0 | 39·7 | |
| 9·8 | | 2·5 | 43·2 | |
| 9·5 | | 31·0 | 35·0 | |
| 9·9 | | 36·0 | 2·0 | |
| 9·9 | | 41·0 | 13·3 | |
| 9·9 | | 43·0 | 3·6 | |
| 9·8 | | 54·5 | 51·8 | |
| 9·9 | 45 | 21·5 | 10·1 | |
| 9·9 | | 26·5 | 30·4 | |
| 9·9 | | 31·7 | 11·4 | |
| 9·8 | | 35·5 | 10·5 | |
| 7·3 | | 42·0 | 54·0 | 7·5 GS*g* |
| 9·8 | | 44·5 | 26·7 | |
| 9·4 | | 49·0 | 30·7 | |
| 9·8 | | 52·5 | 35·0 | |
| 9·9 | 46 | 0·3 | 27·4 | |
| 9·9 | | 1·5 | 57·8 | |
| 9·6 | | 7·5 | 2·0 | |
| 9·9 | | 9·5 | 50·1 | |
| 9·9 | | 11·5 | 54·7 | |
| 9·9 | | 18·5 | 54·2 | |
| 9·7 | | 19·0 | 11·3 | |
| 8·8 | | 19·0 | 53·5 | 9·5 |
| 9·4 | | 21·0 | 13·0 | |
| 9·7 | | 29·5 | 16·2 | |
| 9·7 | | 30·0 | 6·1 | |
| 9·9 | | 37·0 | 54·4 | |
| 9·5 | | 39·0 | 21·8 | |
| 9·9 | | 46·0 | 42·9 | |
| 8·8 | | 50·5 | 43·3 | |
| 9·8 | | 51·5 | 20·0 | |
| 9·4 | 47 | 17·5 | 0·9 | |
| 9·4 | | 22·0 | 55·3 | 9·5 G |
| 9·5 | | 27·5 | 51·4 | |
| 9·9 | | 31·0 | 48·0 | |
| 9·9 | | 36·5 | 39·9 | |
| 9·2 | | 40·7 | 41·4 | |
| 9·6 | | 46·5 | 33·9 | |
| 9·2 | 48 | 1·0 | 36·2 | |
| 7·7 | | 21·5 | 0·4 | 8·0 G*g* |
| 9·8 | | 24·0 | 6·0 | |
| 9·5 | | 32·5 | 10·4 | |
| 9·9 | | 44·0 | 2·1 | |
| 8·6 | 49 | 8·5 | 20·9 | 9·0 *g* |
| 7·7 | | 9·5 | 0·6 | 8·0 G*g* |
| 9·4 | | 20·5 | 22·9 | |
| 9·8 | | 31·0 | 49·7 | |
| 8·8 | | 46·8 | 56·2 | 8·0 G*g* |
| 9·4 | | 48·0 | 50·1 | |

## 2041—2100.

| mag. | 11h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8·8 | 49 | 53·0 | 0·1 | |
| 9·9 | | 53·5 | 21·6 | |
| 9·7 | 50 | 0·5 | 12·5 | |
| 9·1 | | 10·0 | 51·0 | 8·5 G*g* |
| 9·9 | | 13·0 | 48·0 | |
| 7·9 | | 16·0 | 5·8 | G*g* |
| 8·9 | | 21·5 | 5·6 | G |
| 9·4 | | 27·5 | 11·0 | |
| 9·0 | | 34·0 | 22·4 | |
| 9·2 | | 52·5 | 35·2 | *g* |
| 9·5 | | 56·0 | 46·0 | |
| 9·7 | | 57·5 | 28·1 | |
| 9·7 | 51 | 7·0 | 10·2 | |
| 8·8 | | 9·0 | 54·5 | 9·0 |
| 9·7 | | 14·5 | 34·2 | |
| 9·9 | | 14·5 | 33·3 | |
| 9·9 | | 15·0 | 0·0 | |
| 9·9 | | 16·5 | 32·9 | |
| 9·2 | | 21·0 | 44·4 | 9·0 G |
| 9·9 | | 23·0 | 0·4 | |
| 9·9 | | 47·0 | 40·6 | |
| 9·0 | | 47·0 | 59·8 | |
| 9·9 | | 50·5 | 24·5 | |
| 9·2 | | 57·0 | 43·0 | |
| 9·9 | 52 | 1·5 | 40·1 | |
| 9·4 | | 1·5 | 41·3 | |
| 9·0 | | 3·5 | 50·6 | 9·5 |
| 9·2 | | 7·0 | 55·2 | |
| 9·2 | | 18·0 | 54·1 | |
| 9·0 | | 19·5 | 56·1 | 9·5 |
| 9·6 | | 26·0 | 18·1 | |
| 9·4 | | 27·0 | 51·0 | |
| 6·4 | | 29·0 | 38·6 | 6·5 GS*gr* |
| 9·8 | | 29·5 | 39·7 | |
| 9·8 | | 31·5 | 10·2 | |
| 9·6 | | 34·5 | 34·6 | |
| 8·8 | | 34·5 | 54·0 | 9·0 |
| 8·6 | | 37·5 | 48·0 | 9·0 |
| 9·3 | | 41·5 | 43·7 | |
| 9·5 | | 48·0 | 49·1 | |
| 9·9 | | 52·5 | 18·9 | |
| 9·9 | | 57·5 | 19·3 | |
| 9·5 | | 59·5 | 24·1 | |
| 9·4 | 53 | 2·0 | 13·4 | |
| 9·1 | | 19·0 | 58·3 | |
| 9·2 | | 27·0 | 15·1 | |
| 9·5 | | 28·5 | 6·0 | |
| 9·2 | | 34·0 | 14·1 | |
| 9·2 | | 37·5 | 5·9 | |
| 8·5 | | 48·5 | 7·4 | *g* |
| 9·5 | 54 | 14·0 | 18·6 | |
| 9·4 | | 16·5 | 26·1 | |
| 9·4 | | 17·5 | 25·7 | |
| 9·9 | | 19·5 | 17·1 | |
| 9·7 | | 21·5 | 50·7 | |
| 8·2 | | 27·0 | 9·3 | *g* |
| 8·9 | | 43·8 | 1·1 | |
| 8·5 | | 50·5 | 33·1 | 9·0 *g* |
| 9·9 | | 52·7 | 59·3 | |
| 8·6 | 55 | 0·0 | 23·1 | 9·0 *g* |

## 2101—2160.

| mag. | 11h.–12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 55 | 12·5 | 44·4 | |
| 9·9 | | 15·5 | 15·2 | |
| 9·9 | | 17·0 | 14·3 | |
| 9·7 | | 23·0 | 34·9 | |
| 8·8 | | 47·5 | 3·4 | |
| 9·2 | | 52·5 | 6·3 | |
| 9·9 | 56 | 2·0 | 12·1 | |
| 9·4 | | 2·5 | 33·2 | 9·0 |
| 9·5 | | 11·0 | 34·2 | |
| 9·5 | | 20·5 | 43·1 | |
| 9·9 | | 21·5 | 14·0 | |
| 9·9 | | 30·5 | 42·2 | |
| 9·9 | | 41·5 | 46·4 | |
| 9·8 | | 47·5 | 43·9 | |
| 7·9 | | 49·5 | 39·3 | 8·5 G*g* |
| 8·8 | | 55·0 | 13·8 | |
| 9·6 | 57 | 3·0 | 11·7 | |
| 9·9 | | 9·5 | 21·0 | |
| 9·9 | | 11·5 | 56·3 | |
| 9·9 | | 30·5 | 6 6 | |
| 9·4 | | 31·5 | 13·3 | |
| 8·8 | | 32·0 | 18·4 | |
| 9·9 | | 39·5 | 24·0 | |
| 7·3 | | 39·5 | 50·5 | 8·0*g* |
| 9·2 | | 45·5 | 21·4 | |
| 9·4 | | 49·5 | 37·0 | |
| 9·2 | | 50·0 | 23·3 | |
| 9·9 | | 51·0 | 23·8 | |
| 9·9 | | 55·5 | 39·9 | |
| 9·9 | | 59·5 | 0·6 | |
| 9·2 | 58 | 0·5 | 40·0 | |
| 9·3 | | 6·5 | 41·0 | |
| 9·4 | | 9·5 | 42·4 | |
| 9·4 | | 11·0 | 48·4 | |
| 9·2 | | 23·0 | 28·0 | |
| 9·7 | | 25·5 | 21·0 | |
| 9·9 | | 30·5 | 17·3 | |
| 9·7 | | 57·0 | 9·4 | |
| 7·4 | 59 | 4·0 | 34·6 | 7·0 GS*g* |
| 9·3 | | 23·5 | 39·6 | |
| 9·9 | | 37·5 | 52·7 | |
| 9·5 | 0 | 7·5 | 48·0 | |
| 8·5 | | 11·5 | 14·7 | 9·0 G*g* |
| 9·2 | | 16·5 | 58·1 | |
| 5·3 | | 21·0 | 55·0 | GSg*g*tr |
| 8·5 | | 47·5 | 44·6 | G |
| 7·5 | | 49·0 | 59·2 | GS*g* |
| 9·7 | | 55·5 | 15·3 | |
| 9·5 | 1 | 5·5 | 25·5 | |
| 9·7 | | 6·0 | 23·8 | |
| 9·4 | | 19·5 | 4·3 | |
| 9·3 | | 29·5 | 10·0 | |
| 9·7 | | 59·0 | 54·2 | |
| 9·3 | 2 | 5·5 | 5·1 | |
| 9·2 | | 12·0 | 15·9 | |
| 9·2 | | 15·5 | 15·1 | 8·5 G |
| 9·2 | | 35·5 | 55·9 | |
| 8·2 | | 43·0 | 2·2 | 8·0 G |
| 8·7 | | 49·5 | 10·7 | 9·0 G |
| 7·8 | | 50·5 | 7·5 | 7·0 G |

## 2161—2220.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·9 | 3 | 9·8 | 58·0 | |
| 7·8 | | 17·5 | 13·2 | 8·5 G |
| 9·9 | | 18·5 | 4·0 | |
| 9·0 | | 19·5 | 8·0 | G |
| 9·8 | | 27·0 | 21·4 | |
| 8·7 | | 28·0 | 18·1 | 9·0 G |
| 9·7 | | 29·0 | 42·7 | |
| 8·4 | | 38·0 | 44·7 | 9·0 |
| 9·6 | | 45·0 | 41·7 | 9·5 |
| 9·7 | | 48·5 | 41·7 | |
| 9·9 | | 49·0 | 32·7 | |
| 8·8 | | 55·5 | 24·1 | |
| 9·4 | 4 | 11·0 | 40·9 | 9·5 |
| 9·3 | | 19·0 | 43·4 | 9·5 |
| 9·5 | | 19·5 | 40·0 | |
| 9·2 | | 27·5 | 39·0 | |
| 9·2 | | 41·5 | 29·5 | |
| 8·1 | | 45·5 | 16·2 | 8·5 G |
| 9·4 | 5 | 1·0 | 53·4 | |
| 9·8 | | 6·5 | 47·2 | |
| 9·2 | | 9·5 | 58·5 | |
| 9·7 | | 10·5 | 43·0 | |
| 9·7 | | 13·0 | 38·0 | |
| 9·2 | | 15·5 | 49·9 | 9·5 |
| 6·7 | | 23·5 | 48·9 | 7·0 GS |
| 9·9 | | 46·5 | 19·2 | |
| 9·1 | | 47·0 | 9·4 | 8·0 G |
| 9·9 | 6 | 4·5 | 18·9 | |
| 9·0 | | 30·5 | 46·8 | |
| 9·5 | | 30·5 | 12·0 | |
| 9·6 | | 34·5 | 3·7 | |
| 9·4 | | 44·5 | 52·5 | |
| 9·9 | | 48·5 | 38·0 | |
| 9·9 | | 49·5 | 37·5 | |
| 9·9 | | 58·5 | 0·1 | |
| 9·9 | 7 | 3·0 | 55·5 | |
| 9·2 | | 6·5 | 14·4 | 9·0 |
| 9·2 | | 8·0 | 1·8 | |
| 9·2 | | 10·5 | 32·5 | |
| 9·9 | | 21·5 | 45·0 | |
| 8·8 | | 32·2 | 58·0 | 10·0 |
| 9·9 | | 33·0 | 35·7 | |
| 6·3 | | 36·0 | 42·8 | 7·0 GS |
| 9·9 | | 45·0 | 31·0 | |
| 9·1 | | 50·5 | 48·8 | |
| 9·8 | 8 | 1·0 | 47·0 | |
| 7·8 | | 16·5 | 45·9 | 9·0 G |
| 8·8 | | 18·5 | 50·9 | |
| 9·9 | | 33·0 | 42·5 | |
| 9·9 | | 38·5 | 32·0 | |
| 9·0 | | 40·5 | 52·9 | 8·5 |
| 9·9 | | 50·5 | 14·4 | |
| 9·9 | 9 | 8·5 | 58·4 | |
| 9·9 | | 11·5 | 32·0 | |
| 9·6 | | 11·5 | 18·1 | |
| 8·5 | | 12·5 | 17·0 | 9·2 |
| 7·3 | | 24·0 | 45·5 | 7·5G |
| 9·7 | | 37·0 | 41·3 | |
| 8·2 | | 52·0 | 49·2 | 8·5 |
| 9·5 | | 53·5 | 35·5 | |



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## 2221—2280.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·7 | 9 | 54·0 | 57·9 | |
| 9·2 | | 54·0 | 7·9 | 9·0 |
| 9·2 | 10 | 3·0 | 25·9 | |
| 9·9 | | 7·5 | 32·8 | |
| 9·2 | | 8·5 | 18·8 | |
| 9·9 | | 10·5 | 39·0 | |
| 9·9 | | 14·5 | 50·5 | |
| 9·9 | | 37·5 | 36·9 | |
| 9·8 | | 54·5 | 43·0 | |
| 8·2 | 11 | 14·5 | 29·3 | 8·5 G |
| 9·4 | | 18·5 | 43·1 | |
| 9·5 | | 19·0 | 48·1 | |
| 8·8 | | 37·0 | 22·2 | 9·5 |
| 9·9 | | 37·0 | 21·0 | |
| 4·4 | | 39·5 | 18·4 | 5·0 GScr |
| 9·9 | | 41·5 | 30·6 | |
| 9·5 | | 42·5 | 12·5 | 9·0 |
| 9·5 | | 50·5 | 4·6 | |
| 8·8 | 12 | 3·5 | 59·5 | |
| 9·9 | | 28·0 | 17·0 | |
| 9·9 | | 30·5 | 18·7 | |
| 9·9 | | 37·0 | 27·1 | |
| 9·4 | 13 | 1·5 | 42·7 | |
| 9·4 | | 21·5 | 38·9 | |
| 9·3 | | 24·5 | 25·0 | 9·0 |
| 8·2 | | 27·0 | 57·2 | 7·2 GS |
| 9·9 | | 53·5 | 59·0 | |
| 9·4 | 14 | 13·5 | 53·4 | |
| 9·7 | | 13·5 | 18·8 | |
| 9·9 | 15 | 19·5 | 44·0 | |
| 8·4 | | 26·0 | 59·3 | 8·0 G |
| 9·9 | | 39·5 | 53·8 | |
| 9·7 | | 40·5 | 52·7 | |
| 9·2 | 16 | 14·5 | 23·7 | |
| 9·3 | | 26·0 | 23·7 | 9·0 |
| 9·9 | | 31·5 | 49·4 | |
| 9·9 | | 34·8 | 59·0 | |
| 9·7 | | 48·0 | 37·4 | |
| 7·4 | | 49·5 | 10·7 | 7·5 G |
| 9·9 | | 54·0 | 41·6 | |
| 7·8 | | 56·5 | 17·6 | 8·0 G |
| 9·9 | | 59·0 | 57·9 | |
| 9·2 | 17 | 30·0 | 28·9 | 9·5 |
| 9·9 | | 36·5 | 59·5 | |
| 9·0 | 18 | 8·5 | 38·8 | |
| 9·4 | | 8·5 | 26·3 | |
| 8·8 | | 9·5 | 42·2 | 9·5 |
| 9·8 | | 32·5 | 57·6 | |
| 9·9 | | 43·5 | 13·1 | |
| 7·6 | | 52·5 | 19·7 | 7·2 GS |
| 9·4 | | 53·0 | 19·0 | 9·0 |
| 9·9 | 19 | 13·5 | 31·0 | |
| 9·7 | | 14·8 | 31·2 | |
| 9·6 | | 19·5 | 3·9 | |
| 10·0 | | 21·5 | 19·4 | |
| 9·5 | | 21·5 | 17·4 | |
| 9·6 | | 23·5 | 10·1 | |
| 9·8 | | 25·0 | 20·7 | |
| 10·0 | | 33·5 | 26·0 | |
| 9·9 | 20 | 9·5 | 45·0 | |

## 2281—2340.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·8 | 20 | 14·5 | 46·0 | |
| 9·7 | | 21·0 | 12·7 | |
| 6·8 | | 26·3 | 5·9 | 6·5 GS |
| 10·0 | | 28·2 | 11·9 | |
| 9·8 | | 31·0 | 37·8 | |
| 9·3 | | 33·8 | 32·7 | |
| 9·1 | | 35·3 | 6·3 | |
| 8·9 | | 37·3 | 31·8 | 9·5 |
| 9·2 | | 38·0 | 13·7 | 10·0 |
| 10·0 | | 40·0 | 17·7 | |
| 8·9 | | 45·3 | 53·1 | |
| 8·8 | | 47·0 | 11·6 | 9·0 |
| 9·2 | | 51·2 | 37·6 | |
| 9·2 | 21 | 3·5 | 32·2 | |
| 9·2 | | 9·5 | 22·0 | |
| 10·0 | | 13·0 | 14·2 | |
| 6·4 | | 19·0 | 38·8 | 6·5 GS |
| 9·9 | | 31·5 | 44·9 | |
| 9·5 | | 44·0 | 21·0 | |
| 9·6 | | 46·5 | 45·9 | |
| 9·9 | | 49·5 | 26·1 | |
| 10·0 | 22 | 2·0 | 17·7 | |
| 9·5 | | 9·0 | 19·2 | |
| 10·0 | | 17·0 | 41·8 | |
| 10·0 | | 18·0 | 42·1 | |
| 9·5 | | 18·5 | 45·0 | |
| 9·8 | | 28·0 | 29·4 | |
| 10·0 | | 30·0 | 19·1 | |
| 9·4 | | 34·0 | 17·1 | 9·5 |
| 10·0 | | 37·5 | 46·0 | |
| 10·0 | | 55·5 | 35·0 | |
| 10·0 | | 56·0 | 34·4 | |
| 10·0 | 23 | 1·2 | 57·7 | |
| 10·0 | | 5·0 | 21·0 | |
| 9·8 | | 10·0 | 30·9 | |
| 10·0 | | 29·5 | 25·2 | |
| 9·6 | | 34·0 | 58·1 | |
| 9·5 | | 36·5 | 53·0 | |
| 9·6 | | 45·5 | 47·3 | |
| 9·7 | | 49·2 | 15·0 | |
| 10·0 | 24 | 7·5 | 35·8 | |
| 9·2 | | 10·5 | 45·3 | |
| 10·0 | | 17·5 | 34·0 | |
| 9·5 | | 26·0 | 49·4 | |
| 10·0 | | 28·5 | 51·6 | |
| 10·0 | | 30·5 | 35·2 | |
| 10·0 | | 44·5 | 28·0 | |
| 10·0 | | 49·0 | 57·3 | |
| 9·5 | | 54·5 | 0·2 | |
| 9·5 | 25 | 8·5 | 29·1 | 9·5 |
| 9·4 | | 21·5 | 18·5 | |
| 10·0 | | 22·5 | 25·6 | |
| 10·0 | | 28·2 | 15·8 | |
| 9·8 | | 31·5 | 19·9 | |
| 10·0 | | 37·5 | 33·8 | |
| 9·1 | | 38·0 | 32·2 | 10·0 |
| 9·8 | | 52·0 | 51·0 | |
| 9·3 | | 59·0 | 54·4 | |
| 9·3 | 26 | 2·2 | 59·0 | |
| 96 | | 7·5 | 38·0 | |

## 2341—2400.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 26 | 17·5 | 40·4 | |
| 9·6 | | 31·5 | 33·1 | |
| 9·3 | | 35·0 | 37·8 | |
| 9·1 | | 49·5 | 41·0 | 9·5 |
| 9·5 | 27 | 0·0 | 50·0 | |
| 9·6 | | 7·0 | 55·8 | |
| 9·4 | | 38·5 | 42·0 | |
| 9·2 | | 42·5 | 50·7 | 9·0 |
| 10·0 | | 42·7 | 30·5 | |
| 10·0 | | 49·0 | 16·7 | |
| 9·2 | | 55·5 | 49·0 | |
| 9·9 | | 58·7 | 50·4 | |
| 10·0 | | 58·7 | 28·3 | |
| 9·8 | 28 | 2·5 | 50·1 | |
| 9·7 | | 19·0 | 38·1 | |
| 9·2 | | 21·5 | 31·9 | |
| 10·0 | | 29·0 | 17·9 | |
| 9·4 | | 32·0 | 48·8 | |
| 9·4 | | 32·5 | 29·0 | 10·0 |
| 9·6 | | 36·0 | 35·8 | |
| 10·0 | | 50·7 | 42·4 | |
| 9·6 | | 53·5 | 30·7 | 10·0 |
| 9·8 | | 58·5 | 17·8 | |
| 10·0 | 29 | 13·5 | 56·0 | |
| 9·3 | | 21·5 | 52·0 | 9·0 |
| 10·0 | | 25·7 | 41·8 | |
| 9·4 | | 29·0 | 3·4 | |
| 9·3 | | 30·0 | 17·3 | 9·8 |
| 9·3 | | 36·0 | 48·5 | |
| 9·5 | | 37·0 | 33·2 | |
| 9·4 | | 45·0 | 49·5 | |
| 9·8 | 30 | 23·0 | 44·4 | |
| 10·0 | | 39·0 | 52·2 | |
| 9·7 | 31 | 5·5 | 47·9 | |
| 10·0 | | 18·0 | 47·2 | |
| 10·0 | | 20·0 | 29·1 | |
| 9·6 | | 26·0 | 39·7 | |
| 10·0 | | 36·0 | 40·0 | |
| 9·2 | | 42·0 | 27·0 | 8·7 G |
| 10·0 | | 44·5 | 1·0 | |
| 9·2 | | 57·0 | 37·1 | |
| 10·0 | 32 | 0·0 | 45·9 | |
| 9·6 | | 11·0 | 39·9 | |
| 9·2 | | 13·0 | 7·2 | 8·5 G |
| 9·7 | | 17·5 | 15·7 | |
| 9·6 | | 47·5 | 16·9 | |
| 9·4 | 33 | 10·5 | 56·9 | |
| 9·4 | | 28·5 | 44·4 | |
| 10·0 | | 30·7 | 23·2 | |
| 9·4 | | 32·0 | 5·1 | 10·0 |
| 9·3 | | 46·0 | 51·1 | 9·0 |
| 9·7 | | 49·5 | 56·3 | |
| 10·0 | 34 | 11·0 | 3·4 | |
| 9·9 | | 28·5 | 31·5 | |
| 10·0 | | 37·7 | 7·0 | |
| 10·0 | | 41·5 | 37·1 | |
| 10·0 | 35 | 1·0 | 36·1 | |
| 9·4 | | 16·5 | 21·0 | |
| 9·7 | | 31·5 | 20·0 | |
| 9·2 | | 34·5 | 32·7 | 9·7 |

## 2401—2460.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 35 | 40·0 | 25·8 | |
| 10·0 | | 52·0 | 46·0 | |
| 9·6 | 36 | 9·0 | 26·9 | |
| 9·9 | | 25·0 | 28·0 | |
| 9·8 | | 29·5 | 16·0 | |
| 8·7 | | 44·5 | 31·4 | 8·3 G |
| 9·2 | 37 | 2·0 | 22·0 | |
| 10·0 | | 41·0 | 56·0 | |
| 9·7 | | 58·5 | 50·4 | |
| 10·0 | 39 | 3·7 | 11·5 | |
| 9·7 | | 30·5 | 56·2 | |
| 9·8 | | 50·0 | 55·6 | |
| 9·2 | 40 | 7·0 | 59·1 | |
| 9·4 | | 35·0 | 41·6 | |
| 8·9 | | 43·0 | 58·1 | |
| 9·2 | | 47·5 | 41·1 | |
| 9·6 | 41 | 22·0 | 45·8 | |
| 9·2 | | 57·0 | 31·1 | 9·0 |
| 9·7 | | 58·0 | 49·1 | |
| 7·8 | 42 | 22·0 | 56·0 | 8·2 |
| 9·4 | | 26·0 | 9·5 | |
| 9·2 | | 33·0 | 52·3 | |
| 10·0 | | 36·2 | 27·0 | |
| 9·2 | | 46·5 | 29·7 | 10·0 |
| 9·6 | | 49·5 | 40·0 | |
| 9·5 | 43 | 10·5 | 41·8 | |
| 10·0 | | 35·2 | 36·3 | |
| 9·5 | | 39·5 | 44·0 | |
| 10·0 | | 40·2 | 24·0 | |
| 9·6 | | 48·0 | 40·6 | |
| 10·0 | | 50·5 | 23·8 | |
| 10·0 | 44 | 14·0 | 19·7 | |
| 8·6 | | 20·5 | 59·7 | 9·0 |
| 10·0 | | 28·0 | 50·4 | |
| 9·4 | | 32·5 | 5·0 | 9·0 |
| 9·4 | | 42·5 | 19·1 | |
| 9·8 | 45 | 0·5 | 58·0 | |
| 10·0 | | 24·0 | 31·1 | |
| 9·6 | | 27·0 | 2·7 | |
| 10·0 | | 28·0 | 8·8 | |
| 9·0 | | 30·0 | 43·7 | |
| 9·6 | | 31·5 | 46·2 | |
| 9·3 | | 46·0 | 5·4 | |
| 9·6 | | 55·0 | 14·1 | |
| 9·4 | | 56·0 | 26·4 | |
| 9·4 | 46 | 10·0 | 4·3 | |
| 10·0 | | 33·0 | 56·5 | |
| 9·8 | | 44·5 | 49·1 | |
| 9·8 | | 47·0 | 38·8 | |
| 9·2 | 47 | 56·5 | 41·4 | |
| 9·6 | 48 | 0·0 | 38·0 | |
| 10·0 | | 21·5 | 18·3 | |
| 10·0 | | 24·0 | 39·6 | |
| 8·0 | | 51·5 | 41·0 | 7·5 G |
| 9·8 | | 58·0 | 22·3 | |
| 9·5 | 49 | 14·5 | 55·8 | |
| 9·9 | | 20·0 | 59·6 | |
| 10·0 | | 33·5 | 55·9 | |
| 9·9 | | 40·2 | 45·0 | |
| 9·7 | 50 | 5·5 | 22·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |
| | 20 | 83 | 8·3 |
| | 30 | 86 | 8·3 |
| | 40 | 88 | 8·2 |
| | 50 | 91 | 8·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 12 | 50 | 91 | 8.2 |
| 13 | 0 | 94 | 8.1 |
| | 10 | 97 | 8.0 |
| | 20 | 100 | 7.9 |

## 2461—2520.

| mag. | 12h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.8 | 50 | 38.0 | 32.0 | |
| 8.9 | | 44.5 | 43.8 | 9.5 |
| 9.6 | | 59.5 | 56.1 | |
| 9.5 | 51 | 6.5 | 33.3 | |
| 9.5 | | 12.0 | 13.5 | |
| 9.9 | | 21.5 | 26.0 | |
| 10.0 | | 25.2 | 46.0 | |
| 9.2 | | 41.0 | 30.4 | 9.5 |
| 10.0 | | 50.2 | 42.2 | |
| 10.0 | | 51.5 | 3.2 | |
| 9.5 | | 54.0 | 50.7 | |
| 8.1 | | 57.5 | 41.6 | 8.0 G |
| 9.6 | 52 | 10.0 | 21.0 | |
| 8.8 | | 19.5 | 37.2 | 9.2 |
| 8.8 | | 32.0 | 56.6 | |
| 9.2 | | 33.0 | 32.8 | 9.5 |
| 10.0 | | 50.5 | 37.0 | 9.0 |
| 10.0 | | 54.0 | 55.1 | |
| 9.6 | 53 | 6.0 | 38.4 | |
| 10.0 | | 10.5 | 37.6 | |
| 10.0 | | 20.5 | 37.3 | |
| 9.6 | | 48.5 | 22.7 | 10.0 |
| 10.0 | | 56.0 | 54.7 | |
| 9.4 | 54 | 1.0 | 4.9 | |
| 8.6 | | 5.0 | 57.2 | 9.5 |
| 9.7 | | 9.5 | 54.9 | |
| 10.0 | | 12.5 | 52.9 | |
| 10.0 | | 19.0 | 6.0 | |
| 9.6 | | 21.5 | 38.9 | |
| 10.0 | | 27.5 | 30.5 | |
| 10.0 | | 33.0 | 51.4 | |
| 9.2 | | 44.5 | 52.1 | |
| 9.9 | | 49.5 | 57.2 | |
| 10.0 | | 56.0 | 9.3 | |
| 9.5 | | 59.5 | 9.8 | |
| 10.0 | 55 | 2.5 | 23.4 | |
| 9.5 | | 8.0 | 23.8 | |
| 9.5 | | 19.0 | 9.0 | |
| 10.0 | | 20.5 | 37.5 | |
| 10.0 | | 22.5 | 46.9 | |
| 9.4 | | 23.0 | 2.7 | 10.0 |
| 9.6 | | 26.0 | 44.7 | |
| 9.2 | | 27.0 | 27.0 | 9.5 |
| 10.0 | | 35.5 | 13.0 | |
| 9.2 | | 41.0 | 17.7 | |
| 8.8 | | 59.5 | 1.1 | 9.0 |
| 9.3 | 56 | 0.0 | 25.6 | 9.0 |
| 9.6 | | 4.0 | 52.6 | |
| 9.7 | | 4.5 | 6.9 | 9.5 |
| 10.0 | | 8.2 | 3.3 | |
| 9.5 | | 22.0 | 17.2 | |
| 9.2 | | 37.5 | 15.7 | |
| 9.2 | | 43.5 | 17.3 | |
| 9.2 | | 44.0 | 24.4 | |
| 7.2 | 57 | 8.5 | 46.3 | 7.0 GSr |
| 9.4 | | 10.0 | 13.9 | |
| 9.1 | | 12.0 | 33.6 | 9.5 |
| 10.0 | | 21.0 | 47.2 | |
| 8.8 | | 27.5 | 22.7 | 9.5 G |
| 9.8 | | 29.0 | 56.0 | |

## 2521—2580.

| mag. | 12h.—13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10.0 | 57 | 38.0 | 4.5 | |
| 10.0 | | 42.0 | 11.5 | |
| 10.0 | | 50.5 | 59.0 | |
| 10.0 | | 56.0 | 14.8 | |
| 9.8 | 58 | 1.0 | 8.2 | |
| 9.6 | | 1.5 | 14.1 | |
| 8.6 | | 8.5 | 34.3 | 9.0 |
| 9.2 | | 9.5 | 51.5 | 8.5 |
| 10.0 | | 9.5 | 52.0 | |
| 9.8 | | 26.5 | 59.6 | |
| 9.6 | | 31.5 | 29.7 | |
| 9.8 | | 34.0 | 49.1 | |
| 10.0 | | 34.0 | 21.5 | |
| 10.0 | | 37.0 | 20.4 | |
| 8.8 | | 41.0 | 53.4 | 9.5 |
| 9.8 | 59 | 1.5 | 56.4 | |
| 9.5 | | 2.0 | 26.5 | 9.5 |
| 10.0 | | 12.2 | 45.5 | |
| 9.2 | | 21.7 | 23.0 | |
| 9.2 | | 23.5 | 5.7 | |
| 10.0 | | 37.5 | 46.9 | |
| 9.9 | | 41.5 | 16.8 | |
| 9.0 | | 48.0 | 20.4 | 9.0 |
| 9.2 | | 48.5 | 32.0 | |
| 9.9 | | 50.0 | 32.7 | |
| 9.8 | | 53.5 | 38.5 | |
| 9.8 | 0 | 0.8 | 56.1 | |
| 9.9 | | 5.5 | 27.1 | |
| 9.8 | | 9.0 | 31.3 | |
| 9.3 | | 12.3 | 51.1 | |
| 9.9 | | 13.0 | 29.4 | |
| 9.8 | | 18.5 | 57.3 | |
| 9.8 | | 18.5 | 59.2 | |
| 9.3 | | 20.0 | 53.7 | |
| 9.2 | | 21.5 | 57.2 | |
| 9.2 | | 22.3 | 24.8 | |
| 9.8 | | 27.8 | 54.9 | |
| 9.7 | | 30.8 | 50.3 | |
| 9.6 | | 31.3 | 23.0 | |
| 9.5 | | 32.0 | 58.0 | |
| 9.8 | | 33.7 | 25.9 | |
| 9.5 | | 37.5 | 7.9 | |
| 9.3 | | 38.2 | 25.2 | 10.0 |
| 9.6 | | 48.0 | 54.8 | |
| 9.3 | | 58.0 | 52.2 | |
| 9.6 | 1 | 0.0 | 54.0 | |
| 9.5 | | 3.0 | 53.1 | |
| 9.4 | | 11.5 | 13.3 | |
| 9.9 | | 12.5 | 22.4 | |
| 9.4 | | 14.0 | 50.0 | |
| 9.6 | | 23.0 | 49.9 | |
| 9.4 | | 23.5 | 45.1 | |
| 9.9 | | 45.5 | 23.6 | |
| 9.9 | | 50.0 | 11.1 | |
| 9.3 | | 57.5 | 28.7 | |
| 9.9 | | 58.0 | 23.2 | |
| 9.0 | | 59.5 | 53.7 | 9.5 |
| 9.7 | 2 | 14.0 | 46.3 | |
| 9.1 | | 17.0 | 47.2 | |
| 9.5 | | 28.0 | 22.2 | |

## 2581—2640.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.9 | 2 | 31.5 | 47.0 | |
| 9.7 | | 33.5 | 20.6 | |
| 9.6 | | 34.0 | 37.2 | |
| 9.9 | | 40.0 | 44.6 | |
| 8.3 | | 41.5 | 51.6 | 9.0 |
| 9.9 | | 44.0 | 54.4 | |
| 9.5 | | 47.0 | 42.1 | |
| 9.9 | | 49.5 | 55.2 | |
| 9.2 | | 51.5 | 52.3 | |
| 9.9 | | 54.0 | 44.0 | |
| 9.2 | | 58.0 | 8.2 | 9.5 |
| 8.8 | 3 | 3.5 | 40.0 | 9.2 |
| 9.2 | | 4.0 | 40.6 | |
| 9.9 | | 4.0 | 6.9 | |
| 9.2 | | 4.0 | 9.0 | |
| 9.9 | | 5.0 | 20.4 | |
| 9.7 | | 11.5 | 24.3 | |
| 9.2 | | 11.5 | 14.7 | |
| 9.9 | | 18.5 | 53.0 | |
| 9.7 | | 20.0 | 55.3 | |
| 9.4 | | 22.0 | 26.0 | |
| 9.8 | | 22.5 | 42.0 | |
| 9.3 | | 26.5 | 57.3 | |
| 9.2 | | 39.5 | 54.1 | 9.5 |
| 9.8 | | 44.5 | 42.0 | |
| 9.3 | | 47.5 | 52.7 | |
| 9.9 | | 55.0 | 17.9 | |
| 9.3 | 4 | 8.5 | 17.0 | |
| 9.7 | | 14.0 | 58.0 | |
| 9.7 | | 18.5 | 51.9 | |
| 9.4 | | 20.0 | 38.3 | |
| 8.7 | | 20.0 | 8.8 | 9.0 |
| 9.8 | | 23.0 | 28.2 | |
| 9.7 | | 24.5 | 20.2 | |
| 9.8 | | 26.0 | 19.2 | |
| 9.9 | | 27.0 | 51.9 | |
| 9.6 | | 29.5 | 6.8 | |
| 9.2 | | 35.5 | 50.2 | |
| 9.7 | | 37.5 | 27.2 | |
| 9.5 | | 50.0 | 36.5 | |
| 9.5 | | 53.0 | 16.1 | |
| 9.8 | | 56.0 | 38.1 | |
| 9.9 | 5 | 1.0 | 15.4 | |
| 9.3 | | 3.0 | 52.1 | |
| 9.5 | | 9.5 | 4.2 | |
| 9.5 | | 9.5 | 7.8 | |
| 9.5 | | 9.5 | 53.9 | |
| 9.4 | | 10.0 | 20.0 | |
| 9.9 | | 12.8 | 57.8 | |
| 9.4 | | 24.0 | 26.3 | |
| 9.6 | | 27.5 | 31.1 | |
| 9.2 | | 33.0 | 29.1 | |
| 9.0 | | 35.0 | 1.1 | 9.5 |
| 9.9 | | 37.8 | 23.1 | |
| 9.9 | | 39.0 | 41.9 | |
| 8.0 | | 40.5 | 38.9 | 8.5 |
| 9.9 | 6 | 5.5 | 16.1 | |
| 9.8 | | 6.5 | 25.3 | |
| 9.9 | | 11.5 | 44.0 | |
| 9.2 | | 16.0 | 40.2 | |

## 2641—2700.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.6 | 6 | 21.0 | 54.1 | |
| 9.8 | | 22.8 | 26.5 | |
| 9.8 | | 26.8 | 51.5 | |
| 9.9 | | 32.5 | 48.1 | |
| 9.6 | | 35.0 | 18.4 | |
| 9.8 | | 39.0 | 10.9 | |
| 9.9 | | 42.8 | 3.5 | |
| 9.5 | | 47.2 | 57.0 | |
| 8.7 | | 49.0 | 50.8 | 9.5 |
| 9.7 | | 49.5 | 20.9 | |
| 9.2 | 7 | 1.0 | 36.2 | |
| 9.5 | | 1.5 | 55.9 | |
| 9.7 | | 3.0 | 0.1 | |
| 9.4 | | 3.5 | 32.3 | |
| 9.4 | | 15.2 | 57.2 | |
| 9.3 | | 17.0 | 17.0 | |
| 9.5 | | 18.0 | 26.9 | |
| 9.9 | | 19.0 | 45.1 | |
| 9.5 | | 22.0 | 38.5 | 9.0 |
| 9.8 | | 23.8 | 19.2 | |
| 9.9 | | 38.5 | 44.9 | |
| 8.7 | | 44.0 | 13.2 | 9.0 |
| 9.6 | | 47.5 | 44.9 | |
| 9.2 | | 53.5 | 16.4 | |
| 9.8 | | 59.5 | 57.5 | |
| 9.7 | 8 | 1.0 | 51.5 | |
| 9.6 | | 3.5 | 7.5 | |
| 9.5 | | 8.0 | 8.2 | 9.5 |
| 9.8 | | 16.5 | 34.2 | |
| 9.2 | | 18.5 | 18.6 | |
| 9.6 | | 31.0 | 41.4 | |
| 9.6 | | 31.0 | 1.1 | |
| 9.2 | | 52.5 | 22.6 | |
| 9.6 | 9 | 2.0 | 10.7 | |
| 9.6 | | 3.0 | 19.9 | |
| 9.9 | | 7.5 | 31.3 | |
| 9.2 | | 22.0 | 28.1 | 9.5 |
| 9.7 | | 22.0 | 38.0 | |
| 9.7 | | 23.5 | 31.0 | |
| 9.7 | | 35.5 | 38.1 | |
| 9.9 | | 40.0 | 21.0 | |
| 9.1 | | 47.0 | 54.9 | 8.0 G |
| 9.5 | | 50.0 | 50.0 | |
| 8.3 | | 57.5 | 1.7 | 8.5 |
| 9.9 | 10 | 1.5 | 59.8 | |
| 9.5 | | 3.0 | 4.5 | |
| 9.8 | | 13.0 | 8.6 | |
| 9.5 | | 16.0 | 51.1 | |
| 9.8 | | 28.0 | 51.2 | |
| 9.2 | | 37.5 | 54.5 | |
| 9.9 | | 39.5 | 30.6 | |
| 9.5 | | 49.0 | 41.1 | |
| 9.6 | 11 | 1.5 | 53.1 | |
| 9.6 | | 3.0 | 17.6 | |
| 9.6 | | 7.5 | 5.7 | |
| 9.2 | | 10.0 | 38.6 | |
| 8.1 | | 21.0 | 5.8 | 8.0 |
| 9.7 | | 23.8 | 17.9 | |
| 9.7 | | 50.0 | 52.4 | |
| 9.9 | | 53.5 | 0.2 | |



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## 2701—2760.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.7 | 12 | 1.5 | 43.3 | |
| 8.7 | | 11.5 | 7.0 | 9.2 |
| 9.5 | | 13.0 | 56.5 | |
| 9.9 | | 15.0 | 32.1 | |
| 9.7 | | 33.5 | 21.8 | |
| 9.2 | | 43.5 | 55.0 | |
| 9.8 | | 59.5 | 1.0 | |
| 9.5 | 13 | 1.0 | 36.2 | |
| 9.5 | | 6.0 | 17.0 | |
| 9.7 | | 6.5 | 31.0 | |
| 8.2 | | 12.0 | 23.4 | 8.2 G |
| 9.8 | | 23.2 | 1.2 | |
| 9.6 | | 24.0 | 3.7 | |
| 9.5 | | 26.8 | 0.1 | |
| 9.5 | | 29.0 | 37.9 | |
| 8.6 | | 40.5 | 58.7 | 9.5 |
| 9.8 | | 41.8 | 26.1 | |
| 9.8 | | 43.0 | 58.5 | |
| 9.6 | | 51.0 | 10.0 | |
| 9.5 | | 53.0 | 33.7 | 8.0 G |
| 9.9 | 14 | 22.5 | 28.6 | |
| 9.2 | | 28.5 | 47.1 | |
| 9.8 | | 42.0 | 7.0 | |
| 8.9 | | 47.0 | 56.3 | 9.5 |
| 9.8 | | 53.0 | 53.9 | |
| 9.8 | | 59.0 | 36.6 | |
| 9.9 | 15 | 0.0 | 35.7 | |
| 9.5 | | 3.5 | 45.3 | |
| 9.9 | | 3.8 | 20.2 | |
| 9.5 | | 33.5 | 39.1 | |
| 9.9 | | 33.5 | 10.0 | |
| 6.2 | | 38.5 | 52.9 | 5.0 GSc |
| 9.7 | | 41.5 | 25.0 | 9.5 |
| 9.2 | | 42.0 | 32.1 | |
| 9.7 | | 44.5 | 6.6 | |
| 9.6 | | 51.0 | 1.8 | |
| 9.8 | 16 | 13.5 | 52.0 | |
| 9.5 | | 21.5 | 14.4 | |
| 9.8 | | 38.0 | 32.2 | |
| 9.3 | | 42.5 | 20.0 | |
| 9.1 | | 44.2 | 59.2 | |
| 9.3 | | 45.5 | 28.9 | |
| 6.1 | | 53.0 | 49.9 | 6.5 GSc |
| 9.8 | 17 | 1.0 | 28.8 | |
| 9.7 | | 22.0 | 52.1 | |
| 9.5 | | 23.0 | 21.9 | |
| 9.8 | | 39.5 | 45.4 | |
| 9.3 | 18 | 7.0 | 5.4 | |
| 9.9 | | 7.0 | 35.7 | |
| 9.2 | | 18.5 | 13.7 | |
| 9.2 | | 26.5 | 49.7 | |
| 9.9 | | 41.5 | 53.0 | |
| 9.7 | | 42.5 | 49.7 | |
| 8.8 | | 48.0 | 26.4 | 9.5 |
| 9.0 | | 53.5 | 7.5 | |
| 9.6 | | 56.0 | 6.6 | |
| 9.5 | 19 | 0.5 | 6.9 | |
| 9.5 | | 3.5 | 29.6 | |
| 9.9 | | 8.5 | 38.2 | |
| 8.0 | | 9.0 | 9.9 | 9.0 |

## 2761—2820.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.8 | 19 | 15.7 | 37.0 | |
| 9.5 | | 24.0 | 22.5 | |
| 9.7 | | 30.5 | 22.2 | |
| 9.5 | | 48.0 | 37.4 | |
| 9.9 | | 49.7 | 43.9 | |
| 9.5 | | 53.0 | 1.9 | |
| 9.9 | | 56.7 | 26.2 | |
| 9.5 | 20 | 0.0 | 3.6 | |
| 9.6 | | 2.5 | 33.0 | |
| 8.2 | | 10.5 | 35.6 | 8.5 |
| 8.5 | | 15.0 | 36.1 | 9.0 |
| 9.0 | | 16.0 | 23.2 | |
| 9.2 | | 18.5 | 18.5 | 8.5 |
| 9.6 | | 18.5 | 37.8 | |
| 9.9 | | 24.7 | 7.3 | |
| 9.7 | | 26.0 | 35.4 | |
| 9.2 | | 34.5 | 15.3 | |
| 7.5 | | 40.0 | 13.5 | 7.5 GS |
| 8.3 | 21 | 1.0 | 48.6 | 9.0 |
| 9.8 | | 25.0 | 1.7 | |
| 9.2 | | 31.0 | 35.5 | |
| 9.9 | | 31.5 | 32.5 | |
| 9.6 | | 40.5 | 46.1 | |
| 9.7 | | 47.5 | 36.3 | |
| 9.9 | 22 | 6.0 | 19.0 | |
| 9.7 | | 12.5 | 41.0 | |
| 9.0 | | 18.0 | 9.0 | |
| 9.5 | | 41.0 | 28.3 | |
| 9.0 | | 43.5 | 49.2 | |
| 9.5 | | 55.0 | 16.5 | |
| 8.7 | | 59.5 | 2.3 | 9.5 |
| 9.5 | 23 | 15.0 | 10.0 | |
| 9.2 | | 18.5 | 2.3 | |
| 9.8 | | 22.7 | 19.0 | |
| 9.7 | | 23.0 | 43.4 | |
| 9.2 | | 26.0 | 27.0 | |
| 9.9 | | 26.7 | 31.0 | |
| 9.9 | | 31.7 | 29.9 | |
| 9.9 | | 32.5 | 8.1 | |
| 9.5 | | 37.0 | 51.1 | |
| 9.3 | | 42.5 | 11.6 | |
| 9.6 | | 43.0 | 55.3 | |
| 9.2 | | 44.0 | 54.4 | |
| 9.7 | | 49.7 | 6.3 | |
| 9.9 | 24 | 10.0 | 20.4 | |
| 9.6 | | 12.5 | 13.1 | |
| 9.9 | | 14.5 | 40.5 | |
| 9.2 | | 17.5 | 50.6 | |
| 9.5 | | 19.2 | 59.7 | |
| 9.7 | | 28.0 | 12.0 | |
| 7.8 | | 35.5 | 1.4 | 8.5 G |
| 9.5 | | 46.5 | 12.2 | |
| 9.9 | | 49.5 | 35.9 | |
| 9.2 | | 53.0 | 55.7 | |
| 9.3 | | 55.5 | 24.3 | |
| 9.3 | 25 | 3.5 | 36.3 | |
| 8.9 | | 7.5 | 21.4 | 9.5 |
| 9.5 | | 10.5 | 47.0 | |
| 9.7 | | 11.0 | 8.4 | |
| 9.2 | | 11.0 | 36.3 | |

## 2821—2880.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.0 | 25 | 13.5 | 14.3 | 9.5 |
| 9.9 | | 16.0 | 36.0 | |
| 9.9 | | 21.0 | 32.5 | |
| 9.9 | | 36.5 | 27.1 | |
| 9.9 | | 38.0 | 30.8 | |
| 9.7 | | 38.0 | 47.2 | |
| 9.6 | | 42.0 | 5.1 | |
| 9.3 | | 52.5 | 13.8 | |
| 9.8 | | 55.0 | 53.5 | |
| 9.5 | | 58.0 | 57.3 | |
| 9.1 | | 59.0 | 54.1 | |
| 9.2 | 26 | 1.5 | 53.1 | |
| 9.5 | | 9.0 | 43.9 | |
| 9.9 | | 9.5 | 8.8 | |
| 9.7 | | 17.0 | 34.6 | |
| 9.9 | | 23.0 | 51.0 | |
| 9.8 | | 25.0 | 42.3 | |
| 9.9 | | 27.0 | 2.1 | |
| 9.7 | | 33.5 | 31.4 | |
| 9.3 | | 36.0 | 14.9 | |
| 9.2 | | 56.0 | 3.0 | |
| 9.6 | | 57.0 | 24.1 | |
| 9.9 | | 58.5 | 5.9 | |
| 9.6 | 27 | 8.5 | 49.1 | |
| 9.8 | | 14.0 | 4.4 | |
| 9.5 | | 30.2 | 58.2 | |
| 9.9 | | 36.0 | 51.8 | |
| 9.5 | | 44.7 | 59.8 | |
| 8.9 | | 56.0 | 9.0 | 9.5 |
| 9.3 | 28 | 2.0 | 15.9 | |
| 9.1 | | 7.5 | 4.2 | |
| 9.5 | | 15.5 | 24.7 | |
| 9.3 | | 19.5 | 12.7 | |
| 9.0 | | 22.2 | 59.8 | |
| 9.9 | | 24.0 | 18.8 | |
| 8.3 | | 24.0 | 0.4 | 9.0 |
| 9.1 | | 31.0 | 28.8 | 8.2 |
| 9.6 | | 35.0 | 53.0 | |
| 9.7 | | 44.5 | 1.7 | |
| 9.9 | | 47.0 | 16.0 | |
| 9.6 | | 52.5 | 5.3 | |
| 9.9 | | 57.5 | 36.6 | |
| 9.7 | 29 | 1.0 | 13.0 | |
| 9.6 | | 2.0 | 48.2 | |
| 9.7 | | 9.0 | 35.2 | |
| 9.7 | | 10.0 | 35.0 | |
| 9.5 | | 23.0 | 34.1 | |
| 9.4 | | 37.5 | 37.7 | |
| 7.5 | | 49.0 | 25.0 | 8.0 |
| 9.7 | | 51.0 | 49.0 | |
| 9.9 | 30 | 2.0 | 15.3 | |
| 9.3 | | 7.0 | 7.0 | |
| 9.2 | | 7.0 | 33.9 | |
| 9.2 | | 8.5 | 27.2 | 9.5 |
| 9.5 | | 10.5 | 18.8 | |
| 9.9 | | 13.0 | 0.8 | |
| 9.6 | | 18.5 | 27.4 | |
| 9.5 | | 19.0 | 17.0 | |
| 9.5 | | 24.5 | 25.8 | |
| 9.3 | | 30.5 | 22.7 | |

## 2881—2940.

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.5 | 30 | 31.0 | 22.4 | |
| 9.5 | | 35.5 | 42.0 | |
| 8.9 | | 47.5 | 20.8 | 9.5 |
| 9.5 | | 54.0 | 39.0 | |
| 9.3 | | 54.5 | 49.0 | |
| 9.6 | | 57.0 | 1.5 | |
| 9.5 | | 58.5 | 41.5 | |
| 9.8 | 31 | 9.0 | 34.1 | |
| 9.5 | | 9.0 | 38.0 | |
| 9.2 | | 9.0 | 56.1 | |
| 9.2 | | 12.0 | 44.4 | |
| 9.6 | | 15.8 | 55.1 | |
| 9.3 | | 16.0 | 8.2 | |
| 9.9 | | 22.5 | 54.1 | |
| 9.9 | | 24.5 | 35.0 | |
| 6.8 | | 26.5 | 56.6 | 6.5 GSg |
| 9.5 | | 35.8 | 13.6 | |
| 8.9 | | 38.5 | 51.1 | 9.5 |
| 8.6 | | 56.0 | 25.9 | 8.8 G |
| 9.9 | 32 | 13.5 | 45.0 | |
| 9.7 | | 16.0 | 40.1 | |
| 9.5 | | 21.0 | 59.2 | |
| 9.1 | | 21.5 | 6.8 | |
| 9.7 | | 22.0 | 36.6 | |
| 9.6 | | 28.0 | 23.0 | |
| 9.8 | | 30.5 | 39.1 | |
| 9.8 | | 30.8 | 17.8 | |
| 9.6 | | 31.5 | 26.1 | |
| 9.9 | | 57.8 | 15.6 | |
| 9.9 | 33 | 0.5 | 49.1 | |
| 9.5 | | 5.5 | 6.2 | |
| 9.6 | | 14.5 | 32.8 | |
| 9.2 | | 17.0 | 12.1 | |
| 9.5 | | 22.0 | 0.2 | |
| 9.0 | | 30.5 | 4.9 | |
| 9.7 | | 44.0 | 17.0 | |
| 9.1 | | 45.0 | 5.7 | |
| 9.5 | | 49.5 | 43.2 | |
| 9.6 | 34 | 1.0 | 8.1 | |
| 9.5 | | 9.0 | 54.5 | |
| 9.8 | | 10.0 | 47.3 | |
| 9.3 | | 32.5 | 45.9 | |
| 9.1 | | 51.0 | 10.8 | 9.5 |
| 9.7 | | 54.0 | 41.9 | |
| 9.5 | | 56.7 | 58.1 | 9.5 |
| 9.5 | 35 | 11.0 | 21.8 | |
| 9.9 | | 30.5 | 2.1 | |
| 9.9 | | 33.0 | 35.0 | |
| 9.5 | | 34.5 | 56.0 | |
| 9.8 | | 34.5 | 31.1 | |
| 9.5 | | 40.0 | 43.7 | |
| 9.9 | | 51.0 | 6.3 | |
| 9.7 | | 51.5 | 1.7 | |
| 9.3 | | 54.0 | 36.9 | |
| 9.2 | | 54.0 | 26.5 | |
| 8.8 | | 56.0 | 18.7 | 9.5 |
| 9.5 | 36 | 8.0 | 16.2 | |
| 9.3 | | 13.5 | 15.4 | |
| 9.2 | | 21.0 | 7.3 | 9.0 |
| 9.2 | | 23.0 | 2.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 10 | 97 | 8.0 |
| | 20 | 100 | 7 9 |
| | 30 | 102 | 7.7 |
| | 40 | 105 | 7.6 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 13 | 30 | 102 | 7·7 |
| | 40 | 105 | 7·6 |
| | 50 | 108 | 7·4 |
| 14 | 0 | 110 | 7·2 |
| | 10 | 113 | 7·0 |

**2941—3000.**

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·5 | 36 | 51·5 | 21·2 | |
| 8·1 | 37 | 2·0 | 19·7 | |
| 9·5 | | 3·5 | 10·2 | |
| 9·9 | | 5·5 | 19·0 | |
| 9·5 | | 9·5 | 20·8 | |
| 9·5 | | 14·5 | 10·8 | |
| 9·9 | | 15·0 | 37·1 | |
| 9·8 | | 18·0 | 25·0 | |
| 9·7 | | 22·5 | 9·0 | |
| 9·3 | | 23·0 | 39·1 | |
| 8·3 | | 25·2 | 2·2 | |
| 9·9 | | 33·5 | 10·4 | |
| 9·8 | | 37·0 | 54·1 | |
| 9·7 | | 39·0 | 14·4 | |
| 9·6 | | 39·5 | 10·6 | |
| 9·5 | 38 | 0·0 | 25·1 | |
| 9·5 | | 1·0 | 31·1 | |
| 9·3 | | 10·0 | 5·2 | |
| 9·9 | | 12·0 | 29·8 | |
| 9·2 | | 18·0 | 51·2 | |
| 9·9 | | 21·0 | 12·6 | |
| 8·5 | | 36·0 | 44·2 | 8·5 |
| 8·8 | | 36·0 | 42·7 | 9·5 |
| 9·2 | | 40·0 | 32·0 | 9·0 |
| 9·4 | | 54·5 | 28·1 | |
| 9·6 | | 57·0 | 31·7 | |
| 9·8 | 39 | 0·0 | 49·2 | |
| 7·9 | | 6·5 | 14·1 | 8·5 |
| 9·2 | | 17·0 | 2·0 | |
| 9·9 | | 19·2 | 50·0 | |
| 9·8 | | 22·0 | 22·6 | |
| 9·5 | | 28·0 | 54·9 | |
| 9·8 | | 41·2 | 5·0 | |
| 9·8 | | 45·0 | 9·4 | |
| 9·8 | | 45·5 | 50·9 | |
| 9·9 | | 49·0 | 10·6 | |
| 9·8 | | 59·0 | 21·6 | |
| 9·0 | 40 | 4·3 | 39·3 | |
| 9·0 | | 5·7 | 34·4 | |
| 9·5 | | 15·5 | 19·4 | |
| 9·8 | | 17·0 | 10·0 | |
| 10·0 | | 20·5 | 47·2 | |
| 8·8 | | 20·7 | 40·6 | |
| 9·6 | | 26·2 | 35·4 | |
| 9·6 | | 28·0 | 42·5 | |
| 8·6 | | 32·3 | 27·2 | 8·5 |
| 9·6 | | 40·5 | 44·0 | |
| 9·8 | | 44·5 | 38·0 | |
| 9·8 | | 45·5 | 50·0 | |
| 9·6 | | 51·5 | 35·7 | |
| 9·0 | 41 | 0·0 | 43·0 | |
| 10·0 | | 2·5 | 45·6 | |
| 9·3 | | 28·0 | 24·2 | |
| 9·4 | | 29·5 | 56·0 | |
| 9·5 | | 30·0 | 9·5 | |
| 9·4 | | 32·5 | 23·5 | |
| 10·0 | | 34·0 | 54·5 | |
| 9·8 | | 39·0 | 32·4 | |
| 9·8 | 42 | 2·0 | 24·0 | |
| 9·9 | | 6·5 | 16·4 | |

**3001—3060.**

| mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 42 | 9·0 | 2·4 | |
| 9·8 | | 11·5 | 35·4 | |
| 8·6 | | 19·5 | 54·2 | 9·0 |
| 8·8 | | 20·0 | 16·0 | |
| 9·9 | | 21·0 | 35·2 | |
| 9·4 | | 42·5 | 37·2 | |
| 9·4 | | 42·5 | 20·0 | |
| 9·2 | | 59·5 | 47·0 | |
| 9·1 | | 59·5 | 58·6 | |
| 9·4 | 43 | 6·0 | 5·4 | |
| 9·4 | | 9·0 | 7·0 | |
| 9·4 | | 10·0 | 38·8 | |
| 9·5 | | 10·0 | 12·4 | |
| 9·9 | | 24·5 | 0·4 | |
| 9·2 | | 29·0 | 21·8 | |
| 9·2 | | 29·0 | 6·8 | |
| 8·3 | | 32·0 | 1·2 | 9·0 |
| 9·6 | | 32·5 | 16·1 | |
| 10·0 | | 38·0 | 30·8 | |
| 9·6 | | 44·5 | 30·8 | 9·0 |
| 9·6 | | 51·0 | 25·1 | |
| 10·0 | | 51·0 | 51·3 | |
| 9·2 | 44 | 2·5 | 21·4 | |
| 9·9 | | 4·5 | 7·3 | |
| 9·1 | | 10·0 | 17·7 | |
| 9·0 | | 17·5 | 15·1 | 8·5 |
| 9·5 | | 20·0 | 37·2 | |
| 9·6 | | 29·5 | 51·1 | |
| 10·0 | | 32·0 | 15·9 | |
| 8·6 | | 36·5 | 11·8 | 9·0 |
| 10·0 | | 45·0 | 9·1 | |
| 9·4 | | 47·5 | 54·1 | |
| 10·0 | | 56·5 | 5·7 | |
| 9·6 | | 59·5 | 5·3 | |
| 10·0 | 45 | 1·5 | 8·3 | |
| 9·2 | | 12·5 | 52·7 | |
| 9·9 | | 23·0 | 45·9 | |
| 10·0 | | 23·0 | 10·6 | |
| 9·4 | | 35·0 | 6·0 | |
| 10·0 | | 51·5 | 9·3 | |
| 9·2 | | 53·5 | 6·3 | |
| 10·0 | | 57·0 | 15·1 | |
| 9·2 | | 58·0 | 24·3 | 9·3 |
| 9·4 | 46 | 5·0 | 53·1 | |
| 9·8 | | 10·0 | 6·1 | |
| 9·2 | | 11·0 | 40·8 | |
| 9·4 | | 13·0 | 12·1 | 9·5 |
| 10·0 | | 18·2 | 36·4 | |
| 10·0 | | 42·5 | 32·1 | |
| 9·9 | | 52·0 | 49·8 | |
| 10·0 | | 59·0 | 35·8 | |
| 9·6 | 47 | 0·0 | 14·9 | |
| 7·3 | | 4·5 | 16·6 | 8·0 GS |
| 9·8 | | 9·2 | 16·2 | |
| 10·0 | | 11·2 | 30·4 | |
| 10·0 | | 12·2 | 31·4 | |
| 9·9 | | 15·5 | 22·0 | |
| 9·6 | | 16·0 | 21·3 | |
| 9·8 | | 30·5 | 34·3 | |
| 10·0 | | 35·5 | 34·1 | |

**3061—3120.**

| | mag. | 13h. m | s | −63° ′ | |
|---|---|---|---|---|---|
| | 9·9 | 47 | 40·5 | 16·1 | |
| | 10·0 | | 48·5 | 32·1 | |
| : | 9·9 | | 52·5 | 54·3 | |
| | 10·0 | | 54·5 | 14·1 | |
| | 9·9 | 48 | 1·0 | 36·3 | |
| | 9·6 | | 2·5 | 16·1 | |
| | 9·4 | | 12·5 | 16·3 | 9·0 |
| | 9·5 | | 22·5 | 38·0 | |
| : | 8·6 | | 37·0 | 36·3 | 9·5 |
| | 7·0 | | 37·5 | 4·5 | 5·5 GSc |
| | 9·2 | | 39·2 | 58·9 | |
| | 9·5 | | 44·5 | 16·1 | |
| | 9·3 | | 45·0 | 57·4 | |
| | 10·0 | | 51·5 | 46·1 | |
| | 9·8 | | 56·5 | 44·7 | |
| | 9·0 | 49 | 0·5 | 20·1 | |
| | 9·7 | | 4·5 | 47·3 | |
| | 9·7 | | 10·5 | 18·7 | |
| | 9·2 | | 16·0 | 55·1 | |
| | 9·6 | | 24·2 | 17·4 | |
| | 9·4 | | 56·5 | 21·3 | |
| | 9·3 | 50 | 9·5 | 15·1 | |
| | 9·8 | | 12·2 | 32·4 | |
| | 9·6 | | 30·0 | 19·0 | |
| | 9·8 | | 39·0 | 27·0 | |
| | 9·9 | | 52·0 | 2·5 | |
| | 9·5 | 51 | 3·7 | 57·8 | 9·0 |
| | 9·0 | | 22·5 | 30·3 | 9·5 |
| | 9·9 | | 29·5 | 20·0 | |
| | 9·8 | | 31·5 | 14·6 | |
| | 9·7 | 52 | 23·5 | 12·2 | |
| | 9·9 | | 33·5 | 14·7 | |
| | 8·8 | | 42·5 | 37·2 | 9·2 |
| | 10·0 | 53 | 16·5 | 15·0 | |
| | 9·5 | | 27·5 | 32·9 | |
| | 9·6 | | 36·0 | 48·3 | |
| | 9·9 | | 42·0 | 30·8 | |
| | 9·8 | | 45·5 | 54·0 | |
| | 8·6 | | 58·5 | 13·8 | 9·0 |
| | 9·6 | 54 | 7·5 | 3·9 | |
| | 9·9 | | 11·0 | 21·1 | |
| | 8·8 | | 22·5 | 14·3 | 9·0 |
| | 10·0 | | 30·0 | 23·7 | |
| | 9·6 | | 32·5 | 33·6 | |
| | 9·4 | | 40·5 | 13·0 | 9·0 |
| | 9·2 | 55 | 10·5 | 14·0 | |
| | 9·2 | | 19·0 | 27·4 | 9·0 |
| | 9·5 | | 28·5 | 5·0 | |
| | 9·4 | | 29·0 | 38·1 | |
| | 9·9 | | 31·0 | 3·5 | |
| | 9·2 | | 36·5 | 46·8 | |
| | 9·0 | | 55·0 | 44·8 | |
| | 8·8 | | 58·5 | 9·8 | |
| | 9·0 | | 59·5 | 7·2 | 9·0 |
| | 9·9 | 56 | 11·0 | 56·4 | |
| | 9·4 | | 16·5 | 43·8 | |
| | 9·7 | | 22·5 | 33·0 | |
| | 9·5 | | 30·5 | 2·8 | |
| | 9·6 | | 52·0 | 22·0 | |
| | 9·2 | | 59·0 | 0·4 | 9·0 |

**3121—3180.**

| mag. | 13h.–14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·7 | 57 | 2·0 | 18·1 | |
| 9·4 | | 4·5 | 46·4 | 9·5 |
| 10·0 | | 10·0 | 13·7 | |
| 9·6 | | 14·5 | 55·4 | |
| 9·0 | | 16·0 | 4·4 | 9·5 |
| 9·7 | | 37·0 | 26·0 | |
| 9·6 | | 49·0 | 44·7 | |
| 9·9 | | 51·5 | 21·0 | |
| 9·9 | | 52·0 | 50·0 | |
| 9·3 | | 53·5 | 54·6 | |
| 9·3 | | 56·5 | 35·6 | |
| 8·8 | | 58·5 | 29·8 | 9·0 |
| 10·0 | 58 | 1·5 | 12·1 | |
| 8·8 | | 10·5 | 52·2 | 9·0 |
| 10·0 | | 42·0 | 48·1 | |
| 8·0 | | 42·5 | 56·5 | 8·5 |
| 9·9 | | 50·0 | 38·6 | |
| 9·3 | | 52·5 | 36·5 | |
| 9·2 | | 59·0 | 43·0 | |
| 10·0 | 59 | 7·0 | 43·9 | |
| 8·4 | | 20·5 | 35·5 | |
| 9·0 | | 21·5 | 46·6 | |
| 9·6 | | 22·5 | 21·8 | |
| 9·9 | | 27·0 | 37·4 | |
| 9·6 | | 31·5 | 53·0 | |
| 9·7 | 0 | 16·0 | 4·8 | |
| 9·5 | | 18·0 | 27·0 | |
| 8·8 | | 22·8 | 0·0 | 9·5 |
| 9·0 | | 45·0 | 31·3 | |
| 9·9 | | 56·3 | 13·1 | |
| 8·8 | 1 | 1·3 | 0·5 | 9·0 |
| 8·8 | | 36·0 | 52·0 | |
| 9·6 | | 53·5 | 14·6 | |
| 9·5 | 2 | 19·5 | 41·9 | |
| 9·4 | | 21·0 | 38·0 | |
| 9·9 | | 29·5 | 58·2 | |
| 9·8 | | 30·0 | 5·0 | |
| 9·9 | | 37·0 | 0·6 | |
| 10·0 | | 38·5 | 16·9 | |
| 9·9 | | 39·5 | 27·0 | |
| 9·8 | | 43·3 | 43·8 | |
| 9·6 | | 56·5 | 3·5 | |
| 9·7 | 3 | 2·3 | 59·2 | |
| 9·0 | | 30·5 | 34·2 | 9·0 |
| 10·0 | | 45·3 | 58·8 | |
| 8·1 | | 47·0 | 23·7 | 8·5 G |
| 9·4 | | 51·0 | 40·0 | |
| 9·2 | | 56·5 | 27·2 | |
| 9·2 | | 58·5 | 34·8 | |
| 9·8 | 4 | 6·5 | 8·0 | |
| 10·0 | | 19·5 | 5·0 | |
| 10·0 | | 23·5 | 25·0 | |
| 9·6 | | 28·5 | 29·7 | |
| 10·0 | | 38·3 | 0·1 | |
| 9·9 | | 38·5 | 49·4 | |
| 8·2 | | 44·5 | 36·8 | 9·0 |
| 10·0 | | 45·5 | 50·0 | |
| 8·9 | | 52·5 | 37·0 | 9·5 G |
| 9·8 | 5 | 2·5 | 8·9 | |
| 9·8 | | 7·0 | 38·2 | |



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## 3181—3240.

| mag. | 14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·9 | 5 | 10·5 | 37·0 | |
| 9·6 | | 20·0 | 33·9 | |
| 8·8 | | 44·0 | 18·8 | 9·0 G |
| 9·9 | | 44·5 | 10·0 | |
| 9·6 | | 49·0 | 38·8 | |
| 9·0 | 6 | 2·0 | 8·3 | 9·0 |
| 9·2 | | 28·0 | 41·0 | |
| 8·9 | | 41·0 | 49·1 | |
| 10·0 | | 46·0 | 17·1 | |
| 9·6 | | 53·0 | 34·9 | |
| 9·6 | 7 | 0·5 | 11·3 | |
| 9·3 | | 5·5 | 2·0 | |
| 10·0 | | 15·5 | 0·9 | |
| 9·9 | | 39·8 | 0·2 | |
| 9·7 | | 48·0 | 51·0 | |
| 9·8 | 8 | 10·5 | 12·2 | |
| 9·0 | | 28·5 | 53·0 | |
| 9·6 | | 40·8 | 1·7 | |
| 8·7 | | 41·5 | 13·8 | 9·0 |
| 9·4 | | 43·5 | 31·6 | |
| 10·0 | | 51·5 | 11·2 | |
| 9·1 | 9 | 12·5 | 16·3 | |
| 8·8 | | 13·5 | 7·4 | 9·0 |
| 8·8 | | 19·5 | 7·0 | 8·5 |
| 8·8 | | 21·0 | 46·8 | 9·2 |
| 8·6 | | 28·5 | 22·0 | 8·8 |
| 9·8 | | 29·3 | 39·8 | |
| 9·7 | | 31·0 | 4·4 | |
| 10·0 | | 35·0 | 16·3 | |
| 9·8 | | 59·0 | 22·1 | |
| 9·3 | 10 | 22·0 | 13·4 | |
| 9·2 | | 22·0 | 14·6 | |
| 9·4 | | 26·5 | 23·1 | |
| 9·8 | | 38·5 | 21·7 | |
| 9·0 | | 40·0 | 9·9 | |
| 9·0 | | 53·5 | 45·2 | 9·5 |
| 9·4 | 11 | 0·0 | 32·0 | |
| 9·2 | | 3·5 | 53·0 | 9·5 |
| 9·4 | | 5·0 | 29·6 | 9·0 |
| 9·7 | | 8·0 | 30·5 | 9·0 |
| 10·0 | | 31·5 | 56·0 | |
| 8·6 | | 33·5 | 47·8 | 9·0 |
| 9·9 | | 38·0 | 2·9 | |
| 8·6 | | 42·0 | 39·9 | 7·8 G |
| 10·0 | | 51·0 | 44·0 | |
| 9·9 | | 52·0 | 6·0 | |
| 9·8 | | 52·5 | 14·0 | |
| 8·8 | | 59·5 | 13·2 | |
| 9·3 | 12 | 10·0 | 4·4 | |
| 8·6 | | 18·5 | 42·4 | 8·2 |
| 8·8 | | 46·0 | 49·0 | 9·5 |
| 9·9 | | 51·5 | 18·6 | |
| 9·5 | 13 | 3·0 | 4·9 | |
| 9·6 | | 7·0 | 24·6 | |
| 9·0 | | 18·0 | 23·1 | 9·5 |
| 10·0 | | 23·5 | 8·9 | |
| 9·9 | | 32·0 | 53·0 | |
| 9·3 | | 37·2 | 56·4 | |
| 9·9 | | 57·0 | 49·4 | |
| 8·8 | 14 | 1·5 | 38·0 | 9·0 G |

## 3241—3300.

| mag. | 14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 14 | 16·5 | 24·8 | |
| 9·5 | | 43·0 | 26·2 | |
| 9·5 | | 53·5 | 18·8 | |
| 9·4 | | 57·0 | 20·2 | 9·5 |
| 9·4 | 15 | 3·5 | 7·9 | |
| 8·0 | | 14·5 | 8·0 | 8·0 G |
| 9·5 | | 38·5 | 9·4 | |
| 10·0 | | 40·0 | 4·1 | |
| 9·8 | 16 | 12·5 | 24·3 | |
| 9·9 | | 24·0 | 21·0 | |
| 9·5 | | 25·5 | 54·8 | |
| 7·5 | | 28·5 | 54·4 | 8·0 G |
| 9·8 | | 36·0 | 2·4 | |
| 8·8 | | 42·5 | 14·3 | |
| 9·2 | | 56·0 | 10·9 | |
| 9·9 | 17 | 2·0 | 48·9 | |
| 9·5 | | 10·0 | 21·9 | |
| 10·0 | | 51·0 | 53·9 | |
| 9·1 | | 58·0 | 11·6 | 9·0 |
| 8·8 | 18 | 5·8 | 25·8 | 8·5 |
| 9·6 | | 23·2 | 35·0 | |
| 10·0 | 19 | 2·5 | 26·1 | |
| 9·4 | | 4·0 | 37·1 | |
| 9·0 | | 15·7 | 33·2 | 9·0 |
| 9·9 | | 24·5 | 52·5 | |
| 10·0 | | 44·5 | 31·2 | |
| 10·0 | | 57·0 | 32·7 | |
| 8·9 | | 58·7 | 35·9 | |
| 10·0 | 20 | 6·5 | 27·3 | |
| 9·9 | | 11·7 | 18·7 | |
| 8·8 | | 19·0 | 18·5 | |
| 8·4 | | 28·1 | 0·4 | 9·0 |
| 10·0 | | 59·5 | 48·9 | |
| 9·6 | 21 | 0·2 | 56·9 | |
| 9·4 | | 23·5 | 45·8 | |
| 10·0 | | 24·0 | 24·7 | |
| 10·0 | | 35·0 | 31·3 | |
| 9·0 | | 38·5 | 56·9 | |
| 9·9 | | 41·0 | 19·9 | |
| 8·5 | 22 | 1·5 | 43·3 | 8·5 |
| 10·0 | | 2·2 | 27·8 | |
| 9·3 | | 5·5 | 11·3 | |
| 9·0 | | 10·0 | 4·5 | |
| 10·0 | | 15·5 | 2·9 | |
| 9·3 | | 24·5 | 8·9 | |
| 9·9 | | 30·0 | 29·3 | |
| 9·0 | | 46·5 | 24·3 | |
| 8·0 | | 50·0 | 32·3 | 8·0 G |
| 8·2 | 23 | 3·5 | 44·7 | |
| 8·8 | | 7·5 | 45·7 | |
| 9·0 | | 9·0 | 17·0 | |
| 9·4 | | 14·5 | 29·3 | |
| 9·9 | | 25·5 | 36·5 | |
| 9·2 | | 26·5 | 58·4 | |
| 9·9 | | 30·0 | 41·1 | |
| 9·9 | | 35·0 | 4·3 | |
| 9·0 | | 48·7 | 57·7 | |
| 9·0 | | 52·5 | 32·6 | |
| 9·4 | 24 | 10·0 | 19·5 | |
| 9·3 | | 19·5 | 31·8 | 9·0 |

## 3301—3360.

| mag. | 14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·0 | 24 | 20·0 | 23·3 | |
| 9·0 | | 27·5 | 19·3 | |
| 8·6 | | 37·5 | 39·0 | 9·0 |
| 9·7 | | 54·0 | 10·3 | |
| 8·9 | 25 | 5·0 | 25·9 | |
| 9·2 | | 7·5 | 18·2 | |
| 10·0 | | 11·5 | 52·1 | |
| 8·8 | | 18·0 | 54·5 | |
| 10·0 | | 20·5 | 38·2 | |
| 8·9 | | 29·0 | 48·5 | |
| 10·0 | | 32·5 | 37·7 | |
| 9·6 | | 54·0 | 6·6 | |
| 7·4 | 26 | 11·5 | 27·8 | 7·5 GS |
| 8·9 | | 20·0 | 39·8 | 9·5 |
| 8·3 | | 37·0 | 35·8 | 8·5 G |
| 9·2 | | 39·5 | 23·3 | 9·0 |
| 9·0 | | 40·5 | 8·2 | 10·0 |
| 8·8 | | 48·0 | 7·4 | 9·5 |
| 9·2 | | 50·0 | 30·9 | 8·5 |
| 10·0 | 27 | 0·5 | 50·7 | |
| 9·0 | | 5·5 | 55·2 | |
| 9·2 | | 21·5 | 10·8 | 8·5 |
| 9·6 | | 28·5 | 53·1 | |
| 10·0 | | 29·0 | 30·8 | |
| 9·7 | | 32·7 | 59·5 | |
| 9·3 | | 37·0 | 10·8 | |
| 10·0 | | 40·2 | 46·1 | |
| 9·7 | | 40·5 | 53·6 | |
| 9·6 | | 47·0 | 26·7 | |
| 10·0 | | 54·0 | 19·1 | |
| 9·9 | 28 | 0·5 | 46·9 | |
| 9·2 | | 9·5 | 24·0 | |
| 9·4 | | 13·0 | 33·1 | |
| 10·0 | | 17·5 | 39·8 | |
| 9·9 | | 19·5 | 8·3 | |
| 9·9 | | 23·2 | 20·5 | |
| 9·6 | | 24·0 | 5·1 | |
| 9·2 | | 24·5 | 29·9 | |
| 9·6 | | 38·5 | 56·0 | |
| 9·9 | | 52·0 | 35·8 | |
| 10·0 | 29 | 2·0 | 43·2 | |
| 9·2 | | 6·0 | 25·1 | |
| 8·9 | | 11·0 | 44·1 | |
| 9·6 | | 16·5 | 7·1 | |
| 8·9 | | 18·5 | 52·1 | |
| 10·0 | | 24·0 | 17·2 | |
| 9·9 | | 30·0 | 36·1 | |
| 10·0 | | 35·5 | 2·3 | |
| 8·5 | | 47·5 | 0·1 | 8·0 G |
| 9·6 | | 50·5 | 2·1 | |
| 9·6 | 30 | 3·5 | 32·1 | |
| 9·9 | | 6·5 | 48·1 | |
| 9·6 | | 20·5 | 52·7 | |
| 9·3 | | 26·5 | 41·7 | |
| 10·0 | | 34·5 | 7·5 | |
| 10·0 | | 35·0 | 8·3 | |
| 9·9 | | 38·2 | 51·8 | |
| 9·2 | | 51·0 | 35·7 | |
| 8·9 | | 51·2 | 2·2 | |
| 9·8 | | 57·2 | 11·5 | |

## 3361—3420.

| mag. | 14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·2 | 31 | 4·5 | 1·7 | |
| 9·9 | | 8·2 | 59·1 | |
| 8·5 | | 8·5 | 40·7 | 9·0 |
| 8·9 | | 9·5 | 7·1 | 8·0 |
| 9·0 | | 14·0 | 37·9 | 8·2 |
| 9·6 | | 21·0 | 50·1 | |
| 9·6 | | 29·5 | 26·9 | |
| 9·7 | | 38·0 | 47·1 | |
| 9·2 | | 45·5 | 3·3 | |
| 9·2 | | 46·0 | 27·9 | |
| 8·5 | | 46·5 | 48·5 | |
| 9·8 | | 54·5 | 14·7 | |
| 9·4 | | 55·5 | 16·7 | |
| 9·7 | | 57·0 | 1·5 | |
| 8·9 | 32 | 3·0 | 29·5 | |
| 9·4 | | 5·0 | 23·1 | |
| 9·2 | | 7·0 | 30·1 | |
| 10·0 | | 8·0 | 38·1 | |
| 9·6 | | 17·0 | 50·5 | |
| 9·0 | | 27·0 | 59·5 | |
| 8·8 | | 28·5 | 42·2 | 9·0 |
| 9·6 | | 34·0 | 11·5 | |
| 9·4 | | 34·5 | 18·9 | |
| 10·0 | | 39·0 | 39·0 | 9·5 |
| 9·3 | | 41·5 | 19·3 | |
| 10·0 | | 52·5 | 44·2 | |
| 9·7 | 33 | 3·5 | 16·6 | |
| 9·7 | | 7·5 | 18·2 | |
| 9·6 | | 36·0 | 34·5 | |
| 9·9 | | 51·0 | 44·8 | |
| 9·9 | | 59·5 | 31·6 | |
| 10·0 | 34 | 8·0 | 18·2 | |
| 9·3 | | 15·5 | 46·4 | |
| 9·6 | | 30·0 | 40·5 | |
| 10·0 | 35 | 14·5 | 20·0 | |
| 9·7 | | 47·5 | 33·8 | |
| 9·6 | | 49·5 | 35·8 | |
| 9·4 | 36 | 10·0 | 35·7 | |
| 9·3 | | 15·5 | 34·0 | |
| 8·7 | | 16·5 | 23·2 | |
| 9·2 | | 19·5 | 9·0 | |
| 8·4 | | 26·0 | 40·0 | |
| 8·2 | | 41·7 | 56·9 | |
| 9·4 | | 57·0 | 6·7 | |
| 9·2 | | 59·5 | 40·3 | |
| 8·5 | 37 | 5·0 | 28·8 | 9·0 |
| 9·0 | | 7·5 | 23·0 | |
| 9·9 | | 13·5 | 47·5 | |
| 9·4 | | 31·0 | 23·0 | |
| 9·0 | | 46·0 | 48·0 | |
| 9·2 | | 48·5 | 21·0 | |
| 9·7 | | 50·0 | 2·7 | |
| 8·9 | | 53·5 | 24·0 | 8·0 |
| 9·3 | | 54·5 | 16·8 | 8·5 |
| 9·2 | 38 | 1·0 | 41·0 | |
| 9·9 | | 6·5 | 12·3 | |
| 9·4 | | 44·5 | 52·4 | |
| 9·6 | | 58·5 | 48·8 | |
| 10·0 | 39 | 19·0 | 6·8 | |
| 8·6 | | 30·5 | 44·2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 0 | 110 | 7·2 |
| | 10 | 113 | 7·0 |
| | 20 | 115 | 6·8 |
| | 30 | 118 | 6·6 |
| | 40 | 120 | 6·4 |



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**25 prec.**

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 30 | 118 | 6.6 |
| | 40 | 120 | 6.4 |
| | 50 | 122 | 6.2 |
| 15 | 0 | 124 | 5.9 |
| | 10 | 126 | 5.6 |
| | 20 | 128 | 5.4 |
| | 30 | 130 | 5.1 |
| | 40 | 132 | 4.8 |

### 3421—3480.

| mag. | 14h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.0 | 39 | 40.0 | 59.4 | 8.5 |
| 10.0 | 40 | 2.0 | 6.4 | |
| 8.8 | | 35.5 | 30.0 | 9.5 |
| 9.9 | | 47.5 | 4.7 | |
| 9.0 | 41 | 30.5 | 53.5 | |
| 10.0 | | 33.0 | 26.0 | 9.5 |
| 9.0 | | 40.5 | 26.9 | 9.0 |
| 9.0 | | 45.0 | 25.0 | 9.5 |
| 9.3 | | 46.3 | 45.6 | |
| 9.9 | | 51.5 | 22.8 | |
| 9.4 | | 57.0 | 57.9 | |
| 10.0 | 42 | 1.8 | 58.2 | |
| 8.6 | | 13.5 | 16.1 | 9.0 |
| 9.3 | | 17.5 | 25.9 | |
| 9.9 | | 21.5 | 5.9 | |
| 6.8 | | 27.0 | 17.4 | 6.5 GS |
| 9.4 | | 41.0 | 28.4 | |
| 7.7 | | 46.5 | 48.4 | 8.5 |
| 8.9 | | 50.5 | 26.4 | |
| 9.3 | 43 | 5.5 | 36.8 | |
| 8.8 | | 15.5 | 23.4 | 8.8 |
| 8.2 | | 36.5 | 15.3 | 9.0 G |
| 8.8 | | 40.0 | 22.8 | 9.2 G |
| 9.6 | | 50.5 | 1.5 | |
| 9.6 | | 53.0 | 29.7 | |
| 8.9 | 44 | 52.5 | 7.0 | |
| 9.9 | | 54.0 | 25.0 | |
| 9.2 | | 54.5 | 13.1 | |
| 8.3 | 45 | 26.2 | 59.2 | |
| 10.0 | | 36.5 | 14.0 | |
| 9.4 | | 42.0 | 39.3 | |
| 9.8 | 46 | 9.0 | 24.0 | |
| 8.7 | | 28.0 | 38.9 | 8.8 |
| 9.3 | | 39.0 | 41.4 | |
| 9.9 | | 48.5 | 46.0 | |
| 9.4 | | 49.0 | 42.7 | |
| 9.6 | 47 | 0.0 | 41.1 | |
| 9.6 | | 47.5 | 33.3 | |
| 8.0 | | 50.5 | 2.7 | 8.5 G |
| 8.4 | | 52.5 | 3.0 | 9.0 |
| 9.9 | | 58.5 | 52.9 | |
| 10.0 | 48 | 18.0 | 59.9 | |
| 9.4 | | 24.5 | 10.8 | |
| 10.0 | | 45.0 | 5.1 | |
| 9.2 | | 47.0 | 42.2 | 9.0 |
| 9.3 | | 58.0 | 27.7 | |
| 9.4 | 49 | 19.0 | 21.6 | |
| 10.0 | | 46.0 | 15.3 | |
| 8.6 | 50 | 39.0 | 35.2 | 9.5 |
| 10.0 | | 49.0 | 24.7 | |
| 10.0 | 51 | 3.5 | 21.8 | |
| 8.7 | | 15.5 | 44.7 | 9.5 |
| 7.4 | | 17.5 | 25.5 | 7.8 G |
| 9.4 | | 19.0 | 51.0 | 9.0 |
| 9.6 | | 22.5 | 52.4 | |
| 9.3 | | 55.0 | 52.6 | |
| 9.4 | 52 | 19.5 | 37.9 | |
| 8.8 | | 27.5 | 11.3 | 8.5 |
| 9.8 | | 32.0 | 18.1 | |
| 9.3 | | 51.0 | 44.9 | 9.0 |

### 3481—3540.

| mag. | 14h.–15h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.2 | 53 | 1.0 | 6.5 | |
| 9.0 | | 3.0 | 42.2 | |
| 8.4 | | 12.0 | 24.4 | 9.1 |
| 9.8 | | 12.0 | 55.2 | |
| 9.9 | | 19.0 | 22.9 | |
| 10.0 | | 27.0 | 42.8 | |
| 10.0 | | 37.0 | 9.7 | |
| 10.0 | | 38.5 | 46.8 | |
| 10.0 | | 44.5 | 24.5 | |
| 9.6 | | 49.5 | 45.3 | |
| 9.4 | | 52.0 | 56.4 | |
| 9.8 | | 54.0 | 34.3 | |
| 6.4 | 54 | 22.5 | 32.3 | 5.8 GSgr |
| 8.9 | | 27.7 | 56.5 | |
| 9.9 | | 28.5 | 20.2 | |
| 9.8 | | 29.0 | 4.9 | |
| 8.9 | | 38.5 | 14.0 | |
| 9.9 | | 53.5 | 12.7 | |
| 9.4 | | 54.0 | 20.8 | |
| 9.6 | 55 | 30.0 | 46.8 | |
| 8.3 | | 37.0 | 5.0 | 9.0 |
| 8.0 | | 49.5 | 0.1 | 8.5 GS |
| 9.2 | | 59.0 | 33.0 | |
| 9.3 | 56 | 4.5 | 25.4 | |
| 9.2 | | 5.5 | 12.8 | |
| 9.3 | | 6.5 | 15.8 | |
| 9.2 | | 29.0 | 53.7 | |
| 9.6 | | 31.0 | 14.2 | |
| 8.8 | | 57.0 | 28.1 | |
| 9.9 | 57 | 11.0 | 26.7 | |
| 10.0 | | 18.7 | 57.8 | |
| 8.2 | | 22.0 | 35.5 | 9.0 |
| 10.0 | 58 | 0.0 | 6.8 | |
| 9.6 | | 4.5 | 9.7 | |
| 10.0 | | 17.5 | 43.8 | |
| 8.9 | | 49.7 | 2.0 | 8.0 G |
| 10.0 | | 51.7 | 1.9 | |
| 6.6 | 59 | 1.0 | 9.6 | 6.5 GSr |
| 9.6 | | 33.0 | 54.8 | |
| 9.2 | | 34.2 | 34.9 | |
| 9.9 | | 58.2 | 43.9 | |
| 8.8 | 0 | 27.9 | 56.0 | |
| 9.2 | | 34.2 | 53.0 | |
| 9.2 | | 44.7 | 56.5 | |
| 9.9 | | 49.7 | 12.9 | |
| 9.1 | | 53.5 | 20.6 | |
| 9.2 | 1 | 14.0 | 49.9 | |
| 10.0 | 2 | 44.0 | 49.6 | |
| 8.8 | 3 | 3.5 | 25.0 | 8.5 |
| 9.5 | | 13.5 | 39.9 | |
| 10.0 | | 16.0 | 29.8 | 9.5 |
| 9.2 | | 19.0 | 20.2 | |
| 9.7 | | 22.5 | 47.9 | |
| 9.2 | | 34.5 | 54.2 | |
| 9.1 | | 58.5 | 9.6 | |
| 8.3 | 4 | 3.5 | 9.6 | 8.0 G |
| 9.7 | | 31.0 | 13.1 | |
| 8.6 | | 44.0 | 40.2 | |
| 10.0 | | 51.5 | 7.9 | |
| 9.4 | 5 | 4.5 | 22.6 | |

### 3541—3600.

| mag. | 15h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8.5 | 5 | 7.5 | 57.0 | 9.5 |
| 9.2 | 6 | 43.0 | 30.6 | |
| 9.2 | | 57.0 | 9.6 | |
| 7.0 | 7 | 6.0 | 8.8 | 5.5 GScr |
| 9.1 | | 20.0 | 49.0 | 9.0 |
| 9.2 | | 20.0 | 36.0 | |
| 9.9 | | 29.0 | 18.2 | |
| 9.2 | | 46.0 | 47.9 | |
| 10.0 | | 52.5 | 45.2 | |
| 9.7 | | 56.0 | 59.9 | |
| 10.0 | | 58.0 | 32.9 | |
| 9.4 | 8 | 28.5 | 2.4 | |
| 8.9 | | 30.5 | 29.8 | |
| 9.5 | | 42.5 | 31.5 | |
| 9.2 | 9 | 28.5 | 33.8 | |
| 9.5 | | 40.0 | 23.8 | |
| 9.4 | 10 | 2.0 | 39.5 | 9.0 |
| 9.7 | | 11.5 | 29.0 | |
| 9.2 | | 59.7 | 59.0 | |
| 9.9 | 11 | 10.5 | 50.4 | |
| 9.2 | | 13.7 | 56.7 | |
| 9.4 | | 21.0 | 10.4 | |
| 8.4 | | 27.5 | 54.6 | 9.0 |
| 9.5 | | 30.0 | 19.1 | |
| 8.5 | | 43.0 | 40.3 | |
| 9.9 | | 51.5 | 3.5 | |
| 9.2 | | 59.5 | 25.9 | |
| 9.4 | 12 | 3.0 | 11.3 | |
| 9.1 | | 8.5 | 16.9 | |
| 9.5 | | 20.5 | 34.9 | |
| 10.0 | | 30.5 | 25.6 | |
| 8.9 | | 39.5 | 29.6 | |
| 9.5 | | 51.5 | 35.0 | |
| 9.9 | 13 | 2.5 | 29.3 | |
| 9.7 | | 10.5 | 1.5 | |
| 9.7 | | 16.5 | 2.0 | |
| 9.7 | | 17.5 | 12.9 | |
| 9.9 | | 29.5 | 27.3 | |
| 9.9 | | 58.5 | 0.3 | |
| 8.9 | 14 | 1.0 | 11.0 | |
| 8.8 | | 1.5 | 0.1 | |
| 10.0 | | 12.0 | 11.9 | |
| 9.1 | | 14.0 | 42.4 | |
| 9.4 | 15 | 7.5 | 51.0 | |
| 9.2 | | 17.0 | 42.3 | 9.0 |
| 8.1 | | 42.0 | 46.0 | 8.5 |
| 9.2 | | 49.0 | 28.8 | |
| 9.4 | | 50.5 | 0.9 | |
| 10.0 | | 54.5 | 10.9 | |
| 10.0 | 16 | 12.5 | 43.9 | |
| 8.4 | | 17.0 | 53.2 | 9.0 |
| 9.4 | | 20.5 | 30.6 | |
| 9.4 | | 21.5 | 52.4 | |
| 9.4 | | 41.0 | 51.8 | |
| 9.4 | | 54.0 | 2.3 | |
| 9.4 | 18 | 18.5 | 27.6 | |
| 9.2 | | 47.0 | 29.5 | |
| 9.4 | | 52.5 | 21.6 | |
| 10.0 | | 53.0 | 31.2 | |
| 9.2 | 19 | 6.0 | 28.2 | |

### 3601—3660.

| mag. | 15h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.2 | 19 | 26.0 | 34.9 | |
| 9.4 | | 32.0 | 39.5 | |
| 9.2 | | 47.5 | 3.3 | |
| 9.4 | | 50.5 | 40.9 | |
| 10.0 | 20 | 10.0 | 36.8 | |
| 10.0 | | 19.0 | 22.9 | |
| 9.4 | | 25.5 | 39.5 | 8.5 |
| 9.0 | | 26.5 | 20.8 | |
| 9.5 | | 29.5 | 23.9 | |
| 9.2 | | 48.0 | 25.0 | |
| 9.5 | 21 | 20.5 | 36.6 | |
| 9.2 | | 24.5 | 13.6 | |
| 10.0 | 22 | 6.5 | 30.9 | |
| 9.4 | | 10.0 | 24.8 | |
| 9.8 | | 16.5 | 19.0 | |
| 9.9 | | 33.0 | 18.1 | |
| 8.9 | 23 | 6.0 | 57.2 | |
| 9.8 | | 16.5 | 7.0 | |
| 9.1 | | 22.2 | 59.3 | |
| 9.6 | 24 | 10.0 | 39.6 | |
| 9.1 | | 55.0 | 19.0 | |
| 9.8 | | 59.5 | 17.9 | 9.5 |
| 9.7† | 26 | 21.9 | 0.4 | |
| 10.0 | 27 | 0.5 | 26.5 | 9.0 |
| 9.4 | | 9.0 | 21.2 | |
| 9.6† | | 20.9 | 0.8 | |
| 9.7 | | 29.0 | 32.7 | |
| 8.2 | | 43.5 | 14.5 | 8.5 |
| 9.7 | 28 | 2.5 | 35.3 | |
| 9.2 | | 17.5 | 48.3 | |
| 8.6 | | 18.0 | 17.0 | 9.0 |
| 9.8 | | 41.0 | 57.1 | |
| 9.9 | | 58.0 | 25.0 | |
| 10.0 | 29 | 18.5 | 35.2 | 9.0 |
| 9.5 | | 28.0 | 58.2 | |
| 7.5 | | 32.0 | 25.5 | 8.0 G |
| 10.1† | | 57.4 | 0.4 | |
| 9.6 | 30 | 24.5 | 59.3 | |
| 9.5 | | 48.0 | 46.0 | |
| 8.8 | | 51.0 | 27.6 | 8.5 |
| 9.8 | | 52.0 | 19.1 | |
| 7.9 | | 57.5 | 53.6 | 9.0 |
| 8.1 | 31 | 0.5 | 46.2 | 7.0 GS |
| 9.0 | | 13.0 | 59.2 | |
| 10.0† | | 44.2 | 2.3 | |
| 10.0 | | 51.5 | 25.7 | |
| 8.2 | | 55.5 | 54.3 | 9.0 |
| 10.0 | 32 | 3.0 | 12.2 | |
| 8.1 | | 6.5 | 44.5 | 9.0 |
| 9.2 | | 14.5 | 31.2 | |
| 9.7 | | 14.5 | 59.6 | |
| 9.9 | | 17.0 | 48.6 | |
| 9.4 | | 20.0 | 0.8 | |
| 9.7 | | 26.0 | 15.5 | |
| 9.6 | | 30.0 | 5.0 | |
| 9.5 | | 31.0 | 24.8 | |
| 9.9 | | 44.5 | 13.4 | |
| 9.2 | 33 | 28.5 | 5.6 | |
| 10.0 | | 42.0 | 12.0 | |
| 10.0 | 34 | 0.0 | 13.9 | |



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### 3661—3720.

| mag. | 15h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8.8 | 34 | 11.0 | 21.2 | 9.0 |
| 9.2 | | 18.0 | 13.5 | 8.8 |
| 8.6 | | 20.5 | 19.6 | 8.8 |
| 9.9† | | 20.7 | 2.1 | |
| 9.0 | | 44.5 | 38.8 | |
| 9.7† | 35 | 22.2 | 2.4 | |
| 9.7 | | 29.0 | 38.3 | |
| 9.4 | | 30.5 | 36.1 | |
| 9.9 | | 31.5 | 37.3 | |
| 9.2 | | 38.0 | 12.7 | 8.0 |
| 9.8† | | 38.7 | 2.7 | |
| 9.2 | | 42.5 | 59.0 | 9.5 |
| 10.0 | 36 | 8.0 | 29.0 | |
| 9.6 | | 8.5 | 15.4 | |
| 8.6 | | 14.5 | 26.1 | |
| 10.0 | | 28.0 | 56.6 | |
| 8.8 | | 38.0 | 6.2 | |
| 9.5 | 37 | 31.0 | 33.3 | 9.0 |
| 8.8 | | 40.5 | 47.1 | |
| 9.4† | 38 | 1.2 | 2.0 | |
| 9.4 | | 3.5 | 55.3 | |
| 8.6 | | 17.5 | 52.7 | |
| 9.4† | | 30.2 | 2.5 | |
| 9.9 | | 31.0 | 20.3 | |
| 8.8 | | 44.0 | 22.5 | 8.8 |
| 9.4 | | 48.0 | 23.3 | 9.0 |
| 9.5 | | 51.3 | 44.0 | |
| 9.5 | | 56.5 | 52.3 | |
| 9.4 | | 57.2 | 55.1 | |
| 9.0 | 39 | 0.0 | 17.0 | 9.3 |
| 9.5 | | 21.2 | 29.9 | 9.0 |
| 9.3 | | 22.2 | 53.4 | |
| 9.2 | | 30.0 | 39.8 | |
| 9.2 | | 31.7 | 38.7 | |
| 9.7 | | 58.5 | 52.0 | |
| 9.4 | 40 | 6.2 | 9.9 | |
| 8.4 | | 18.7 | 47.9 | 8.0 G |
| 9.8† | | 24.2 | 0.6 | |
| 9.3 | 41 | 11.0 | 31.9 | |
| 9.5 | | 28.0 | 35.4 | |
| 9.3 | | 41.0 | 23.9 | |
| 9.4 | | 46.0 | 25.7 | |
| 9.4 | | 50.5 | 46.3 | |
| 9.8† | | 53.1 | 1.7 | |
| 9.5 | | 53.5 | 48.3 | |
| 9.7 | | 56.3 | 3.4 | |
| 9.2 | 42 | 27.0 | 31.0 | |
| 8.9 | | 30.0 | 37.8 | |
| 9.4 | | 30.3 | 14.8 | |
| 9.4 | | 31.4 | 0.3 | |
| 9.1 | | 40.7 | 39.1 | |
| 9.1 | | 48.0 | 45.3 | 8.5 |
| 8.6 | | 48.1 | 1.0 | 8.5 |
| 9.7 | 43 | 10.3 | 20.3 | |
| 9.3 | | 26.0 | 22.2 | |
| 9.4 | | 27.5 | 56.1 | |
| 9.1 | | 31.0 | 51.8 | |
| 9.6 | | 34.3 | 23.5 | |
| 9.7 | | 42.0 | 3.9 | |
| 9.5 | | 47.5 | 59.4 | |

### 3721—3780.

| mag. | 15h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.6† | 43 | 48.6 | 1.2 | |
| 9.5 | | 51.0 | 38.0 | |
| 4.4 | 44 | 8.0 | 2.5 | 3.0 GStrλ |
| 9.4 | | 10.5 | 7.7 | |
| 9.8† | | 21.6 | 1.8 | |
| 9.5 | | 22.5 | 39.2 | |
| 9.4 | | 22.5 | 21.7 | |
| 8.5 | | 25.0 | 41.6 | 9.5 |
| 9.6 | | 34.5 | 48.1 | |
| 9.7 | | 36.5 | 28.7 | |
| 9.3 | | 39.5 | 38.1 | |
| 9.5 | 45 | 18.5 | 59.1 | |
| 9.1 | | 18.5 | 51.2 | |
| 9.7† | | 29.1 | 2.8 | |
| 9.4 | | 30.5 | 30.0 | |
| 9.2 | | 35.0 | 52.0 | |
| 9.0 | | 39.0 | 58.5 | |
| 9.5 | 46 | 12.0 | 7.7 | |
| 9.7 | | 14.5 | 51.4 | |
| 9.6† | | 21.8 | 2.3 | |
| 10.1† | | 24.1 | 1.2 | |
| 8.8 | | 48.0 | 37.4 | |
| 9.2 | | 55.0 | 13.4 | 8.5 |
| 9.1 | | 59.5 | 1.3 | |
| 9.1 | 47 | 5.0 | 7.1 | |
| 9.6 | | 31.5 | 37.5 | |
| 9.3 | | 48.5 | 42.4 | |
| 9.6 | | 54.5 | 0.2 | 9.0 |
| 9.4 | | 56.0 | 47.4 | |
| 9.2 | 48 | 0.0 | 32.7 | |
| 9.7 | | 10.5 | 18.0 | |
| 9.3 | | 18.0 | 50.6 | |
| 9.3 | | 21.5 | 59.4 | |
| 9.1 | | 25.0 | 30.5 | |
| 9.3 | | 26.0 | 39.8 | |
| 9.6 | | 26.5 | 23.5 | |
| 9.1 | | 42.0 | 54.1 | 8.5 |
| 9.6 | | 51.0 | 23.4 | |
| 9.6 | | 56.5 | 18.8 | |
| 9.3 | 49 | 6.5 | 43.5 | |
| 9.2 | | 7.5 | 26.9 | |
| 9.3 | | 24.5 | 3.2 | |
| 9.0 | | 28.0 | 4.0 | |
| 9.7 | | 49.0 | 10.7 | |
| 7.8 | | 59.0 | 25.0 | 7.0 GS |
| 9.3 | 50 | 0.0 | 17.3 | 9.5 |
| 9.4 | | 17.5 | 10.6 | |
| 9.3 | | 27.5 | 29.1 | |
| 9.3 | | 34.5 | 3.5 | |
| 9.5 | | 35.5 | 10.3 | |
| 9.7† | | 39.6 | 0.8 | |
| 8.7 | | 45.0 | 25.1 | 8.8 |
| 9.0 | | 51.5 | 53.5 | |
| 9.1 | 51 | 20.5 | 10.9 | |
| 9.4 | | 23.5 | 25.6 | |
| 8.0 | | 25.5 | 32.1 | 8.2 |
| 9.4 | | 52.0 | 2.4 | G |
| 8.2 | 52 | 12.4 | 0.7 | 8.0 G |
| 9.3 | | 24.5 | 29.4 | |
| 8.7 | | 31.0 | 28.4 | 9.0 |

### 3781—3840.

| mag. | 15h.–16h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.4 | 52 | 47.5 | 4.1 | |
| 9.7 | 53 | 1.0 | 58.8 | |
| 9.4 | | 18.0 | 25.0 | |
| 9.7 | | 23.5 | 9.2 | |
| 9.1 | | 28.0 | 53.0 | |
| 9.6 | | 29.5 | 55.0 | |
| 8.9 | | 31.5 | 18.1 | 9.0 |
| 9.7 | | 40.0 | 9.0 | |
| 9.2 | | 43.5 | 44.8 | |
| 9.6 | | 50.0 | 19.9 | |
| 8.5 | 54 | 5.0 | 12.1 | 8.5 |
| 9.3 | | 10.0 | 32.9 | |
| 9.4 | | 26.5 | 25.4 | |
| 9.4 | | 49.5 | 59.0 | |
| 9.4 | 55 | 11.0 | 59.5 | |
| 9.6 | | 13.0 | 48.7 | |
| 9.4 | | 21.5 | 19.7 | |
| 9.4 | | 22.5 | 53.2 | |
| 9.6 | | 26.5 | 44.1 | |
| 9.2 | | 34.5 | 59.9 | |
| 9.5 | | 44.0 | 46.8 | |
| 9.6 | | 58.5 | 40.4 | |
| 9.3 | 56 | 50.0 | 47.8 | |
| 9.1 | | 53.0 | 20.1 | |
| 9.4 | 57 | 0.0 | 56.5 | |
| 9.4 | | 1.0 | 9.2 | |
| 9.3 | | 8.5 | 52.3 | |
| 9.3 | | 21.5 | 24.7 | |
| 9.6 | | 29.5 | 12.8 | |
| 8.2 | | 39.0 | 34.4 | 9.0 S |
| 9.7 | | 50.0 | 49.9 | |
| 9.7 | | 50.5 | 35.6 | |
| 9.5 | | 57.5 | 6.7 | |
| 9.7 | 58 | 1.0 | 53.0 | |
| 9.3 | | 17.5 | 36.3 | |
| 9.2 | | 18.0 | 58.4 | |
| 9.3 | | 28.0 | 14.2 | |
| 9.3 | | 28.5 | 4.9 | |
| 9.5 | | 44.5 | 12.1 | |
| 8.9 | | 44.5 | 8.3 | 8.0 G |
| 9.3 | 59 | 11.5 | 18.3 | |
| 8.3 | | 18.5 | 55.1 | 9.0 |
| 9.3 | | 19.5 | 40.1 | |
| 9.3 | | 20.5 | 9.0 | |
| 9.4 | | 22.0 | 46.4 | |
| 9.4 | | 41.0 | 22.1 | 9.0 |
| 8.4 | | 53.5 | 49.8 | 8.5 |
| 9.5 | 0 | 7.0 | 43.3 | |
| 9.0 | | 8.0 | 23.5 | 9.0 |
| 9.6 | | 14.0 | 57.5 | |
| 9.3 | | 18.5 | 56.6 | |
| 9.3 | | 25.5 | 46.0 | 9.5 |
| 8.9 | | 28.0 | 42.9 | |
| 9.7 | | 31.5 | 17.3 | |
| 9.6 | | 49.5 | 11.1 | |
| 9.1 | 1 | 2.0 | 52.3 | 8.5 |
| 9.3 | | 7.0 | 0.6 | |
| 9.5 | | 25.0 | 8.3 | |
| 9.2 | | 32.5 | 10.4 | |
| 9.1 | | 38.5 | 33.4 | |

### 3841—3900.

| mag. | 16h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9.2 | 1 | 45.5 | 10.7 | |
| 9.5 | | 57.5 | 21.1 | |
| 8.8 | | 58.0 | 57.5 | 9.0 |
| 9.4 | 2 | 40.0 | 48.0 | |
| 9.5 | | 41.0 | 17.0 | |
| 8.0 | | 42.5 | 47.4 | 8.5 |
| 9.7 | 3 | 6.0 | 22.2 | |
| 9.4 | | 10.5 | 8.7 | |
| 9.6 | | 12.0 | 13.1 | |
| 9.7 | | 24.0 | 27.6 | |
| 9.3 | | 28.0 | 38.4 | |
| 9.4 | | 41.0 | 10.2 | |
| 9.5 | | 59.5 | 7.1 | |
| 5.9 | 4 | 4.0 | 21.8 | 4.2 GStr |
| 9.1 | | 4.5 | 4.7 | |
| 9.1 | | 21.5 | 21.6 | |
| 9.6 | | 33.5 | 33.1 | |
| 8.9 | | 44.5 | 56.5 | |
| 9.6 | | 45.5 | 51.1 | |
| 9.2 | | 50.0 | 46.7 | |
| 9.7 | 5 | 5.0 | 45.3 | |
| 8.8 | | 9.5 | 16.7 | |
| 8.6 | | 10.0 | 50.8 | 8.0 |
| 9.1 | | 15.5 | 53.6 | |
| 9.7 | | 28.5 | 9.2 | |
| 8.8 | | 45.5 | 17.4 | |
| 8.9 | | 59.3 | 59.8 | |
| 9.5 | 6 | 1.0 | 1.9 | |
| 9.7 | | 14.0 | 51.1 | |
| 9.1 | | 21.5 | 45.9 | |
| 9.4 | | 34.5 | 25.2 | |
| 9.6 | | 41.0 | 5.3 | |
| 9.1 | | 51.0 | 45.1 | |
| 8.9 | | 55.0 | 1.6 | |
| 9.7 | 7 | 0.3 | 59.6 | |
| 9.3 | | 1.5 | 59.6 | |
| 9.6 | | 7.5 | 23.2 | |
| 9.4 | | 12.0 | 1.0 | |
| 9.4 | | 55.0 | 36.9 | |
| 9.4 | 8 | 0.0 | 16.1 | |
| 8.7 | | 20.7 | 0.0 | 9.0 |
| 8.6 | | 22.0 | 41.1 | |
| 9.1 | | 35.5 | 53.1 | |
| 8.6 | | 36.0 | 37.8 | |
| 9.1 | 9 | 7.0 | 3.8 | 9.0 |
| 8.3 | | 28.2 | 0.6 | 8.5 |
| 9.3 | | 31.5 | 16.3 | |
| 8.3 | | 38.5 | 24.7 | |
| 9.7 | | 51.0 | 21.3 | |
| 9.6 | 10 | 0.5 | 40.3 | |
| 9.2 | | 3.0 | 56.1 | |
| 9.3 | | 35.0 | 14.3 | |
| 8.4 | | 36.0 | 15.7 | |
| 8.7 | | 38.5 | 50.8 | |
| 9.6 | | 39.5 | 56.3 | |
| 9.2 | | 40.0 | 54.9 | |
| 9.7 | | 41.0 | 23.5 | |
| 9.2 | | 48.0 | 46.5 | |
| 9.6 | | 58.3 | 35.8 | |
| 9.3 | 11 | 1.0 | 52.9 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 15 | 30 | 130 | 5.1 |
| | 40 | 132 | 4.8 |
| | 50 | 133 | 4.5 |
| 16 | 0 | 135 | 4.2 |
| | 10 | 136 | 3.9 |
| | 20 | 138 | 3.5 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 16 | 10 | 136 | 3·9 |
| | 20 | 138 | 3·5 |
| | 30 | 139 | 3·2 |
| | 40 | 140 | 2·9 |
| | 50 | 141 | 2·5 |
| 17 | 0 | 142 | 2·2 |
| | 10 | 142 | 1·8 |
| | 20 | 143 | 1·5 |
| | 30 | 143 | 1·1 |
| | 40 | 144 | 0·7 |

## 3901—3960.

| mag. | 16h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·3 | 11 | 4·0 | 5·1 | |
| 9·7 | | 4·5 | 1·0 | |
| 8·9 | | 14·0 | 9·5 | 8·2 |
| 9·6 | | 17·0 | 3·8 | |
| 9·4 | 12 | 36·5 | 45·0 | |
| 9·7 | | 41·0 | 12·5 | 9·5 |
| 9·2 | | 43·5 | 36·0 | |
| 8·9 | | 48·0 | 45·9 | |
| 9·0 | 13 | 9·5 | 36·5 | |
| 9·6 | | 21·3 | 41·6 | |
| 9·6 | | 49·0 | 59·6 | |
| 9·7 | 14 | 8·5 | 8·8 | |
| 9·0 | | 9·5 | 38·0 | |
| 9·1 | | 48·5 | 34·7 | 8·8 |
| 9·3 | | 53·5 | 16·6 | |
| 9·0 | 15 | 3·5 | 9·9 | |
| 8·6 | | 9·5 | 23·0 | |
| 8·8 | | 11·5 | 23·8 | |
| 9·3 | | 44·0 | 29·0 | |
| 9·5 | | 48·0 | 10·1 | |
| 9·6 | 16 | 8·5 | 22·1 | |
| 9·4 | | 19·5 | 27·8 | |
| 6·0 | | 21·0 | 46·3 | 6·0 GSc |
| 9·7 | | 39·5 | 9·9 | |
| 8·9 | | 43·0 | 4·8 | |
| 9·3 | | 44·0 | 34·7 | |
| 9·0 | | 46·0 | 40·9 | |
| 9·1 | | 47·5 | 28·0 | |
| 9·7 | | 48·5 | 7·6 | |
| 9·6 | 17 | 5·5 | 51·0 | |
| 9·4 | | 11·5 | 34·1 | |
| 9·3 | | 15·5 | 2·4 | |
| 9·0 | | 36·5 | 3·0 | |
| 8·8 | | 56·0 | 15·3 | 9·5 |
| 9·6 | 18 | 15·0 | 4·8 | |
| 9·1 | | 21·0 | 59·9 | |
| 9·6 | | 31·5 | 41·2 | |
| 9·0 | | 40·0 | 46·3 | |
| 9·6 | | 42·5 | 56·7 | |
| 9·2 | | 43·0 | 10·2 | |
| 9·4 | | 54·0 | 17·0 | |
| 9·4 | | 55·5 | 0·9 | |
| 9·6 | 19 | 3·2 | 58·3 | |
| 9·4 | | 28·5 | 2·8 | |
| 9·6 | | 29·5 | 51·2 | |
| 9·5 | | 31·5 | 14·0 | |
| 8·7 | | 36·8 | 32·1 | |
| 9·6 | | 41·3 | 29·0 | |
| 9·3 | | 55·5 | 15·0 | |
| 9·6 | | 57·3 | 26·5 | |
| 9·0 | 20 | 14·7 | 36·7 | 9·5 |
| 9·5 | 21 | 29·5 | 13·3 | |
| 9·4 | | 36·0 | 35·6 | |
| 9·5 | | 37·3 | 7·2 | |
| 8·1 | | 38·5 | 33·8 | 7·7 GS |
| 9·7 | | 58·3 | 0·2 | |
| 9·5 | 22 | 11·7 | 24·0 | 9·0 |
| 9·6 | | 19·0 | 43·6 | |
| 9·3 | | 33·0 | 16·7 | |
| 9·1 | | 33·2 | 29·6 | 9·0 |

## 3961—4020.

| mag. | 16h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·2 | 22 | 34·0 | 27·0 | |
| 9·3 | | 41·2 | 3·5 | |
| 9·1 | | 45·2 | 47·7 | |
| 9·7 | | 51·5 | 6·9 | |
| 9·2 | 23 | 1·2 | 44·2 | 8·5 |
| 9·6 | | 5·3 | 30·0 | |
| 9·2 | | 21·0 | 3·3 | |
| 9·6 | | 31·8 | 31·1 | |
| 9·2 | | 51·0 | 45·9 | 9·0 |
| 9·7 | 24 | 2·5 | 4·3 | |
| 9·2 | | 23·5 | 47·8 | |
| 9·5 | | 26·5 | 7·6 | |
| 9·0 | | 27·5 | 57·2 | |
| 8·3 | | 49·0 | 58·2 | G |
| 9·7 | | 52·5 | 47·2 | |
| 8·3 | 25 | 8·0 | 21·5 | 8·5 |
| 9·2 | | 24·0 | 8·1 | |
| 8·1 | 26 | 2·3 | 59·3 | GSc |
| 9·5 | | 13·5 | 23·6 | |
| 9·6 | | 26·0 | 42·4 | |
| 9·0 | 27 | 19·0 | 35·2 | |
| 9·7 | | 38·0 | 36·8 | |
| 9·7 | 28 | 1·5 | 48·8 | |
| 9·7 | | 19·0 | 5·1 | |
| 9·0 | | 23·0 | 34·9 | 9·5 |
| 9·5 | | 27·5 | 59·2 | |
| 9·5 | | 28·0 | 12·6 | |
| 9·7 | 29 | 8·5 | 53·6 | |
| 9·2 | | 22·5 | 53·2 | |
| 8·2 | | 31·5 | 48·2 | 8·5 |
| 9·7 | | 43·0 | 2·8 | |
| 9·7 | 30 | 12·5 | 0·1 | |
| 9·0 | | 20·0 | 9·2 | |
| 9·3 | | 59·5 | 43·2 | |
| 9·7 | 31 | 2·5 | 59·9 | |
| 9·3 | | 6·5 | 36·0 | |
| 9·6 | | 31·5 | 22·0 | |
| 9·3 | | 31·5 | 23·2 | |
| 9·7 | | 34·5 | 50·8 | |
| 9·3 | | 52·5 | 1·7 | |
| 9·7 | 32 | 3·5 | 31·2 | |
| 9·2 | | 26·5 | 14·2 | 8·5 |
| 9·5 | | 28·5 | 2·6 | |
| 9·5 | | 46·5 | 24·2 | |
| 9·2 | 33 | 15·0 | 11·4 | |
| 9·7 | | 19·0 | 33·5 | |
| 9·5 | 34 | 15·0 | 10·1 | |
| 9·6 | 35 | 17·5 | 7·2 | |
| 9·0 | 36 | 0·5 | 17·4 | 9·5 |
| 8·2 | | 52·0 | 37·2 | 8·8 |
| 9·5 | 37 | 1·0 | 2·3 | |
| 9·6 | | 25·0 | 6·2 | |
| 9·6 | | 45·5 | 21·2 | |
| 9·5 | | 50·5 | 27·8 | |
| 8·9 | 38 | 8·0 | 35·9 | 9·3 |
| 9·5 | | 32·5 | 15·6 | |
| 9·3 | | 54·0 | 18·0 | |
| 9·7 | 39 | 11·0 | 15·1 | |
| 8·6 | | 17·0 | 5·2 | 8·8 G |
| 8·8 | | 19·0 | 16·2 | 9·0 G |

## 4021—4080.

| mag. | 16h.–17h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·7 | 39 | 43·5 | 28·1 | |
| 9·0 | 40 | 5·0 | 55·1 | |
| 9·7 | | 29·5 | 10·9 | |
| 8·8 | | 53·0 | 59·0 | 8·5 G |
| 9·7 | 41 | 14·0 | 25·1 | |
| 7·8 | | 52·5 | 1·1 | 8·0 GScr |
| 9·6 | | 53·5 | 3·8 | |
| 9·7 | 42 | 21·0 | 20·1 | |
| 9·3 | | 32·5 | 14·4 | |
| 9·7 | | 43·5 | 56·1 | |
| 8·4 | | 52·0 | 14·4 | 8·0 |
| 6·2 | 43 | 45·5 | 3·6 | 6·5 GScr |
| 9·7 | 44 | 38·5 | 50·3 | |
| 8·9 | | 45·0 | 40·4 | 8·8 |
| 8·2 | 45 | 13·0 | 59·0 | |
| 9·2 | 46 | 1·0 | 49·1 | |
| 9·7 | | 2·3 | 0·3 | |
| 9·6 | | 16·5 | 17·3 | |
| 9·6 | | 44·0 | 32·6 | |
| 8·8 | 47 | 31·0 | 25·8 | 8·5 |
| 8·7 | | 32·5 | 11·6 | 9·5 |
| 8·8 | | 34·5 | 25·1 | 8·5 |
| 9·0 | | 50·0 | 26·9 | |
| 8·7 | 48 | 0·5 | 25·1 | 8·8 |
| 9·0 | | 22·0 | 3·4 | |
| 9·2 | 49 | 35·5 | 12·7 | 9·0 |
| 8·9 | | 37·0 | 22·4 | 9·0 |
| 9·2 | | 51·0 | 4·3 | 9·0 |
| 9·7 | 50 | 54·0 | 52·4 | |
| 9·6 | 51 | 4·5 | 24·8 | |
| 9·7 | | 8·3 | 0·9 | |
| 9·0 | | 51·0 | 8·1 | |
| 9·7 | 53 | 1·5 | 39·1 | |
| 9·2 | | 6·0 | 52·5 | |
| 9·6 | | 55·0 | 43·1 | |
| 9·2 | 54 | 25·0 | 14·4 | |
| 9·0 | 55 | 2·5 | 48·8 | |
| 9·6 | | 27·3 | 4·5 | |
| 8·4 | | 46·0 | 32·2 | 9·0 |
| 7·8 | | 55·0 | 39·7 | 8·5 GS |
| 9·7 | 56 | 56·5 | 55·4 | |
| 9·8 | 57 | 10·5 | 2·6 | |
| 9·5 | | 18·0 | 21·0 | |
| 9·5 | | 30·5 | 25·9 | |
| 9·6 | | 47·5 | 5·0 | |
| 9·5 | 58 | 6·2 | 9·4 | 9·5 |
| 9·8 | | 25·0 | 52·1 | |
| 9·9 | 59 | 50·0 | 12·0 | |
| 9·3 | 0 | 36·2 | 8·9 | |
| 7·2 | | 43·0 | 31·4 | 7·1 GSc |
| 9·4 | | 56·2 | 36·9 | |
| 9·4 | | 57·5 | 43·0 | |
| 9·6 | 1 | 38·0 | 9·9 | |
| 8·4 | 2 | 26·0 | 23·9 | 9·0 |
| 8·6 | | 48·0 | 42·8 | 8·0 G |
| 9·8 | 4 | 36·0 | 13·8 | |
| 9·8 | | 44·0 | 21·9 | |
| 9·8† | | 45·4 | 2·8 | |
| 9·9 | | 53·5 | 24·8 | |
| 9·2 | 5 | 34·8 | 1·7 | 9·2 |

## 4081—4140.

| mag. | 17h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8·8 | 6 | 21·5 | 32·8 | 9·5 |
| 10·0† | | 24·8 | 0·6 | |
| 8·9 | | 51·5 | 40·4 | |
| 9·5 | 7 | 18·5 | 4·8 | |
| 8·5 | | 27·3 | 58·4 | 9·0 |
| 9·2 | | 37·0 | 37·0 | |
| 8·9 | 8 | 51·5 | 48·5 | 8·5 |
| 8·0 | 9 | 20·5 | 26·8 | 7·3 GS |
| 8·5 | | 31·5 | 24·5 | 9·0 |
| 8·0 | | 56·0 | 17·9 | 8·2 |
| 9·5 | 10 | 9·0 | 21·5 | |
| 8·2 | | 15·0 | 56·4 | 8·5 |
| 9·6† | | 54·8 | 0·8 | |
| 9·6 | 11 | 24·0 | 3·7 | 9·0 |
| 8·5 | 12 | 6·5 | 2·5 | 8·5 |
| 9·8 | | 8·0 | 28·4 | |
| 9·3 | | 37·5 | 58·3 | |
| 9·6† | 13 | 22·3 | 0·2 | |
| 9·4 | | 48·9 | 1·9 | |
| 9·9 | 14 | 15·0 | 43·5 | |
| 9·2 | | 21·5 | 11·5 | |
| 9·2 | | 27·5 | 31·0 | 9·3 |
| 8·6 | | 40·5 | 41·7 | 9·5 GS |
| 8·8 | 15 | 53·5 | 8·9 | 7·5 G |
| 8·1 | 16 | 20·0 | 42·5 | 8·5 GS |
| 8·8 | | 23·0 | 27·2 | |
| 8·4 | | 32·0 | 40·7 | 9·0 G |
| 9·2 | | 46·5 | 58·1 | G |
| 9·3 | | 50·0 | 24·9 | |
| 7·5 | 17 | 7·0 | 18·7 | 8·0 |
| 9·5 | | 30·0 | 46·7 | |
| 9·0 | 18 | 20·5 | 44·5 | 9·0 |
| 9·2 | | 32·0 | 0·7 | |
| 9·8† | | 47·8 | 1·0 | |
| 9·8 | 19 | 8·0 | 46·5 | |
| 9·8 | | 32·7 | 58·9 | |
| 9·9 | 20 | 34·9 | 2·4 | |
| 9·0 | | 52·0 | 2·8 | 9·0 |
| 7·7 | 21 | 0·0 | 14·6 | 8·2 G |
| 9·6 | | 6·0 | 30·0 | |
| 9·6 | | 6·0 | 10·5 | |
| 9·2 | | 23·3 | 58·4 | |
| 9·2 | | 41·5 | 35·8 | |
| 9·3 | 23 | 21·0 | 35·3 | |
| 9·9 | | 39·5 | 8·6 | |
| 8·6 | 24 | 24·5 | 6·2 | 8·0 G |
| 8·7 | | 52·0 | 26·0 | 9·0 |
| 9·0 | 25 | 21·0 | 41·0 | |
| 8·8 | | 45·0 | 16·0 | 8·5 |
| 9·0 | 27 | 32·0 | 20·2 | |
| 9·0 | 28 | 38·5 | 41·1 | |
| 9·2 | 29 | 25·0 | 13·7 | |
| 9·2 | | 50·0 | 41·3 | 9·5 |
| 9·6 | 31 | 4·5 | 19·2 | |
| 9·5 | 33 | 30·0 | 6·1 | |
| 9·8 | | 42·0 | 6·3 | |
| 9·8† | | 55·3 | 1·9 | |
| 9·8 | 35 | 26·0 | 32·5 | 9·5 |
| 9·8† | | 43·8 | 2·0 | |
| 7·6 | | 48·0 | 30·3 | 8·0 GS |



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### 4141—4200.

| mag. | 17h. m | s | −63° ′ | |
|---|---|---|---|---|
| 8·6 | 37 | 4·0 | 45·6 | 9·2 |
| 9·5 | | 50·8 | 51·6 | |
| 9·0 | 39 | 9·5 | 10·6 | |
| 10·3 | | 13·5 | 53·6 | |
| 8·7 | | 14·2 | 8·9 | |
| 9·5 | | 15·0 | 57·2 | |
| 9·5 | | 22·5 | 18·7 | |
| 9·0 | | 54·5 | 14·3 | |
| 10·0 | | 57·0 | 41·2 | |
| 10·2 | 40 | 23·5 | 39·5 | |
| 10·3 | | 26·0 | 45·0 | |
| 10·0 | | 50·0 | 40·4 | |
| 10·0 | 41 | 12·0 | 47·7 | |
| 10·3 | | 18·0 | 34·5 | |
| 7·4 | | 34·0 | 55·3 | 7·8 G |
| 9·8 | | 36·5 | 27·3 | |
| 10·3 | | 44·7 | 59·5 | |
| 9·4 | | 55·5 | 45·7 | |
| 10·3 | | 59·0 | 47·4 | |
| 10·2 | 42 | 4·0 | 28·3 | |
| 10·3 | | 6·5 | 27·3 | |
| 10·3 | | 11·5 | 45·9 | |
| 10·0 | | 12·0 | 3·8 | |
| 9·2 | | 15·5 | 36·8 | |
| 9·4 | | 17·0 | 48·8 | |
| 9·8 | | 22·0 | 51·8 | |
| 10·3 | | 25·8 | 45·8 | |
| 9·7 | | 40·0 | 34·8 | |
| 10·0 | | 46·0 | 38·7 | |
| 8·2 | | 56·3 | 14·4 | 8·5 G |
| 10·2 | 43 | 22·5 | 51·9 | |
| 10·3 | | 31·0 | 20·1 | |
| 9·9 | | 33·0 | 54·4 | |
| 10·3 | | 34·0 | 15·5 | |
| 10·3 | | 49·5 | 37·3 | |
| 9·8 | 44 | 3·5 | 42·8 | |
| 9·1 | | 10·2 | 57·9 | |
| 9·2 | | 18·5 | 34·1 | |
| 9·1 | | 42·5 | 17·1 | |
| 9·5 | | 42·6 | 6·9 | |
| 10·3 | 45 | 0·7 | 59·8 | |
| 9·8 | | 4·1 | 17·2 | |
| 8·3 | | 4·1 | 5·2 | 9·2 |
| 10·3 | | 6·1 | 39·5 | |
| 10·2 | | 11·1 | 42·9 | |
| 10·2 | | 15·3 | 1·3 | |
| 10·3 | | 16·1 | 56·3 | |
| 10·0 | | 23·6 | 21·7 | |
| 10·3 | | 26·6 | 14·0 | |
| 10·2 | | 33·1 | 31·7 | |
| 9·2 | | 49·6 | 49·5 | |
| 9·9 | | 50·1 | 24·3 | |
| 10·2 | | 54·4 | 58·0 | |
| 8·6 | | 58·6 | 36·5 | 8·1 G |
| 9·0 | 46 | 2·6 | 9·9 | 9·5 |
| 9·2 | | 17·1 | 9·7 | 9·8 |
| 9·7 | | 19·6 | 0·7 | |
| 9·0 | | 24·1 | 19·8 | |
| 9·1 | | 25·1 | 48·9 | |
| 10·3 | | 48·1 | 57·7 | |

### 4201—4260.

| mag. | 17h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·3 | 46 | 51·1 | 57·5 | |
| 10·3 | | 53·1 | 35·8 | |
| 9·1 | 47 | 15·1 | 40·6 | |
| 9·0 | | 16·6 | 24·5 | |
| 9·5 | | 18·6 | 28·2 | |
| 8·8 | | 32·1 | 45·2 | |
| 9·5 | | 34·1 | 31·9 | |
| 9·5 | | 36·6 | 37·6 | |
| 10·3 | | 53·6 | 29·1 | |
| 10·0 | | 58·6 | 56·6 | |
| 10·2 | 48 | 0·1 | 34·2 | |
| 9·8 | | 1·6 | 3·7 | |
| 10·2 | | 2·6 | 47·9 | |
| 9·9 | | 8·6 | 24·8 | |
| 10·2 | | 11·1 | 41·1 | |
| 10·0 | | 29·3 | 1·8 | |
| 8·7 | | 37·1 | 27·9 | |
| 10·2 | | 52·1 | 13·4 | |
| 10·3 | 49 | 16·1 | 38·7 | |
| 10·3 | | 18·1 | 37·8 | |
| 9·9 | | 22·6 | 53·7 | |
| 9·2 | | 27·1 | 39·0 | |
| 9·6 | | 38·6 | 54·1 | |
| 10·0 | | 39·6 | 42·0 | |
| 10·2 | | 40·6 | 31·1 | |
| 10·3 | | 46·6 | 3·0 | |
| 9·9 | 50 | 12·1 | 1·0 | |
| 10·2 | | 15·6 | 3·9 | |
| 10·3 | | 19·1 | 46·0 | |
| 10·3 | | 27·6 | 53·9 | |
| 9·5 | | 29·1 | 58·3 | |
| 10·3 | | 30·1 | 28·4 | |
| 9·7 | | 32·1 | 36·7 | |
| 8·9 | | 32·9 | 57·5 | 8·0 G |
| 9·5 | | 33·1 | 23·2 | |
| 10·2 | | 42·1 | 27·3 | |
| 9·2 | | 46·1 | 23·1 | |
| 10·3 | | 51·1 | 21·1 | |
| 10·3 | | 58·1 | 13·7 | |
| 9·5 | 51 | 1·6 | 48·2 | |
| 9·1 | | 15·1 | 14·1 | 9·2 |
| 10·2 | | 15·1 | 16·9 | |
| 10·3 | | 15·6 | 42·3 | |
| 10·2 | | 17·1 | 4·1 | |
| 10·3 | | 29·2 | 2·1 | |
| 10·0 | | 31·3 | 0·4 | |
| 10·2 | | 37·1 | 39·8 | |
| 8·7 | | 38·6 | 2·1 | 9·2 |
| 10·3 | | 39·6 | 36·9 | |
| 9·4 | | 40·1 | 33·3 | |
| 9·2 | | 43·1 | 15·2 | |
| 10·0 | | 51·6 | 5·6 | |
| 9·2 | | 58·6 | 55·2 | |
| 10·2 | | 59·1 | 34·8 | |
| 9·0 | 52 | 1·1 | 7·2 | 9·5 |
| 10·3 | | 9·1 | 58·3 | |
| 10·2 | | 16·6 | 56·7 | |
| 10·0 | | 21·1 | 52·3 | |
| 10·3 | | 25·6 | 27·2 | |
| 10·2 | | 46·6 | 10·3 | |

### 4261—4320.

| mag. | 17h.–18h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·1 | 52 | 51·6 | 43·5 | |
| 9·6 | | 51·6 | 33·1 | |
| 9·6 | | 51·6 | 34·5 | |
| 10·2 | 53 | 4·2 | 3·1 | |
| 9·0 | | 7·2 | 44·3 | 8·5 |
| 10·2 | | 8·5 | 58·4 | |
| 10·3 | | 8·7 | 37·6 | |
| 10·3 | | 10·2 | 40·5 | |
| 9·8 | | 11·4 | 2·1 | |
| 10·2 | | 20·2 | 23·6 | |
| 10·3 | | 27·7 | 30·9 | |
| 10·3 | | 28·2 | 25·3 | |
| 9·0 | | 28·7 | 3·9 | |
| 9·9 | | 29·7 | 13·7 | |
| 7·8 | | 36·2 | 11·4 | 8·0 |
| 9·6 | | 58·7 | 14·1 | |
| 9·7 | 54 | 1·7 | 37·5 | |
| 10·0 | | 5·2 | 4·7 | |
| 10·2 | | 8·7 | 7·8 | |
| 10·0 | | 13·2 | 19·2 | |
| 10·3 | | 14·2 | 15·7 | |
| 10·3 | | 16·2 | 35·6 | |
| 9·1 | | 19·7 | 34·6 | 9·0 |
| 10·3 | | 47·2 | 54·5 | |
| 10·3 | 55 | 10·2 | 42·2 | |
| 8·0 | | 28·7 | 9·5 | 9·0 |
| 10·0 | | 49·2 | 36·6 | |
| 10·3 | 56 | 3·2 | 16·5 | |
| 10·3 | | 3·7 | 47·3 | |
| 9·4 | | 5·2 | 44·5 | |
| 9·8 | | 12·2 | 57·6 | |
| 4·8 | | 32·2 | 40·1 | 5·0 GScr |
| 10·2 | | 32·7 | 42·0 | |
| 10·2 | | 38·7 | 7·9 | |
| 10·3 | | 50·7 | 6·7 | |
| 9·0 | | 56·2 | 38·0 | 9·3 |
| 10·3 | 57 | 14·2 | 18·3 | |
| 10·0 | | 15·2 | 47·0 | |
| 9·5 | | 18·7 | 39·9 | |
| 10·0 | | 26·2 | 5·9 | |
| 9·2 | | 35·2 | 56·0 | |
| 8·8 | | 47·2 | 0·1 | |
| 9·4 | | 48·7 | 1·2 | |
| 10·3 | | 51·2 | 18·5 | |
| 10·0 | | 58·3 | 1·9 | |
| 9·9 | 58 | 1·7 | 50·9 | |
| 10·3 | | 7·2 | 31·7 | |
| 10·3 | | 8·2 | 28·2 | |
| 9·5 | | 26·7 | 20·8 | |
| 10·3 | | 39·2 | 32·0 | |
| 10·0 | 59 | 15·2 | 40·4 | |
| 10·3 | | 35·2 | 53·3 | |
| 10·2 | | 50·7 | 4·1 | |
| 10·3 | | 58·4 | 57·1 | |
| 10·0 | 0 | 5·4 | 6·8 | |
| 9·0 | | 6·4 | 51·8 | |
| 10·3 | | 9·4 | 56·1 | |
| 10·0 | | 11·4 | 10·8 | |
| 10·3 | | 14·9 | 9·9 | |
| 9·6 | | 18·4 | 32·2 | 9·2 |

### 4321—4380.

| mag. | 18h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·3 | 0 | 25·9 | 21·1 | |
| 9·0 | | 48·9 | 42·3 | |
| 10·3 | | 52·4 | 38·1 | 8·5 G |
| 10·0 | | 55·9 | 34·1 | |
| 9·1 | | 57·4 | 21·8 | |
| 9·6 | 1 | 15·9 | 15·6 | |
| 10·2 | | 17·9 | 41·8 | |
| 10·3 | | 17·9 | 50·3 | |
| 10·3 | | 20·9 | 50·2 | |
| 9·6 | | 39·6 | 1·4 | |
| 9·8 | | 42·4 | 44·5 | |
| 10·2 | | 47·4 | 49·4 | |
| 9·0 | 2 | 9·4 | 21·2 | |
| 8·0 | | 14·9 | 42·8 | 7·0 GScr |
| 10·2 | | 30·9 | 4·7 | |
| 9·4 | | 36·9 | 43·1 | |
| 9·7 | | 56·3 | 0·5 | |
| 9·2 | 3 | 12·9 | 29·0 | |
| 10·0 | | 23·9 | 38·8 | |
| 10·3 | | 29·2 | 27·3 | |
| 9·9 | | 40·4 | 18·6 | |
| 9·6 | | 47·4 | 33·0 | |
| 7·1 | | 48·4 | 5·2 | 6·0 GSc |
| 9·4 | | 49·4 | 4·4 | |
| 9·7 | 4 | 1·4 | 31·7 | |
| 9·0 | | 6·9 | 18·9 | 8·8 |
| 9·9 | | 7·9 | 23·0 | |
| 9·4 | | 19·6 | 0·3 | |
| 8·2 | | 24·9 | 22·2 | 8·8 |
| 9·9 | | 27·4 | 12·3 | |
| 9·5 | | 29·4 | 17·5 | |
| 10·3 | | 29·4 | 52·5 | |
| 9·7 | | 36·4 | 35·2 | |
| 9·2 | | 39·4 | 17·0 | |
| 9·7 | | 41·4 | 31·6 | |
| 10·3 | | 43·9 | 30·0 | |
| 9·9 | | 48·9 | 44·7 | |
| 10·2 | | 57·0 | 29·5 | |
| 10·2 | 5 | 19·5 | 37·4 | |
| 10·0 | | 20·6 | 0·7 | |
| 9·9 | | 23·5 | 37·4 | |
| 10·3 | | 27·5 | 53·2 | |
| 9·6 | | 35·0 | 30·0 | |
| 10·3 | 6 | 5·5 | 10·0 | |
| 10·3 | | 39·0 | 40·5 | |
| 9·6 | | 47·0 | 34·4 | |
| 10·2 | | 52·0 | 36·0 | |
| 7·6 | | 57·0 | 53·6 | 9·0 |
| 10·3 | 7 | 4·5 | 20·2 | |
| 6·8 | | 35·0 | 55·2 | 6·5 GSc |
| 9·1 | | 45·5 | 44·5 | |
| 9·8 | | 51·5 | 30·2 | |
| 10·0 | | 55·5 | 6·4 | |
| 10·0 | 8 | 2·0 | 18·2 | |
| 9·8 | | 3·5 | 28·6 | |
| 9·2 | | 17·5 | 38·9 | |
| 10·2 | | 47·5 | 18·5 | |
| 10·0 | | 54·0 | 11·2 | |
| 9·2 | 9 | 1·0 | 48·2 | |
| 8·4 | | 3·5 | 17·4 | 8·5 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 30 | 143 | 1·1 |
| | 40 | 144 | 0·7 |
| | 50 | 144 | 0·4 |
| 18 | 0 | 144 | 0·0 |
| | | | + |
| | 10 | 144 | 0·4 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 0 | 144 | 0.0 |
| | 10 | 144 | 0.4 |
| | 20 | 144 | 0.7 |
| | 30 | 143 | 1.1 |
| | 40 | 143 | 1.5 |
| | 50 | 142 | 1.8 |
| 19 | 0 | 142 | 2.2 |
| | 10 | 141 | 2.5 |
| | 20 | 140 | 2.9 |
| | 30 | 139 | 3.2 |
| | 40 | 138 | 3.5 |
| | 50 | 136 | 3.9 |
| 20 | 0 | 135 | 4.2 |
| | 10 | 133 | 4.5 |
| | 20 | 132 | 4.8 |
| | 30 | 130 | 5.1 |
| | 40 | 128 | 5.4 |
| | 50 | 126 | 5.6 |

## 4381—4440.

| mag. | 18ʰ m | s | −63° ′ | |
|---|---|---|---|---|
| 10.2 | 9 | 19.0 | 26.3 | |
| 9.8 | | 33.5 | 51.6 | |
| 10.0 | | 49.0 | 45.0 | |
| 7.9 | | 59.0 | 40.0 | 8.7 |
| 8.0 | 10 | 8.5 | 25.8 | 8.0 GSg |
| 10.3 | | 11.5 | 22.2 | |
| 10.0 | | 13.5 | 41.7 | |
| 9.7 | | 15.5 | 7.5 | |
| 9.2 | | 19.5 | 22.8 | 8.8 G |
| 10.3 | | 29.5 | 5.6 | |
| 8.8 | | 58.8 | 57.2 | |
| 9.4 | | 59.5 | 19.6 | |
| 10.2 | 11 | 2.5 | 38.1 | |
| 9.8 | | 29.5 | 31.1 | |
| 9.8 | | 31.4 | 1.6 | |
| 9.5 | | 31.5 | 17.2 | |
| 10.3 | | 38.5 | 35.8 | |
| 8.4 | | 56.0 | 26.2 | 8.0 G |
| 9.8 | 12 | 49.0 | 14.1 | |
| 9.7 | | 57.0 | 43.1 | |
| 8.8 | 13 | 0.0 | 15.5 | |
| 10.2 | | 0.0 | 45.7 | |
| 10.2 | | 8.5 | 46.7 | |
| 10.0 | | 15.5 | 19.7 | |
| 10.3 | | 26.0 | 48.6 | |
| 6.6 | | 39.5 | 4.7 | GSc |
| 9.6 | 14 | 22.5 | 24.1 | |
| 10.3 | | 27.0 | 39.0 | |
| 9.7 | | 37.0 | 20.5 | |
| 9.8 | | 47.5 | 19.9 | |
| 10.3 | 15 | 31.5 | 28.1 | |
| 9.7 | | 39.5 | 3.5 | |
| 9.6 | | 45.0 | 51.0 | |
| 10.3 | | 52.0 | 15.0 | |
| 8.4 | 16 | 8.0 | 22.7 | 8.0 |
| 9.0 | | 25.0 | 53.9 | 8.5 |
| 9.5 | | 35.0 | 2.6 | |
| 9.2 | | 48.0 | 45.2 | |
| 9.4 | 17 | 9.0 | 38.3 | |
| 9.0 | | 53.5 | 2.9 | |
| 8.4 | 18 | 29.0 | 13.6 | 8.0 G |
| 7.7 | 19 | 11.3 | 7.2 | 8.0 G |
| 9.0 | 20 | 2.3 | 16.6 | |
| 9.2 | | 11.8 | 37.3 | |
| 10.2 | | 30.5 | 1.7 | |
| 10.3 | 21 | 3.5 | 47.1 | |
| 9.9– | | 12.5 | 57.0 | |
| 9.6 | 23 | 38.0 | 24.3 | |
| 9.0 | | 56.0 | 12.3 | |
| 9.6 | 24 | 31.0 | 38.5 | |
| 9.6 | | 32.0 | 47.9 | |
| 9.0 | | 35.8 | 59.2 | 9.0 |
| 9.6 | 25 | 15.0 | 6.5 | |
| 9.3 | | 39.0 | 8.0 | |
| 10.0† | 26 | 21.5 | 0.6 | |
| 9.0 | | 53.5 | 11.6 | |
| 8.6 | | 55.0 | 28.8 | 9.0 |
| 8.8 | 29 | 20.0 | 38.4 | 9.5 G |
| 8.8 | 30 | 11.8 | 2.0 | |
| 9.4 | | 57.5 | 10.5 | |

## 4441—4500.

| mag. | 18ʰ—19ʰ m | s | −63° ′ | |
|---|---|---|---|---|
| 8.8 | 31 | 7.5 | 45.0 | 9.5 G |
| 8.5 | | 14.0 | 45.0 | 8.0 G |
| 9.4† | 32 | 9.1 | 2.0 | |
| 10.0† | 33 | 41.1 | 1.7 | |
| 9.6 | | 56.5 | 32.6 | |
| 9.8† | 34 | 30.1 | 1.6 | |
| 9.0 | 35 | 23.5 | 29.4 | |
| 9.6 | | 36.5 | 6.1 | |
| 9.0 | 36 | 0.5 | 5.9 | |
| 9.3 | | 16.5 | 51.9 | |
| 7.6 | 37 | 12.0 | 24.0 | 8.0 GS |
| 9.6 | | 49.0 | 34.1 | |
| 7.8 | 39 | 49.8 | 58.4 | 8.5 |
| 9.6 | 40 | 9.5 | 38.1 | 9.0 |
| 9.6 | | 11.5 | 50.4 | 9.0 |
| 8.5 | | 49.0 | 52.1 | |
| 9.1 | 41 | 34.8 | 58.7 | |
| 9.3 | 43 | 14.5 | 23.1 | 9.5 |
| 9.1 | | 17.0 | 27.3 | |
| 9.8† | 45 | 9.0 | 2.4 | |
| 8.0 | | 31.0 | 32.1 | 9.0 |
| 9.3 | 46 | 39.5 | 25.9 | |
| 8.1 | 48 | 32.0 | 10.0 | |
| 9.6 | | 41.8 | 58.2 | |
| 8.0 | 49 | 23.3 | 2.0 | GS |
| 8.8 | | 33.0 | 30.9 | 8.5 |
| 7.7 | 51 | 21.5 | 4.4 | 8.0 GS |
| 9.6 | | 37.5 | 1.2 | |
| 6.9 | 52 | 11.5 | 57.7 | 7.0 GS |
| 9.4† | | 20.0 | 2.0 | |
| 8.8 | 53 | 24.0 | 31.9 | 8.5 |
| 7.1 | 54 | 5.5 | 55.5 | 7.5 GSc |
| 8.0 | | 18.5 | 11.7 | 8.0 G |
| 9.1 | | 52.0 | 51.1 | |
| 9.6 | | 53.3 | 59.7 | |
| 9.3 | | 58.5 | 3.8 | 9.5 |
| 9.0 | 55 | 4.5 | 35.5 | 9.0 |
| 9.8† | | 36.5 | 2.2 | |
| 9.3– | | 39.5 | 13.1 | |
| 9.5 | 56 | 44.0 | 28.6 | |
| 9.2 | 57 | 0.5 | 38.0 | |
| 9.2 | | 22.0 | 27.6 | |
| 9.5 | | 33.5 | 57.0 | |
| 9.1 | | 52.5 | 25.4 | |
| 9.2 | 58 | 47.2 | 0.2 | |
| 8.9 | 59 | 9.8 | 46.9 | |
| 9.5 | 0 | 36.5 | 44.2 | |
| 8.9 | 1 | 1.5 | 45.9 | |
| 7.6 | | 55.5 | 7.4 | 7.0 GS |
| 9.2 | 2 | 9.0 | 35.8 | |
| 8.9 | | 16.7 | 19.5 | |
| 8.7 | | 18.7 | 57.1 | 9.5 |
| 8.9 | | 43.0 | 39.8 | 9.2 |
| 9.5 | 3 | 3.7 | 48.9 | |
| 9.1 | | 8.5 | 17.4 | |
| 8.8 | | 32.0 | 14.4 | |
| 9.2 | 4 | 43.5 | 19.7 | 9.0 |
| 8.7 | | 52.0 | 25.2 | 8.1 G |
| 9.5 | | 56.5 | 10.0 | |
| 9.5 | 5 | 20.5 | 28.0 | |

## 4501—4560.

| mag. | 19ʰ m | s | −63° ′ | |
|---|---|---|---|---|
| 9.5 | 6 | 3.0 | 16.7 | |
| 9.4 | | 4.8 | 0.0 | 10.0 |
| 9.5 | 7 | 31.0 | 23.1 | 9.5 |
| 8.5 | | 46.5 | 5.7 | G |
| 9.5 | | 50.5 | 10.4 | G |
| 7.8 | 8 | 12.0 | 6.9 | 8.0 G |
| 7.9 | | 32.0 | 24.2 | 8.5 |
| 8.7 | | 35.5 | 42.0 | 9.0 |
| 8.7 | | 43.5 | 19.8 | |
| 8.5 | 10 | 12.5 | 21.4 | 8.0 G |
| 9.2 | 11 | 20.0 | 28.0 | |
| 8.8 | | 37.0 | 3.2 | |
| 7.9 | 12 | 0.5 | 25.0 | 8.5 G |
| 8.9 | | 20.5 | 5.4 | |
| 8.7 | | 21.5 | 11.9 | 9.0 S |
| 7.2 | | 40.0 | 13.9 | 7.0 GS |
| 9.5 | | 43.0 | 40.9 | |
| 8.7 | | 46.0 | 35.7 | 8.5 G |
| 9.5 | 14 | 10.0 | 33.5 | |
| 7.8 | | 44.0 | 28.0 | 8.0 GS |
| 9.4 | 15 | 51.5 | 27.3 | 9.0 |
| 8.8 | 16 | 56.5 | 8.0 | 9.5 |
| 8.8 | 17 | 48.0 | 4.0 | |
| 8.5 | | 51.5 | 2.2 | 8.5 G |
| 8.3 | | 54.0 | 3.6 | 9.0 G |
| 9.5 | 22 | 5.5 | 36.5 | |
| 7.4 | | 16.5 | 19.0 | 8.0 G |
| 8.7 | 23 | 5.5 | 16.7 | 10.0 |
| 9.5 | | 12.0 | 37.3 | |
| 8.9 | 24 | 2.3 | 1.5 | 8.0 G |
| 9.5 | | 12.5 | 44.7 | |
| 9.5 | | 25.5 | 48.0 | |
| 9.2 | 26 | 50.5 | 16.0 | |
| 9.4 | 27 | 1.5 | 22.0 | |
| 7.9 | | 21.5 | 10.0 | 8.0 G |
| 9.1 | 28 | 2.7 | 59.0 | |
| 8.7 | | 46.0 | 14.6 | 9.5 |
| 8.2 | 29 | 53.5 | 6.6 | 8.2 G |
| 9.4 | 32 | 52.5 | 10.0 | 9.5 |
| 9.4 | 33 | 11.0 | 16.0 | 8.5 |
| 8.8 | 34 | 12.5 | 20.1 | 9.0 G |
| 9.5 | 35 | 3.5 | 32.1 | |
| 8.8 | | 5.0 | 1.9 | 8.2 |
| 8.5– | 36 | 10.8 | 33.1 | 8.8 G |
| 9.9 | | 43.0 | 49.1 | |
| 9.9 | 38 | 19.5 | 59.8 | |
| 9.9 | 41 | 57.5 | 14.8 | |
| 7.7 | 42 | 17.5 | 53.3 | 8.0 GS |
| 8.9 | 44 | 16.5 | 20.2 | 8.5 |
| 9.9 | | 50.5 | 26.6 | |
| 8.6 | 45 | 11.5 | 21.1 | 9.0 |
| 8.7 | | 27.5 | 47.9 | 8.5 G |
| 9.2 | | 40.5 | 27.6 | |
| 9.2 | 46 | 39.5 | 0.2 | |
| 7.3 | 47 | 15.5 | 27.4 | 8.0 GS |
| 9.9 | | 35.5 | 24.6 | 9.5 |
| 9.2 | | 53.5 | 9.7 | |
| 9.2 | 49 | 19.5 | 45.6 | |
| 8.6 | 51 | 20.5 | 41.3 | GS |
| 9.3 | | 43.0 | 17.2 | |

## 4561—4620.

| mag. | 19ʰ—20ʰ m | s | −63° ′ | |
|---|---|---|---|---|
| 7.4 | 53 | 57.5 | 24.4 | 8.0 GS |
| 8.4 | 56 | 22.5 | 4.4 | 9.0 G |
| 9.5 | 57 | 14.0 | 13.1 | |
| 6.9 | 58 | 55.0 | 59.0 | 7.0 GS |
| 9.0 | 59 | 49.5 | 49.2 | 9.0 |
| 7.2 | 0 | 37.3 | 58.9 | 7.8 GS |
| 9.5 | 1 | 15.5 | 31.2 | |
| 9.2 | | 24.0 | 16.3 | 8.5 |
| 8.4 | | 38.0 | 16.4 | 8.5 |
| 9.3 | | 55.0 | 52.3 | |
| 5.9 | 3 | 19.0 | 47.4 | 6.5 GS |
| 8.9 | 6 | 18.0 | 20.3 | 8.5 |
| 9.6 | | 48.5 | 58.2 | |
| 6.8 | 7 | 15.5 | 32.4 | 7.5 G |
| 8.9 | | 40.0 | 40.3 | 9.2 |
| 6.8 | 8 | 0.0 | 36.7 | 6.8 GSc |
| 9.5 | 10 | 51.0 | 15.4 | |
| 9.5 | 14 | 41.0 | 10.7 | |
| 7.9 | | 52.0 | 3.6 | 8.5 GS |
| 8.9 | 15 | 23.0 | 22.1 | 9.0 |
| 8.9 | 16 | 8.0 | 27.5 | 8.7 G |
| 8.9– | 17 | 30.5 | 30.4 | 8.8 G |
| 9.7 | | 32.0 | 1.5 | |
| 9.7 | 19 | 23.5 | 53.3 | |
| 9.3 | | 43.5 | 16.1 | |
| 9.6 | | 49.5 | 16.0 | |
| 8.8 | 20 | 3.0 | 44.5 | |
| 8.8 | | 37.0 | 44.7 | |
| 9.6 | 21 | 58.0 | 22.7 | |
| 7.5 | 23 | 52.7 | 44.1 | 7.5 GScr |
| 9.0 | 24 | 20.0 | 32.9 | |
| 9.6 | | 58.0 | 1.0 | |
| 9.6 | 25 | 19.0 | 29.7 | |
| 8.4 | | 21.5 | 1.9 | |
| 7.0 | | 51.0 | 32.8 | 6.5 GScr |
| 8.9 | | 51.5 | 33.9 | 9.5 |
| 9.4 | 26 | 18.0 | 56.4 | |
| 9.0 | | 36.0 | 19.3 | 9.5 |
| 9.6 | 27 | 0.0 | 33.5 | |
| 9.6 | | 27.0 | 13.5 | |
| 9.6 | 28 | 27.5 | 33.1 | |
| 7.6 | 29 | 9.5 | 20.3 | 6.5 GScr |
| 8.5 | 30 | 0.0 | 29.8 | 9.0 |
| 8.8 | | 32.0 | 8.0 | |
| 9.3 | 31 | 31.0 | 52.5 | |
| 8.9 | 32 | 28.0 | 25.1 | 8.2 GS |
| 9.3 | 33 | 38.0 | 35.4 | 9.0 |
| 8.8 | | 56.0 | 34.6 | 9.0 |
| 8.9 | 34 | 17.0 | 41.7 | |
| 8.2 | 35 | 3.0 | 7.3 | 8.5 GS |
| 9.6 | | 51.0 | 50.2 | |
| 9.3 | 36 | 0.0 | 36.5 | |
| 9.6 | | 7.0 | 54.4 | |
| 9.3 | 37 | 41.0 | 41.1 | |
| 9.6 | 41 | 2.0 | 0.6 | |
| 9.6 | | 19.0 | 15.5 | |
| 9.0 | 42 | 49.0 | 47.0 | |
| 9.6 | 43 | 39.0 | 7.1 | |
| 7.8 | | 52.0 | 18.1 | 7.2 GS |
| 9.6 | 44 | 15.5 | 3.1 | |



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### 4621—4680.

| mag. | $20^{h}$—$21^{h}$ m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 46 | 43·0 | 58·6 | |
| 9·6 | 48 | 16·5 | 23·2 | 9·5 |
| 9·6 | | 20·5 | 17·5 | 9·5 G |
| 8·0 | | 20·5 | 2·7 | 8·5 G |
| 9·4 | | 27·0 | 25·1 | 9·5 |
| 8·0 | 49 | 18·5 | 21·4 | 8·2 GS |
| 9·6 | | 51·5 | 14·0 | |
| 8·8 | 50 | 56·5 | 56·3 | 9·0 |
| 9·0 | 51 | 15·5 | 48·0 | |
| 9·0 | 52 | 35·0 | 44·3 | 9·0 |
| 8·0 | 53 | 21·5 | 58·3 | 8·0 G |
| 9·6 | 54 | 32·5 | 53·9 | 9·5 G |
| 9·6 | 57 | 31·0 | 39·1 | |
| 8·0 | | 45·5 | 26·7 | 8·0 G |
| 9·6 | 58 | 19·5 | 51·2 | |
| 9·2 | | 34·7 | 33·0 | 9·0 |
| 9·2 | | 37·5 | 36·2 | 8·5 |
| 9·4 | 59 | 55·0 | 5·0 | |
| 10·2 | 0 | 9·5 | 10·6 | |
| 10·4 | | 21·0 | 35·6 | |
| 10·4 | | 54·0 | 30·6 | |
| 10·2 | 1 | 0·2 | 1·0 | |
| 10·2 | | 10·0 | 34·0 | |
| 9·6 | | 13·0 | 17·8 | 9·5 |
| 10·0 | 3 | 42·5 | 12·6 | |
| 9·3 | 4 | 44·5 | 2·2 | |
| 9·3 | 5 | 58·0 | 14·0 | |
| 9·8 | 6 | 17·5 | 19·2 | |
| 9·2 | | 55·0 | 44·3 | |
| 10·4 | 7 | 38·0 | 6·8 | |
| 9·9 | 8 | 7·5 | 38·7 | |
| 8·0 | | 49·0 | 34·0 | 8·0 |
| 9·6 | 9 | 41·0 | 6·0 | |
| 10·2 | | 42·0 | 6·6 | |
| 10·4 | | 43·5 | 37·2 | |
| 10·4 | 10 | 41·5 | 56·0 | |
| 10·2 | | 52·5 | 31·3 | |
| 9·0 | 11 | 1·5 | 35·0 | 9·5 |
| 9·8 | | 52·0 | 39·9 | |
| 10·2 | | 58·0 | 51·6 | |
| 10·4 | 12 | 18·0 | 13·5 | |
| 10·2 | | 59·2 | 36·9 | |
| 9·6 | | 59·5 | 51·6 | |
| 10·2 | 13 | 6·5 | 23·8 | |
| 9·3 | | 33·0 | 24·3 | |
| 9·1 | 14 | 11·0 | 27·1 | |
| 10·2 | | 25·5 | 46·8 | |
| 10·2 | | 34·0 | 28·4 | |
| 10·2 | 16 | 39·5 | 56·0 | |
| 8·8 | 17 | 13·0 | 11·4 | 9·5 |
| 10·2 | | 34·0 | 51·0 | |
| 9·8 | | 38·5 | 7·0 | |
| 10·4 | 18 | 42·0 | 1·2 | |
| 9·2 | 19 | 27·5 | 49·8 | 9·0 |
| 10·2 | | 39·5 | 48·2 | |
| 10·0 | | 47·7 | 2·0 | |
| 10·4 | 20 | 3·0 | 1·3 | |
| 8·4 | | 46·0 | 39·0 | 8·5 |
| 9·9 | 21 | 41·0 | 34·1 | |
| 8·7 | | 42·5 | 35·6 | 8·0 G |

### 4681—4740.

| mag. | $21^{h}$ m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 22 | 20·5 | 43·2 | |
| 10·4 | | 23·5 | 7·6 | |
| 9·2 | 23 | 9·0 | 47·4 | |
| 10·2 | | 17·0 | 42·9 | |
| 10·4 | 24 | 22·0 | 2·2 | |
| 10·2 | | 36·0 | 31·0 | |
| 8·1 | 25 | 56·5 | 31·1 | 8·3 GS |
| 10·0 | | 59·0 | 20·2 | |
| 9·0 | 26 | 10·0 | 4·0 | |
| 10·2 | | 14·5 | 6·0 | |
| 10·2 | | 50·5 | 34·0 | |
| 10·2 | 27 | 15·5 | 12·1 | |
| 8·8 | 28 | 8·5 | 21·7 | |
| 9·2 | | 33·0 | 54·0 | 8·5 |
| 9·0 | | 50·0 | 30·3 | |
| 9·2 | 30 | 6·0 | 39·0 | 9·5 |
| 8·0 | | 32·5 | 22·0 | 8·5 G |
| 9·2 | 31 | 14·0 | 6·9 | |
| 9·2 | 32 | 54·0 | 15·2 | 9·0 |
| 10·0 | 33 | 56·5 | 3·0 | |
| 8·4 | 34 | 12·5 | 58·8 | 8·2 |
| 10·2 | 35 | 36·0 | 28·4 | |
| 7·6 | 36 | 50·0 | 7·3 | 7·0 GSr |
| 10·4 | 37 | 41·5 | 24·4 | |
| 8·5 | 38 | 8·5 | 28·8 | 9·0 |
| 10·4 | | 44·8 | 18·3 | |
| 10·2 | 39 | 59·6 | 49·4 | |
| 9·0 | 40 | 10·4 | 30·7 | 9·5 |
| 8·7 | | 28·0 | 53·5 | 9·0 |
| 7·8 | | 34·0 | 27·1 | 8·2 G |
| 10·2 | | 39·2 | 32·0 | |
| 9·2 | | 40·2 | 9·9 | 9·5 |
| 8·8 | 41 | 19·6 | 21·4 | 9·2 |
| 9·1 | | 21·0 | 48·4 | |
| 9·6 | | 21·2 | 39·2 | |
| 9·3 | | 33·4 | 58·3 | |
| 10·2 | | 52·4 | 59·0 | |
| 10·0 | 42 | 30·8 | 3·5 | |
| 9·6 | | 33·1 | 25·4 | |
| 9·1 | 43 | 54·8 | 26·9 | |
| 7·5 | 44 | 34·1 | 41·3 | 7·5 GS |
| 10·0 | | 44·4 | 19·3 | |
| 10·2 | 45 | 30·4 | 25·0 | |
| 10·1 | | 48·8 | 7·8 | |
| 8·8 | 46 | 2·1 | 47·9 | 8·0 |
| 9·2 | 47 | 8·9 | 53·7 | 9·0 |
| 10·0 | | 9·6 | 49·1 | |
| 10·2 | | 15·3 | 23·3 | |
| 9·6 | | 47·4 | 39·8 | |
| 9·8 | 48 | 8·9 | 50·5 | |
| 10·0 | | 26·1 | 40·9 | |
| 9·1 | 49 | 4·9 | 18·2 | 9·0 G |
| 9·2 | | 18·9 | 53·5 | |
| 10·0 | | 28·9 | 12·1 | |
| 10·1 | | 48·2 | 38·8 | |
| 7·9 | 50 | 3·6 | 4·4 | 8·5 G |
| 10·2 | 51 | 8·1 | 45·7 | |
| 9·4 | 52 | 22·9 | 57·6 | 9·0 |
| 10·2 | 53 | 5·2 | 34·0 | |
| 10·2 | | 6·4 | 18·9 | |

### 4741—4800.

| mag. | $21^{h}$—$22^{h}$ m | s | −63° ′ | |
|---|---|---|---|---|
| 9·6 | 53 | 32·1 | 59·9 | |
| 9·1 | | 33·7 | 33·6 | |
| 9·6 | 54 | 8·8 | 22·7 | |
| 9·2 | | 45·7 | 33·3 | 9·5 |
| 9·8 | 55 | 3·9 | 13·3 | |
| 10·2 | 56 | 4·6 | 4·9 | |
| 8·5 | | 19·4 | 51·3 | 8·2 G |
| 8·9 | | 46·6 | 43·2 | 8·5 |
| 9·3 | 57 | 7·9 | 15·5 | |
| 10·2 | | 15·4 | 9·4 | |
| 10·2 | | 44·2 | 36·9 | |
| 10·0 | | 58·4 | 54·1 | |
| 10·0 | | 58·7 | 37·1 | |
| 9·6 | 1 | 21·4 | 55·5 | |
| 9·7 | | 30·9 | 19·2 | |
| 8·0 | | 46·1 | 42·7 | |
| 9·6 | | 57·6 | 43·9 | |
| 9·6 | 2 | 32·1 | 43·1 | |
| 10·2 | | 54·9 | 17·3 | |
| 10·0 | 4 | 6·2 | 31·0 | |
| 10·2 | | 19·4 | 18·9 | |
| 10·2 | 5 | 21·7 | 49·9 | |
| 10·2 | | 21·9 | 15·3 | |
| 10·1 | | 30·6 | 4·5 | |
| 7·4 | 7 | 30·6 | 57·5 | 7·2 GS |
| 10·2 | | 44·9 | 0·6 | |
| 10·2 | 8 | 8·4 | 0·9 | |
| 10·2 | | 15·9 | 16·5 | |
| 7·2 | 9 | 9·8 | 25·9 | 7·0 GSg |
| 10·2 | | 13·2 | 37·3 | |
| 8·4 | | 22·7 | 37·5 | 8·5 |
| 9·3 | | 36·1 | 2·9 | 9·0 |
| 10·2 | 10 | 0·1 | 2·1 | |
| 9·3 | | 1·3 | 28·4 | |
| 9·8 | | 6·6 | 3·1 | |
| 9·4 | | 18·6 | 9·4 | |
| 10·2 | | 29·7 | 39·4 | |
| 9·1 | | 33·6 | 42·7 | |
| 7·8 | | 47·9 | 53·6 | 8·0 G |
| 9·3 | 11 | 35·2 | 38·4 | |
| 10·2 | | 50·1 | 5·1 | |
| 7·0 | 12 | 15·9 | 10·6 | G |
| 10·2 | 13 | 30·6 | 6·5 | |
| 9·2 | 14 | 9·9 | 14·0 | 8·5 G |
| 10·0 | | 46·9 | 10·2 | |
| 9·2 | 15 | 22·4 | 46·8 | |
| 7·7 | | 31·1 | 47·2 | |
| 10·1 | 16 | 4·7 | 32·4 | |
| 8·2 | 17 | 56·6 | 10·4 | 8·0 G |
| 9·4 | 18 | 16·8 | 21·5 | |
| 8·9 | | 25·6 | 9·7 | 9·0 |
| 9·6 | | 28·4 | 19·1 | |
| 10·0 | | 49·0 | 34·9 | |
| 9·2 | 19 | 12·2 | 52·1 | |
| 10·0 | | 56·5 | 48·5 | |
| 9·5 | 21 | 12·6 | 22·5 | |
| 9·2 | 22 | 7·3 | 5·7 | 9·5 |
| 10·0 | | 42·5 | 27·9 | |
| 9·1 | 23 | 41·0 | 45·9 | |
| 9·6 | | 55·5 | 49·1 | |

### 4801—4860.

| mag. | $22^{h}$—$23^{h}$ m | s | −63° ′ | |
|---|---|---|---|---|
| 9·0 | 24 | 0·0 | 22·6 | 9·0 |
| 9·2 | 25 | 28·5 | 14·6 | |
| 9·5 | | 48·5 | 2·0 | |
| 9·2 | 26 | 31·0 | 26·5 | |
| 9·6 | | 45·5 | 44·0 | |
| 9·4 | 29 | 13·0 | 16·0 | |
| 9·5 | 30 | 2·0 | 12·0 | |
| 10·0 | | 16·0 | 41·1 | |
| 9·5 | 31 | 33·0 | 42·0 | |
| 8·7 | 32 | 0·0 | 9·2 | 8·5 |
| 10·0 | | 3·5 | 8·0 | |
| 8·4 | | 40·5 | 35·4 | 7·8 G |
| 8·7 | 33 | 21·5 | 55·4 | 8·5 |
| 7·9 | 36 | 22·0 | 12·1 | 7·0 G |
| 9·2 | 37 | 3·0 | 13·0 | 9·0 G |
| 9·4 | | 42·0 | 40·3 | |
| 9·4 | 38 | 4·5 | 12·5 | |
| 9·2 | | 15·5 | 43·5 | |
| 9·0 | 39 | 29·0 | 1·1 | |
| 9·2 | | 54·5 | 43·3 | G |
| 10·0 | 40 | 57·0 | 5·1 | |
| 9·5 | 42 | 9·5 | 53·0 | |
| 9·7 | | 14·5 | 52·3 | |
| 8·0 | | 47·5 | 28·5 | 7·0 GS |
| 8·2 | 43 | 3·0 | 30·9 | 7·5 G |
| 7·2 | 44 | 2·5 | 51·1 | GS |
| 10·0 | | 33·0 | 27·1 | |
| 7·9 | | 46·0 | 28·8 | 7·5 GS |
| 10·0 | 45 | 49·0 | 38·1 | |
| 9·2 | 48 | 2·5 | 11·9 | 9·5 |
| 9·7 | 50 | 24·5 | 24·1 | |
| 9·5 | 51 | 43·5 | 27·4 | |
| 7·3 | | 49·0 | 26·4 | GS |
| 10·0 | | 53·0 | 27·7 | |
| 7·7 | 54 | 1·5 | 45·3 | 7·5 GS |
| 9·2 | 55 | 0·5 | 24·9 | 9·5 |
| 7·4 | | 21·0 | 3·3 | 8·0 G |
| 9·0 | | 24·0 | 29·1 | 9·0 |
| 10·0 | | 36·8 | 50·2 | |
| 10·0 | | 40·0 | 45·0 | |
| 9·5 | 56 | 2·5 | 30·3 | |
| 9·4 | | 5·5 | 52·4 | |
| 8·4 | | 56·8 | 59·9 | 9·0 |
| 10·0 | 57 | 32·5 | 46·0 | |
| 8·7 | | 33·5 | 56·1 | 9·0 |
| 7·6 | | 38·0 | 3·9 | 7·5 G |
| 8·6 | | 53·0 | 3·1 | 9·0 |
| 10·0 | 58 | 3·8 | 51·0 | |
| 10·1 | | 7·0 | 18·4 | |
| 10·1 | | 28·0 | 17·4 | |
| 9·4 | 0 | 14·0 | 35·3 | |
| 9·4 | | 19·5 | 0·0 | |
| 9·4 | | 20·5 | 42·4 | |
| 10·1 | 1 | 8·5 | 43·9 | |
| 9·0 | | 24·0 | 28·0 | 9·5 |
| 10·1 | 2 | 56·5 | 18·8 | |
| 8·2 | 3 | 29·0 | 52·1 | 7·5 GS |
| 9·6 | 4 | 34·5 | 31·4 | |
| 9·4 | | 53·5 | 18·0 | |
| 9·6 | 5 | 31·0 | 10·0 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 20 | 40 | 128 | 5·4 |
| | 50 | 126 | 5·6 |
| 21 | 0 | 124 | 5·9 |
| | 10 | 122 | 6·2 |
| | 20 | 120 | 6·4 |
| | 30 | 118 | 6·6 |
| | 40 | 115 | 6·8 |
| | 50 | 113 | 7·0 |
| 22 | 0 | 110 | 7·2 |
| | 10 | 108 | 7·4 |
| | 20 | 105 | 7·6 |
| | 30 | 102 | 7·7 |
| | 40 | 100 | 7·9 |
| | 50 | 97 | 8·0 |
| 23 | 0 | 94 | 8·1 |
| | 10 | 91 | 8·2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 0 | 94 | 8·1 |
| | 10 | 91 | 8·2 |
| | 20 | 88 | 8·2 |
| | 30 | 86 | 8·3 |
| | 40 | 83 | 8·3 |
| | 50 | 80 | 8·3 |
| 0 | 0 | 77 | 8·4 |

## 4861—4883.

| mag. | 23h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·1 | 5 | 40·0 | 34·7 | 9·5 |
| 7·1 | 6 | 23·5 | 22·0 | 6·0 GS |
| 9·8 | 7 | 51·0 | 21·1 | |
| 10·1 | 8 | 29·0 | 54·6 | |
| 9·0 | | 34·0 | 30·3 | |
| 10·1 | 9 | 5·3 | 35·5 | |
| 9·4 | | 21·0 | 13·0 | |
| 8·2 | | 50·5 | 27·8 | 7·5 GS |
| 10·1 | | 54·0 | 20·0 | |
| 10·0 | 10 | 1·0 | 18·8 | |
| 10·1 | | 12·5 | 41·0 | |
| 9·0 | | 38·0 | 40·6 | |
| 9·4 | 11 | 30·5 | 43·6 | |
| 9·8 | 12 | 16·0 | 33·4 | |
| 9·1 | | 18·0 | 25·9 | |
| 10·0 | | 48·0 | 45·5 | |
| 10·0 | 13 | 16·0 | 2·1 | |
| 10·1 | | 23·5 | 40·0 | |
| 8·4 | 15 | 11·0 | 16·1 | 8·0 |
| 10·0 | | 22·0 | 40·1 | |
| 9·1 | | 26·0 | 5·8 | |
| 10·1 | 16 | 5·0 | 21·0 | |
| 10·0 | | 7·5 | 23·1 | |

## 4884—4905.

| mag. | 23h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·2 | 16 | 56·0 | 3·3 | |
| 9·0 | | 58·0 | 24·6 | 8·3 G |
| 9·8 | 17 | 43·0 | 44·9 | |
| 9·8 | 18 | 21·0 | 45·0 | |
| 7·2 | 19 | 10·0 | 55·5 | 7·5 GS |
| 8·2 | | 53·5 | 25·4 | 7·0 GSc |
| 8·8 | 20 | 24·7 | 2·2 | |
| 4·5 | 21 | 44·5 | 48·0 | 6·0 GSc |
| 9·4 | 22 | 22·5 | 10·4 | |
| 10·0 | | 56·5 | 31·0 | |
| 8·8 | 24 | 18·5 | 37·1 | 9·0 |
| 10·0 | | 18·5 | 23·2 | |
| 10·1 | | 22·5 | 0·2 | |
| 9·8 | | 33·0 | 43·3 | |
| 10·1 | | 38·5 | 41·9 | |
| 9·6 | 25 | 52·0 | 49·0 | |
| 9·2 | 26 | 9·5 | 16·2 | |
| 8·8 | | 10·0 | 58·6 | 9·0 G |
| 9·1 | 27 | 48·5 | 12·0 | |
| 10·1 | | 55·5 | 20·6 | |
| 9·1 | 28 | 13·0 | 51·9 | |
| 9·4 | | 52·5 | 52·8 | |

## 4906—4927.

| mag. | 23h. m | s | −63° ′ | |
|---|---|---|---|---|
| 9·4 | 29 | 0·5 | 48·6 | |
| 7·6 | | 28·5 | 26·8 | 8·2 G |
| 9·4 | | 32·5 | 0·2 | |
| 8·8 | | 38·0 | 26·4 | 9·2 G |
| 9·4 | | 50·5 | 39·9 | |
| 10·0 | 30 | 24·0 | 24·0 | |
| 9·1 | | 49·0 | 3·3 | |
| 7·4 | 31 | 43·0 | 34·6 | 7·0 GScr |
| 8·8 | | 47·5 | 27·1 | 9·0 |
| 9·0 | 32 | 4·5 | 56·2 | 9·0 |
| 9·0 | | 6·0 | 44·2 | 9·0 |
| 8·6 | 33 | 7·0 | 33·7 | 9·0 |
| 10·1 | | 16·0 | 45·7 | |
| 9·1 | | 30·0 | 54·6 | |
| 10·0 | 34 | 11·0 | 18·6 | |
| 8·8 | | 44·0 | 13·1 | 9·0 |
| 9·1 | | 57·5 | 5·4 | |
| 10·1 | 35 | 39·5 | 35·0 | |
| 10·0 | 36 | 2·5 | 40·7 | |
| 9·6 | | 54·0 | 56·0 | |
| 10·0 | 37 | 24·5 | 32·0 | |
| 10·1 | 39 | 40·4 | 14·1 | |

## 4928—4949.

| mag. | 23h. m | s | −63° ′ | |
|---|---|---|---|---|
| 10·6 | 40 | 6·7 | 24·0 | |
| 9·2 | | 49·9 | 1·0 | |
| 10·4 | 41 | 38·7 | 32·4 | |
| 7·9 | 43 | 0·4 | 32·0 | 7·0 GS |
| 10·2 | 44 | 58·4 | 5·3 | |
| 10·1 | 45 | 42·7 | 13·1 | |
| 10·4 | 46 | 33·4 | 1·7 | 9·5 |
| 9·5 | 47 | 56·4 | 33·8 | 9·2 |
| 10·4 | | 57·2 | 2·3 | |
| 10·4 | 49 | 30·6 | 45·0 | |
| 7·4 | | 33·6 | 34·1 | 7·0 GS |
| 10·2 | 50 | 41·1 | 7·0 | |
| 6·4 | | 45·6 | 39·2 | 6·0 GScr |
| 7·6 | 51 | 50·6 | 42·1 | 7·0 GSc |
| 9·8 | 54 | 35·6 | 17·4 | |
| 9·2 | | 38·1 | 11·1 | |
| 7·6 | 55 | 2·6 | 37·2 | 7·7 GSg |
| 9·1 | 56 | 31·1 | 34·0 | 9·5 |
| 10·2 | 57 | 40·1 | 51·8 | |
| 10·4 | | 49·6 | 56·0 | |
| 9·6 | 58 | 22·6 | 30·7 | |
| 8·3 | | 47·1 | 32·4 | 8·2 G |

# ZONE—64°

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 71 | 8·3 |
| | 30 | 68 | 8·3 |
| | 40 | 65 | 8·2 |

## 1—15.

| mag. | 0h. m | s | −64° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 18·7 | 24·4 | |
| 10·6 | 1 | 41·7 | 18·1 | |
| 8·6 | 3 | 26·2 | 17·0 | 8·0 |
| 9·8 | 4 | 4·7 | 58·8 | |
| 8·7 | | 23·7 | 19·7 | 9·0 |
| 10·0 | | 47·7 | 8·3 | |
| 9·2 | 6 | 19·7 | 58·0 | |
| 9·6 | 8 | 36·2 | 52·3 | |
| 10·0 | 9 | 36·7 | 39·1 | |
| 10·0 | | 41·2 | 26·2 | |
| 9·6 | | 51·2 | 14·7 | |
| 9·1 | 10 | 16·7 | 44·0 | 9·5 |
| 9·6 | | 33·7 | 33·1 | |
| 10·4 | 11 | 15·2 | 50·1 | |
| 10·0 | 12 | 2·7 | 45·0 | |

## 16—30.

| mag. | 0h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·1 | 12 | 18·7 | 21·6 | |
| 7·8 | | 23·2 | 10·1 | G |
| 10·0 | | 24·1 | 2·7 | |
| 10·4 | | 49·7 | 25·7 | |
| 9·8 | 13 | 57·7 | 20·3 | |
| 10·0 | 15 | 25·7 | 0·7 | |
| 9·5 | | 58·7 | 53·3 | |
| 8·9 | 16 | 37·7 | 22·2 | 9·5 |
| 9·6 | | 45·2 | 44·5 | |
| 10·0 | 18 | 3·8 | 16·3 | |
| 10·1 | | 25·7 | 13·2 | |
| 8·6 | 19 | 7·7 | 38·6 | G |
| 10·2 | | 8·5 | 22·6 | |
| 10·8 | | 32·7 | 21·9 | |
| 8·4 | | 48·7 | 42·1 | G |

## 31—45.

| mag. | 0h. m | s | −64° ′ |
|---|---|---|---|
| 10·5 | 21 | 3·5 | 44·1 |
| 10·9 | | 14·2 | 35·1 |
| 10·8 | | 38·2 | 26·6 |
| 9·8 | 22 | 39·9 | 23·9 |
| 10·8 | 23 | 31·7 | 28·9 |
| 10·0 | | 51·2 | 5·1 |
| 10·2 | 24 | 9·7 | 54·0 |
| 10·4 | | 20·2 | 34·2 |
| 9·5 | 25 | 29·2 | 59·1 |
| 10·4 | | 34·2 | 32·7 |
| 10·4 | | 49·2 | 38·3 |
| 10·9 | | 49·2 | 3·9 |
| 10·6 | 26 | 0·2 | 2·9 |
| 10·8 | | 25·2 | 34·7 |
| 10·8 | | 30·2 | 57·2 |

## 46—60.

| mag. | 0h. m | s | −64° ′ | |
|---|---|---|---|---|
| 10·9 | 26 | 49·7 | 31·7 | |
| 9·4 | 27 | 33·2 | 35·9 | |
| 9·5 | | 38·2 | 11·9 | |
| 9·2 | | 46·2 | 21·9 | ·5 G |
| 10·6 | 28 | 37·7 | 55·3 | |
| 9·2 | 29 | 11·2 | 22·0 | 9·0 G |
| 9·8 | | 57·7 | 56·7 | |
| 10·0 | | 59·2 | 18·9 | |
| 10·0 | 30 | 8·2 | 56·0 | |
| 10·0 | | 48·7 | 21·9 | |
| 10·9 | 31 | 9·2 | 24·1 | |
| 10·5 | | 10·2 | 21·5 | |
| 9·4 | | 39·2 | 30·5 | |
| 10·0 | 32 | 33·2 | 42·5 | |
| 9·6 | | 46·2 | 45·9 | |



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## 61—120.

| mag. | $0^{h}$–$1^{h}$ m | s | −64° ′ | |
|---|---|---|---|---|
| 10.8 | 32 | 56.2 | 13.9 | |
| 10.2 | 34 | 29.2 | 42.1 | |
| 10.0 | | 39.2 | 47.5 | |
| 10.5 | 35 | 26.7 | 51.7 | |
| 10.9 | | 45.2 | 24.1 | |
| 10.6 | 36 | 9.2 | 28.3 | |
| 9.0 | | 15.4 | 37.5 | |
| 9.6 | 37 | 12.4 | 24.5 | |
| 10.0 | 38 | 18.4 | 49.6 | |
| 10.6 | | 51.9 | 5.2 | |
| 9.4 | 39 | 26.4 | 38.6 | |
| 10.6 | | 28.4 | 53.1 | |
| 10.2 | | 30.4 | 18.3 | |
| 10.2 | 40 | 10.4 | 8.8 | |
| 9.6 | 41 | 6.9 | 5.5 | 9.5 |
| 9.6 | 42 | 7.4 | 33.7 | |
| 10.5 | | 39.9 | 39.0 | |
| 10.8 | | 45.2 | 54.8 | |
| 10.6 | 44 | 29.4 | 34.9 | |
| 9.8 | | 33.4 | 26.0 | |
| 8.3 | 45 | 9.9 | 44.9 | |
| 9.8 | | 19.4 | 36.2 | |
| 8.8 | 46 | 16.9 | 22.5 | 9.0 |
| 7.3 | 47 | 24.4 | 25.3 | 7.0 GSg |
| 10.0 | | 30.2 | 54.0 | |
| 9.0 | | 54.4 | 50.5 | 9.0 |
| 10.2 | | 55.9 | 3.2 | |
| 10.4 | 48 | 19.4 | 22.5 | |
| 10.6 | 49 | 1.9 | 33.4 | |
| 10.8 | 51 | 7.4 | 19.8 | |
| 7.7 | | 11.4 | 38.4 | 8.0 GS |
| 10.0 | | 35.4 | 23.6 | |
| 8.3 | | 44.9 | 45.1 | 9.0 |
| 9 | | 58.4 | 46.9 | 9.5 |
| 8.6 | 52 | 36.4 | 34.1 | 9.0 G |
| 8.4 | | 47.9 | 27.0 | 8.5 |
| 10.6 | 53 | 39.4 | 9.6 | |
| 10.5 | 54 | 29.4 | 38.7 | |
| 10.5 | | 43.9 | 24.0 | |
| 9.6 | 55 | 9.4 | 42.0 | |
| 10.6 | | 28.9 | 44.6 | |
| 8.7 | | 46.1 | 58.3 | |
| 9.2 | 56 | 28.7 | 53.6 | 9.0 |
| 10.2 | | 31.4 | 28.7 | |
| 9.6 | 57 | 3.2 | 5.8 | |
| 10.2 | | 5.4 | 44.2 | |
| 8.9 | | 49.1 | 39.4 | |
| 10.6 | | 50.9 | 17.5 | |
| 9.0 | 59 | 8.6 | 48.8 | 9.0 |
| 9.5 | 0 | 0.2 | 25.9 | |
| 9.7 | | 26.7 | 38.7 | |
| 9.7 | 1 | 24.4 | 28.7 | |
| 9.1 | 2 | 9.2 | 1.5 | 8.5 |
| 9.5 | | 39.5 | 34.9 | |
| 9.1 | 3 | 29.2 | 58.7 | 9.5 |
| 9.7 | 4 | 14.0 | 17.9 | |
| 9.6 | 5 | 39.0 | 46.1 | |
| 9.4 | 7 | 31.0 | 45.0 | |
| 9.1 | 8 | 35.5 | 25.3 | 9.5 |
| 9.7 | | 36.0 | 51.4 | |

## 121—180.

| mag. | $1^{h}$–$2^{h}$ m | s | −64° ′ | |
|---|---|---|---|---|
| 9.0 | 9 | 33.0 | 45.0 | |
| 9.0 | 11 | 14.5 | 44.3 | |
| 9.7 | | 52.8 | 59.1 | |
| 9.0 | 12 | 14.0 | 10.1 | |
| 9.8 | | 24.0 | 23.2 | |
| 9.7 | 13 | 0.0 | 9.9 | |
| 9.7 | 18 | 3.0 | 24.0 | |
| 9.1 | 19 | 10.5 | 1.2 | |
| 9.0 | 20 | 38.0 | 36.7 | |
| 9.8 | 22 | 14.0 | 6.7 | |
| 9.7 | 25 | 25.0 | 33.1 | 9.5 |
| 9.7 | 28 | 9.0 | 37.6 | |
| 8.7 | | 55.0 | 30.6 | |
| 9.6 | 31 | 31.0 | 9.8 | |
| 9.1 | 41 | 41.7 | 23.0 | |
| 9.2 | 43 | 26.5 | 4.9 | |
| 9.1 | | 40.5 | 13.9 | 8.5 S |
| 8.5 | 44 | 42.0 | 58.5 | 8.0 G |
| 8.2 | 45 | 22.5 | 8.3 | 8.5 S |
| 8.9 | | 51.5 | 0.4 | |
| 9.2 | 49 | 20.5 | 23.9 | |
| 9.2 | 53 | 11.0 | 39.2 | |
| 9.2 | 55 | 39.5 | 29.5 | |
| 9.2 | 56 | 23.0 | 34.5 | |
| 9.2 | 57 | 1.0 | 43.0 | |
| 9.2 | | 8.0 | 0.8 | |
| 9.3 | | 56.0 | 40.6 | |
| 7.4 | 58 | 16.5 | 13.6 | GS |
| 9.2 | 59 | 5.5 | 27.5 | |
| 9.1 | | 36.0 | 30.9 | |
| 8.7 | | 40.0 | 50.0 | |
| 9.3 | 0 | 36.0 | 33.3 | |
| 9.2 | 2 | 58.0 | 58.2 | |
| 9.1 | 3 | 10.0 | 54.9 | |
| 9.2 | 4 | 23.2 | 58.0 | |
| 7.8 | 6 | 45.0 | 56.8 | 8.0 GS |
| 9.2 | 7 | 31.0 | 16.9 | |
| 9.2 | 9 | 16.5 | 52.9 | |
| 8.0 | 10 | 58.0 | 22.7 | 8.5 G |
| 9.2 | 15 | 12.0 | 52.4 | 9.2 |
| 8.2 | 16 | 38.3 | 7.2 | 9.0 |
| 8.6 | 18 | 37.8 | 2.4 | 8.5 |
| 9.1 | | 40.5 | 54.4 | 9.0 |
| 9.5 | 19 | 43.0 | 43.1 | |
| 9.1 | 20 | 9.7 | 38.0 | |
| 8.7 | 21 | 22.8 | 17.6 | 8.0 G |
| 8.7 | | 27.3 | 34.1 | |
| 9.1 | 22 | 24.5 | 47.9 | |
| 9.4 | | 34.5 | 6.9 | |
| 9.0 | | 56.5 | 12.6 | |
| 9.4 | 23 | 26.0 | 0.5 | |
| 9.1 | 24 | 45.0 | 11.0 | |
| 9.5 | | 48.5 | 13.1 | |
| 6.4 | 25 | 8.0 | 51.6 | 6.5 GSg |
| 9.4 | 27 | 27.5 | 23.9 | |
| 8.7 | | 29.0 | 27.3 | |
| 9.1 | | 29.5 | 3.9 | |
| 7.5 | | 59.0 | 35.9 | 7.5 GS |
| 8.9 | 28 | 37.5 | 7.7 | |
| 9.5 | | 43.0 | 5.4 | |

## 181—240.

| mag. | $2^{h}$–$3^{h}$ m | s | −64° ′ | |
|---|---|---|---|---|
| 8.9 | 28 | 52.0 | 31.9 | 9.0 G |
| 9.4 | 29 | 37.5 | 11.9 | |
| 9.0 | | 40.0 | 4.4 | |
| 9.5 | | 48.0 | 58.6 | |
| 9.0 | | 53.5 | 20.7 | |
| 9.1 | 30 | 49.5 | 8.5 | |
| 9.1 | 31 | 25.5 | 27.5 | |
| 9.0 | 33 | 25.0 | 1.4 | |
| 9.1 | | 38.5 | 6.1 | |
| 9.1 | 34 | 1.0 | 29.4 | |
| 9.4 | 36 | 26.5 | 20.4 | |
| 6.4 | | 50.0 | 49.2 | 6.5 GS |
| 9.3 | 37 | 39.0 | 45.6 | |
| 9.3 | 38 | 36.5 | 21.9 | |
| 8.6 | 40 | 58.7 | 1.1 | |
| 6.8 | 42 | 47.5 | 13.8 | 6.0 GSc |
| 8.6 | 43 | 25.5 | 55.2 | 9.0 |
| 9.4 | 44 | 13.5 | 50.0 | 9.0 |
| 9.4 | 45 | 8.5 | 19.0 | |
| 8.6 | | 9.0 | 53.1 | 9.0 G |
| 8.5 | 47 | 35.0 | 31.9 | 8.5 G |
| 9.0 | 48 | 41.5 | 34.2 | 9.0 |
| 7.6 | 49 | 1.0 | 3.2 | 7.0 GSc |
| 8.3 | | 34.5 | 31.9 | 8.0 Gg |
| 9.0 | 51 | 10.0 | 50.9 | 9.0 G |
| 7.7 | | 59.0 | 56.6 | 7.0 GS |
| 7.8 | 52 | 19.0 | 30.6 | 7.0 GScg |
| 8.0 | | 29.0 | 32.8 | 8.0 GS |
| 9.5 | 53 | 18.5 | 6.0 | |
| 8.2 | | 47.5 | 20.2 | 8.0 G |
| 9.5 | 54 | 11.0 | 5.6 | |
| 8.7 | | 29.0 | 30.8 | 8.5 |
| 8.6 | | 42.0 | 21.3 | 8.0 G |
| 8.9 | 55 | 17.0 | 46.3 | |
| 5.3 | 56 | 26.0 | 34.1 | 5.0 GS |
| 8.2 | 57 | 16.5 | 7.5 | 7.5 GSc |
| 9.5 | | 28.0 | 31.0 | |
| 9.1 | | 34.7 | 6.1 | 9.0 |
| 9.3 | | 57.5 | 0.7 | 8.5 |
| 7.6 | 0 | 10.3 | 21.5 | 8.0 G |
| 8.9 | 1 | 46.7 | 49.8 | |
| 9.1 | | 48.5 | 42.0 | |
| 9.6 | 2 | 11.0 | 3.7 | |
| 9.6 | 4 | 16.0 | 13.7 | G |
| 8.6 | | 40.0 | 11.8 | G |
| 9.0 | 5 | 5.5 | 31.2 | |
| 8.7 | 6 | 21.0 | 35.4 | |
| 9.6 | | 32.0 | 48.0 | |
| 6.6 | 7 | 51.5 | 23.1 | GS |
| 9.4 | | 54.0 | 42.8 | |
| 9.1 | | 56.0 | 22.5 | G |
| 9.4 | 8 | 49.5 | 15.3 | |
| 9.1 | 9 | 59.5 | 47.5 | |
| 8.6 | 10 | 2.0 | 48.1 | |
| 6.5 | 13 | 12.0 | 54.2 | 7.0 GS |
| 8.7 | 14 | 42.0 | 38.1 | |
| 8.9 | 15 | 41.0 | 15.8 | |
| 9.5 | | 55.5 | 36.6 | |
| 8.7 | 20 | 13.3 | 0.2 | 8.5 |
| 9.6 | 21 | 12.0 | 7.3 | |

## 241—300.

| mag. | $3^{h}$–$4^{h}$ m | s | −64° ′ | |
|---|---|---|---|---|
| 9.6 | 22 | 1.5 | 41.3 | |
| 9.6 | | 2.0 | 17.0 | |
| 9.4 | 24 | 2.5 | 1.3 | 9.0 |
| 8.9 | 25 | 33.5 | 45.9 | 8.5 G |
| 8.3 | 26 | 7.0 | 40.3 | 8.5 G |
| 9.6 | | 16.5 | 6.1 | |
| 8.5 | 27 | 6.5 | 23.2 | |
| 8.9 | | 39.8 | 1.4 | 8.5 |
| 8.3 | 28 | 36.0 | 32.7 | 8.0 G |
| 8.4 | 29 | 52.5 | 6.0 | 8.5 G |
| 9.6 | 30 | 37.5 | 50.4 | |
| 9.6 | 31 | 39.0 | 33.8 | |
| 9.6 | 33 | 34.0 | 40.6 | |
| 8.6 | | 34.5 | 4.8 | |
| 9.4 | 35 | 25.5 | 8.2 | |
| 9.3 | 36 | 46.5 | 56.3 | |
| 9.1 | 37 | 13.0 | 38.2 | |
| 8.8 | 38 | 19.3 | 26.4 | 8.5 G |
| 9.4 | | 24.0 | 36.3 | |
| 9.3 | | 54.0 | 3.1 | |
| 8.9 | 39 | 24.0 | 17.2 | 8.5 |
| 8.5 | 40 | 56.2 | 35.5 | 7.5 GS |
| 9.8 | | 56.5 | 23.8 | |
| 10.1 | 41 | 31.5 | 2.2 | |
| 10.1 | | 49.5 | 0.3 | |
| 9.2 | | 56.8 | 36.2 | |
| 9.8 | 42 | 42.5 | 48.9 | |
| 10.1 | 43 | 14.5 | 29.1 | |
| 8.3 | | 28.0 | 7.1 | 7.2 GS |
| 8.5 | 44 | 32.5 | 27.9 | 8.5 |
| 9.0 | | 33.5 | 27.5 | 9.5 |
| 8.8 | 45 | 40.5 | 43.2 | 8.8 |
| 9.4 | 47 | 10.0 | 30.2 | 10.0 |
| 9.7 | | 19.5 | 53.4 | |
| 10.1 | 48 | 21.0 | 58.3 | |
| 9.8 | | 45.5 | 22.1 | |
| 9.0 | | 53.5 | 26.9 | 9.5 |
| 10.1 | 49 | 18.5 | 50.9 | |
| 9.0 | | 23.0 | 9.4 | 9.0 |
| 10.1 | 52 | 44.5 | 5.6 | |
| 10.1 | 54 | 1.0 | 3.5 | |
| 10.1 | | 34.0 | 41.4 | |
| 10.0 | | 57.0 | 49.7 | |
| 9.8 | 55 | 6.7 | 1.3 | |
| 10.1 | | 39.5 | 49.0 | |
| 9.4 | 56 | 12.5 | 59.0 | |
| 8.2 | | 18.5 | 22.6 | 8.8 |
| 10.1 | | 27.0 | 45.1 | |
| 9.2 | | 32.5 | 6.2 | |
| 10.1 | | 52.5 | 48.5 | |
| 9.4 | 57 | 17.0 | 11.2 | |
| 10.1 | 58 | 28.5 | 50.0 | |
| 10.1 | | 50.5 | 20.1 | |
| 7.6 | 59 | 30.5 | 46.2 | 8.0 G |
| 9.0 | 0 | 13.5 | 3.3 | |
| 8.7 | | 34.5 | 55.1 | 8.5 |
| 10.1 | | 40.5 | 7.3 | |
| 9.1 | 1 | 29.5 | 24.0 | |
| 10.1 | 3 | 30.5 | 30.1 | |
| 9.5 | | 35.0 | 28.5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 30 | 68 | 8.3 |
| | 40 | 65 | 8.2 |
| | 50 | 62 | 8.2 |
| 1 | 0 | 59 | 8.1 |
| | 10 | 56 | 8.0 |
| | 20 | 53 | 7.9 |
| | 30 | 50 | 7.7 |
| | 40 | 47 | 7.6 |
| | 50 | 44 | 7.4 |
| 2 | 0 | 42 | 7.2 |
| | 10 | 39 | 7.0 |
| | 20 | 37 | 6.8 |
| | 30 | 34 | 6.6 |
| | 40 | 32 | 6.4 |
| | 50 | 29 | 6.2 |
| 3 | 0 | 27 | 5.9 |
| | 10 | 25 | 5.6 |
| | 20 | 23 | 5.4 |
| | 30 | 21 | 5.1 |
| | 40 | 19 | 4.8 |
| | 50 | 18 | 4.5 |
| 4 | 0 | 16 | 4.2 |
| | 10 | 15 | 3.9 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 0 | 16 | 4·2 |
| | 10 | 15 | 3·9 |
| | 20 | 13 | 3·5 |
| | 30 | 12 | 3·2 |
| | 40 | 11 | 2·9 |
| | 50 | 10 | 2·5 |
| 5 | 0 | 9 | 2·2 |
| | 10 | 8 | 1·8 |
| | 20 | 8 | 1·5 |
| | 30 | 7 | 1·1 |
| | 40 | 7 | 0·7 |
| | 50 | 7 | 0·4 |
| | | 7 | 0·0 |
| 6 | 0 | | — |
| | 10 | 7 | 0·4 |
| | 20 | 7 | 0·7 |
| | 30 | 7 | 1·1 |

## 301—360

| mag. | 4ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 10·1 | 4 | 8·5 | 13·2 | |
| 9·0 | | 16·5 | 15·9 | 8·5 |
| 10·1 | | 43·5 | 25·4 | |
| 10·1 | 5 | 31·0 | 43·2 | |
| 6·2 | 6 | 0·5 | 33·8 | 6·5 GSc |
| 8·4 | | 41·5 | 56·1 | 8·8 |
| 9·8 | | 47·0 | 7·3 | |
| 9·5 | 9 | 42·0 | 11·9 | |
| 9·2 | 11 | 10·5 | 39·5 | 8·8 G |
| 10·1 | | 17·5 | 13·4 | |
| 8·2 | | 24·5 | 34·2 | 9·0 |
| 10·1 | | 35·5 | 39·6 | |
| 10·1 | 12 | 45·0 | 1·1 | |
| 9·2 | 13 | 23·5 | 9·8 | |
| 9·8 | | 47·5 | 11·1 | |
| 10·1 | 14 | 24·5 | 21·3 | |
| 7·5 | 15 | 29·0 | 37·3 | 8·5 GS |
| 10·1 | | 41·5 | 49·5 | |
| 10·1 | 16 | 14·5 | 34·2 | |
| 8·5 | | 34·5 | 12·8 | |
| 10·1 | | 50·5 | 35·3 | |
| 10·1 | | 57·3 | 48·3 | |
| 10·1 | 17 | 28·5 | 36·3 | |
| 9·8 | 19 | 57·0 | 11·7 | |
| 10·1 | 20 | 6·5 | 28·2 | |
| 9·6 | 22 | 40·0 | 58·1 | |
| 9·4 | | 41·3 | 27·1 | |
| 8·8 | 23 | 6·5 | 28·4 | 8·5 |
| 8·9 | | 6·7 | 33·1 | 8·5 |
| 9·4 | | 9·0 | 28·2 | |
| 9·6 | | 36·0 | 47·1 | |
| 9·3 | | 43·0 | 0·5 | |
| 9·9 | 24 | 2·0 | 31·1 | |
| 8·4 | | 2·5 | 22·3 | 8·0 GS |
| 9·4 | | 6·0 | 31·1 | |
| 9·6 | | 9·0 | 52·6 | |
| 9·0 | 25 | 20·0 | 18·3 | |
| 9·0 | 26 | 3·0 | 25·0 | |
| 8·6 | | 24·0 | 3·6 | |
| 9·8 | 27 | 7·5 | 31·7 | |
| 9·3 | | 50·0 | 29·1 | |
| 8·9 | | 57·0 | 50·2 | 8·2 |
| 9·0 | 28 | 9·0 | 17·3 | 9·0 |
| 9·9 | | 12·5 | 21·4 | |
| 9·0 | | 45·0 | 59·8 | S |
| 9·4 | | 56·0 | 20·3 | |
| 9·6 | 29 | 39·5 | 15·9 | |
| 9·4 | 30 | 0·0 | 59·3 | |
| 9·3 | | 5·5 | 34·3 | |
| 9·1 | | 36·5 | 36·1 | |
| 9·8 | 31 | 2·5 | 44·1 | |
| 9·6 | 32 | 30·5 | 17·6 | |
| 9·0 | 33 | 45·5 | 55·3 | |
| 9·3 | 34 | 27·5 | 10·1 | |
| 9·9 | | 43·5 | 21·4 | |
| 9·5 | | 48·5 | 16·8 | |
| 9·0 | 36 | 32·5 | 22·1 | |
| 9·9 | 37 | 10·0 | 18·5 | |
| 9·6 | | 27·5 | 31·8 | |
| 9·6 | 38 | 31·0 | 7·5 | |

400

## 361—420.

| mag. | 4ʰ·—5ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 39 | 4·0 | 17·5 | |
| 9·8 | | 15·0 | 24·7 | |
| 8·7 | 40 | 13·0 | 40·8 | 9·0 |
| 8·7 | | 25·5 | 42·5 | 9·0 |
| 8·8 | 42 | 18·5 | 9·3 | |
| 9·8 | | 50·0 | 34·9 | |
| 9·8 | 43 | 10·0 | 11·5 | |
| 9·6 | | 22·5 | 15·2 | |
| 8·8 | | 49·8 | 0·2 | 9·0 |
| 9·8 | 45 | 6·0 | 19·7 | |
| 8·7 | 48 | 1·5 | 36·1 | 8·5 G |
| 9·4 | | 9·0 | 0·0 | |
| 9·6 | | 54·0 | 54·1 | |
| 9·4 | 50 | 25·5 | 4·9 | |
| 9·4 | 51 | 19·0 | 8·7 | |
| 9·9 | | 33·5 | 3·1 | |
| 9·5 | | 52·0 | 18·1 | |
| 9·9 | 52 | 42·0 | 24·0 | |
| 9·3 | | 47·0 | 21·1 | |
| 8·6 | 53 | 18·5 | 2·2 | 9·0 G |
| 9·8 | | 49·0 | 10·1 | |
| 9·8 | | 55·5 | 54·3 | |
| 9·9 | 54 | 0·0 | 41·1 | |
| 7·9 | | 17·0 | 9·3 | 8·0 GS |
| 9·9 | | 26·5 | 6·5 | |
| 9·3 | | 43·0 | 55·8 | |
| 9·6 | | 44·0 | 58·4 | |
| 9·6 | 55 | 2·5 | 18·9 | |
| 8·7 | | 22·0 | 46·5 | 8·5 G |
| 9·4 | | 42·5 | 40·9 | |
| 9·9 | | 47·0 | 3·6 | |
| 9·5 | 56 | 24·5 | 32·8 | |
| 9·5 | | 47·0 | 42·4 | G |
| 9·2 | 57 | 7·5 | 47·1 | 9·0 G |
| 9·0 | | 44·0 | 8·7 | 9·0 |
| 9·8 | | 46·0 | 11·8 | |
| 8·4 | 59 | 45·8 | 34·3 | 7·0 GS |
| 9·4 | | 51·0 | 37·3 | |
| 10·0 | | 55·5 | 35·4 | |
| 9·3 | 0 | 38·5 | 21·9 | |
| 10·0 | 2 | 4·5 | 1·7 | |
| 9·3 | | 23·5 | 9·6 | |
| 9·2 | | 31·5 | 42·5 | 8·5 G |
| 9·3 | 3 | 12·5 | 21·7 | |
| 8·4 | 4 | 3·0 | 42·8 | 7·8 GS |
| 9·7 | | 4·0 | 37·6 | |
| 9·8 | | 48·5 | 37·0 | |
| 9·7 | | 51·5 | 46·4 | |
| 10·0 | | 51·5 | 24·8 | |
| 9·7 | 5 | 17·5 | 32·5 | |
| 10·0 | | 30·5 | 10·3 | |
| 10·0 | | 37·5 | 35·5 | |
| 9·1 | 6 | 43·8 | 59·5 | |
| 9·3 | | 58·5 | 42·0 | |
| 10·0 | 7 | 18·0 | 13·7 | |
| 9·2 | 8 | 14·5 | 5·9 | |
| 10·0 | | 42·5 | 22·2 | |
| 9·1 | 9 | 0·5 | 32·2 | |
| 9·1 | | 20·5 | 41·9 | |
| 8·9 | 10 | 0·5 | 26·6 | |

## 421—480.

| mag. | 5ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·1 | 10 | 5·5 | 24·4 | |
| 10·0 | | 20·5 | 10·2 | |
| 9·5 | 11 | 29·5 | 47·0 | |
| 10·0 | | 40·5 | 10·7 | |
| 9·5 | | 46·0 | 10·9 | |
| 10·0 | | 55·0 | 30·0 | |
| 10·0 | | 58·5 | 30·9 | |
| 9·5 | 12 | 3·0 | 22·8 | *g* |
| 9·8 | | 18·0 | 20·1 | |
| 9·8 | 13 | 5·5 | 46·8 | |
| 8·9 | | 10·5 | 36·5 | 9·0 *g* |
| 9·5 | | 39·5 | 33·1 | |
| 9·7 | 14 | 10·5 | 50·2 | |
| 10·0 | | 22·5 | 39·8 | |
| 9·5 | | 59·0 | 3·9 | |
| 9·3 | 15 | 48·5 | 29·0 | *g* |
| 9·5 | 18 | 54·5 | 47·2 | *g* |
| 9·7 | 19 | 33·5 | 48·9 | *g* |
| 8·3 | 20 | 14·5 | 11·8 | 8·0 GS*g* |
| 9·7 | | 21·0 | 38·0 | |
| 8·0 | | 21·5 | 27·3 | 8·5 GS*g* |
| 8·8 | 24 | 10·5 | 28·5 | 6·5 G*g* |
| 10·0 | 25 | 9·5 | 5·3 | |
| 10·0 | | 22·0 | 37·5 | |
| 9·5 | | 50·0 | 22·0 | 9·0 *g* |
| 7·0 | 26 | 1·5 | 25·6 | 7·5 GS*g* |
| 8·4 | | 9·5 | 42·2 | 8·0 G*g* |
| 9·5 | | 16·0 | 8·3 | |
| 10·0 | | 26·5 | 23·7 | *g* |
| 9·7 | 27 | 54·5 | 50·6 | |
| 10·0 | 28 | 15·5 | 33·9 | |
| 6·7 | 29 | 30·2 | 1·4 | GS*g* |
| 9·5 | 30 | 29·0 | 39·5 | *g* |
| 9·4 | | 47·0 | 11·0 | *g* |
| 10·0 | 31 | 22·5 | 4·9 | |
| 6·1 | 32 | 18·5 | 18·6 | 5·0 GSc*g* |
| 10·0 | | 50·5 | 45·0 | |
| 8·4 | | 50·5 | 29·9 | *g* |
| 9·2 | 35 | 14·5 | 0·1 | *g* |
| 10·0 | | 44·0 | 50·7 | *g* |
| 8·8 | | 54·5 | 51·0 | *g* |
| 10·0 | | 55·5 | 52·1 | |
| 10·0 | 37 | 24·0 | 55·2 | |
| 8·7 | | 33·0 | 58·6 | 9·5 *g* |
| 9·3 | 38 | 7·5 | 9·5 | *g* |
| 10·0 | | 24·0 | 2·9 | |
| 9·6 | | 47·2 | 51·4 | 9·0 *g* |
| 9·9 | 39 | 53·0 | 19·7 | |
| 9·9 | | 59·0 | 20·6 | |
| 9·3 | 40 | 3·0 | 55·2 | *g* |
| 10·0 | 42 | 0·0 | 0·8 | |
| 10·1 | | 0·5 | 7·9 | |
| 9·4 | | 16·0 | 7·7 | *g* |
| 9·7 | | 52·0 | 46·0 | |
| 9·4 | 43 | 44·5 | 23·9 | *g* |
| 9·4 | 44 | 7·0 | 48·6 | *g* |
| 8·8 | 46 | 33·5 | 48·1 | *g* |
| 9·3 | | 50·3 | 2·3 | |
| 9·4 | | 52·0 | 36·9 | *g* |
| 10·0 | 47 | 22·0 | 39·6 | |

## 481—540.

| mag. | 5ʰ·—6ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·4 | 47 | 23·5 | 25·2 | |
| 10·1 | | 25·5 | 2·0 | |
| 9·4 | | 50·5 | 24·0 | |
| 9·4 | | 52·3 | 1·7 | *g* |
| 9·9 | 50 | 30·2 | 57·8 | |
| 7·2 | | 42·0 | 3·7 | 7·0 GSc*g* |
| 9·4 | 51 | 3·0 | 42·4 | |
| 9·7 | | 16·8 | 2·1 | |
| 9·4 | | 35·0 | 42·5 | |
| 10·1 | | 46·5 | 27·8 | |
| 9·4 | 52 | 1·5 | 1·7 | *g* |
| 9·6 | | 8·0 | 53·0 | *g* |
| 8·9 | | 54·0 | 41·4 | 8·5 *g* |
| 10·1 | 53 | 31·0 | 0·1 | |
| 6·7 | | 38·5 | 30·2 | 6·5 GSc*g* |
| 10·0 | | 57·0 | 2·1 | |
| 10·0 | | 57·0 | 39·3 | |
| 10·0 | 55 | 51·0 | 13·0 | |
| 10·1 | 56 | 9·5 | 14·2 | |
| 9·6 | 57 | 22·5 | 18·3 | *g* |
| 9·9 | | 38·0 | 6·6 | |
| 9·4 | | 38·7 | 57·9 | |
| 8·9 | | 42·0 | 10·2 | *g* |
| 10·0 | | 57·5 | 33·6 | |
| 9·6 | 58 | 19·0 | 44·0 | |
| 9·3 | | 23·0 | 12·9 | |
| 9·1 | | 23·5 | 23·0 | *g* |
| 9·4 | | 55·0 | 28·3 | *g* |
| 9·9 | 59 | 12·5 | 27·3 | |
| 7·9 | | 31·0 | 18·7 | 7·5 GS*g* |
| 10·1 | 0 | 49·0 | 3·5 | |
| 7·6 | 1 | 25·5 | 51·3 | 7·5 GS*g* |
| 9·4 | | 38·3 | 1·7 | |
| 9·8 | 2 | 39·0 | 55·8 | |
| 10·0 | 6 | 20·5 | 53·9 | |
| 8·9 | | 35·5 | 22·0 | 8·0 *g* |
| 10·0 | | 41·0 | 23·9 | |
| 9·6 | | 41·0 | 32·3 | *g* |
| 9·6 | | 45·5 | 2·3 | |
| 8·8 | 7 | 13·0 | 25·1 | 9·0 *g* |
| 9·7 | | 47·0 | 5·9 | |
| 9·3 | 9 | 35·5 | 18·7 | 9·5 *g* |
| 9·6 | 11 | 55·5 | 14·0 | |
| 10·0 | 13 | 22·0 | 38·3 | *g* |
| 8·0 | 14 | 20·5 | 20·0 | *g* |
| 9·7 | 16 | 39·0 | 15·3 | |
| 9·6 | | 45·5 | 5·0 | *g* |
| 8·2 | 17 | 0·5 | 33·0 | 9·0 *g* |
| 9·4 | 18 | 11·5 | 29·7 | *g* |
| 8·8 | | 13·8 | 44·1 | 9·0 *g* |
| 9·6 | | 24·5 | 51·5 | *g* |
| 9·7 | | 45·5 | 46·3 | |
| 10·0 | | 52·0 | 53·8 | |
| 10·0 | 19 | 50·5 | 47·4 | |
| 9·4 | 20 | 21·2 | 39·5 | *g* |
| 9·5 | | 34·6 | 58·0 | |
| 10·0 | | 44·0 | 31·6 | |
| 9·7 | | 48·0 | 9·4 | |
| 9·4 | 21 | 19·2 | 44·5 | |
| 10·0 | | 36·0 | 20·0 | |

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## 541—600.

| mag. | 6h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 21 | 46·0 | 22·1 | |
| 10·0 | | 55·0 | 51·4 | |
| 10·0 | 22 | 1·7 | 58·0 | |
| 9·5 | | 11·0 | 21·8 | g |
| 10·0 | | 12·0 | 55·0 | |
| 9·6 | | 13·5 | 43·2 | |
| 8·5 | | 17·0 | 28·6 | 8·0 g |
| 9·2 | | 30·0 | 28·9 | 9·5 g |
| 9·8 | | 33·0 | 13·5 | |
| 10·0 | 23 | 12·0 | 33·8 | |
| 9·3 | | 22·2 | 58·0 | g |
| 10·0 | | 49·0 | 25·5 | |
| 9·8 | | 52·0 | 25·8 | |
| 9·6 | 24 | 14·0 | 41·7 | g |
| 9·1 | | 21·5 | 50·2 | g |
| 9·7 | | 26·0 | 40·8 | |
| 9·5 | | 36·0 | 11·3 | |
| 10·0 | | 45·0 | 18·6 | |
| 9·5 | 25 | 5·5 | 13·1 | |
| 9·6 | | 16·0 | 14·6 | |
| 8·6 | | 24·5 | 15·0 | 8·0 g |
| 8·8 | | 33·0 | 28·4 | g |
| 9·1 | 26 | 12·5 | 22·8 | g |
| 9·7 | | 16·0 | 49·2 | |
| 9·8 | | 51·0 | 12·0 | |
| 9·2 | 27 | 12·5 | 2·0 | g |
| 9·6 | | 16·0 | 4·0 | |
| 9·3 | | 36·0 | 38·2 | g |
| 10·0 | 28 | 6·0 | 50·4 | |
| 9·8 | | 18·5 | 13·3 | |
| 8·4 | | 30·0 | 9·0 | g |
| 9·6 | | 53·5 | 5·1 | g |
| 9·6 | 29 | 8·0 | 40·8 | |
| 10·0 | | 46·0 | 13·5 | |
| 10·0 | 30 | 3·7 | 57·1 | |
| 9·2 | | 30·0 | 29·0 | g |
| 9·5 | | 41·0 | 48·3 | g |
| 9·1 | 31 | 6·5 | 37·0 | g |
| 9·8 | | 9·0 | 45·0 | |
| 9·8 | | 12·0 | 18·6 | |
| 9·3 | | 14·0 | 27·0 | g |
| 10·0 | 32 | 51·5 | 54·5 | |
| 9·5 | 33 | 2·0 | 18·4 | g |
| 9·8 | | 28·5 | 22·7 | |
| 9·2 | | 38·5 | 21·0 | g |
| 9·1 | 34 | 7·0 | 46·1 | 10·0 g |
| 9·2 | | 13·0 | 52·2 | g |
| 8·9 | | 36·5 | 54·4 | 8·5 g |
| 8·2 | 35 | 22·0 | 46·4 | 8·2 Gg |
| 9·4 | | 23·0 | 26·0 | |
| 10·0 | | 56·0 | 32·0 | |
| 8·7 | | 58·0 | 35·2 | 8·5 g |
| 9·2 | 36 | 41·0 | 4·0 | g |
| 9·4 | | 42·5 | 33·0 | |
| 9·1 | | 46·0 | 56·0 | 8·8 g |
| 9·5 | 37 | 3·5 | 41·2 | |
| 9·4 | | 45·0 | 31·8 | |
| 9·7 | 38 | 2·5 | 12·8 | |
| 10·0 | | 23·0 | 45·8 | |
| 9·7 | | 40·5 | 53·8 | ? |

## 601—660.

| mag. | 6h.–7h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·3 | 38 | 56·0 | 20·0 | 9·5 g |
| 9·5 | 40 | 19·0 | 46·4 | |
| 9·8 | | 28·0 | 51·6 | |
| 8·4 | | 33·0 | 14·1 | 8·2 Gg |
| 8·4 | 41 | 1·0 | 29·6 | 8·0 Gg |
| 10·0 | | 3·0 | 45·8 | |
| 9·8 | | 17·0 | 25·1 | |
| 8·2 | | 27·0 | 23·8 | 8·0 Gg |
| 9·8 | | 30·0 | 51·0 | |
| 9·3 | | 39·5 | 54·2 | g |
| 9·5 | | 46·5 | 44·3 | |
| 9·3 | 42 | 59·5 | 59·2 | |
| 9·5 | 43 | 2·5 | 39·0 | |
| 10·0 | | 6·0 | 7·4 | |
| 9·3 | | 44·5 | 30·8 | g |
| 8·8 | 44 | 2·5 | 31·0 | 9· g |
| 9·8 | | 43·5 | 9·8 | |
| 8·4 | | 52·5 | 54·5 | 7·5 GSg |
| 9·5 | | 53·0 | 8·0 | |
| 9·5 | | 56·5 | 43·4 | |
| 10·0 | 45 | 15·0 | 12·0 | |
| 9·3 | 46 | 33·5 | 11·6 | |
| 8·8 | | 42·5 | 56·9 | 8·2 Gg |
| 10·0 | 49 | 19·0 | 12·4 | |
| 10·0 | 50 | 3·0 | 27·3 | |
| 9·6 | | 28·5 | 8·0 | |
| 9·6 | 51 | 41·5 | 5·0 | g |
| 9·3 | | 49·0 | 56·2 | 10·0 g |
| 9·2 | 52 | 2·0 | 33·0 | g |
| 9·8 | | 12·0 | 5·3 | |
| 9·2 | 53 | 16·0 | 27·5 | g |
| 10·0 | | 33·5 | 20·4 | |
| 10·0 | 54 | 33·0 | 28·4 | |
| 9·2 | | 43·5 | 11·0 | g |
| 9·5 | 55 | 1·5 | 19·8 | |
| 9·5 | | 3·0 | 12·2 | |
| 8·8 | | 15·5 | 49·9 | g |
| 8·8 | | 51·0 | 24·4 | 9·0 Sg |
| 9·5 | 56 | 32·5 | 46·8 | g |
| 8·9 | | 33·2 | 57·9 | g |
| 9·6 | 57 | 2·5 | 25·1 | |
| 9·0 | | 9·0 | 40·8 | g |
| 10·0 | | 21·0 | 43·0 | |
| 9·1 | | 32·0 | 10·3 | g |
| 9·3 | 58 | 6·0 | 36·6 | |
| 9·0 | | 29·0 | 31·0 | 8·8 g |
| 9·6 | | 52·0 | 13·6 | g |
| 9·4 | 59 | 8·3 | 38·0 | |
| 9·3 | | 28·2 | 33·4 | |
| 9·5 | | 40·5 | 23·6 | |
| 9·6 | | 47·0 | 11·9 | |
| 9·7 | 0 | 12·5 | 29·0 | |
| 9·7 | | 16·0 | 19·2 | |
| 9·7 | | 21·0 | 51·8 | |
| 9·6 | | 41·0 | 4·8 | |
| 9·3 | 2 | 29·5 | 47·0 | |
| 9·7 | 3 | 7·0 | 28·0 | |
| 9·7 | | 10·5 | 10·8 | |
| 9·7 | | 13·5 | 54·0 | |
| 7·8 | | 19·5 | 18·0 | 8·0 GSgt |

## 661—720.

| mag. | 7h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·5 | 3 | 48·5 | 58·8 | |
| 9·1 | 4 | 30·5 | 3·0 | g |
| 8·9 | | 40·0 | 5·0 | g |
| 9·3 | 5 | 1·0 | 6·8 | g |
| 9·6 | | 15·5 | 44·8 | |
| 9·5 | | 51·0 | 7·2 | |
| 9·7 | 6 | 9·0 | 42·6 | |
| 9·0 | | 12·0 | 31·8 | |
| 9·6 | | 37·5 | 53·0 | |
| 9·6 | | 50·0 | 13·6 | |
| 9·7 | 7 | 35·0 | 50·0 | |
| 9·7 | | 42·0 | 2·0 | |
| 9·2 | 8 | 16·0 | 15·8 | g |
| 9·4 | | 29·0 | 32·2 | |
| 9·1 | | 40·0 | 15·0 | g |
| 9·1 | | 54·0 | 52·2 | g |
| 7·9 | 9 | 18·5 | 15·0 | 8·0 GSg |
| 9·6 | | 50·0 | 46·2 | |
| 9·5 | 10 | 46·5 | 44·0 | g |
| 9·7 | | 48·5 | 47·1 | g |
| 9·7 | | 57·5 | 58·8 | |
| 8·9 | 11 | 39·0 | 26·8 | 9·0 g |
| 9·4 | | 55·5 | 29·8 | |
| 9·4 | | 56·0 | 47·2 | |
| 9·7 | 12 | 20·0 | 5·6 | |
| 7·3 | | 29·0 | 39·4 | 7·5 GSg |
| 9·7 | | 42·0 | 2·0 | |
| 8·8 | 13 | 58·0 | 43·4 | 9·5 g |
| 8·8 | 14 | 8·0 | 47·7 | 9·5 g |
| 9·2 | | 9·0 | 4·6 | g |
| 9·7 | | 50·0 | 9·1 | |
| 8·9 | 15 | 6·0 | 25·0 | 9·0 g |
| 9·7 | | 6·5 | 9·6 | |
| 9·3 | | 49·0 | 56·4 | g |
| 9·3 | 16 | 7·5 | 29·0 | |
| 9·6 | | 32·0 | 40·4 | |
| 9·7 | | 32·0 | 22·4 | |
| 9·0 | 17 | 4·3 | 59·2 | g |
| 9·7 | | 10·5 | 27·4 | |
| 9·3 | | 23·0 | 36·3 | g |
| 9·3 | | 48·0 | 26·1 | |
| 9·6 | 18 | 12·5 | 30·4 | |
| 9·3 | | 14·0 | 39·2 | g |
| 9·1 | | 17·0 | 59·7 | 9·5 g |
| 9·2 | | 30·5 | 41·7 | g |
| 9·7 | | 42·5 | 32·1 | |
| 9·7 | 19 | 32·5 | 57·9 | g |
| 9·7 | 20 | 18·5 | 34·1 | |
| 8·9 | 21 | 59·0 | 23·1 | 9·5 g |
| 9·1 | 22 | 3·5 | 33·0 | 9·5 g |
| 8·1 | | 30·5 | 26·7 | 8·5 g |
| 9·1 | | 30·5 | 48·8 | g |
| 9·1 | | 54·0 | 45·9 | g |
| 9·6 | 23 | 43·5 | 13·8 | g |
| 9·7 | 24 | 34·0 | 15·1 | g |
| 9·7 | | 44·5 | 8·7 | g |
| 9·7 | 25 | 37·0 | 47·3 | |
| 8·8 | 26 | 48·5 | 6·1 | g |
| 9·7 | | 59·0 | 37·4 | |
| 8·7 | 27 | 38·0 | 22·5 | 9·0 g |

## 721—780.

| mag. | 7h. m | s | −64° ′ | |
|---|---|---|---|---|
| 8·1 | 27 | 49·5 | 14·9 | 7·0 GSg |
| 8·8 | | 51·5 | 30·9 | 9·5 g |
| 8·8 | | 55·5 | 6·1 | g |
| 9·7 | 28 | 2·5 | 59·1 | |
| 8·9 | | 14·5 | 24·7 | g |
| 9·7 | 29 | 2·0 | 8·9 | g |
| 9·7 | | 33·5 | 17·3 | g |
| 8·0 | 30 | 20·5 | 6·3 | 7·8 GSg |
| 9·7 | 31 | 27·5 | 6·8 | |
| 9·3 | 32 | 12·0 | 29·5 | |
| 9·7 | 33 | 37·0 | 40·0 | |
| 8·8 | | 59·0 | 31·6 | g |
| 9·1 | 34 | 27·5 | 57·8 | g |
| 9·1 | 35 | 35·0 | 27·8 | g |
| 9·7 | 36 | 19·5 | 24·0 | |
| 8·8 | 37 | 44·8 | 1·3 | 9·0 g |
| 9·7 | 38 | 48·0 | 35·0 | |
| 8·7 | 39 | 12·7 | 11·5 | 8·5 GSg |
| 9·1 | | 22·0 | 1·9 | 8·0 Gg |
| 9·6 | | 31·5 | 16·9 | |
| 9·1 | 41 | 5·2 | 8·5 | g |
| 9·1 | | 48·0 | 2·2 | |
| 9·7 | 42 | 10·0 | 52·3 | |
| 9·3 | | 21·0 | 49·0 | g |
| 9·4 | | 21·5 | 59·7 | |
| 9·1 | | 45·0 | 19·1 | 8·8 g |
| 9·7 | | 52·0 | 46·6 | |
| 9·6 | 43 | 41·5 | 42·5 | |
| 9·3 | 44 | 8·5 | 17·2 | g |
| 9·7 | | 30·0 | 27·0 | |
| 8·9 | | 41·0 | 5·8 | 9·0 g |
| 9·6 | 45 | 0·0 | 8·6 | |
| 9·7 | | 58·0 | 49·8 | |
| 9·6 | 47 | 11·0 | 38·4 | g |
| 9·4 | | 14·5 | 42·9 | g |
| 9·3 | | 22·0 | 38·1 | g |
| 8·3 | | 24·5 | 30·4 | 8·5 Gg |
| 8·9 | | 31·5 | 45·7 | g |
| 9·7 | 49 | 22·0 | 4·6 | |
| 9·4 | 50 | 20·0 | 25·0 | |
| 9·7 | | 37·0 | 58·6 | |
| 9·0 | 51 | 5·0 | 58·1 | 9·0 g |
| 9·6 | | 17·0 | 21·4 | |
| 9·4 | | 21·0 | 42·1 | |
| 9·7 | | 24·0 | 42·6 | |
| 9·3 | | 37·5 | 1·7 | g |
| 9·2 | | 37·5 | 8·7 | g |
| 9·4 | | 41·5 | 15·7 | g |
| 8·9 | | 43·5 | 42·2 | 8·2 Gg |
| 9·1 | | 49·5 | 30·7 | |
| 9·1 | | 51·5 | 4·8 | g |
| 9·1 | | 54·0 | 57·1 | g |
| 8·8 | 52 | 0·0 | 22·2 | g |
| 9·7 | | 19·5 | 53·2 | |
| 9·7 | | 22·0 | 58·0 | |
| 8·5 | 53 | 2·0 | 36·6 | 9·0 g |
| 9·7 | | 2·0 | 27·9 | |
| 9·5 | | 17·5 | 57·3 | |
| 9·2 | | 34·5 | 42·9 | 9·5 g |
| 9·4 | | 42·0 | 44·9 | g |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 6 | 20 | 7 | 0·7 |
| | 30 | 7 | 1·1 |
| | 40 | 8 | 1·5 |
| | 50 | 8 | 1·8 |
| 7 | 0 | 9 | 2·2 |
| | 10 | 10 | 2·5 |
| | 20 | 11 | 2·9 |
| | 30 | 12 | 3·2 |
| | 40 | 13 | 3·5 |
| | 50 | 15 | 3·9 |
| 8 | 0 | 16 | 4·2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 50 | 15 | 3·9 |
| 8 | 0 | 16 | 4·2 |
| | 10 | 18 | 4·5 |
| | 20 | 19 | 4·8 |
| | 30 | 21 | 5·1 |
| | 40 | 23 | 5·4 |
| | 50 | 25 | 5·6 |
| 9 | 0 | 27 | 5·9 |
| | 10 | 29 | 6·2 |
| | 20 | 32 | 6·4 |

781—840.

| mag. | 7ʰ·–8ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·4 | 53 | 56·5 | 40·7 | g |
| 9·7 | 54 | 1·5 | 10·8 | |
| 9·4 | | 30·5 | 28·1 | |
| 8·8 | | 33·0 | 22·6 | 9·5 g |
| 8·9 | | 41·7 | 57·0 | g |
| 9·6 | | 50·5 | 36·5 | |
| 9·4 | 55 | 6·0 | 19·2 | |
| 9·0 | 56 | 4·0 | 23·2 | 8·8 g |
| 9·7 | | 18·0 | 31·7 | |
| 9·4 | | 34·0 | 25·2 | 10·0 |
| 9·7 | | 47·5 | 16·3 | |
| 9·0 | 57 | 12·3 | 1·2 | g |
| 8·7 | | 12·5 | 40·1 | 9·0 g |
| 8·2 | | 27·0 | 12·1 | g |
| 9·1 | | 35·0 | 46·0 | |
| 9·5 | | 52·5 | 23·8 | |
| 9·1 | | 57·5 | 13·8 | |
| 9·7 | 58 | 38·5 | 19·0 | |
| 9·7 | | 43·0 | 18·3 | |
| 8·9 | | 58·5 | 18·0 | g |
| 8·3 | 59 | 6·0 | 29·7 | 9·0 g |
| 9·4 | | 8·5 | 57·1 | 8·5 |
| 9·6 | | 12·0 | 28·6 | |
| 9·7 | | 28·7 | 0·6 | |
| 9·6 | | 58·0 | 52·0 | |
| 9·7 | 0 | 2·5 | 40·6 | |
| 9·0 | | 14·5 | 58·0 | 9·0 |
| 9·7 | | 32·0 | 7·1 | |
| 9·7 | 1 | 0·5 | 18·1 | |
| 9·1 | | 21·0 | 25·1 | |
| 8·7 | | 49·5 | 58·2 | 9·5 g |
| 9·7 | 2 | 10·5 | 10·1 | |
| 9·7 | | 17·5 | 8·4 | |
| 9·7 | | 20·5 | 32·2 | |
| 8·1 | | 26·0 | 16·4 | 9·0 g |
| 9·4 | 3 | 38·5 | 52·7 | |
| 9·0 | 4 | 6·0 | 14·6 | |
| 9·4 | | 34·0 | 46·2 | |
| 8·0 | | 35·3 | 1·0 | 8·0 GSg |
| 8·3 | | 39·5 | 42·3 | 8·5 Gg |
| 9·4 | | 49·0 | 38·5 | |
| 9·4 | 5 | 48·0 | 13·7 | |
| 9·4 | 6 | 9·0 | 18·3 | |
| 9·7 | | 19·5 | 18·1 | |
| 9·1 | | 40·0 | 27·2 | 8·2 GS |
| 9·7 | 7 | 28·0 | 16·0 | |
| 9·7 | | 31·5 | 50·3 | |
| 8·3 | | 46·0 | 24·3 | 7·5 GSg |
| 9·3 | 8 | 27·5 | 20·4 | |
| 9·4 | | 29·5 | 21·1 | |
| 9·5 | | 52·5 | 19·5 | |
| 8·7 | 9 | 40·5 | 8·0 | 9·0 |
| 9·4 | 10 | 2·0 | 35·2 | |
| 9·6 | | 28·5 | 25·3 | |
| 9·4 | | 54·2 | 57·1 | |
| 8·9 | 11 | 47·0 | 35·1 | |
| 9·4 | 12 | 12·7 | 57·7 | |
| 9·5 | | 55·5 | 33·1 | |
| 9·5 | 13 | 43·0 | 25·1 | |
| 8·8 | 14 | 15·5 | 6·1 | 8·8 g |

841—900.

| mag. | 8ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·7 | 14 | 23·5 | 53·3 | |
| 8·5 | | 39·5 | 7·2 | 8·8 g |
| 7·7 | 15 | 9·5 | 0·9 | 8·0 GSg |
| 9·7 | | 12·0 | 15·8 | |
| 9·7 | | 23·0 | 43·3 | |
| 9·7 | 16 | 24·5 | 48·7 | G |
| 9·0 | | 31·5 | 56·1 | 8·5 g |
| 9·7 | 17 | 3·5 | 30·2 | |
| 9·7 | | 20·5 | 10·3 | |
| 8·5 | | 32·0 | 53·1 | 8·5 G g |
| 9·7 | | 45·5 | 6·1 | |
| 8·5 | 18 | 7·5 | 24·7 | g |
| 9·7 | | 15·0 | 30·9 | |
| 9·0 | | 48·7 | 6·5 | |
| 9·6 | 19 | 1·8 | 5·8 | |
| 9·7 | | 11·5 | 9·0 | |
| 10·0 | | 15·5 | 3·6 | |
| 9·5 | | 21·5 | 39·9 | |
| 10·0 | | 30·5 | 41·5 | |
| 9·3 | 20 | 18·5 | 16·9 | |
| 9·6 | | 47·0 | 3·5 | |
| 10·0 | | 50·5 | 3·7 | |
| 9·2 | | 54·5 | 33·0 | g |
| 10·0 | 21 | 42·5 | 2·3 | |
| 9·0 | | 51·5 | 46·9 | 8·8 g |
| 9·6 | | 53·5 | 29·1 | |
| 9·2 | 22 | 45·0 | 37·7 | |
| 9·6 | | 51·0 | 45·0 | |
| 10·0 | | 55·0 | 4·8 | |
| 10·0 | 23 | 5·5 | 3·3 | |
| 10·0 | | 9·7 | 57·5 | |
| 9·8 | | 14·5 | 20·6 | |
| 9·8 | | 48·5 | 19·1 | |
| 9·2 | | 49·5 | 31·0 | |
| 10·0 | | 59·5 | 42·9 | |
| 8·9 | 24 | 4·7 | 2·3 | 8·2 g |
| 10·0 | | 5·5 | 5·0 | |
| 7·2 | | 9·0 | 11·4 | 6·5 GSg |
| 9·9 | | 15·7 | 0·1 | |
| 10·0 | | 35·0 | 18·1 | |
| 9·3 | | 39·0 | 26·6 | |
| 9·6 | | 45·7 | 0·2 | |
| 9·2 | 25 | 8·0 | 13·8 | |
| 10·0 | | 14·0 | 52·0 | |
| 9·5 | | 19·5 | 49·5 | |
| 9·6 | | 27·0 | 2·8 | |
| 9·6 | | 31·5 | 40·0 | |
| 9·2 | | 45·0 | 17·9 | |
| 10·0 | | 48·5 | 37·8 | |
| 9·2 | | 51·5 | 20·7 | 9·0 g |
| 10·0 | 26 | 26·0 | 35·9 | |
| 10·0 | | 26·5 | 11·0 | |
| 9·9 | | 58·0 | 7·7 | |
| 9·0 | | 58·5 | 28·6 | |
| 9·9 | 27 | 9·3 | 3·0 | |
| 10·0 | | 45·0 | 47·1 | |
| 9·8 | 28 | 8·5 | 36·0 | |
| 10·0 | | 20·5 | 36·9 | |
| 9·4 | | 29·5 | 42·3 | |
| 9·1 | | 42·0 | 56·8 | 9·0 g |

901—960.

| mag. | 8ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·1 | 28 | 54·0 | 33·9 | |
| 9·7 | 29 | 1·0 | 22·8 | |
| 9·8 | | 14·0 | 24·0 | |
| 10·0 | | 23·0 | 32·0 | |
| 8·8 | | 40·0 | 23·2 | |
| 8·4 | 30 | 11·5 | 26·8 | g |
| 10·0 | | 15·0 | 0·0 | |
| 9·8 | | 47·5 | 51·2 | |
| 9·1 | 31 | 3·5 | 42·9 | 9·5 |
| 9·8 | | 10·5 | 45·2 | |
| 9·5 | | 12·0 | 10·0 | |
| 9·5 | | 32·0 | 50·8 | |
| 10·0 | 32 | 3·0 | 47·4 | |
| 9·8 | | 18·0 | 9·2 | |
| 9·2 | | 22·5 | 23·8 | 9·0 |
| 10·0 | 33 | 14·5 | 47·7 | |
| 10·0 | | 58·5 | 13·6 | |
| 8·6 | 34 | 5·0 | 49·1 | 8·7 g |
| 7·9 | | 18·5 | 22·7 | 8·3 g |
| 7·6 | | 27·5 | 13·3 | 8·0 Gg |
| 9·5 | | 30·5 | 4·0 | |
| 10·0 | 35 | 15·5 | 1·0 | |
| 9·6 | 36 | 20·5 | 15·4 | |
| 9·3 | | 21·7 | 0·2 | |
| 8·1 | 37 | 17·5 | 31·5 | 8·6 |
| 10·0 | 38 | 5·0 | 21·0 | |
| 8·0 | | 24·5 | 23·6 | 8·8 Gg |
| 8·9 | | 42·5 | 20·8 | 9·5 |
| 9·1 | 39 | 10·5 | 9·3 | 9·0 g |
| 10·0 | | 34·5 | 47·2 | |
| 8·2 | 40 | 32·0 | 47·3 | 8·2 g |
| 9·4 | 41 | 0·5 | 16·6 | |
| 8·4 | | 30·5 | 29·0 | 8·0 Gg |
| 8·7 | 43 | 25·0 | 43·3 | 9·0 |
| 10·0 | | 26·0 | 6·0 | |
| 9·7 | | 34·5 | 30·8 | |
| 9·8 | | 41·0 | 52·1 | |
| 9·6 | | 41·5 | 32·0 | |
| 9·7 | | 47·5 | 12·9 | |
| 9·6 | 44 | 2·0 | 34·2 | |
| 9·2 | 45 | 1·5 | 47·0 | |
| 8·3 | | 14·5 | 28·8 | 9·0 g |
| 9·8 | | 23·5 | 0·9 | 9·0 g |
| 10·0 | | 38·5 | 28·0 | |
| 10·0 | | 41·5 | 3·0 | |
| 8·1 | 46 | 28·0 | 58·0 | 7·7 GSg |
| 8·9 | | 41·5 | 44·7 | |
| 9·7 | | 57·5 | 52·2 | |
| 8·9 | 47 | 1·0 | 51·9 | 8·5 |
| 9·4 | | 8·5 | 40·0 | |
| 8·1 | | 12·0 | 19·9 | 8·3 g |
| 8·5 | | 23·2 | 0·2 | g |
| 9·1 | | 39·5 | 16·8 | 8·3 g |
| 9·1 | 48 | 2·5 | 38·1 | |
| 9·5 | | 9·5 | 35·1 | |
| 10·0 | | 20·8 | 0·2 | |
| 8·7 | | 28·5 | 18·1 | 9·2 G |
| 8·1 | | 51·5 | 35·2 | 8·8 g |
| 9·1 | 49 | 8·5 | 11·0 | |
| 9·5 | | 12·0 | 29·9 | |

961—1020.

| mag. | 8ʰ·–9ʰ· m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 49 | 28·5 | 45·2 | |
| 10·0 | | 51·0 | 46·7 | |
| 8·6 | 50 | 22·0 | 17·0 | 8·2 g |
| 9·6 | | 33·0 | 55·4 | 9·5 g |
| 9·6 | | 46·5 | 1·9 | |
| 9·2 | | 56·0 | 59·8 | 8·5 g |
| 9·7 | 52 | 12·0 | 36·3 | |
| 10·0 | | 27·5 | 30·9 | |
| 10·0 | | 38·5 | 2·1 | |
| 10·0 | 53 | 44·5 | 49·1 | |
| 8·8 | | 56·5 | 10·9 | |
| 8·6 | 54 | 6·0 | 4·6 | |
| 9·8 | | 37·5 | 57·0 | |
| 8·2 | | 37·5 | 32·3 | g |
| 9·7 | 55 | 12·0 | 54·0 | |
| 8·9 | | 28·0 | 48·0 | |
| 9·8 | 56 | 1·5 | 2·0 | |
| 7·3 | | 30·0 | 2·8 | 7·3 GSg |
| 8·6 | | 31·0 | 15·0 | 9·0 |
| 10·0 | 57 | 56·5 | 24·6 | |
| 10·0 | 58 | 24·5 | 35·2 | |
| 9·8 | | 27·3 | 52·0 | |
| 10·0 | | 56·6 | 8·5 | |
| 8·3 | 59 | 4·5 | 25·9 | 7·5 g |
| 8·2 | | 35·8 | 18·4 | 9·0 |
| 9·7 | | 43·1 | 10·9 | |
| 10·0 | 0 | 10·8 | 14·6 | |
| 9·4 | | 1·0 | 25·8 | |
| 9·4 | | 15·5 | 46·0 | |
| 9·5 | | 41·5 | 22·6 | |
| 9·2 | | 53·5 | 30·1 | |
| 9·3 | 1 | 0·0 | 10·2 | |
| 7·5 | | 30·0 | 11·3 | 8·0 GSg |
| 9·5 | | 45·5 | 14·1 | 9·5 G |
| 9·4 | 2 | 9·5 | 33·7 | |
| 9·1 | | 26·0 | 50·4 | |
| 9·5 | | 43·0 | 51·8 | |
| 8·9 | | 59·0 | 21·7 | 10·0 |
| 9·5 | 3 | 1·5 | 52·9 | |
| 9·0 | | 16·0 | 27·1 | 8·7 g |
| 9·1 | | 22·0 | 26·9 | 9·8 |
| 8·9 | | 55·5 | 41·2 | g |
| 9·0 | 4 | 18·5 | 25·5 | |
| 8·6 | | 49·8 | 59·3 | g |
| 9·4 | | 52·5 | 9·6 | |
| 9·4 | 6 | 5·5 | 10·2 | |
| 9·4 | | 8·0 | 17·0 | |
| 8·0 | 7 | 50·0 | 58·9 | 8·0 GSg |
| 9·2 | 8 | 49·5 | 6·0 | 9·5 |
| 9·3 | 9 | 7·0 | 20·0 | |
| 8·2 | | 27·5 | 40·7 | 8·2 g |
| neb. | | 36·0 | 20·8 | G |
| 9·5 | 10 | 1·5 | 36·3 | |
| 9·4 | | 1·5 | 3·5 | |
| 9·5 | | 21·5 | 46·9 | |
| 9·5 | 11 | 24·5 | 0·4 | |
| 8·2 | | 55·5 | 32·1 | 7·8 GSg |
| 9·5 | 12 | 8·0 | 0·9 | |
| 9·5 | 13 | 11·5 | 42·0 | |
| 9·3 | 14 | 28·5 | 8·8 | |

## 1021—1080.

| mag. | 9h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.2 | 15 | 8.5 | 18.6 | |
| 8.6 | | 50.0 | 54.2 | 8.0 G*g* |
| 9.5 | 18 | 17.0 | 31.3 | |
| 8.8 | | 57.5 | 6.0 | G |
| 9.5 | 19 | 9.0 | 59.9 | |
| 9.5 | | 28.5 | 13.2 | |
| 9.3 | 20 | 23.5 | 7.0 | |
| 8.8 | | 28.0 | 59.4 | *g* |
| 9.4 | | 41.5 | 14.6 | G |
| 9.2 | | 49.5 | 29.7 | *g* |
| 9.1 | 22 | 4.0 | 29.7 | |
| 7.8 | | 12.5 | 10.2 | 9.0 GS*g* |
| 9.2 | | 18.0 | 5.1 | G |
| 7.2 | | 39.0 | 43.8 | 7.5 GS*g* |
| 9.4 | | 47.0 | 48.7 | |
| 9.5 | 23 | 2.0 | 37.1 | |
| 6.6 | 24 | 2.0 | 23.3 | 7.0 GSc*g*tr |
| 9.1 | 26 | 25.0 | 5.2 | |
| 9.2 | | 31.5 | 58.4 | *g* |
| 9.5 | 27 | 2.0 | 37.8 | |
| 9.5 | | 5.5 | 20.5 | |
| 8.6 | 29 | 39.0 | 56.4 | 8.5 G*g* |
| 8.9 | | 46.5 | 49.4 | 8.0 GS*g* |
| 9.5 | 31 | 10.5 | 42.6 | |
| 8.1 | 32 | 4.0 | 26.4 | 8.5 GSg*g* |
| 9.4 | | 32.0 | 39.3 | |
| 9.5 | | 34.5 | 42.5 | |
| 9.5 | | 40.5 | 33.5 | |
| 7.0 | 33 | 11.0 | 23.5 | 7.0 GSg*g*t |
| 8.4 | 34 | 30.0 | 35.0 | |
| 8.9 | 35 | 57.0 | 25.6 | *g* |
| 9.4 | 36 | 45.5 | 25.7 | G |
| 8.2 | 37 | 36.0 | 31.8 | G*g* |
| 9.5 | 38 | 27.0 | 5.8 | |
| 9.8 | | 36.5 | 4.9 | |
| 9.6 | | 48.5 | 53.5 | |
| 9.9 | 39 | 8.5 | 6.8 | |
| 9.5 | | 11.5 | 45.8 | |
| 9.5 | | 11.5 | 12.9 | |
| 9.9 | | 31.5 | 55.1 | |
| 9.1 | | 43.0 | 56.2 | *g* |
| 9.9 | | 54.5 | 13.6 | |
| 9.2 | 40 | 7.7 | 3.5 | |
| 9.9 | | 10.5 | 18.1 | |
| 9.4 | | 22.0 | 41.0 | |
| 9.4 | | 26.7 | 20.1 | |
| 9.9 | | 28.0 | 1.1 | |
| 9.9 | | 59.2 | 59.0 | |
| 9.9 | 41 | 7.0 | 58.9 | |
| 9.6 | | 12.5 | 35.1 | |
| 9.4 | | 15.5 | 51.1 | |
| 9.6 | | 19.5 | 16.3 | |
| 9.9 | | 23.5 | 36.4 | |
| 9.9 | | 43.5 | 3.5 | |
| 9.5 | | 47.0 | 14.9 | |
| 9.0 | | 48.0 | 4.8 | *g* |
| 9.6 | | 49.5 | 6.8 | |
| 9.0 | | 50.5 | 14.1 | *g* |
| 9.6 | | 59.0 | 36.2 | |
| 9.1 | 42 | 49.5 | 21.9 | |

## 1081—1140.

| mag. | 9h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.0 | 43 | 25.5 | 10.9 | 9.5 |
| 9.8 | | 35.5 | 3.5 | |
| 9.9 | | 43.5 | 5.1 | |
| 4.6 | | 57.5 | 29.5 | 3.0 GSgtrλ |
| 9.4 | 44 | 13.0 | 7.1 | |
| 9.9 | | 16.5 | 37.4 | |
| 9.2 | | 41.0 | 32.3 | G*g* |
| 8.9 | | 43.0 | 32.3 | G*g* |
| 9.9 | | 51.0 | 11.9 | |
| 9.9 | | 51.5 | 10.8 | |
| 9.5 | 45 | 2.5 | 20.9 | |
| 9.6 | | 8.5 | 2.0 | |
| 9.8 | | 45.0 | 39.3 | |
| 9.6 | | 46.0 | 29.7 | |
| 9.6 | | 50.5 | 39.3 | |
| 9.5 | | 52.0 | 45.0 | |
| 9.9 | | 55.0 | 41.9 | |
| 9.8 | | 57.0 | 12.3 | |
| 9.7 | | 59.5 | 41.5 | |
| 9.9 | 46 | 2.5 | 40.1 | |
| 9.9 | | 9.5 | 40.1 | |
| 9.7 | | 10.5 | 0.7 | |
| 9.4 | | 15.5 | 10.1 | G |
| 9.2 | | 38.5 | 23.7 | |
| 9.2 | | 55.5 | 35.3 | |
| 9.7 | 47 | 11.5 | 25.7 | |
| 8.1 | | 40.0 | 51.6 | G*g* |
| 9.9 | 48 | 0.0 | 27.8 | |
| 9.6 | | 3.0 | 56.0 | |
| 9.4 | | 32.5 | 27.0 | |
| 9.6 | | 48.5 | 2.2 | |
| 9.4 | 49 | 4.5 | 40.9 | |
| 9.9 | | 22.5 | 26.2 | |
| 9.6 | | 34.0 | 27.4 | |
| 9.6 | | 35.5 | 37.0 | |
| 9.4 | | 47.0 | 31.0 | |
| 9.2 | 50 | 24.0 | 30.6 | |
| 9.0 | | 32.5 | 24.8 | 9.0 *g* |
| 9.2 | | 45.0 | 5.0 | |
| 9.2 | 51 | 0.5 | 42.6 | |
| 9.0 | | 42.0 | 28.8 | 8.5 *g* |
| 9.5 | | 51.5 | 30.0 | |
| 9.6 | 52 | 0.0 | 51.0 | |
| 9.4 | | 4.5 | 42.6 | |
| 9.3 | | 38.0 | 36.9 | |
| 9.3 | | 42.0 | 36.2 | |
| 9.3 | | 50.5 | 45.6 | S |
| 9.0 | | 51.5 | 3.0 | G |
| 9.9 | | 55.5 | 44.8 | |
| 9.9 | 53 | 15.0 | 8.2 | |
| 9.9 | | 39.0 | 42.0 | |
| 9.9 | 54 | 12.5 | 13.4 | |
| 9.0 | | 29.5 | 9.9 | |
| 9.6 | | 37.5 | 21.7 | |
| 9.5 | | 51.5 | 59.0 | |
| 9.4 | | 52.5 | 10.0 | |
| 9.8 | | 57.5 | 23.0 | |
| 9.5 | 55 | 7.0 | 53.4 | |
| 9.9 | | 7.5 | 18.6 | |
| 8.8 | | 18.0 | 49.8 | G*g* |

## 1141—1200.

| mag. | 9h.—10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 8.8 | 55 | 26.0 | 3.0 | |
| 9.6 | | 26.5 | 11.0 | |
| 9.5 | | 58.0 | 43.8 | |
| 9.9 | | 59.5 | 35.6 | |
| 9.9 | 56 | 4.0 | 7.0 | |
| 9.9 | | 6.5 | 24.3 | |
| 9.6 | | 42.5 | 13.0 | |
| 9.9 | 57 | 20.5 | 46.0 | |
| 9.6 | | 52.5 | 18.2 | |
| 9.9 | | 54.5 | 9.8 | |
| 9.9 | | 58.0 | 9.8 | |
| 9.2 | 58 | 0.0 | 46.4 | |
| 9.5 | | 9.5 | 8.8 | |
| 9.4 | | 10.5 | 55.3 | |
| 9.6 | | 23.5 | 53.6 | |
| 9.9 | | 53.0 | 45.4 | |
| 9.2 | 59 | 25.5 | 46.2 | |
| 9.9 | | 28.0 | 1.0 | |
| 9.5 | | 35.5 | 13.0 | |
| 9.2 | | 43.5 | 47.0 | |
| 9.0 | 0 | 6.5 | 9.8 | 9.0 |
| 9.3 | | 8.0 | 0.2 | |
| 9.9 | | 13.5 | 32.0 | |
| 9.9 | | 14.5 | 19.2 | |
| 9.7 | | 18.5 | 10.8 | |
| 9.0 | | 22.5 | 8.3 | 9.0 *g* |
| 9.9 | | 22.5 | 37.8 | |
| 7.1 | 1 | 0.8 | 2.5 | GS*g* |
| 9.4 | | 9.5 | 41.2 | |
| 9.2 | | 15.5 | 19.9 | |
| 9.6 | | 15.5 | 24.0 | |
| 9.9 | | 19.5 | 4.9 | |
| 9.9 | | 23.5 | 2.7 | |
| 9.9 | | 38.5 | 34.6 | |
| 9.6 | | 39.0 | 5.6 | |
| 9.9 | | 39.0 | 10.0 | |
| 9.0 | | 39.5 | 4.1 | 9.0 |
| 9.6 | | 50.5 | 51.8 | |
| 9.8 | 2 | 7.5 | 40.7 | |
| 9.9 | | 23.5 | 22.0 | |
| 8.2 | | 25.0 | 37.6 | 8.5 *g* |
| 9.9 | | 26.0 | 2.7 | |
| 9.9 | | 32.0 | 4.4 | |
| 9.9 | | 55.5 | 0.3 | |
| 9.2 | | 58.0 | 17.0 | |
| 9.9 | 3 | 12.5 | 3.0 | |
| 9.4 | 4 | 23.5 | 36.8 | |
| 9.9 | | 30.5 | 2.2 | |
| 9.4 | | 46.5 | 38.8 | |
| 7.4 | 5 | 9.5 | 53.8 | 7.5 GSg*g*r |
| 9.4 | | 26.5 | 7.7 | |
| 9.2 | | 38.0 | 4.6 | |
| 9.6 | | 50.5 | 40.8 | |
| 9.2 | 6 | 0.5 | 34.0 | |
| 9.4 | | 11.5 | 11.8 | |
| 9.9 | | 13.5 | 18.3 | |
| 9.8 | | 15.5 | 46.0 | |
| 8.4 | | 18.5 | 32.0 | *g* |
| 9.4 | | 21.0 | 54.0 | |
| 9.7 | | 30.0 | 33.1 | |

## 1201—1260.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.6 | 7 | 40.5 | 53.6 | |
| 9.6 | | 40.8 | 2.0 | |
| 9.9 | | 42.0 | 53.1 | |
| 9.0 | | 46.5 | 23.0 | *g* |
| 9.9 | | 55.5 | 40.8 | |
| 9.5 | 8 | 33.0 | 44.7 | |
| 9.9 | | 34.5 | 53.0 | |
| 9.8 | | 39.0 | 58.6 | |
| 8.8 | | 53.5 | 14.2 | |
| 9.4 | 9 | 3.5 | 2.0 | |
| 9.4 | | 5.0 | 12.6 | |
| 7.2 | | 16.5 | 32.8 | 8.0 GS*g* |
| 9.9 | | 17.0 | 19.2 | |
| 9.2 | | 56.5 | 29.9 | 9.0 |
| 9.5 | | 59.0 | 52.0 | |
| 8.9 | | 59.0 | 34.5 | |
| 9.6 | 10 | 5.0 | 50.8 | |
| 9.5 | | 11.5 | 24.8 | |
| 9.9 | | 12.0 | 17.0 | |
| 9.5 | | 17.0 | 43.3 | |
| 9.7 | | 32.5 | 24.6 | |
| 8.8 | | 33.0 | 51.2 | 8.5 *g* |
| 9.9 | 11 | 9.5 | 47.0 | |
| 9.4 | | 20.5 | 4.2 | |
| 9.0 | | 21.0 | 27.5 | |
| 9.5 | | 21.5 | 39.0 | |
| 9.9 | | 31.0 | 22.0 | |
| 9.2 | | 42.0 | 6.6 | |
| 9.5 | 12 | 22.5 | 54.2 | |
| 9.7 | | 27.5 | 13.0 | |
| 9.9 | | 31.5 | 54.6 | |
| 9.2 | | 33.5 | 14.2 | 9.0 |
| 9.6 | | 41.5 | 3.7 | |
| 8.7 | | 48.0 | 55.0 | 9.0 *g* |
| 9.9 | 13 | 13.0 | 19.6 | |
| 9.5 | | 30.5 | 23.8 | |
| 9.9 | | 44.5 | 25.7 | |
| 7.5 | | 46.0 | 48.3 | 7.5 GS*g* |
| 9.9 | | 49.5 | 15.4 | |
| 9.4 | | 50.0 | 34.0 | |
| 9.6 | 14 | 12.0 | 41.0 | |
| 9.9 | | 28.0 | 59.9 | |
| 9.3 | | 50.0 | 3.1 | |
| 8.7 | 15 | 3.0 | 45.9 | 9.0 *g* |
| 9.7 | | 5.5 | 24.8 | G |
| 9.4 | | 6.0 | 1.8 | |
| 9.9 | | 11.5 | 33.0 | |
| 6.0 | | 12.0 | 3.0 | 6.0 GS*g*r |
| 9.9 | | 28.0 | 42.1 | |
| 8.2 | | 51.5 | 30.4 | 7.0 GS*g*r |
| 9.7 | 16 | 48.5 | 41.5 | |
| 7.5 | 17 | 25.0 | 34.0 | 7.5 GS*g* |
| 9.5 | | 35.7 | 2.0 | |
| 9.6 | | 52.5 | 56.2 | |
| 9.9 | | 54.0 | 55.0 | |
| 9.9 | | 59.5 | 51.8 | |
| 9.0 | 18 | 19.0 | 55.8 | 9.5 |
| 9.6 | | 32.0 | 52.8 | |
| 9.8 | | 54.5 | 17.0 | |
| 9.7 | 19 | 9.5 | 34.2 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 9 | 10 | 29 | 6.2 |
| | 20 | 32 | 6.4 |
| | 30 | 34 | 6.6 |
| | 40 | 37 | 6.8 |
| | 50 | 39 | 7.0 |
| 10 | 0 | 42 | 7.2 |
| | 10 | 44 | 7.4 |
| | 20 | 47 | 7.6 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 44 | 7·4 |
| | 20 | 47 | 7·6 |
| | 30 | 50 | 7·7 |
| | 40 | 53 | 7·9 |
| | 50 | 56 | 8·0 |

## 1261—1320.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 19 | 39·5 | 22·3 | |
| 8·9 | | 40·5 | 23·8 | |
| 9·8 | | 41·5 | 51·7 | |
| 9·8 | | 41·5 | 51·1 | |
| 9·8 | | 46·5 | 8·3 | |
| 9·9 | | 51·5 | 50·1 | |
| 9·6 | | 56·0 | 4·5 | |
| 8·8 | 20 | 9·0 | 10·9 | 9·0 G |
| 9·8 | | 13·7 | 22·9 | |
| 9·4 | | 14·2 | 19·5 | |
| 9·6 | | 15·3 | 0·9 | |
| 9·7 | | 20·5 | 54·9 | |
| 8·7 | | 26·5 | 35·7 | 9·0 g |
| 9·8 | | 28·7 | 49·4 | |
| 9·8 | | 38·7 | 16·0 | |
| 9·9 | | 46·7 | 27·7 | |
| 9·4 | | 47·0 | 23·9 | |
| 9·2 | | 50·8 | 1·6 | |
| 9·9 | | 55·0 | 27·5 | |
| 9·4 | | 56·7 | 40·9 | |
| 9·8 | 21 | 0·7 | 6·0 | |
| 9·2 | | 17·0 | 16·2 | |
| 9·3 | | 25·5 | 10·9 | |
| 9·5 | | 30·0 | 38·1 | |
| 9·0 | | 33·0 | 25·9 | |
| 9·9 | | 37·0 | 3·1 | |
| 9·9 | 22 | 5·5 | 22·0 | |
| 9·5 | | 6·0 | 11·9 | |
| 9·8 | | 21·0 | 7·9 | |
| 8·6 | | 23·0 | 13·1 | 9·0 |
| 9·9 | | 26·7 | 28·5 | |
| 9·5 | | 29·5 | 47·1 | |
| 9·1 | | 35·5 | 9·7 | |
| 9·7 | | 38·5 | 2·2 | |
| 9·8 | | 46·5 | 10·4 | |
| 9·6 | 23 | 0·5 | 11·5 | |
| 9·8 | | 2·0 | 55·7 | |
| 9·6 | | 2·7 | 38·0 | |
| 8·3 | | 10·0 | 24·1 | 8·0 Gg |
| 8·9 | | 25·5 | 12·6 | |
| 9·4 | | 46·5 | 30·5 | |
| 9·8 | | 51·5 | 58·1 | |
| 8·6 | | 53·0 | 16·2 | 9·0 g |
| 9·2 | | 54·5 | 49·3 | |
| 9·5 | | 55·7 | 33·1 | |
| 9·0 | 24 | 0·0 | 5·0 | |
| 9·2 | | 29·0 | 46·1 | |
| 9·5 | | 30·7 | 26·3 | |
| 9·7 | | 51·5 | 45·9 | |
| 8·6 | | 59·0 | 32·2 | 7·0 GScg |
| 9·6 | 25 | 22·5 | 17·4 | |
| 9·7 | | 49·0 | 51·8 | |
| 9·7 | | 50·5 | 13·0 | |
| 9·6 | 26 | 11·0 | 22·3 | |
| 9·4 | | 15·0 | 12·5 | |
| 9·5 | | 56·0 | 14·9 | |
| 9·9 | | 57·0 | 15·1 | |
| 9·1 | 27 | 9·0 | 37·8 | |
| 9·8 | | 21·0 | 33·4 | |
| 9·1 | | 23·0 | 40·7 | |

## 1321—1380.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 27 | 24·0 | 42·2 | |
| 9·8 | | 36·5 | 36·5 | |
| 9·3 | | 43·0 | 21·5 | |
| 9·8 | | 53·0 | 22·1 | |
| 9·8 | 28 | 6·5 | 46·1 | |
| 9·9 | | 9·5 | 45·8 | |
| 9·7 | | 18·2 | 1·1 | |
| 9·9 | | 25·5 | 8·3 | |
| 9·4 | | 33·0 | 6·1 | |
| 9·3 | | 33·0 | 4·7 | |
| 9·6 | | 33·5 | 16·1 | |
| 9·6 | | 34·0 | 41·4 | 9·5 |
| 9·8 | | 35·0 | 47·8 | |
| 9·7 | | 41·0 | 26·1 | |
| 9·4 | | 49·5 | 43·8 | |
| 9·2 | | 53·5 | 4·9 | |
| 9·5 | | 55·0 | 43·1 | |
| 9·6 | 29 | 4·5 | 54·1 | |
| 8·2 | | 20·0 | 43·3 | 8·5 GSg |
| 8·7 | | 23·5 | 23·8 | 9·0 g |
| 9·9 | | 51·5 | 6·3 | |
| 8·8 | | 57·0 | 45·2 | 9·0 g |
| 9·9 | | 57·0 | 37·7 | |
| 9·9 | 30 | 0·0 | 56·5 | |
| 9·2 | | 2·5 | 34·8 | G |
| 9·8 | | 3·5 | 19·4 | |
| 9·9 | | 5·0 | 57·8 | |
| 9·7 | | 13·0 | 55·9 | |
| 9·9 | | 18·0 | 47·1 | |
| 8·6 | | 19·5 | 41·1 | 9·0 Gg |
| 9·9 | | 35·5 | 36·1 | |
| 9·9 | | 36·5 | 23·7 | |
| 9·0 | | 40·0 | 15·1 | |
| 8·6 | | 41·0 | 33·2 | 8·5 Gg |
| 9·8 | | 46·5 | 39·2 | |
| 9·8 | 31 | 2·5 | 31·1 | |
| 9·8 | | 20·5 | 30·1 | |
| 9·9 | | 21·0 | 23·3 | |
| 9·6 | 32 | 17·0 | 31·1 | |
| 9·9 | | 20·0 | 18·1 | |
| 9·9 | | 21·5 | 15·5 | |
| 9·6 | | 22·5 | 38·9 | |
| 9·2 | | 33·0 | 26·0 | g |
| 9·6 | | 34·0 | 35·9 | |
| 9·1 | | 43·0 | 33·5 | |
| 9·2 | | 47·5 | 51·1 | |
| 9·7 | | 52·2 | 57·9 | |
| 9·9 | 33 | 5·5 | 31·8 | |
| 9·9 | | 13·5 | 12·7 | |
| 9·0 | | 19·5 | 43·3 | 9·5 |
| 9·2 | | 35·5 | 26·0 | |
| 9·4 | | 49·5 | 24·8 | |
| 9·7 | | 53·0 | 31·4 | |
| 7·2 | 34 | 1·0 | 23·5 | 7·5 GSg |
| 9·5 | | 8·0 | 58·3 | |
| 9·9 | | 15·5 | 13·3 | |
| 9·9 | | 18·3 | 57·1 | |
| 9·5 | | 20·0 | 33·3 | |
| 9·5 | | 22·5 | 38·5 | |
| 9·8 | | 23·5 | 25·2 | |

## 1381—1440.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 34 | 29·0 | 8·3 | |
| 9·8 | | 36·5 | 41·1 | |
| 8·0 | | 44·0 | 19·3 | 8·0 g |
| 9·6 | | 44·0 | 40·8 | |
| 9·5 | | 48·5 | 6·5 | |
| 9·9 | | 52·5 | 36·1 | |
| 9·8 | | 59·0 | 40·3 | |
| 9·9 | 35 | 2·0 | 19·1 | |
| 9·8 | | 2·0 | 51·1 | |
| 9·3 | | 9·5 | 15·8 | |
| 9·7 | | 10·0 | 20·1 | |
| 9·9 | | 10·5 | 18·8 | |
| 9·4 | | 11·5 | 35·9 | |
| 8·9 | | 12·0 | 25·9 | 9·0 |
| 8·9 | | 12·0 | 2·3 | |
| 9·8 | | 14·7 | 0·9 | |
| 9·4 | | 16·5 | 45·9 | |
| 9·8 | | 22·0 | 41·9 | |
| 9·2 | | 24·0 | 14·9 | |
| 9·6 | | 29·5 | 3·5 | |
| 9·8 | | 31·0 | 41·2 | |
| 9·6 | | 39·5 | 17·1 | |
| 5·7 | | 50·5 | 27·0 | 6·5 GSg |
| 9·6 | | 52·5 | 45·1 | |
| 9·8 | 36 | 0·5 | 25·0 | |
| 9·7 | | 10·5 | 32·1 | |
| 9·6 | | 13·5 | 13·1 | |
| 7·3 | | 19·5 | 0·1 | 9·0 GSg |
| 9·6 | | 26·5 | 16·6 | |
| 9·6 | | 43·0 | 51·3 | |
| 9·8 | | 48·5 | 29·5 | |
| 9·4 | | 50·5 | 49·1 | |
| 9·6 | | 51·0 | 29·7 | |
| 9·8 | | 56·5 | 20·2 | |
| 9·6 | | 59·5 | 41·1 | |
| 9·6 | 37 | 1·5 | 26·9 | |
| 9·8 | | 3·5 | 17·1 | |
| 9·5 | | 12·5 | 27·0 | |
| 9·6 | | 25·5 | 25·3 | |
| 9·4 | | 26·0 | 32·3 | |
| 9·8 | | 29·5 | 30·6 | |
| 9·4 | | 30·5 | 19·1 | |
| 9·5 | | 32·5 | 30·9 | |
| 9·8 | | 35·5 | 27·5 | |
| 9·6 | | 39·5 | 25·9 | |
| 9·7 | | 42·5 | 27·9 | |
| 9·7 | | 43·0 | 41·7 | |
| 9·9 | | 43·0 | 6·9 | |
| 9·9 | | 43·5 | 43·8 | |
| 9·8 | | 48·5 | 24·0 | |
| 9·8 | | 50·0 | 25·1 | |
| 9·8 | | 50·5 | 24·1 | |
| 9·9 | | 52·5 | 27·4 | |
| 9·8 | 38 | 2·0 | 24·1 | |
| 9·7 | | 3·0 | 24·5 | |
| 9·8 | | 3·5 | 25·9 | |
| 9·2 | | 11·0 | 3·1 | |
| 9·7 | | 12·0 | 21·1 | |
| 7·9 | | 12·5 | 1·5 | g |
| 9·6 | | 15·5 | 27·0 | |

## 1441—1500.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 38 | 25·0 | 25·0 | |
| 9·9 | | 25·5 | 33·1 | |
| 8·9 | | 26·0 | 32·3 | |
| 9·9 | | 30·5 | 27·0 | |
| 9·9 | | 33·0 | 31·2 | |
| 9·6 | | 38·0 | 59·1 | |
| 9·8 | | 39·5 | 51·1 | |
| 9·9 | | 42·5 | 1·3 | |
| 9·8 | | 44·0 | 28·2 | |
| 9·2 | 39 | 6·5 | 45·7 | |
| 9·8 | | 6·5 | 27·0 | |
| 8·8 | | 16·5 | 49·3 | g |
| 9·8 | | 29·5 | 18·1 | |
| 9·6 | | 30·0 | 8·1 | |
| 9·8 | | 36·5 | 42·3 | |
| 8·8 | | 41·0 | 1·2 | |
| 9·6 | | 43·0 | 42·0 | |
| 9·7 | | 47·0 | 7·1 | |
| 9·5 | | 52·5 | 5·1 | |
| 9·6 | 40 | 4·0 | 26·8 | |
| 9·8 | | 9·5 | 27·5 | |
| 9·7 | | 16·5 | 19·0 | |
| 9·9 | | 31·5 | 5·7 | |
| 9·6 | | 32·5 | 22·8 | |
| 9·0 | | 42·0 | 12·9 | |
| 9·7 | | 44·0 | 56·2 | |
| 9·9 | 41 | 1·0 | 15·5 | |
| 9·9 | | 3·5 | 15·5 | |
| 8·1 | | 5·0 | 2·9 | 8·5 g |
| 9·4 | | 12·5 | 7·0 | |
| 9·8 | | 13·0 | 2·2 | |
| 9·2 | | 20·0 | 21·1 | |
| 9·6 | | 27·5 | 40·2 | |
| 9·6 | | 38·0 | 56·0 | |
| 9·5 | | 38·3 | 57·3 | g |
| 9·9 | | 52·5 | 55·0 | |
| 9·6 | | 59·5 | 39·1 | |
| 9·6 | 42 | 6·5 | 47·7 | |
| 9·6 | | 13·0 | 48·9 | |
| 9·8 | | 20·0 | 14·0 | |
| 9·5 | | 23·5 | 14·7 | |
| 9·8 | 43 | 2·5 | 41·9 | |
| 9·6 | | 29·0 | 44·1 | |
| 9·6 | | 40·5 | 33·9 | |
| 9·9 | | 44·5 | 7·9 | |
| 9·9 | | 50·0 | 4·1 | |
| 9·4 | | 50·5 | 48·2 | |
| 9·9 | 44 | 0·5 | 46·2 | |
| 9·8 | | 12·5 | 13·8 | |
| 9·9 | | 22·5 | 6·1 | |
| 9·6 | | 25·5 | 56·4 | |
| 9·7 | | 28·0 | 50·7 | |
| 9·5 | | 31·5 | 52·2 | |
| 9·7 | | 45·5 | 14·4 | |
| 9·9 | 45 | 2·5 | 28·1 | |
| 9·2 | | 3·5 | 7·3 | |
| 9·9 | | 9·0 | 56·5 | |
| 9·8 | | 9·5 | 55·9 | |
| 9·8 | | 13·5 | 6·6 | |
| 9·4 | | 56·5 | 22·1 | |



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### 1501—1560.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 46 | 2·5 | 27·1 | |
| 9·6 | | 19·0 | 18·7 | |
| 9·4 | | 27·0 | 28·1 | |
| 9·9 | | 40·5 | 33·2 | |
| 9·6 | 47 | 1·0 | 1·2 | |
| 9·7 | | 6·5 | 46·2 | |
| 9·7 | | 10·0 | 41·2 | |
| 9·9 | | 11·0 | 56·0 | |
| 9·5 | | 31·5 | 45·8 | |
| 9·0 | | 37·5 | 54·3 | 9·5 |
| 9·6 | | 41·0 | 18·4 | |
| 9·7 | | 41·5 | 51·1 | |
| 9·4 | | 41·5 | 43·8 | |
| 9·9 | | 44·0 | 13·8 | |
| 9·8 | | 53·5 | 55·1 | |
| 9·7 | | 54·0 | 26·3 | |
| 9·8 | 48 | 2·0 | 57·0 | |
| 9·6 | | 2·5 | 55·1 | |
| 9·2 | | 10·0 | 43·0 | 9·0 |
| 9·6 | | 10·0 | 35·3 | |
| 9·8 | | 14·0 | 2·3 | |
| 9·6 | | 22·5 | 11·9 | |
| 9·0 | | 44·5 | 8·5 | 9·0 |
| 9·9 | | 47·5 | 31·0 | |
| 9·5 | | 48·0 | 15·6 | |
| 9·1 | | 51·5 | 56·1 | |
| 9·8 | | 55·5 | 0·5 | |
| 9·9 | 49 | 0·5 | 55·1 | |
| 9·3 | | 4·0 | 13·9 | 9·0 |
| 9·8 | | 6·5 | 5·4 | |
| 9·5 | | 9·5 | 18·1 | |
| 9·6 | | 9·5 | 6·7 | |
| 9·8 | | 12·5 | 43·2 | |
| 9·8 | | 18·5 | 6·5 | |
| 9·5 | | 21·5 | 0·7 | |
| 9·7 | | 22·5 | 58·1 | |
| 9·6 | | 26·5 | 11·5 | |
| 9·6 | | 27·5 | 8·8 | |
| 9·7 | | 32·5 | 7·1 | |
| 9·6 | | 38·0 | 36·1 | |
| 9·8 | | 40·0 | 51·6 | |
| 9·9 | | 47·5 | 1·9 | |
| 9·4 | | 49·3 | 2·3 | |
| 9·4 | | 55·0 | 32·5 | |
| 9·2 | 50 | 5·5 | 59·3 | |
| 9·6 | | 20·5 | 29·3 | |
| 9·7 | | 29·5 | 25·9 | |
| 9·8 | | 34·0 | 34·1 | |
| 9·4 | | 40·0 | 19·0 | |
| 9·4 | | 50·5 | 8·7 | |
| 9·6 | 51 | 11·5 | 15·5 | |
| 9·4 | | 15·0 | 52·1 | |
| 9·6 | | 22·2 | 58·1 | |
| 9·4 | | 27·5 | 8·1 | |
| 9·6 | | 33·0 | 14·3 | |
| 9·9 | | 46·5 | 9·1 | |
| 9·0 | | 51·5 | 38·1 | 9·0 *g* |
| 9·5 | | 58·5 | 47·1 | |
| 9·9 | | 59·5 | 19·5 | |
| 9·5 | 52 | 6·5 | 1·1 | |

### 1561—1620.

| mag. | 10h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 52 | 18·5 | 46·9 | |
| 9·9 | | 19·5 | 15·1 | |
| 9·2 | | 20·0 | 15·9 | 9·5 |
| 9·0 | | 25·5 | 27·9 | 9·0 *g* |
| 9·6 | | 45·0 | 51·1 | |
| 9·9 | | 45·5 | 46·0 | |
| 9·6 | | 45·5 | 54·9 | |
| 9·6 | | 47·5 | 38·1 | |
| 9·7 | 53 | 9·5 | 30·7 | |
| 9·8 | | 18·5 | 43·2 | |
| 9·7 | | 47·5 | 57·0 | |
| 9·7 | | 57·5 | 3·9 | |
| 9·6 | 54 | 11·5 | 21·4 | |
| 8·9 | | 16·5 | 7·2 | |
| 9·6 | | 21·5 | 5·7 | |
| 9·9 | | 27·5 | 48·1 | |
| 9·9 | | 37·5 | 55·9 | |
| 9·7 | | 44·0 | 25·1 | |
| 9·6 | | 46·0 | 11·1 | |
| 9·6 | | 48·0 | 10·3 | |
| 9·6 | | 48·5 | 26·1 | |
| 9·9 | | 50·5 | 49·1 | |
| 9·9 | | 51·5 | 54·3 | |
| 9·9 | | 57·0 | 4·3 | |
| 9·3 | 55 | 22·0 | 13·3 | |
| 9·9 | | 23·0 | 16·1 | |
| 9·2 | | 30·5 | 22·9 | |
| 9·5 | | 38·0 | 35·7 | |
| 9·8 | | 42·5 | 28·1 | |
| 9·2 | | 47·5 | 28·7 | |
| 9·2 | | 52·5 | 57·1 | |
| 9·2 | | 59·5 | 6·7 | |
| 9·7 | 56 | 3·0 | 25·5 | |
| 9·9 | | 3·5 | 0·4 | |
| 9·8 | | 3·5 | 28·3 | |
| 9·8 | | 5·5 | 9·7 | |
| 9·9 | | 13·5 | 8·5 | |
| 9·4 | | 28·0 | 33·1 | |
| 9·9 | | 30·0 | 59·1 | |
| 9·8 | | 45·5 | 17·2 | |
| 9·8 | | 46·5 | 28·2 | |
| 9·6 | | 53·0 | 7·9 | |
| 9·6 | 57 | 5·3 | 58·2 | |
| 8·8 | | 8·5 | 54·3 | 9·0 |
| 9·6 | | 14·0 | 14·9 | |
| 9·2 | | 15·5 | 51·5 | 9·0 |
| 9·9 | | 22·5 | 47·3 | |
| 9·7 | | 29·5 | 2·5 | |
| 9·8 | | 32·5 | 42·1 | |
| 9·0 | | 48·5 | 2·1 | 9·0 |
| 9·6 | | 57·5 | 30·3 | |
| 9·8 | 58 | 2·5 | 53·7 | |
| 9·4 | | 2·5 | 52·1 | |
| 9·2 | | 8·5 | 39·1 | |
| 8·0 | | 13·5 | 1·4 | 9·0 G*g* |
| 9·8 | | 16·5 | 53·3 | |
| 9·6 | | 28·5 | 57·4 | |
| 9·6 | | 31·3 | 37·2 | |
| 9·2 | | 39·3 | 43·2 | |
| 9·2 | | 49·8 | 4·4 | |

### 1621—1680.

| mag. | 10h.–11h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 59 | 45·5 | 54·0 | G*g* |
| 9·5 | 0 | 1·3 | 43·5 | |
| 8·8 | | 1·5 | 44·5 | 9·0 *g* |
| 9·6 | | 8·0 | 25·6 | |
| 9·9 | | 11·0 | 15·7 | |
| 9·3 | | 19·0 | 22·8 | |
| 9·7 | | 45·7 | 0·3 | |
| 9·2 | | 45·7 | 50·8 | |
| 8·3 | 1 | 20·5 | 50·1 | 8·5 GS*g* |
| 7·1 | | 25·0 | 9·9 | 7·0 GS*g* |
| 9·6 | 2 | 22·0 | 0·1 | |
| 9·1 | 3 | 0·0 | 16·8 | 9·0 |
| 8·6 | | 27·0 | 45·0 | 8·0 GS*g* |
| 9·6 | 5 | 51·0 | 43·8 | 9·5 *g* |
| 9·4 | | 51·0 | 38·1 | |
| 8·6 | | 53·0 | 44·5 | 8·5 G*g* |
| 9·5 | 6 | 19·0 | 10·0 | |
| 9·6 | | 22·0 | 42·9 | |
| 9·3 | | 24·0 | 57·0 | |
| 9·6 | 7 | 4·0 | 32·2 | |
| 7·8 | | 10·0 | 32·3 | 8·5 GS*g* |
| 9·3 | | 14·0 | 27·7 | |
| 9·4 | | 31·5 | 29·0 | |
| 9·3 | 8 | 32·0 | 42·9 | |
| 9·7 | 9 | 49·0 | 9·2 | |
| 9·7 | | 59·5 | 5·9 | |
| 9·7 | 11 | 6·0 | 40·1 | |
| 9·0 | 13 | 15·5 | 51·5 | 9·5 *g* |
| 8·8 | | 56·0 | 21·9 | 9·0 *g* |
| 9·0 | 14 | 20·5 | 0·4 | 9·5 |
| 9·7 | | 45·5 | 34·9 | |
| 9·6 | | 49·5 | 33·9 | 8·5 *g* |
| 9·4 | 15 | 8·5 | 29·2 | |
| 8·9 | 16 | 24·5 | 14·2 | 9·5 |
| 9·6 | | 55·0 | 18·2 | 9·0 |
| 9·6 | 17 | 35·0 | 1·7 | 8·8 *g* |
| 5·5 | | 57·0 | 16·1 | 6·0 GSc*g*r |
| 9·7 | 18 | 13·0 | 21·9 | |
| 8·8 | | 17·0 | 39·2 | 8·5 GS*g* |
| 9·7 | 19 | 0·0 | 1·0 | |
| 9·3 | 20 | 13·0 | 49·3 | 8·5 G |
| 9·4 | 21 | 48·5 | 5·9 | |
| 9·0 | | 54·0 | 25·6 | 9·5 |
| 9·3 | 22 | 21·5 | 59·2 | |
| 8·6 | | 59·0 | 11·9 | 8·8 *g* |
| 9·3 | 23 | 25·5 | 32·2 | |
| 9·6 | 24 | 49·5 | 19·7 | 9·0 |
| 8·3 | 26 | 2·5 | 42·8 | *g* |
| 9·2 | | 4·5 | 34·8 | |
| 9·2 | | 8·5 | 59·9 | |
| 9·7 | | 36·5 | 3·0 | 9·0 *g* |
| 9·7 | | 39·0 | 20·9 | |
| 9·2 | | 59·5 | 6·9 | 9·0 *g* |
| 9·2 | 27 | 9·0 | 55·9 | 9·0 |
| 9·4 | 28 | 17·5 | 24·9 | |
| 9·4 | | 19·5 | 47·8 | |
| 7·4 | | 32·0 | 43·1 | 8·0 GS*g* |
| 9·5 | 29 | 39·0 | 52·4 | |
| 9·6 | 31 | 5·5 | 14·6 | |
| 9·0 | | 31·5 | 21·5 | 9·5 *g* |

### 1681—1740.

| mag. | 11h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 31 | 40·0 | 47·2 | 9·0 *g* |
| 7·5 | 32 | 19·0 | 57·8 | 8·0 GS*g* |
| 9·4 | | 35·5 | 13·0 | |
| 9·7 | | 48·5 | 6·2 | |
| 6·4 | 33 | 41·5 | 42·3 | 6·0 GS*g*r |
| 8·8 | | 59·5 | 0·7 | 8·5 *g* |
| 8·8 | 34 | 14·0 | 35·1 | 9·0 *g* |
| 9·6 | 35 | 38·0 | 7·9 | |
| 9·6 | 36 | 40·0 | 5·1 | 8·8 |
| 9·2 | 37 | 18·5 | 41·0 | 8·5 *g* |
| 9·1 | | 25·0 | 2·8 | 9·5 |
| 9·4 | | 37·5 | 58·0 | |
| 9·2 | | 43·5 | 29·6 | |
| 9·6 | | 50·5 | 30·9 | |
| 9·4 | | 55·5 | 11·9 | |
| 9·6 | 38 | 0·5 | 6·9 | 8·5 |
| 9·3 | | 10·5 | 33·9 | |
| 9·1 | | 57·0 | 3·5 | 9·5 |
| 9·9 | 39 | 11·5 | 19·8 | |
| 9·5 | | 21·0 | 39·2 | |
| 9·9 | | 35·0 | 15·7 | |
| 9·9 | | 42·5 | 14·8 | |
| 9·9 | | 49·5 | 45·8 | |
| 9·4 | | 50·0 | 13·0 | |
| 9·0 | 40 | 32·3 | 53·8 | 9·0 *g* |
| 7·2 | | 37·0 | 4·4 | 8·0 GS*g* |
| 9·9 | | 42·5 | 28·1 | |
| 9·4 | 41 | 9·3 | 45·7 | *g* |
| 9·4 | | 27·5 | 11·2 | |
| 9·9 | | 36·5 | 39·0 | |
| 8·8 | | 54·0 | 37·7 | 9·0 *g* |
| 9·0 | 42 | 45·5 | 2·1 | 9·5 |
| 9·9 | 43 | 16·7 | 0·1 | |
| 9·5 | | 26·5 | 25·6 | |
| 9·8 | | 53·0 | 21·1 | |
| 9·6 | 44 | 6·5 | 8·7 | |
| 9·9 | | 19·0 | 47·2 | |
| 9·8 | | 36·0 | 53·0 | |
| 9·8 | | 55·0 | 51·2 | |
| 9·5 | 45 | 0·0 | 37·0 | |
| 9·9 | | 21·1 | 22·4 | |
| 9·9 | | 22·0 | 22·0 | |
| 9·9 | | 33·5 | 26·6 | |
| 4·6 | | 43·5 | 30·6 | 5·5 GSc*g*r |
| 9·7 | 46 | 10·5 | 42·5 | |
| 9·5 | | 31·0 | 33·0 | |
| 9·6 | | 39·0 | 34·4 | |
| 8·9 | | 47·5 | 32·8 | 8·0 G*g* |
| 7·4 | 47 | 11·5 | 42·5 | 7·5 GS*g* |
| 9·0 | | 22·0 | 5·6 | 9·0 G |
| 7·8 | | 34·5 | 35·6 | 7·5 GS*g* |
| 9·2 | | 53·0 | 8·1 | |
| 9·8 | | 56·0 | 49·4 | |
| 8·7 | 48 | 31·0 | 31·2 | 8·0 G*g* |
| 9·9 | | 31·0 | 49·9 | |
| 9·9 | 49 | 37·5 | 29·7 | |
| 9·9 | | 44·0 | 14·0 | |
| 9·1 | | 49·0 | 3·6 | |
| 9·8 | | 56·0 | 59·8 | |
| 9·6 | 50 | 0·5 | 16·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 53 | 7·9 |
| | 50 | 56 | 8·0 |
| 11 | 0 | 59 | 8·1 |
| | 10 | 62 | 8·2 |
| | 20 | 65 | 8·2 |
| | 30 | 68 | 8·3 |
| | 40 | 71 | 8·3 |
| | 50 | 74 | 8·3 |



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| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 11 | 50 | 74 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |
| | 20 | 83 | 8·3 |
| | 30 | 86 | 8·3 |
| | 40 | 89 | 8·2 |

## 1741—1800.

| mag. | 11h.—12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·7 | 50 | 18·0 | 6·0 | |
| 9·2 | | 28·5 | 33·3 | |
| 9·8 | | 37·0 | 52·6 | |
| 9·9 | | 40·5 | 43·9 | |
| 9·9 | | 49·3 | 1·2 | |
| 9·8 | | 49·5 | 12·9 | |
| 9·1 | 51 | 16·0 | 3·0 | |
| 9·3 | | 20·5 | 37·0 | |
| 9·9 | | 42·0 | 44·2 | |
| 9·4 | | 42·0 | 24·0 | |
| 8·2 | | 42·5 | 37·6 | GS*g* |
| 9·5 | | 44·5 | 9·4 | |
| 9·3 | 52 | 5·0 | 7·3 | |
| 9·2 | | 17·5 | 28·6 | |
| 9·4 | | 23·0 | 59·4 | |
| 9·9 | | 43·0 | 56·0 | |
| 8·8 | | 53·0 | 36·1 | 8·5 G*g* |
| 9·9 | | 53·5 | 0·9 | |
| 8·8 | | 54·5 | 3·9 | *g* |
| 9·8 | | 55·0 | 10·0 | |
| 9·9 | 53 | 1·0 | 57·1 | |
| 9·6 | | 8·5 | 11·1 | |
| 9·9 | | 11·0 | 19·1 | |
| 8·8 | | 12·0 | 41·9 | 9·0 *g* |
| 9·4 | | 53·5 | 34·0 | 9·5 |
| 9·7 | 54 | 8·0 | 13·2 | |
| 9·4 | | 12·5 | 44·4 | |
| 9·4 | | 51·0 | 13·1 | |
| 9·9 | | 55·5 | 14·3 | |
| 9·0 | 55 | 15·5 | 1·8 | 8·5 *g* |
| 9·4 | | 41·5 | 40·8 | |
| 8·0 | | 47·0 | 6·2 | 8·0 G*g* |
| 9·4 | | 47·5 | 55·3 | |
| 9·5 | 56 | 2·0 | 15·1 | |
| 9·9 | | 26·0 | 3·1 | |
| 8·5 | | 27·5 | 56·6 | *g* |
| 9·9 | | 49·0 | 27·0 | |
| 9·8 | 57 | 10·5 | 39·7 | |
| 9·5 | | 42·5 | 30·4 | 9·0 *g* |
| 9·7 | | 44·0 | 32·7 | |
| 9·9 | | 48·0 | 42·3 | |
| 8·6 | | 48·5 | 41·2 | G*g* |
| 9·8 | 58 | 14·0 | 3·7 | |
| 9·9 | | 20·5 | 6·0 | |
| 9·9 | | 26·0 | 39·0 | |
| 9·8 | | 26·5 | 50·0 | *g* |
| 9·9 | | 55·5 | 7·2 | |
| 9·1 | 59 | 1·0 | 11·0 | 8·5 *g* |
| 9·9 | | 10·5 | 28·7 | |
| 9·7 | | 22·5 | 39·1 | |
| 6·9 | | 24·5 | 51·1 | 7·0 GS |
| 9·8 | | 28·5 | 12·6 | |
| 9·7 | | 29·0 | 47·7 | 9·5 *g* |
| 9·9 | | 41·5 | 39·0 | |
| 8·6 | 0 | 4·0 | 47·8 | 8·5 *g* |
| 9·9 | | 7·5 | 40·6 | |
| 9·5 | | 28·5 | 54·0 | |
| 9·7 | 1 | 23·0 | 29·5 | |
| 9·9 | | 28·0 | 27·4 | |
| 9·4 | | 37·5 | 55·0 | |

## 1801—1860.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 2 | 19·5 | 5·1 | |
| 8·8 | | 38·0 | 55·2 | *g* |
| 9·5 | | 49·0 | 51·0 | |
| 8·8 | 3 | 1·0 | 56·1 | *g* |
| 9·7 | | 3·0 | 40·9 | |
| 9·8 | | 7·5 | 44·5 | |
| 9·9 | | 9·5 | 40·2 | |
| 9·7 | | 27·5 | 9·7 | |
| 9·9 | | 49·0 | 7·0 | |
| 8·9 | 4 | 18·0 | 4·2 | |
| 9·9 | | 27·0 | 4·4 | |
| 9·5 | | 39·5 | 19·8 | 9·0 |
| 8·8 | 5 | 6·5 | 46·0 | 9·5 G |
| 9·9 | | 6·5 | 54·2 | |
| 8·2 | | 7·5 | 15·0 | 8·5 G |
| 9·9 | | 13·0 | 0·0 | |
| 8·9 | | 16·5 | 18·7 | 9·5 |
| 9·9 | | 45·0 | 3·0 | |
| 9·9 | 6 | 11·0 | 56·6 | |
| 9·5 | | 17·0 | 16·6 | |
| 9·4 | | 22·7 | 58·5 | |
| 9·9 | | 31·5 | 7·0 | |
| 8·2 | | 39·5 | 55·4 | |
| 9·9 | 7 | 18·0 | 32·0 | |
| 9·5 | | 42·3 | 2·0 | |
| 9·5 | | 43·5 | 27·9 | |
| 9·1 | | 44·0 | 31·1 | |
| 9·5 | | 56·5 | 52·3 | |
| 9·9 | 8 | 19·5 | 16·1 | |
| 9·9 | | 19·5 | 7·0 | |
| 9·0 | | 28·5 | 28·9 | |
| 9·8 | | 49·0 | 45·3 | |
| 8·9 | | 53·5 | 3·3 | |
| 9·9 | 9 | 0·5 | 24·8 | |
| 8·0 | | 18·5 | 29·8 | 8·0 |
| 9·0 | | 21·0 | 5·0 | |
| 7·9 | | 23·2 | 58·4 | 8·0 |
| 9·7 | | 28·5 | 8·0 | |
| 7·8 | | 52·5 | 48·7 | |
| 9·2 | 10 | 1·5 | 34·9 | |
| 9·8 | | 3·0 | 23·3 | 9·5 |
| 9·9 | | 11·5 | 30·8 | |
| 8·8 | | 20·0 | 33·3 | 9·5 |
| 6·4 | | 20·5 | 59·9 | 6·5 GS |
| 8·8 | | 21·0 | 36·7 | 9·5 |
| 9·4 | | 24·5 | 3·6 | |
| 9·8 | | 26·0 | 47·0 | |
| 9·9 | | 28·5 | 53·1 | |
| 9·9 | | 31·5 | 20·0 | |
| 9·4 | | 58·0 | 14·0 | |
| 9·9 | 11 | 9·0 | 31·4 | |
| 8·8 | | 23·0 | 58·1 | 8·5 |
| 9·9 | | 32·5 | 38·5 | |
| 9·1 | | 41·0 | 1·2 | G |
| 9·3 | | 47·0 | 5·8 | |
| 9·9 | | 51·5 | 31·0 | |
| 9·9 | 12 | 3·5 | 45·0 | |
| 9·2 | | 27·5 | 25·6 | |
| 9·9 | | 32·5 | 12·3 | |
| 9·9 | | 40·0 | 15·0 | |

## 1861—1920.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·4 | 12 | 41·0 | 9·8 | |
| 8·9 | | 45·0 | 37·6 | |
| 9·9 | | 49·5 | 1·6 | |
| 9·9 | 13 | 5·0 | 7·0 | |
| 8·0 | | 9·0 | 19·1 | |
| 9·3 | | 25·5 | 46·6 | |
| 9·1 | | 39·0 | 37·5 | |
| 9·6 | | 42·0 | 57·2 | |
| 9·5 | | 47·0 | 55·3 | |
| 9·8 | | 53·0 | 41·0 | |
| 8·8 | | 55·0 | 27·1 | |
| 8·6 | | 59·0 | 16·0 | 8·0 |
| 9·2 | 14 | 50·0 | 4·5 | |
| 9·4 | | 51·5 | 40·0 | |
| 9·9 | | 51·5 | 55·8 | |
| 8·8 | 15 | 2·5 | 16·3 | |
| 8·5 | | 10·0 | 0·0 | 9·0 |
| 9·0 | | 15·5 | 37·2 | |
| 7·7 | | 25·0 | 54·9 | 8·0 |
| 9·9 | | 26·5 | 6·6 | |
| 8·4 | | 27·2 | 59·8 | 9·0 |
| 9·9 | | 30·0 | 58·2 | |
| 7·9 | | 48·5 | 44·4 | 8·5 |
| 9·4 | | 50·5 | 29·0 | |
| 9·9 | | 57·5 | 29·0 | |
| 8·3 | 16 | 6·0 | 2·2 | 7·5 GS |
| 9·4 | | 10·5 | 22·2 | |
| 9·6 | | 16·5 | 37·2 | |
| 8·5 | | 35·5 | 11·0 | |
| 9·9 | | 37·0 | 23·7 | |
| 9·8 | | 45·5 | 12·8 | |
| 9·8 | 17 | 0·5 | 31·0 | |
| 9·9 | | 1·0 | 12·0 | |
| 9·9 | | 27·5 | 30·0 | |
| 8·8 | | 40·0 | 14·8 | 8·5 |
| 9·9 | | 47·0 | 22·2 | |
| 9·7 | | 51·0 | 57·4 | |
| 7·2 | | 59·0 | 31·0 | 7·5 GS |
| 9·0 | 18 | 1·0 | 16·0 | |
| 9·2 | | 3·0 | 23·6 | |
| 9·2 | | 3·5 | 30·3 | |
| 9·9 | | 5·0 | 6·3 | |
| 8·8 | | 7·5 | 59·8 | |
| 8·8 | | 17·0 | 25·2 | 9·0 |
| 9·1 | | 19·0 | 20·4 | |
| 9·9 | | 20·0 | 2·3 | |
| 9·9 | | 23·0 | 31·6 | |
| 9·9 | | 28·5 | 5·4 | |
| 9·9 | | 49·5 | 9·0 | |
| 10·0 | 19 | 1·0 | 28·1 | |
| 9·5 | | 3·5 | 38·1 | |
| 10·0 | | 14·5 | 30·5 | |
| 9·6 | | 20·0 | 52·1 | |
| 9·2 | | 22·5 | 19·7 | |
| 9·7 | | 25·0 | 52·7 | |
| 10·0 | | 36·5 | 33·9 | |
| 8·9 | | 41·3 | 35·7 | 9·0 |
| 9·6 | 20 | 0·0 | 10·7 | |
| 9·2 | | 11·3 | 10·0 | 9·0 |
| 10·0 | | 17·5 | 24·3 | |

## 1921—1980.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 10·0 | 20 | 19·5 | 52·7 | |
| 10·0 | | 31·0 | 17·1 | |
| 9·5 | | 43·3 | 40·4 | |
| 9·6 | | 46·8 | 10·3 | |
| 10·0 | 21 | 10·5 | 12·7 | |
| 9·5 | | 15·0 | 1·1 | |
| 9·4 | | 25·5 | 30·3 | |
| 9·2 | | 33·5 | 23·2 | |
| 9·7 | | 34·5 | 22·5 | |
| 9·4 | | 38·5 | 5·9 | |
| 9·3 | | 44·0 | 11·1 | |
| 9·9 | | 49·5 | 24·9 | |
| 9·9 | | 51·5 | 13·3 | |
| 9·8 | | 54·0 | 26·1 | |
| 8·8 | 22 | 0·5 | 13·3 | 9·0 |
| 10·0 | | 7·5 | 19·5 | |
| 9·7 | | 13·5 | 16·9 | |
| 9·9 | | 38·0 | 27·9 | |
| 10·0 | | 38·5 | 6·6 | |
| 9·6 | | 40·0 | 6·7 | |
| 9·6 | | 44·5 | 6·1 | |
| 8·8 | | 51·5 | 6·0 | 8·0 G |
| 8·9 | | 51·5 | 7·2 | 8·0 |
| 9·6 | | 56·0 | 5·7 | |
| 9·2 | 23 | 0·0 | 9·2 | |
| 9·2 | | 10·5 | 6·1 | |
| 10·0 | | 18·5 | 6·7 | |
| 9·5 | | 50·5 | 48·1 | |
| 9·6 | | 50·5 | 12·6 | |
| 9·2 | 24 | 0·0 | 58·0 | 9·5 |
| 9·4 | | 20·5 | 11·3 | 9·0 |
| 10·0 | | 38·5 | 30·1 | |
| 9·5 | | 48·0 | 7·3 | |
| 9·6 | | 54·0 | 21·1 | |
| 9·6 | 25 | 6·0 | 51·0 | |
| 9·6 | | 11·5 | 31·7 | |
| 10·0 | | 17·5 | 14·6 | |
| 9·7 | | 29·5 | 47·8 | |
| 9·0 | | 59·0 | 6·3 | 8·5 |
| 9·5 | 26 | 21·5 | 57·9 | |
| 9·9 | | 21·5 | 8·3 | |
| 9·6 | | 30·5 | 36·3 | |
| 9·7 | 27 | 10·0 | 4·8 | |
| 10·0 | | 22·5 | 41·2 | |
| 10·0 | 28 | 8·0 | 9·7 | |
| 8·9 | | 26·5 | 35·2 | 9·0 |
| 10·0 | | 31·5 | 5·7 | |
| 10·0 | 29 | 26·0 | 59·9 | |
| 9·6 | | 39·0 | 4·1 | |
| 10·0 | | 50·5 | 10·7 | |
| 10·0 | 30 | 5·0 | 23·7 | |
| 9·8 | | 49·0 | 36·2 | |
| 9·2 | 31 | 4·0 | 39·3 | |
| 10·0 | | 17·0 | 5·0 | |
| 9·6 | | 35·0 | 26·9 | |
| 9·7 | 32 | 18·0 | 27·3 | |
| 10·0 | | 42·0 | 50·7 | |
| 9·9 | 33 | 0·5 | 58·7 | |
| 9·8 | | 18·0 | 9·7 | |
| 9·5 | | 22·0 | 49·0 | |



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### 1981—2040.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 10.0 | 34 | 15.5 | 14.6 | |
| 9.5 | | 19.0 | 3.1 | |
| 8.0 | | 32.0 | 2.6 | 8.0 GS |
| 10.0 | | 54.0 | 12.1 | |
| 10.0 | 35 | 12.0 | 36.1 | |
| 9.8 | | 33.0 | 5.1 | |
| 9.1 | | 41.5 | 59.1 | 8.8 |
| 10.0 | 36 | 22.0 | 41.7 | |
| 9.7 | 37 | 1.5 | 10.2 | |
| 8.4 | | 22.0 | 16.7 | 9.0 |
| 10.0 | | 29.5 | 23.9 | |
| 8.6 | | 30.0 | 37.9 | 9.0 |
| 9.2 | | 41.5 | 14.1 | 9.5 |
| 8.7 | | 52.0 | 46.1 | 8.5 |
| 9.9 | | 53.0 | 34.9 | |
| 9.2 | 38 | 2.5 | 44.7 | |
| 8.9 | | 14.0 | 56.2 | |
| 10.0 | | 34.0 | 10.4 | |
| 9.2 | | 44.0 | 47.1 | |
| 9.9 | | 48.5 | 49.8 | |
| 8.9 | 39 | 0.5 | 14.1 | 9.5 |
| 9.5 | | 2.5 | 44.1 | |
| 9.2 | | 31.5 | 21.3 | |
| 9.2 | | 34.0 | 0.1 | |
| 9.3 | | 35.0 | 6.1 | |
| 9.2 | | 37.0 | 58.1 | |
| 9.0 | | 40.0 | 48.1 | 9.5 |
| 9.9 | | 41.5 | 33.3 | |
| 9.0 | | 48.3 | 57.1 | 9.5 |
| 9.1 | 40 | 14.8 | 57.1 | 9.5 |
| 9.9 | | 15.0 | 51.5 | |
| 9.2 | | 15.5 | 4.1 | |
| 9.2 | | 27.5 | 10.3 | |
| 9.7 | | 28.0 | 1.5 | |
| 9.8 | | 28.3 | 57.7 | |
| 9.2 | | 39.0 | 42.1 | |
| 9.8 | | 58.5 | 48.2 | |
| 9.2 | 41 | 13.5 | 5.1 | |
| 9.6 | | 18.5 | 56.1 | |
| 7.4 | | 28.0 | 54.6 | 8.0 GSg |
| 9.1 | | 39.0 | 48.2 | |
| 10.0 | | 55.0 | 42.4 | |
| 9.2 | | 59.0 | 48.9 | |
| 10.0 | 42 | 10.0 | 42.6 | |
| 9.1 | | 16.5 | 24.1 | |
| 9.4 | | 19.0 | 10.2 | |
| 9.2 | | 22.5 | 40.0 | |
| 9.7 | | 23.5 | 17.1 | |
| 9.8 | | 35.3 | 59.9 | |
| 9.4 | | 39.8 | 59.9 | |
| 9.5 | | 41.0 | 38.1 | |
| 9.2 | 43 | 5.0 | 38.7 | |
| 10.0 | | 10.0 | 37.7 | |
| 9.2 | | 16.0 | 23.3 | |
| 10.0 | | 22.0 | 58.9 | |
| 9.2 | | 26.5 | 58.3 | |
| 9.2 | | 28.5 | 40.9 | |
| 8.8 | | 36.5 | 14.2 | |
| 9.5 | | 55.0 | 50.9 | |
| 9.2 | 44 | 9.5 | 3.9 | |

### 2041—2100.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.3 | 44 | 18.5 | 15.1 | |
| 9.7 | | 25.5 | 12.1 | |
| 10.0 | | 42.5 | 21.3 | |
| 10.0 | | 47.0 | 17.7 | |
| 9.2 | | 50.5 | 17.1 | |
| 9.8 | | 55.5 | 20.3 | |
| 9.4 | | 56.5 | 40.7 | |
| 9.2 | 45 | 4.5 | 40.5 | |
| 9.3 | | 9.5 | 10.1 | |
| 8.2 | | 12.5 | 8.2 | 8.5 G |
| 10.0 | | 13.5 | 2.5 | |
| 9.9 | | 14.0 | 15.7 | |
| 8.6 | | 33.0 | 6.9 | 9.0 |
| 10.0 | | 33.5 | 20.7 | |
| 9.7 | | 38.0 | 22.8 | |
| 9.0 | | 42.0 | 59.7 | |
| 9.4 | | 43.5 | 47.3 | |
| 9.2 | | 46.0 | 56.6 | |
| 10.0 | | 57.0 | 45.3 | |
| 10.0 | 46 | 9.5 | 29.1 | |
| 10.0 | | 15.0 | 20.4 | |
| 9.9 | | 39.5 | 32.3 | |
| 9.7 | | 50.5 | 27.5 | |
| 10.0 | | 51.5 | 39.7 | |
| 10.0 | | 55.0 | 4.1 | |
| 9.8 | | 57.5 | 20.0 | |
| 10.0 | | 58.0 | 29.0 | |
| 10.0 | 47 | 1.0 | 21.7 | |
| 9.6 | | 7.0 | 28.7 | |
| 10.0 | | 18.5 | 33.2 | |
| 9.9 | | 37.5 | 53.1 | |
| 9.3 | | 45.5 | 3.0 | |
| 10.0 | | 46.0 | 58.2 | |
| 9.0 | 48 | 19.0 | 47.7 | |
| 10.0 | | 33.5 | 59.2 | |
| 9.9 | | 42.5 | 49.1 | |
| 9.2 | | 44.7 | 58.6 | |
| 9.5 | | 47.0 | 19.3 | |
| 10.0 | | 52.5 | 51.1 | |
| 9.3 | 49 | 0.5 | 32.3 | |
| 10.0 | | 13.5 | 39.5 | |
| 10.0 | | 18.0 | 36.8 | |
| 9.4 | | 28.5 | 21.3 | |
| 10.0 | | 31.0 | 51.2 | |
| 9.2 | | 43.5 | 40.1 | |
| 8.3 | | 45.0 | 58.2 | 7.0 GS |
| 10.0 | | 49.5 | 18.1 | |
| 9.8 | 50 | 5.0 | 16.3 | |
| 10.0 | | 7.5 | 33.1 | |
| 9.3 | | 16.5 | 16.5 | |
| 9.9 | | 25.5 | 39.7 | |
| 9.6 | | 42.0 | 40.9 | |
| 9.0 | | 50.5 | 33.0 | |
| 9.7 | | 52.0 | 38.5 | |
| 10.0 | 51 | 6.0 | 22.1 | |
| 10.0 | | 9.5 | 6.1 | |
| 9.7 | | 16.0 | 9.7 | |
| 8.9 | | 50.3 | 57.1 | |
| 9.9 | 52 | 2.0 | 55.2 | |
| 10.0 | | 7.0 | 7.1 | |

### 2101—2160.

| mag. | 12h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.3 | 52 | 19.0 | 23.7 | 9.0 |
| 9.3 | | 20.0 | 17.5 | |
| 10.0 | | 20.5 | 34.1 | |
| 9.6 | | 21.0 | 1.3 | |
| 9.4 | | 30.0 | 32.4 | |
| 10.0 | | 36.0 | 54.0 | |
| 9.3 | | 48.0 | 18.0 | |
| 9.9 | | 49.0 | 45.5 | |
| 9.8 | 53 | 5.5 | 59.1 | |
| 10.0 | | 18.0 | 25.7 | |
| 10.0 | | 20.0 | 22.9 | |
| 9.2 | | 38.0 | 19.5 | |
| 9.5 | | 40.0 | 57.2 | |
| 9.8 | | 42.5 | 15.9 | |
| 9.5 | 54 | 11.0 | 32.1 | |
| 9.2 | | 19.0 | 14.1 | |
| 9.5 | | 20.0 | 11.7 | |
| 9.8 | | 29.5 | 19.7 | |
| 9.2 | | 29.5 | 23.1 | |
| 10.0 | | 30.5 | 52.1 | |
| 10.0 | | 31.5 | 13.9 | |
| 10.0 | | 50.5 | 6.1 | |
| 10.0 | 55 | 5.5 | 25.2 | |
| 8.6 | | 9.5 | 6.7 | 9.0 |
| 10.0 | | 18.0 | 10.5 | |
| 10.0 | | 22.5 | 21.3 | |
| 10.0 | | 39.5 | 29.7 | |
| 9.0 | | 41.0 | 29.2 | |
| 9.9 | | 41.0 | 9.1 | |
| 10.0 | | 44.0 | 48.5 | |
| 10.0 | | 49.0 | 25.3 | |
| 10.0 | | 50.0 | 25.7 | |
| 9.2 | | 50.5 | 13.1 | 9.5 |
| 9.8 | | 51.5 | 9.9 | |
| 9.2 | | 59.5 | 33.1 | |
| 9.7 | 56 | 0.0 | 22.1 | |
| 9.6 | | 12.0 | 10.2 | |
| 9.1 | | 31.5 | 7.1 | 9.0 |
| 9.3 | | 36.0 | 58.4 | |
| 10.0 | | 40.0 | 10.1 | |
| 9.5 | | 40.0 | 19.7 | |
| 9.4 | | 48.0 | 36.9 | |
| 9.8 | | 52.0 | 34.3 | |
| 9.5 | | 53.5 | 37.3 | |
| 9.3 | 57 | 0.0 | 43.9 | |
| 9.2 | | 21.5 | 51.0 | |
| 9.5 | | 31.5 | 19.9 | |
| 10.0 | | 47.0 | 15.9 | |
| 10.0 | | 48.5 | 50.5 | |
| 9.6 | 58 | 1.5 | 2.1 | |
| 8.6 | | 2.0 | 56.7 | |
| 10.0 | | 18.0 | 2.3 | |
| 9.7 | | 20.5 | 39.4 | |
| 9.2 | | 22.0 | 50.0 | |
| 8.9 | | 25.0 | 23.2 | |
| 9.7 | | 26.5 | 24.0 | |
| 9.3 | | 30.5 | 53.7 | |
| 10.0 | | 31.0 | 12.1 | |
| 10.0 | | 32.0 | 51.5 | |
| 8.0 | | 32.5 | 24.7 | k |

### 2161—2220.

| mag. | 12h.–13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.2 | 58 | 42.5 | 23.7 | |
| 8.8 | | 43.0 | 17.8 | |
| 7.8 | | 48.2 | 32.5 | Gk |
| 9.9 | | 59.5 | 49.1 | |
| 9.7 | 59 | 0.3 | 42.6 | |
| 9.0 | | 0.8 | 40.2 | |
| 9.6 | | 8.8 | 37.2 | |
| 9.9 | | 11.5 | 37.1 | |
| 9.9 | | 18.5 | 1.1 | |
| 9.5 | | 21.5 | 0.7 | |
| 9.3 | | 21.5 | 38.6 | |
| 9.7 | | 24.8 | 59.1 | |
| 9.7 | | 29.0 | 28.6 | |
| 9.7 | | 30.5 | 2.4 | |
| 9.8 | | 33.7 | 1.3 | |
| 9.7 | | 36.5 | 35.1 | |
| 9.4 | | 38.0 | 20.4 | |
| 9.7 | | 43.5 | 1.8 | |
| 9.5 | | 44.7 | 32.1 | |
| 9.6 | 0 | 1.0 | 45.5 | |
| 9.9 | | 1.5 | 47.3 | |
| 9.5 | | 3.5 | 11.9 | |
| 6.1 | | 3.5 | 38.1 | 6.0 GS |
| 9.3 | | 7.7 | 1.6 | |
| 9.8 | | 9.3 | 50.4 | |
| 8.9 | | 9.8 | 52.3 | 8.8 |
| 9.9 | | 12.0 | 51.4 | |
| 9.9 | | 18.5 | 36.8 | |
| 9.5 | | 20.7 | 2.6 | |
| 9.9 | | 21.5 | 35.6 | |
| 9.7 | | 24.0 | 50.1 | |
| 9.8 | | 30.5 | 29.6 | |
| 9.9 | | 30.5 | 3.3 | |
| 9.6 | | 34.0 | 38.4 | |
| 9.9 | | 37.0 | 36.4 | |
| 8.9 | | 43.7 | 6.9 | 9.5 |
| 9.6 | | 45.5 | 25.2 | |
| 9.9 | 1 | 5.5 | 16.2 | |
| 9.0 | | 7.5 | 14.7 | |
| 9.6 | | 12.0 | 37.1 | |
| 9.9 | | 14.5 | 40.0 | |
| 9.7 | | 20.0 | 1.1 | |
| 9.7 | | 21.0 | 4.5 | |
| 9.9 | | 24.7 | 58.9 | |
| 9.5 | | 32.5 | 23.5 | |
| 9.5 | | 32.5 | 3.1 | |
| 9.5 | | 37.0 | 32.1 | |
| 9.7 | | 41.5 | 41.1 | |
| 9.5 | | 42.5 | 22.9 | |
| 9.7 | | 43.5 | 42.7 | |
| 9.5 | | 58.0 | 59.6 | |
| 9.0 | 2 | 5.5 | 35.9 | |
| 9.7 | | 5.5 | 9.4 | |
| 9.6 | | 6.0 | 1.2 | |
| 9.5 | | 9.5 | 28.5 | |
| 9.2 | | 12.5 | 7.9 | |
| 9.5 | | 13.5 | 3.3 | |
| 9.5 | | 15.0 | 45.1 | |
| 9.9 | | 22.5 | 1.1 | |
| 9.8 | | 26.5 | 1.2 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 30 | 86 | 8.3 |
| | 40 | 89 | 8.2 |
| | 50 | 92 | 8.2 |
| 13 | 0 | 95 | 8.1 |
| | 10 | 98 | 8.1 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 13 | 0 | 95 | 8·1 |
| | 10 | 98 | 8·0 |
| | 20 | 101 | 7·9 |
| | 30 | 104 | 7·7 |

## 2221—2280.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·4 | 2 | 44·5 | 14·1 | |
| 9·5 | | 45·0 | 36·7 | |
| 9·2 | | 47·0 | 4·1 | |
| 9·4 | | 53·0 | 33·1 | |
| 9·5 | | 54·5 | 48·9 | |
| 9·7 | 3 | 4·0 | 51·0 | |
| 9·8 | | 8·0 | 18·4 | |
| 9·4 | | 16·0 | 25·0 | |
| 9·6 | | 25·5 | 39·8 | |
| 9·7 | | 27·5 | 10·2 | |
| 9·7 | | 35·5 | 14·9 | |
| 9·6 | | 38·5 | 28·3 | |
| 9·9 | | 45·5 | 17·1 | |
| 9·5 | | 48·0 | 37·9 | |
| 9·5 | | 48·0 | 44·9 | |
| 9·9 | | 52·5 | 37·7 | |
| 9·9 | | 54·0 | 42·5 | |
| 9·5 | | 54·0 | 44·1 | |
| 9·4 | 4 | 15·5 | 37·7 | |
| 9·9 | | 16·5 | 58·1 | |
| 9·5 | | 17·0 | 28·8 | |
| 9·8 | | 18·5 | 45·3 | |
| 9·9 | | 20·5 | 48·4 | |
| 9·5 | | 21·0 | 59·1 | |
| 9·6 | | 25·5 | 29·4 | |
| 9·7 | | 32·0 | 51·6 | |
| 9·2 | | 32·3 | 59·5 | 8·5 |
| 9·4 | | 32·5 | 33·1 | |
| 8·1 | | 34·5 | 37·6 | |
| 9·9 | | 35·0 | 7·0 | |
| 9·4 | | 35·5 | 14·2 | |
| 9·9 | | 36·5 | 51·5 | |
| 9·9 | | 38·0 | 0·4 | |
| 9·9 | | 40·5 | 54·4 | |
| 9·9 | | 44·0 | 2·2 | |
| 9·0 | | 44·5 | 58·0 | 9·0 |
| 9·7 | | 46·5 | 54·2 | |
| 9·4 | | 48·5 | 13·9 | |
| 9·8 | | 54·5 | 56·4 | |
| 9·9 | | 55·5 | 22·0 | |
| 9·9 | 5 | 3·0 | 5·1 | |
| 9·2 | | 8·0 | 28·1 | |
| 9·8 | | 9·5 | 19·3 | |
| 9·4 | | 12·0 | 12·1 | |
| 9·5 | | 12·5 | 20·1 | |
| 9·9 | | 13·0 | 14·3 | |
| 9·5 | | 13·0 | 36·9 | |
| 9·5 | | 15·0 | 28·2 | |
| 9·9 | | 24·5 | 37·4 | |
| 9·1 | | 24·5 | 16·7 | |
| 9·6 | | 27·0 | 52·5 | |
| 9·5 | | 36·5 | 16·0 | |
| 9·9 | | 39·5 | 54·2 | |
| 9·7 | | 43·5 | 30·4 | |
| 8·7 | | 43·5 | 22·1 | 9·0 |
| 9·8 | | 45·5 | 6·8 | |
| 9·7 | | 48·5 | 33·6 | |
| 9·8 | | 48·5 | 56·7 | |
| 9·7 | | 51·5 | 25·1 | |
| 9·8 | | 52·0 | 12·4 | |

## 2281—2340.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 8·9 | 5 | 53·0 | 12·8 | 9·0 |
| 9·5 | 6 | 3·0 | 7·8 | |
| 9·5 | | 13·5 | 43·3 | |
| 9·5 | | 30·0 | 3·2 | |
| 9·4 | | 30·5 | 59·6 | |
| 8·7 | | 32·0 | 4·1 | |
| 9·6 | | 39·5 | 11·1 | |
| 9·6 | | 42·5 | 19·7 | |
| 9·5 | | 43·5 | 41·1 | |
| 9·2 | | 51·0 | 46·3 | |
| 9·5 | | 51·0 | 20·2 | |
| 9·9 | | 57·5 | 27·2 | |
| 9·3 | | 57·5 | 23·3 | |
| 9·7 | | 58·5 | 18·9 | |
| 9·9 | | 59·5 | 18·1 | |
| 9·6 | 7 | 8·5 | 41·3 | |
| 9·9 | | 12·5 | 3·1 | |
| 9·5 | | 17·0 | 36·1 | |
| 9·6 | | 18·0 | 8·4 | |
| 9·9 | | 20·0 | 37·0 | |
| 9·5 | | 22·0 | 19·5 | |
| 9·9 | | 27·0 | 49·9 | |
| 9·2 | | 39·5 | 13·6 | |
| 9·7 | | 42·5 | 26·1 | |
| 9·9 | | 53·5 | 50·3 | |
| 9·7 | | 57·5 | 32·9 | |
| 9·9 | 8 | 0·0 | 8·5 | |
| 9·7 | | 13·0 | 32·9 | |
| 9·7 | | 17·5 | 46·5 | |
| 9·7 | | 20·5 | 41·8 | |
| 9·5 | | 23·5 | 36·5 | |
| 9·5 | | 24·0 | 4·8 | |
| 9·9 | | 25·5 | 17·8 | |
| 9·9 | | 26·0 | 18·4 | |
| 9·6 | | 27·0 | 45·1 | |
| 7·3 | | 32·5 | 28·5 | 7·0 GS |
| 9·9 | | 34·5 | 26·4 | |
| 9·2 | | 46·0 | 22·7 | |
| 9·2 | | 48·0 | 56·6 | 9·5 |
| 9·9 | | 53·5 | 18·3 | |
| 9·7 | 9 | 0·0 | 17·6 | |
| 9·7 | | 9·5 | 13·1 | |
| 9·4 | | 12·0 | 39·9 | |
| 9·7 | | 12·5 | 33·9 | |
| 9·2 | | 16·5 | 22·4 | 9·0 |
| 9·6 | | 28·5 | 45·1 | |
| 9·7 | | 31·5 | 3·1 | |
| 9·9 | | 35·0 | 13·3 | |
| 9·5 | | 37·0 | 59·2 | |
| 9·5 | | 42·5 | 45·3 | |
| 9·5 | | 48·7 | 57·1 | |
| 9·5 | 10 | 1·0 | 8·7 | |
| 9·9 | | 2·5 | 55·4 | |
| 9·5 | | 8·5 | 10·3 | |
| 9·5 | | 17·0 | 31·0 | |
| 9·7 | | 20·0 | 55·7 | |
| 9·2 | | 22·8 | 2·1 | |
| 9·9 | | 31·0 | 5·9 | |
| 9·7 | | 32·0 | 46·1 | |
| 9·5 | | 42·5 | 38·1 | |

## 2341—2400.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 10 | 48·5 | 17·8 | |
| 9·3 | 11 | 5·0 | 47·3 | |
| 9·2 | | 9·0 | 32·9 | |
| 9·8 | | 18·0 | 52·2 | |
| 9·3 | | 26·0 | 21·6 | |
| 9·9 | | 28·0 | 59·2 | |
| 9·3 | | 37·0 | 44·8 | |
| 9·8 | | 42·0 | 43·1 | |
| 9·5 | | 48·0 | 42·0 | |
| 9·4 | | 53·0 | 12·3 | |
| 9·9 | 12 | 2·5 | 35·2 | |
| 9·9 | | 4·5 | 36·4 | |
| 9·9 | | 10·0 | 51·9 | |
| 9·3 | | 22·5 | 12·4 | |
| 9·4 | | 27·0 | 49·9 | |
| 9·0 | | 42·0 | 53·4 | |
| 9·5 | | 43·5 | 33·3 | |
| 9·6 | | 50·5 | 7·9 | |
| 9·9 | 13 | 0·5 | 6·2 | |
| 9·6 | | 4·0 | 44·0 | |
| 9·9 | | 7·5 | 50·0 | |
| 9·8 | | 11·5 | 42·8 | |
| 9·1 | | 11·5 | 30·2 | |
| 9·3 | | 16·5 | 11·1 | |
| 9·4 | | 23·0 | 57·6 | |
| 9·2 | | 28·0 | 23·2 | |
| 9·2 | | 40·5 | 7·0 | |
| 9·5 | | 54·0 | 41·7 | |
| 9·8 | | 56·0 | 29·1 | |
| 9·4 | 14 | 0·0 | 50·0 | |
| 9·5 | | 0·5 | 55·1 | |
| 9·7 | | 14·0 | 16·2 | |
| 9·3 | | 32·5 | 10·1 | |
| 9·8 | | 33·5 | 25·1 | |
| 9·2 | | 36·0 | 51·1 | |
| 9·4 | | 42·0 | 21·5 | |
| 9·7 | | 50·5 | 59·3 | |
| 9·4 | | 51·5 | 30·2 | |
| 9·9 | | 59·5 | 28·1 | |
| 9·7 | 15 | 1·5 | 11·0 | |
| 9·9 | | 3·0 | 54·1 | |
| 9·6 | | 9·5 | 55·2 | |
| 9·1 | | 13·0 | 33·3 | |
| 9·1 | | 15·5 | 38·4 | |
| 9·3 | | 20·0 | 7·0 | |
| 9·2 | | 38·5 | 14·8 | |
| 9·0 | | 47·8 | 59·0 | |
| 9·9 | 16 | 12·5 | 24·3 | |
| 9·9 | | 17·0 | 2·0 | |
| 9·8 | | 18·5 | 50·2 | |
| 9·1 | | 23·0 | 54·6 | |
| 8·8 | | 25·5 | 8·1 | 9·0 |
| 9·6 | | 29·0 | 34·1 | |
| 9·6 | | 41·5 | 31·1 | |
| 9·4 | 17 | 1·0 | 19·2 | |
| 9·9 | | 17·0 | 3·8 | |
| 9·5 | | 22·0 | 10·3 | |
| 9·0 | | 31·5 | 40·5 | |
| 9·4 | | 34·0 | 22·1 | |
| 9·2 | | 38·0 | 19·9 | |

## 2401—2460.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·8 | 17 | 41·5 | 32·1 | |
| 9·1 | 18 | 1·0 | 59·2 | 9·0 |
| 9·6 | | 2·8 | 59·9 | |
| 9·9 | | 9·5 | 36·1 | |
| 9·9 | | 20·0 | 41·3 | |
| 9·2 | | 31·0 | 35·7 | |
| 9·7 | | 45·5 | 44·9 | |
| 8·5 | | 48·5 | 25·7 | |
| 9·9 | | 55·0 | 56·9 | |
| 9·9 | 19 | 0·5 | 2·1 | |
| 9·3 | | 7·5 | 17·3 | |
| 9·3 | | 11·0 | 15·3 | |
| 9·3 | | 43·0 | 5·0 | |
| 9·9 | 20 | 7·0 | 59·1 | |
| 9·8 | | 10·0 | 6·7 | |
| 9·6 | | 25·0 | 55·2 | |
| 9·5 | | 39·0 | 54·1 | |
| 7·0 | | 39·0 | 1·7 | 7·0 GS |
| 9·0 | | 42·5 | 24·3 | |
| 9·8 | | 46·5 | 4·2 | |
| 9·7 | | 47·0 | 24·5 | |
| 9·8 | | 53·5 | 41·1 | |
| 9·5 | | 55·0 | 14·5 | |
| 9·6 | | 56·0 | 19·3 | |
| 9·9 | 21 | 8·5 | 57·0 | |
| 9·3 | | 10·0 | 16·6 | |
| 9·2 | | 10·5 | 49·2 | |
| 7·9 | | 18·5 | 51·2 | 8·5 |
| 9·3 | | 48·0 | 43·8 | |
| 9·9 | | 53·3 | 59·2 | |
| 9·5 | | 57·5 | 45·7 | |
| 9·4 | | 58·0 | 43·1 | |
| 9·3 | 22 | 1·5 | 28·9 | |
| 9·9 | | 12·5 | 12·9 | |
| 9·9 | | 19·0 | 22·5 | |
| 9·4 | | 23·5 | 51·8 | |
| 9·9 | | 34·0 | 24·2 | |
| 9·4 | | 55·5 | 26·4 | |
| 9·2 | 23 | 11·0 | 13·5 | |
| 9·0 | | 20·0 | 11·9 | |
| 7·1 | | 21·0 | 40·5 | 7·0 GS |
| 9·3 | | 25·5 | 48·3 | |
| 9·2 | | 34·0 | 13·7 | |
| 9·9 | | 35·0 | 41·3 | |
| 9·3 | | 38·3 | 2·6 | |
| 9·6 | | 39·5 | 16·8 | |
| 9·2 | | 41·5 | 5·0 | 9·5 |
| 8·4 | | 42·5 | 18·6 | |
| 9·6 | | 54·0 | 9·7 | |
| 9·9 | | 55·5 | 26·7 | |
| 9·7 | | 59·0 | 25·1 | |
| 9·3 | 24 | 5·0 | 35·7 | |
| 9·8 | | 9·0 | 11·3 | |
| 9·6 | | 13·0 | 13·1 | |
| 9·3 | | 17·5 | 42·2 | |
| 9·4 | | 26·5 | 8·1 | |
| 9·3 | | 30·0 | 12·1 | |
| 9·3 | | 32·5 | 14·7 | |
| 9·4 | | 39·0 | 53·9 | |
| 9·7 | | 40·5 | 25·8 | |



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### 2461—2520.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.3 | 24 | 42.0 | 12.5 | |
| 9.6 | | 48.5 | 23.8 | |
| 9.9 | | 50.0 | 7.3 | |
| 9.3 | | 51.0 | 13.1 | |
| 6.7 | | 54.2 | 59.3 | 7.0 GSr |
| 8.2 | 25 | 2.0 | 7.1 | 8.0 |
| 9.2 | | 12.5 | 56.3 | |
| 9.0 | | 12.5 | 32.0 | |
| 9.9 | | 21.0 | 19.9 | |
| 8.4 | | 45.0 | 42.0 | 9.0 G |
| 9.7 | | 56.5 | 16.2 | |
| 9.8 | 26 | 18.5 | 0.9 | |
| 9.6 | | 40.5 | 33.6 | |
| 9.7 | | 49.5 | 33.3 | |
| 9.6 | | 50.0 | 15.1 | |
| 8.2 | | 58.0 | 30.5 | 8.0 GSr |
| 7.9 | 27 | 3.5 | 40.9 | 8.0 G |
| 9.5 | | 11.0 | 25.8 | |
| 9.9 | | 14.0 | 53.1 | |
| 9.9 | | 15.0 | 14.1 | |
| 8.6 | | 20.5 | 16.0 | 8.0 |
| 9.2 | | 28.5 | 1.2 | |
| 9.9 | | 57.0 | 20.6 | |
| 9.5 | 28 | 26.0 | 40.1 | |
| 9.5 | | 36.0 | 4.0 | |
| 8.5 | | 38.5 | 45.4 | |
| 7.6 | | 42.0 | 17.7 | 8.0 GS |
| 9.5 | | 47.5 | 49.6 | |
| 9.7 | 29 | 2.0 | 6.7 | |
| 9.9 | | 11.5 | 3.2 | |
| 9.6 | | 24.5 | 24.1 | |
| 9.7 | | 30.5 | 26.6 | |
| 8.4 | | 38.0 | 48.8 | |
| 9.9 | | 48.0 | 19.1 | |
| 9.5 | | 56.5 | 37.3 | |
| 7.7 | 30 | 17.0 | 3.5 | |
| 9.8 | | 24.0 | 23.9 | |
| 9.9 | | 27.5 | 46.2 | |
| 9.9 | | 30.0 | 20.0 | |
| 9.3 | | 30.5 | 19.0 | |
| 9.7 | | 31.5 | 53.7 | |
| 9.5 | | 35.5 | 43.4 | |
| 9.3 | | 47.0 | 14.3 | |
| 9.6 | | 56.5 | 26.0 | |
| 9.3 | 31 | 0.5 | 53.0 | |
| 9.6 | | 13.5 | 29.2 | |
| 9.4 | | 14.5 | 15.3 | |
| 9.3 | | 34.0 | 2.9 | |
| 8.9 | | 53.0 | 16.0 | |
| 9.3 | 32 | 8.5 | 15.7 | |
| 8.9 | | 20.0 | 38.1 | |
| 9.9 | | 28.5 | 14.2 | |
| 9.7 | | 30.7 | 57.5 | |
| 9.3 | | 33.5 | 41.8 | |
| 9.5 | | 41.0 | 38.1 | |
| 9.6 | 33 | 1.0 | 48.4 | |
| 9.9 | | 20.0 | 32.8 | |
| 9.3 | | 42.0 | 37.1 | |
| 8.9 | | 42.5 | 57.2 | |
| 9.6 | | 51.5 | 17.8 | |

### 2521—2580.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.9 | 33 | 54.5 | 22.5 | |
| 9.9 | | 54.5 | 25.1 | |
| 9.9 | 34 | 27.5 | 24.1 | |
| 9.2 | | 29.5 | 50.5 | |
| 9.5 | | 39.5 | 22.7 | |
| 9.8 | | 40.0 | 42.0 | |
| 9.7 | | 41.5 | 35.4 | |
| 9.6 | | 45.5 | 7.7 | |
| 9.9 | 35 | 2.0 | 53.1 | |
| 9.5 | | 2.0 | 26.3 | |
| 9.9 | | 15.0 | 20.8 | |
| 9.9 | | 18.0 | 21.1 | |
| 9.6 | | 23.0 | 42.1 | |
| 9.0 | | 28.0 | 24.0 | |
| 8.6 | | 31.5 | 45.9 | |
| 9.7 | | 33.5 | 14.7 | |
| 9.6 | | 44.5 | 15.1 | |
| 9.8 | 36 | 7.5 | 34.2 | |
| 9.2 | | 13.0 | 11.0 | |
| 9.8 | | 14.5 | 46.9 | |
| 9.9 | | 20.5 | 43.1 | |
| 9.9 | | 52.5 | 44.1 | |
| 9.6 | | 57.3 | 0.4 | |
| 9.0 | 37 | 3.5 | 12.7 | 9.0 |
| 9.8 | | 12.0 | 56.1 | |
| 9.6 | | 20.0 | 5.3 | |
| 9.7 | | 25.0 | 19.7 | |
| 9.9 | | 30.5 | 33.1 | |
| 9.9 | | 31.0 | 31.2 | |
| 9.1 | | 33.5 | 56.3 | |
| 9.8 | | 38.5 | 55.8 | |
| 9.0 | | 38.5 | 3.0 | 8.0 G |
| 9.4 | | 54.0 | 5.0 | |
| 9.5 | 38 | 0.5 | 29.7 | |
| 9.9 | | 1.0 | 19.0 | |
| 9.8 | | 16.5 | 10.9 | |
| 9.8 | | 24.0 | 18.6 | |
| 9.5 | | 36.0 | 16.2 | |
| 9.8 | | 50.0 | 2.4 | |
| 9.9 | 39 | 4.0 | 35.0 | |
| 10.0 | | 14.5 | 51.0 | |
| 9.6 | | 16.8 | 49.4 | |
| 8.8 | | 22.5 | 4.0 | |
| 8.6 | | 23.3 | 27.5 | 9.0 |
| 9.7 | | 26.5 | 9.3 | |
| 9.8 | | 33.5 | 7.8 | |
| 10.0 | | 38.5 | 12.3 | |
| 9.6 | | 59.0 | 17.5 | |
| 9.8 | 40 | 2.0 | 11.4 | |
| 10.0 | | 2.0 | 58.8 | |
| 9.7 | | 25.3 | 25.8 | |
| 9.4 | | 26.3 | 32.3 | |
| 10.0 | | 41.0 | 56.0 | |
| 9.6 | | 41.6 | 36.6 | |
| 10.0 | | 48.0 | 54.2 | |
| 10.0 | 41 | 2.0 | 10.1 | |
| 10.0 | | 18.0 | 21.1 | |
| 10.0 | | 20.0 | 8.5 | |
| 9.9 | | 42.0 | 54.3 | |
| 9.5 | | 48.0 | 19.1 | |

### 2581—2640.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.6 | 41 | 54.5 | 6.9 | |
| 9.8 | | 56.0 | 15.0 | |
| 9.4 | | 59.0 | 17.1 | |
| 9.8 | 42 | 1.5 | 42.1 | |
| 9.4 | | 5.0 | 44.4 | |
| 9.6 | | 13.0 | 32.1 | |
| 10.0 | | 19.5 | 12.3 | |
| 9.4 | | 23.0 | 49.8 | |
| 9.3 | | 31.5 | 15.8 | |
| 9.5 | | 49.0 | 14.3 | |
| 8.8 | | 50.0 | 20.4 | |
| 9.4 | | 59.0 | 35.1 | |
| 9.6 | 43 | 1.5 | 51.0 | |
| 9.2 | | 1.5 | 47.0 | |
| 9.9 | | 6.5 | 43.9 | |
| 9.6 | | 8.0 | 46.6 | |
| 10.0 | | 10.5 | 36.5 | |
| 9.8 | | 13.0 | 56.3 | |
| 9.9 | | 14.5 | 34.3 | |
| 9.3 | | 27.0 | 49.4 | |
| 10.0 | | 43.5 | 27.3 | 9.5 |
| 10.0 | | 46.5 | 24.7 | |
| 9.1 | | 49.0 | 12.1 | 9.0 |
| 9.5 | | 52.0 | 0.3 | |
| 10.0 | 44 | 2.0 | 28.2 | |
| 9.8 | | 14.5 | 11.2 | |
| 9.8 | | 17.5 | 29.9 | |
| 9.6 | | 31.0 | 30.1 | |
| 9.2 | | 34.5 | 35.5 | |
| 9.2 | | 37.0 | 50.1 | |
| 9.4 | | 46.0 | 14.0 | |
| 8.9 | | 51.0 | 55.1 | 9.5 |
| 9.7 | 45 | 2.0 | 46.9 | |
| 9.4 | | 2.0 | 19.5 | 9.0 |
| 9.9 | | 9.0 | 41.4 | |
| 9.2 | | 24.0 | 4.8 | |
| 10.0 | | 26.5 | 19.5 | |
| 9.0 | | 27.3 | 56.7 | 9.5 |
| 9.7 | | 27.5 | 33.9 | |
| 9.0 | | 28.0 | 26.8 | |
| 9.8 | | 36.0 | 44.2 | |
| 9.1 | | 39.0 | 28.4 | |
| 9.6 | | 42.0 | 7.2 | |
| 9.7 | | 49.5 | 18.1 | |
| 9.8 | | 50.0 | 25.1 | |
| 9.2 | | 57.5 | 45.4 | |
| 10.0 | 46 | 1.5 | 45.0 | |
| 10.0 | | 4.5 | 45.4 | |
| 9.8 | | 9.5 | 10.1 | |
| 9.8 | | 25.5 | 23.9 | |
| 8.8 | | 27.5 | 17.8 | 9.5 |
| 10.0 | | 31.0 | 46.8 | |
| 9.8 | | 33.5 | 41.8 | |
| 9.6 | | 40.0 | 7.2 | |
| 10.0 | | 55.0 | 10.2 | |
| 10.0 | | 59.5 | 22.1 | |
| 9.8 | 47 | 16.5 | 42.2 | |
| 9.1 | | 19.0 | 55.6 | |
| 9.3 | | 20.5 | 37.9 | |
| 9.0 | | 24.0 | 55.5 | |

### 2641—2700.

| mag. | 13h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.8 | 47 | 27.5 | 33.6 | |
| 10.0 | | 42.5 | 26.2 | |
| 9.1 | | 49.5 | 38.7 | |
| 9.8 | 48 | 7.0 | 48.1 | |
| 9.6 | | 9.0 | 43.0 | |
| 9.6 | | 32.0 | 26.2 | |
| 9.9 | | 47.0 | 54.1 | |
| 10.0 | | 50.0 | 13.7 | |
| 9.5 | | 50.0 | 7.9 | |
| 9.8 | | 51.5 | 48.9 | |
| 9.0 | | 52.0 | 8.1 | |
| 9.9 | 49 | 5.0 | 12.0 | |
| 9.2 | | 6.0 | 24.3 | |
| 9.7 | | 24.0 | 10.0 | |
| 10.0 | | 28.5 | 33.4 | |
| 9.2 | | 30.0 | 33.3 | |
| 8.8 | | 39.5 | 13.5 | |
| 9.7 | | 54.0 | 40.6 | |
| 10.0 | 50 | 0.5 | 31.6 | |
| 9.0 | | 12.0 | 36.7 | |
| 9.8 | | 24.5 | 26.9 | |
| 9.6 | | 39.5 | 26.3 | |
| 7.9 | | 41.0 | 56.0 | 9.5 GS |
| 9.6 | | 44.5 | 33.3 | |
| 8.6 | | 55.5 | 2.3 | 8.5 |
| 9.8 | 51 | 15.5 | 28.7 | |
| 8.8 | | 24.0 | 11.1 | 9.0 G |
| 9.8 | | 37.5 | 9.5 | |
| 10.0 | | 40.0 | 25.2 | |
| 9.9 | | 42.0 | 28.7 | |
| 10.0 | | 55.0 | 29.2 | |
| 9.2 | 52 | 8.0 | 33.5 | |
| 9.2 | | 10.0 | 44.7 | |
| 9.6 | | 14.0 | 47.8 | |
| 10.0 | | 21.0 | 11.2 | |
| 9.9 | | 27.5 | 40.5 | |
| 10.0 | | 40.5 | 41.1 | |
| 10.0 | | 41.5 | 53.8 | |
| 9.6 | | 51.5 | 53.8 | |
| 9.5 | 53 | 1.5 | 5.8 | |
| 9.2 | | 4.0 | 19.1 | |
| 9.2 | | 27.0 | 1.3 | |
| 9.2 | | 28.0 | 47.1 | |
| 10.0 | | 30.5 | 35.2 | |
| 9.8 | | 31.5 | 5.9 | |
| 9.7 | | 38.0 | 43.8 | |
| 9.2 | | 46.5 | 29.8 | |
| 9.6 | | 51.0 | 14.8 | |
| 9.6 | | 53.5 | 41.0 | |
| 9.4 | 54 | 1.5 | 35.0 | |
| 10.0 | | 1.5 | 35.6 | |
| 9.8 | | 17.0 | 48.2 | |
| 9.6 | | 30.0 | 59.4 | |
| 9.3 | | 39.5 | 47.9 | |
| 8.6 | | 48.0 | 9.2 | |
| 9.3 | | 48.5 | 54.8 | |
| 8.0 | | 58.0 | 48.7 | 8.0 G |
| 9.1 | | 58.5 | 4.1 | |
| 10.0 | 55 | 2.0 | 1.4 | |
| 9.6 | | 18.5 | 56.1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 20 | 101 | 7.9 |
| | 30 | 104 | 7.7 |
| | 40 | 106 | 7.6 |
| | 50 | 109 | 7.4 |
| 14 | 0 | 112 | 7.2 |



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| 25 prec. h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 50 | 109 | 7·4 |
| 14 | 0 | 112 | 7·2 |
| | 10 | 114 | 7·0 |
| | 20 | 117 | 6·8 |
| | 30 | 119 | 6·6 |

**2701—2760.**

| mag. | 13h.–14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·7 | 55 | 41·5 | 45·1 | |
| 10·0 | | 47·0 | 49·2 | |
| 8·8 | | 48·5 | 59·4 | 9·2 |
| 9·2 | | 59·5 | 28·7 | |
| 9·4 | 56 | 2·0 | 16·3 | |
| 9·9 | | 9·0 | 31·1 | |
| 9·8 | | 11·0 | 29·9 | |
| 9·5 | | 18·5 | 29·2 | |
| 9·0 | | 27·0 | 52·2 | 10·0 |
| 10·0 | | 35·5 | 42·0 | |
| 9·8 | | 36·5 | 45·4 | |
| 9·8 | | 41·5 | 21·0 | |
| 9·6 | | 44·0 | 36·0 | |
| 9·7 | | 46·0 | 8·7 | |
| 10·0 | | 48·0 | 51·8 | |
| 9·6 | | 49·0 | 5·7 | |
| 9·8 | | 50·5 | 26·9 | |
| 9·5 | | 51·5 | 41·9 | |
| 9·8 | | 59·0 | 35·6 | |
| 9·9 | 57 | 1·5 | 15·4 | |
| 9·8 | | 3·5 | 22·1 | |
| 9·0 | | 8·0 | 43·2 | |
| 9·2 | | 10·5 | 54·3 | 9·0 |
| 9·2 | | 16·0 | 16·0 | |
| 9·8 | | 19·5 | 42·4 | |
| 9·4 | | 24·5 | 9·4 | |
| 9·0 | | 24·5 | 13·7 | |
| 9·4 | | 27·0 | 39·4 | |
| 9·0 | | 36·5 | 50·8 | |
| 9·8 | | 38·0 | 52·1 | |
| 9·4 | | 39·5 | 53·5 | |
| 9·8 | | 50·0 | 56·6 | |
| 9·7 | 58 | 18·5 | 27·0 | |
| 8·8 | | 29·0 | 15·8 | |
| 10·0 | | 44·5 | 15·0 | |
| 9·8 | 59 | 0·5 | 10·9 | |
| 9·4 | | 10·5 | 34·0 | |
| 9·4 | | 12·0 | 55·1 | |
| 9·1 | | 14·0 | 42·1 | |
| 9·2 | | 19·5 | 56·3 | |
| 9·9 | | 30·0 | 15·0 | |
| 9·4 | | 50·0 | 24·0 | |
| 10·0 | | 59·0 | 33·7 | |
| 9·0 | 0 | 1·0 | 10·8 | 9·0 G |
| 9·2 | | 5·0 | 21·2 | |
| 9·6 | | 16·0 | 58·4 | |
| 9·6 | | 26·5 | 44·7 | |
| 10·0 | | 30·0 | 7·2 | |
| 9·8 | | 30·0 | 48·1 | |
| 9·5 | | 30·5 | 37·0 | |
| 8·8 | | 37·0 | 0·0 | 9·5 |
| 10·0 | | 38·0 | 55·0 | |
| 9·4 | | 40·0 | 8·9 | |
| 9·2 | | 48·5 | 57·1 | |
| 9·4 | | 51·5 | 33·7 | |
| 10·0 | 1 | 12·8 | 2·6 | |
| 9·5 | | 27·0 | 18·1 | |
| 9·2 | | 29·5 | 28·5 | |
| 9·9 | | 52·0 | 52·4 | |
| 9·4 | 2 | 3·5 | 49·6 | |

**2761—2820.**

| mag. | 14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·5 | 2 | 3·5 | 10·2 | |
| 9·9 | | 9·3 | 58·6 | |
| 9·1 | | 19·0 | 46·4 | |
| 10·0 | | 22·0 | 0·1 | |
| 9·9 | | 37·0 | 24·1 | |
| 9·4 | | 39·0 | 24·4 | |
| 8·1 | | 57·0 | 5·6 | 9·0 |
| 9·8 | 3 | 2·5 | 47·1 | |
| 9·9 | | 5·5 | 26·7 | |
| 10·0 | | 17·0 | 0·0 | |
| 10·0 | | 18·0 | 15·1 | |
| 9·3 | | 28·5 | 33·2 | |
| 9·2 | | 49·0 | 46·6 | |
| 9·8 | | 48·5 | 41·2 | |
| 10·0 | 4 | 1·5 | 40·8 | |
| 9·9 | | 5·5 | 39·4 | |
| 10·0 | | 12·0 | 40·2 | |
| 10·0 | | 31·2 | 2·0 | |
| 9·8 | | 40·5 | 26·0 | |
| 10·0 | | 48·0 | 33·0 | |
| 10·0 | | 55·5 | 25·6 | |
| 9·5 | | 58·5 | 38·8 | |
| 9·5 | 5 | 35·0 | 52·1 | |
| 9·7 | | 37·0 | 56·9 | |
| 9·1 | | 39·5 | 9·2 | |
| 9·3 | | 59·5 | 13·4 | |
| 10·0 | 6 | 2·0 | 20·0 | |
| 9·3 | | 6·0 | 39·1 | |
| 9·4 | | 10·5 | 28·4 | |
| 9·8 | | 32·3 | 0·1 | |
| 9·4 | | 49·0 | 57·0 | |
| 9·4 | | 52·0 | 17·1 | |
| 8·7 | | 53·5 | 11·8 | 9·5 |
| 10·0 | 7 | 10·5 | 50·8 | |
| 10·0 | | 15·0 | 43·2 | |
| 9·9 | | 18·0 | 35·2 | |
| 9·8 | | 44·0 | 34·1 | |
| 10·0 | | 53·0 | 33·2 | |
| 9·9 | | 55·0 | 59·0 | |
| 8·8 | 8 | 35·5 | 41·0 | |
| 9·2 | | 52·0 | 17·6 | |
| 9·2 | 9 | 2·0 | 37·9 | |
| 9·2 | | 5·5 | 27·7 | |
| 10·0 | | 12·0 | 52·0 | |
| 9·8 | | 29·5 | 21·0 | |
| 10·0 | | 35·0 | 12·5 | |
| 9·2 | | 39·0 | 45·8 | |
| 10·0 | | 40·0 | 11·8 | |
| 10·0 | | 51·7 | 0·7 | |
| 8·2 | 10 | 6·5 | 56·3 | 9·0 |
| 9·9 | | 17·5 | 3·6 | |
| 9·7 | | 28·5 | 56·8 | |
| 9·5 | | 30·0 | 10·1 | |
| 9·2 | | 52·0 | 8·4 | |
| 9·3 | 11 | 6·0 | 32·1 | |
| 9·6 | | 15·0 | 55·4 | |
| 9·9 | | 22·0 | 9·5 | |
| 9·5 | | 33·5 | 40·0 | |
| 9·6 | | 44·5 | 30·1 | |
| 9·2 | 12 | 1·0 | 16·2 | |

**2821—2880.**

| mag. | 14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 12 | 4·8 | 58·0 | |
| 10·0 | 13 | 1·0 | 34·2 | |
| 9·1 | | 15·5 | 34·1 | |
| 9·0 | | 20·0 | 14·2 | |
| 9·9 | | 24·0 | 27·3 | |
| 9·2 | 14 | 8·0 | 36·1 | |
| 9·4 | | 27·0 | 37·6 | |
| 9·7 | | 29·0 | 34·4 | |
| 9·7 | | 29·5 | 43·0 | |
| 8·8 | | 36·0 | 33·1 | 9·5 |
| 8·2 | | 45·0 | 23·2 | 8·5 |
| 8·8 | | 56·5 | 54·9 | |
| 9·2 | 15 | 1·0 | 32·1 | |
| 9·8 | | 2·0 | 17·2 | |
| 10·0 | | 20·0 | 15·2 | |
| 9·2 | | 29·5 | 52·3 | |
| 9·9 | 16 | 4·5 | 1·2 | |
| 9·8 | | 9·5 | 8·1 | |
| 9·1 | | 13·0 | 12·1 | |
| 8·6 | | 16·0 | 21·7 | 8·2 |
| 10·0 | | 20·5 | 23·8 | |
| 9·0 | | 21·0 | 2·0 | |
| 9·2 | | 37·0 | 38·9 | |
| 10·0 | | 43·0 | 13·1 | |
| 9·6 | 17 | 6·5 | 17·3 | |
| 9·0 | | 11·5 | 57·5 | |
| 9·8 | | 13·0 | 27·9 | |
| 9·4 | | 17·5 | 17·9 | |
| 9·4 | | 31·5 | 18·2 | |
| 10·0 | | 51·0 | 56·4 | |
| 8·8 | | 52·0 | 34·7 | |
| 10·0 | | 52·5 | 50·5 | |
| 9·9 | 18 | 19·0 | 50·0 | |
| 8·8 | | 19·0 | 4·3 | |
| 9·9 | | 26·0 | 28·8 | |
| 8·6 | | 38·5 | 28·8 | 8·5 |
| 9·0 | | 41·5 | 53·0 | 9·0 |
| 9·4 | | 45·0 | 32·4 | |
| 10·0 | | 50·8 | 12·0 | |
| 10·0 | | 54·0 | 18·3 | |
| 9·9 | | 59·0 | 18·5 | |
| 9·8 | | 59·0 | 39·5 | |
| 10·0 | 19 | 9·0 | 3·5 | |
| 10·0 | | 12·0 | 59·9 | |
| 9·9 | | 18·0 | 27·4 | |
| 9·6 | | 18·2 | 38·0 | |
| 9·0 | | 20·4 | 57·1 | |
| 8·6 | | 22·0 | 59·4 | 8·5 |
| 9·6 | | 30·2 | 13·0 | |
| 8·8 | | 30·7 | 55·2 | 9·0 |
| 9·9 | | 40·0 | 58·8 | |
| 9·4 | | 40·7 | 35·3 | |
| 10·0 | | 43·5 | 35·0 | |
| 9·4 | 20 | 0·3 | 26·3 | 9·5 |
| 9·9 | | 4·0 | 15·2 | |
| 9·0 | | 5·5 | 10·1 | 8·0 |
| 9·3 | | 11·0 | 50·0 | |
| 8·7 | | 28·7 | 20·6 | 9·5 |
| 9·0 | | 51·5 | 52·8 | |
| 10·0 | | 58·0 | 45·8 | |

**2881—2940.**

| mag. | 14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·4 | 20 | 58·0 | 18·6 | |
| 9·9 | 21 | 4·5 | 44·9 | |
| 9·7 | | 17·0 | 39·0 | |
| 9·4 | | 19·5 | 13·8 | |
| 9·4 | | 31·0 | 46·0 | |
| 9·3 | | 36·0 | 41·3 | |
| 9·4 | | 45·5 | 50·2 | |
| 9·4 | | 49·0 | 51·2 | 9·0 |
| 9·6 | | 50·5 | 46·1 | |
| 9·6 | | 52·5 | 50·3 | 9·5 |
| 8·9 | 22 | 4·0 | 10·2 | |
| 9·0 | | 13·5 | 37·3 | |
| 9·9 | | 15·5 | 25·8 | |
| 9·4 | | 31·5 | 50·4 | 9·0 |
| 10·0 | | 38·5 | 33·0 | |
| 9·6 | | 51·5 | 51·8 | |
| 9·0 | | 59·0 | 35·0 | |
| 10·0 | 23 | 14·0 | 48·6 | |
| 8·7 | | 14·5 | 51·2 | 9·5 |
| 9·4 | | 27·0 | 34·2 | |
| 9·4 | | 45·5 | 18·1 | |
| 8·7 | | 52·5 | 30·2 | 9·0 |
| 9·8 | | 57·0 | 48·5 | |
| 9·2 | 24 | 10·5 | 5·0 | |
| 9·0 | | 11·0 | 23·4 | 9·5 |
| 8·4 | | 13·5 | 1·3 | |
| 10·0 | | 16·5 | 5·3 | |
| 9·9 | | 17·5 | 23·2 | |
| 9·7 | | 18·5 | 39·6 | |
| 9·0 | | 25·0 | 51·7 | |
| 9·4 | | 26·5 | 57·6 | |
| 9·2 | | 27·5 | 22·5 | |
| 10·0 | | 32·5 | 22·1 | |
| 9·3 | | 35·5 | 4·4 | |
| 9·3 | | 39·5 | 16·4 | 9·0 |
| 9·9 | | 52·0 | 6·1 | |
| 9·9 | | 53·5 | 5·0 | |
| 9·7 | | 59·5 | 48·9 | |
| 9·9 | 25 | 4·5 | 31·0 | |
| 9·2 | | 15·0 | 30·9 | |
| 8·8 | | 16·0 | 2·4 | |
| 9·9 | | 20·5 | 2·6 | |
| 8·9 | | 21·0 | 20·0 | 9·0 |
| 9·8 | | 24·5 | 26·9 | |
| 9·9 | | 25·5 | 58·2 | |
| 9·8 | | 28·5 | 10·3 | |
| 9·8 | | 31·5 | 48·2 | |
| 9·0 | | 34·0 | 15·3 | |
| 9·4 | | 41·5 | 17·4 | |
| 9·8 | | 43·0 | 28·1 | |
| 9·7 | | 44·5 | 19·2 | |
| 9·4 | 26 | 27·5 | 11·2 | |
| 9·6 | | 48·0 | 16·5 | |
| 9·0 | | 48·5 | 54·8 | |
| 9·2 | | 49·5 | 32·1 | |
| 10·0 | 27 | 0·5 | 16·5 | |
| 9·3 | | 2·5 | 50·6 | |
| 9·2 | | 10·0 | 51·2 | |
| 9·7 | | 10·5 | 15·1 | |
| 9·6 | | 18·2 | 59·1 | |



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## 2941—3000.

| mag. | 14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 27 | 20·5 | 12·5 | |
| 8·9 | | 27·0 | 8·1 | 8·0 G |
| 9·8 | | 35·0 | 6·2 | |
| 9·2 | | 35·5 | 36·3 | |
| 9·4 | | 51·5 | 18·7 | |
| 9·2 | | 54·5 | 34·7 | |
| 8·9 | | 59·5 | 23·6 | |
| 9·6 | 28 | 7·0 | 53·0 | |
| 8·7 | | 10·5 | 5·7 | 9·0 |
| 9·8 | | 21·5 | 17·6 | |
| 9·6 | | 35·0 | 7·5 | |
| 8·9 | | 36·5 | 33·9 | |
| 10·0 | 29 | 0·5 | 48·9 | |
| 9·4 | | 8·5 | 25·5 | |
| 8·5 | | 9·5 | 7·8 | 9·0 |
| 10·0 | | 10·0 | 34·0 | |
| 8·0 | | 37·5 | 10·1 | 8·0 |
| 9·0 | | 44·5 | 17·1 | |
| 9·4 | | 55·5 | 39·1 | |
| 9·9 | | 58·5 | 31·5 | |
| 8·6 | 30 | 14·0 | 17·4 | 9·0 |
| 9·9 | | 15·5 | 42·3 | |
| 9·6 | | 19·5 | 43·0 | |
| 8·0 | | 29·5 | 52·7 | 8·0 |
| 10·0 | | 38·0 | 9·5 | |
| 9·4 | | 40·0 | 58·3 | |
| 9·7 | | 40·5 | 28·6 | |
| 8·8 | | 41·0 | 55·2 | 9·5 |
| 9·2 | | 53·5 | 30·2 | |
| 9·3 | | 56·0 | 30·0 | |
| 9·3 | 31 | 6·0 | 43·8 | |
| 9·9 | | 38·5 | 20·9 | |
| 9·3 | | 46·5 | 43·3 | |
| 9·4 | | 50·5 | 34·8 | |
| 9·6 | 32 | 1·0 | 4·1 | |
| 10·0 | | 3·5 | 23·1 | |
| 3·7 | | 25·0 | 25·7 | *3·0* GSctλ |
| 9·3 | | 26·0 | 37·2 | |
| 9·3 | | 38·0 | 5·2 | |
| 10·0 | | 52·5 | 15·0 | |
| 7·5 | | 53·5 | 41·5 | 8·2 |
| 9·4 | 33 | 8·5 | 6·1 | |
| 9·2 | | 9·5 | 44·5 | |
| 9·0 | | 9·5 | 31·1 | 9·5 |
| 9·9 | | 11·5 | 29·5 | |
| 9·0 | | 24·0 | 17·9 | |
| 8·4 | | 31·5 | 30·8 | 8·5 |
| 9·4 | | 40·0 | 29·9 | 9·0 |
| 9·8 | | 40·5 | 28·3 | |
| 9·4 | | 41·0 | 13·1 | |
| 9·0 | | 45·0 | 26·8 | 9·5 |
| 9·6 | | 46·5 | 40·1 | |
| 9·4 | 34 | 15·0 | 52·8 | |
| 9·9 | | 20·0 | 3·2 | |
| 9·8 | | 26·0 | 34·7 | |
| 9·8 | | 26·0 | 49·9 | |
| 9·6 | | 29·0 | 8·0 | |
| 9·9 | | 39·5 | 54·5 | |
| 9·9 | 35 | 0·5 | 10·2 | |
| 9·8 | | 6·0 | 56·2 | |

## 3001—3060.

| mag. | 14h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 35 | 18·0 | 57·0 | |
| 8·8 | | 30·5 | 24·1 | 9·2 |
| 9·9 | | 39·0 | 37·1 | |
| 9·2 | | 43·5 | 51·1 | |
| 9·3 | 36 | 7·5 | 13·0 | |
| 10·0 | | 7·5 | 54·9 | |
| 9·2 | | 10·0 | 6·5 | |
| 8·8 | | 18·3 | 0·8 | |
| 9·7 | | 20·0 | 27·4 | |
| 9·0 | | 31·5 | 13·8 | 9·0 |
| 9·2 | | 45·5 | 13·4 | |
| 9·6 | 37 | 51·5 | 21·6 | |
| 9·3 | 38 | 31·0 | 1·8 | |
| 10·0 | | 31·0 | 19·8 | |
| 9·6 | | 58·0 | 2·0 | |
| 9·2 | | 58·0 | 43·8 | |
| 9·4 | 39 | 27·5 | 25·4 | |
| 9·3 | | 55·0 | 23·5 | |
| 10·0 | | 58·2 | 1·3 | |
| 9·9 | 40 | 12·0 | 27·0 | |
| 9·9 | | 16·5 | 16·0 | |
| 10·0 | | 47·0 | 4·8 | |
| 9·6 | 41 | 12·5 | 38·8 | |
| 9·2 | 42 | 4·0 | 17·3 | |
| 9·2 | | 40·5 | 14·5 | |
| 9·7 | | 44·5 | 39·0 | |
| 10·0 | | 49·5 | 24·8 | |
| 10·0 | | 51·0 | 4·3 | |
| 9·0 | 43 | 4·0 | 24·0 | 8·8 |
| 9·2 | | 5·5 | 4·0 | |
| 9·0 | | 11·0 | 25·0 | |
| 9·4 | 44 | 0·5 | 49·6 | |
| 9·7 | | 38·0 | 14·7 | |
| 9·2 | | 42·5 | 24·5 | |
| 9·7 | | 44·0 | 49·0 | |
| 8·4 | | 49·5 | 46·2 | 9·0 |
| 10·0 | 45 | 5·0 | 16·0 | |
| 9·2 | | 24·0 | 21·2 | 9·0 |
| 9·8 | | 29·5 | 0·0 | |
| 9·4 | | 34·0 | 3·1 | |
| 9·2 | | 46·0 | 53·8 | 9·5 |
| 9·6 | 46 | 2·5 | 20·7 | |
| 9·4 | | 6·5 | 17·4 | |
| 10·0 | | 8·0 | 17·0 | |
| 8·0 | | 14·5 | 38·6 | 9·0 |
| 10·0 | | 27·5 | 13·7 | |
| 8·7 | | 29·5 | 35·2 | 8·0 G |
| 10·0 | | 46·5 | 50·5 | |
| 9·8 | | 59·5 | 33·3 | |
| 10·0 | 47 | 2·0 | 56·7 | |
| 9·6 | | 4·0 | 25·1 | |
| 9·2 | | 5·5 | 31·9 | |
| 7·9 | 48 | 18·0 | 29·7 | 8·2 GS |
| 9·6 | | 26·0 | 8·3 | |
| 10·0 | | 33·0 | 26·9 | |
| 9·8 | | 48·5 | 23·3 | |
| 9·3 | | 52·0 | 4·9 | |
| 10·0 | 49 | 27·5 | 43·0 | |
| 9·3 | | 30·5 | 5·9 | |
| 8·9 | | 41·7 | 59·0 | |

## 3061—3120.

| mag. | 14h.—15h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 49 | 52·5 | 47·3 | |
| 9·6 | 50 | 7·7 | 58·9 | |
| 9·6 | | 13·5 | 28·9 | |
| 9·0 | | 15·5 | 37·7 | 8·5 |
| 9·3 | | 31·0 | 11·2 | 8·5 |
| 6·4 | | 38·0 | 4·4 | 7·0 GSr |
| 10·0 | | 44·0 | 10·9 | |
| 10·0 | | 54·0 | 30·4 | |
| 9·6 | 51 | 1·0 | 5·3 | |
| 9·9 | | 6·5 | 49·7 | |
| 8·8 | | 38·0 | 56·9 | |
| 8·5 | | 40·0 | 15·6 | |
| 8·6 | 52 | 0·0 | 27·7 | 9·0 |
| 10·0 | | 8·0 | 52·1 | |
| 9·6 | | 17·0 | 33·3 | |
| 10·0 | | 37·0 | 31·1 | |
| 9·2 | | 39·5 | 5·3 | |
| 9·4 | 53 | 1·5 | 58·6 | |
| 9·0 | | 28·0 | 57·7 | |
| 9·6 | | 44·0 | 7·9 | |
| 9·9 | | 44·5 | 37·9 | |
| 9·3 | 54 | 16·0 | 23·0 | |
| 9·7 | | 23·5 | 15·0 | |
| 9·8 | | 30·5 | 17·2 | |
| 10·0 | | 42·0 | 3·1 | |
| 9·0 | | 49·0 | 35·8 | |
| 10·0 | | 58·5 | 4·2 | |
| 9·4 | 55 | 6·0 | 45·2 | |
| 9·6 | | 12·0 | 27·6 | |
| 8·2 | | 28·5 | 53·9 | 8·8 |
| 9·4 | | 37·0 | 11·8 | |
| 8·5 | | 40·0 | 7·1 | 9·0 G |
| 9·6 | | 46·5 | 48·0 | |
| 9·2 | 56 | 12·0 | 35·2 | |
| 7·9 | 57 | 15·5 | 47·2 | 7·0 GS |
| 9·2 | | 28·5 | 47·8 | |
| 10·0 | | 39·5 | 11·6 | |
| 9·2 | | 39·5 | 19·8 | |
| 9·2 | | 50·0 | 39·2 | |
| 8·4 | | 53·3 | 9·2 | 8·5 Gr |
| 10·0 | 58 | 31·3 | 39·7 | |
| 8·8 | | 52·5 | 12·4 | |
| 9·2 | | 58·5 | 54·8 | |
| 9·9 | 59 | 13·3 | 33·6 | |
| 9·6 | | 45·3 | 26·8 | |
| 10·0* | 0 | 8·0 | 32·0 | |
| 9·3 | | 20·5 | 9·3 | 9·0 |
| 9·0 | | 20·8 | 37·3 | |
| 10·0 | | 27·8 | 11·8 | |
| 9·6 | | 47·5 | 8·2 | |
| 9·7 | | 57·2 | 42·9 | |
| 9·4 | | 58·7 | 27·4 | |
| 8·6 | 1 | 14·7 | 29·5 | 8·5 |
| 9·4 | | 18·7 | 8·7 | |
| 7·6 | | 42·2 | 3·9 | 8·5 GScr |
| 8·8 | | 46·5 | 4·3 | |
| 9·7 | 2 | 33·0 | 52·3 | |
| 9·5 | | 36·5 | 38·2 | |
| 9·2 | | 44·5 | 33·5 | |
| 9·2 | | 47·5 | 10·6 | |

## 3121—3180.

| mag. | 15h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·1 | 2 | 51·0 | 16·0 | |
| 9·5 | 3 | 23·5 | 20·2 | |
| 9·4 | | 35·5 | 35·1 | |
| 9·2 | | 54·0 | 0·5 | |
| 8·9 | | 57·0 | 50·8 | |
| 9·0 | 4 | 12·0 | 9·7 | |
| 8·6 | | 12·5 | 8·3 | 9·5 |
| 9·8 | | 29·0 | 29·4 | |
| 9·7 | | 54·0 | 30·7 | |
| 9·9 | 5 | 0·5 | 50·9 | |
| 9·4 | | 20·0 | 46·5 | |
| 9·8 | | 21·0 | 26·6 | |
| 9·9 | | 30·0 | 39·2 | |
| 9·9 | 6 | 4·0 | 30·7 | |
| 8·6 | | 7·0 | 11·9 | 9·5 |
| 9·4 | | 27·0 | 13·2 | |
| 9·5 | 7 | 41·5 | 39·9 | |
| 9·2 | 8 | 13·0 | 10·8 | |
| 9·9 | | 42·0 | 49·6 | |
| 9·2 | 9 | 20·5 | 36·9 | |
| 9·7 | | 33·0 | 20·9 | |
| 9·2 | | 37·0 | 1·9 | 9·5 |
| 8·6 | | 50·0 | 0·1 | 8·5 |
| 9·8 | | 59·5 | 24·6 | |
| 9·2 | 10 | 17·5 | 35·3 | |
| 9·1 | | 28·0 | 24·9 | |
| 9·4 | 11 | 14·0 | 8·2 | |
| 9·2 | | 16·3 | 2·2 | |
| 8·6 | | 20·5 | 3·1 | |
| 9·9 | | 28·0 | 32·6 | |
| 9·2 | | 32·0 | 58·5 | |
| 9·2 | | 44·5 | 20·7 | |
| 9·5 | 12 | 2·0 | 47·9 | |
| 9·9 | | 11·5 | 14·8 | |
| 9·2 | | 12·5 | 13·9 | |
| 9·7 | | 28·5 | 12·1 | |
| 9·5 | | 34·5 | 34·3 | |
| 9·5 | | 45·0 | 48·8 | |
| 9·2 | | 48·5 | 53·5 | 8·5 |
| 9·4 | 13 | 4·5 | 33·9 | |
| 9·9 | | 7·0 | 19·9 | |
| 9·9 | | 20·0 | 16·9 | |
| 9·2 | | 27·5 | 3·4 | |
| 9·8 | | 36·5 | 56·6 | |
| 10·0 | 14 | 8·5 | 5·8 | |
| 9·4 | | 24·0 | 51·9 | |
| 8·9 | | 28·5 | 53·2 | |
| 9·9 | | 38·0 | 12·3 | |
| 9·4 | | 57·0 | 32·8 | |
| 9·5 | | 57·5 | 2·4 | |
| 9·9 | 15 | 2·0 | 24·9 | |
| 9·4 | | 10·0 | 40·9 | |
| 8·8 | | 10·0 | 54·2 | 9·5 |
| 8·9 | | 10·0 | 54·0 | 10·0 |
| 9·9 | | 46·5 | 16·1 | |
| 9·2 | | 55·0 | 27·3 | |
| 10·0 | 16 | 38·5 | 27·5 | |
| 8·0 | | 42·0 | 5·2 | 6·0 GS |
| 9·8 | | 42·5 | 27·1 | |
| 9·4 | 17 | 0·0 | 14·4 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 20 | 117 | 6·8 |
| | 30 | 119 | 6·6 |
| | 40 | 122 | 6·4 |
| | 50 | 124 | 6·2 |
| 15 | 0 | 126 | 5·9 |
| | 10 | 128 | 5·6 |
| | 20 | 130 | 5·4 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 10 | 128 | 5·6 |
| | 20 | 130 | 5·4 |
| | 30 | 132 | 5·1 |
| | 40 | 134 | 4·8 |
| | 50 | 136 | 4·5 |
| 16 | 0 | 137 | 4·2 |
| | 10 | 139 | 3·9 |

### 3181—3240.

| mag. | 15h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 17 | 1·0 | 36·2 | |
| 8·9 | | 1·0 | 41·8 | |
| 9·7 | | 24·2 | 1·7 | |
| 10·0 | | 31·0 | 44·5 | |
| 9·8 | | 38·5 | 58·5 | |
| 8·8 | 18 | 2·5 | 5·2 | |
| 9·8 | | 11·5 | 10·7 | |
| 8·9 | | 13·5 | 36·6 | 8·5 |
| 9·9 | | 14·5 | 8·5 | |
| 10·0 | | 21·0 | 23·8 | |
| 9·8 | | 24·0 | 26·0 | |
| 9·2 | | 24·5 | 23·9 | |
| 10·0 | | 36·5 | 26·1 | |
| 9·4 | 19 | 10·5 | 27·1 | |
| 10·0 | | 13·5 | 26·9 | |
| 9·2 | | 20·0 | 6·6 | |
| 9·9 | | 31·0 | 25·2 | |
| 10·0 | | 42·0 | 11·8 | |
| 9·9 | 20 | 35·5 | 20·6 | |
| 10·0 | | 55·0 | 52·9 | |
| 8·9 | 22 | 8·0 | 13·1 | |
| 8·7 | | 12·0 | 56·0 | 10·0 |
| 9·8 | 23 | 11·5 | 4·9 | |
| 8·3 | | 21·0 | 55·9 | 9·0 |
| 8·4 | | 28·0 | 40·5 | 9·0 G |
| 9·9 | | 34·0 | 49·5 | |
| 9·1 | 24 | 27·0 | 5·4 | |
| 8·9 | | 30·0 | 26·5 | |
| 10·0 | | 54·0 | 16·9 | |
| 9·9 | | 58·0 | 47·1 | |
| 9·8 | | 58·5 | 5·9 | |
| 10·0 | 25 | 0·5 | 30·1 | 9·0 |
| 7·0 | | 4·0 | 41·3 | 7·5 GS |
| 10·0 | | 29·0 | 50·1 | |
| 9·1 | | 31·5 | 22·0 | |
| 9·6 | | 32·0 | 53·6 | |
| 10·0 | | 44·0 | 48·5 | |
| 9·9 | | 53·0 | 28·5 | |
| 8·1 | 26 | 13·5 | 8·0 | 8·5 |
| 9·0 | | 16·0 | 6·8 | 8·0 |
| 8·6 | | 28·5 | 46·1 | 8·5 |
| 9·7 | | 40·5 | 59·8 | |
| 9·4 | | 41·5 | 0·4 | |
| 9·9 | | 50·0 | 9·2 | |
| 9·6 | | 55·0 | 14·1 | |
| 9·7 | 27 | 32·0 | 10·3 | |
| 9·8 | | 40·5 | 49·1 | |
| 9·5 | 28 | 14·0 | 3·9 | |
| 9·2 | | 16·0 | 42·0 | |
| 9·8 | | 23·0 | 51·2 | |
| 9·8 | | 32·0 | 23·0 | |
| 10·0 | | 56·0 | 22·9 | |
| 10·0 | | 57·5 | 40·0 | |
| 9·8 | 29 | 3·5 | 59·0 | |
| 9·8 | | 8·0 | 57·6 | |
| 8·4 | | 17·5 | 47·3 | 9·0 |
| 9·7 | | 19·5 | 27·6 | |
| 9·2 | | 40·0 | 52·0 | |
| 9·2 | | 48·5 | 29·1 | |
| 8·9 | 30 | 4·5 | 6·6 | |

### 3241—3300.

| mag. | 15h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 30 | 5·5 | 51·6 | |
| 8·6 | | 12·0 | 19·9 | |
| 7·4 | | 13·5 | 39·3 | 7·5 GS |
| 9·2 | | 41·5 | 1·3 | 8·5 |
| 8·9 | 31 | 3·0 | 0·3 | |
| 9·2 | | 26·0 | 35·0 | |
| 9·0 | | 50·0 | 3·2 | |
| 10·0 | | 57·0 | 39·8 | |
| 8·8 | 32 | 27·0 | 17·0 | |
| 10·0 | | 30·0 | 27·8 | |
| 8·0 | | 49·8 | 59·2 | 9·0 |
| 10·0 | 33 | 15·5 | 20·0 | |
| 9·5 | | 27·0 | 1·6 | |
| 9·9 | | 27·5 | 45·0 | |
| 9·4 | | 38·8 | 58·6 | |
| 9·5 | | 48·5 | 9·7 | |
| 9·6 | 34 | 58·0 | 29·7 | 9·5 |
| 9·2 | | 59·0 | 55·4 | |
| 9·9 | 35 | 3·0 | 39·5 | |
| 9·0 | | 9·0 | 47·3 | |
| 9·5 | | 11·0 | 27·9 | |
| 9·2 | | 25·5 | 42·3 | |
| 9·9 | | 38·5 | 23·0 | |
| 7·9 | | 50·5 | 0·9 | 8·5 |
| 9·0 | | 50·5 | 54·6 | |
| 9·0 | 36 | 22·0 | 2·2 | |
| 9·5 | 37 | 7·5 | 1·3 | |
| 9·4 | | 16·0 | 10·0 | |
| 9·1 | | 21·0 | 50·0 | 9·0 |
| 9·8 | | 36·0 | 16·0 | |
| 9·4 | | 49·5 | 34·8 | |
| 9·4 | 38 | 23·5 | 42·8 | |
| 9·2 | | 33·5 | 22·0 | |
| 9·7 | | 49·5 | 50·1 | |
| 8·9 | 39 | 18·7 | 22·3 | |
| 9·7 | | 19·0 | 21·2 | |
| 9·7 | | 21·0 | 14·0 | |
| 9·4 | | 28·5 | 24·8 | |
| 9·6 | 40 | 17·5 | 2·7 | |
| 9·7 | | 22·5 | 22·0 | |
| 9·1 | | 40·2 | 32·3 | 9·0 |
| 9·7 | | 45·0 | 5·6 | |
| 9·5 | | 59·5 | 28·5 | |
| 9·4 | 41 | 1·0 | 3·3 | |
| 9·6 | | 25·5 | 7·4 | |
| 7·4 | | 32·5 | 46·2 | 7·0 GSr |
| 9·4 | | 34·0 | 17·1 | |
| 9·0 | | 35·0 | 37·9 | |
| 9·5 | | 35·5 | 12·0 | |
| 9·3 | | 41·0 | 36·1 | |
| 8·1 | | 50·5 | 37·3 | 8·0 GS |
| 9·2 | | 59·0 | 18·7 | |
| 9·2 | 42 | 16·0 | 18·0 | |
| 9·7 | | 45·5 | 41·7 | |
| 9·7 | 43 | 19·5 | 22·3 | |
| 9·3 | | 35·0 | 37·8 | |
| 9·3 | | 44·0 | 43·9 | |
| 9·6 | | 45·5 | 22·0 | |
| 9·1 | | 55·5 | 3·3 | |
| 9·6 | 44 | 0·5 | 20·3 | |

### 3301—3360.

| mag. | 15h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 44 | 20·0 | 48·7 | |
| 9·4 | | 20·5 | 12·0 | |
| 9·0 | | 23·0 | 30·2 | |
| 9·1 | | 23·5 | 46·5 | |
| 9·2 | | 34·0 | 18·2 | |
| 9·3 | | 38·0 | 58·5 | |
| 9·6 | | 53·0 | 20·0 | |
| 9·3 | 45 | 14·5 | 58·9 | |
| 9·4 | | 22·5 | 42·5 | |
| 9·5 | | 44·0 | 49·6 | |
| 9·6 | | 44·5 | 5·2 | |
| 9·3 | | 55·5 | 9·0 | |
| 9·6 | | 56·0 | 43·2 | |
| 9·5 | 46 | 16·0 | 45·2 | |
| 9·2 | | 48·5 | 43·1 | |
| 9·7 | 47 | 0·0 | 6·0 | |
| 9·5 | | 16·0 | 40·9 | |
| 9·5 | | 16·5 | 44·4 | |
| 9·3 | | 17·0 | 55·0 | |
| 6·2 | | 31·5 | 40·3 | 6·0 GSgcr |
| 9·7 | | 41·5 | 59·6 | |
| 9·4 | | 50·5 | 6·8 | |
| 9·7 | | 51·0 | 54·1 | |
| 9·2 | | 55·0 | 24·3 | |
| 9·7 | 48 | 15·0 | 28·1 | |
| 8·6 | | 25·0 | 29·4 | 7·5 GSg |
| 9·1 | | 35·5 | 39·6 | |
| 9·4 | | 37·0 | 9·0 | |
| 9·3 | | 37·5 | 12·1 | |
| 8·6 | | 42·0 | 2·4 | 9·0 |
| 9·6 | | 45·5 | 7·6 | |
| 8·7 | | 49·5 | 24·7 | |
| 9·7 | | 50·5 | 11·7 | |
| 9·7 | | 59·0 | 41·3 | |
| 9·6 | 49 | 0·0 | 29·7 | |
| 9·7 | | 19·5 | 42·2 | |
| 9·7 | | 22·5 | 30·2 | |
| 9·4 | | 40·5 | 18·4 | |
| 9·2 | | 44·0 | 34·4 | |
| 9·1 | | 46·5 | 51·9 | |
| 9·3 | | 55·0 | 28·1 | |
| 9·7 | 50 | 2·0 | 53·7 | |
| 9·2 | | 11·5 | 13·7 | |
| 9·3 | | 22·0 | 7·5 | |
| 9·2 | | 30·5 | 14·7 | |
| 7·6 | | 32·0 | 2·7 | 8·0 G |
| 8·7 | | 50·0 | 8·3 | |
| 9·6 | 51 | 2·0 | 10·1 | |
| 9·2 | | 4·0 | 51·1 | |
| 9·1 | | 8·5 | 44·7 | |
| 9·2 | | 40·5 | 4·1 | |
| 9·5 | | 45·0 | 13·1 | |
| 8·5 | 52 | 18·5 | 6·8 | 8·0 G |
| 9·2 | | 35·7 | 0·4 | |
| 9·1 | | 40·0 | 3·1 | |
| 9·1 | | 40·5 | 44·1 | |
| 9·2 | | 48·0 | 5·3 | |
| 9·7 | | 53·5 | 0·9 | |
| 9·3 | | 57·5 | 46·3 | |
| 9·6 | 53 | 6·0 | 11·1 | |

### 3361—3420.

| mag. | 15h.–16h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·3 | 53 | 8·5 | 42·9 | |
| 8·9 | | 14·5 | 28·9 | |
| 9·6 | | 19·5 | 3·0 | |
| 9·3 | | 22·5 | 29·0 | |
| 9·6 | | 29·5 | 18·0 | |
| 9·7 | | 41·0 | 20·8 | |
| 9·3 | | 52·0 | 55·0 | |
| 9·2 | | 58·5 | 42·1 | |
| 8·8 | | 59·5 | 52·2 | |
| 9·7 | 54 | 5·7 | 3·5 | |
| 9·2 | | 17·5 | 38·8 | |
| 9·5 | | 46·5 | 58·3 | |
| 9·6 | | 51·0 | 46·0 | |
| 9·6 | | 52·0 | 36·7 | |
| 9·6 | | 58·0 | 1·2 | |
| 9·2 | | 58·5 | 26·8 | |
| 8·5 | 55 | 19·0 | 13·0 | 7·5 G |
| 9·7 | | 22·0 | 10·7 | |
| 9·1 | | 30·0 | 22·1 | |
| 9·2 | | 54·5 | 45·0 | |
| 9·1 | | 58·5 | 19·0 | |
| 9·4 | | 58·7 | 41·3 | |
| 9·7 | 56 | 42·5 | 25·9 | |
| 9·1 | | 46·0 | 27·0 | |
| 8·4 | | 57·5 | 30·8 | 9·0 |
| 8·9 | 57 | 10·5 | 57·9 | |
| 9·3 | | 40·5 | 39·4 | |
| 9·7 | | 47·7 | 14·2 | |
| 9·0 | | 48·0 | 49·3 | |
| 9·1 | 58 | 37·0 | 15·4 | |
| 9·5 | | 41·0 | 3·0 | |
| 9·4 | 59 | 1·3 | 1·7 | |
| 9·6 | | 10·0 | 30·4 | |
| 8·8 | | 23·0 | 8·0 | |
| 9·6 | | 25·7 | 52·9 | |
| 9·7 | | 28·7 | 36·1 | |
| 9·6 | | 39·5 | 4·8 | |
| 9·7 | | 41·0 | 52·1 | |
| 9·5 | | 48·7 | 46·0 | |
| 9·6 | 0 | 5·3 | 47·0 | |
| 9·6 | | 11·5 | 20·3 | |
| 9·0 | | 15·3 | 12·7 | |
| 9·2 | | 17·0 | 10·5 | |
| 9·7 | | 20·3 | 27·0 | |
| 9·6 | | 31·3 | 27·0 | |
| 8·6 | | 37·5 | 17·9 | |
| 9·2 | | 40·0 | 51·7 | |
| 9·3 | | 48·5 | 42·1 | |
| 9·1 | 1 | 3·5 | 8·2 | |
| 9·2 | | 8·0 | 45·6 | |
| 9·0 | | 31·0 | 13·1 | 9·0 |
| 7·8 | | 51·0 | 39·3 | 8·0 GSr |
| 9·7 | 2 | 0·0 | 1·0 | |
| 9·7 | | 50·0 | 39·9 | |
| 9·3 | 3 | 1·0 | 55·6 | |
| 8·7 | | 27·5 | 46·7 | |
| 9·6 | | 38·0 | 11·4 | |
| 9·7 | | 46·3 | 12·5 | |
| 9·7 | 4 | 6·5 | 15·7 | |
| 9·6 | | 7·5 | 43·5 | |



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### 3421—3480.

| mag. | 16h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·6 | 4 | 18·0 | 56·1 | |
| 9·6 | | 19·0 | 30·1 | |
| 9·1 | | 27·5 | 1·0 | 8·5 |
| 9·1 | | 42·5 | 45·7 | |
| 9·2 | | 59·5 | 14·1 | |
| 8·6 | 5 | 15·0 | 59·2 | 9·0 |
| 9·1 | | 27·5 | 15·6 | |
| 9·3 | | 31·0 | 34·7 | |
| 9·1 | | 45·0 | 29·9 | |
| 9·7 | | 47·0 | 54·0 | |
| 8·6 | 6 | 9·0 | 4·3 | |
| 8·5 | | 29·0 | 39·9 | 9·5 |
| 9·6 | | 29·5 | 7·1 | |
| 9·6 | | 31·5 | 6·2 | |
| 9·0 | | 49·5 | 32·8 | 9·0 |
| 9·1 | 7 | 26·5 | 42·7 | |
| 9·4 | | 38·0 | 20·7 | |
| 7·9 | | 41·0 | 15·4 | 8·0 G |
| 9·2 | | 48·0 | 31·8 | |
| 9·7 | | 54·0 | 10·2 | |
| 9·3 | 8 | 0·0 | 40·3 | |
| 6·8 | | 23·0 | 20·2 | 7·0 GS |
| 9·7 | | 25·5 | 39·4 | |
| 8·9 | | 26·0 | 18·8 | |
| 9·2 | | 31·0 | 0·3 | |
| 8·4 | | 38·0 | 11·2 | 8·0 G |
| 8·7 | | 40·0 | 33·3 | |
| 9·3 | | 41·0 | 21·9 | |
| 8·5 | | 43·5 | 4·8 | 9·5 |
| 8·6 | 9 | 10·0 | 15·2 | |
| 9·1 | | 31·0 | 40·9 | |
| 9·3 | | 34·0 | 1·9 | |
| 9·7 | | 41·0 | 56·6 | |
| 9·1 | | 54·5 | 38·1 | |
| 9·6 | 10 | 8·0 | 36·8 | |
| 9·2 | | 11·5 | 38·1 | |
| 9·1 | | 25·0 | 6·0 | |
| 9·4 | | 44·0 | 10·5 | |
| 8·6 | | 45·3 | 2·9 | 9·0 |
| 9·7 | | 45·5 | 41·0 | |
| 9·7 | | 51·0 | 0·0 | |
| 9·3 | 11 | 26·5 | 16·4 | |
| 9·3 | | 35·5 | 27·0 | |
| 9·4 | | 36·0 | 13·2 | |
| 9·3 | | 40·3 | 2·0 | 9·5 |
| 9·7 | | 40·5 | 54·4 | |
| 9·7 | | 42·5 | 14·7 | |
| 9·3 | | 47·0 | 55·0 | |
| 8·8 | | 51·5 | 35·0 | |
| 9·4 | 12 | 1·0 | 43·1 | |
| 9·7 | | 15·0 | 12·9 | |
| 9·6 | | 17·0 | 39·6 | |
| 9·5 | | 17·5 | 4·0 | |
| 9·3 | | 23·5 | 53·8 | |
| 9·7 | | 41·0 | 7·1 | |
| 8·8 | 13 | 15·0 | 44·6 | |
| 8·8 | | 23·5 | 44·1 | 8·5 |
| 9·5 | | 49·5 | 12·8 | |
| 8·5 | 14 | 9·5 | 21·3 | |
| 9·0 | | 20·0 | 11·9 | |

### 3481—3540.

| mag. | 16h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·7 | 14 | 52·5 | 46·7 | |
| 9·7 | | 54·0 | 48·3 | |
| 9·7 | 15 | 5·5 | 20·1 | |
| 9·4 | | 13·7 | 8·8 | |
| 9·4 | | 15·0 | 27·2 | |
| 9·2 | | 42·5 | 47·0 | |
| 9·6 | 16 | 0·0 | 36·2 | |
| 8·6 | | 8·5 | 22·3 | |
| 9·3 | | 11·5 | 55·6 | |
| 9·7 | | 11·5 | 18·2 | |
| 8·6 | 17 | 20·0 | 45·8 | |
| 9·1 | | 20·0 | 0·3 | |
| 9·0 | | 22·0 | 33·0 | 9·5 |
| 9·4 | | 47·5 | 56·8 | |
| 9·4 | 18 | 4·0 | 18·2 | |
| 9·1 | | 9·0 | 37·9 | |
| 9·4 | | 15·0 | 28·9 | |
| 9·4 | | 25·5 | 35·3 | |
| 9·6 | | 41·0 | 53·2 | |
| 9·3 | | 59·5 | 14·6 | |
| 9·7 | 19 | 2·0 | 1·0 | |
| 8·6 | | 18·8 | 42·4 | 9·5 |
| 8·4 | | 31·0 | 56·3 | |
| 9·4 | | 50·8 | 52·4 | |
| 9·4 | | 51·5 | 29·2 | |
| 9·2 | 20 | 0·0 | 53·9 | |
| 6·8 | | 1·3 | 11·7 | 7·0 G |
| 9·1 | | 1·8 | 10·3 | |
| 9·6 | | 21·0 | 5·7 | |
| 9·2 | | 46·7 | 24·9 | |
| 9·2 | 21 | 15·0 | 1·4 | |
| 9·7 | | 25·7 | 2·0 | |
| 9·5 | | 41·0 | 56·9 | |
| 9·6 | 22 | 34·0 | 7·0 | |
| 8·3 | | 36·0 | 45·5 | 8·0 |
| 9·3 | 23 | 1·5 | 30·2 | |
| 9·7 | | 5·5 | 52·2 | |
| 9·5 | | 14·0 | 3·6 | |
| 9·7 | | 37·0 | 58·2 | |
| 8·6 | | 43·5 | 24·6 | 8·0 |
| 8·7 | | 53·0 | 27·2 | 8·5 |
| 9·7 | | 56·0 | 52·0 | |
| 9·7 | 24 | 7·0 | 18·2 | |
| 9·0 | | 29·5 | 17·3 | |
| 9·7 | | 47·5 | 6·0 | |
| 8·2 | | 56·5 | 32·7 | 7·8 G |
| 9·2 | 25 | 2·0 | 50·9 | |
| 9·2 | | 27·0 | 53·9 | |
| 9·2 | | 28·0 | 3·3 | |
| 8·2 | | 32·0 | 23·8 | 7·0 |
| 8·5 | | 52·5 | 47·1 | 8·0 |
| 9·0 | 26 | 49·0 | 49·5 | 8·8 |
| 9·7 | | 54·0 | 26·6 | |
| 8·6 | 27 | 4·5 | 21·1 | 9·0 |
| 9·2 | | 13·0 | 15·8 | |
| 8·6 | | 21·5 | 40·0 | 9·5 |
| 9·7 | | 33·0 | 17·8 | |
| 9·5 | 28 | 5·5 | 36·2 | |
| 9·5 | | 31·2 | 0·5 | |
| 9·6 | | 32·5 | 18·6 | |

### 3541—3600.

| mag. | 16h.–17h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·0 | 28 | 48·5 | 28·2 | |
| 9·7 | 29 | 23·0 | 37·5 | |
| 8·9 | | 44·5 | 40·6 | |
| 9·7 | | 48·5 | 30·0 | |
| 9·0 | 30 | 58·5 | 40·0 | |
| 9·7 | 31 | 8·0 | 53·9 | |
| 9·7 | | 15·5 | 44·6 | |
| 9·5 | | 27·0 | 14·2 | |
| 8·9 | 32 | 22·0 | 6·4 | |
| 9·5 | | 24·5 | 54·0 | |
| 9·7 | | 52·0 | 22·2 | |
| 9·5 | 33 | 8·5 | 57·0 | |
| 8·1 | | 9·5 | 49·9 | |
| 9·6 | | 24·5 | 29·7 | |
| 9·0 | | 27·5 | 41·8 | |
| 9·7 | | 49·5 | 34·5 | |
| 8·6 | 34 | 28·5 | 12·7 | 8·0 |
| 9·6 | 35 | 12·5 | 45·9 | |
| 9·0 | | 21·5 | 7·9 | 9·0 |
| 9·0 | 36 | 11·5 | 0·0 | |
| 8·7 | | 24·0 | 8·8 | |
| 9·5 | 38 | 3·0 | 39·6 | |
| 8·9 | | 42·5 | 16·8 | 8·5 |
| 9·7 | | 50·5 | 22·2 | |
| 8·5 | 39 | 5·5 | 28·2 | 9·0 |
| 9·2 | | 6·5 | 42·0 | 8·5 |
| 8·2 | | 49·0 | 21·7 | 8·5 |
| 9·3 | 40 | 55·5 | 56·0 | |
| 9·5 | 41 | 0·5 | 58·6 | |
| 9·5 | | 24·0 | 3·2 | 9·5 |
| 9·7 | 42 | 7·0 | 53·6 | |
| 9·2 | | 10·5 | 41·5 | 9·0 |
| 9·5 | | 40·7 | 59·4 | |
| 8·9 | | 41·0 | 7·2 | |
| 9·7 | | 55·5 | 35·5 | |
| 9·2 | 43 | 4·0 | 45·2 | 9·0 |
| 9·2 | | 5·5 | 27·2 | |
| 9·0 | | 32·5 | 16·2 | |
| 8·5 | | 42·0 | 38·0 | |
| 9·7 | 45 | 48·5 | 28·7 | |
| 9·7 | 46 | 9·0 | 10·0 | |
| 9·0 | | 45·0 | 26·4 | 8·5 |
| 9·7 | 47 | 19·5 | 42·6 | |
| 9·3 | | 31·0 | 34·2 | |
| 9·7 | | 33·0 | 32·6 | |
| 8·9 | 48 | 3·0 | 27·8 | 9·0 |
| 9·0 | | 17·5 | 23·0 | 8·5 |
| 8·3 | | 48·0 | 21·2 | 8·0 |
| 9·2 | 49 | 38·0 | 3·4 | 9·0 |
| 9·3 | 51 | 20·0 | 43·0 | |
| 9·7 | 52 | 29·5 | 21·0 | |
| 9·7 | 53 | 39·5 | 52·6 | |
| 9·0 | 56 | 36·5 | 40·3 | |
| 9·0 | 58 | 12·0 | 32·3 | 9·0 |
| 9·0 | | 22·6 | 58·0 | |
| 9·9 | | 25·5 | 20·7 | |
| 9·5 | 59 | 6·0 | 43·9 | |
| 9·5 | 0 | 3·5 | 13·9 | |
| 9·3 | | 4·2 | 12·4 | |
| 8·7 | | 14·5 | 49·9 | |

### 3601—3660.

| mag. | 17h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·2 | 0 | 51·2 | 40·9 | |
| 9·9 | | 55·0 | 59·1 | |
| 9·0 | 1 | 29·0 | 25·8 | |
| 9·4 | | 38·5 | 12·0 | |
| 9·9 | | 47·5 | 11·4 | |
| 9·6 | 2 | 15·5 | 51·8 | |
| 8·4 | | 16·0 | 28·5 | 8·5 GS |
| 9·0 | | 31·0 | 46·3 | |
| 9·9 | | 38·5 | 45·9 | |
| 9·3 | | 41·7 | 4·3 | 9·0 |
| 8·5 | 3 | 18·7 | 1·3 | 9·0 |
| 9·0 | | 21·2 | 48·0 | |
| 9·9 | 4 | 11·5 | 57·2 | |
| 9·8 | | 34·0 | 37·1 | |
| 8·4 | 5 | 13·5 | 35·5 | |
| 9·2 | | 26·5 | 36·1 | |
| 9·2 | | 41·5 | 20·3 | |
| 9·2 | | 54·0 | 6·9 | |
| 9·4 | 6 | 15·0 | 32·9 | |
| 9·3 | 7 | 9·5 | 26·5 | |
| 9·8 | | 38·5 | 33·9 | |
| 9·5 | 8 | 44·5 | 55·1 | |
| 9·5 | 10 | 6·0 | 27·7 | |
| 9·9 | | 30·5 | 17·9 | |
| 9·2 | | 30·5 | 48·9 | 9·5 |
| 8·8 | 11 | 21·0 | 9·0 | |
| 8·7 | 12 | 28·0 | 26·4 | |
| 9·2 | | 40·5 | 29·9 | |
| 9·2 | | 58·0 | 34·3 | |
| 8·4 | 14 | 34·5 | 23·9 | |
| 9·2 | | 38·5 | 38·9 | |
| 9·6 | | 43·0 | 23·5 | |
| 9·4 | | 48·5 | 36·7 | |
| 8·2 | 15 | 2·5 | 53·1 | 9·0 |
| 9·3 | | 15·5 | 46·2 | |
| 9·9 | | 46·5 | 20·9 | |
| 8·5 | | 50·0 | 50·0 | 8·0 |
| 9·2 | 16 | 48·0 | 48·9 | 9·5 |
| 9·3 | 19 | 9·5 | 42·9 | |
| 9·2 | 20 | 14·5 | 59·3 | 9·5 |
| 9·2 | | 21·5 | 4·0 | 9·0 |
| 9·6 | | 37·5 | 48·9 | 9·5 |
| 9·2 | 21 | 14·5 | 54·7 | |
| 9·6 | | 43·0 | 25·9 | |
| 8·5 | 23 | 28·5 | 31·1 | |
| 8·4 | | 31·5 | 57·1 | 8·0 GS |
| 9·9 | | 31·5 | 55·4 | |
| 8·7 | 24 | 31·0 | 26·3 | |
| 8·8 | | 32·0 | 42·9 | |
| 9·9 | | 35·0 | 15·7 | |
| 9·9 | | 40·5 | 23·7 | |
| 9·2 | 26 | 40·5 | 9·4 | |
| 9·6 | 27 | 5·5 | 51·0 | |
| 9·2 | | 46·0 | 20·7 | |
| 9·9 | 28 | 18·5 | 8·6 | |
| 9·6 | 29 | 16·0 | 54·0 | |
| 9·9 | | 20·5 | 30·6 | |
| 9·6 | 30 | 20·5 | 16·1 | |
| 9·9 | | 25·5 | 44·8 | |
| 8·4 | 31 | 55·0 | 46·3 | 9·5 G |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 137 | 4·2 |
| | 10 | 139 | 3·9 |
| | 20 | 140 | 3·5 |
| | 30 | 142 | 3·2 |
| | 40 | 143 | 2·9 |
| | 50 | 144 | 2·5 |
| 17 | 0 | 144 | 2·2 |
| | 10 | 145 | 1·8 |
| | 20 | 146 | 1·5 |
| | 30 | 146 | 1·1 |
| | 40 | 147 | 0·7 |



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25 prec.

| h | m | α + s | δ ′ |
|---|---|---|---|
| 17 | 30 | 146 | − 1·1 |
| | 40 | 147 | 0·7 |
| | 50 | 147 | 0·4 |
| 18 | 0 | 147 | 0·0 |
| | 10 | 147 | + 0·4 |
| | 20 | 147 | 0·7 |

## 3661—3720.

| mag. | $17^h$ m | s | −64° ′ | |
|---|---|---|---|---|
| 8·8 | 32 | 57·5 | 8·3 | 9·0 |
| 5·6 | 33 | 27·5 | 39·6 | 4·0 GStrλ |
| 7·2 | | 39·5 | 15·8 | 7·0 GS |
| 9·0 | | 52·0 | 6·0 | 9·5 |
| 9·8 | 34 | 24·5 | 59·2 | 9·5 |
| 9·4 | | 42·0 | 0·8 | |
| 9·0 | 35 | 31·5 | 0·9 | |
| 9·3 | | 42·0 | 55·5 | |
| 9·0 | | 44·5 | 38·1 | |
| 7·2 | 37 | 57·5 | 15·6 | 7·0 GSc |
| 9·9 | 38 | 7·3 | 49·8 | 9·0 |
| 9·4 | 39 | 14·2 | 23·7 | |
| 9·7 | | 18·9 | 58·1 | |
| 9·9 | | 21·7 | 54·7 | |
| 10·2 | | 23·2 | 17·2 | |
| 10·3 | | 27·2 | 47·4 | |
| 10·3 | | 30·2 | 15·5 | |
| 9·2 | | 30·2 | 25·3 | |
| 9·4 | | 40·3 | 19·4 | 9·5 |
| 8·5 | | 45·2 | 47·4 | 9·5 |
| 10·3 | | 58·7 | 21·0 | |
| 9·6 | | 59·2 | 44·3 | |
| 10·3 | 40 | 7·7 | 32·8 | |
| 10·2 | | 17·2 | 54·6 | |
| 9·8 | | 18·2 | 32·7 | |
| 9·9 | | 18·7 | 24·6 | |
| 7·9 | | 25·3 | 34·6 | 8·2 |
| 9·1 | | 26·7 | 52·3 | |
| 10·0 | | 40·2 | 41·8 | |
| 10·0 | | 54·7 | 22·7 | |
| 10·3 | 41 | 10·2 | 20·7 | |
| 9·7 | | 18·2 | 34·9 | |
| 9·8 | | 28·2 | 1·7 | |
| 9·5 | | 38·2 | 13·1 | |
| 10·3 | | 44·7 | 30·4 | |
| 9·0 | 42 | 9·6 | 49·8 | 9·0 |
| 9·9 | | 24·7 | 42·1 | |
| 9·9 | | 38·7 | 21·5 | |
| 10·0 | | 52·7 | 7·7 | |
| 9·7 | | 58·7 | 49·8 | |
| 10·3 | 43 | 4·2 | 8·8 | |
| 9·2 | | 9·6 | 46·6 | 9·5 |
| 10·3 | | 18·2 | 8·2 | |
| 10·3 | | 22·2 | 3·6 | |
| 9·8 | | 34·2 | 30·9 | |
| 9·4 | | 51·7 | 53·3 | |
| 10·2 | | 59·7 | 4·8 | |
| 10·3 | 44 | 4·2 | 43·3 | |
| 9·7 | | 10·7 | 55·0 | |
| 10·3 | | 20·2 | 32·9 | |
| 8·9 | | 34·2 | 46·6 | 8·0 G |
| 10·2 | | 34·2 | 38·3 | |
| 10·0 | | 36·2 | 42·6 | |
| 10·3 | | 37·7 | 43·0 | |
| 9·8 | | 43·2 | 47·6 | |
| 10·0 | | 44·7 | 10·4 | |
| 9·4 | 45 | 9·7 | 25·8 | |
| 9·8 | | 43·2 | 38·7 | |
| 10·2 | | 45·2 | 59·9 | |
| 10·3 | | 47·4 | 58·0 | |

## 3721—3780.

| mag. | $17^h$ m | s | −64° ′ | |
|---|---|---|---|---|
| 9·9 | 46 | 1·7 | 22·0 | |
| 9·4 | | 4·2 | 36·1 | |
| 9·2 | | 9·7 | 28·5 | |
| 9·0 | | 41·7 | 20·3 | |
| 10·2 | | 51·7 | 47·6 | |
| 10·2 | | 56·7 | 12·8 | |
| 9·1 | 47 | 15·7 | 4·3 | 9·0 G |
| 10·2 | | 32·7 | 32·2 | |
| 10·3 | | 56·7 | 15·3 | |
| 9·7 | | 58·7 | 31·7 | |
| 9·6 | 48 | 0·2 | 54·7 | |
| 9·5 | | 8·7 | 44·6 | |
| 10·3 | | 10·1 | 10·6 | |
| 9·4 | | 10·2 | 55·4 | |
| 9·4 | | 12·2 | 12·0 | |
| 10·3 | | 13·2 | 41·7 | |
| 10·0 | | 14·2 | 33·1 | |
| 9·6 | | 15·7 | 29·1 | |
| 9·6 | | 19·6 | 1·9 | 9·0 G |
| 9·6 | | 24·7 | 54·9 | |
| 10·2 | | 27·2 | 37·2 | |
| 10·0 | | 29·9 | 58·1 | |
| 10·0 | | 41·2 | 36·9 | |
| 10·3 | | 41·7 | 16·9 | |
| 10·3 | | 43·4 | 27·0 | |
| 10·2 | | 47·2 | 9·3 | |
| 9·9 | 49 | 3·1 | 1·1 | |
| 10·3 | | 8·7 | 31·8 | |
| 10·0 | | 9·2 | 29·5 | |
| 10·3 | | 9·4 | 15·0 | |
| 10·2 | | 17·7 | 9·3 | |
| 9·4 | | 19·2 | 21·7 | |
| 10·2 | | 26·7 | 11·7 | |
| 10·2 | | 26·9 | 1·7 | |
| 9·9 | | 27·4 | 4·5 | |
| 9·9 | | 35·2 | 11·3 | |
| 10·3 | | 37·2 | 55·9 | |
| 9·0 | | 40·2 | 54·6 | |
| 9·9 | 50 | 3·7 | 16·4 | |
| 10·0 | | 3·7 | 33·9 | |
| 9·8 | | 8·2 | 48·5 | |
| 8·5 | | 17·2 | 14·2 | 9·5 |
| 10·3 | | 26·4 | 20·7 | |
| 10·2 | | 26·7 | 48·3 | |
| 10·2 | | 36·4 | 5·4 | |
| 10·3 | | 48·4 | 4·7 | |
| 10·2 | | 50·7 | 37·2 | |
| 8·9 | | 55·2 | 1·3 | 9·2 |
| 9·9 | 51 | 8·7 | 30·6 | |
| 10·0 | | 21·2 | 59·8 | |
| 10·2 | | 38·7 | 11·0 | |
| 9·8 | | 40·6 | 1·9 | |
| 10·2 | | 54·7 | 24·1 | |
| 9·0 | 52 | 0·2 | 29·5 | |
| 10·2 | | 0·2 | 4·7 | |
| 10·2 | | 1·2 | 36·3 | |
| 10·3 | | 38·2 | 37·7 | |
| 9·1 | 53 | 59·5 | 5·2 | 9·0 |
| 9·8 | 54 | 14·5 | 37·4 | |
| 10·2 | | 18·5 | 42·3 | |

## 3781—3840.

| mag. | $17^h$–$18^h$ m | s | −64° ′ | |
|---|---|---|---|---|
| 10·0 | 54 | 22·0 | 23·8 | |
| 10·3 | | 24·3 | 34·4 | |
| 9·7 | | 27·5 | 37·6 | |
| 10·2 | | 30·5 | 44·2 | |
| 10·0 | | 31·0 | 10·5 | |
| 10·3 | | 41·5 | 13·7 | |
| 10·3 | | 43·0 | 12·2 | |
| 9·2 | | 43·5 | 40·5 | |
| 9·8 | | 46·5 | 49·4 | |
| 9·9 | 55 | 0·0 | 14·9 | |
| 10·3 | | 2·5 | 36·2 | |
| 9·6 | | 9·5 | 38·5 | |
| 9·9 | | 14·0 | 47·3 | |
| 10·3 | | 19·5 | 48·5 | |
| 9·2 | | 30·5 | 11·5 | 9·0 |
| 7·8 | | 33·5 | 33·2 | 6·5 GSc |
| 9·9 | | 34·0 | 53·0 | |
| 10·3 | | 43·5 | 11·6 | |
| 9·8 | | 43·5 | 5·6 | |
| 10·3 | 56 | 32·3 | 58·9 | |
| 9·0 | | 35·0 | 37·5 | 9·2 |
| 9·9 | | 36·5 | 9·8 | |
| 10·3 | | 41·0 | 23·1 | |
| 10·3 | | 44·0 | 23·1 | |
| 10·2 | | 54·0 | 23·9 | |
| 10·0 | | 54·0 | 31·1 | |
| 10·0 | | 56·0 | 33·3 | |
| 10·3 | 57 | 6·0 | 50·6 | |
| 10·3 | | 7·3 | 52·4 | |
| 9·6 | | 29·0 | 34·6 | |
| 10·3 | | 29·3 | 23·7 | |
| 10·3 | | 32·5 | 56·9 | |
| 10·3 | | 42·0 | 38·4 | |
| 9·9 | | 53·0 | 4·9 | |
| 10·3 | 58 | 5·5 | 5·6 | |
| 9·8 | | 8·5 | 30·6 | |
| 9·2 | | 13·5 | 40·0 | |
| 9·1 | | 26·5 | 11·7 | |
| 9·5 | | 33·5 | 33·6 | |
| 9·6 | | 42·0 | 26·7 | |
| 10·2 | | 43·5 | 33·6 | |
| 8·4 | | 53·0 | 31·9 | 9·0 |
| 10·2 | 59 | 25·3 | 1·7 | |
| 9·8 | | 49·0 | 26·1 | |
| 10·2 | | 54·5 | 16·0 | |
| 8·3 | 0 | 7·0 | 0·4 | 8·0 GS |
| 10·2 | | 24·5 | 37·3 | |
| 9·9 | | 27·5 | 17·1 | |
| 10·3 | | 55·5 | 56·5 | |
| 9·9 | 1 | 10·5 | 33·0 | |
| 9·4 | | 26·5 | 7·6 | |
| 9·0 | | 28·0 | 16·7 | |
| 9·1 | | 40·5 | 42·9 | |
| 9·8 | | 50·5 | 19·2 | |
| 9·8 | | 52·3 | 57·9 | |
| 10·3 | 2 | 2·5 | 30·4 | |
| 9·8 | | 22·0 | 25·9 | |
| 10·0 | | 45·0 | 50·5 | |
| 9·7 | | 54·0 | 11·1 | |
| 9·6 | 3 | 4·0 | 47·4 | |

## 3841—3900.

| mag. | $18^h$ m | s | −64° ′ | |
|---|---|---|---|---|
| 10·3 | 3 | 13·5 | 45·3 | |
| 10·3 | | 19·5 | 25·8 | |
| 9·9 | | 21·3 | 57·2 | |
| 10·3 | | 43·0 | 48·0 | |
| 10·2 | | 44·5 | 52·4 | |
| 10·2 | | 49·5 | 16·4 | |
| 9·9 | 4 | 1·0 | 8·0 | |
| 10·0 | | 9·0 | 31·8 | |
| 9·4 | | 11·0 | 32·7 | |
| 9·6 | | 15·5 | 10·2 | |
| 10·3 | | 38·5 | 45·8 | |
| 10·2 | | 53·5 | 3·8 | |
| 9·7 | | 57·0 | 19·9 | |
| 9·7 | 5 | 3·7 | 59·9 | |
| 10·3 | | 26·5 | 34·3 | |
| 10·0 | | 32·5 | 22·3 | |
| 10·2 | | 51·0 | 55·0 | |
| 10·2 | | 56·5 | 10·7 | |
| 9·9 | 6 | 3·5 | 46·0 | |
| 9·8 | | 25·5 | 46·6 | |
| 8·9 | | 25·5 | 47·8 | |
| 9·0 | | 52·5 | 6·8 | |
| 9·9 | 7 | 2·5 | 9·5 | |
| 10·2 | | 14·5 | 39·4 | |
| 10·3 | | 23·0 | 2·8 | |
| 9·5 | | 42·5 | 57·2 | |
| 9·7 | | 48·0 | 25·3 | |
| 9·5 | 8 | 24·5 | 42·2 | |
| 9·6 | | 50·2 | 59·7 | |
| 10·3 | | 54·0 | 24·3 | |
| 10·2 | 9 | 0·8 | 59·1 | |
| 9·8 | | 5·5 | 27·9 | |
| 10·0 | | 7·0 | 15·8 | |
| 10·2 | | 32·5 | 23·0 | |
| 10·3 | | 36·5 | 31·2 | |
| 9·5 | 10 | 4·0 | 16·6 | |
| 10·3 | | 16·3 | 12·7 | |
| 9·8 | | 18·0 | 44·9 | |
| 10·3 | | 39·0 | 20·9 | |
| 10·3 | | 41·5 | 34·8 | |
| 7·8 | | 52·5 | 25·7 | 8·8 G |
| 9·4 | 11 | 6·0 | 6·3 | |
| 9·8 | | 9·5 | 40·4 | |
| 10·3 | | 25·2 | 59·6 | |
| 8·9 | | 30·5 | 45·8 | 10·0 |
| 9·7 | | 32·5 | 22·3 | |
| 9·5 | | 50·0 | 19·7 | |
| 9·0 | | 55·5 | 8·3 | |
| 9·5 | | 57·0 | 43·3 | |
| 10·0 | 12 | 7·0 | 0·2 | |
| 10·0 | | 21·5 | 4·7 | |
| 9·4 | | 43·5 | 30·4 | |
| 9·8 | | 45·0 | 59·7 | |
| 9·6 | 13 | 2·2 | 0·4 | |
| 9·8 | | 24·0 | 16·5 | |
| 9·2 | | 37·5 | 12·6 | 9·2 |
| 9·8 | | 41·5 | 15·0 | |
| 9·6 | | 43·5 | 26·8 | |
| 10·3 | | 53·0 | 48·2 | |
| 8·8 | 14 | 0·0 | 21·0 | 9·5 |



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### 3901—3960.

| mag. | 18h. m | s | −64° ′ | |
|---|---|---|---|---|
| 8.7 | 14 | 5.5 | 41.9 | 9.0 |
| 10.3 | | 19.5 | 27.6 | |
| 9.6 | | 22.0 | 6.2 | |
| 10.3 | | 36.3 | 38.2 | |
| 8.8 | 15 | 22.0 | 43.9 | 8.5 |
| 10.3 | | 33.0 | 34.2 | |
| 8.7 | | 49.0 | 22.7 | 8.2 |
| 10.3 | | 59.0 | 35.5 | |
| 10.3 | 16 | 9.5 | 48.1 | |
| 10.3 | | 17.0 | 33.8 | |
| 8.7 | | 20.5 | 32.7 | 9.5 |
| 10.0 | | 39.0 | 37.6 | |
| 9.8 | 17 | 2.5 | 17.0 | |
| 10.0 | | 3.5 | 4.9 | |
| 10.2 | | 12.5 | 39.9 | |
| 10.2 | | 21.0 | 40.6 | |
| 8.7 | | 28.5 | 39.8 | 8.5 |
| 10.0 | 18 | 9.5 | 23.8 | |
| 9.5 | | 22.8 | 31.3 | |
| 10.3 | | 28.0 | 31.6 | |
| 10.3 | | 37.5 | 4.3 | |
| 9.5 | | 49.0 | 22.4 | |
| 8.6 | 19 | 3.5 | 12.1 | 9.0 |
| 10.3 | | 10.5 | 35.1 | |
| 9.0 | | 18.0 | 44.4 | 8.5 |
| 10.2 | | 25.5 | 6.7 | |
| 10.2 | | 26.0 | 25.4 | |
| 9.0 | | 37.5 | 20.2 | |
| 10.2 | 20 | 18.5 | 39.6 | |
| 9.1 | | 45.0 | 32.8 | 9.5 |
| 10.3 | | 45.4 | 26.4 | |
| 10.2 | 21 | 9.5 | 37.1 | |
| 9.7 – | | 14.0 | 42.9 | |
| 9.4 | 24 | 52.5 | 54.1 | |
| 8.8 | 26 | 47.5 | 53.2 | 9.0 |
| 8.5 | | 54.3 | 57.9 | 7.8 GSt |
| 8.9 | 27 | 23.0 | 25.0 | 9.5 |
| 7.8 | | 48.5 | 49.7 | 7.8 GS |
| 9.0 | 28 | 27.0 | 45.0 | 9.0 G |
| 8.5 | 29 | 54.5 | 25.3 | 8.8 G |
| 8.8 | | 59.0 | 36.3 | 8.2 GS |
| 6.8 | 30 | 9.0 | 45.0 | 7.0 GS |
| 7.0 | 31 | 26.5 | 39.7 | 6.2 GS |
| 8.8 | | 47.5 | 4.9 | |
| 9.0 | | 52.0 | 40.7 | |
| 8.8 | 32 | 8.5 | 51.0 | |
| 8.4 | | 39.5 | 34.7 | 8.8 |
| 4.7 | 33 | 9.7 | 59.3 | 5.0 GSct |
| 9.4 | | 12.5 | 50.5 | |
| 8.8 | | 20.5 | 58.7 | 9.0 |
| 8.3 | | 42.0 | 55.5 | 8.2 |
| 9.6 | 34 | 18.5 | 26.7 | |
| 8.5 | | 28.5 | 9.8 | 8.2 G |
| 9.1 | | 44.0 | 53.8 | |
| 8.8 | 35 | 10.5 | 19.5 | |
| 9.3 | | 18.5 | 24.4 | |
| 9.3 | | 35.0 | 7.6 | 9.0 |
| 8.5 | 36 | 36.0 | 34.3 | |
| 9.3 | | 48.0 | 58.2 | |
| 8.6 | 37 | 19.5 | 55.3 | 8.5 |

### 3961—4020.

| mag. | 18h.–19h. m | s | −64° ′ | |
|---|---|---|---|---|
| 8.8 | 38 | 18.5 | 3.7 | |
| 8.8 | 39 | 58.0 | 43.4 | |
| 9.6 | 40 | 49.0 | 2.3 | |
| 9.6 | 42 | 58.5 | 4.8 | |
| 8.5 | 43 | 2.0 | 28.1 | 8.0 |
| 9.0 | 45 | 9.5 | 18.2 | |
| 8.0 | 46 | 28.5 | 9.3 | 7.0 GSc |
| 8.7 | 47 | 5.5 | 47.3 | |
| 9.3 | 49 | 30.0 | 29.2 | 9.0 |
| 9.6 | | 39.0 | 29.6 | 9.5 |
| 9.6 | 50 | 15.0 | 30.5 | 9.5 |
| 9.3 | 53 | 3.0 | 57.1 | |
| 9.6 | | 54.5 | 59.5 | |
| 9.3 – | 54 | 59.0 | 26.7 | |
| 9.5 | 57 | 23.0 | 20.9 | |
| 8.3 | 59 | 7.5 | 29.1 | 8.0 G |
| 8.5 | | 33.7 | 50.1 | 9.0 |
| 9.5 | | 43.5 | 45.6 | |
| 7.9 | 1 | 21.3 | 4.9 | 8.2 |
| 9.5 | | 39.5 | 6.4 | 9.0 |
| 8.7 | 2 | 54.2 | 44.3 | 8.0 G |
| 8.7 | 3 | 30.5 | 6.7 | 9.0 |
| 9.2 | | 47.0 | 37.0 | |
| 8.8 | 4 | 22.5 | 21.5 | |
| 8.7 | 9 | 15.5 | 5.4 | |
| 9.5 | | 20.0 | 6.8 | |
| 9.1 | | 55.5 | 30.5 | |
| 9.5 | 10 | 27.5 | 45.9 | |
| 9.4 | 13 | 2.5 | 8.9 | |
| 9.5 | 14 | 39.0 | 14.5 | |
| 9.5 | | 59.0 | 35.6 | |
| 9.5 | 17 | 10.5 | 4.8 | |
| 9.2 | 19 | 13.5 | 7.0 | |
| 9.5 | | 15.5 | 46.4 | |
| 9.5 | 21 | 20.5 | 31.0 | |
| 9.5 | 24 | 51.0 | 44.1 | |
| 8.7 | 26 | 29.0 | 24.2 | 9.0 |
| 8.5 | | 31.0 | 11.3 | 8.0 GS |
| 7.9 | 27 | 47.5 | 48.6 | GS |
| 8.3 | 28 | 47.5 | 31.0 | |
| 9.2 | 32 | 3.0 | 44.5 | |
| 9.5 | 35 | 14.0 | 4.2 | |
| 9.2 – | | 46.5 | 33.9 | |
| 8.4 | 39 | 9.7 | 15.7 | 8.0 |
| 8.2 | | 13.7 | 39.2 | |
| 9.9 | | 30.5 | 53.4 | |
| 8.7 | 40 | 51.0 | 17.0 | 7.8 G |
| 9.2 | 41 | 53.5 | 17.5 | 9.2 |
| 8.7 | 42 | 57.0 | 26.6 | 8.5 |
| 9.5 | 44 | 2.0 | 43.9 | |
| 9.5 | | 19.0 | 33.3 | |
| 9.0 | | 19.5 | 18.2 | 8.5 G |
| 9.5 | | 27.0 | 50.1 | |
| 9.3 | 45 | 1.0 | 29.2 | |
| 7.9 | 47 | 34.5 | 7.5 | 8.0 G |
| 8.4 | | 50.0 | 11.9 | 9.0 |
| 9.8 | 50 | 26.5 | 19.0 | |
| 8.6 | | 31.0 | 24.8 | |
| 8.6 | 51 | 22.0 | 3.7 | |
| 9.5 | 53 | 0.0 | 55.4 | |

### 4021—4080.

| mag. | 19h.–20h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.2 | 53 | 0.0 | 10.5 | |
| 9.2 | 55 | 3.0 | 50.1 | |
| 9.9 | 56 | 0.0 | 35.9 | |
| 9.9 | 57 | 41.5 | 17.9 | |
| 8.9 | 58 | 45.5 | 1.2 | 8.0 GS |
| 9.8 | 59 | 24.0 | 35.9 | |
| 9.0 | | 38.0 | 40.6 | |
| 9.5 | | 54.5 | 1.1 | |
| 7.9 | 0 | 3.5 | 18.1 | |
| 8.2 | | 3.5 | 59.1 | |
| 9.0 | | 32.5 | 8.4 | 9.5 |
| 8.6 | 1 | 18.5 | 13.1 | 8.5 |
| 9.8 | 2 | 34.5 | 40.3 | |
| 9.0 | | 42.5 | 13.9 | 9.0 |
| 6.8 | 3 | 12.0 | 48.0 | 7.0 GS : |
| 8.7 | | 32.5 | 33.8 | 8.2 G |
| 8.6 | 4 | 18.0 | 37.8 | 8.5 |
| 9.8 | 6 | 34.0 | 11.5 | 9.0 |
| 9.9 | 7 | 13.5 | 43.8 | 9.5 |
| 8.2 | 11 | 30.5 | 34.6 | 9.0 |
| 9.0 | 12 | 6.5 | 42.6 | |
| 9.0 | | 51.0 | 59.1 | 9.0 |
| 9.9 | 13 | 3.0 | 44.0 | |
| 7.7 – | | 9.5 | 17.1 | 8.5 |
| 9.6 | 17 | 55.5 | 41.9 | |
| 9.6 | 18 | 8.8 | 48.2 | 8.8 |
| 9.0 | | 47.8 | 32.4 | |
| 8.6 | 19 | 10.2 | 39.1 | 8.0 G |
| 7.6 | | 28.0 | 36.1 | 7.5 GS |
| 9.6 | | 48.5 | 46.9 | |
| 9.3 | 20 | 8.5 | 56.9 | 9.0 |
| 9.3 | | 10.5 | 9.1 | |
| 9.6 | | 57.0 | 4.5 | |
| 8.9 | 21 | 3.7 | 27.8 | 9.0 |
| 9.6 | | 41.5 | 17.1 | |
| 8.0 | | 46.5 | 27.4 | 8.0 G |
| 8.8 | 23 | 30.7 | 5.1 | |
| 9.0 | 24 | 59.0 | 37.1 | |
| 9.6 | 26 | 38.0 | 49.5 | |
| 9.3 | 28 | 8.0 | 11.7 | |
| 9.4 | | 48.5 | 55.8 | 9.5 |
| 9.3 | 29 | 6.0 | 42.5 | |
| 8.4 | | 48.0 | 37.1 | 8.0 G |
| 8.8 | 30 | 10.0 | 28.2 | 9.0 |
| 8.8 | | 35.5 | 35.1 | 8.0 |
| 9.4 | 32 | 52.5 | 11.7 | 9.5 |
| 8.9 | 33 | 9.0 | 30.4 | 9.5 |
| 9.0 | | 29.0 | 38.1 | |
| 7.6 | 34 | 36.0 | 52.5 | 8.0 GS |
| 9.0 | 35 | 0.5 | 24.1 | |
| 9.4 | | 45.7 | 59.5 | |
| 9.2 | 36 | 4.0 | 51.9 | |
| 9.4 | 37 | 48.0 | 28.3 | |
| 8.5 | 38 | 8.0 | 20.0 | 9.0 |
| 9.6 | | 50.0 | 5.1 | 10.0 |
| 9.2 | | 51.5 | 11.1 | 9.0 |
| 9.6 | | 59.0 | 10.8 | 9.5 |
| 9.3 | 39 | 4.0 | 24.9 | |
| 9.0 | 40 | 16.0 | 20.0 | 10.0 |
| 9.0 | | 46.0 | 29.5 | 9.5 |

### 4081—4140.

| mag. | 20h.–21h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9.3 | 42 | 21.5 | 13.0 | |
| 8.9 | | 26.0 | 5.1 | |
| 7.6 | | 41.5 | 39.9 | GS |
| 8.6 | 44 | 8.0 | 40.1 | 8.5 |
| 9.6 | 46 | 8.0 | 48.7 | |
| 8.6 | 47 | 50.5 | 48.3 | 9.0 G |
| 9.6 | 51 | 9.0 | 30.9 | |
| 8.9 | | 58.0 | 27.0 | 8.0 G |
| 9.0 | 54 | 1.0 | 27.1 | 9.0 G |
| 8.8 | | 9.0 | 32.2 | 7.5 GS |
| 8.0 | | 29.2 | 0.0 | 8.5 G |
| 9.2 | 55 | 21.0 | 16.5 | |
| 9.6 | 56 | 57.0 | 10.6 | |
| 7.4 – | 58 | 8.0 | 25.7 | 6.0 GSc |
| 10.4 | | 34.5 | 59.1 | |
| 7.0 | 59 | 43.3 | 31.6 | 7.0 GS |
| 10.2 | 0 | 1.0 | 13.7 | |
| 10.2 | | 7.0 | 20.3 | |
| 10.2 | | 14.5 | 1.9 | |
| 8.4 | | 43.7 | 11.3 | 8.5 |
| 9.4 | 1 | 26.5 | 4.4 | |
| 9.4 | 2 | 1.0 | 4.9 | |
| 10.2 | | 17.5 | 30.1 | |
| 9.0 | | 30.3 | 37.8 | |
| 10.4 | | 44.5 | 33.6 | |
| 10.2 | 3 | 24.5 | 49.1 | |
| 9.9 | | 33.0 | 55.1 | |
| 9.6 | | 48.0 | 12.6 | |
| 10.4 | 4 | 44.5 | 19.1 | |
| 8.0 | 5 | 5.5 | 12.1 | 8.5 G |
| 10.0 | | 37.5 | 41.8 | |
| 8.4 | 6 | 7.5 | 35.1 | 9.0 |
| 10.2 | 7 | 10.5 | 11.1 | |
| 9.6 | | 55.0 | 17.1 | |
| 9.4 | 8 | 22.5 | 37.1 | |
| 9.2 | | 32.5 | 13.6 | |
| 9.3 | 9 | 59.5 | 45.0 | |
| 9.4 | 10 | 20.5 | 25.7 | |
| 9.6 | | 52.0 | 53.9 | |
| 10.2 | 11 | 13.5 | 25.3 | |
| 9.4 | | 14.0 | 33.6 | 9.5 |
| 8.5 | | 18.5 | 35.7 | 9.0 |
| 9.9 | | 31.5 | 5.4 | |
| 9.0 | | 31.5 | 56.2 | 8.0 |
| 9.6 | | 53.5 | 13.3 | |
| 10.4 | | 57.0 | 13.5 | |
| 10.2 | 12 | 12.5 | 39.5 | |
| 8.2 | 13 | 40.5 | 56.3 | |
| 9.3 | 14 | 22.5 | 51.1 | |
| 9.6 | | 28.0 | 52.7 | |
| 10.4 | | 32.0 | 32.1 | |
| 8.8 | 15 | 33.5 | 24.2 | 9.0 |
| 10.2 | | 34.5 | 33.0 | |
| 9.8 | 16 | 9.5 | 21.7 | |
| 10.4 | 17 | 50.5 | 27.9 | |
| 10.4 | 19 | 3.5 | 2.3 | |
| 9.0 | | 33.0 | 4.8 | |
| 9.4 | 20 | 22.0 | 22.3 | 9.0 |
| 9.4 | | 26.5 | 41.6 | |
| 9.2 | | 42.5 | 40.5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 10 | 147 | 0.4 |
| | 20 | 147 | 0.7 |
| | 30 | 146 | 1.1 |
| | 40 | 146 | 1.5 |
| | 50 | 145 | 1.8 |
| 19 | 0 | 144 | 2.2 |
| | 10 | 144 | 2.5 |
| | 20 | 143 | 2.9 |
| | 30 | 142 | 3.2 |
| | 40 | 140 | 3.5 |
| | 50 | 139 | 3.9 |
| 20 | 0 | 137 | 4.2 |
| | 10 | 136 | 4.5 |
| | 20 | 134 | 4.8 |
| | 30 | 132 | 5.1 |
| | 40 | 130 | 5.4 |
| | 50 | 128 | 5.6 |
| 21 | 0 | 126 | 5.9 |
| | 10 | 124 | 6.2 |
| | 20 | 122 | 6.4 |
| | 30 | 119 | 6.6 |



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25 prec.

| h | m | α + s | δ + ' |
|---|---|---|---|
| 21 | 20 | 122 | 6·4 |
| | 30 | 119 | 6·6 |
| | 40 | 117 | 6·8 |
| | 50 | 114 | 7·0 |
| 22 | 0 | 112 | 7·2 |
| | 10 | 109 | 7·4 |
| | 20 | 106 | 7·6 |
| | 30 | 104 | 7·7 |
| | 40 | 101 | 7·9 |
| | 50 | 98 | 8·0 |
| 23 | 0 | 95 | 8·1 |
| | 10 | 92 | 8·2 |
| | 20 | 89 | 8·2 |
| | 30 | 86 | 8·3 |
| | 40 | 83 | 8·3 |
| | 50 | 80 | 8·3 |

**4141—4200.**

| mag. | 21h. m | s | −64° ' | |
|---|---|---|---|---|
| 9·4 | 21 | 3·0 | 0·1 | |
| 9·2 | | 12·0 | 56·1 | |
| 8·4 | | 58·0 | 36·8 | 9·0 |
| 9·3 | 22 | 8·0 | 52·7 | |
| 8·4 | | 51·0 | 41·9 | 7·5 G |
| 10·2 | 23 | 0·5 | 15·1 | |
| 10·4 | | 30·0 | 57·6 | |
| 8·8 | | 36·0 | 37·1 | 9·0 G |
| 9·2 | | 48·0 | 18·1 | 9·5 |
| 10·4 | 24 | 1·0 | 4·4 | |
| 9·2 | | 28·0 | 11·7 | |
| 9·6 | 26 | 5·0 | 6·1 | |
| 10·4 | | 38·0 | 31·1 | |
| 10·0 | 27 | 30·5 | 5·3 | |
| 9·0 | 28 | 28·5 | 20·1 | 8·5 G |
| 9·4 | 29 | 50·0 | 43·1 | 9·0 G |
| 9·6 | 31 | 28·5 | 1·5 | |
| 10·2 | | 50·5 | 49·4 | |
| 8·0 | | 51·0 | 42·5 | 8·3 |
| 10·4 | 33 | 11·0 | 46·1 | |
| 9·8 | 34 | 32·0 | 59·4 | |
| 10·4 | | 42·0 | 28·1 | |
| 10·4 | 35 | 21·5 | 22·2 | |
| 9·8 | 36 | 15·0 | 33·1 | |
| 10·4 | | 17·0 | 15·3 | |
| 9·6 | 37 | 41·7 | 19·0 | |
| 8·4 | 38 | 7·0 | 30·1 | 8·8 |
| 10·2 | 39 | 27·6 | 4·3 | |
| 10·4 | 40 | 35·5 | 14·7 | |
| 8·8 | | 49·0 | 48·3 | 9·5 |
| 10·2 | 41 | 28·7 | 45·7 | |
| 9·8 | | 34·8 | 30·6 | |
| 9·6 | | 35·1 | 43·2 | |
| 9·3 | | 35·9 | 21·9 | |
| 9·4 | | 58·3 | 47·3 | |
| 10·2 | 43 | 8·2 | 2·5 | |
| 10·2 | | 12·2 | 0·8 | |
| 9·6 | | 26·2 | 48·0 | |
| 10·2 | | 40·2 | 48·7 | |
| 10·2 | 44 | 21·7 | 42·8 | |
| 10·1 | | 35·5 | 16·6 | |
| 9·8 | | 36·9 | 24·2 | |
| 10·0 | | 42·7 | 4·1 | |
| 10·2 | 45 | 18·9 | 27·1 | |
| 10·0 | | 21·5 | 12·7 | |
| 9·2 | | 22·0 | 54·7 | |
| 9·1 | 46 | 11·5 | 11·8 | |
| 9·4 | 48 | 12·7 | 42·9 | |
| 9·7 | | 26·0 | 9·9 | |
| 8·8 | 49 | 16·7 | 43·4 | 8·0 |
| 10·2 | | 20·7 | 2·7 | |
| 9·7 | | 48·7 | 40·5 | |
| 10·2 | 51 | 3·9 | 21·7 | |
| 8·7 | | 6·7 | 1·8 | 7·5 G |
| 10·2 | | 32·5 | 15·8 | |
| 10·2 | | 59·7 | 2·2 | |
| 9·0 | 52 | 47·0 | 56·0 | 9·5 |
| 10·2 | 53 | 23·0 | 53·0 | |
| 9·7 | | 46·2 | 19·8 | |
| 9·8 | 54 | 5·5 | 11·9 | |

**4201—4260.**

| mag. | 21h.—22h. m | s | −64° ' | |
|---|---|---|---|---|
| 9·8 | 54 | 8·2 | 41·1 | |
| 10·1 | | 17·2 | 7·6 | |
| 8·8 | | 23·7 | 7·5 | 8·5 |
| 9·6 | | 49·0 | 51·8 | |
| 10·0 | 55 | 40·5 | 54·5 | |
| 9·6 | 56 | 3·3 | 31·7 | |
| 10·2 | | 30·5 | 17·3 | |
| 10·2 | | 31·2 | 9·8 | |
| 10·2 | | 58·7 | 6·4 | |
| 10·0 | 57 | 22·0 | 13·5 | |
| 10·1 | 58 | 26·0 | 56·3 | |
| 10·0 | 59 | 2·7 | 1·9 | |
| 7·8 | | 7·2 | 6·8 | 8·0 GS |
| 8·1 | | 45·8 | 29·9 | 7·0 G |
| 8·8 | 0 | 2·0 | 59·4 | |
| 8·7 | | 7·8 | 57·1 | |
| 8·7 | 1 | 2·4 | 20·0 | 9·0 |
| 10·0 | | 3·2 | 0·6 | |
| 10·2 | | 33·3 | 35·8 | |
| 8·4 | | 36·3 | 38·5 | 8·0 G |
| 9·0 | | 42·5 | 10·8 | |
| 10·2 | | 51·4 | 22·8 | |
| 8·2 | 2 | 14·8 | 37·6 | 7·0 |
| 10·1 | | 54·4 | 27·7 | |
| 10·0 | 3 | 52·5 | 50·7 | 9·0 |
| 10·2 | 5 | 5·2 | 5·5 | |
| 10·2 | | 35·3 | 32·9 | |
| 9·6 | 6 | 12·5 | 11·6 | |
| 9·7 | | 17·4 | 27·8 | |
| 9·3 | | 49·2 | 5·4 | |
| 10·2 | 7 | 8·9 | 22·8 | |
| 10·2 | 8 | 14·5 | 53·6 | |
| 10·2 | 9 | 19·5 | 16·4 | |
| 9·1 | 10 | 53·3 | 34·4 | |
| 9·6 | | 57·0 | 59·0 | |
| 8·9 | 11 | 7·5 | 15·2 | 8·5 G |
| 10·1 | | 14·5 | 50·6 | |
| 10·0 | | 54·7 | 47·2 | |
| 10·2 | 12 | 15·2 | 49·2 | |
| 10·0 | | 22·7 | 43·2 | |
| 10·2 | | 29·3 | 31·8 | |
| 9·6 | | 35·2 | 48·9 | |
| 10·2 | | 46·2 | 45·9 | |
| 10·1 | 14 | 18·4 | 26·2 | |
| 10·2 | | 39·4 | 21·2 | |
| 10·2 | | 59·0 | 51·6 | |
| 9·4 | 15 | 4·8 | 39·7 | |
| 10·2 | | 23·7 | 46·2 | |
| 8·9 | | 43·0 | 17·8 | |
| 9·8 | 17 | 13·0 | 52·2 | |
| 9·4 | | 26·0 | 54·4 | |
| 9·7 | | 30·5 | 55·1 | |
| 9·7 | | 44·5 | 12·6 | |
| 9·6 | 18 | 11·2 | 46·0 | |
| 10·0 | | 16·7 | 54·8 | |
| 9·0 | | 35·5 | 19·2 | 9·0 |
| 8·6 | | 41·0 | 15·7 | 9·0 |
| 10·2 | | 41·2 | 23·4 | |
| 9·8 | | 43·5 | 45·3 | |
| 10·0 | 19 | 8·0 | 3·8 | |

**4261—4320.**

| mag. | 22h.—23h. m | s | −64° ' | |
|---|---|---|---|---|
| 10·0 | 19 | 10·8 | 4·9 | |
| 8·8 | | 15·5 | 20·0 | 8·8 |
| 8·7 | | 28·3 | 55·6 | 8·0 |
| 9·2 | 20 | 2·2 | 14·5 | |
| 10·0 | | 4·2 | 14·9 | |
| 8·6 | | 45·3 | 2·8 | |
| 10·0 | 21 | 2·0 | 8·4 | |
| 10·0 | | 25·5 | 46·5 | |
| 9·6 | | 41·2 | 29·5 | |
| 9·5 | 22 | 39·5 | 21·9 | |
| 9·0 | 24 | 18·0 | 37·2 | 9·5 |
| 9·7 | | 32·0 | 41·6 | |
| 8·2 | | 54·0 | 6·9 | 8·0 GSg |
| 10·0 | 26 | 15·0 | 8·2 | |
| 10·0 | | 37·0 | 12·9 | |
| 9·4 | 27 | 8·0 | 27·2 | |
| 9·0 | | 12·0 | 30·1 | |
| 9·7 | | 19·0 | 13·9 | |
| 9·8 | 28 | 0·0 | 26·9 | |
| 10·0 | | 10·5 | 31·5 | |
| 8·7 | | 35·5 | 27·6 | 8·5 |
| 9·2 | | 56·0 | 3·0 | |
| 9·0 | 30 | 7·0 | 13·1 | 9·0 |
| 9·6 | | 50·0 | 22·9 | |
| 9·0 | 32 | 28·0 | 24·3 | |
| 8·4 | | 39·5 | 47·7 | 8·5 |
| 10·0 | | 48·0 | 22·8 | |
| 9·8 | | 51·0 | 49·9 | |
| 9·4 | 33 | 51·0 | 15·0 | |
| 9·7 | 35 | 21·5 | 54·7 | |
| 9·2 | | 35·5 | 21·8 | |
| 9·2 | | 49·0 | 17·8 | |
| 6·9 | 36 | 12·0 | 36·3 | 7·0 GS |
| 9·5 | | 49·5 | 43·3 | |
| 8·4 | | 51·5 | 6·9 | 8·0 G |
| 9·8 | 38 | 2·0 | 20·5 | |
| 9·2 | | 41·5 | 36·6 | |
| 10·0 | 39 | 22·0 | 35·9 | |
| 8·8 | 40 | 31·5 | 12·6 | 8·5 |
| 6·0 | | 41·0 | 22·6 | 6·5 GScr |
| 9·0 | | 51·0 | 24·4 | 10·0 |
| 7·5 | 45 | 6·0 | 25·6 | 7·5 GS |
| 9·5 | | 19·0 | 40·2 | |
| 9·0 | 46 | 14·5 | 36·0 | |
| 10·0 | 50 | 21·5 | 27·3 | |
| 8·6 | 51 | 25·5 | 51·0 | 8·5 G |
| 8·8 | | 57·5 | 22·2 | 8·5 |
| 9·2 | 54 | 14·0 | 23·0 | |
| 7·3 | | 17·0 | 58·0 | 8·0 GSc |
| 9·6 | | 24·3 | 58·0 | |
| 9·0 | 55 | 39·5 | 38·8 | |
| 9·7 | | 59·5 | 23·4 | |
| 9·2 | 56 | 52·5 | 34·3 | |
| 10·0 | 57 | 4·5 | 51·2 | |
| 10·0 | 58 | 34·0 | 10·1 | |
| 9·1 | 59 | 21·0 | 27·7 | 9·5 |
| 9·4 | | 50·8 | 47·3 | |
| 10·1 | 0 | 17·5 | 25·0 | |
| 8·6 | | 24·0 | 18·1 | 9·0 G |
| 9·8 | | 26·0 | 44·2 | |

**4321—4380.**

| mag. | 23h. m | s | −64° ' | |
|---|---|---|---|---|
| 7·6 | 0 | 47·0 | 32·4 | 7·5 GSg |
| 8·6 | 1 | 42·5 | 19·7 | |
| 9·8 | | 48·5 | 8·9 | |
| 9·8 | 2 | 28·0 | 3·7 | |
| 9·6 | | 53·5 | 39·6 | |
| 9·8 | 3 | 16·0 | 31·0 | |
| 10·1 | 4 | 1·5 | 30·0 | |
| 9·1 | 5 | 2·0 | 33·9 | 9·0 |
| 10·1 | 6 | 4·0 | 50·6 | |
| 9·4 | 7 | 19·5 | 49·3 | |
| 9·2 | | 23·0 | 15·1 | |
| 9·4 | | 30·0 | 47·8 | |
| 9·4 | 8 | 57·5 | 8·0 | |
| 8·8 | 10 | 0·5 | 12·9 | |
| 10·1 | | 5·5 | 8·9 | |
| 9·6 | | 13·5 | 35·8 | |
| 9·2 | | 41·5 | 47·0 | |
| 9·4 | 11 | 11·5 | 28·7 | |
| 9·8 | | 23·5 | 26·0 | |
| 10·0 | 12 | 52·5 | 46·0 | |
| 9·0 | 13 | 4·0 | 13·6 | 9·0 |
| 10·1 | 14 | 11·5 | 5·6 | |
| 10·0 | | 24·3 | 26·2 | |
| 9·6 | | 29·5 | 14·3 | |
| 9·1 | 15 | 18·0 | 2·2 | |
| 8·8 | | 53·5 | 32·9 | |
| 8·4 | 16 | 6·0 | 13·2 | 8·5 G |
| 9·6 | 17 | 15·0 | 17·5 | |
| 9·4 | 20 | 8·5 | 7·4 | |
| 9·4 | 23 | 10·5 | 18·3 | |
| 9·4 | 24 | 7·5 | 51·0 | |
| 9·2 | | 20·0 | 56·9 | |
| 10·0 | | 43·0 | 33·1 | |
| 8·0 | 25 | 17·0 | 20·6 | 7·5 GS |
| 10·0 | 26 | 12·5 | 46·3 | |
| 10·0 | | 22·5 | 55·1 | |
| 9·0 | | 24·5 | 14·9 | |
| 10·1 | | 25·5 | 0·5 | |
| 9·2 | | 31·0 | 55·2 | |
| 9·4 | 28 | 26·5 | 27·8 | |
| 9·4 | | 45·5 | 24·5 | |
| 9·6 | 29 | 20·0 | 54·9 | |
| 9·0 | | 22·0 | 46·6 | |
| 9·6 | | 23·5 | 1·9 | |
| 10·1 | 31 | 36·5 | 44·1 | |
| 8·4 | | 37·0 | 43·7 | 8·0 G |
| 10·1 | | 38·5 | 31·0 | |
| 9·0 | 32 | 2·0 | 1·9 | 9·0 |
| 10·0 | | 34·0 | 5·5 | |
| 10·0 | 33 | 23·0 | 54·9 | |
| 10·1 | 35 | 52·0 | 29·2 | |
| 8·6 | 36 | 19·0 | 50·0 | |
| 7·8 | | 42·0 | 39·0 | 8·5 G |
| 8·8 | 37 | 3·0 | 40·3 | 9·0 |
| 9·2 | | 50·0 | 17·2 | |
| 10·1 | 38 | 10·5 | 19·3 | |
| 8·8 | 39 | 8·0 | 46·7 | 9·0 |
| 10·1 | 40 | 7·4 | 43·9 | |
| 9·8 | | 27·4 | 22·1 | |
| 9·0 | | 53·8 | 52·7 | |



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### 4381—4386.

| mag. | 23h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·5 | 42 | 10·8 | 12·4 | |
| 10·2 | 43 | 13·2 | 19·2 | |
| 9·8 | 46 | 19·3 | 41·5 | |
| 10·1 | 47 | 12·7 | 58·3 | |
| 10·2 | | 26·7 | 4·0 | |
| 9·6 | 48 | 4·7 | 49·4 | |

### 4387—4392.

| mag. | 23h. m | s | −64° ′ | |
|---|---|---|---|---|
| 10·1 | 50 | 6·9 | 58·4 | 9·5 |
| 9·6 | | 22·2 | 9·4 | |
| 10·4 | | 25·7 | 29·9 | |
| 9·1 | | 48·2 | 56·3 | 9·5 |
| 4·7 | | 59·5 | 59·6 | 5·5 GSct |
| 9·8 | 53 | 53·2 | 53·8 | |

### 4393—4398.

| mag. | 23h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·1 | 55 | 19·2 | 25·7 | 10·0 |
| 9·2 | 56 | 59·2 | 25·7 | 9·0 |
| 10·4 | 57 | 2·2 | 23·3 | |
| 8·6 | | 20·2 | 17·7 | 8·5 |
| 10·0 | | 28·7 | 17·8 | |
| 10·0 | 58 | 2·2 | 5·6 | |

### 4399—4404.

| mag. | 23h. m | s | −64° ′ | |
|---|---|---|---|---|
| 9·5 | 58 | 9·7 | 52·5 | |
| 10·1 | | 32·2 | 0·3 | |
| 10·1 | 59 | 14·7 | 45·0 | |
| 9·8 | | 27·0 | 58·1 | |
| 9·5 | | 53·2 | 36·2 | |
| 8·2 | | 56·2 | 56·2 | 9·0 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 40 | 83 | 8·3 |
| | 50 | 80 | 8·3 |
| 0 | 0 | 77 | 8·4 |

# ZONE—65°.

### 1—30.

| mag. | 0h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·4 | 4 | 48·8 | 53·5 | |
| 10·4 | 7 | 2·7 | 29·2 | |
| 10·0 | | 16·2 | 49·5 | |
| 9·5 | | 39·2 | 27·4 | |
| 9·5 | | 41·7 | 57·0 | g |
| 10·1 | 9 | 54·2 | 49·3 | |
| 9·0 | 10 | 50·7 | 24·6 | 10·0 G |
| 9·8 | 11 | 9·2 | 3·5 | |
| 9·4 | 12 | 10·2 | 45·5 | 9·0 Gg |
| 10·1 | | 32·2 | 34·2 | |
| 10·1 | | 49·2 | 50·4 | |
| 10·2 | 13 | 29·7 | 27·4 | |
| 5·1 | | 36·7 | 36·3 | 4·0 GScgtλ |
| 10·1 | 14 | 45·2 | 29·3 | |
| 10·2 | | 59·2 | 46·2 | |
| 8·5 | | 59·7 | 48·4 | 9·0 Gg |
| 9·1 | 15 | 48·7 | 4·0 | |
| 10·2 | | 55·7 | 27·4 | |
| 9·8 | 16 | 57·7 | 47·9 | |
| 7·9 | 17 | 14·2 | 48·8 | 8·5 Gg |
| 10·4 | | 38·7 | 32·2 | |
| 9·6 | 18 | 51·7 | 34·5 | 9·5 |
| 9·6 | 19 | 15·4 | 27·8 | |
| 9·6 | | 22·4 | 31·9 | 9·5 G |
| 10·0 | | 26·7 | 6·4 | |
| 9·1 | | 37·0 | 31·9 | 9·5 G |
| 10·9 | | 38·4 | 56·9 | |
| 9·4 | | 59·0 | 38·0 | 9·0 G |
| 9·5 | 20 | 57·4 | 18·0 | |
| 10·2 | | 58·4 | 14·1 | |

### 31—60.

| mag. | 0h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·0 | 21 | 50·2 | 58·9 | g |
| 10·2 | 22 | 2·7 | 3·3 | |
| 10·4 | | 16·7 | 32·9 | |
| 9·8 | | 30·7 | 28·9 | |
| 7·8 | | 34·2 | 25·3 | 8·0 |
| 10·5 | 23 | 15·7 | 32·0 | |
| 10·0 | | 17·0 | 7·8 | |
| 10·2 | | 19·5 | 4·1 | |
| 9·0 | | 32·6 | 57·0 | g |
| 10·8 | 24 | 36·8 | 8·8 | |
| 10·4 | | 43·5 | 24·6 | |
| 9·8 | | 49·5 | 3·6 | |
| 10·4 | 25 | 8·5 | 54·4 | |
| 10·4 | | 19·0 | 31·0 | |
| 10·2 | | 26·0 | 12·4 | |
| 10·2 | | 55·5 | 30·6 | |
| 10·2 | 26 | 0·5 | 18·8 | |
| 9·4 | | 9·5 | 54·6 | g |
| 10·4 | | 49·5 | 43·4 | |
| 10·2 | | 59·5 | 2·8 | |
| 10·0 | 27 | 18·0 | 8·0 | |
| 10·2 | | 59·5 | 47·8 | |
| 9·4 | 28 | 10·5 | 32·0 | |
| 10·6 | | 34·8 | 20·9 | |
| 10·8 | 30 | 25·0 | 15·2 | |
| 9·6 | | 51·0 | 28·0 | |
| 10·8 | 31 | 4·0 | 37·0 | |
| 7·8 | | 7·5 | 48·8 | 7·0 GSg |
| 9·6 | | 17·5 | 11·5 | |
| 9·4 | | 22·0 | 33·3 | |

### 61—90.

| mag. | 0h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·0 | 31 | 29·5 | 53·2 | |
| 9·8 | 32 | 29·5 | 40·0 | |
| 10·9 | 33 | 23·5 | 43·4 | |
| 10·0 | | 24·0 | 26·2 | |
| 10·2 | 34 | 1·0 | 10·6 | |
| 10·5 | | 16·5 | 52·6 | |
| 10·8 | | 23·5 | 37·4 | |
| 8·2 | 36 | 18·5 | 11·8 | |
| 10·2 | 37 | 0·5 | 11·4 | |
| 9·4 | | 16·5 | 53·7 | 10·0 g |
| 10·0 | | 22·5 | 39·8 | |
| 10·6 | | 30·5 | 27·1 | |
| 8·6 | | 57·0 | 30·2 | 8·5 |
| 10·2 | 38 | 2·0 | 45·3 | |
| 9·0 | | 12·0 | 44·2 | 9·5 g |
| 10·2 | | 25·0 | 18·8 | |
| 9·4 | | 33·5 | 12·4 | 9·5 |
| 10·6 | 39 | 11·5 | 10·7 | |
| 10·2 | 40 | 25·5 | 32·6 | |
| 9·8 | | 29·0 | 57·4 | |
| 9·2 | | 35·3 | 51·0 | g |
| 10·2 | 41 | 2·8 | 9·4 | |
| 10·8 | 42 | 24·8 | 43·1 | |
| 10·4 | | 55·3 | 1·5 | |
| 9·2 | 43 | 19·8 | 46·7 | 10·0 g |
| 8·6 | 44 | 17·3 | 41·1 | 9·0 g |
| 10·0 | 46 | 3·3 | 22·2 | |
| 10·9 | | 58·8 | 14·8 | |
| 8·8 | 47 | 36·8 | 31·4 | 9·0 |
| 9·8 | 48 | 9·8 | 4·0 | |

### 91—120.

| mag. | 0h.–1h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·2 | 48 | 23·8 | 47·8 | |
| 10·4 | | 42·8 | 58·5 | |
| 10·2 | | 51·4 | 58·4 | |
| 9·8 | 49 | 4·3 | 40·0 | |
| 10·6 | 50 | 29·3 | 22·8 | |
| 9·4 | | 55·8 | 52·9 | g |
| 10·2 | 51 | 20·8 | 39·4 | |
| 9·8 | 52 | 15·3 | 34·6 | |
| 10·0 | | 41·8 | 57·3 | |
| 8·9 | 53 | 11·3 | 23·3 | 8·5 |
| 8·3 | | 14·8 | 26·3 | 8·5 |
| 8·8 | 55 | 42·8 | 20·3 | 9·5 |
| 10·2 | 56 | 42·8 | 21·2 | |
| 10·0 | 57 | 5·3 | 11·1 | |
| 10·2 | | 6·8 | 2·0 | |
| 9·8 | | 29·3 | 35·9 | |
| 10·5 | | 29·3 | 2·9 | |
| 9·5 | 58 | 26·5 | 2·1 | |
| 9·7 | 59 | 4·9 | 38·5 | 9·5 G |
| 9·4 | | 5·9 | 46·3 | 9·5 g |
| 10·9 | | 12·8 | 50·0 | |
| 8·0 | | 45·4 | 22·3 | 7·8 G |
| 9·8 | 0 | 3·0 | 3·8 | |
| 9·2 | 1 | 53·1 | 26·4 | |
| 9·8 | 3 | 47·5 | 6·6 | |
| 9·7 | | 55·5 | 26·8 | |
| 9·6 | 4 | 2·5 | 0·0 | 10·0 |
| 9·6 | | 40·0 | 53·4 | |
| 9·0 | 5 | 14·7 | 1·6 | 9·0 |
| 9·5 | | 50·0 | 10·6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 74 | 8·3 |
| | 20 | 70 | 8·3 |
| | 30 | 67 | 8·3 |
| | 40 | 64 | 8·2 |
| | 50 | 61 | 8·2 |
| 1 | 0 | 58 | 8·1 |
| | 10 | 55 | 8·0 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 1 | 0 | 58 | 8·1 |
| | 10 | 55 | 8·0 |
| | 20 | 52 | 7·9 |
| | 30 | 49 | 7·7 |
| | 40 | 46 | 7·6 |
| | 50 | 43 | 7·4 |
| 2 | 0 | 40 | 7·2 |
| | 10 | 37 | 7·0 |
| | 20 | 35 | 6·8 |
| | 30 | 32 | 6·6 |
| | 40 | 30 | 6·4 |
| | 50 | 27 | 6·2 |
| 3 | 0 | 25 | 5·9 |
| | 10 | 23 | 5·6 |
| | 20 | 21 | 5·4 |
| | 30 | 19 | 5·1 |
| | 40 | 17 | 4·8 |
| | 50 | 15 | 4·5 |
| 4 | 0 | 13 | 4·2 |
| | 10 | 12 | 3·9 |
| | 20 | 10 | 3·5 |
| | 30 | 9 | 3·2 |
| | 40 | 8 | 2·9 |

## 121—180.

| mag. | 1h.–2h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·7 | 7 | 35·0 | 12·0 | |
| 9·7 | 8 | 25·0 | 16·9 | |
| 8·5 | 9 | 9·0 | 41·8 | 9·0 g |
| 9·2 | | 56·5 | 33·4 | 9·0 G |
| 8·8 | 10 | 5·5 | 24·8 | 8·5 |
| 9·7 | 12 | 31·0 | 29·4 | |
| 8·2 | 13 | 9·0 | 52·2 | 7·0 GSg |
| 8·8 | | 56·0 | 17·2 | 9·5 |
| 9·5 | 15 | 3·0 | 38·2 | |
| 7·5 | 20 | 45·5 | 1·4 | 6·0 GSr |
| 9·8 | 21 | 15·5 | 1·2 | |
| 9·6 | 22 | 48·0 | 13·7 | 9·5 |
| 9·8 | 26 | 0·0 | 32·0 | |
| 7·8 | | 28·5 | 45·8 | 8·0 Gg |
| 7·7 | 27 | 4·0 | 45·8 | 7·0 Gg |
| 9·4 | | 29·0 | 15·1 | 8·5 G |
| 8·3 | 29 | 10·0 | 30·4 | |
| 9·6 | 30 | 15·5 | 9·5 | |
| 8·4 | | 50·4 | 56·2 | 8·0 Gg |
| 8·8 | 31 | 42·0 | 55·8 | 8·5 Gg |
| 8·7 | 32 | 33·0 | 38·2 | |
| 9·2 | 34 | 35·5 | 22·3 | |
| 8·4 | 35 | 50·8 | 12·2 | 8·5 G |
| 9·8 | 37 | 14·8 | 39·7 | |
| 8·9 | 39 | 5·7 | 32·2 | 9·0 |
| 9·3 | 42 | 21·0 | 21·3 | |
| 9·2 | | 30·0 | 23·7 | |
| 9·1 | | 41·5 | 29·6 | |
| 9·1 | 43 | 2·5 | 24·6 | |
| 9·2 | 45 | 7·0 | 16·6 | |
| 9·2 | | 46·0 | 10·3 | |
| 8·2 | 46 | 4·3 | 0·4 | 8·0 G |
| 9·3 | 47 | 45·0 | 51·7 | |
| 9·2 | 48 | 12·0 | 42·9 | g |
| 9·0 | 49 | 27·0 | 29·9 | |
| 9·2 | 50 | 11·0 | 11·9 | |
| 9·2 | 55 | 6·0 | 17·8 | |
| 8·9 | 56 | 17·5 | 23·7 | |
| 9·2 | 57 | 5·5 | 1·8 | |
| 8·5 | | 39·0 | 42·8 | 7·5 Gg |
| 8·8 | 58 | 0·0 | 47·8 | 9·5 g |
| 8·8 | | 12·0 | 31·8 | 9·5 |
| 8·8 | | 31·5 | 59·9 | 9·0 g |
| 9·2 | | 45·0 | 35·9 | 9·5 |
| 7·4 | 1 | 15·5 | 44·2 | 7·0 GSg |
| 9·1 | | 45·5 | 43·2 | Gg |
| 9·0 | 4 | 53·5 | 35·0 | 9·0 |
| 9·2 | 6 | 29·3 | 1·0 | 9·5 G |
| 9·2 | 9 | 16·0 | 35·5 | |
| 9·5 | 15 | 55·5 | 46·4 | |
| 9·5 | 17 | 25·5 | 34·7 | |
| 8·6 | | 28·0 | 4·7 | 9·5 |
| 9·4 | 19 | 38·5 | 41·1 | |
| 8·7 | 21 | 4·3 | 54·1 | 8·2 Gg |
| 8·9 | | 27·3 | 28·1 | |
| 9·4 | | 57·5 | 2·7 | |
| 9·5 | 22 | 28·5 | 19·6 | |
| 9·0 | 24 | 52·0 | 20·1 | 9·0 |
| 9·0 | 25 | 10·0 | 52·9 | g |
| 9·4 | | 18·0 | 7·1 | |

## 181—240.

| mag. | 2h.–3h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 25 | 41·0 | 1·8 | |
| 9·3 | 26 | 12·5 | 0·8 | |
| 9·4 | | 13·5 | 14·7 | |
| 9·3 | | 35·0 | 40·5 | |
| 9·1 | 28 | 58·5 | 27·5 | |
| 8·7 | 31 | 17·0 | 2·5 | 8·5 G |
| 9·3 | | 27·5 | 12·0 | |
| 9·5 | 32 | 16·0 | 18·0 | |
| 9·5 | | 30·5 | 38·7 | |
| 9·4 | 35 | 32·5 | 19·4 | |
| 8·7 | 36 | 34·5 | 52·2 | 9·0 g |
| 9·1 | | 54·0 | 22·2 | |
| 9·4 | 38 | 25·0 | 31·9 | |
| 9·0 | | 37·0 | 21·6 | |
| 9·4 | 44 | 45·0 | 14·1 | |
| 9·5 | 45 | 4·5 | 29·9 | |
| 9·4 | | 37·5 | 26·1 | |
| 9·0 | 46 | 35·5 | 45·4 | 8·5 Gg |
| 9·5 | 48 | 32·5 | 20·3 | |
| 9·5 | 49 | 39·5 | 24·0 | |
| 7·6 | 50 | 42·3 | 58·0 | 7·5 GScg |
| 9·4 | 51 | 41·0 | 27·9 | |
| 7·3 | | 41·0 | 24·5 | 7·5 GSc |
| 9·5 | 54 | 4·0 | 40·2 | |
| 9·3 | | 26·5 | 38·0 | |
| 8·9 | 55 | 26·0 | 25·4 | |
| 8·9 | 56 | 45·5 | 43·0 | g |
| 8·9 | 58 | 44·0 | 35·7 | |
| 9·5 | 0 | 28·8 | 43·5 | g |
| 8·2 | 1 | 35·5 | 18·5 | 8·0 G |
| 8·7 | 2 | 10·8 | 38·9 | 8·0 G |
| 8·8 | | 15·5 | 1·2 | |
| 9·0 | | 30·0 | 4·9 | |
| 9·6 | | 44·0 | 31·4 | |
| 7·9 | | 49·0 | 40·2 | 8·0 Gg |
| 9·1 | 4 | 13·5 | 33·2 | |
| 9·6 | | 15·0 | 50·3 | 9·5 |
| 8·9 | 5 | 7·5 | 55·7 | 8·5 g |
| 6·7 | 6 | 44·5 | 2·7 | 7·0 GS |
| 9·6 | 7 | 16·0 | 27·7 | |
| 7·7 | | 23·0 | 19·6 | 8·0 G |
| 9·6 | 8 | 40·0 | 40·5 | |
| 8·3 | | 40·0 | 26·2 | 8·0 G |
| 9·6 | 9 | 23·5 | 45·0 | |
| 9·6 | | 44·0 | 10·3 | |
| 8·8 | 10 | 28·5 | 34·6 | |
| 8·6 | | 46·5 | 49·4 | g |
| 9·0 | 11 | 42·5 | 19·5 | |
| 9·6 | 12 | 40·5 | 55·2 | |
| 9·4 | | 54·0 | 29·7 | |
| 9·4 | 15 | 44·0 | 1·2 | |
| 9·6 | 16 | 52·0 | 10·8 | |
| 9·3 | 18 | 43·5 | 42·0 | g |
| 9·4 | 20 | 45·0 | 33·0 | |
| 9·6 | 21 | 55·0 | 56·4 | |
| 9·6 | 22 | 15·0 | 7·6 | |
| 8·5 | 23 | 26·0 | 26·4 | 8·0 |
| 9·6 | | 31·0 | 3·2 | |
| 9·6 | | 55·0 | 13·1 | |
| 9·6 | 25 | 22·0 | 32·5 | |

## 241—300.

| mag. | 3h.–4h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8·7 | 25 | 38·5 | 5·0 | |
| 9·1 | | 48·5 | 26·7 | |
| 9·6 | 27 | 35·0 | 34·1 | |
| 8·8 | 28 | 23·5 | 54·8 | 9·5 g |
| 9·6 | | 50·0 | 45·1 | |
| 8·6 | 29 | 5·0 | 24·6 | 8·0 G |
| 8·4 | | 15·0 | 34·9 | 8·0 G |
| 8·5 | | 27·0 | 4·5 | G |
| 9·4 | 30 | 44·0 | 35·1 | |
| 8·7 | | 44·5 | 50·1 | 7·0 Gg |
| 7·7 | 32 | 57·0 | 7·6 | 8·0 GS |
| 9·3 | 33 | 4·0 | 36·2 | |
| 8·9 | 34 | 8·0 | 29·1 | 7·8 G |
| 9·7 | 35 | 49·5 | 4·6 | |
| 10·1 | 36 | 43·5 | 1·6 | |
| 9·5 | 37 | 17·2 | 17·6 | |
| 10·1 | 38 | 23·0 | 18·2 | |
| 10·0 | | 41·0 | 52·1 | |
| 8·7 | 39 | 1·0 | 41·0 | 8·5 g |
| 9·3 | 40 | 17·2 | 18·8 | |
| 10·1 | 41 | 0·5 | 24·3 | |
| 10·1 | | 40·5 | 32·0 | |
| 4·8 | 42 | 38·5 | 12·2 | 4·0 GSctλ |
| 10·1 | 44 | 2·0 | 28·1 | |
| 9·4 | | 34·0 | 36·0 | |
| 9·5 | | 43·0 | 10·3 | |
| 10·1 | | 55·0 | 22·0 | |
| 10·1 | 45 | 0·5 | 8·6 | |
| 10·1 | | 5·3 | 2·6 | |
| 10·1 | | 30·5 | 0·5 | |
| 9·2 | 46 | 4·0 | 18·2 | |
| 8·2 | | 30·5 | 13·3 | 8·2 G |
| 10·1 | | 55·0 | 15·1 | |
| 10·1 | 47 | 2·5 | 16·1 | |
| 10·1 | 48 | 44·0 | 52·0 | |
| 9·8 | | 53·5 | 27·3 | |
| 10·0 | | 58·5 | 40·0 | |
| 10·0 | 49 | 38·0 | 35·0 | |
| 8·4 | 50 | 0·5 | 39·6 | 9·0 |
| 9·7 | | 40·5 | 10·0 | |
| 10·1 | 51 | 0·0 | 2·8 | |
| 10·1 | | 7·5 | 41·2 | |
| 9·2 | | 19·5 | 58·6 | 9·5 g |
| 10·1 | | 31·0 | 51·3 | |
| 9·5 | | 50·5 | 31·8 | |
| 10·0 | 52 | 7·0 | 30·3 | |
| 9·1 | | 8·0 | 6·9 | |
| 10·1 | | 54·5 | 36·2 | |
| 10·1 | 53 | 3·0 | 58·2 | |
| 10·1 | | 51·5 | 42·2 | |
| 8·7 | 54 | 7·0 | 38·9 | 8·5 |
| 9·5 | | 14·0 | 19·0 | |
| 9·4 | | 30·7 | 0·2 | |
| 7·7 | | 34·5 | 33·0 | 8·0 G |
| 9·2 | 55 | 48·5 | 43·0 | |
| 9·1 | 56 | 57·0 | 11·9 | |
| 10·1 | 57 | 4·5 | 24·3 | |
| 9·2 | 59 | 8·5 | 29·0 | |
| 9·1 | 3 | 15·5 | 35·4 | |
| 10·1 | | 38·0 | 23·2 | |

## 301—360.

| mag. | 4h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·8 | 4 | 4·5 | 56·1 | |
| 10·1 | 5 | 25·5 | 9·9 | |
| 10·1 | | 28·0 | 24·1 | |
| 9·4 | | 50·0 | 44·3 | |
| 8·2 | 7 | 13·0 | 54·3 | 7·5 GSg |
| 9·5 | | 54·5 | 1·9 | |
| 10·1 | 8 | 8·0 | 56·6 | |
| 10·1 | | 8·5 | 37·4 | |
| 8·8 | 9 | 22·0 | 39·2 | 9·0 |
| 9·2 | | 28·0 | 7·1 | |
| 9·8 | | 29·0 | 32·0 | 9·0 G |
| 8·4 | 10 | 37·0 | 43·3 | g |
| 9·5 | | 45·5 | 21·1 | |
| 10·1 | | 55·5 | 50·8 | |
| 10·1 | 11 | 34·0 | 26·3 | |
| 10·1 | | 59·0 | 6·1 | |
| 8·4 | 12 | 10·0 | 55·8 | g |
| 10·1 | | 18·0 | 1·6 | |
| 10·1 | 13 | 3·0 | 40·9 | |
| 7·7 | | 20·0 | 16·6 | 8·5 |
| 10·1 | 15 | 2·0 | 19·1 | |
| 8·7 | | 37·0 | 27·1 | |
| 8·7 | 16 | 0·0 | 56·1 | 8·5 g |
| 10·1 | | 15·5 | 29·1 | |
| 9·2 | | 31·5 | 23·1 | |
| 9·7 | | 49·5 | 9·1 | |
| 8·9 | 17 | 9·5 | 16·4 | 8·5 |
| 8·8 | 18 | 30·5 | 24·2 | 9·0 G |
| 9·7 | 19 | 1·5 | 6·0 | |
| 9·5 | | 2·5 | 12·2 | |
| 9·6 | 20 | 10·5 | 52·3 | |
| 9·5 | 21 | 31·5 | 39·4 | |
| 9·8 | | 41·0 | 38·2 | |
| 9·6 | | 58·0 | 19·7 | |
| 9·2 | 24 | 26·5 | 50·6 | 9·0 g |
| 9·3 | | 29·5 | 15·5 | |
| 9·6 | | 29·5 | 2·8 | |
| 9·8 | | 33·5 | 50·8 | |
| 8·8 | 25 | 38·5 | 55·7 | 8·0 g |
| 9·1 | | 45·0 | 51·6 | 9·2 g |
| 9·4 | 26 | 3·5 | 46·6 | |
| 9·8 | | 56·0 | 27·6 | |
| 9·5 | 27 | 16·0 | 8·2 | |
| 8·5 | | 40·0 | 59·2 | 8·2 Gg |
| 8·8 | | 42·3 | 59·1 | 9·0 Gg |
| 9·8 | | 47·0 | 30·8 | |
| 8·8 | 28 | 3·0 | 10·5 | S |
| 9·5 | | 27·5 | 0·8 | |
| 7·9 | | 46·5 | 38·8 | 8·2 GS |
| 9·3 | 31 | 5·5 | 18·7 | |
| 9·1 | | 14·5 | 22·6 | 8·2 G |
| 8·8 | | 36·5 | 6·9 | 8·5 G |
| 9·3 | | 44·0 | 19·6 | 9·0 |
| 9·4 | | 46·5 | 50·0 | g |
| 8·9 | | 48·0 | 15·7 | 8·2 G |
| 8·6 | 32 | 1·0 | 30·7 | 8·0 G |
| 9·0 | 33 | 40·0 | 3·9 | 9·0 |
| 9·8 | 35 | 2·5 | 59·5 | |
| 9·8 | | 50·0 | 40·7 | |
| 9·9 | | 54·0 | 6·7 | |



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**361—420.**

| mag. | $4^{h.}$–$5^{h.}$ m | s | −65° ′ | |
|---|---|---|---|---|
| 9.1 | 37 | 29.5 | 42.0 | |
| 9.0 | | 46.0 | 20.3 | 9.0 |
| 9.2 | | 52.5 | 57.1 | |
| 8.9 | 38 | 34.5 | 31.0 | 8.7 |
| 8.7 | 39 | 7.5 | 54.2 | G*g* |
| 9.6 | | 38.5 | 50.6 | |
| 9.8 | | 49.0 | 53.0 | |
| 9.2 | 40 | 3.5 | 11.3 | |
| 8.7 | | 31.5 | 32.7 | 8.5 *g* |
| 9.3 | | 44.0 | 17.9 | |
| 8.7 | 41 | 13.0 | 45.0 | 8.2 G*g* |
| 9.2 | | 47.5 | 8.0 | |
| 9.0 | | 55.5 | 7.0 | |
| 8.8 | | 58.5 | 16.3 | |
| 9.2 | 42 | 1.5 | 18.0 | |
| 8.7 | 43 | 23.0 | 44.0 | G*g* |
| 8.9 | 44 | 8.5 | 12.0 | |
| 9.0 | | 37.0 | 1.9 | |
| 9.9 | 45 | 14.5 | 7.0 | |
| 9.0 | 46 | 1.0 | 39.9 | *g* |
| 9.6 | | 23.0 | 14.8 | |
| 9.5 | 47 | 19.5 | 47.8 | |
| 9.9 | | 33.0 | 40.9 | |
| 9.5 | 48 | 5.3 | 57.7 | |
| 9.0 | | 46.0 | 47.9 | *g* |
| 9.0 | 49 | 27.0 | 17.3 | |
| 9.3 | | 27.5 | 49.8 | *g* |
| 9.1 | | 52.0 | 23.6 | 9.5 |
| 9.8 | 51 | 33.0 | 13.9 | |
| 9.3 | | 52.5 | 38.2 | 9.5 *g* |
| 9.9 | 53 | 10.5 | 16.1 | |
| 9.1 | | 43.0 | 35.6 | *g* |
| 9.2 | 54 | 22.5 | 9.5 | |
| 6.6 | 56 | 28.5 | 12.4 | 7.0 GS*g* |
| 9.5 | | 45.5 | 41.3 | |
| 9.5 | 57 | 9.0 | 28.1 | *g* |
| 9.9 | | 21.0 | 44.0 | |
| 9.2 | 58 | 42.7 | 51.0 | *g* |
| 10.0 | | 59.0 | 53.0 | |
| 10.0 | 59 | 5.0 | 9.7 | |
| 10.0 | | 14.0 | 19.1 | |
| 10.0 | | 18.0 | 46.9 | |
| 9.5 | | 32.0 | 18.4 | |
| 9.5 | | 42.5 | 56.7 | |
| 9.1 | | 46.0 | 32.1 | |
| 9.4 | 0 | 6.3 | 29.9 | |
| 9.7 | | 39.0 | 39.8 | |
| 9.4 | | 40.7 | 15.1 | |
| 8.7 | | 46.0 | 43.9 | 8.8 G*g* |
| 9.7 | | 51.0 | 59.4 | |
| 9.7 | 1 | 2.0 | 35.4 | |
| 10.0 | | 23.5 | 30.9 | |
| 9.7 | | 28.0 | 59.9 | |
| 9.3 | | 30.3 | 45.4 | *g* |
| 9.3 | | 41.2 | 11.9 | |
| 9.5 | | 45.0 | 5.5 | *g* |
| 8.8 | | 47.0 | 4.9 | 9.0 *g* |
| 9.8 | | 52.5 | 36.9 | |
| 9.4 | 2 | 26.5 | 0.8 | |
| 9.5 | | 44.0 | 15.7 | |

**421—480.**

| mag. | $5^{h.}$ m | s | −65° ′ | |
|---|---|---|---|---|
| 8.9 | 3 | 21.5 | 11.0 | 8.0 G*g* |
| 9.8 | | 30.5 | 35.9 | |
| 9.1 | 4 | 14.0 | 55.9 | 8.5 G*g* |
| 9.8 | | 43.0 | 9.3 | |
| 10.0 | 5 | 11.0 | 17.4 | |
| 9.7 | | 23.0 | 42.5 | |
| 9.3 | 6 | 9.3 | 58.5 | *g* |
| 8.5 | | 11.0 | 32.3 | 7.6 GS*g* |
| 10.0 | | 24.5 | 41.9 | |
| 9.4 | | 29.0 | 42.4 | *g* |
| 9.4 | | 30.0 | 49.9 | *g* |
| 9.8 | 7 | 10.5 | 43.9 | *g* |
| 9.8 | | 23.8 | 58.4 | |
| 9.8 | | 37.3 | 59.8 | |
| 8.7 | 8 | 50.0 | 17.0 | 8.8 G*g* |
| 10.0 | 9 | 29.5 | 39.9 | |
| 8.9 | | 32.0 | 11.7 | 8.5 G*g* |
| 9.8 | | 34.0 | 33.9 | |
| 9.3 | | 36.5 | 41.9 | *g* |
| 9.8 | 10 | 41.0 | 49.9 | |
| 7.0 | 11 | 31.5 | 19.3 | 6.8 GS*g* |
| 9.3 | 12 | 43.5 | 7.1 | |
| 7.5 | | 57.5 | 22.5 | 8.2 GS*g* |
| neb. | 13 | 14.5 | 36.1 | |
| 9.8 | | 51.5 | 0.9 | |
| 10.0 | | 58.5 | 50.5 | |
| 10.0 | 15 | 30.0 | 4.5 | |
| 9.7 | 16 | 51.5 | 43.0 | *g* |
| 9.7 | 17 | 1.0 | 22.9 | |
| 10.0 | | 5.0 | 1.7 | |
| 9.5 | | 21.0 | 14.1 | |
| 9.2 | | 52.5 | 39.3 | *g* |
| 10.0 | 18 | 33.5 | 48.9 | |
| 10.0 | 19 | 26.0 | 16.1 | |
| 8.7 | | 29.5 | 42.8 | 9.0 *g* |
| 9.5 | 20 | 19.0 | 52.7 | |
| 8.9 | | 44.5 | 55.1 | *g* |
| 9.7 | 21 | 7.0 | 13.4 | |
| 9.7 | | 21.0 | 20.5 | |
| 9.3 | | 24.0 | 45.3 | *g* |
| 9.5 | | 25.0 | 51.9 | *g* |
| 9.4 | | 26.0 | 59.0 | |
| 10.0 | 22 | 19.0 | 50.9 | |
| 10.0 | | 52.5 | 52.9 | |
| 8.9 | 23 | 27.5 | 16.7 | *g* |
| 10.0 | | 44.0 | 9.1 | |
| 9.3 | 24 | 39.5 | 37.5 | |
| 9.1 | 25 | 20.0 | 5.5 | *g* |
| 8.5 | | 37.0 | 50.7 | 8.0 G*g* |
| 10.0 | 26 | 1.5 | 52.2 | |
| 10.0 | | 24.0 | 15.6 | |
| 10.0 | | 30.5 | 6.9 | |
| 10.0 | 27 | 28.5 | 46.7 | |
| 9.5 | 28 | 17.2 | 0.5 | |
| 7.1 | | 22.0 | 32.7 | 6.0 GS*g* |
| 8.1 | | 42.5 | 5.7 | 8.0 *g* |
| 9.8 | 29 | 29.0 | 55.8 | |
| 10.0 | | 34.2 | 0.1 | |
| 8.5 | 30 | 38.5 | 33.4 | *g* |
| 9.5 | | 41.5 | 12.9 | |

**481—540.**

| mag. | $5^{h.}$–$6^{h.}$ m | s | −65° ′ | |
|---|---|---|---|---|
| 10.0 | 31 | 29.0 | 55.5 | |
| 10.0 | 32 | 18.5 | 54.5 | 9.0 *g* |
| 8.2 | | 44.5 | 6.5 | *g* |
| 9.7 | 34 | 27.0 | 56.9 | |
| 9.5 | 35 | 28.7 | 2.2 | 9.5 G*g* |
| 9.8 | | 57.0 | 14.9 | |
| 9.2 | 36 | 9.0 | 3.5 | 9.5 G*g* |
| 9.4 | 38 | 15.5 | 29.8 | *g* |
| 9.4 | | 47.8 | 19.2 | |
| 9.0 | 39 | 19.5 | 27.3 | *g* |
| 9.0 | 41 | 5.2 | 30.2 | *g* |
| 8.9 | 42 | 11.5 | 11.1 | *g* |
| 8.8 | 43 | 7.0 | 46.8 | 9.5 *g* |
| 8.9 | | 40.0 | 32.3 | *g* |
| 9.0 | | 44.5 | 9.1 | *g* |
| 5.0 | 44 | 31.5 | 46.9 | 4.0 GSc*g*t |
| 9.4 | | 41.0 | 21.7 | |
| 9.3 | | 43.5 | 33.0 | *g* |
| 9.6 | 45 | 10.5 | 6.3 | |
| 9.3 | | 15.5 | 10.8 | |
| 9.0 | 46 | 22.5 | 31.8 | 9.5 *g* |
| 9.4 | | 43.0 | 29.9 | 10.0 *g* |
| 9.4 | 47 | 44.5 | 4.5 | |
| 8.6 | 48 | 11.5 | 12.2 | 8.5 GS*g* |
| 9.6 | | 33.5 | 54.0 | |
| 10.0 | | 37.0 | 54.5 | |
| 7.9 | 50 | 17.0 | 17.3 | GS*g* |
| 10.0 | | 29.5 | 11.2 | |
| 10.0 | | 34.5 | 2.0 | |
| 10.0 | | 45.5 | 30.8 | |
| 9.6 | | 52.5 | 52.3 | |
| 9.6 | | 57.0 | 57.0 | |
| 10.1 | 51 | 32.5 | 32.6 | |
| 9.0 | | 51.0 | 35.9 | *g* |
| 9.9 | | 58.5 | 16.9 | |
| 9.3 | 52 | 25.0 | 12.7 | |
| 9.3 | | 55.5 | 35.2 | *g* |
| 9.4 | | 56.5 | 24.6 | *g* |
| 9.7 | 54 | 7.5 | 19.7 | |
| 9.6 | | 28.0 | 9.0 | |
| 9.6 | | 34.5 | 56.0 | |
| 9.4 | | 43.0 | 58.0 | *g* |
| 7.8 | | 46.0 | 54.0 | 8.5 G*g* |
| 8.5 | | 48.5 | 58.6 | 9.0 *g* |
| 9.1 | 55 | 47.0 | 1.5 | *g* |
| 9.0 | 57 | 0.5 | 17.7 | *g* |
| 10.1 | | 0.5 | 40.0 | |
| 8.9 | | 32.5 | 23.8 | 9.0 *g* |
| 10.0 | 58 | 54.0 | 16.2 | |
| 9.0 | 59 | 0.0 | 23.7 | *g* |
| 8.5 | | 21.5 | 26.9 | G*gg* |
| 9.6 | | 23.5 | 25.1 | G*g* |
| 10.1 | | 55.5 | 15.0 | |
| 10.1 | 1 | 19.0 | 29.7 | |
| 10.0 | | 41.5 | 9.1 | *g* |
| 8.5 | | 47.0 | 20.2 | *g* |
| 9.7 | | 47.0 | 8.5 | *g* |
| 9.7 | 2 | 16.5 | 39.6 | |
| 9.1 | | 28.0 | 48.9 | *g* |
| 9.4 | | 38.5 | 53.1 | *g* |

**541—600.**

| mag. | $6^{h.}$ m | s | −65° ′ | |
|---|---|---|---|---|
| 9.4 | 2 | 44.5 | 46.1 | *g* |
| 9.1 | | 48.0 | 15.0 | *g* |
| 10.0 | 3 | 29.5 | 24.1 | |
| 9.3 | | 52.0 | 34.8 | 9.0 |
| 10.1 | 4 | 40.0 | 41.1 | |
| 8.7 | | 58.0 | 50.1 | 9.5 *g* |
| 9.4 | 5 | 11.0 | 51.3 | 9.0 *g* |
| 10.0 | | 16.0 | 43.3 | |
| 8.5 | | 38.0 | 17.4 | 9.0 *g* |
| 10.1 | | 44.5 | 53.2 | |
| 9.1 | | 58.0 | 31.9 | *g* |
| 9.7 | 6 | 37.5 | 47.2 | *g* |
| 8.8 | 7 | 29.5 | 15.3 | 9.5 *g* |
| 9.4 | | 51.0 | 59.9 | |
| 8.8 | 8 | 37.0 | 3.8 | 8.5 GS*g* |
| 9.6 | 9 | 7.0 | 39.1 | *g* |
| 8.1 | | 46.0 | 17.1 | 7.5 GS*g* |
| 9.0 | | 51.0 | 52.6 | 8.5 *g* |
| 9.4 | 10 | 18.0 | 39.6 | 9.5 *g* |
| 9.0 | | 39.0 | 22.4 | 9.5 *g* |
| 6.7 | | 58.0 | 33.6 | 5.5 GSc*g* |
| 10.1 | 11 | 15.5 | 54.9 | |
| 9.9 | | 24.5 | 1.1 | *g* |
| 9.0 | | 34.0 | 30.8 | 8.5 S*g* |
| 7.3 | | 52.5 | 30.0 | 7.7 GS*g* |
| 8.5 | | 57.0 | 30.1 | 8.5 GS*g* |
| 9.9 | 12 | 2.5 | 43.4 | |
| 10.0 | | 18.0 | 43.3 | |
| 9.0 | | 42.5 | 46.6 | *g* |
| 9.0 | 13 | 10.5 | 26.5 | 10.0 *g* |
| 8.8 | | 38.5 | 29.0 | 9.0 *g* |
| 9.1 | | 52.5 | 42.1 | *g* |
| 9.7 | 17 | 13.5 | 46.7 | |
| 9.0 | 18 | 25.5 | 3.5 | 9.5 *g* |
| 10.0 | | 33.5 | 1.6 | |
| 10.0 | 19 | 8.5 | 2.1 | |
| 10.0 | | 10.5 | 40.5 | |
| 9.3 | | 39.3 | 16.6 | *g* |
| 10.0 | 20 | 49.0 | 9.0 | |
| 9.8 | 21 | 24.0 | 6.1 | |
| 10.0 | | 43.0 | 31.0 | |
| 9.4 | | 56.0 | 41.0 | *g* |
| 10.0 | | 57.0 | 1.6 | |
| 10.0 | | 59.0 | 18.2 | |
| 9.4 | 23 | 0.0 | 30.0 | *g* |
| 9.8 | | 6.5 | 37.4 | |
| 10.0 | | 20.5 | 30.9 | |
| 8.1 | 24 | 0.5 | 36.2 | 7.8 GS*g* |
| 9.5 | | 1.2 | 57.0 | |
| 9.0 | | 33.5 | 26.0 | 8.2 G*g* |
| 9.2 | | 36.0 | 42.0 | 8.5 *g* |
| 9.6 | | 39.5 | 18.4 | |
| 9.5 | 25 | 14.5 | 46.2 | |
| 10.0 | | 39.5 | 30.3 | |
| 10.0 | | 55.0 | 4.4 | |
| 9.1 | 26 | 18.0 | 42.0 | *g* |
| 10.0 | | 40.0 | 41.0 | |
| 10.0 | | 50.0 | 42.6 | |
| 9.5 | | 51.0 | 36.6 | |
| 10.0 | 27 | 12.0 | 53.5 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 4 | 30 | 9 | 3.2 |
| | 40 | 8 | 2.9 |
| | 50 | 7 | 2.5 |
| 5 | 0 | 6 | 2.2 |
| | 10 | 5 | 1.8 |
| | 20 | 5 | 1.5 |
| | 30 | 4 | 1.1 |
| | 40 | 4 | 0.7 |
| | 50 | 4 | 0.4 |
| 6 | 0 | 3 | 0.0 |
| | | | − |
| | 10 | 4 | 0.4 |
| | 20 | 4 | 0.7 |
| | 30 | 4 | 1.1 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 6 | 20 | 4 | 0.7 |
| | 30 | 4 | 1.1 |
| | 40 | 5 | 1.5 |
| | 50 | 5 | 1.8 |
| 7 | 0 | 6 | 2.2 |
| | 10 | 7 | 2.5 |
| | 20 | 8 | 2.9 |
| | 30 | 9 | 3.2 |
| | 40 | 10 | 3.5 |
| | 50 | 12 | 3.9 |
| 8 | 0 | 13 | 4.2 |

**601—660.**

| mag. | 6h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8.9 | 27 | 29.0 | 37.3 | g |
| 9.3 | | 42.0 | 38.4 | g |
| 10.0 | | 55.0 | 10.7 | |
| 9.6 | 28 | 9.0 | 48.3 | |
| 9.6 | | 11.0 | 17.1 | |
| 9.4 | | 31.0 | 28.5 | g |
| 8.8 | | 36.0 | 33.4 | 8.0 g |
| 9.6 | | 41.5 | 19.6 | |
| 10.0 | | 48.0 | 12.8 | |
| 6.8 | 29 | 42.0 | 28.6 | 6.7 GSg |
| 8.2 | 30 | 10.0 | 56.0 | 8.0 Gg |
| 9.6 | | 40.0 | 26.9 | |
| 9.2 | 31 | 7.5 | 18.0 | |
| 10.0 | | 8.5 | 51.0 | |
| 10.0 | | 10.0 | 58.8 | |
| 8.0 | | 46.0 | 13.3 | 8.0 Gg |
| 9.3 | | 48.5 | 47.0 | 9.5 g |
| 8.0 | | 55.5 | 16.3 | 8.2 Gg |
| 9.2 | 32 | 0.0 | 49.3 | |
| 9.8 | | 14.5 | 16.8 | |
| 8.9 | 33 | 59.2 | 59.8 | g |
| 9.6 | 34 | 14.0 | 37.6 | |
| 9.8 | | 42.5 | 47.6 | |
| 10.0 | 35 | 1.0 | 58.1 | |
| 10.0 | | 8.5 | 36.6 | |
| 10.0 | 36 | 28.0 | 53.1 | |
| 10.0 | 37 | 33.0 | 53.7 | |
| 9.2 | | 49.5 | 18.1 | |
| 10.0 | | 51.5 | 29.7 | |
| 9.4 | 38 | 6.0 | 48.8 | g |
| 8.0 | | 11.7 | 58.3 | 7.5 GSg |
| 10.0 | | 23.0 | 12.1 | |
| 9.3 | | 38.0 | 51.7 | g |
| 10.0 | 39 | 1.5 | 33.2 | |
| 9.4 | | 10.5 | 9.7 | g |
| 8.1 | | 13.0 | 9.3 | 8.5 g |
| 10.0 | | 26.0 | 13.3 | |
| 9.7 | | 43.5 | 30.7 | |
| 9.2 | | 52.0 | 49.0 | g |
| 9.6 | 40 | 2.0 | 57.0 | |
| 10.0 | | 6.5 | 12.5 | |
| 10.0 | | 7.0 | 12.9 | |
| 8.8 | 41 | 2.5 | 51.3 | 10.0 g |
| 7.9 | | 5.0 | 20.4 | 8.0 GSg |
| 9.6 | | 24.5 | 20.4 | |
| 9.6 | | 49.0 | 0.5 | g |
| 8.7 | | 54.5 | 58.1 | 9.5 g |
| 8.2 | 42 | 3.0 | 36.9 | g |
| 9.6 | 44 | 3.0 | 8.8 | |
| 9.2 | | 6.0 | 26.3 | g |
| 9.4 | | 11.5 | 59.3 | |
| 10.0 | | 27.0 | 11.1 | |
| 10.0 | 46 | 2.5 | 13.1 | |
| 10.0 | | 16.0 | 13.9 | |
| 10.0 | | 22.0 | 29.1 | |
| 9.1 | | 53.0 | 25.9 | g |
| 9.5 | 47 | 9.5 | 35.7 | g |
| 9.1 | 48 | 11.5 | 54.5 | g |
| 9.5 | | 43.5 | 58.1 | g |
| 10.0 | 49 | 1.5 | 14.0 | |

**661—720.**

| mag. | 6h.—7h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.3 | 49 | 5.0 | 2.2 | g |
| 9.3 | 50 | 58.5 | 35.0 | |
| 8.0 | 51 | 23.0 | 27.8 | 9.2 g |
| 8.7 | | 46.5 | 6.2 | 9.2 g |
| 10.0 | | 52.5 | 16.0 | |
| 8.3 | 52 | 25.5 | 15.9 | 9.2 g |
| 10.0 | | 35.5 | 33.0 | |
| 10.0 | | 53.5 | 11.1 | |
| 8.7 | | 54.0 | 42.0 | 9.0 g |
| 9.0 | 53 | 22.0 | 45.1 | 8.5 g |
| 10.0 | 54 | 15.0 | 13.6 | |
| 9.2 | | 31.5 | 11.0 | g |
| 8.2 | 55 | 12.0 | 47.0 | 8.8 g |
| 9.4 | | 36.0 | 35.6 | g |
| 10.0 | | 49.0 | 39.9 | |
| 9.4 | 56 | 3.0 | 42.0 | |
| 9.3 | | 30.5 | 32.4 | |
| 9.6 | | 50.5 | 51.2 | |
| 9.7 | 57 | 55.0 | 36.8 | |
| 9.7 | 58 | 26.0 | 42.8 | |
| 9.1 | | 30.7 | 2.4 | g |
| 9.0 | 59 | 28.5 | 41.3 | 8.8 g |
| 9.2 | | 31.5 | 4.6 | |
| 9.5 | | 56.3 | 54.5 | |
| 8.7 | 0 | 2.5 | 44.0 | 8.5 g |
| 8.0 | | 38.8 | 31.6 | 7.7 GSg |
| 9.2 | | 59.7 | 58.3 | g |
| 9.7 | 1 | 21.5 | 15.7 | |
| 9.7 | | 34.0 | 44.0 | |
| 9.2 | | 36.2 | 22.5 | 9.0 g |
| 9.7 | | 53.0 | 25.0 | |
| 9.2 | 2 | 12.0 | 23.8 | 9.5 g |
| 9.3 | 3 | 30.5 | 30.8 | |
| 9.5 | | 32.0 | 17.4 | |
| 9.7 | | 33.5 | 50.8 | |
| 9.6 | | 36.5 | 7.9 | |
| 9.2 | 4 | 0.5 | 19.8 | |
| 9.4 | | 15.5 | 51.3 | |
| 9.2 | 5 | 28.0 | 8.0 | |
| 9.6 | | 52.5 | 14.0 | |
| 9.4 | 6 | 22.3 | 0.2 | |
| 9.3 | | 53.0 | 51.8 | |
| 9.3 | 7 | 3.5 | 20.1 | g |
| 9.7 | | 5.5 | 1.0 | |
| 9.7 | | 11.0 | 10.5 | |
| 9.7 | | 11.5 | 30.0 | |
| 9.7 | | 13.0 | 5.4 | |
| 9.6 | 8 | 31.5 | 34.0 | |
| 9.7 | | 40.0 | 50.1 | g |
| 9.7 | 9 | 15.5 | 46.0 | |
| 9.2 | | 30.5 | 46.8 | |
| 9.2 | | 54.0 | 23.0 | g |
| 9.7 | | 54.5 | 29.1 | |
| 8.9 | 10 | 19.5 | 33.0 | g |
| 9.6 | 11 | 4.5 | 17.8 | |
| 9.7 | | 13.0 | 41.0 | |
| 9.3 | | 20.5 | 10.8 | |
| 9.3 | | 58.0 | 20.0 | |
| 9.3 | 12 | 30.5 | 11.0 | g |
| 9.4 | | 50.5 | 14.2 | g |

**721—780.**

| mag. | 7h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.3 | 13 | 43.0 | 53.0 | g |
| 9.7 | 14 | 4.0 | 5.7 | |
| 9.7 | | 5.0 | 21.0 | |
| 9.6 | | 22.0 | 32.1 | |
| 9.6 | | 31.0 | 54.7 | |
| 8.9 | 15 | 18.0 | 58.4 | g |
| 9.2 | | 20.5 | 58.0 | g |
| 9.0 | 16 | 13.0 | 9.7 | 10.0 g |
| 9.7 | | 21.5 | 39.9 | |
| 9.7 | | 23.0 | 14.0 | |
| 9.5 | | 30.5 | 38.9 | |
| 9.6 | | 32.0 | 15.8 | |
| 9.6 | | 41.5 | 33.0 | |
| 9.2 | | 47.5 | 51.0 | g |
| 9.4 | | 51.5 | 20.0 | g |
| 9.3 | | 58.0 | 11.0 | |
| 9.7 | 17 | 12.5 | 5.0 | |
| 9.2 | | 40.0 | 25.2 | g |
| 9.5 | 18 | 14.0 | 47.3 | g |
| 9.0 | | 16.5 | 36.1 | g |
| 9.7 | | 32.5 | 45.4 | |
| 9.3 | 19 | 29.0 | 51.1 | |
| 9.1 | | 51.0 | 50.0 | g |
| 9.5 | 20 | 0.0 | 25.0 | g |
| 9.6 | | 1.2 | 0.2 | |
| 9.5 | | 17.0 | 40.1 | |
| 9.1 | | 50.0 | 24.9 | 8.5 g |
| 9.4 | 21 | 7.0 | 15.3 | |
| 9.5 | | 25.5 | 49.5 | g |
| 9.4 | | 26.0 | 8.9 | |
| 9.7 | | 27.0 | 7.2 | |
| 9.7 | | 46.5 | 59.6 | |
| 8.7 | 22 | 22.0 | 13.2 | Gg |
| 9.2 | | 58.7 | 59.7 | g |
| 9.5 | 23 | 6.0 | 43.6 | |
| 9.5 | | 45.0 | 55.2 | |
| 8.9 | 24 | 44.5 | 41.0 | g |
| 8.5 | 25 | 0.0 | 3.9 | 9.2 Gg |
| 8.8 | | 6.5 | 18.0 | 9.5 g |
| 9.4 | | 37.5 | 19 1 | g |
| 9.1 | | 58.5 | 59.5 | g |
| 8.4 | 26 | 12.0 | 20.4 | 8.0 Gg |
| 8.9 | | 49.2 | 59.9 | 8.5 g |
| 9.0 | | 58.5 | 35.2 | g |
| 9.7 | 27 | 10.5 | 48.0 | |
| 9.7 | | 48.5 | 50.1 | |
| 9.4 | | 59.0 | 30.8 | |
| 9.7 | 28 | 7.0 | 2.1 | |
| 9.6 | | 28.0 | 42.9 | |
| 9.2 | 29 | 10.0 | 22.0 | g |
| 9.1 | 30 | 31.5 | 20.8 | 8.2 g |
| 9.7 | 31 | 7.5 | 7.5 | |
| 8.9 | | 7.5 | 40.9 | g |
| 9.2 | | 26.0 | 32.4 | g |
| 9.5 | 33 | 30.0 | 59.9 | 9.5 g |
| 9.0 | | 30.0 | 24.8 | 10.0 g |
| 9.4 | | 36.5 | 54.1 | g |
| 9.7 | | 42.5 | 12.0 | g |
| 8.9 | 34 | 0.0 | 17.2 | 9.5 g |
| 9.7 | 35 | 19.5 | 57.1 | |

**781—840.**

| mag. | 7h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.7 | 36 | 10.5 | 10.1 | |
| 9.7 | | 20.5 | 42.1 | |
| 8.8 | | 22.0 | 20.4 | 9.2 g |
| 9.7 | | 36.0 | 33.6 | g |
| 8.4 | | 50.5 | 37.9 | 7.5 GSg |
| 8.9 | 37 | 15.5 | 10.4 | 9.0 g |
| 9.7 | | 50.5 | 57.1 | |
| 9.7 | 38 | 20.0 | 46.9 | |
| 9.7 | | 21.0 | 49.9 | |
| 9.4 | 39 | 10.7 | 51.1 | |
| 9.4 | | 15.7 | 39.1 | |
| 9.4 | | 17.7 | 9.3 | |
| 9.4 | 40 | 0.0 | 29.9 | g |
| 9.6 | | 28.0 | 53.9 | |
| 9.3 | | 46.0 | 5.1 | |
| 8.4 | | 55.0 | 29.3 | 8.5 g |
| 8.8 | 41 | 5.0 | 13.2 | 8.5 g |
| 9.7 | | 39.5 | 23.8 | |
| 9.7 | | 48.5 | 35.8 | |
| 9.4 | | 58.0 | 52.5 | |
| 9.7 | | 59.5 | 29.5 | |
| 9.7 | 42 | 50.5 | 39.4 | |
| 9.6 | 43 | 25.5 | 40.9 | |
| 9.7 | | 50.0 | 34.9 | |
| 9.0 | | 55.0 | 10.5 | 9.2 g |
| 8.1 | | 56.0 | 46.1 | 7.0 GScg |
| 9.4 | 44 | 0.0 | 40.8 | |
| 9.1 | | 5.5 | 7.6 | g |
| 9.2 | | 30.0 | 48.9 | g |
| 9.1 | | 37.5 | 24.9 | 9.0 g |
| 9.6 | | 48.0 | 27.9 | |
| 9.6 | | 59.0 | 27.2 | |
| 9.6 | | 59.0 | 18.1 | |
| 9.7 | 45 | 22.0 | 48.9 | |
| 9.5 | | 27.5 | 18.3 | |
| 9.4 | | 38.0 | 40.0 | g |
| 9.4 | | 39.5 | 26.1 | |
| 9.7 | 46 | 12.5 | 49.9 | |
| 9.7 | | 17.0 | 10.3 | |
| 9.4 | | 20.5 | 44.9 | |
| 9.7 | | 33.5 | 3.6 | |
| 9.7 | | 37.5 | 1.2 | |
| 9.6 | 48 | 1.5 | 16.1 | |
| 9.7 | | 18.5 | 15.8 | |
| 9.4 | | 27.0 | 49.9 | g |
| 9.0 | | 27.5 | 30.2 | 8.8 g |
| 6.3 | | 50.5 | 52.7 | 6.2 GSg |
| 9.3 | 49 | 11.5 | 2.5 | |
| 9.0 | | 47.0 | 33.9 | g |
| 9.5 | 50 | 9.5 | 46.0 | |
| 9.6 | 51 | 18.5 | 29.1 | |
| 9.7 | | 27.5 | 21.8 | |
| 9.7 | | 36.5 | 20.3 | |
| 9.3 | | 42.0 | 3.9 | |
| 9.4 | 52 | 8.0 | 29.0 | g |
| 9.1 | | 17.0 | 47.6 | |
| 9.7 | | 19.5 | 54.2 | |
| 9.4 | 53 | 12.0 | 6.6 | |
| 9.1 | | 54.5 | 53.0 | 9.0 g |
| 9.7 | 55 | 5.0 | 23.9 | |



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### 841—900.

| mag. | 7h.–8h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.5 | 55 | 16.5 | 1.2 | |
| 9.1 | | 22.0 | 29.0 | g |
| 8.7 | | 34.0 | 16.7 | 9.0 g |
| 9.7 | 56 | 9.5 | 40.7 | |
| 9.0 | | 37.0 | 30.0 | 9.0 g |
| 8.5 | | 40.5 | 34.0 | 7.0 GSg |
| 9.4 | 57 | 7.5 | 40.6 | g |
| 9.7 | | 9.0 | 43.5 | |
| 9.6 | | 18.5 | 11.2 | |
| 9.4 | 58 | 4.0 | 35.0 | g |
| 9.4 | | 20.0 | 37.8 | g |
| 9.0 | | 24.5 | 49.2 | 8.5 g |
| 8.8 | | 26.0 | 5.6 | 9.5 |
| 9.5 | 59 | 36.0 | 21.1 | |
| 9.6 | 0 | 14.0 | 53.9 | |
| 9.5 | | 38.5 | 5.3 | |
| 8.6 | 1 | 26.5 | 14.2 | g |
| 8.3 | | 30.5 | 39.8 | 7.5 GSg |
| 9.7 | | 41.5 | 22.9 | |
| 9.5 | | 42.0 | 29.0 | 8.8 g |
| 9.1 | | 56.5 | 51.6 | 8.5 g |
| 8.7 | 2 | 48.5 | 59.2 | 8.5 g |
| 9.6 | 3 | 45.0 | 32.0 | |
| 9.7 | | 55.5 | 11.0 | |
| 9.4 | 4 | 2.0 | 40.9 | |
| 9.4 | | 31.0 | 55.7 | g |
| 9.7 | | 35.0 | 55.1 | g |
| 9.5 | | 41.0 | 47.6 | |
| 9.0 | | 49.5 | 10.0 | |
| 8.9 | | 54.5 | 43.4 | g |
| 9.4 | | 58.0 | 27.0 | |
| 9.3 | 5 | 32.5 | 44.0 | |
| 9.1 | | 34.5 | 17.0 | |
| 9.7 | | 48.0 | 7.2 | |
| 9.2 | 6 | 2.5 | 26.0 | |
| 8.6 | | 24.5 | 36.6 | 7.5 GSg |
| 9.4 | | 27.5 | 31.1 | |
| 9.4 | 8 | 20.5 | 25.7 | |
| 9.3 | | 34.0 | 6.9 | 9.5 |
| 9.4 | | 39.5 | 35.1 | g |
| 9.6 | 9 | 10.0 | 37.9 | g |
| 9.7 | | 15.5 | 5.1 | |
| 9.5 | | 16.5 | 28.6 | |
| 8.8 | | 25.0 | 38.6 | 10.0 g |
| 9.3 | 10 | 6.0 | 3.8 | |
| 9.2 | | 39.3 | 1.9 | |
| 9.3 | | 39.5 | 40.9 | |
| 9.4 | | 42.0 | 50.9 | g |
| 9.4 | 11 | 9.5 | 10.2 | g |
| 9.1 | | 45.0 | 20.7 | |
| 8.9 | | 47.0 | 0.7 | |
| 9.6 | 12 | 6.0 | 38.9 | |
| 9.7 | | 14.5 | 8.1 | |
| 8.8 | | 56.0 | 31.9 | 8.5 g |
| 8.8 | | 56.5 | 38.5 | 9.5 Ggg |
| 9.2 | 13 | 1.5 | 52.9 | 9.0 g |
| 9.1 | | 31.0 | 53.0 | 9.8 Gg |
| 9.7 | 14 | 2.5 | 10.9 | |
| 9.7 | | 18.0 | 36.9 | |
| 9.5 | 15 | 2.0 | 13.1 | |

### 901—960.

| mag. | 8h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.7 | 15 | 41.0 | 27.4 | G |
| 9.7 | | 42.0 | 56.6 | G |
| 8.8 | | 52.0 | 15.9 | G |
| 9.4 | | 54.0 | 38.4 | |
| 8.7 | 16 | 28.5 | 12.9 | 9.0 Gg |
| 9.7 | | 49.0 | 18.9 | |
| 6.8 | | 55.0 | 13.3 | 5.8 GScgr |
| 9.3 | 17 | 3.0 | 23.9 | |
| 9.4 | | 10.0 | 23.6 | |
| 9.3 | | 47.5 | 45.9 | |
| 9.9 | 18 | 7.0 | 33.0 | |
| 10.0 | | 34.0 | 3.0 | |
| 9.8 | | 53.0 | 27.6 | |
| 9.1 | 19 | 34.2 | 14.2 | |
| 9.4 | | 50.0 | 56.1 | |
| 9.4 | | 50.5 | 10.5 | |
| 9.1 | 20 | 22.0 | 16.2 | 9.0 g |
| 9.0 | | 42.5 | 4.8 | 9.5 g |
| 9.2 | | 43.7 | 32.0 | |
| 8.1 | | 47.5 | 7.4 | 8.2 g |
| 9.9 | | 59.0 | 41.0 | |
| 8.8 | | 59.5 | 42.0 | g |
| 9.7 | 21 | 22.0 | 38.1 | |
| 9.1 | 22 | 17.0 | 24.2 | |
| 9.8 | | 34.8 | 1.8 | |
| 9.5 | | 35.0 | 9.0 | |
| 10.0 | | 44.5 | 37.2 | |
| 9.5 | 23 | 14.5 | 25.4 | |
| 9.3 | | 22.0 | 9.8 | |
| 10.0 | 24 | 8.0 | 34.0 | |
| 9.3 | | 18.5 | 51.4 | |
| 10.0 | | 19.5 | 34.8 | |
| 5.7 | | 21.5 | 43.1 | 4.0 GSggt |
| 10.0 | | 27.7 | 57.9 | |
| 9.9 | | 38.0 | 34.5 | |
| 10.0 | | 39.0 | 24.0 | |
| 9.5 | | 39.5 | 11.2 | |
| 9.4 | | 49.5 | 32.8 | |
| 8.9 | | 58.0 | 49.4 | |
| 9.2 | 25 | 11.0 | 6.0 | |
| 9.3 | | 19.0 | 35.2 | |
| 9.2 | | 22.0 | 35.4 | |
| 10.0 | | 26.0 | 11.0 | |
| 9.1 | | 38.0 | 35.9 | |
| 9.7 | | 50.0 | 1.8 | |
| 9.4 | 26 | 3.5 | 41.4 | 9.0 |
| 9.6 | | 10.5 | 52.0 | |
| 9.4 | | 15.0 | 19.3 | |
| 10.0 | | 18.0 | 7.1 | |
| 9.8 | | 42.5 | 50.4 | |
| 9.8 | | 50.0 | 14.9 | |
| 10.0 | | 53.0 | 14.1 | |
| 9.4 | 27 | 1.0 | 25.8 | |
| 10.0 | | 47.5 | 49.0 | |
| 9.4 | 28 | 39.5 | 39.0 | |
| 9.2 | 29 | 6.0 | 10.8 | |
| 9.4 | | 13.5 | 57.8 | |
| 8.8 | | 31.5 | 14.9 | 8.8 g |
| 7.1 | | 45.5 | 6.0 | 7.8 GSg |
| 8.4 | | 53.0 | 16.6 | 9.2 g |

### 961—1020.

| mag. | 8h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10.0 | 30 | 9.0 | 22.0 | |
| 8.9 | | 22.0 | 19.7 | 9.2 G |
| 8.7 | | 31.0 | 14.5 | 9.2 |
| 10.0 | | 31.0 | 55.6 | |
| 10.0 | | 37.0 | 32.6 | |
| 9.8 | | 43.5 | 2.4 | |
| 9.3 | | 48.0 | 24.9 | |
| 10.0 | | 51.0 | 11.8 | |
| 9.1 | | 58.0 | 39.3 | 8.5 g |
| 9.5 | 31 | 0.0 | 41.2 | |
| 9.2 | | 23.5 | 19.8 | 9.2 |
| 10.0 | | 48.0 | 51.0 | |
| 9.4 | 32 | 2.0 | 56.2 | |
| 9.4 | 33 | 4.5 | 59.1 | |
| 9.2 | | 7.5 | 35.8 | |
| 10.0 | | 30.5 | 25.2 | |
| 8.2 | 34 | 5.5 | 55.6 | 8.2 g |
| 10.0 | | 28.5 | 34.8 | |
| 9.2 | | 45.0 | 6.8 | |
| 9.5 | | 49.0 | 32.4 | |
| 9.1 | 35 | 2.5 | 10.5 | |
| 10.0 | | 39.5 | 3.8 | |
| 9.9 | 36 | 32.5 | 42.2 | |
| 10.0 | | 41.5 | 22.6 | |
| 9.6 | | 56.0 | 4.9 | |
| 9.9 | 37 | 3.0 | 45.2 | |
| 8.9 | | 22.0 | 45.8 | |
| 10.0 | | 56.5 | 41.4 | |
| 9.2 | 38 | 12.0 | 37.4 | |
| 9.7 | | 27.0 | 5.0 | |
| 10.0 | | 27.5 | 31.0 | |
| 10.0 | | 35.5 | 27.2 | |
| 10.0 | | 42.5 | 29.0 | |
| 10.0 | | 46.0 | 53.3 | |
| 8.7 | | 56.5 | 13.7 | g |
| 10.0 | | 56.5 | 12.1 | |
| 10.0 | | 59.5 | 56.3 | |
| 9.1 | 39 | 5.0 | 45.1 | 10.0 |
| 10.0 | | 6.5 | 2.3 | |
| 9.3 | | 12.0 | 39.0 | 9.2 g |
| 8.8 | | 12.7 | 58.1 | |
| 9.4 | | 14.5 | 21.9 | |
| 9.1 | | 33.5 | 20.3 | 9.5 |
| 9.2 | | 46.0 | 49.0 | 8.5 g |
| 10.0 | | 49.0 | 42.9 | |
| 9.6 | | 56.0 | 50.0 | |
| 10.0 | 40 | 25.5 | 18.1 | |
| 8.0 | | 48.0 | 26.5 | 8.5 g |
| 9.7 | | 48.5 | 18.9 | |
| 9.4 | 42 | 5.5 | 10.1 | |
| 9.6 | | 29.5 | 32.1 | |
| 10.0 | | 38.5 | 44.1 | |
| 6.5 | | 45.5 | 22.4 | 6.5 GScg |
| 8.5 | | 52.5 | 14.4 | 8.0 Gg |
| 9.0 | 43 | 41.0 | 39.5 | 8.8 g |
| 10.0 | | 45.5 | 20.5 | |
| 9.4 | | 50.0 | 33.1 | |
| 9.4 | | 58.0 | 13.1 | |
| 8.9 | 44 | 10.0 | 55.1 | 9.2 g |
| 9.5 | | 12.0 | 41.9 | |

### 1021—1080.

| mag. | 8h.–9h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.5 | 44 | 32.5 | 49.2 | |
| 10.0 | | 36.0 | 35.0 | |
| 9.4 | | 42.0 | 37.0 | |
| 9.6 | | 55.5 | 39.6 | |
| 9.5 | 45 | 0.5 | 33.8 | |
| 9.6 | | 59.0 | 33.8 | |
| 10.0 | 46 | 12.0 | 40.0 | |
| 10.0 | | 50.0 | 8.5 | |
| 8.7 | 47 | 17.5 | 5.8 | |
| 10.0 | | 34.5 | 12.2 | |
| 10.0 | | 35.0 | 13.8 | |
| 9.6 | | 38.0 | 26.4 | |
| 9.1 | | 42.5 | 38.1 | g |
| 10.0 | | 55.5 | 42.1 | |
| 9.3 | 48 | 16.0 | 54.2 | g |
| 9.6 | | 22.0 | 58.9 | |
| 10.0 | | 37.0 | 35.2 | |
| 10.0 | | 49.0 | 49.9 | |
| 9.0 | | 53.5 | 18.6 | 9.5 g |
| 9.2 | 49 | 0.0 | 8.9 | 9.5 |
| 10.0 | | 15.5 | 37.2 | |
| 9.3 | | 32.0 | 49.3 | |
| 9.4 | | 54.0 | 15.3 | 10.0 |
| 10.0 | | 56.5 | 38.3 | |
| 10.0 | 51 | 4.5 | 40.0 | |
| 10.0 | | 40.0 | 59.7 | |
| 9.5 | 52 | 9.0 | 21.0 | |
| 9.3 | | 12.0 | 36.7 | |
| 9.2 | | 46.0 | 59.3 | g |
| 10.0 | | 48.0 | 45.2 | |
| 10.0 | | 53.5 | 55.0 | |
| 9.6 | | 55.5 | 55.3 | |
| 10.0 | 53 | 27.0 | 46.1 | |
| 10.0 | 54 | 23.5 | 34.8 | |
| 9.6 | 55 | 17.8 | 58.5 | |
| 8.0 | | 27.0 | 43.2 | 7.5 GSg |
| 10.0 | 56 | 52.5 | 32.8 | |
| 10.0 | 58 | 0.0 | 23.8 | |
| 10.0 | | 13.5 | 2.9 | |
| 8.0 | | 25.3 | 51.6 | 8.9 g |
| 10.0 | | 50.5 | 21.3 | |
| 10.0 | 59 | 38.5 | 38.4 | |
| 8.4 | | 59.2 | 59.9 | 8.9 g |
| 10.0 | 0 | 20.0 | 17.2 | |
| 5.3 | | 26.8 | 53.8 | 4.0 GSgtrλ |
| 9.1 | | 29.0 | 21.6 | g |
| 9.5 | | 40.6 | 2.6 | |
| 9.2 | | 57.7 | 36.6 | |
| 9.3 | 1 | 7.0 | 29.8 | |
| 9.1 | | 42.5 | 24.6 | |
| 9.3 | | 45.5 | 54.5 | |
| 9.5 | 2 | 16.0 | 59.7 | |
| 9.2 | | 20.7 | 58.6 | 9.0 |
| 9.2 | | 32.0 | 21.1 | |
| 9.4 | 3 | 22.5 | 21.3 | |
| 9.4 | 4 | 12.5 | 21.9 | |
| 9.5 | | 31.5 | 8.1 | |
| 9.1 | | 41.5 | 40.4 | 9.0 g |
| 8.9 | | 47.5 | 39.0 | 8.7 g |
| 9.2 | 5 | 13.0 | 52.5 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 7 | 50 | 12 | 3.9 |
| 8 | 0 | 13 | 4.2 |
| | 10 | 15 | 4.5 |
| | 20 | 17 | 4.8 |
| | 30 | 19 | 5.1 |
| | 40 | 21 | 5.4 |
| | 50 | 23 | 5.6 |
| 9 | 0 | 25 | 5.9 |
| | 10 | 27 | 6.2 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 9 | 0 | 25 | 5·9 |
| | 10 | 27 | 6·2 |
| | 20 | 30 | 6·4 |
| | 30 | 32 | 6·6 |
| | 40 | 35 | 6·8 |
| | 50 | 37 | 7·0 |
| 10 | 0 | 40 | 7·2 |
| | 10 | 43 | 7·4 |
| | 20 | 46 | 7·6 |

## 1081—1140.

| mag. | 9h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·3 | 5 | 14·0 | 13·9 | |
| 9·5 | | 40·0 | 44·9 | |
| 9·5 | 6 | 30·5 | 7·9 | |
| 9·2 | | 50·5 | 19·9 | |
| 9·4 | 7 | 42·0 | 3·1 | |
| 9·1 | 8 | 37·5 | 28·0 | |
| 8·6 | 9 | 9·5 | 19·5 | 9·5 *g* |
| 9·4 | | 42·0 | 40·0 | *g* |
| 9·2 | | 48·0 | 24·0 | *g* |
| 9·5 | 10 | 20·5 | 54·9 | |
| 8·2 | | 22·0 | 12·7 | 8·5 *g* |
| 9·5 | 11 | 45·5 | 51·1 | |
| 9·0 | | 54·5 | 38·9 | 9·5 *g* |
| 9·2 | 12 | 4·5 | 52·9 | |
| 8·5 | | 9·5 | 21·1 | 9·0 |
| 8·6 | | 32·0 | 35·0 | *g* |
| 8·9 | 14 | 37·0 | 14·3 | |
| 9·2 | 15 | 4·8 | 59·1 | 9·5 |
| 8·9 | | 42·5 | 37·8 | *g* |
| 9·2 | 16 | 2·5 | 50·1 | |
| 8·9 | | 31·5 | 6·9 | |
| 9·5 | 18 | 4·5 | 42·7 | |
| 7·7 | | 10·5 | 57·5 | 8·5 *g* |
| 9·2 | 19 | 10·5 | 10·3 | |
| 9·5 | | 58·0 | 53·0 | |
| 9·4 | 20 | 37·5 | 39·9 | |
| 9·5 | 23 | 29·5 | 32·9 | |
| 9·5 | 24 | 18·0 | 31·0 | |
| 9·5 | | 35·0 | 42·9 | *g* |
| 9·0 | 25 | 23·0 | 33·1 | G*g* |
| 9·0 | 28 | 4·5 | 38·2 | *g* |
| 9·0 | | 24·0 | 28·9 | *g* |
| 9·1 | 29 | 25·0 | 58·7 | |
| 9·1 | 30 | 12·5 | 45·2 | *g* |
| 7·5 | 31 | 48·0 | 33·8 | 8·0 GS*g* |
| 9·4 | 32 | 1·5 | 11·3 | |
| 9·3 | 33 | 51·0 | 51·1 | *g* |
| 7·8 | 34 | 12·5 | 50·9 | *g* |
| 9·4 | 35 | 13·0 | 53·5 | *g* |
| 9·4 | | 28·5 | 40·5 | |
| 9·5 | 37 | 17·5 | 44·3 | |
| 9·2 | | 50·0 | 29·9 | G*g* |
| 9·5 | 38 | 6·0 | 23·9 | G |
| 8·2 | | 17·0 | 30·7 | 7·5 GS*g* |
| 8·6 | | 21·7 | 59·9 | G*g* |
| 9·5 | | 23·0 | 17·7 | G |
| 9·6 | | 35·5 | 27·9 | |
| 9·6 | 39 | 1·0 | 56·0 | |
| 9·4 | | 5·5 | 50·9 | |
| 9·8 | | 40·5 | 58·2 | |
| 9·4 | | 49·5 | 49·3 | |
| 9·4 | | 57·5 | 33·8 | |
| 9·5 | 40 | 13·0 | 37·8 | |
| 9·1 | | 17·7 | 24·9 | |
| 9·9 | | 23·0 | 29·4 | |
| 9·4 | | 28·3 | 37·9 | |
| 9·9 | 41 | 0·5 | 48·0 | |
| 9·9 | | 23·0 | 37·7 | |
| 9·6 | | 42·0 | 19·5 | |
| 9·9 | | 45·5 | 11·0 | |

## 1141—1200.

| mag. | 9h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 41 | 52·0 | 25·3 | |
| 9·4 | 42 | 2·0 | 53·8 | |
| 9·5 | | 20·0 | 39·9 | |
| 9·2 | | 20·0 | 37·0 | |
| 8·7 | | 34·5 | 32·2 | *g* |
| 9·1 | | 49·5 | 39·0 | *g* |
| 9·6 | 43 | 18·5 | 8·4 | |
| 9·2 | | 25·5 | 54·3 | |
| 8·8 | | 37·5 | 58·3 | *g* |
| 9·6 | 44 | 1·5 | 13·3 | |
| 9·9 | | 8·0 | 42·4 | |
| 9·3 | | 19·0 | 52·5 | |
| 9·5 | | 25·0 | 32·9 | |
| 9·2 | | 33·0 | 36·2 | |
| 9·5 | | 33·0 | 16·8 | |
| 9·5 | | 53·0 | 47·2 | |
| 9·9 | 45 | 3·0 | 24·2 | |
| 9·5 | | 7·0 | 2·6 | |
| 9·9 | | 16·0 | 43·8 | |
| 9·8 | | 16·5 | 46·2 | |
| 9·5 | | 29·5 | 35·9 | |
| 9·6 | | 42·0 | 7·0 | |
| 9·5 | 46 | 5·0 | 5·4 | |
| 9·2 | | 31·0 | 33·8 | *g* |
| 9·9 | | 36·0 | 32·9 | |
| 9·9 | | 37·5 | 52·8 | |
| 9·5 | 47 | 8·5 | 29·9 | |
| 9·5 | | 11·5 | 15·4 | *g* |
| 8·6 | | 17·0 | 31·6 | 9·0 *g* |
| 9·4 | | 18·5 | 11·7 | |
| 9·5 | | 56·0 | 19·4 | |
| 9·4 | 48 | 3·0 | 21·7 | |
| 9·9 | | 33·0 | 2·4 | |
| 9·9 | | 38·0 | 31·9 | |
| 9·9 | | 53·5 | 26·6 | |
| 9·6 | | 54·0 | 34·0 | |
| 9·6 | 49 | 5·5 | 32·2 | |
| 9·6 | | 18·7 | 59·1 | |
| 9·6 | | 19·5 | 5·9 | |
| 9·6 | | 23·5 | 53·7 | |
| 9·6 | | 38·0 | 49·8 | |
| 9·6 | 50 | 3·0 | 26·6 | |
| 9·3 | | 20·5 | 13·7 | |
| 9·9 | | 25·8 | 57·3 | |
| 9·9 | | 32·5 | 37·9 | |
| 9·9 | 51 | 15·0 | 45·8 | |
| 9·5 | 52 | 2·0 | 13·2 | |
| 9·9 | | 55·0 | 31·8 | |
| 9·4 | 53 | 2·0 | 49·2 | |
| 9·4 | | 3·0 | 23·1 | |
| 9·6 | | 26·0 | 41·0 | |
| 9·9 | | 34·0 | 33·3 | |
| 9·9 | | 34·5 | 22·1 | 9·0 |
| 9·4 | 54 | 12·0 | 37·0 | |
| 9·6 | | 19·5 | 55·7 | |
| 9·5 | | 23·0 | 3·5 | |
| 9·9 | | 28·5 | 24·2 | |
| 9·4 | | 30·0 | 10·4 | |
| 9·2 | | 52·5 | 58·0 | |
| 9·6 | | 57·0 | 42·0 | |

## 1201—1260.

| mag. | 9h.—10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8·7 | 54 | 58·5 | 19·6 | 9·0 *g* |
| 9·5 | 55 | 3·0 | 1·4 | |
| 9·8 | | 7·0 | 17·1 | |
| 9·6 | | 13·5 | 40·9 | |
| 9·5 | | 23·5 | 29·9 | |
| 9·4 | | 25·5 | 15·6 | |
| 9·9 | | 37·5 | 12·5 | |
| 9·9 | | 40·0 | 10·9 | |
| 9·9 | | 47·0 | 31·0 | |
| 7·9 | | 50·0 | 22·9 | 7·8 GSg*g* |
| 9·5 | | 57·0 | 4·5 | |
| 9·6 | 56 | 1·0 | 7·5 | |
| 8·8 | | 17·5 | 44·9 | 9·0 *g* |
| 8·9 | | 33·5 | 25·5 | 9·0 G*g* |
| 8·6 | | 50·0 | 40·6 | 9·0 *g* |
| 9·5 | | 57·0 | 41·3 | |
| 9·2 | 57 | 4·5 | 43·2 | 9·5 |
| 9·2 | | 7·0 | 49·8 | 9·0 |
| 9·5 | | 39·5 | 25·0 | G |
| 9·9 | 58 | 10·0 | 15·6 | |
| 9·6 | | 24·0 | 24·7 | |
| 9·3 | | 33·0 | 5·2 | |
| 9·0 | | 35·0 | 13·3 | 9·0 *g* |
| 7·6 | | 57·0 | 18·8 | 8·2 GS*g* |
| 9·9 | 59 | 7·5 | 9·0 | |
| 9·2 | | 16·5 | 54·6 | |
| 9·5 | | 34·5 | 17·2 | |
| 9·2 | | 45·0 | 5·2 | 8·5 *g* |
| 9·9 | | 51·0 | 28·1 | |
| 9·5 | | 54·5 | 57·8 | |
| 9·9 | 0 | 16·5 | 47·8 | |
| 9·6 | | 37·0 | 43·3 | |
| 9·3 | | 50·0 | 15·6 | |
| 9·0 | | 57·7 | 57·8 | |
| 9·9 | 1 | 32·0 | 28·3 | |
| 9·3 | | 50·5 | 56·6 | |
| 8·6 | 2 | 3·0 | 32·7 | 9·0 *g* |
| 9·2 | | 3·5 | 10·6 | |
| 9·9 | | 4·0 | 28·3 | 9·5 |
| 9·9 | | 7·0 | 21·0 | |
| 9·4 | | 41·0 | 23·9 | |
| 9·7 | 3 | 5·0 | 56·7 | |
| 9·4 | | 22·5 | 41·7 | |
| 8·9 | | 37·0 | 41·9 | |
| 9·8 | | 38·0 | 6·7 | |
| 9·2 | 4 | 11·0 | 54·3 | 9·0 *g* |
| 9·6 | | 33·5 | 41·9 | |
| 7·2 | 5 | 13·0 | 12·3 | 6·0 GS*g* |
| 9·9 | | 18·5 | 48·8 | |
| 9·6 | | 21·0 | 12·8 | |
| 9·0 | | 37·5 | 11·1 | 9·0 *g* |
| 9·6 | | 42·5 | 43·0 | |
| 9·9 | | 43·5 | 32·8 | |
| 9·4 | | 55·5 | 53·9 | 9·0 *g* |
| 9·8 | 6 | 0·0 | 39·7 | |
| 9·5 | | 21·0 | 55·7 | |
| 9·9 | | 29·0 | 48·2 | |
| 9·9 | | 34·0 | 43·9 | |
| 8·3 | | 35·0 | 59·2 | 8·0 *g* |
| 9·6 | | 43·0 | 30·8 | |

## 1261—1320.

| mag. | 10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8·5 | 7 | 11·0 | 23·6 | *g* |
| 9·8 | | 27·0 | 38·0 | |
| 9·9 | | 33·7 | 58·0 | |
| 9·6 | | 38·0 | 26·0 | |
| 8·7 | 8 | 39·0 | 33·9 | 8·0 GS*g* |
| 9·9 | | 44·0 | 51·1 | |
| 8·0 | | 53·5 | 40·1 | 8·0 GS*g* |
| 9·9 | 9 | 9·5 | 54·3 | |
| 9·6 | | 11·5 | 22·0 | |
| 9·4 | | 19·0 | 39·2 | |
| 9·9 | | 43·5 | 48·7 | |
| 9·9 | | 55·5 | 0·1 | |
| 6·2 | | 58·0 | 45·2 | 5·5 GSc*g* |
| 9·8 | | 58·0 | 16·2 | |
| 9·8 | 10 | 6·0 | 49·0 | |
| 7·7 | | 10·5 | 5·2 | 9·0 *g* |
| 9·9 | | 19·5 | 11·1 | |
| 9·6 | | 21·5 | 40·8 | |
| 9·9 | | 40·0 | 9·9 | |
| 9·2 | 11 | 2·5 | 8·9 | |
| 9·2 | | 21·0 | 11·0 | 9·0 |
| 9·6 | | 36·0 | 19·0 | |
| 8·9 | | 59·5 | 24·1 | 9·0 *g* |
| 9·4 | 12 | 0·0 | 0·9 | |
| 9·9 | | 0·8 | 0·2 | |
| 9·4 | | 46·5 | 19·4 | |
| 9·9 | | 54·0 | 38·9 | |
| 8·8 | 13 | 6·0 | 27·4 | |
| 9·9 | | 9·0 | 51·9 | |
| 9·9 | | 21·5 | 5·1 | |
| 8·0 | | 33·2 | 58·0 | *g* |
| 9·6 | | 42·5 | 33·4 | |
| 9·6 | | 43·0 | 54·5 | |
| 9·8 | 14 | 2·0 | 45·2 | |
| 8·4 | | 6·0 | 32·8 | *g* |
| 9·6 | | 13·0 | 54·8 | |
| 9·9 | | 13·5 | 2·0 | |
| 8·6 | | 22·0 | 27·8 | *g* |
| 9·9 | | 33·5 | 17·9 | |
| 9·6 | | 51·5 | 27·9 | |
| 9·7 | 15 | 25·0 | 48·1 | |
| 9·3 | | 40·0 | 15·8 | |
| 9·9 | | 50·0 | 16·8 | |
| 9·5 | | 56·5 | 17·9 | |
| 7·8 | 16 | 33·5 | 26·1 | 8·5 GS*g* |
| 9·7 | 17 | 1·0 | 2·9 | |
| 9·8 | | 9·0 | 2·9 | |
| 9·9 | | 18·0 | 27·9 | |
| 9·5 | | 27·5 | 29·8 | |
| 9·4 | | 42·5 | 28·6 | |
| 9·6 | | 46·3 | 1·1 | G |
| 9·6 | | 49·8 | 57·0 | |
| 8·4 | | 54·5 | 28·9 | G*g* |
| 9·9 | 18 | 12·0 | 54·7 | |
| 8·2 | | 22·0 | 3·7 | 8·5 G*g* |
| 9·7* | | 33·5 | 0·8 | |
| 9·3 | | 48·5 | 42·9 | |
| 9·7* | 19 | 6·0 | 1·5 | |
| 9·6 | | 15·5 | 50·9 | |
| 9·8 | | 20·0 | 32·6 | |



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## 1321—1380.

| mag. | 10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.7 | 19 | 22.0 | 21.8 | |
| 9.7 | | 30.5 | 2.9 | |
| 9.5 | | 36.8 | 45.8 | |
| 9.8 | | 42.7 | 56.7 | |
| 9.8 | | 43.5 | 13.8 | |
| 9.4 | 20 | 8.5 | 8.6 | |
| 9.9 | | 16.5 | 29.6 | |
| 9.9 | | 28.5 | 15.4 | |
| 9.7 | | 39.0 | 8.2 | |
| 9.7 | | 42.5 | 58.9 | |
| 9.5 | 21 | 7.7 | 19.6 | |
| 9.8 | | 9.5 | 6.3 | |
| 9.8 | | 16.5 | 34.4 | |
| 9.6 | | 21.0 | 56.2 | |
| 9.8 | | 38.5 | 55.7 | |
| 9.8 | | 41.0 | 35.6 | |
| 9.5 | | 42.5 | 0.3 | |
| 9.6 | | 53.5 | 27.5 | |
| 9.8 | | 54.5 | 54.8 | |
| 9.5 | 22 | 0.5 | 53.5 | |
| 9.8 | | 0.5 | 58.3 | |
| 9.6 | | 8.5 | 41.9 | |
| 9.9 | | 24.0 | 7.8 | |
| 9.2 | | 36.5 | 31.8 | |
| 9.2 | | 38.5 | 53.1 | |
| 8.8 | | 43.0 | 8.4 | 9.0 G*g* |
| 9.8 | | 44.5 | 47.2 | |
| 9.2 | | 55.0 | 23.8 | |
| 9.6 | | 58.0 | 40.4 | |
| 9.1 | 23 | 4.5 | 31.8 | |
| 9.4 | | 10.5 | 3.2 | |
| 9.1 | | 12.5 | 3.8 | 9.5 |
| 9.7 | | 22.5 | 11.8 | |
| 6.6 | | 28.5 | 4.2 | 6.5 GSc*g* |
| 9.4 | | 32.5 | 45.6 | |
| 9.8 | | 42.5 | 42.5 | |
| 9.6 | | 54.5 | 23.4 | |
| 9.9 | 24 | 4.0 | 38.9 | |
| 9.9 | | 11.0 | 51.2 | |
| 8.9 | | 22.5 | 3.3 | 9.0 *g* |
| 9.6 | | 52.0 | 5.8 | |
| 9.9 | | 57.0 | 2.6 | |
| 9.8 | 25 | 5.5 | 5.7 | |
| 9.2 | | 9.5 | 27.8 | 9.5 |
| 8.8 | | 26.5 | 14.1 | 9.2 *g* |
| 9.1 | | 32.5 | 14.3 | |
| 9.6 | | 35.5 | 38.5 | |
| 8.5 | | 38.0 | 49.1 | |
| 9.8 | | 39.5 | 37.3 | |
| 9.9 | | 41.0 | 36.3 | |
| 9.5 | | 44.0 | 56.4 | |
| 9.6 | 26 | 2.5 | 40.8 | |
| 9.4 | | 12.5 | 53.1 | |
| 9.7 | | 20.5 | 23.8 | |
| 9.4 | | 25.7 | 2.6 | |
| 9.5 | | 26.0 | 36.7 | |
| 9.7 | | 29.5 | 14.0 | |
| 9.8 | | 31.5 | 33.1 | |
| 9.9 | | 32.5 | 6.3 | |
| 9.8 | | 39.0 | 10.4 | |

## 1381—1440.

| mag. | 10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.8 | 26 | 39.0 | 41.9 | |
| 9.7 | | 45.0 | 49.0 | |
| 9.0 | | 46.5 | 44.8 | 9.5 |
| 9.8 | | 47.5 | 43.1 | |
| 9.8 | | 48.5 | 59.2 | |
| 9.6 | 27 | 2.5 | 22.0 | |
| 9.8 | | 2.5 | 53.6 | |
| 9.6 | | 15.0 | 12.7 | |
| 9.8 | | 16.5 | 32.0 | |
| 9.6 | | 32.0 | 37.7 | |
| 9.6 | | 39.0 | 51.9 | |
| 8.6 | | 40.0 | 48.6 | 9.0 *g* |
| 8.5 | 28 | 8.0 | 55.6 | 8.5 *g* |
| 9.1 | | 12.0 | 8.0 | |
| 9.1 | | 17.0 | 51.9 | |
| 9.7 | | 20.5 | 10.9 | |
| 9.6 | | 26.5 | 33.0 | |
| 9.9 | | 32.5 | 4.5 | |
| 9.6 | | 32.5 | 9.7 | |
| 9.6 | | 32.5 | 40.9 | |
| 9.5 | | 33.5 | 30.9 | |
| 9.2 | | 36.5 | 32.2 | 9.0 *g* |
| 9.7 | | 42.5 | 23.9 | |
| 9.5 | | 46.5 | 46.8 | |
| 9.8 | | 59.0 | 38.4 | |
| 9.9 | 29 | 7.5 | 10.7 | |
| 9.9 | | 14.0 | 14.2 | |
| 9.5 | | 30.5 | 38.7 | |
| 9.5 | | 32.0 | 55.1 | |
| 9.5 | 30 | 6.0 | 19.1 | |
| 9.8 | | 21.5 | 51.4 | |
| 9.8 | | 22.0 | 33.0 | |
| 9.9 | | 29.5 | 16.8 | |
| 9.8 | | 35.5 | 16.7 | |
| 9.6 | | 35.5 | 50.0 | |
| 9.4 | | 36.5 | 5.9 | |
| 9.0 | | 42.0 | 10.3 | |
| 9.6 | | 45.0 | 26.3 | |
| 9.4 | | 55.0 | 29.6 | |
| 9.5 | | 55.5 | 25.3 | |
| 9.5 | | 59.0 | 38.7 | |
| 9.9 | 31 | 9.0 | 40.4 | |
| 9.8 | | 23.0 | 16.8 | |
| 9.9 | | 29.5 | 11.1 | |
| 9.8 | | 42.5 | 28.0 | |
| 9.6 | | 57.5 | 15.9 | |
| 9.2 | | 58.5 | 3.3 | |
| 9.5 | 32 | 1.5 | 58.3 | |
| 9.5 | | 8.0 | 24.0 | |
| 9.9 | | 11.5 | 8.9 | |
| 9.7 | | 26.5 | 24.9 | |
| 9.6 | | 31.0 | 39.9 | |
| 9.1 | | 31.3 | 57.1 | |
| 9.4 | 33 | 25.0 | 45.2 | |
| 9.2 | | 29.5 | 35.7 | |
| 9.9 | | 58.0 | 5.9 | |
| 9.9 | 34 | 4.2 | 58.4 | |
| 9.9 | | 10.5 | 24.4 | |
| 9.8 | | 11.0 | 1.8 | |
| 9.8 | | 39.0 | 59.1 | |

## 1441—1500.

| mag. | 10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.9 | 34 | 53.0 | 7.1 | |
| 9.8 | 35 | 3.0 | 36.1 | |
| 9.4 | | 11.5 | 58.2 | |
| 9.2 | | 21.0 | 50.1 | |
| 9.2 | | 33.5 | 57.2 | |
| 9.8 | | 35.5 | 24.6 | |
| 9.4 | | 38.5 | 23.6 | |
| 9.8 | | 39.5 | 23.1 | |
| 9.2 | | 53.5 | 29.1 | 9.5 |
| 9.9 | 36 | 0.5 | 43.9 | |
| 9.7 | | 12.5 | 30.1 | |
| 9.6 | | 18.0 | 16.5 | |
| 9.7 | | 23.5 | 28.4 | |
| 9.7 | | 25.5 | 44.6 | |
| 9.6 | | 32.0 | 59.4 | |
| 9.6 | | 32.5 | 21.7 | |
| 8.4 | | 47.5 | 26.5 | 8.0 G*g* |
| 9.9 | 37 | 3.5 | 38.9 | |
| 9.2 | | 15.0 | 12.9 | |
| 9.6 | | 16.0 | 24.9 | |
| 9.7 | | 18.0 | 52.0 | |
| 9.8 | | 22.0 | 28.1 | |
| 9.9 | | 26.0 | 54.2 | |
| 9.5 | | 42.0 | 12.5 | |
| 9.6 | | 46.0 | 23.8 | |
| 9.6 | | 58.0 | 14.0 | |
| 9.1 | 38 | 18.5 | 44.1 | |
| 9.8 | | 31.0 | 55.9 | |
| 9.9 | | 43.5 | 18.9 | |
| 9.3 | | 46.5 | 9.2 | |
| 9.4 | | 52.5 | 8.2 | |
| 9.5 | 39 | 0.5 | 29.5 | |
| 9.2 | | 17.0 | 5.7 | |
| 9.9 | | 21.5 | 19.2 | |
| 9.7 | | 32.0 | 38.4 | |
| 9.6 | | 32.5 | 28.1 | |
| 9.3 | | 35.5 | 33.2 | |
| 9.6 | | 41.0 | 24.8 | |
| 9.9 | 40 | 0.0 | 41.2 | |
| 9.8 | | 1.5 | 9.3 | |
| 9.8 | | 5.5 | 36.5 | |
| 9.6 | | 6.0 | 41.3 | |
| 9.6 | | 15.5 | 44.8 | |
| 9.8 | | 17.5 | 40.6 | |
| 9.5 | | 23.5 | 26.8 | |
| 9.9 | | 30.0 | 1.6 | |
| 9.8 | | 30.5 | 40.9 | |
| 9.8 | | 46.0 | 10.7 | |
| 9.9 | | 49.0 | 41.0 | |
| 9.8 | 41 | 9.5 | 5.9 | |
| 9.7 | | 11.5 | 18.6 | |
| 9.8 | | 13.5 | 41.0 | |
| 9.8 | | 17.5 | 5.1 | |
| 9.5 | | 32.5 | 31.0 | |
| 9.7 | | 36.5 | 25.7 | |
| 9.6 | | 37.5 | 29.3 | |
| 9.8 | | 42.0 | 8.2 | |
| 9.5 | 42 | 6.0 | 2.4 | |
| 9.9 | | 12.5 | 21.0 | |
| 9.8 | | 19.5 | 37.1 | |

## 1501—1560.

| mag. | 10h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.7 | 42 | 30.0 | 33.9 | |
| 9.5 | | 46.5 | 51.8 | |
| 9.8 | | 47.0 | 7.3 | |
| 9.9 | | 52.0 | 43.8 | |
| 7.8 | | 55.5 | 15.4 | 8.0 G*g* |
| 9.6 | | 57.5 | 23.7 | |
| 9.9 | 43 | 4.5 | 5.5 | |
| 8.7 | | 11.0 | 15.7 | 8.9 *g* |
| 9.2 | | 12.5 | 53.2 | 10.0 |
| 9.6 | | 16.5 | 4.8 | |
| 9.7 | | 31.0 | 56.4 | |
| 9.7 | | 33.5 | 12.8 | |
| 9.6 | | 43.5 | 1.2 | |
| 9.8 | | 55.0 | 41.9 | |
| 9.1 | | 59.5 | 44.0 | |
| 9.9 | 44 | 10.5 | 53.2 | |
| 9.5 | | 19.0 | 21.7 | |
| 9.4 | | 19.7 | 1.9 | |
| 9.6 | | 29.0 | 40.3 | |
| 9.8 | 45 | 22.5 | 40.7 | |
| 9.9 | | 48.5 | 38.8 | |
| 9.3 | | 53.5 | 47.7 | |
| 9.9 | | 58.5 | 6.1 | |
| 9.9 | 46 | 0.0 | 6.5 | |
| 9.9 | | 1.0 | 6.3 | |
| 9.8 | | 4.5 | 52.3 | |
| 9.2 | | 5.5 | 39.7 | |
| 9.3 | | 9.5 | 50.3 | |
| 9.8 | | 9.5 | 46.1 | |
| 9.4 | | 18.2 | 0.2 | |
| 9.8 | | 20.5 | 1.9 | |
| 9.5 | | 24.0 | 39.3 | |
| 9.4 | | 28.0 | 43.8 | 9.8 |
| 9.6 | | 33.5 | 32.7 | |
| 9.9 | | 45.5 | 5.6 | |
| 9.5 | 47 | 21.5 | 40.2 | |
| 9.8 | | 21.5 | 31.6 | |
| 9.9 | | 30.5 | 28.1 | |
| 9.7 | | 43.5 | 13.8 | |
| 9.6 | | 52.5 | 7.4 | |
| 9.8 | 48 | 3.0 | 7.7 | |
| 9.6 | | 20.5 | 14.7 | |
| 9.6 | | 29.0 | 41.0 | |
| 9.9 | | 30.5 | 24.6 | |
| 9.8 | | 52.0 | 28.0 | |
| 9.9 | | 56.5 | 52.5 | |
| 9.4 | 49 | 16.0 | 0.1 | |
| 9.9 | | 37.5 | 50.0 | |
| 9.8 | | 41.0 | 19.2 | |
| 9.5 | | 46.0 | 44.0 | |
| 9.9 | | 52.5 | 43.6 | |
| 9.8 | | 52.5 | 50.5 | |
| 9.6 | 50 | 1.5 | 34.3 | |
| 9.9 | | 3.5 | 40.3 | |
| 9.8 | | 4.0 | 21.7 | |
| 9.8 | | 17.5 | 36.7 | |
| 9.8 | | 36.5 | 41.8 | |
| 9.6 | | 37.0 | 13.1 | |
| 9.8 | | 54.5 | 49.2 | |
| 9.9 | | 55.5 | 42.0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 43 | 7.4 |
| | 20 | 46 | 7.6 |
| | 30 | 49 | 7.7 |
| | 40 | 52 | 7.9 |
| | 50 | 55 | 8.0 |
| 11 | 0 | 58 | 8.1 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 50 | 55 | 8.0 |
| 11 | 0 | 58 | 8.1 |
| | 10 | 61 | 8.2 |
| | 20 | 64 | 8.2 |
| | 30 | 67 | 8.3 |
| | 40 | 70 | 8.3 |
| | 50 | 74 | 8.3 |
| 12 | 0 | 77 | 8.4 |
| | 10 | 80 | 8.3 |

**1561—1620.**

| mag. | 10h.–11h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.8 | 50 | 58.0 | 5.0 | |
| 9.8 | 51 | 11.5 | 16.8 | |
| 9.5 | | 16.5 | 20.1 | 9.0 |
| 9.9 | | 23.5 | 45.2 | |
| 9.1 | | 37.0 | 28.0 | 9.5 |
| 9.2 | | 45.0 | 46.7 | |
| 9.9 | | 52.5 | 9.7 | |
| 9.6 | | 54.0 | 38.1 | |
| 9.2 | | 54.5 | 30.1 | |
| 9.4 | 52 | 21.5 | 18.5 | |
| | | | | |
| 9.8 | | 22.5 | 19.3 | |
| 9.4 | | 25.0 | 20.3 | |
| 9.6 | | 25.5 | 36.0 | |
| 9.6 | | 48.0 | 3.9 | |
| 9.9 | 53 | 23.0 | 46.8 | |
| 9.9 | | 31.5 | 50.5 | |
| 9.2 | | 40.0 | 17.5 | 9.5 |
| 9.9 | 54 | 9.5 | 1.9 | |
| 9.9 | | 20.5 | 23.2 | |
| 9.1 | | 42.5 | 59.1 | 9.5 *g* |
| | | | | |
| 9.9 | 55 | 1.0 | 22.3 | |
| 9.6 | | 4.5 | 59.7 | |
| 9.9 | | 13.5 | 55.0 | |
| 8.9 | | 35.0 | 53.2 | 8.5 *g* |
| 9.4 | | 47.5 | 13.2 | |
| 8.5 | | 49.5 | 5.1 | 8.5 *g* |
| 9.0 | | 52.5 | 21.5 | 8.0 G*g* |
| 9.8 | | 57.0 | 34.0 | |
| 8.8 | 56 | 9.5 | 10.7 | 9.0 *g* |
| 9.9 | | 35.0 | 53.8 | |
| | | | | |
| 9.6 | | 52.5 | 6.3 | |
| 9.6 | 57 | 2.0 | 35.8 | |
| 8.0 | | 6.5 | 20.3 | 8.0 *g* |
| 8.6 | | 15.0 | 55.7 | 9.0 *g* |
| 9.5 | | 36.0 | 54.9 | 9.5 |
| 9.9 | | 49.0 | 50.7 | |
| 9.9 | | 59.5 | 41.2 | |
| 9.2 | 58 | 0.5 | 35.8 | |
| 8.8 | | 0.5 | 30.7 | 9.0 |
| 9.3 | | 5.7 | 2.3 | |
| | | | | |
| 9.3 | | 30.5 | 45.7 | |
| 9.4 | | 36.5 | 45.8 | |
| 9.9 | | 36.5 | 22.0 | |
| 9.0 | | 48.5 | 19.7 | 9.5 |
| 9.2 | 59 | 6.0 | 51.6 | 9.0 *g* |
| 9.0 | | 28.7 | 21.0 | 9.0 |
| 9.8 | | 34.0 | 3.0 | |
| 9.7 | | 35.0 | 41.7 | |
| 9.7 | | 36.5 | 27.9 | |
| 9.7 | | 37.7 | 23.6 | |
| | | | | |
| 9.8 | | 41.5 | 32.4 | |
| 9.7 | 0 | 6.3 | 29.0 | |
| 9.4 | | 9.5 | 34.1 | |
| 9.9 | | 15.0 | 47.7 | |
| 9.8 | | 24.5 | 23.1 | |
| 9.8 | | 40.0 | 40.7 | |
| 9.9 | | 56.5 | 13.8 | |
| 9.8 | 1 | 2.0 | 8.0 | |
| 9.6 | | 13.3 | 14.6 | |
| 9.4 | | 19.8 | 52.0 | |

**1621—1680.**

| mag. | 11h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.4 | 1 | 21.0 | 2.9 | |
| 9.4 | | 46.5 | 4.9 | |
| 9.0 | | 49.0 | 19.9 | 9.0 *g* |
| 9.7 | 2 | 12.0 | 51.1 | |
| 9.2 | | 37.0 | 7.8 | |
| 9.5 | | 43.0 | 51.9 | |
| 9.7 | | 56.5 | 28.3 | |
| 8.9 | 3 | 10.0 | 4.9 | 9.5 |
| 9.4 | | 22.0 | 21.5 | |
| 9.6 | | 33.0 | 5.1 | |
| | | | | |
| 9.6 | | 47.0 | 6.8 | |
| 9.1 | | 48.0 | 17.3 | 9.5 |
| 8.8 | 4 | 31.5 | 27.5 | 9.0 *g* |
| 9.5 | | 52.5 | 11.5 | |
| 9.2 | 5 | 2.5 | 0.9 | |
| 9.6 | | 22.0 | 45.9 | |
| 9.6 | | 50.5 | 34.6 | |
| 9.3 | 6 | 0.5 | 49.8 | 10.0 |
| 9.3 | | 20.5 | 47.0 | |
| 9.2 | | 20.5 | 40.9 | 10.0 |
| | | | | |
| 9.0 | | 32.0 | 46.4 | 9.5 |
| 9.1 | 7 | 9.0 | 55.7 | |
| 9.7 | | 16.0 | 59.6 | |
| 9.5 | | 32.0 | 2.9 | |
| 9.7 | 8 | 32.5 | 53.0 | |
| 8.5 | 9 | 11.0 | 12.6 | 8.9 *g* |
| 9.0 | | 23.0 | 35.3 | |
| 9.7 | 10 | 9.0 | 24.9 | |
| 8.8 | | 16.0 | 49.9 | 7.2 GS*g* |
| 9.7 | | 36.0 | 48.0 | |
| | | | | |
| 9.3 | | 50.0 | 8.9 | 9.0 *g* |
| 9.6 | 11 | 26.5 | 44.9 | |
| 9.5 | | 52.0 | 42.1 | |
| 9.6 | 14 | 1.5 | 51.9 | |
| 9.3 | | 29.5 | 20.9 | 8.5 *g* |
| 8.9 | 15 | 50.5 | 17.1 | 9.0 |
| 9.4 | 16 | 43.5 | 43.9 | |
| 9.7 | | 59.5 | 6.9 | |
| 9.4 | 17 | 1.5 | 3.1 | |
| 9.5 | | 12.0 | 26.5 | |
| | | | | |
| 9.0 | | 29.5 | 50.5 | |
| 8.3 | 18 | 18.5 | 8.9 | 8.5 G*g* |
| 9.5 | | 21.0 | 40.6 | |
| 9.2 | 20 | 9.0 | 50.9 | |
| 9.7 | 21 | 24.0 | 33.6 | |
| 9.7 | 22 | 11.0 | 23.9 | |
| 9.4 | | 20.0 | 51.3 | |
| 7.7 | | 31.5 | 30.1 | 8.0 G*g* |
| 7.9 | | 59.0 | 48.1 | 8.0 G*g* |
| 9.6 | 23 | 26.0 | 37.2 | |
| | | | | |
| 9.2 | | 48.0 | 25.3 | |
| 9.7 | | 56.5 | 41.9 | |
| 9.4 | 24 | 34.5 | 53.0 | |
| 9.7 | | 38.5 | 43.7 | |
| 8.6 | 25 | 37.5 | 3.2 | 9.0 *g* |
| 8.7 | 26 | 8.5 | 42.9 | *g* |
| 9.5 | | 15.5 | 25.9 | |
| 9.7 | | 20.0 | 23.9 | |
| 9.7 | | 50.0 | 57.3 | |
| 7.8 | 27 | 6.0 | 10.4 | 8.5 *g* |

**1681—1740.**

| mag. | 11h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.2 | 28 | 0.0 | 34.2 | 10.0 |
| 9.6 | | 10.0 | 27.9 | |
| 9.2 | | 20.0 | 26.9 | 9.5 |
| 9.6 | | 33.0 | 46.7 | |
| 9.7 | | 59.0 | 21.9 | |
| 9.7 | 29 | 29.5 | 30.9 | |
| 9.7 | | 32.0 | 29.9 | |
| 9.7 | 30 | 15.0 | 31.9 | |
| 8.5 | | 18.0 | 23.9 | 9.0 *g* |
| 9.7 | | 20.5 | 46.8 | |
| | | | | |
| 8.8 | | 58.5 | 30.2 | 9.8 *g* |
| 9.7 | 31 | 9.0 | 31.4 | 10.0 |
| 9.6 | | 17.5 | 13.9 | |
| 9.2 | | 26.0 | 6.7 | |
| 9.6 | | 28.0 | 46.9 | |
| 9.7 | 32 | 7.0 | 4.6 | |
| 9.7 | 33 | 7.0 | 43.9 | |
| 9.4 | | 21.0 | 18.9 | |
| 9.4 | 34 | 0.5 | 4.9 | |
| 8.6 | 36 | 7.5 | 52.8 | 9.0 *g* |
| | | | | |
| 9.7 | | 39.5 | 56.1 | |
| 9.2 | | 47.0 | 31.1 | 9.5 *g* |
| 9.5 | | 48.0 | 29.6 | *g* |
| 8.3 | 37 | 26.5 | 33.9 | 8.5 G*g* |
| 9.7 | | 49.0 | 52.0 | |
| 9.7 | 39 | 10.0 | 47.9 | 9.0 |
| 9.9 | | 14.8 | 0.2 | |
| 9.2 | | 24.5 | 17.9 | 8.5 G*g* |
| 9.9 | | 29.0 | 24.0 | |
| 9.6 | 40 | 22.5 | 7.2 | *g* |
| | | | | |
| 9.9 | | 33.0 | 28.0 | |
| 9.1 | | 36.3 | 57.9 | 9.0 *g* |
| 9.7 | | 59.2 | 24.9 | |
| 9.9 | 41 | 2.0 | 3.8 | |
| 9.9 | | 7.5 | 54.9 | |
| 9.9 | | 11.5 | 18.0 | |
| 9.9 | | 17.0 | 43.4 | |
| 9.9 | | 36.0 | 10.3 | |
| 8.0 | | 39.5 | 18.7 | 8.0 *g* |
| 9.9 | | 41.5 | 1.2 | |
| | | | | |
| 9.7 | | 54.0 | 33.8 | |
| 9.9 | | 55.0 | 33.0 | |
| 8.9 | 42 | 8.0 | 25.4 | *g* |
| 9.9 | | 23.0 | 34.6 | |
| 9.6 | 43 | 19.0 | 18.9 | |
| 9.9 | | 19.0 | 41.3 | |
| 9.9 | | 31.0 | 23.1 | |
| 9.9 | | 47.5 | 35.9 | |
| 8.9 | | 51.0 | 33.0 | 9.0 *g* |
| 9.8 | 44 | 10.0 | 0.9 | |
| | | | | |
| 9.3 | | 36.5 | 37.0 | |
| 9.5 | | 46.5 | 3.1 | |
| 9.9 | | 57.0 | 28.2 | |
| 9.4 | 45 | 13.0 | 6.2 | |
| 9.3 | | 15.5 | 5.9 | 9.5 |
| 9.9 | 47 | 8.5 | 59.5 | |
| 9.4 | | 10.0 | 15.3 | |
| 9.6 | | 31.0 | 26.9 | |
| 9.9 | | 31.5 | 54.2 | |
| 9.7 | | 53.0 | 16.7 | |

**1741—1800.**

| mag. | 11h.–12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.9 | 47 | 58.5 | 30.5 | |
| 9.9 | 48 | 10.5 | 56.1 | |
| 9.9 | | 20.0 | 16.9 | |
| 7.2 | | 34.0 | 40.7 | 7.0 GS*g* |
| 9.9 | | 38.0 | 23.7 | |
| 8.8 | | 42.0 | 44.1 | 9.0 *g* |
| 8.8 | 49 | 4.0 | 42.7 | 8.0 G*g* |
| 9.9 | | 4.0 | 15.3 | |
| 9.2 | | 23.5 | 14.1 | 9.2 *g* |
| 9.9 | | 27.0 | 41.2 | |
| | | | | |
| 9.9 | | 57.0 | 10.3 | |
| 9.4 | 50 | 19.5 | 45.2 | 9.5 |
| 9.9 | | 22.5 | 42.9 | |
| 9.9 | | 37.6 | 57.6 | |
| 9.2 | | 58.2 | 58.9 | *g* |
| 9.0 | 51 | 0.5 | 53.9 | 9.0 *g* |
| 9.0 | | 9.5 | 7.1 | |
| 9.8 | | 32.0 | 26.7 | 9.0 *g* |
| 9.8 | | 35.5 | 50.9 | |
| 9.4 | | 35.5 | 38.2 | |
| | | | | |
| 9.7 | | 47.0 | 1.9 | |
| 9.4 | | 50.0 | 1.8 | |
| 9.9 | 52 | 53.5 | 35.5 | |
| 9.5 | | 58.0 | 17.5 | 9.5 |
| 9.9 | 53 | 39.0 | 18.1 | |
| 9.2 | | 52.5 | 33.2 | 9.5 *g* |
| 8.6 | | 53.5 | 22.9 | 9.0 *g* |
| 9.2 | | 57.5 | 12.2 | *g* |
| 9.9 | 54 | 7.0 | 1.1 | |
| 9.9 | | 35.0 | 26.4 | |
| | | | | |
| 8.9 | 55 | 26.5 | 34.3 | 9.0 *g* |
| 9.4 | | 29.0 | 46.4 | |
| 9.7 | 56 | 2.5 | 13.1 | |
| 9.1 | | 29.0 | 14.0 | 9.0 *g* |
| 9.9 | | 33.5 | 10.0 | |
| 8.7 | | 37.0 | 1.1 | *g* |
| 9.0 | | 40.5 | 30.9 | 9.0 *g* |
| 9.9 | | 42.0 | 8.1 | |
| 8.5 | | 47.0 | 8.2 | 8.0 *g* |
| 9.9 | 57 | 21.0 | 53.9 | |
| | | | | |
| 9.4 | | 24.0 | 15.3 | |
| 9.9 | | 36.0 | 24.7 | |
| 9.9 | 58 | 17.0 | 20.2 | |
| 9.5 | | 29.0 | 14.0 | |
| 9.2 | | 53.0 | 27.3 | |
| 9.5 | 59 | 28.5 | 42.1 | |
| 9.5 | | 47.0 | 44.1 | |
| 7.1 | | 55.0 | 0.7 | 6.8 GS*g* |
| 9.9 | 0 | 8.0 | 13.9 | 9.0 |
| 9.5 | | 41.0 | 15.1 | 9.0 *g* |
| | | | | |
| 8.8 | | 56.0 | 12.1 | 9.0 *g* |
| 9.9 | 1 | 5.5 | 23.3 | |
| 9.1 | | 23.0 | 4.7 | |
| 9.9 | 2 | 13.5 | 20.9 | |
| 9.8 | | 20.5 | 37.7 | |
| 9.2 | | 22.5 | 14.8 | |
| 9.5 | | 36.5 | 24.3 | |
| 9.9 | | 42.5 | 57.1 | |
| 7.6 | | 43.0 | 24.7 | 8.0 *g* |
| 9.4 | | 44.5 | 12.1 | |

## 1801—1860.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 3 | 19·5 | 26·9 | |
| 9·6 | | 27·0 | 0·7 | |
| 9·2 | | 27·0 | 0·3 | |
| 9·4 | | 28·0 | 29·1 | 9·5 |
| 9·5 | | 35·5 | 4·1 | |
| 9·9 | | 50·0 | 0·7 | |
| 9·5 | | 50·0 | 27·7 | |
| 9·9 | 4 | 3·0 | 29·8 | 9·5 |
| 9·9 | | 21·5 | 6·1 | |
| 9·4 | | 51·0 | 26·1 | 9·5 |
| 9·7 | 5 | 9·0 | 31·2 | 9·5 |
| 8·5 | | 28·5 | 32·1 | 9·0 |
| 9·0 | | 53·0 | 18·5 | 9·0 |
| 9·9 | 6 | 7·5 | 6·1 | |
| 9·9 | | 17·0 | 49·1 | |
| 9·4 | 7 | 18·5 | 19·1 | |
| 9·9 | | 31·0 | 27·1 | |
| 9·5 | | 32·5 | 26·7 | |
| 7·2 | | 35·5 | 51·1 | 7·5 GSr |
| 7·3 | | 44·0 | 49·7 | 7·8 GSr |
| 9·2 | | 45·0 | 19·5 | 9·5 |
| 9·4 | 8 | 0·7 | 58·8 | |
| 9·2 | | 12·5 | 18·4 | |
| 9·9 | | 28·5 | 36·1 | |
| 9·9 | | 37·0 | 5·1 | |
| 8·8 | | 41·0 | 0·7 | |
| 9·4 | 9 | 12·0 | 2·8 | |
| 9·8 | | 24·5 | 7·1 | |
| 9·8 | | 51·0 | 23·3 | |
| 9·9 | 10 | 12·0 | 17·1 | |
| 9·9 | | 18·3 | 57·2 | |
| 9·9 | | 28·0 | 8·5 | |
| 9·6 | | 37·5 | 1·8 | 8·8 |
| 8·5 | 11 | 58·5 | 49·5 | 8·2 |
| 8·9 | 12 | 10·0 | 4·9 | 9·5 |
| 8·5 | | 14·8 | 57·9 | 8·2 *g* |
| 9·2 | | 18·0 | 22·5 | |
| 8·8 | | 30·5 | 8·0 | 9·5 |
| 9·5 | 13 | 4·0 | 48·7 | |
| 9·4 | | 25·0 | 39·1 | |
| 8·6 | | 28·0 | 35·3 | 7·8 G |
| 6·4 | | 37·0 | 8·9 | 7·0 GSc |
| 8·8 | | 39·0 | 36·8 | 9·0 |
| 9·0 | | 39·5 | 7·1 | 8·0 GS |
| 9·9 | | 40·0 | 49·0 | |
| 8·3 | 14 | 17·5 | 8·4 | 8·5 GS |
| 9·9 | | 40·5 | 23·8 | |
| 9·6 | | 42·5 | 35·7 | |
| 9·9 | 15 | 35·5 | 51·9 | |
| 9·9 | 16 | 3·0 | 19·1 | |
| 9·5 | | 9·5 | 8·7 | |
| 8·8 | | 18·0 | 24·0 | 8·8 |
| 9·7 | | 24·0 | 51·1 | |
| 9·2 | | 32·7 | 59·1 | *g* |
| 9·2 | | 39·0 | 10·0 | |
| 9·9 | | 40·5 | 13·2 | |
| 9·3 | | 49·5 | 1·1 | 8·5 G |
| 9·0 | 17 | 9·0 | 25·1 | 8·0 G |
| 8·7 | | 53·0 | 9·5 | 9·0 |
| 9·1 | 18 | 1·5 | 19·9 | |

## 1861—1920.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 18 | 14·0 | 37·7 | |
| 7·1 | | 20·0 | 4·5 | GS |
| 9·3 | | 31·0 | 7·9 | |
| 9·5 | | 42·0 | 15·0 | |
| 9·9 | | 51·7 | 26·6 | |
| 8·6 | | 58·0 | 1·7 | |
| 9·5 | 19 | 2·0 | 5·3 | |
| 9·9 | | 22·5 | 48·1 | |
| 9·6 | | 52·5 | 28·0 | |
| 10·0 | | 56·0 | 27·9 | |
| 9·1 | | 59·0 | 7·8 | |
| 9·6 | 20 | 9·5 | 15·5 | |
| 8·7 | | 10·8 | 19·5 | 8·2 |
| 9·1 | | 14·0 | 33·6 | 9·5 |
| 9·7 | | 20·0 | 36·7 | |
| 9·8 | | 21·5 | 58·6 | |
| 9·7 | | 22·0 | 44·9 | |
| 9·9 | | 28·0 | 14·9 | |
| 10·0 | 21 | 12·5 | 39·8 | |
| 9·4 | | 44·5 | 32·3 | |
| 9·7 | 22 | 24·0 | 36·5 | |
| 9·0 | | 32·0 | 54·4 | 9·0 *g* |
| 9·8 | | 58·0 | 34·9 | |
| 9·8 | 23 | 7·5 | 4·0 | |
| 9·6 | | 22·5 | 42·1 | |
| 9·5 | | 23·5 | 39·9 | |
| 9·3 | 24 | 1·0 | 50·6 | |
| 9·7 | | 15·0 | 54·9 | |
| 9·1 | | 15·0 | 41·8 | 9·5 |
| 9·2 | | 15·5 | 51·8 | 9·5 |
| 10·0 | | 19·5 | 53·7 | |
| 9·8 | | 26·5 | 17·6 | |
| 10·0 | | 34·0 | 37·9 | |
| 9·5 | | 36·0 | 42·9 | |
| 9·7 | | 39·5 | 54·4 | |
| 9·4 | | 59·5 | 44·4 | |
| 9·6 | 25 | 1·0 | 38·5 | |
| 9·6 | | 1·0 | 47·7 | |
| 10·0 | | 35·0 | 54·6 | |
| 9·2 | | 40·0 | 41·0 | 8·5 |
| 9·2 | | 41·0 | 31·9 | 9·5 |
| 9·6 | | 48·0 | 0·8 | 9·5 |
| 9·2 | | 49·5 | 59·9 | 9·5 *g* |
| 9·6 | | 59·0 | 32·7 | |
| 8·0 | 26 | 21·5 | 25·5 | 8·0 |
| 9·5 | | 26·0 | 0·6 | |
| 10·0 | | 53·0 | 8·6 | |
| 9·2 | 27 | 21·0 | 15·6 | 9·5 |
| 9·6 | | 21·5 | 17·9 | |
| 10·0 | | 49·0 | 17·5 | |
| 9·9 | | 53·5 | 48·7 | |
| 10·0 | | 58·5 | 14·9 | |
| 9·4 | 28 | 27·5 | 59·9 | 9·0 *g* |
| 9·5 | | 56·5 | 45·3 | |
| 9·4 | | 57·0 | 35·1 | |
| 10·0 (?) | 29 | 23·5 | 29·9 | |
| 9·0 | | 28·0 | 22·1 | 9·5 |
| 10·0 | | 32·0 | 50·9 | |
| 9·5 | | 41·5 | 28·8 | |
| 9·9 | | 49·5 | 30·5 | |

## 1921—1980.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 29 | 57·0 | 30·2 | |
| 10·0 | 30 | 28·5 | 15·1 | |
| 10·0 | | 35·0 | 52·3 | |
| 9·4 | | 44·0 | 10·9 | 10·0 |
| 9·4 | | 47·0 | 30·5 | |
| 8·4 | | 58·0 | 8·7 | 9·0 |
| 9·6 | | 59·5 | 48·5 | |
| 10·0 | 31 | 6·5 | 6·4 | |
| 10·0 | | 30·5 | 51·8 | |
| 9·9 | | 40·0 | 33·9 | |
| 9·9 | | 40·0 | 55·1 | |
| 9·7 | | 45·5 | 9·9 | |
| 10·0 | | 54·0 | 46·5 | |
| 9·2 | | 58·0 | 44·5 | |
| 10·0 | 32 | 0·0 | 12·5 | |
| 8·7 | | 5·0 | 1·4 | 9·0 |
| 10·0 | | 6·5 | 27·8 | |
| 9·2 | | 14·5 | 21·6 | |
| 9·8 | | 26·0 | 5·8 | |
| 9·3 | | 30·0 | 17·7 | |
| 6·8 | | 31·5 | 49·3 | 6·8 GS |
| 9·6 | | 33·0 | 47·2 | |
| 10·0 | | 39·0 | 39·3 | |
| 9·9 | | 42·0 | 43·9 | 9·5 |
| 9·9 | | 43·0 | 23·8 | |
| 8·9 | | 59·5 | 10·4 | 8·7 |
| 9·5 | 33 | 2·5 | 43·8 | |
| 9·7 | | 19·5 | 45·1 | |
| 10·0 | | 26·0 | 40·3 | |
| 10·0 | | 31·5 | 36·3 | |
| 9·3 | | 47·0 | 4·9 | |
| 9·5 | | 52·0 | 43·4 | 9·5 |
| 9·2 | 34 | 12·0 | 12·1 | |
| 9·7 | | 16·0 | 58·8 | |
| 9·8 | | 30·0 | 55·9 | |
| 9·8 | | 42·0 | 52·9 | |
| 9·8 | | 45·0 | 56·8 | |
| 9·9 | | 51·7 | 59·6 | |
| 9·4 | | 52·0 | 13·1 | |
| 9·9 | 35 | 1·5 | 50·0 | |
| 9·8 | | 3·5 | 10·1 | |
| 10·0 | | 11·5 | 16·6 | |
| 9·5 | | 14·5 | 44·7 | |
| 10·0 | | 17·5 | 38·8 | |
| 10·0 | | 19·5 | 37·4 | |
| 7·6 | | 21·5 | 46·2 | 7·7 G |
| 9·6 | | 28·0 | 49·6 | |
| 9·9 | | 29·5 | 9·9 | |
| 9·4 | | 33·5 | 35·9 | |
| 9·1 | | 36·5 | 40·7 | 9·2 |
| 9·5 | | 40·0 | 40·8 | |
| 9·8 | | 41·0 | 57·0 | |
| 8·9 | | 58·0 | 56·1 | 9·2 *g* |
| 10·0 | | 59·0 | 55·8 | |
| 10·0 | 36 | 0·0 | 42·4 | |
| 9·8 | | 6·0 | 28·9 | |
| 9·6 | | 10·5 | 26·2 | |
| 10·0 | | 12·5 | 19·9 | |
| 9·8 | | 14·5 | 16·4 | |
| 9·5 | | 27·5 | 10·9 | |

## 1981—2040.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·2 | 36 | 55·5 | 22·9 | |
| 9·8 | 37 | 2·0 | 38·9 | |
| 9·8 | | 6·5 | 0·4 | |
| 9·3 | | 12·0 | 43·9 | |
| 9·3 | | 25·0 | 25·3 | |
| 9·4 | | 29·0 | 56·6 | |
| 9·8 | | 37·5 | 58·8 | |
| 9·4 | | 38·0 | 21·2 | |
| 10·0 | | 40·5 | 59·7 | |
| 9·0 | | 43·2 | 57·7 | 9·5 *g* |
| 9·6 | | 57·5 | 42·9 | |
| 9·9 | 38 | 9·5 | 41·8 | |
| 9·0 | | 14·5 | 40·6 | |
| 9·2 | | 29·5 | 31·8 | |
| 10·0 | | 29·5 | 34·9 | |
| 10·0 | | 29·5 | 10·1 | |
| 10·0 | | 35·5 | 48·7 | |
| 9·6 | | 48·5 | 41·9 | |
| 9·4 | | 50·7 | 58·0 | |
| 10·0 | | 59·0 | 54·0 | |
| 9·1 | 39 | 6·5 | 15·5 | |
| 10·0 | | 26·5 | 29·9 | |
| 10·0 | | 31·5 | 38·9 | |
| 9·3 | | 33·5 | 6·8 | |
| 9·4 | | 42·5 | 23·6 | 9·5 |
| 8·9 | | 46·5 | 33·1 | 8·8 |
| 10·0 | | 48·0 | 6·8 | |
| 10·0 | | 59·0 | 59·0 | |
| 10·0 | 40 | 25·5 | 42·2 | |
| 10·0 | | 31·0 | 4·0 | |
| 10·0 | | 33·0 | 22·6 | |
| 9·1 | | 35·0 | 22·9 | 9·0 |
| 9·2 | | 36·5 | 22·0 | |
| 9·6 | | 40·5 | 39·0 | |
| 10·0 | | 57·5 | 31·3 | |
| 9·6 | | 58·0 | 31·8 | |
| 10·0 | 41 | 0·5 | 19·6 | |
| 9·7 | | 1·5 | 18·5 | |
| 10·0 | | 15·5 | 2·9 | |
| 10·0 | | 15·5 | 43·3 | |
| 9·2 | | 26·5 | 44·1 | |
| 10·0 | | 39·5 | 1·9 | |
| 9·5 | | 46·0 | 27·9 | |
| 9·4 | | 49·0 | 11·4 | |
| 9·2 | | 52·0 | 54·3 | 8·2 G*g* |
| 9·4 | 42 | 3·2 | 58·1 | |
| 8·5 | | 15·5 | 50·7 | 9·1 |
| 9·9 | | 18·0 | 11·9 | |
| 9·5 | | 20·0 | 0·8 | |
| 8·8 | | 34·0 | 25·0 | |
| 9·5 | | 42·0 | 8·8 | |
| 9·8 | | 49·0 | 44·8 | |
| 9·2 | | 54·0 | 29·9 | |
| 9·9 | | 55·0 | 37·7 | |
| 8·6 | 43 | 7·5 | 44·9 | 8·5 |
| 9·0 | | 8·5 | 6·2 | |
| 10·0 | | 28·5 | 49·1 | |
| 9·8 | | 38·0 | 32·0 | |
| 9·9 | | 49·0 | 47·7 | |
| 9·4 | | 50·0 | 19·1 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |
| | 20 | 83 | 8·3 |
| | 30 | 86 | 8·3 |
| | 40 | 90 | 8·2 |
| | 50 | 93 | 8·2 |



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| h | m | 25 prec. a + s | δ − ′ |
|---|---|---|---|
| 12 | 40 | 90 | 8·2 |
| | 50 | 93 | 8·2 |
| 13 | 0 | 96 | 8·1 |
| | 10 | 99 | 8·0 |
| | 20 | 102 | 7·9 |

## 2041—2100.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8·5 | 43 | 51·5 | 17·4 | 9·0 |
| 9·2 | | 54·0 | 2·1 | |
| 9·2 | | 55·0 | 36·3 | 9·0 |
| 9·4 | 44 | 4·0 | 31·9 | |
| 9·0 | | 4·5 | 10·0 | 9·0 |
| 10·0 | | 15·0 | 57·6 | |
| 9·2 | | 18·0 | 21·2 | 9·5 |
| 9·5 | | 41·0 | 30·9 | |
| 9·0 | | 44·5 | 40·0 | 8·5 |
| 10·0 | | 50·0 | 14·8 | |
| 9·9 | | 54·0 | 2·5 | |
| 9·4 | | 55·0 | 8·3 | |
| 9·9 | 45 | 0·0 | 28·7 | |
| 10·0 | | 2·0 | 2·3 | |
| 8·9 | | 4·5 | 29·5 | |
| 9·2 | | 5·5 | 25·4 | |
| 10·0 | | 9·0 | 12·0 | |
| 10·0 | | 21·0 | 12·1 | |
| 9·8 | 46 | 6·0 | 34·2 | |
| 9·0 | | 16·0 | 59·9 | g |
| 10·0 | | 36·5 | 49·1 | |
| 9·6 | | 40·0 | 48·1 | |
| 10·0 | | 46·0 | 27·9 | |
| 10·0 | | 59·5 | 29·6 | |
| 10·0 | | 59·5 | 21·9 | |
| 9·2 | 47 | 1·5 | 16·4 | |
| 9·3 | | 4·0 | 46·0 | |
| 9·2 | | 7·0 | 54·6 | |
| 9·0 | | 9·5 | 9·0 | 9·0 |
| 9·2 | | 13·7 | 59·5 | |
| 9·0 | | 15·5 | 20·7 | |
| 9·2 | | 19·0 | 55·1 | |
| 9·2 | | 21·0 | 41·6 | 8·5 |
| 10·0 | | 22·0 | 16·3 | |
| 10·0 | | 54·5 | 41·9 | |
| 10·0 | | 55·5 | 41·0 | |
| 9·4 | 48 | 26·0 | 7·3 | 9·0 |
| 9·4 | | 28·5 | 55·7 | |
| 9·2 | | 34·0 | 52·8 | |
| 9·6 | | 34·5 | 23·3 | |
| 9·9 | | 36·5 | 5·9 | |
| 8·7 | | 37·2 | 0·1 | 9·5 |
| 9·5 | 49 | 3·5 | 47·7 | |
| 9·9 | | 22·5 | 59·0 | |
| 9·7 | | 25·0 | 49·2 | |
| 9·9 | | 31·0 | 8·1 | |
| 9·7 | | 38·5 | 29·5 | |
| 10·0 | | 54·3 | 57·9 | |
| 10·0 | 50 | 0·0 | 28·4 | |
| 9·6 | | 9·0 | 11·1 | |
| 10·0 | | 13·0 | 32·0 | |
| 9·2 | | 26·5 | 52·1 | |
| 10·0 | | 31·0 | 10·2 | |
| 9·8 | | 48·0 | 38·2 | |
| 9·4 | | 59·0 | 36·9 | |
| 9·5 | 51 | 0·0 | 4·7 | |
| 9·8 | | 1·0 | 5·6 | |
| 10·0 | | 8·5 | 55·8 | |
| 10·0 | | 17·0 | 51·0 | |
| 9·0 | | 22·0 | 28·0 | 9·5 |

## 2101—2160.

| mag. | 12h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 51 | 50·0 | 52·8 | |
| 10·0 | | 54·0 | 59·0 | |
| 9·8 | | 54·0 | 46·5 | |
| 9·2 | 52 | 0·5 | 19·2 | |
| 9·3 | | 15·5 | 39·0 | |
| 9·5 | | 17·0 | 56·8 | |
| 10·0 | | 20·0 | 10·1 | |
| 10·0 | | 30·0 | 28·1 | |
| 10·0 | | 51·5 | 48·2 | |
| 8·8 | | 56·5 | 48·4 | 8·5 G |
| 8·8 | 53 | 3·0 | 10·6 | |
| 10·0 | | 13·0 | 3·3 | |
| 10·0 | | 20·0 | 13·7 | |
| 10·0 | | 32·5 | 29·0 | |
| 10·0 | | 39·5 | 7·8 | |
| 9·4 | 54 | 1·5 | 12·0 | |
| 8·8 | | 11·0 | 27·8 | 9·5 G |
| 10·0 | | 18·0 | 14·1 | |
| 9·2 | | 23·5 | 50·4 | |
| 10·0 | | 26·0 | 50·8 | |
| 9·1 | | 26·5 | 34·0 | 8·8 G |
| 9·0 | | 28·5 | 23·0 | |
| 9·2 | | 29·0 | 43·0 | |
| 9·2 | | 38·7 | 1·7 | |
| 9·5 | | 52·0 | 48·0 | |
| 9·3 | | 56·5 | 7·6 | |
| 8·7 | 55 | 1·0 | 25·2 | 9·0 : |
| 9·6 | | 2·0 | 7·9 | |
| 10·0 | | 16·5 | 27·8 | |
| 10·0 | | 19·5 | 34·0 | |
| 9·4 | | 25·5 | 24·2 | |
| 10·0 | | 27·5 | 50·0 | |
| 10·0 | | 32·2 | 1·3 | |
| 10·0 | | 45·5 | 23·1 | |
| 9·9 | | 51·5 | 48·0 | |
| 9·8 | 56 | 7·0 | 24·3 | |
| 10·0 | | 19·0 | 3·3 | |
| 9·3 | | 20·0 | 9·9 | |
| 9·2 | | 23·6 | 3·4 | |
| 8·8 | | 26·5 | 33·2 | 9·0 |
| 8·7 | | 32·0 | 15·0 | 8·8 |
| 9·5 | 57 | 10·0 | 4·9 | |
| 10·0 | | 15·5 | 45·1 | |
| 9·6 | | 41·5 | 32·9 | |
| 9·6 | | 42·0 | 3·3 | |
| 9·1 | | 44·0 | 40·8 | 9·0 |
| 9·8 | | 53·0 | 57·1 | |
| 9·9 | | 54·5 | 25·0 | |
| 9·4 | 58 | 26·5 | 39·5 | |
| 9·6 | | 40·5 | 47·1 | |
| 9·4 | 59 | 6·5 | 46·0 | |
| 9·8 | | 7·5 | 53·0 | |
| 10·0 | | 27·0 | 14·2 | |
| 10·0 | | 29·3 | 6·9 | |
| 9·9 | | 28·5 | 5·2 | |
| 8·1 | | 32·5 | 12·6 | 7·5 G |
| 9·9 | | 32·5 | 7·0 | |
| 9·9 | | 35·5 | 31·9 | |
| 9·9 | | 39·5 | 40·5 | |
| 9·8 | | 49·0 | 26·1 | : |

## 2161—2220.

| mag. | 12h.–13h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 59 | 55·0 | 29·5 | |
| 9·7 | | 59·0 | 57·8 | |
| 9·2 | 0 | 8·0 | 20·6 | |
| 9·9 | | 8·5 | 16·3 | |
| 9·8 | | 12·5 | 25·9 | |
| 9·8 | | 16·5 | 51·0 | |
| 9·6 | | 17·5 | 2·1 | |
| 9·5 | | 17·7 | 16·9 | |
| 9·7 | | 21·3 | 52·8 | |
| 9·8 | | 28·5 | 51·4 | |
| 9·9 | | 30·5 | 45·0 | |
| 9·9 | | 43·5 | 30·2 | |
| 9·2 | | 47·7 | 30·7 | 9·5 |
| 9·1 | | 56·0 | 20·2 | 9·5 |
| 9·5 | | 58·0 | 42·1 | |
| 9·6 | | 58·5 | 16·1 | |
| 9·9 | | 58·5 | 54·9 | |
| 9·8 | 1 | 2·5 | 28·8 | |
| 9·9 | | 17·2 | 12·5 | |
| 9·4 | | 19·5 | 32·8 | |
| 8·7 | | 25·5 | 52·5 | 8·2 G |
| 9·9 | | 25·5 | 12·2 | |
| 9·7 | | 39·5 | 6·9 | |
| 9·9 | | 52·5 | 3·4 | |
| 9·6 | 2 | 7·0 | 0·9 | |
| 9·8 | | 24·2 | 44·8 | |
| 9·0 | | 31·5 | 1·0 | |
| 9·3 | | 41·5 | 20·1 | |
| 9·9 | | 56·5 | 2·8 | |
| 9·5 | | 59·5 | 32·0 | |
| 9·6 | 3 | 7·0 | 3·6 | |
| 9·9 | | 11·2 | 37·2 | |
| 9·9 | | 24·5 | 1·3 | |
| 9·9 | | 44·0 | 1·9 | |
| 9·8 | | 57·2 | 54·9 | |
| 9·8 | 4 | 5·0 | 19·5 | |
| 9·3 | | 6·5 | 40·1 | |
| 9·5 | | 10·0 | 18·2 | |
| 9·8 | | 14·2 | 29·7 | |
| 9·8 | | 31·2 | 22·9 | |
| 6·6 | | 32·5 | 33·6 | 6·5 GSr |
| 9·5 | | 43·5 | 13·1 | |
| 9·9 | | 46·8 | 1·3 | |
| 9·9 | 5 | 18·0 | 34·0 | |
| 9·0 | | 22·0 | 51·3 | 9·0 |
| 9·9 | | 23·0 | 6·1 | |
| 9·0 | | 26·0 | 24·0 | 9·0 |
| 9·3 | | 26·0 | 56·0 | g |
| 9·9 | | 26·5 | 3·8 | |
| 9·6 | | 34·0 | 6·1 | |
| 8·9 | | 40·0 | 17·5 | 9·0 |
| 9·8 | | 48·5 | 15·2 | |
| 9·9 | | 49·5 | 15·8 | |
| 9·7 | | 54·2 | 23·6 | |
| 9·9 | | 56·5 | 20·9 | |
| 9·7 | 6 | 2·5 | 22·2 | |
| 9·4 | | 9·0 | 36·6 | |
| 9·6 | | 10·0 | 1·4 | |
| 9·3 | | 19·5 | 1·3 | |
| 9·9 | | 20·0 | 45·0 | |

## 2221—2280.

| mag. | 13h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·3 | 6 | 29·3 | 59·1 | |
| 9·6 | | 40·0 | 53·2 | |
| 9·8 | | 47·0 | 52·6 | |
| 9·8 | | 50·8 | 58·7 | |
| 9·8 | | 53·0 | 56·9 | |
| 9·6 | 7 | 6·0 | 21·4 | |
| 9·8 | | 9·5 | 21·0 | |
| 9·3 | | 35·5 | 29·8 | |
| 9·5 | | 36·5 | 48·8 | 9·0 |
| 9·2 | | 39·5 | 7·1 | 9·5 |
| 9·5 | | 41·0 | 56·1 | |
| 9·7 | | 42·0 | 52·0 | |
| 9·4 | 8 | 1·0 | 31·1 | |
| 9·5 | | 11·5 | 5·1 | |
| 9·7 | | 12·5 | 17·9 | |
| 9·7 | | 19·0 | 34·0 | |
| 9·3 | | 26·5 | 27·9 | |
| 9·9 | | 59·5 | 7·9 | |
| 9·8 | 9 | 12·0 | 52·8 | |
| 9·8 | | 13·0 | 42·9 | |
| 9·3 | | 15·0 | 40·9 | |
| 9·2 | | 39·5 | 46·7 | |
| 9·9 | | 40·0 | 7·4 | |
| 9·7 | | 46·5 | 18·5 | |
| 9·5 | | 52·5 | 33·8 | |
| 9·9 | | 55·0 | 46·4 | |
| 9·9 | 10 | 10·0 | 23·7 | |
| 9·4 | | 12·2 | 1·8 | |
| 9·4 | | 14·5 | 5·6 | |
| 9·7 | | 41·0 | 16·6 | |
| 9·7 | | 42·0 | 9·9 | |
| 9·7 | | 52·0 | 38·0 | |
| 9·2 | | 55·0 | 5·6 | 9·5 |
| 9·8 | | 59·0 | 43·2 | |
| 9·2 | 11 | 14·5 | 51·7 | 9·5 |
| 9·9 | | 21·0 | 23·6 | |
| 9·9 | | 21·0 | 19·5 | |
| 8·8 | | 22·0 | 15·5 | 9·5 |
| 9·9 | | 30·0 | 1·1 | |
| 9·9 | | 33·0 | 14·2 | |
| 9·5 | | 36·5 | 20·7 | |
| 9·9 | | 50·0 | 27·6 | |
| 9·5 | | 53·0 | 11·9 | |
| 9·5 | | 56·5 | 3·0 | |
| 9·9 | | 57·0 | 22·9 | |
| 9·6 | 12 | 2·5 | 7·5 | |
| 9·0 | | 2·5 | 52·3 | 8·5 G |
| 9·0 | | 11·0 | 26·7 | |
| 9·9 | | 18·5 | 5·0 | |
| 9·0 | | 25·0 | 54·8 | 9·0 g |
| 9·5 | | 26·5 | 41·6 | |
| 9·9 | | 28·0 | 41·1 | |
| 9·5 | | 40·0 | 59·9 | |
| 9·9 | | 46·5 | 27·9 | |
| 9·5 | | 47·0 | 28·1 | |
| 9·5 | | 56·0 | 46·2 | |
| 9·9 | | 59·0 | 19·5 | |
| 9·2 | 13 | 8·0 | 50·0 | 8·8 G |
| 8·4 | | 12·0 | 22·5 | |
| 9·2 | | 15·0 | 3·5 | |

## 2281—2340.

| mag. | 13ʰ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 13 | 18·5 | 21·0 | |
| 9·9 | | 19·0 | 2·0 | |
| 9·1 | | 24·0 | 22·5 | 9·5 |
| 9·9 | | 25·0 | 36·9 | |
| 8·8 | | 27·0 | 16·2 | 9·0 |
| 9·8 | | 28·0 | 17·5 | |
| 9·9 | | 35·0 | 55·2 | |
| 9·8 | | 35·5 | 42·8 | |
| 9·8 | | 39·2 | 59·3 | |
| 9·3 | | 39·5 | 56·5 | |
| 9·4 | | 41·5 | 30·2 | |
| 9·9 | | 45·5 | 56·4 | |
| 9·7 | | 52·0 | 6·9 | |
| 9·3 | | 52·5 | 56·7 | |
| 9·6 | | 56·5 | 9·1 | |
| 9·8 | | 57·5 | 9·2 | |
| 9·6 | | 59·0 | 9·6 | |
| 9·3 | | 59·0 | 0·4 | |
| 9·5 | 14 | 22·5 | 32·8 | |
| 9·9 | | 26·0 | 28·3 | |
| 9·5 | | 39·0 | 36·0 | |
| 9·4 | | 41·0 | 35·7 | |
| 9·7 | | 47·0 | 27·2 | |
| 9·9 | | 53·5 | 27·4 | |
| 9·9 | 15 | 2·5 | 32·8 | |
| 9·6 | | 11·5 | 37·1 | |
| 9·6 | | 12·5 | 36·9 | |
| 9·9 | | 36·0 | 31·8 | |
| 9·7 | | 38·5 | 24·1 | |
| 9·9 | | 52·0 | 53·2 | |
| 9·9 | | 57·5 | 36·1 | |
| 9·9 | 16 | 9·5 | 39·9 | |
| 9·9 | | 10·0 | 42·0 | |
| 9·1 | | 18·5 | 17·1 | |
| 9·5 | | 26·0 | 14·6 | |
| 9·9 | | 33·0 | 25·9 | |
| 8·9 | | 41·0 | 15·3 | 9·5 |
| 9·0 | | 42·0 | 48·0 | |
| 9·7 | | 44·0 | 25·3 | |
| 9·6 | | 58·0 | 22·9 | |
| 9·3 | 17 | 0·0 | 38·0 | |
| 9·9 | | 17·5 | 56·6 | |
| 9·9 | | 23·0 | 34·0 | |
| 9·5 | | 29·0 | 15·9 | |
| 8·7 | | 41·0 | 55·2 | 9·0 *g* |
| 9·9 | | 49·0 | 15·1 | |
| 9·8 | | 49·0 | 22·6 | |
| 9·9 | | 49·5 | 54·2 | |
| 8·4 | 18 | 2·0 | 11·4 | 8·5 |
| 9·8 | | 20·2 | 2·4 | |
| 9·2 | | 31·0 | 4·7 | 9·0 |
| 9·9 | | 31·5 | 34·5 | |
| 9·9 | 19 | 11·0 | 43·7 | |
| 9·9 | | 14·5 | 40·8 | |
| 8·9 | | 30·0 | 37·7 | |
| 9·0 | | 32·0 | 42·0 | |
| 9·2 | | 51·0 | 28·4 | |
| 9·2 | 20 | 3·5 | 41·0 | |
| 9·5 | | 3·5 | 23·1 | |
| 9·7 | | 5·5 | 33·4 | |

## 2341—2400.

| mag. | 13ʰ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·6 | 20 | 15·0 | 57·1 | |
| 9·9 | | 26·0 | 1·5 | |
| 8·8 | | 31·0 | 25·4 | 8·8 |
| 9·1 | | 34·0 | 25·8 | 9·0 |
| 9·9 | | 35·5 | 39·6 | |
| 9·5 | 21 | 18·0 | 39·5 | |
| 9·5 | | 30·0 | 44·3 | |
| 9·7 | | 37·0 | 55·2 | |
| 9·9 | | 41·0 | 5·6 | |
| 9·9 | | 48·5 | 42·9 | |
| 9·4 | | 51·0 | 39·0 | |
| 9·9 | 22 | 1·5 | 14·0 | |
| 9·9 | | 26·5 | 21·0 | |
| 9·9 | | 42·5 | 12·8 | |
| 9·1 | | 44·5 | 3·4 | |
| 9·0 | | 45·0 | 36·2 | |
| 9·0 | | 46·5 | 35·5 | |
| 8·8 | | 47·0 | 55·9 | 9·0 *g* |
| 9·9 | 23 | 29·2 | 2·9 | |
| 9·6 | | 37·0 | 27·7 | |
| 9·9 | | 41·0 | 44·0 | |
| 9·4 | | 42·5 | 29·0 | |
| 9·3 | | 44·5 | 25·1 | |
| 9·6 | 24 | 0·0 | 53·6 | |
| 9·5 | | 5·5 | 35·2 | 9·5 |
| 9·4 | | 10·5 | 44·1 | |
| 9·5 | | 11·0 | 22·1 | |
| 9·9 | | 56·0 | 8·0 | |
| 8·6 | | 59·0 | 43·3 | 9·5 |
| 9·8 | 25 | 0·5 | 6·4 | |
| 7·1 | | 4·5 | 26·0 | 7·5 GS |
| 9·7 | | 11·0 | 4·8 | |
| 9·9 | | 14·0 | 56·0 | |
| 9·9 | | 29·0 | 15·1 | |
| 8·9 | | 30·5 | 0·2 | |
| 9·5 | | 32·0 | 19·6 | |
| 9·5 | | 42·0 | 25·3 | |
| 9·6 | 26 | 10·0 | 12·1 | |
| 9·7 | | 12·0 | 54·3 | |
| 9·5 | | 22·0 | 27·4 | |
| 9·3 | | 27·0 | 24·1 | 9·0 |
| 9·5 | | 34·0 | 50·8 | 9·5 G |
| 9·7 | | 37·0 | 9·7 | |
| 9·1 | | 37·5 | 19·8 | |
| 9·9 | | 46·0 | 31·0 | |
| 9·6 | | 50·5 | 46·4 | |
| 9·9 | 27 | 20·0 | 34·6 | |
| 9·7 | | 29·5 | 56·8 | |
| 9·9 | 28 | 9·5 | 48·1 | |
| 9·3 | | 17·0 | 54·8 | |
| 9·9 | | 22·5 | 9·0 | |
| 9·3 | | 24·5 | 8·3 | 9·5 |
| 9·9 | | 29·0 | 22·1 | |
| 9·9 | | 37·0 | 46·5 | |
| 9·8 | | 45·5 | 30·0 | |
| 9·9 | 29 | 0·0 | 3·0 | |
| 9·2 | | 1·0 | 37·7 | |
| 9·8 | | 2·5 | 25·9 | |
| 8·5 | | 6·0 | 35·4 | 8·5 |
| 9·4 | | 23·5 | 59·1 | |

## 2401—2460.

| mag. | 13ʰ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·2 | 29 | 44·0 | 40·1 | 8·5 |
| 9·7 | | 47·0 | 19·2 | |
| 9·7 | | 59·5 | 7·1 | |
| 9·8 | 30 | 3·5 | 52·9 | |
| 9·4 | | 9·0 | 9·1 | |
| 9·3 | | 17·0 | 7·5 | |
| 9·2 | | 29·2 | 59·5 | |
| 9·9 | | 36·5 | 17·0 | |
| 9·0 | | 43·5 | 58·1 | 9·5 *g* |
| 9·2 | 31 | 2·0 | 19·1 | |
| 9·5 | | 8·0 | 34·1 | |
| 9·5 | | 8·5 | 1·2 | |
| 9·7 | | 11·0 | 51·1 | |
| 9·7 | | 14·5 | 50·4 | |
| 9·8 | | 15·0 | 3·2 | |
| 9·5 | | 39·0 | 31·4 | |
| 9·9 | | 46·0 | 47·7 | |
| 9·5 | | 48·5 | 23·1 | |
| 8·9 | | 51·0 | 54·0 | |
| 8·6 | | 52·7 | 58·9 | 7·5 G*g* |
| 9·7 | 32 | 7·0 | 46·6 | |
| 8·7 | | 11·0 | 41·2 | 9·0 |
| 9·7 | | 27·0 | 27·9 | |
| 9·3 | | 29·5 | 45·0 | 9·0 |
| 9·5 | | 30·5 | 36·0 | |
| 9·3 | | 38·0 | 19·3 | 9·0 |
| 9·7 | | 57·5 | 26·2 | |
| 9·7 | 33 | 8·5 | 22·4 | |
| 9·9 | | 27·5 | 13·6 | |
| 9·9 | | 32·0 | 45·1 | |
| 9·5 | | 32·5 | 23·7 | |
| 9·8 | | 33·0 | 47·2 | |
| 9·3 | | 37·0 | 39·0 | |
| 9·5 | | 48·3 | 2·6 | |
| 8·3 | | 49·0 | 56·8 | 8·5 *g* |
| 9·9 | | 57·0 | 18·0 | |
| 9·0 | 34 | 14·0 | 29·9 | |
| 9·0 | | 17·5 | 54·1 | 9·5 |
| 9·0 | | 31·5 | 51·4 | 9·0 |
| 9·9 | | 32·5 | 16·1 | |
| 9·5 | | 32·5 | 30·8 | |
| 9·7 | | 32·5 | 35·2 | |
| 9·4 | | 35·5 | 10·2 | |
| 9·6 | 35 | 27·0 | 6·9 | |
| 9·7 | | 29·0 | 9·7 | |
| 9·3 | | 42·5 | 7·0 | 9·0 |
| 9·4 | | 54·5 | 0·7 | |
| 9·9 | | 56·5 | 59·0 | |
| 9·9 | 36 | 0·0 | 1·0 | |
| 9·7 | | 6·0 | 42·0 | |
| 9·8 | 37 | 0·0 | 17·4 | |
| 9·7 | | 8·0 | 18·3 | |
| 9·6 | | 18·5 | 7·7 | |
| 9·2 | | 27·0 | 13·1 | 9·0 |
| 9·7 | | 43·5 | 40·8 | |
| 9·9 | 38 | 2·5 | 58·9 | |
| 9·6 | | 35·0 | 36·7 | |
| 9·8 | | 37·5 | 9·4 | |
| 8·4 | | 57·0 | 12·8 | 8·5 |
| 10·0 | 39 | 0·5 | 52·2 | |

## 2461—2520.

| mag. | 13ʰ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 39 | 23·2 | 17·6 | |
| 9·6 | | 39·0 | 39·7 | |
| 9·9 | | 43·0 | 39·9 | |
| 9·5 | 40 | 2·5 | 24·1 | |
| 9·9 | | 2·7 | 1·4 | |
| 9·2 | | 19·7 | 19·1 | |
| 8·6 | | 21·7 | 46·7 | 9·0 |
| 9·2 | | 31·2 | 54·6 | |
| 9·8 | | 40·0 | 51·6 | |
| 9·2 | | 40·5 | 7·2 | |
| 10·0 | | 45·0 | 21·4 | |
| 8·8 | | 46·0 | 35·5 | |
| 10·0 | | 47·0 | 21·7 | |
| 9·8 | 41 | 2·0 | 39·6 | |
| 9·2 | | 11·0 | 33·9 | |
| 9·4 | | 14·5 | 54·3 | |
| 10·0 | | 18·0 | 1·4 | |
| 8·8 | | 18·0 | 35·5 | |
| 9·4 | | 28·0 | 49·3 | |
| 9·2 | | 34·0 | 33·8 | |
| 9·1 | | 43·0 | 47·2 | |
| 9·4 | | 45·5 | 59·9 | |
| 10·0 | | 46·5 | 12·9 | |
| 9·8 | | 47·0 | 48·6 | |
| 9·1 | | 54·0 | 54·8 | |
| 9·8 | | 58·0 | 35·6 | |
| 8·9 | 42 | 15·0 | 16·1 | 8·8 |
| 8·8 | | 26·5 | 9·1 | 8·0 G |
| 9·4 | | 28·5 | 53·5 | |
| 9·6 | | 38·5 | 47·5 | |
| 9·9 | | 44·0 | 15·1 | |
| 9·5 | | 55·5 | 18·8 | |
| 9·4 | | 56·0 | 41·1 | |
| 9·6 | | 58·0 | 42·7 | |
| 8·6 | 43 | 0·5 | 23·7 | 8·0 |
| 8·7 | | 1·0 | 47·0 | 9·0 |
| 9·6 | | 12·0 | 42·0 | |
| 9·0 | | 20·5 | 31·6 | 9·0 |
| 9·4 | | 28·5 | 27·9 | |
| 9·4 | | 32·0 | 45·6 | |
| 10·0 | | 40·5 | 53·2 | |
| 9·7 | | 40·5 | 56·6 | |
| 7·3 | 44 | 1·0 | 53·6 | 7·5 GS*g* |
| 9·4 | | 3·0 | 20·0 | |
| 10·0 | | 4·0 | 29·6 | |
| 10·0 | | 6·0 | 44·6 | |
| 9·8 | | 9·5 | 2·4 | |
| 9·7 | | 32·0 | 46·5 | |
| 9·2 | | 32·0 | 28·7 | |
| 9·4 | | 33·0 | 1·1 | |
| 9·4 | | 35·5 | 7·1 | |
| 9·4 | | 36·5 | 0·1 | |
| 10·0 | | 39·5 | 53·8 | |
| 9·8 | | 40·0 | 31·0 | |
| 9·8 | | 40·5 | 11·0 | |
| 9·2 | | 59·5 | 34·2 | |
| 9·8 | 45 | 3·0 | 14·6 | |
| 9·4 | | 4·5 | 34·3 | |
| 8·8 | | 20·5 | 3·1 | 8·8 |
| 9·9 | | 30·0 | 19·9 | |

| h m | ·25 prec. a + s | δ − ′ |
|---|---|---|
| 13 10 | 99 | 8·0 |
| 20 | 102 | 7·9 |
| 30 | 105 | 7·7 |
| 40 | 108 | 7·6 |
| 50 | 111 | 7·4 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | + s | − ′ |
| 13 | 40 | 108 | 7·6 |
| | 50 | 111 | 7·4 |
| 14 | 0 | 113 | 7·2 |
| | 10 | 116 | 7·0 |
| | 20 | 119 | 6·8 |
| | 30 | 121 | 6·6 |

### 2521—2580.

| mag. | 13h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 45 | 36·5 | 22·9 | |
| 9·1 | 46 | 3·5 | 32·5 | |
| 9·4 | | 17·0 | 14·6 | |
| 9·2 | | 19·0 | 47·3 | |
| 9·7 | | 25·0 | 38·5 | |
| 8·4 | | 31·5 | 46·0 | 7·5 GS |
| 9·2 | | 31·5 | 19·0 | |
| 10·0 | | 32·0 | 20·0 | |
| 8·8 | | 32·5 | 43·3 | 9·0 |
| 9·9 | | 34·5 | 24·1 | |
| 9·5 | | 41·0 | 43·0 | |
| 10·0 | | 41·5 | 18·2 | |
| 9·8 | 47 | 5·0 | 15·1 | |
| 9·0 | | 10·5 | 53·6 | |
| 9·5 | | 28·0 | 55·4 | |
| 9·2 | | 39·5 | 15·7 | 9·5 |
| 10·0 | | 48·5 | 5·1 | |
| 9·2 | | 54·5 | 39·6 | |
| 10·0 | | 56·0 | 49·8 | |
| 10·0 | 48 | 9·5 | 32·9 | |
| 10·0 | | 18·5 | 2·0 | |
| 9·4 | | 18·5 | 47·1 | |
| 9·1 | | 20·5 | 11·9 | 9·5 |
| 10·0 | | 29·5 | 30·6 | |
| 9·5 | | 33·5 | 15·6 | |
| 9·9 | | 50·0 | 6·4 | |
| 9·6 | | 50·0 | 44·2 | |
| 9·9 | | 58·0 | 21·3 | |
| 9·4 | 49 | 0·5 | 7·1 | |
| 9·8 | | 1·5 | 7·4 | |
| 8·1 | | 2·3 | 1·8 | 9·0 |
| 9·6 | | 2·5 | 48·0 | |
| 8·0 | | 13·5 | 11·3 | 7·0 GS |
| 8·7 | | 25·5 | 42·0 | 9·5 |
| 9·6 | | 30·0 | 40·3 | |
| 9·4 | | 39·5 | 28·6 | |
| 9·8 | | 50·5 | 16·7 | |
| 9·8 | | 52·0 | 12·7 | |
| 10·0 | | 52·0 | 36·6 | |
| 10·0 | | 52·5 | 47·8 | |
| 9·8 | | 55·0 | 15·3 | |
| 8·6 | | 57·0 | 9·6 | 9·0 G |
| 9·5 | 50 | 7·5 | 3·4 | |
| 9·4 | | 18·5 | 16·6 | |
| 9·4 | | 19·0 | 38·7 | |
| 10·0 | | 19·0 | 8·8 | |
| 9·2 | | 31·5 | 35·1 | |
| 9·4 | | 34·0 | 47·7 | |
| 9·5 | 51 | 18·0 | 26·2 | |
| 9·7 | | 21·0 | 11·6 | |
| 10·0 | | 21·5 | 43·0 | |
| 9·7 | | 27·0 | 11·1 | |
| 6·7 | | 28·0 | 39·5 | 6·5 GS |
| 10·0 | | 30·0 | 41·9 | |
| 9·3 | | 43·5 | 47·2 | |
| 10·0 | | 53·0 | 4·9 | |
| 10·0 | 52 | 5·5 | 21·5 | |
| 9·1 | | 9·7 | 57·1 | |
| 9·2 | | 15·0 | 39·6 | |
| 9·4 | | 32·0 | 34·3 | |

### 2581—2640.

| mag. | 13h.—14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·6 | 52 | 35·0 | 33·9 | |
| 9·2 | | 38·0 | 59·9 | |
| 9·2 | | 42·0 | 1·6 | 9·0 |
| 9·9 | | 50·0 | 48·0 | |
| 9·8 | 53 | 3·0 | 30·0 | |
| 9·9 | | 18·7 | 59·9 | |
| 9·4 | | 25·0 | 6·9 | 9·5 |
| 8·8 | | 31·0 | 40·1 | |
| 9·5 | | 56·5 | 22·6 | |
| 9·2 | 54 | 32·5 | 9·0 | 8·8 |
| 9·4 | | 34·5 | 47·0 | |
| 10·0 | | 37·5 | 26·8 | |
| 9·9 | | 38·5 | 46·2 | |
| 9·4 | | 39·5 | 21·2 | |
| 9·5 | | 59·5 | 37·2 | |
| 10·0 | 55 | 44·5 | 43·6 | |
| 10·0 | | 48·0 | 42·0 | |
| 9·4 | 56 | 13·5 | 38·6 | |
| 9·9 | | 21·0 | 55·0 | |
| 9·0 | | 41·0 | 7·3 | |
| 10·0 | | 45·0 | 15·4 | |
| 9·4 | | 47·5 | 51·1 | |
| 9·3 | | 58·5 | 27·1 | |
| 9·2 | 57 | 23·5 | 4·0 | |
| 10·0 | | 55·0 | 33·0 | |
| 9·2 | | 57·0 | 24·0 | 8·8 |
| 9·4 | | 58·0 | 41·0 | |
| 9·9 | 58 | 3·5 | 9·9 | |
| 10·0 | | 5·5 | 50·9 | |
| 8·3 | | 7·0 | 33·1 | 8·2 |
| 9·1 | | 14·5 | 33·8 | 10·0 |
| 9·4 | | 31·5 | 40·6 | |
| 9·7 | | 34·5 | 42·0 | |
| 9·8 | 59 | 4·0 | 14·5 | |
| 9·7 | | 17·5 | 22·6 | 9·5 |
| 9·4 | | 20·5 | 22·2 | 9·5 |
| 9·2 | | 35·5 | 14·4 | |
| 8·6 | | 41·8 | 1·7 | 9·0 |
| 8·8 | | 50·5 | 13·3 | 9·5 G |
| 9·4 | | 51·0 | 58·6 | 9·5 *g* |
| 10·0 | 0 | 30·0 | 9·1 | |
| 10·0 | | 33·5 | 32·0 | |
| 9·4 | | 42·0 | 41·4 | |
| 10·0 | | 58·5 | 32·7 | |
| 9·8 | 1 | 14·5 | 32·9 | |
| 9·8 | | 25·0 | 17·4 | |
| 8·1 | | 36·0 | 48·8 | 9·0 |
| 9·9 | | 42·0 | 33·5 | |
| 9·1 | | 45·5 | 49·9 | |
| 9·8 | | 46·5 | 57·4 | |
| 9·9 | 2 | 6·5 | 2·0 | |
| 9·4 | | 17·5 | 12·9 | |
| 9·9 | | 18·0 | 11·0 | |
| 9·8 | | 26·0 | 3·0 | |
| 9·8 | | 29·0 | 47·0 | |
| 9·2 | | 31·0 | 20·2 | |
| 8·2 | | 36·0 | 21·5 | 8·5 |
| 9·6 | | 40·5 | 48·4 | |
| 8·4 | | 45·0 | 24·8 | 9·0 |
| 9·9 | | 58·0 | 32·5 | |

### 2641—2700.

| mag. | 14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·1 | 2 | 58·5 | 15·1 | 9·2 |
| 8·8 | 3 | 6·0 | 51·7 | 8·5 *g* |
| 9·0 | | 8·5 | 34·2 | |
| 9·5 | | 25·0 | 54·2 | |
| 10·0 | | 32·0 | 3·9 | |
| 9·4 | | 40·5 | 35·6 | |
| 9·8 | | 41·5 | 58·1 | |
| 9·3 | 4 | 4·0 | 39·0 | |
| 9·3 | | 26·0 | 37·6 | |
| 9·5 | | 44·5 | 1·6 | |
| 10·0 | | 50·0 | 59·0 | |
| 7·0 | | 51·0 | 33·9 | 7·5 G |
| 10·0 | | 57·5 | 3·8 | |
| 10·0 | | 58·0 | 4·1 | |
| 7·1 | 5 | 0·0 | 6·8 | 7·0 GS |
| 9·6 | | 4·0 | 42·8 | |
| 9·2 | | 9·0 | 34·9 | 9·5 |
| 9·4 | | 26·0 | 50·4 | |
| 9·6 | | 45·0 | 24·5 | |
| 10·0 | 6 | 20·5 | 8·2 | |
| 8·5 | | 34·5 | 36·4 | 9·0 |
| 9·4 | | 36·0 | 27·3 | |
| 9·2 | 7 | 10·5 | 53·4 | |
| 9·9 | | 11·5 | 5·7 | |
| 9·1 | | 19·5 | 5·4 | 9·5 |
| 9·9 | | 20·5 | 42·5 | |
| 7·9 | | 22·5 | 43·5 | 7·0 G |
| 8·8 | | 48·0 | 53·9 | 9·5 *g* |
| 9·9 | 8 | 8·5 | 10·7 | |
| 9·2 | | 11·5 | 0·7 | 9·5 |
| 9·6 | | 16·0 | 34·2 | |
| 8·6 | | 40·5 | 2·6 | 9·0 |
| 9·8 | | 45·5 | 31·0 | |
| 9·5 | | 48·5 | 39·0 | |
| 9·9 | | 55·0 | 3·6 | 10·0 |
| 9·8 | 9 | 8·0 | 45·3 | |
| 9·8 | | 10·0 | 44·6 | |
| 9·9 | | 15·5 | 21·8 | |
| 9·8 | 10 | 24·0 | 29·5 | |
| 10·0 | | 32·0 | 27·2 | |
| 8·8 | | 39·0 | 32·5 | |
| 10·0 | | 40·5 | 57·0 | |
| 8·4 | | 52·0 | 44·6 | 9·5 |
| 9·2 | | 55·5 | 40·2 | |
| 9·8 | 11 | 14·5 | 17·0 | |
| 8·3 | | 21·0 | 14·9 | 8·5 |
| 9·9 | | 32·5 | 22·4 | |
| 9·9 | | 57·5 | 48·0 | |
| 9·6 | | 59·0 | 31·2 | |
| 9·4 | 12 | 4·0 | 32·5 | 9·0 |
| 9·4 | | 7·5 | 9·8 | 9·5 |
| 9·9 | | 17·5 | 17·0 | |
| 10·0 | | 24·0 | 16·3 | |
| 9·9 | | 25·0 | 10·5 | |
| 8·7 | | 27·0 | 0·8 | |
| 8·4 | | 31·5 | 45·0 | |
| 9·5 | | 39·0 | 54·3 | |
| 10·0 | | 42·8 | 32·0 | |
| 9·6 | | 58·5 | 20·0 | |
| 10·0 | | 59·0 | 45·0 | |

### 2701—2760.

| mag. | 14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·0 | 13 | 20·0 | 22·2 | |
| 9·2 | | 52·0 | 27·6 | 9·5 |
| 9·7 | 14 | 6·5 | 58·1 | |
| 9·9 | | 11·8 | 4·0 | |
| 9·6 | | 16·0 | 45·5 | |
| 10·0 | | 17·8 | 15·0 | |
| 10·0 | | 18·8 | 27·9 | |
| 9·9 | | 26·0 | 9·0 | |
| 8·8 | | 49·0 | 22·8 | |
| 10·0 | 15 | 2·0 | 26·9 | |
| 9·8 | | 18·8 | 18·2 | |
| 9·4 | | 21·5 | 35·9 | |
| 9·6 | | 30·5 | 33·6 | |
| 9·8 | | 30·8 | 52·6 | |
| 9·1 | | 33·5 | 22·9 | |
| 9·9 | | 40·8 | 28·8 | |
| 8·8 | | 41·0 | 7·0 | |
| 7·0 | | 41·5 | 36·2 | 7·0 GS |
| 10·0 | | 44·5 | 8·8 | |
| 9·5 | 16 | 0·0 | 23·7 | |
| 9·9 | | 0·0 | 13·6 | |
| 9·2 | | 0·5 | 32·0 | 9·0 |
| 9·1 | | 2·5 | 5·7 | |
| 9·8 | | 14·5 | 54·0 | |
| 8·2 | | 16·5 | 2·3 | 8·5 |
| 9·2 | | 22·0 | 33·0 | |
| 9·4 | | 27·0 | 33·0 | |
| 8·5 | | 30·0 | 37·9 | 9·0 |
| 8·8 | | 42·5 | 56·0 | 9·5 *g* |
| 9·9 | | 45·0 | 37·0 | |
| 8·9 | | 50·0 | 56·0 | 8·5 G*g* |
| 7·9 | 17 | 10·0 | 15·2 | 6·5 GS |
| 9·4 | | 20·0 | 50·6 | |
| 9·2 | | 23·0 | 59·1 | 9·5 |
| 10·0 | 18 | 2·0 | 58·3 | |
| 9·9 | | 18·8 | 28·9 | |
| 10·0 | | 21·5 | 51·8 | |
| 9·4 | | 29·0 | 47·2 | |
| 10·0 | | 51·0 | 32·0 | |
| 10·0 | 19 | 13·0 | 43·0 | |
| 9·7 | | 21·5 | 29·1 | |
| 8·4 | | 32·0 | 50·9 | 9·5 |
| 9·2 | | 35·1 | 1·7 | |
| 9·6 | | 46·2 | 28·4 | |
| 9·4 | | 49·7 | 59·3 | |
| 10·0 | 20 | 11·5 | 44·7 | |
| 9·6 | | 18·0 | 3·0 | |
| 10·0 | | 20·0 | 2·3 | |
| 10·0 | | 21·0 | 2·5 | |
| 9·6 | | 43·2 | 16·1 | |
| 10·0* | 21 | 8·0 | 11·9 | |
| 9·8 | | 12·0 | 27·1 | |
| 10·0 | | 25·0 | 52·5 | |
| 9·9 | | 35·5 | 7·0 | |
| 9·4 | | 42·0 | 45·4 | |
| 9·7 | 22 | 3·0 | 27·7 | |
| 9·4 | | 6·5 | 31·0 | |
| 8·8 | | 42·5 | 14·5 | 9·5 |
| 9·4 | | 44·5 | 58·5 | |
| 10·0 | | 45·5 | 17·1 | |



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### 2761—2820.

| mag. | 14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·8 | 22 | 46·5 | 46·2 | |
| 9·6 | | 49·5 | 22·3 | |
| 9·7 | | 54·5 | 55·0 | |
| 10·0 | 23 | 21·5 | 51·7 | |
| 9·6 | | 23·0 | 13·5 | |
| 10·0 | | 37·0 | 18·9 | |
| 9·9 | | 40·5 | 21·8 | |
| 9·8 | | 58·0 | 51·1 | |
| 9·6 | | 58·0 | 3·5 | |
| 9·9 | 24 | 10·5 | 0·0 | |
| 9·8 | | 17·0 | 20·3 | |
| 10·0 | | 21·5 | 32·6 | |
| 10·0 | | 35·5 | 49·8 | |
| 9·4 | | 36·0 | 37·1 | |
| 8·8 | | 48·0 | 27·5 | |
| 9·3 | | 50·0 | 28·7 | |
| 9·4 | 25 | 43·0 | 11·9 | |
| 9·7 | | 45·0 | 5·5 | |
| 10·0 | | 47·0 | 10·1 | |
| 10·0 | 26 | 6·5 | 50·1 | |
| 9·2 | | 7·0 | 11·2 | |
| 8·9 | | 12·5 | 40·9 | |
| 9·2 | | 28·5 | 56·4 | |
| 10·0 | | 35·5 | 42·9 | |
| 8·9 | | 56·5 | 54·1 | |
| 9·6 | 27 | 8·0 | 41·4 | |
| 9·8 | | 20·5 | 17·2 | |
| 9·5 | | 24·5 | 4·1 | |
| 9·6 | | 26·5 | 19·1 | |
| 9·3 | | 53·0 | 35·0 | |
| 9·0 | 28 | 9·0 | 54·0 | |
| 9·4 | | 9·5 | 36·8 | |
| 9·5 | | 13·0 | 54·4 | |
| 9·9 | | 22·0 | 21·1 | 10·0 |
| 8·5 | | 30·5 | 35·1 | |
| 10·0 | | 34·5 | 59·9 | |
| 9·9 | | 38·5 | 27·8 | |
| 10·0 | | 57·5 | 36·4 | |
| 9·4 | 29 | 2·0 | 36·9 | |
| 9·3 | | 7·0 | 19·8 | |
| 9·9 | | 9·5 | 8·0 | |
| 9·4 | | 18·5 | 38·4 | |
| 9·0 | | 23·5 | 16·8 | 9·5 |
| 9·9 | | 28·5 | 0·5 | |
| 9·9 | | 42·5 | 14·5 | |
| 10·0 | | 42·5 | 4·9 | |
| 9·6 | | 49·5 | 30·9 | |
| 9·4 | | 51·5 | 30·1 | |
| 9·4 | | 57·0 | 40·0 | |
| 9·6 | 30 | 8·0 | 26·9 | |
| 10·0 | | 19·0 | 3·8 | |
| 9·6 | | 21·0 | 44·3 | |
| 9·2 | | 29·5 | 53·6 | 9·5 g |
| 9·8 | | 32·0 | 36·1 | |
| 9·4 | | 52·5 | 1·4 | |
| 10·0 | 31 | 0·5 | 29·9 | |
| 10·0 | | 12·0 | 36·5 | |
| 9·6 | | 16·5 | 34·3 | |
| 10·0 | | 21·5 | 46·6 | |
| 9·2 | | 24·5 | 31·9 | |

### 2821—2880.

| mag. | 14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·0 | 31 | 29·0 | 45·1 | |
| 10·0 | | 30·5 | 42·0 | |
| 9·6 | | 37·0 | 32·5 | |
| 9·6 | | 42·5 | 11·0 | |
| 9·9 | | 48·0 | 42·6 | |
| 10·0 | | 49·0 | 45·5 | |
| 10·0 | | 52·5 | 44·4 | |
| 10·0 | | 52·5 | 54·4 | |
| 9·4 | | 54·0 | 29·0 | |
| 9·3 | | 58·0 | 7·3 | |
| 8·8 | | 59·5 | 20·9 | |
| 10·0 | 32 | 7·0 | 8·4 | |
| 10·0 | | 19·0 | 25·3 | |
| 9·0 | | 20·0 | 21·2 | |
| 8·8 | | 20·0 | 9·3 | 9·5 |
| 10·0 | | 20·0 | 24·9 | |
| 9·4 | | 30·5 | 6·9 | |
| 9·3 | | 54·5 | 11·0 | 9·5 |
| 8·2 | | 58·0 | 4·9 | |
| 9·0 | | 59·5 | 3·4 | |
| 8·9 | 33 | 6·5 | 6·5 | |
| 9·2 | | 9·5 | 18·7 | |
| 8·9 | | 15·5 | 24·1 | 9·5 |
| 9·8 | | 35·0 | 14·3 | |
| 8·4 | | 47·0 | 55·5 | 9·0 g |
| 9·4 | | 53·5 | 15·7 | |
| 9·6 | | 54·5 | 11·2 | |
| 9·2 | | 59·5 | 12·9 | |
| 9·8 | 34 | 13·5 | 42·5 | |
| 9·2 | | 43·5 | 38·3 | |
| 9·6 | | 48·5 | 37·0 | |
| 9·2 | 35 | 6·0 | 12·2 | 10·0 |
| 9·7 | | 6·0 | 33·5 | |
| 9·6 | | 17·2 | 59·4 | |
| 8·6 | | 19·0 | 41·8 | |
| 9·6 | | 34·0 | 53·3 | |
| 9·2 | | 41·5 | 30·3 | 9·5 |
| 9·0 | | 52·0 | 35·0 | 8·0 G |
| 8·9 | | 52·7 | 59·7 | |
| 9·4 | | 56·5 | 7·7 | |
| 10·0 | 36 | 11·0 | 5·4 | |
| 8·8 | | 22·0 | 38·1 | 9·0 G |
| 9·2 | | 25·0 | 22·9 | 9·5 |
| 7·8 | 37 | 0·5 | 19·3 | 9·0 |
| 7·4 | | 1·5 | 39·0 | 8·0 GS |
| 9·9 | | 11·0 | 25·6 | |
| 10·0 | | 13·5 | 42·6 | |
| 7·2 | | 19·5 | 48·1 | 8·0 GS |
| 8·9 | | 32·0 | 45·9 | |
| 10·0 | | 32·1 | 59·7 | |
| 7·8 | | 39·0 | 12·7 | 8·5 |
| 9·4 | | 39·0 | 17·3 | |
| 9·3 | | 39·0 | 31·0 | |
| 7·7 | | 42·0 | 54·7 | 8·0 GSg |
| 9·0 | | 46·5 | 22·2 | 9·0 |
| 9·4 | | 50·0 | 19·9 | |
| 9·7 | | 58·0 | 56·2 | |
| 9·8 | | 59·0 | 52·2 | |
| 7·8 | | 59·2 | 59·9 | 8·0 GSg |
| 9·6 | 38 | 19·5 | 5·9 | |

### 2881—2940.

| mag. | 14h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 38 | 22·8 | 2·7 | |
| 9·9 | | 23·5 | 35·9 | |
| 9·9 | | 27·5 | 25·6 | |
| 9·8 | | 30·0 | 26·9 | |
| 9·4 | | 37·5 | 48·7 | |
| 9·4 | | 44·5 | 13·9 | |
| 7·5 | 39 | 1·5 | 9·4 | 8·0 |
| 9·3 | | 28·5 | 50·9 | |
| 7·6 | | 33·5 | 11·5 | 8·0 G |
| 9·2 | | 41·5 | 57·5 | |
| 9·3 | | 43·0 | 26·4 | |
| 9·3 | | 44·0 | 26·9 | |
| 9·6 | | 48·0 | 43·0 | |
| 9·3 | | 50·0 | 53·5 | 9·5 |
| 7·7 | 40 | 2·0 | 44·1 | 8·0 GS |
| 8·2 | | 5·2 | 57·8 | 8·5 Sg |
| 9·6 | | 31·7 | 59·7 | |
| 10·0 | | 49·5 | 27·8 | |
| 10·0 | | 52·5 | 7·4 | |
| 10·0 | | 56·0 | 27·2 | |
| 8·9 | 41 | 2·0 | 40·8 | |
| 9·0 | | 14·2 | 57·8 | 9·5 |
| 9·9 | | 43·5 | 46·4 | |
| 8·9 | | 46·5 | 7·6 | 9·5 |
| 8·4 | | 54·0 | 16·4 | 8·5 |
| 9·9 | 42 | 1·0 | 50·1 | |
| 9·4 | | 19·5 | 33·9 | |
| 10·0 | | 50·0 | 40·8 | |
| 9·6 | 43 | 9·5 | 9·6 | |
| 9·3 | | 19·0 | 3·1 | |
| 10·0 | | 19·0 | 28·1 | |
| 9·8 | | 27·5 | 20·8 | |
| 9·2 | | 35·5 | 50·4 | |
| 7·9 | | 38·0 | 54·0 | 7·5 GSg |
| 9·7 | | 54·0 | 41·2 | |
| 9·9 | | 57·5 | 45·9 | |
| 8·9 | 44 | 7·5 | 16·9 | 10·0 |
| 6·0 | | 8·5 | 28·4 | 6·5 GSr |
| 8·8 | | 24·5 | 41·6 | |
| 9·6 | | 34·0 | 23·4 | |
| 8·9 | | 48·5 | 35·4 | |
| 9·2 | 45 | 4·0 | 14·8 | |
| 9·2 | | 40·5 | 2·8 | |
| 9·2 | 46 | 2·0 | 3·8 | |
| 9·4 | | 12·0 | 13·7 | |
| 9·9 | | 14·5 | 21·6 | |
| 9·3 | 47 | 30·5 | 18·8 | |
| 10·0 | | 36·5 | 18·7 | |
| 10·0 | | 45·0 | 32·3 | |
| 8·2 | | 49·0 | 17·3 | 9·0 |
| 8·0 | 48 | 4·0 | 48·4 | 9·0 S |
| 9·3 | | 12·0 | 11·9 | |
| 10·0 | | 14·0 | 55·9 | |
| 9·4 | | 30·0 | 4·0 | |
| 10·0 | | 32·5 | 44·3 | |
| 9·0 | | 43·5 | 38·1 | |
| 9·0 | 49 | 13·5 | 9·1 | 9·0 |
| 8·9 | | 28·5 | 28·8 | |
| 10·0 | | 34·5 | 14·4 | |
| 9·3 | | 52·0 | 53·7 | |

### 2941—3000.

| mag. | 14h.–15h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 49 | 55·5 | 3·8 | |
| 10·0 | | 59·5 | 32·0 | |
| 9·2 | 50 | 2·0 | 46·3 | |
| 9·0 | | 3·5 | 36·5 | 9·5 |
| 9·2 | | 16·5 | 44·3 | 9·5 |
| 9·9 | | 18·5 | 16·0 | |
| 10·0 | | 19·0 | 18·0 | |
| 7·7 | | 44·5 | 24·8 | 8·0 G |
| 9·2 | 52 | 1·0 | 36·8 | 9·5 |
| 9·8 | | 16·5 | 17·5 | |
| 8·7 | | 21·0 | 28·2 | 9·5 |
| 9·4 | | 44·5 | 43·3 | 9·5 G |
| 9·2 | | 52·0 | 31·7 | 9·0 |
| 9·6 | | 53·5 | 48·7 | |
| 8·8 | | 53·5 | 48·0 | 9·5 |
| 8·3 | | 54·5 | 40·7 | 8·5 G |
| 9·3 | 53 | 0·0 | 4·1 | |
| 9·4 | | 19·5 | 4·5 | |
| 9·3 | | 33·5 | 3·0 | |
| 9·6 | | 35·5 | 35·5 | |
| 8·7 | | 42·0 | 13·0 | |
| 9·4 | | 47·5 | 53·4 | |
| 8·8 | 54 | 7·5 | 40·3 | 9·5 |
| 9·8 | | 16·5 | 49·7 | |
| 8·6 | | 31·0 | 45·0 | 9·0 |
| 10·0 | | 37·0 | 45·0 | |
| 8·3 | | 45·0 | 22·6 | 8·8 |
| 9·6 | | 54·0 | 5·6 | |
| 9·6 | 55 | 5·5 | 33·7 | |
| 9·6 | | 9·5 | 36·9 | |
| 9·3 | | 32·5 | 21·7 | |
| 9·6 | | 34·0 | 1·2 | |
| 9·6 | | 51·5 | 54·8 | g |
| 9·2 | 56 | 7·0 | 29·4 | |
| 9·9 | | 9·7 | 59·0 | |
| 9·9 | | 28·0 | 29·6 | 9·5 |
| 10·0 | | 33·0 | 29·6 | |
| 9·6 | | 40·0 | 7·6 | |
| 9·4 | 57 | 9·5 | 9·7 | |
| 9·7 | | 20·3 | 1·6 | |
| 9·4 | | 21·5 | 3·5 | |
| 7·6 | | 34·5 | 59·5 | 7·5 Gg |
| 10·0 | | 49·0 | 27·6 | |
| 9·4 | 58 | 6·0 | 42·7 | |
| 9·4 | | 17·0 | 21·7 | |
| 8·6 | | 20·4 | 59·2 | 9·0 g |
| 8·6 | | 21·5 | 4·7 | |
| 9·3 | | 34·8 | 59·1 | 10·0 |
| 9·8 | | 51·0 | 50·4 | |
| 10·0 | | 53·3 | 30·0 | |
| 9·9* | | 55·0 | 59·0 | |
| 10·0 | | 55·5 | 25·5 | |
| 8·6 | 59 | 9·5 | 1·6 | |
| 9·6 | | 26·5 | 50·6 | |
| 9·2 | 0 | 2·8 | 42·4 | |
| 9·2 | | 33·5 | 45·7 | |
| 9·9 | | 59·8 | 7·3 | |
| 9·8 | 1 | 50·3 | 43·3 | |
| 9·4 | 2 | 14·0 | 9·1 | |
| 10·0 | | 16·5 | 52·5 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 14 | 20 | 119 | 6·8 |
| | 30 | 121 | 6·6 |
| | 40 | 124 | 6·4 |
| | 50 | 126 | 6·2 |
| 15 | 0 | 129 | 5·9 |
| | 10 | 131 | 5·6 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 15 | 0 | 129 | 5.9 |
| | 10 | 131 | 5.6 |
| | 20 | 133 | 5.4 |
| | 30 | 135 | 5.1 |
| | 40 | 137 | 4.8 |
| | 50 | 139 | 4.5 |
| 16 | 0 | 140 | 4.2 |

## 3001—3060.

| mag. | 15h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8.3 | 2 | 17.5 | 29.6 | 9.0 |
| 9.2 | | 19.8 | 13.9 | 9.0 |
| 9.9 | | 28.8 | 52.2 | |
| 10.0 | | 33.5 | 35.1 | |
| 10.0 | 3 | 5.5 | 45.0 | |
| 9.2 | | 51.7 | 45.2 | 9.0 |
| 8.2 | | 57.0 | 41.1 | 8.0 |
| 9.1 | 4 | 19.5 | 33.1 | 9.5 |
| 9.5 | 5 | 0.5 | 7.9 | |
| 9.9 | | 29.5 | 32.6 | |
| 9.8 | | 34.0 | 48.7 | |
| 9.4 | 6 | 3.0 | 57.5 | |
| 7.0 | | 13.0 | 37.5 | 7.0 GS |
| 9.6 | | 16.0 | 31.9 | |
| 9.5 | | 48.0 | 26.2 | |
| 9.7 | | 48.5 | 18.1 | 9.8 |
| 9.4 | | 50.0 | 18.6 | 9.2 |
| 9.8 | 7 | 1.0 | 26.1 | |
| 9.9 | | 6.5 | 3.2 | |
| 8.4 | | 9.7 | 59.9 | 9.0 S*g* |
| 10.0 | | 13.0 | 45.9 | |
| 9.9 | | 18.0 | 48.1 | |
| 9.2 | | 19.5 | 54.7 | 8.5*g* |
| 9.9 | | 21.5 | 47.8 | |
| 8.4 | | 30.0 | 8.4 | 9.0 |
| 9.5 | | 46.0 | 33.7 | |
| 9.9 | 8 | 1.5 | 53.4 | |
| 10.0 | | 17.5 | 39.0 | |
| 9.8 | | 26.5 | 44.2 | |
| 9.9 | | 44.5 | 50.9 | |
| 9.9 | 9 | 49.0 | 27.3 | |
| 9.2 | | 53.0 | 50.9 | |
| 10.0 | 10 | 3.5 | 24.4 | |
| 10.0 | | 33.5 | 15.0 | |
| 9.6 | | 42.2 | 58.9 | 10.0 |
| 9.7 | 11 | 11.5 | 4.2 | |
| 9.2 | | 16.5 | 37.7 | |
| 7.7 | | 24.0 | 45.2 | 7.5 GS |
| 9.9 | | 26.0 | 40.7 | |
| 9.9 | 12 | 1.5 | 32.0 | |
| 9.2 | | 30.5 | 47.1 | 10.0 |
| 8.9 | | 40.5 | 59.7 | 9.5 *g* |
| 8.8 | 13 | 2.7 | 57.7 | 9.0 *g* |
| 9.7 | | 4.5 | 54.2 | |
| 9.5 | | 16.0 | 33.3 | |
| 9.5 | | 18.0 | 10.4 | |
| 9.6 | | 26.5 | 6.7 | |
| 8.6 | | 39.5 | 25.3 | 9.0 |
| 9.4 | | 41.5 | 25.3 | |
| 9.5 | 14 | 21.5 | 35.3 | |
| 9.2 | | 23.0 | 35.3 | |
| 9.2 | | 43.5 | 58.2 | 9.5 *g* |
| 9.0 | | 51.5 | 6.7 | |
| 9.2 | 15 | 1.5 | 52.2 | 9.0 |
| 9.2 | | 4.5 | 16.0 | |
| 10.0 | | 12.5 | 13.8 | |
| 8.8 | | 41.0 | 30.8 | 8.5 S |
| 9.7 | 16 | 5.5 | 29.5 | |
| 6.9 | | 15.5 | 40.6 | 7.0 GS |
| 8.8 | | 22.7 | 3.0 | |

## 3061—3120.

| mag. | 15h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.9 | 16 | 31.5 | 27.3 | 9.0 |
| 9.2 | | 40.5 | 59.0 | |
| 9.4 | | 42.0 | 5.3 | |
| 9.4 | 17 | 19.5 | 47.1 | |
| 10.0 | | 22.5 | 38.5 | 9.0 |
| 9.8 | | 47.0 | 7.9 | |
| 9.2 | 18 | 0.5 | 56.9 | |
| 9.5 | | 2.0 | 3.5 | |
| 8.8 | | 5.5 | 27.0 | 7.5 GSt |
| 9.9 | | 40.5 | 13.8 | |
| 9.0 | 19 | 12.5 | 3.8 | |
| 8.6 | | 20.5 | 57.2 | 9.0 S*g* |
| 9.4 | | 24.5 | 41.4 | |
| 8.2 | | 41.5 | 9.8 | 8.0 G |
| 9.8 | | 51.5 | 39.1 | |
| 7.0 | 20 | 2.5 | 30.4 | 8.0 GS |
| 7.6 | | 7.0 | 6.5 | 8.0 G |
| 9.4 | | 12.0 | 53.0 | |
| 10.0 | | 15.5 | 57.0 | |
| 9.7 | | 29.0 | 49.9 | |
| 9.4 | | 31.8 | 2.5 | |
| 9.9 | | 58.0 | 5.1 | |
| 9.2 | 21 | 21.0 | 28.0 | 10.0 |
| 9.0 | | 32.5 | 42.5 | |
| 9.0 | | 53.5 | 55.0 | *g* |
| 9.4 | | 59.0 | 30.2 | |
| 9.8 | | 59.0 | 4.8 | |
| 8.5 | 22 | 13.5 | 44.6 | 9.0 |
| 10.0 | | 47.5 | 46.1 | |
| 10.0 | | 55.0 | 27.8 | |
| 9.5 | 23 | 8.0 | 51.9 | |
| 9.8 | | 10.0 | 21.3 | |
| 9.5 | | 23.0 | 56.0 | |
| 9.6 | | 25.5 | 1.9 | |
| 10.0 | | 40.0 | 10.2 | |
| 9.1 | | 51.0 | 33.0 | |
| 7.9 | 24 | 3.0 | 49.6 | 8.5 G |
| 9.4 | | 31.5 | 52.3 | 9.5 |
| 9.6 | 25 | 0.5 | 29.1 | |
| 7.2 | | 4.5 | 11.3 | 7.0 GS |
| 8.9 | | 10.5 | 54.8 | 9.5 *g* |
| 6.2 | | 19.0 | 53.5 | 5.0 GSc*g*tr |
| 9.4 | | 42.5 | 25.7 | |
| 10.0 | | 49.0 | 36.0 | |
| 9.6 | 26 | 21.0 | 7.9 | |
| 9.4 | | 39.5 | 50.1 | 9.0 |
| 9.9 | | 44.5 | 28.1 | |
| 9.5 | | 45.5 | 24.1 | |
| 10.0 | | 50.5 | 48.8 | |
| 9.4 | 27 | 13.5 | 2.7 | |
| 9.7 | | 15.0 | 36.2 | |
| 9.2 | | 28.0 | 34.9 | |
| 10.0 | | 31.5 | 34.3 | |
| 10.0 | | 50.0 | 9.2 | |
| 9.4 | | 56.0 | 50.1 | |
| 8.2 | 28 | 44.0 | 14.9 | 8.5 |
| 9.0 | 29 | 53.5 | 23.2 | 10.0 |
| 9.9 | | 59.5 | 9.1 | |
| 9.6 | 30 | 35.5 | 35.8 | |
| 9.5 | 31 | 8.0 | 3.7 | |

## 3121—3180.

| mag. | 15h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8.8 | 31 | 9.5 | 36.8 | 8.5 |
| 9.2 | | 16.5 | 31.0 | 9.0 |
| 9.2 | | 29.5 | 49.3 | |
| 9.5 | | 46.0 | 31.7 | |
| 9.8 | 32 | 0.5 | 45.8 | |
| 9.9 | | 9.5 | 46.2 | |
| 9.1 | | 18.5 | 33.2 | 9.5 |
| 9.4 | | 52.5 | 53.0 | |
| 9.5 | | 58.5 | 3.3 | |
| 9.2 | 33 | 57.5 | 11.0 | |
| 8.6 | 34 | 2.5 | 21.0 | 7.0 G |
| 9.5 | | 7.0 | 19.3 | |
| 8.6 | | 21.5 | 5.1 | 8.5 |
| 9.9 | | 49.5 | 46.0 | |
| 9.8 | | 57.5 | 1.3 | 10.0 |
| 9.7 | 35 | 17.5 | 28.5 | |
| 10.0 | | 52.0 | 5.4 | |
| 9.4 | 36 | 11.0 | 58.8 | |
| 6.3 | | 30.5 | 2.9 | 6.0 GScr |
| 9.8 | | 31.5 | 44.1 | |
| 8.6 | | 48.5 | 7.2 | 8.5 |
| 10.0 | 37 | 2.0 | 35.1 | 9.0 |
| 9.2 | | 6.5 | 45.9 | |
| 9.9 | 38 | 18.5 | 53.8 | |
| 9.7 | | 42.2 | 1.0 | |
| 9.6 | | 58.0 | 54.6 | |
| 9.3 | | 58.5 | 49.7 | |
| 9.7 | 39 | 17.5 | 54.0 | |
| 9.4 | | 25.5 | 44.7 | |
| 8.9 | | 46.7 | 25.9 | 9.0 |
| 9.0 | 40 | 1.7 | 40.1 | |
| 9.4 | | 11.5 | 56.3 | |
| 8.9 | | 24.7 | 39.9 | |
| 9.0 | | 50.5 | 46.0 | |
| 9.6 | | 52.5 | 10.3 | |
| 9.7 | 41 | 38.5 | 26.9 | |
| 9.1 | | 43.2 | 59.5 | |
| 9.1 | | 44.5 | 8.5 | |
| 9.7 | | 50.0 | 48.8 | |
| 9.6 | | 56.0 | 20.8 | |
| 9.4 | 42 | 2.5 | 23.7 | |
| 9.4 | | 22.0 | 46.3 | |
| 9.6 | | 35.5 | 17.2 | |
| 9.0 | | 50.7 | 1.0 | |
| 8.5 | 43 | 12.0 | 31.5 | 8.0 |
| 9.6 | | 12.0 | 49.0 | |
| 9.6 | | 18.0 | 41.0 | |
| 9.3 | | 28.5 | 15.3 | |
| 9.1 | | 38.5 | 53.3 | |
| 9.7 | 44 | 12.5 | 26.2 | |
| 9.2 | | 21.5 | 46.8 | |
| 9.3 | | 28.5 | 18.2 | |
| 9.2 | | 34.0 | 13.0 | |
| 8.6 | | 37.5 | 9.7 | 9.0 |
| 9.0 | 45 | 11.5 | 8.9 | |
| 9.3 | | 22.0 | 31.0 | |
| 9.2 | | 22.0 | 32.4 | |
| 9.1 | 46 | 0.0 | 5.2 | 8.5 |
| 8.6 | | 28.5 | 22.7 | 9.2 |
| 9.6 | | 37.5 | 29.0 | |

## 3181—3240.

| mag. | 15h.–16h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9.6 | 46 | 38.2 | 58.0 | |
| 9.6 | 47 | 6.0 | 25.3 | |
| 9.2 | | 6.5 | 12.4 | |
| 9.0 | | 16.0 | 34.0 | 8.5 |
| 9.6 | | 25.5 | 26.2 | |
| 9.3 | | 26.5 | 6.9 | 9.0 |
| 9.6 | | 30.5 | 41.4 | |
| 9.4 | | 59.5 | 34.9 | 10.0 |
| 9.7 | 48 | 15.5 | 39.2 | |
| 9.6 | | 19.5 | 36.7 | |
| 9.5 | | 50.5 | 54.8 | |
| 9.4 | | 59.5 | 39.9 | |
| 8.8 | 49 | 16.5 | 32.0 | 9.0 |
| 9.0 | | 26.5 | 17.7 | |
| 9.7 | | 47.5 | 22.4 | |
| 9.2 | | 50.5 | 17.0 | |
| 9.4 | 50 | 6.5 | 30.2 | |
| 8.9 | | 17.0 | 22.0 | |
| 9.2 | | 24.0 | 8.1 | |
| 9.3 | | 30.0 | 0.7 | |
| 9.6 | | 48.5 | 26.9 | |
| 9.6 | 51 | 7.5 | 52.8 | |
| 9.6 | | 17.5 | 7.0 | |
| 8.9 | | 29.5 | 17.9 | |
| 9.3 | | 39.0 | 24.3 | |
| 9.3 | 52 | 15.0 | 57.6 | |
| 9.7 | | 19.5 | 44.3 | |
| 9.1 | | 23.0 | 19.0 | |
| 9.4 | | 42.0 | 56.2 | |
| 9.0 | | 51.0 | 10.7 | |
| 9.3 | 53 | 10.0 | 43.5 | |
| 7.8 | | 11.5 | 30.4 | 8.5 |
| 9.4 | | 42.0 | 48.4 | |
| 9.6 | | 45.5 | 36.8 | |
| 9.3 | | 50.0 | 8.1 | G |
| 9.4 | | 51.0 | 10.7 | |
| 9.4 | | 52.0 | 45.2 | |
| 8.8 | 54 | 8.5 | 10.5 | 9.5 G |
| 9.3 | | 40.0 | 15.0 | 9.5 |
| 9.2 | | 50.5 | 25.8 | |
| 9.2 | 55 | 15.5 | 57.6 | |
| 8.5 | | 32.5 | 52.3 | 9.0 *g* |
| 9.6 | | 51.0 | 3.0 | |
| 9.0 | 56 | 5.0 | 25.8 | |
| 9.0 | | 18.5 | 49.3 | 9.5 |
| 9.7 | | 55.5 | 6.2 | |
| 9.6 | 57 | 32.5 | 31.0 | |
| 9.6 | | 52.5 | 32.3 | |
| 9.2 | 58 | 4.5 | 10.5 | |
| 8.8 | | 8.5 | 49.2 | |
| 8.5 | | 19.5 | 34.1 | 9.0 |
| 9.3 | | 21.5 | 24.9 | |
| 9.0 | | 25.5 | 11.3 | 9.0 |
| 9.7 | | 30.0 | 54.0 | |
| 9.1 | 59 | 9.5 | 27.2 | 9.5 |
| 9.1 | | 31.0 | 0.4 | |
| 9.1 | | 38.5 | 1.3 | G |
| 9.7 | | 43.0 | 22.8 | |
| 9.0 | | 47.0 | 1.5 | G |
| 9.4 | 0 | 19.0 | 32.9 | |

### 3241—3300.

| mag. | 16h. m | s | −65° ′ | |
|---|---|---|---|---|
| 8·8 | 0 | 38·5 | 2·1 | G |
| 9·4 | 1 | 3·0 | 44·3 | |
| 9·2 | | 30·5 | 22·9 | |
| 9·4 | | 48·0 | 25·1 | |
| 9·3 | | 50·5 | 25·1 | |
| 9·6 | | 54·5 | 3·3 | |
| 8·8 | | 54·5 | 44·1 | 10·0 |
| 9·3 | 2 | 5·0 | 35·7 | |
| 9·3 | | 9·0 | 9·5 | |
| 8·5 | | 12·5 | 49·0 | 9·0 |
| 9·6 | | 15·5 | 44·0 | |
| 9·7 | | 26·5 | 42·7 | |
| 8·9 | | 46·0 | 48·3 | 9·5 |
| 9·7 | 3 | 33·0 | 39·1 | |
| 9·4 | | 44·0 | 14·9 | |
| 9·7 | | 44·5 | 5·9 | |
| 9·0 | 4 | 5·0 | 54·4 | g |
| 9·7 | | 6·5 | 38·0 | |
| 9·6 | | 27·5 | 49·5 | g |
| 9·3 | | 38·8 | 58·5 | g |
| 9·1 | | 44·5 | 45·1 | |
| 9·6 | 5 | 15·5 | 4·2 | |
| 9·7 | | 34·5 | 15·3 | |
| 9·7 | 6 | 2·0 | 18·1 | |
| 9·3 | | 41·5 | 7·1 | |
| 9·6 | | 53·0 | 43·5 | |
| 9·4 | | 54·5 | 0·2 | |
| 9·2 | | 55·0 | 17·1 | 9·0 |
| 9·6 | 7 | 12·5 | 49·8 | |
| 9·2 | | 54·5 | 39·3 | |
| 9·7 | | 57·5 | 14·1 | |
| 9·1 | 8 | 6·5 | 33·9 | |
| 9·2 | | 7·5 | 58·0 | |
| 9·4 | | 20·5 | 29·5 | |
| 9·2 | | 25·5 | 5·6 | |
| 9·1 | | 28·5 | 10·7 | |
| 8·4 | | 31·0 | 24·1 | 8·5 |
| 9·1 | | 43·5 | 9·4 | |
| 9·6 | | 58·0 | 9·1 | |
| 9·4 | 9 | 6·0 | 21·4 | |
| 9·3 | | 6·5 | 22·4 | |
| 9·7 | | 16·0 | 15·9 | |
| 9·0 | | 20·7 | 59·9 | g |
| 9·0 | | 22·5 | 33·3 | |
| 9·3 | | 42·5 | 1·1 | |
| 9·3 | | 47·5 | 24·8 | |
| 9·2 | | 58·5 | 11·1 | |
| 9·3 | 10 | 11·0 | 28·1 | |
| 9·3 | | 14·0 | 16·0 | 8·0 |
| 8·8 | | 56·0 | 41·1 | |
| 9·7 | 11 | 18·0 | 5·1 | |
| 9·6 | | 38·5 | 30·1 | |
| 9·0 | | 51·0 | 52·5 | 8·5 g |
| 9·7 | 12 | 15·5 | 46·0 | |
| 8·5 | | 40·0 | 25·4 | 9·2 |
| 9·3 | 13 | 27·5 | 22·3 | |
| 9·3 | 14 | 25·5 | 8·1 | |
| 9·4 | | 43·5 | 14·2 | |
| 9·6 | | 49·5 | 16·1 | |
| 9·4 | | 59·5 | 5·1 | |

### 3301—3360.

| mag. | 16h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·6 | 15 | 6·0 | 11·9 | |
| 8·5 | | 6·0 | 30·2 | 9·5 |
| 9·7 | | 42·5 | 37·3 | |
| 8·6 | | 48·0 | 27·1 | |
| 9·2 | | 49·0 | 55·9 | |
| 9·7 | 16 | 1·0 | 21·7 | |
| 9·7 | | 31·5 | 1·9 | |
| 9·3 | | 37·5 | 25·7 | |
| 9·2 | | 57·5 | 16·8 | |
| 9·3 | 17 | 50·8 | 54·1 | |
| 8·0 | 18 | 1·5 | 46·1 | 8·5 |
| 9·7 | | 15·8 | 5·3 | |
| 8·5 | | 37·0 | 38·3 | 8·8 |
| 9·7 | | 42·5 | 36·6 | |
| 9·5 | | 43·8 | 44·7 | |
| 9·0 | | 59·8 | 19·3 | |
| 9·5 | 19 | 11·5 | 21·6 | |
| 9·0 | 20 | 15·7 | 35·0 | |
| 9·0 | 21 | 3·5 | 40·2 | 10·0 |
| 8·8 | | 22·0 | 6·6 | 10·0 |
| 9·7 | | 46·0 | 54·0 | |
| 9·7 | 22 | 13·5 | 25·6 | |
| 9·7 | | 23·0 | 14·0 | |
| 7·4 | | 33·0 | 44·7 | 7·5 G |
| 8·9 | | 40·5 | 58·4 | g |
| 9·6 | | 42·5 | 23·0 | |
| 8·4 | | 43·0 | 36·3 | 8·0 |
| 9·0 | | 49·5 | 41·1 | |
| 9·2 | 23 | 6·0 | 26·0 | |
| 9·2 | | 25·0 | 36·6 | |
| 7·0 | | 43·5 | 13·6 | 6·0 GScr |
| 9·7 | 24 | 11·0 | 8·0 | |
| 9·0 | | 18·5 | 33·6 | 8·0 |
| 9·5 | | 50·5 | 35·6 | |
| 8·2 | | 51·5 | 19·4 | 8·0 |
| 9·7 | 25 | 0·5 | 16·8 | |
| 9·0 | | 8·5 | 34·1 | 8·0 |
| 9·2 | | 30·7 | 2·5 | |
| 9·6 | 26 | 2·5 | 15·7 | |
| 9·5 | | 4·0 | 1·3 | |
| 8·9 | | 23·0 | 23·6 | |
| 8·5 | | 31·5 | 5·9 | 8·7 |
| 9·7 | 27 | 15·5 | 18·2 | |
| 8·6 | | 29·5 | 38·9 | 9·5 |
| 9·0 | 28 | 19·0 | 39·9 | 9·5 |
| 8·5 | | 40·5 | 40·2 | 8·2 |
| 8·1 | | 46·0 | 11·4 | 8·2 G |
| 9·5 | 29 | 14·5 | 56·0 | |
| 8·9 | 30 | 30·0 | 9·9 | 9·5 G |
| 9·5 | | 55·5 | 39·0 | |
| 9·5 | 31 | 43·5 | 23·7 | |
| 9·7 | 32 | 52·0 | 25·0 | |
| 8·6 | | 54·5 | 37·9 | 9·0 |
| 9·7 | 33 | 29·0 | 40·4 | |
| 9·5 | | 30·0 | 29·0 | |
| 9·0 | | 32·0 | 57·4 | g |
| 9·2 | | 32·0 | 39·0 | |
| 8·6 | | 37·5 | 16·0 | 9·0 |
| 8·9 | 35 | 13·0 | 50·1 | 9·0 g |
| 9·7 | 36 | 43·5 | 3·0 | |

### 3361—3420.

| mag. | 16h.—17h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·7 | 37 | 44·5 | 55·6 | |
| 9·2 | 38 | 34·5 | 16·0 | |
| 9·0 | | 40·0 | 46·0 | |
| 9·0 | 39 | 39·0 | 7·4 | |
| 7·2 | | 45·5 | 9·2 | GSc |
| 9·5 | 40 | 20·0 | 21·0 | |
| 9·3 | 41 | 15·0 | 31·8 | |
| 9·5 | | 42·0 | 19·0 | |
| 9·7 | | 50·5 | 32·9 | |
| 8·8 | 42 | 22·0 | 19·6 | 9·0 |
| 9·2 | | 49·5 | 20·4 | |
| 8·2 | 44 | 1·5 | 6·0 | GS |
| 8·9 | | 4·5 | 1·7 | |
| 8·1 | | 11·5 | 54·0 | 8·5 g |
| 8·2 | 45 | 7·0 | 33·4 | 8·5 |
| 9·7 | | 45·5 | 13·0 | |
| 7·5 | 46 | 6·5 | 0·0 | 7·0 GSc |
| 9·2 | | 41·0 | 58·2 | |
| 9·5 | 47 | 10·5 | 16·3 | |
| 9·3 | | 26·5 | 51·2 | |
| 9·7 | | 38·3 | 45·0 | |
| 9·6 | | 51·3 | 5·3 | |
| 9·6 | | 52·0 | 25·0 | |
| 9·2 | 48 | 19·5 | 59·1 | |
| 9·2 | | 43·5 | 34·8 | |
| 9·5 | | 52·5 | 4·0 | |
| 8·5 | 49 | 16·0 | 9·0 | |
| 9·7 | 50 | 32·0 | 44·2 | |
| 8·2 | 52 | 5·5 | 27·8 | 9·0 |
| 9·5 | | 25·5 | 46·4 | |
| 9·7 | 53 | 25·5 | 8·6 | |
| 9·7 | | 54·0 | 52·2 | g |
| 9·5 | 54 | 55·5 | 33·6 | |
| 7·6 | 55 | 5·5 | 34·0 | 8·0 GScg |
| 9·3 | 56 | 13·5 | 46·7 | |
| 9·7 | | 16·5 | 4·0 | |
| 8·9 | | 34·5 | 42·6 | |
| 8·7 | 57 | 2·5 | 8·9 | 8·5 |
| 9·7 | | 11·5 | 33·8 | |
| 9·9 | | 15·0 | 18·1 | |
| 9·5 | | 21·5 | 15·9 | |
| 9·0 | | 51·0 | 35·5 | 8·5 |
| 9·6 | 58 | 12·0 | 1·9 | |
| 9·9 | | 31·7 | 56·3 | |
| 9·2 | | 37·8 | 51·3 | g |
| 9·2 | 59 | 29·8 | 20·1 | |
| 9·6 | | 41·0 | 17·3 | |
| 8·4 | 1 | 25·2 | 31·7 | 9·0 S |
| 8·4 | | 39·5 | 48·1 | GS |
| 9·3 | | 47·3 | 57·3 | |
| 9·6 | 2 | 31·0 | 58·4 | |
| 9·9 | | 37·5 | 9·4 | |
| 9·9 | | 58·0 | 51·1 | |
| 9·0 | 3 | 1·8 | 37·0 | |
| 9·5 | | 31·5 | 35·9 | |
| 9·8 | | 40·5 | 38·1 | |
| 9·2 | | 54·5 | 36·0 | |
| 9·4 | 4 | 11·0 | 28·2 | |
| 9·6 | | 15·5 | 4·6 | |
| 9·4 | | 44·5 | 51·0 | |

### 3421—3480.

| mag. | 17h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·5 | 5 | 7·5 | 31·4 | |
| 9·0 | | 21·0 | 45·0 | |
| 9·9 | | 41·5 | 24·4 | |
| 9·3 | | 59·0 | 4·8 | |
| 9·2 | 6 | 12·0 | 27·2 | |
| 9·6 | 7 | 32·5 | 43·5 | |
| 9·6 | | 38·0 | 53·8 | |
| 9·8 | | 40·5 | 29·1 | |
| 9·4 | | 53·5 | 0·1 | |
| 9·9 | | 58·5 | 23·1 | |
| 9·9 | 8 | 5·5 | 56·0 | |
| 9·2 | | 5·5 | 52·9 | 9·5 |
| 9·3 | | 26·0 | 23·5 | |
| 9·2 | | 44·0 | 6·4 | |
| 8·9 | 10 | 7·5 | 11·1 | |
| 8·4 | | 42·5 | 48·9 | |
| 9·4 | 11 | 10·0 | 22·9 | |
| 7·1 | | 31·0 | 34·4 | 7·0 GSc |
| 9·9 | | 39·5 | 22·8 | |
| 9·2 | | 59·5 | 20·2 | |
| 9·8 | 12 | 6·0 | 55·2 | |
| 8·8 | | 28·5 | 4·1 | |
| 8·8 | 13 | 18·0 | 32·2 | |
| 9·2 | | 41·0 | 47·3 | |
| 8·4 | | 49·5 | 10·8 | |
| 9·8 | 14 | 41·5 | 47·6 | |
| 9·6 | 15 | 49·0 | 41·0 | |
| 9·8 | 16 | 41·0 | 2·3 | |
| 8·8 | | 58·0 | 50·7 | 9·5 g |
| 9·9 | | 59·5 | 11·1 | |
| 9·5 | 18 | 22·0 | 28·9 | |
| 8·5 | 19 | 18·0 | 48·7 | 8·5 G |
| 9·5 | | 19·2 | 0·8 | 9·5 |
| 9·3 | 20 | 15·0 | 23·2 | |
| 9·9 | | 19·5 | 35·7 | |
| 9·8 | 21 | 10·5 | 41·4 | |
| 9·4 | | 24·0 | 55·8 | |
| 8·2 | | 35·0 | 54·7 | 9·0 Gg |
| 9·9 | | 41·0 | 9·0 | |
| 9·2 | | 55·0 | 48·1 | |
| 9·9 | | 56·0 | 41·2 | |
| 9·0 | 22 | 19·5 | 33·4 | |
| 8·9 | 23 | 21·5 | 47·2 | |
| 9·5 | | 36·5 | 26·1 | |
| 7·4 | | 42·0 | 54·3 | 8·5 GSg |
| 9·0 | 24 | 22·0 | 30·4 | 9·0 |
| 8·8 | | 52·0 | 33·6 | |
| 8·4 | 25 | 22·0 | 46·5 | 9·5 |
| 9·6 | 26 | 7·5 | 46·0 | |
| 9·6 | | 23·0 | 33·5 | |
| 9·8 | 27 | 48·5 | 48·0 | |
| 8·5 | 28 | 4·0 | 46·9 | 9·2 G |
| 9·6 | | 10·5 | 20·1 | |
| 8·7 | | 44·5 | 0·1 | |
| 8·6 | | 47·0 | 14·9 | 9·0 |
| 9·6 | | 51·0 | 8·0 | 9·5 |
| 9·9 | | 56·5 | 13·1 | |
| 8·7 | 29 | 3·0 | 27·1 | |
| 9·9 | | 21·0 | 19·5 | |
| 9·3 | | 26·0 | 36·5 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 0 | 140 | 4·2 |
| | 10 | 142 | 3·9 |
| | 20 | 143 | 3·5 |
| | 30 | 145 | 3·2 |
| | 40 | 146 | 2·9 |
| | 50 | 147 | 2·5 |
| 17 | 0 | 148 | 2·2 |
| | 10 | 148 | 1·8 |
| | 20 | 149 | 1·5 |
| | 30 | 150 | 1·1 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 20 | 149 | 1·5 |
| | 30 | 150 | 1·1 |
| | 40 | 150 | 0·7 |
| | 50 | 150 | 0·4 |
| 18 | 0 | 150 | 0·0 |
| | | | + |
| | 10 | 150 | 0·4 |
| | 20 | 150 | 0·7 |

## 3481—3540.

| mag. | 17h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·3 | 29 | 33·5 | 12·3 | |
| 9·0 | 30 | 58·5 | 9·7 | 9·5 |
| 9·9 | 31 | 19·5 | 7·3 | |
| 9·6 | 32 | 21·0 | 35·2 | |
| 9·6 | 34 | 44·0 | 0·3 | 9·5 |
| 9·2 | 35 | 16·0 | 47·2 | |
| 7·3 | | 44·8 | 30·8 | 7·8 G |
| 9·6 | 37 | 48·0 | 45·2 | |
| 9·8 | | 56·0 | 41·4 | |
| 9·2 | 38 | 3·0 | 18·0 | 9·0 |
| 9·9 | | 41·0 | 31·4 | |
| 9·9 | | 44·4 | 58·1 | |
| 10·2 | | 57·1 | 24·6 | |
| 9·5 | | 57·6 | 38·5 | |
| 9·9 | 39 | 4·6 | 35·7 | |
| 10·3 | | 23·9 | 1·5 | |
| 9·9 | | 24·6 | 30·3 | |
| 9·6 | 40 | 3·1 | 10·5 | |
| 9·2 | | 4·1 | 36·9 | |
| 10·3 | | 7·1 | 28·3 | |
| 10·3 | | 11·1 | 15·2 | |
| 9·9 | | 17·1 | 12·5 | |
| 9·4 | | 26·3 | 58·1 | |
| 9·0 | | 43·5 | 59·7 | 9·0 g |
| 10·3 | | 45·6 | 46·4 | |
| 9·7 | | 46·6 | 21·9 | |
| 7·8 | | 49·5 | 26·8 | 6·5 GSc |
| 10·3 | | 58·1 | 46·7 | |
| 10·3 | 41 | 20·1 | 23·8 | |
| 9·7 | | 29·6 | 19·5 | |
| 8·8 | | 37·8 | 51·0 | g |
| 10·3 | | 49·6 | 26·2 | |
| 10·0 | 42 | 5·1 | 34·7 | |
| 10·2 | | 6·1 | 7·2 | |
| 9·4 | | 25·6 | 24·9 | |
| 8·8 | | 26·8 | 10·5 | |
| 10·2 | | 28·1 | 13·0 | |
| 9·2 | | 31·1 | 20·5 | |
| 9·1 | | 37·3 | 2·9 | |
| 9·9 | | 38·1 | 35·8 | |
| 10·2 | | 40·1 | 55·6 | |
| 9·0 | | 51·3 | 54·7 | |
| 9·7 | | 51·6 | 46·0 | |
| 10·3 | 43 | 0·1 | 33·4 | |
| 9·9 | | 5·1 | 22·1 | |
| 10·2 | | 13·1 | 31·7 | |
| 10·0 | | 33·1 | 34·2 | |
| 6·9 | | 49·8 | 40·8 | 6·5 GS |
| 9·0 | | 58·6 | 15·0 | |
| 10·3 | 44 | 32·6 | 29·2 | |
| 10·3 | | 34·1 | 30·3 | |
| 8·2 | | 42·1 | 5·1 | 7·2 G |
| 9·9 | | 44·6 | 43·7 | |
| 9·0 | | 46·1 | 51·8 | g |
| 10·3 | | 47·1 | 0·4 | |
| 10·3 | | 50·1 | 0·8 | |
| 10·2 | 45 | 7·5 | 57·0 | |
| 9·9 | | 10·1 | 31·3 | |
| 9·5 | | 22·8 | 57·5 | |
| 9·6 | | 41·6 | 13·4 | |

## 3541—3600.

| mag. | 17h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·3 | 45 | 42·1 | 43·1 | |
| 9·4 | 46 | 9·1 | 5·8 | |
| 9·9 | | 17·1 | 9·9 | |
| 9·5 | | 27·1 | 9·3 | |
| 9·9 | | 31·6 | 15·3 | |
| 9·9 | | 32·6 | 34·8 | |
| 10·0 | | 33·6 | 42·9 | |
| 10·2 | | 41·1 | 53·5 | |
| 10·2 | | 57·6 | 48·0 | |
| 9·8 | | 59·6 | 32·9 | |
| 9·7 | 47 | 1·4 | 1·5 | |
| 10·0 | | 7·6 | 5·0 | |
| 10·0 | | 13·1 | 13·3 | |
| 9·5 | | 32·8 | 56·9 | |
| 10·2 | | 33·1 | 39·9 | |
| 10·3 | | 45·1 | 23·3 | |
| 10·3 | | 50·6 | 19·7 | |
| 9·4 | | 57·6 | 45·6 | |
| 10·2 | | 58·1 | 33·1 | |
| 10·2 | 48 | 0·1 | 35·7 | |
| 9·5 | | 7·6 | 17·7 | |
| 10·2 | | 12·6 | 25·0 | |
| 10·3 | | 14·6 | 29·3 | |
| 9·1 | | 45·1 | 4·6 | 9·0 |
| 9·6 | 49 | 14·1 | 39·3 | |
| 9·2 | | 15·1 | 20·2 | |
| 9·0 | | 29·3 | 59·7 | |
| 9·5 | | 38·1 | 6·3 | |
| 10·0 | | 39·6 | 13·4 | |
| 10·2 | 50 | 23·6 | 4·8 | |
| 9·9 | | 33·4 | 2·0 | |
| 10·3 | | 57·1 | 12·9 | |
| 7·8 | | 59·1 | 5·1 | 8·5 G |
| 10·2 | 51 | 2·1 | 24·3 | |
| 10·2 | | 23·3 | 56·5 | |
| 9·9 | | 46·8 | 8·2 | |
| 9·0 | | 49·8 | 46·7 | |
| 10·2 | 52 | 18·8 | 9·0 | |
| 9·0 | | 25·3 | 29·5 | |
| 9·9 | | 26·3 | 17·0 | |
| 9·4 | | 46·8 | 0·9 | |
| 9·2 | | 55·3 | 29·0 | |
| 10·3 | 53 | 0·3 | 32·2 | |
| 9·7 | | 10·8 | 5·1 | |
| 9·0 | | 10·8 | 9·8 | 8·5 |
| 10·2 | | 11·3 | 22·9 | |
| 9·2 | | 16·3 | 8·3 | |
| 9·4 | | 18·2 | 2·0 | |
| 9·5 | | 28·3 | 46·6 | |
| 10·0 | | 31·3 | 7·7 | |
| 10·3 | | 52·3 | 33·9 | |
| 9·9 | 54 | 2·8 | 1·3 | |
| 10·3 | | 14·8 | 39·1 | |
| 9·0 | | 29·8 | 58·2 | |
| 10·3 | | 37·8 | 16·2 | |
| 10·3 | | 43·3 | 16·5 | |
| 8·4 | | 54·8 | 31·2 | 7·5 G |
| 9·7 | | 56·3 | 5·0 | |
| 10·3 | 55 | 13·3 | 56·2 | |
| 10·2 | | 19·8 | 41·4 | |

## 3601—3660.

| mag. | 17h.–18h. m | s | −65° ′ | |
|---|---|---|---|---|
| 10·3 | 55 | 48·3 | 29·8 | |
| 10·0 | | 54·3 | 42·5 | |
| 8·9 | 56 | 1·3 | 18·8 | |
| 10·0 | | 30·3 | 35·6 | |
| 9·8 | | 37·8 | 58·2 | |
| 10·3 | | 50·3 | 19·7 | |
| 10·3 | 57 | 4·3 | 13·3 | |
| 9·6 | | 11·3 | 34·5 | |
| 9·1 | | 26·3 | 40·0 | |
| 10·2 | | 42·8 | 37·0 | |
| 8·8 | | 50·3 | 43·6 | 8·5 |
| 8·9 | | 55·3 | 7·3 | |
| 10·3 | 58 | 3·3 | 10·1 | |
| 9·8 | | 6·3 | 42·9 | |
| 9·0 | | 10·5 | 14·0 | |
| 9·1 | | 14·5 | 44·8 | 9·0 |
| 9·8 | | 20·1 | 57·9 | |
| 10·3 | | 21·5 | 35·3 | |
| 9·6 | | 29·5 | 39·9 | |
| 10·2 | | 39·0 | 32·6 | |
| 10·2 | | 40·5 | 20·9 | |
| 9·9 | | 50·0 | 39·2 | |
| 10·3 | | 56·0 | 53·0 | |
| 9·2 | 59 | 19·0 | 50·6 | |
| 9·4 | 0 | 3·0 | 11·3 | |
| 10·0 | | 40·0 | 44·3 | |
| 8·5 | | 43·5 | 44·4 | |
| 10·2 | | 47·5 | 21·1 | |
| 9·0 | | 51·5 | 14·1 | |
| 9·9 | 1 | 8·0 | 46·2 | |
| 10·3 | | 10·0 | 40·0 | |
| 10·2 | | 11·2 | 2·0 | |
| 9·9 | | 13·0 | 43·1 | |
| 9·7 | | 38·0 | 11·5 | |
| 10·3 | | 42·5 | 42·8 | |
| 9·0 | | 44·5 | 5·0 | 9·2 G |
| 8·9 | | 46·5 | 51·7 | 9·0 g |
| 9·1 | | 50·0 | 10·8 | 9·2 |
| 9·2 | | 54·5 | 7·7 | |
| 7·9 | 2 | 8·0 | 13·3 | 8·0 GS |
| 9·7 | | 48·5 | 38·9 | |
| 10·2 | | 58·5 | 20·6 | |
| 10·3 | 3 | 20·0 | 27·6 | |
| 9·2 | | 26·9 | 57·2 | g |
| 9·6 | | 35·0 | 36·2 | |
| 10·0 | | 39·0 | 46·8 | |
| 9·9 | | 48·0 | 50·9 | |
| 9·1 | | 49·0 | 24·5 | |
| 10·3 | 4 | 10·5 | 15·7 | |
| 9·0 | | 19·0 | 44·9 | 9·0 |
| 10·0 | 5 | 10·0 | 53·1 | |
| 10·2 | | 20·5 | 53·2 | |
| 9·4 | | 31·5 | 39·6 | |
| 10·0 | 6 | 10·0 | 31·0 | |
| 9·4 | | 11·0 | 8·3 | |
| 10·2 | | 56·0 | 30·9 | |
| 10·3 | 7 | 2·0 | 50·0 | |
| 9·4 | | 13·0 | 25·0 | |
| 9·4 | | 15·5 | 23·7 | |
| 9·0 | | 19·0 | 27·8 | G |

## 3661—3720.

| mag. | 18h. m | s | −65° ′ | |
|---|---|---|---|---|
| 9·9 | 7 | 27·0 | 14·2 | |
| 10·2 | 8 | 3·0 | 16·6 | |
| 10·3 | | 28·0 | 21·5 | |
| 9·0 | | 39·5 | 24·9 | |
| 10·3 | | 48·5 | 34·1 | |
| 9·9 | 9 | 0·0 | 49·7 | |
| 9·5 | | 5·5 | 37·4 | |
| 9·4 | | 14·0 | 38·2 | |
| 9·9 | | 36·0 | 40·0 | |
| 10·0 | | 41·5 | 24·8 | |
| 9·4 | 10 | 8·0 | 28·2 | |
| 10·0 | | 10·5 | 17·1 | |
| 10·0 | | 35·5 | 14·1 | |
| 9·1 | | 51·5 | 43·5 | |
| 10·2 | | 51·5 | 51·2 | |
| 9·1 | | 54·0 | 56·5 | 9·0 |
| 10·0 | | 58·0 | 7·2 | |
| 10·2 | 11 | 17·0 | 30·0 | |
| 10·3 | | 24·5 | 2·0 | |
| 10·3 | | 31·5 | 2·9 | |
| 10·3 | | 36·0 | 12·1 | |
| 10·3 | | 50·5 | 17·2 | |
| 10·3 | | 58·0 | 37·5 | |
| 8·7 | 12 | 12·0 | 28·4 | 8·8 |
| 9·6 | | 13·5 | 14·4 | |
| 9·2 | 13 | 9·0 | 24·8 | |
| 9·4 | | 15·0 | 47·1 | g |
| 9·4 | | 16·5 | 19·0 | |
| 9·1 | | 31·0 | 54·5 | g |
| 10·3 | | 34·5 | 27·7 | |
| 10·3 | | 59·5 | 12·1 | |
| 10·2 | 14 | 7·5 | 48·9 | |
| 9·7 | | 14·0 | 9·2 | |
| 10·2 | | 14·0 | 43·5 | |
| 10·0 | | 16·0 | 45·3 | |
| 9·7 | | 25·5 | 22·3 | |
| 10·3 | | 27·5 | 59·1 | |
| 10·2 | | 30·0 | 50·6 | |
| 9·6 | | 36·5 | 23·9 | |
| 10·0 | | 37·0 | 2·1 | |
| 10·3 | | 40·0 | 6·4 | |
| 9·9 | | 47·5 | 49·3 | |
| 9·1 | | 58·0 | 57·7 | g |
| 10·2 | 15 | 13·5 | 41·5 | |
| 10·2 | | 43·5 | 13·7 | |
| 9·9 | | 49·5 | 26·6 | |
| 9·7 | | 58·0 | 37·5 | |
| 10·3 | 16 | 1·5 | 40·1 | |
| 9·4 | | 13·5 | 12·1 | |
| 7·8 | | 38·0 | 15·3 | 7·8 G |
| 8·7 | | 50·5 | 20·6 | 8·2 |
| 9·8 | | 59·5 | 6·7 | |
| 9·5 | 17 | 8·0 | 33·2 | |
| 10·3 | | 11·0 | 33·5 | |
| 10·0 | | 16·0 | 49·9 | |
| 10·3 | | 20·0 | 57·9 | |
| 10·3 | | 42·5 | 47·9 | |
| 9·5 | | 45·5 | 15·2 | |
| 9·4 | | 46·0 | 43·3 | |
| 9·9 | | 51·5 | 45·3 | |



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## 3721—3780.

| mag. | 18$^{h}$–19$^{h}$ m s | −65° ′ | |
|---|---|---|---|
| 10·2 | 17 55·0 | 11·1 | |
| 10·3 | 18 10·0 | 35·5 | |
| 10·2 | 31·5 | 29·0 | |
| 10·0 | 43·5 | 47·9 | |
| 9·5 | 19 33·5 | 13·1 | |
| 9·6 | 38·0 | 28·4 | |
| 10·3 | 41·5 | 56·7 | |
| 9·4 | 20 6·3 | 52·3 | |
| 9·7 | 24·5 | 51·3 | |
| 10·3 | 26·5 | 7·9 | |
| 7·3 | 28·0 | 20·5 | 8·0 |
| 9·7 | 43·8 | 47·6 | |
| 10·3 | 48·0 | 46·7 | |
| 9·7 | 21 0·1 | 17·9 | |
| 10·2 | 0·5 | 33·0 | |
| 10·2 | 8·0 | 29·7 | |
| 9·7 | 44·0 | 13·4 | |
| 10·0 | 44·5 | 58·6 | g |
| 8·8 | 22 29·5 | 19·7 | 8·2 |
| 8·9 | 23 43·0 | 37·2 | 8·0 |
| 9·0 | 24 5·5 | 35·9 | 8·5 |
| 9·3 | 30·5 | 51·5 | 9·0 g |
| 8·8 | 25 39·5 | 8·1 | 9·5 |
| 9·1 | 54·0 | 21·4 | |
| 9·3 | 26 41·5 | 29·4 | |
| 8·1 | 27 13·0 | 59·5 | 8·0 Gg |
| 9·3 | 28 8·0 | 0·3 | |
| 9·6 | 31 19·0 | 28·9 | |
| 9·6 | 27·0 | 58·1 | |
| 9·6 | 32 25·5 | 34·8 | |
| 9·0 | 45·0 | 13·3 | |
| 8·3 | 34 30·0 | 22·2 | 7·5 GS |
| 9·0 | 36 16·5 | 14·0 | 9·5 |
| 5·9 | 20·0 | 12·2 | 6·0 GSct |
| 9·6 | 37 58·5 | 35·8 | |
| 9·3 | 38 6·0 | 6·1 | |
| 9·1 | 38·5 | 2·1 | |
| 9·1 | 41·0 | 16·0 | 9·0 |
| 9·6 | 55·5 | 55·9 | |
| 8·6 | 41 12·0 | 2·3 | 8·8 |
| 8·1 | 44 18·0 | 37·6 | 8·0 G |
| 7·7 | 49 53·5 | 3·7 | 8·5 G |
| 7·7 | 50 29·5 | 5·3 | 8·0 GS |
| 9·6 | 54 6·5 | 29·3 | |
| 8·7 | 55 43·0 | 6·7 | 9·0 |
| 9·3 | 49·0 | 24·3 | |
| 9·3 | 51·3 | 1·0 | 9·2 G |
| 9·4 | 56 8·5 | 10·5 | |
| 8·7 | 10·5 | 20·7 | |
| 7·7 | 37·8 | 43·1 | 8·0 G |
| 9·5 | 57 4·0 | 40·5 | |
| 9·5 | 28·0 | 40·5 | |
| 8·9 | 58 23·7 | 21·4 | |
| 7·9 | 39·8 | 11·1 | 8·0 G |
| 9·5 | 59 15·0 | 53·7 | g |
| 9·5 | 16·0 | 0·0 | 9·0 |
| 9·5 | 18·0 | 56·6 | g |
| 8·4 | 0 43·5 | 21·1 | 9·2 G |
| 9·5 | 55·0 | 26·0 | |
| 8·7 | 1 9·0 | 27·8 | 9·0 |

## 3781—3840.

| mag. | 19$^{h}$ m s | −65° ′ | |
|---|---|---|---|
| 8·5 | 4 1·1 | 2·0 | |
| 8·9 | 12·5 | 40·8 | |
| 7·0 | 50·5 | 26·3 | 6·5 GSc |
| 9·2 | 6 13·0 | 52·0 | g |
| 9·5 | 18·0 | 8·1 | |
| 9·5 | 7 12·0 | 50·1 | g |
| 9·5 | 8 30·0 | 49·8 | g |
| 8·9 | 9 32·5 | 16·9 | |
| 8·8 | 10 53·5 | 25·2 | 8·5 |
| 7·1 | 11 10·0 | 48·4 | 8·0 GSg |
| 8·8 | 40·5 | 38·8 | 8·5 |
| 8·9 | 46·5 | 52·8 | g |
| 9·5 | 12 28·0 | 10·1 | |
| 8·4 | 42·0 | 58·0 | 9·0 g |
| 8·9 | 14 1·0 | 57·9 | 8·5 Gg |
| 7·5 | 15·5 | 26·1 | G |
| 8·5 | 53·5 | 35·1 | |
| 8·5 | 56·0 | 55·1 | 8·0 g |
| 8·7 | 15 26·5 | 9·8 | |
| 8·7 | 16 36·5 | 56·4 | 9·5 g |
| 9·2 | 17 19·5 | 6·2 | |
| 8·7 | 33·5 | 8·0 | 9·0 |
| 9·5 | 19 54·0 | 36·1 | 9·5 |
| 9·5 | 20 34·0 | 57·0 | g |
| 8·7 | 21 14·0 | 35·4 | |
| 8·1 | 22 41·5 | 17·6 | 8·0 G |
| 9·4 | 47·0 | 38·7 | |
| 9·5 | 23 45·5 | 36·2 | |
| 9·1 | 49·5 | 56·3 | g |
| 9·2 | 26 1·0 | 33·9 | |
| 9·5 | 28 54·0 | 31·0 | |
| 8·5 | 29 31·0 | 10·2 | 9·0 |
| 9·4 | 50·0 | 34·6 | 9·5 |
| 9·5 | 58·5 | 7·6 | |
| 9·5 | 30 3·5 | 33·6 | 9·5 |
| 9·2 | 7·0 | 53·0 | g |
| 9·5 | 45·0 | 54·4 | g |
| 8·9 | 33 4·5 | 45·6 | 9·5 g |
| 8·9 | 39·5 | 19·1 | 9·5 |
| 9·5 | 51·0 | 45·2 | |
| 8·5 | 35 8·5 | 34·3 | 9·0 |
| 9·5 | 28·5 | 52·6 | |
| 8·4 | 37 40·0 | 57·0 | 9·0 g |
| 8·9 | 52·5 | 10·9 | |
| 7·9 | 38 1·8 | 12·9 | 8·0 GS |
| 9·5 | 53·5 | 56·3 | 9·0 g |
| 6·9 | 39 2·3 | 54·5 | 6·5 GSg |
| 9·5 | 28·2 | 14·9 | |
| 9·9 | 41·0 | 37·9 | |
| 9·0 | 42 30·0 | 36·4 | 9·0 |
| 8·9 | 43 22·0 | 24·3 | |
| 9·2 | 44 38·5 | 41·3 | |
| 8·9 | 50·0 | 51·3 | 8·5 g |
| 8·2 | 46 26·5 | 32·4 | 8·0 |
| 9·6 | 48 3·0 | 20·4 | |
| 6·8 | 49 20·5 | 8·1 | 7·0 GS |
| 7·9 | 51 36·5 | 37·8 | 8·5 G |
| 9·9 | 52 49·5 | 53·9 | g |
| 8·6 | 53 8·0 | 42·0 | 8·2 GS |
| 8·6 | 54 54·5 | 11·2 | |

## 3841—3900.

| mag. | 19$^{h}$–21$^{h}$ m s | −65° ′ | |
|---|---|---|---|
| 8·9 | 55 24·0 | 35·0 | 9·0 |
| 9·8 | 59 3·5 | 25·5 | |
| 9·5 | 2 20·5 | 38·1 | |
| 9·6 | 20·5 | 5·6 | |
| 8·6 | 37·5 | 22·3 | 9·0 |
| 7·9 | 3 53·0 | 11·5 | |
| 9·2 | 8 0·0 | 23·3 | |
| 9·8 | 11 21·5 | 38·9 | 10·0 |
| 9·5 | 12 41·0 | 58·6 | 9·0 g |
| 9·3 | 13 53·5 | 56·6 | g |
| 9·5 | 16 12·5 | 44·1 | |
| 9·0 | 17 39·3 | 58·7 | 9·5 g |
| 9·2 | 24 5·7 | 44·2 | 9·5 g |
| 9·6 | 54·5 | 4·5 | |
| 6·8 | 26 0·0 | 27·6 | GSg |
| 9·0 | 26·5 | 3·8 | 9·0 |
| 9·3 | 28 41·0 | 2·2 | 10·0 |
| 8·6 | 41·0 | 2·5 | 8·0 |
| 9·6 | 48·0 | 28·2 | |
| 8·9 | 29 8·5 | 30·3 | 8·5 G |
| 8·9 | 30 29·5 | 21·5 | |
| 9·0 | 31 8·5 | 11·0 | |
| 9·2 | 9·5 | 52·2 | |
| 9·4 | 33 47·0 | 27·3 | 9·5 |
| 8·0 | 35 46·0 | 21·3 | 7·0 GS |
| 9·2 | 37 18·0 | 6·7 | |
| 9·6 | 40 47·0 | 14·1 | |
| 8·8 | 41 16·5 | 36·3 | 9·0 |
| 8·4 | 30·0 | 13·9 | 8·5 G |
| 8·3 | 51·8 | 0·0 | 8·0 G |
| 8·8 | 42 18·0 | 51·8 | 8·5 G g |
| 9·0 | 43 22·0 | 39·9 | |
| 8·5 | 44 53·5 | 38·7 | 8·0 GS |
| 8·3 | 45 2·0 | 54·2 | g |
| 8·4 | 46 35·0 | 24·7 | 8·0 GS |
| 9·4 | 38·0 | 15·0 | 9·0 |
| 9·6 | 47 37·5 | 8·2 | |
| 9·4 | 48 54·5 | 23·2 | |
| 9·6 | 51 35·0 | 35·5 | |
| 9·6 | 55 35·5 | 59·7 | |
| 9·4 | 57 55·5 | 28·3 | |
| 10·4 | 58 10·5 | 7·8 | |
| 10·4 | 16·0 | 3·1 | |
| 9·2 | 59 4·2 | 35·4 | |
| 9·2 | 16·4 | 1·0 | 9·0 |
| 10·2 | 23·5 | 49·4 | |
| 9·8 | 28·5 | 17·3 | |
| 10·4 | 33·5 | 7·5 | |
| 10·4 | 0 42·5 | 26·1 | |
| 10·4 | 46·0 | 1·5 | |
| 9·8 | 53·5 | 1·0 | |
| 10·4 | 2 18·0 | 25·5 | |
| 9·6 | 38·0 | 31·1 | |
| 10·4 | 3 50·5 | 29·1 | |
| 9·4 | 57·2 | 2·0 | |
| 9·6 | 4 25·5 | 6·8 | |
| 10·4 | 6 11·0 | 46·3 | g |
| 10·4 | 17·5 | 35·8 | |
| 10·4 | 50·5 | 32·1 | |
| 5·8 | 7 38·0 | 12·0 | GSc |

## 3901—3960.

| mag. | 21$^{h}$ m s | −65° ′ | |
|---|---|---|---|
| 9·2 | 7 53·0 | 10·2 | |
| 9·0 | 8 6·5 | 39·6 | g |
| 9·2 | 26·5 | 9·4 | |
| 10·4 | 42·0 | 23·1 | |
| 10·2 | 10 23·0 | 6·7 | |
| 10·4 | 43·0 | 37·2 | |
| 9·9 | 11 8·0 | 43·1 | |
| 10·4 | 46·5 | 33·0 | |
| 9·3 | 56·0 | 16·4 | 9·5 |
| 9·0 | 59·0 | 19·5 | 9·5 |
| 9·6 | 12 26·5 | 22·5 | |
| 8·8 | 35·5 | 21·4 | 9·0 |
| 10·4 | 13 14·0 | 17·2 | |
| 9·2 | 52·0 | 19·8 | 8·5 |
| 10·2 | 15 0·5 | 26·7 | |
| 9·2 | 2·5 | 48·3 | 8·5 g |
| 10·4 | 16 2·5 | 17·9 | |
| 4·1 | 4·0 | 55·7 | 5·0 GScgtλ |
| 9·2 | 23·0 | 20·3 | |
| 10·4 | 17 26·5 | 48·5 | |
| 10·4 | 18 7·5 | 53·2 | |
| 10·2 | 19 6·5 | 23·8 | |
| 9·3 | 20 6·0 | 18·4 | |
| 9·8 | 29·3 | 1·1 | |
| 10·4 | 30·5 | 28·6 | |
| 9·0 | 22 2·0 | 51·2 | 8·5 Gg |
| 9·3 | 23 36·0 | 14·8 | |
| 9·6 | 25 9·0 | 21·0 | |
| 10·2 | 47·0 | 20·5 | |
| 10·2 | 57·5 | 27·4 | |
| 9·2 | 26 20·5 | 42·4 | 9·5 g |
| 10·4 | 26·5 | 56·9 | g |
| 9·0 | 27 12·0 | 35·5 | 9·0 |
| 9·0 | 18·0 | 52·2 | 8·5 Gg |
| 10·4 | 49·5 | 17·2 | |
| 9·9 | 28 1·0 | 44·6 | |
| 5·9 | 1·5 | 22·8 | 6·5 GScr |
| 9·4 | 30 41·0 | 25·1 | |
| 10·4 | 31 20·5 | 23·3 | |
| 9·9 | 46·0 | 18·5 | 9·5 |
| 10·2 | 32 29·0 | 53·2 | g |
| 10·4 | 31·5 | 36·2 | |
| 10·4 | 33 39·0 | 56·1 | |
| 10·4 | 34 2·0 | 30·4 | |
| 9·4 | 35 4·0 | 20·2 | |
| 9·4 | 45·0 | 52·5 | 9·2 g |
| 9·6 | 37 48·9 | 36·6 | 10·0 |
| 10·2 | 50·0 | 20·2 | |
| 9·0 | 51·5 | 38·1 | 8·8 G |
| 10·0 | 39 16·7 | 32·1 | |
| 7·0 | 40 17·2 | 17·4 | 6·0 GSc |
| 10·2 | 42·4 | 57·6 | |
| 9·6 | 41 20·4 | 33·5 | |
| 10·0 | 25·2 | 36·3 | |
| 10·2 | 54·3 | 23·6 | |
| 8·6 | 42 10·7 | 38·4 | 9·0 |
| 9·8 | 36·9 | 16·9 | |
| 10·0 | 43 6·4 | 53·9 | |
| 8·8 | 47·7 | 18·1 | 9·0 |
| 10·2 | 44 4·4 | 16·3 | |

25 prec.

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 18 | 10 | 150 | 0·4 |
| | 20 | 150 | 0·7 |
| | 30 | 150 | 1·1 |
| | 40 | 149 | 1·5 |
| | 50 | 148 | 1·8 |
| 19 | 0 | 148 | 2·2 |
| | 10 | 147 | 2·5 |
| | 20 | 146 | 2·9 |
| | 30 | 145 | 3·2 |
| | 40 | 143 | 3·5 |
| | 50 | 142 | 3·9 |
| 20 | 0 | 140 | 4·2 |
| | 10 | 139 | 4·5 |
| | 20 | 137 | 4·8 |
| | 30 | 135 | 5·1 |
| | 40 | 133 | 5·4 |
| | 50 | 131 | 5·6 |
| 21 | 0 | 129 | 5·9 |
| | 10 | 126 | 6·2 |
| | 20 | 124 | 6·4 |
| | 30 | 121 | 6·6 |
| | 40 | 119 | 6·8 |
| | 50 | 116 | 7·0 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 40 | 119 | 6·8 |
| | 50 | 116 | 7·0 |
| 22 | 0 | 113 | 7·2 |
| | 10 | 111 | 7·4 |
| | 20 | 108 | 7·6 |
| | 30 | 105 | 7·7 |
| | 40 | 102 | 7·9 |
| | 50 | 99 | 8·0 |
| 23 | 0 | 96 | 8·1 |
| | 10 | 93 | 8·2 |
| | 20 | 90 | 8·2 |
| | 30 | 86 | 8·3 |
| | 40 | 83 | 8·3 |
| | 50 | 80 | 8·3 |
| 0 | 0 | 77 | 8·4 |

### 3961—4020.

| mag. | $21^h$–$22^h$ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·8 | 44 | 6·1 | 41·4 | |
| 9·8 | | 28·3 | 24·3 | |
| 9·6 | | 37·3 | 26·8 | |
| 9·4 | | 38·8 | 24·8 | |
| 10·2 | | 54·7 | 34·8 | |
| 9·8 | 45 | 25·4 | 17·0 | |
| 10·0 | | 29·1 | 3·1 | |
| 10·0 | 46 | 11·6 | 7·7 | |
| 10·2 | | 14·1 | 4·3 | |
| 10·2 | | 49·4 | 50·1 | |
| 9·6 | 47 | 3·9 | 10·9 | |
| 10·1 | | 10·1 | 47·4 | |
| 9·4 | | 19·9 | 10·8 | |
| 10·2 | | 20·9 | 55·4 | |
| 9·4 | 48 | 16·8 | 20·8 | |
| 8·4 | | 19·9 | 11·4 | 8·5 G |
| 10·0 | | 24·8 | 28·2 | |
| 9·1 | | 25·9 | 52·7 | |
| 10·2 | 49 | 17·9 | 11·7 | |
| 9·8 | | 18·1 | 41·7 | |
| 8·6 | 50 | 10·4 | 12·1 | 8·5 G |
| 9·1 | 51 | 23·7 | 33·4 | |
| 9·1 | | 45·3 | 0·8 | |
| 10·0 | 52 | 7·3 | 58·8 | |
| 7·6 | | 34·4 | 50·1 | 7·5 GS*g* |
| 10·0 | | 54·7 | 30·3 | |
| 10·1 | 53 | 29·4 | 59·1 | |
| 10·1 | 54 | 45·1 | 7·4 | |
| 7·6 | 55 | 14·9 | 19·7 | 7·5 GS |
| 9·8 | 56 | 4·6 | 47·8 | *g* |
| 10·2 | | 43·3 | 21·9 | |
| 10·2 | | 44·3 | 23·2 | |
| 9·0 | 57 | 11·6 | 41·2 | 9·0 *g* |
| 10·2 | | 40·1 | 45·8 | |
| 9·1 | | 45·2 | 35·0 | 9·0 |
| 8·2 | 58 | 23·1 | 42·6 | 7·5 G*g* |
| 10·2 | | 37·6 | 43·8 | |
| 10·0 | | 56·8 | 24·4 | |
| 10·0 | 0 | 6·7 | 30·9 | |
| 8·8 | | 31·9 | 50·9 | *g* |
| 9·4 | 1 | 6·1 | 3·0 | |
| 9·6 | | 38·6 | 0·7 | |
| 9·6 | 2 | 48·3 | 23·4 | |
| 10·2 | 3 | 1·4 | 10·5 | |
| 10·2 | | 14·0 | 36·7 | |
| 8·6 | | 15·9 | 12·5 | 7·5 G |
| 9·1 | | 31·1 | 0·3 | 9·0 |
| 9·7 | | 41·1 | 4·7 | |
| 10·2 | 4 | 41·3 | 26·3 | |
| 9·6 | 5 | 40·1 | 2·9 | |
| 10·0 | | 52·4 | 12·8 | |
| 10·2 | 6 | 15·4 | 56·1 | |
| 9·6 | | 29·5 | 58·5 | |
| 8·6 | | 42·8 | 25·8 | 8·8 |
| 10·0 | | 57·6 | 45·0 | |
| 7·6 | 8 | 37·2 | 38·3 | 8·0 *g* |
| 8·2 | 9 | 16·9 | 10·8 | 8·5 |
| 10·2 | | 46·3 | 24·7 | |
| 9·4 | 10 | 5·1 | 49·6 | *g* |
| 10·2 | | 34·1 | 46·6 | |

### 4021—4080.

| mag. | $22^h$ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·7 | 11 | 8·8 | 26·8 | |
| 8·0 | | 25·9 | 51·5 | 8·0 *g* |
| 10·2 | 12 | 3·2 | 18·1 | |
| 10·2 | | 11·2 | 13·8 | |
| 10·2 | 13 | 41·6 | 8·3 | |
| 10·1 | | 45·6 | 48·3 | |
| 9·0 | 14 | 3·6 | 46·8 | *g* |
| 9·8 | | 7·6 | 47·0 | |
| 10·0 | | 11·8 | 28·3 | |
| 10·2 | | 40·9 | 50·5 | |
| 9·1 | | 49·6 | 4·7 | |
| 7·5 | | 53·9 | 59·0 | 7·5 G*g* |
| 10·2 | 15 | 16·6 | 45·2 | |
| 9·6 | | 29·1 | 5·6 | |
| 9·8 | | 53·1 | 42·1 | |
| 10·0 | 16 | 4·3 | 23·4 | |
| 10·1 | | 13·4 | 10·5 | |
| 9·2 | | 20·8 | 21·3 | 9·0 |
| 9·7 | | 50·9 | 51·5 | |
| 9·2 | 17 | 5·9 | 51·4 | |
| 9·6 | | 7·2 | 31·7 | |
| 10·1 | | 48·8 | 24·5 | |
| 10·2 | | 51·6 | 2·8 | |
| 5·0 | 18 | 24·6 | 36·0 | 5·0 GSc*gg*t |
| 9·1 | | 48·8 | 22·6 | |
| 9·4 | 19 | 47·3 | 37·9 | |
| 8·6 | | 52·9 | 13·3 | |
| 9·6 | 20 | 26·4 | 56·3 | |
| 10·0 | | 52·5 | 3·9 | |
| 9·2 | | 53·5 | 50·2 | |
| 9·4 | 21 | 7·1 | 29·2 | |
| 9·6 | | 31·5 | 48·1 | |
| 9·6 | | 32·5 | 22·0 | |
| 9·6 | | 45·2 | 52·8 | |
| 9·2 | 22 | 15·3 | 7·2 | |
| 8·7 | | 28·8 | 7·0 | |
| 9·2 | | 57·0 | 27·5 | |
| 10·0 | 23 | 23·0 | 13·3 | |
| 10·0 | 25 | 5·0 | 25·8 | |
| 10·0 | | 22·0 | 12·6 | |
| 9·4 | | 28·5 | 13·1 | |
| 9·8 | | 32·0 | 52·0 | |
| 9·8 | | 33·5 | 35·9 | |
| 9·4 | 26 | 17·0 | 41·0 | *g* |
| 9·8 | | 34·0 | 18·9 | |
| 10·0 | | 43·0 | 49·6 | |
| 9·2 | 27 | 44·0 | 51·7 | *g* |
| 9·4 | | 53·0 | 0·0 | |
| 10·0 | | 59·0 | 38·5 | |
| 8·5 | 28 | 10·2 | 2·2 | 7·5 G |
| 9·7 | | 32·0 | 13·9 | |
| 10·0 | | 55·7 | 1·5 | |
| 9·4 | 29 | 3·0 | 12·5 | |
| 9·0 | | 37·0 | 16·9 | |
| 9·4 | 32 | 1·0 | 3·1 | 9·5 |
| 9·7 | | 27·0 | 16·0 | |
| 9·4 | 33 | 47·5 | 56·5 | |
| 9·5 | | 53·5 | 14·0 | |
| 10·0 | | 55·0 | 18·9 | |
| 9·4 | 34 | 13·0 | 15·0 | |

### 4081—4140.

| mag. | $22^h$–$23^h$ m | s | −65° ′ | |
|---|---|---|---|---|
| 10·0 | 34 | 28·5 | 20·3 | |
| 8·2 | | 58·0 | 27·8 | 8·0 |
| 9·2 | 35 | 9·0 | 30·5 | 9·5 |
| 8·2 | | 12·5 | 18·0 | 8·5 G |
| 10·0 | | 12·5 | 37·1 | |
| 10·0 | 37 | 36·0 | 38·5 | |
| 8·7 | 40 | 29·0 | 7·0 | 8·5 |
| 10·0 | 41 | 20·0 | 58·1 | |
| 8·2 | 43 | 46·5 | 9·6 | 8·5 G |
| 8·4 | 44 | 32·0 | 34·1 | 8·0 G |
| 9·4 | | 35·5 | 6·0 | |
| 9·4 | | 50·0 | 47·2 | *g* |
| 10·0 | 45 | 14·0 | 12·0 | |
| 8·4 | 46 | 2·0 | 44·3 | 8·5 *g* |
| 8·4 | | 41·5 | 59·8 | 7·5 G*g* |
| 8·6 | 47 | 31·7 | 2·5 | 9·0 G |
| 9·2 | | 57·0 | 10·1 | |
| 10·0 | 49 | 22·0 | 34·1 | |
| 9·8 | | 51·0 | 52·1 | |
| 10·0 | 50 | 10·0 | 14·7 | |
| 8·8 | | 26·5 | 37·9 | |
| 8·8 | 51 | 21·0 | 41·8 | *g* |
| 9·8 | | 53·5 | 8·0 | |
| 9·2 | 52 | 49·5 | 31·7 | |
| 10·0 | 54 | 11·0 | 42·1 | *g* |
| 9·0 | | 58·5 | 43·1 | 9·5 *g* |
| 9·7 | 57 | 29·5 | 10·6 | |
| 9·0 | 0 | 2·8 | 9·7 | |
| 9·4 | 2 | 17·5 | 58·2 | |
| 9·6 | 4 | 20·0 | 20·6 | |
| 9·6 | | 22·0 | 18·1 | |
| 9·8 | 5 | 12·0 | 10·0 | |
| 9·1 | 57 | 31·5 | 4·9 | |
| 9·0 | | 41·0 | 26·1 | |
| 9·1 | 7 | 11·0 | 42·1 | |
| 8·8 | | 33·0 | 18·8 | 9·5 |
| 10·1 | | 46·5 | 7·4 | |
| 8·8 | 8 | 5·0 | 56·4 | 9·0 *g* |
| 9·4 | 9 | 58·0 | 50·9 | *g* |
| 9·2 | 10 | 27·5 | 44·3 | 9·5 *g* |
| 8·4 | 11 | 8·3 | 59·1 | 8·0 G*g* |
| 9·2 | | 57·0 | 17·1 | |
| 10·1 | 12 | 17·5 | 11·4 | |
| 9·0 | | 48·5 | 19·0 | 10·0 |
| 8·4 | | 57·5 | 23·1 | 9·5 |
| 10·0 | 13 | 32·5 | 33·1 | |
| 10·1 | | 33·0 | 6·2 | |
| 9·2 | | 34·0 | 53·4 | *g* |
| 9·2 | | 34·0 | 43·1 | |
| 10·1 | | 36·5 | 52·4 | |
| 10·1 | 14 | 0·0 | 54·1 | |
| 10·0 | | 22·0 | 32·1 | |
| 7·8 | | 54·0 | 56·9 | 8·5 *g* |
| 10·1 | 15 | 31·5 | 23·6 | |
| 8·2 | | 43·0 | 34·5 | 8·5 |
| 9·6 | 17 | 29·0 | 12·4 | |
| 9·8 | 18 | 6·0 | 33·1 | |
| 9·8 | | 22·0 | 27·7 | |
| 10·1 | | 23·0 | 23·2 | |
| 9·4 | 21 | 43·5 | 27·1 | 9·0 |

### 4141—4199.

| mag. | $23^h$ m | s | −65° ′ | |
|---|---|---|---|---|
| 9·4 | 22 | 10·0 | 13·6 | |
| 9·1 | | 52·0 | 31·1 | |
| 7·8 | 24 | 3·0 | 3·7 | 8·0 G |
| 9·0 | | 42·5 | 2·9 | |
| 9·8 | 25 | 38·0 | 59·3 | *g* |
| 10·1 | 26 | 55·0 | 57·7 | |
| 9·6 | 27 | 34·5 | 29·9 | |
| 7·5 | 28 | 3·5 | 22·8 | 7·5 GScr |
| 9·2 | | 9·0 | 22·3 | 9·5 |
| 10·1 | 29 | 5·0 | 54·0 | *g* |
| 9·5 | 30 | 2·5 | 16·3 | |
| 10·0 | | 33·0 | 10·4 | |
| 9·0 | 31 | 43·5 | 6·4 | |
| 10·0 | 32 | 7·5 | 14·1 | |
| 10·1 | 33 | 30·5 | 33·2 | |
| 8·1 | | 46·5 | 58·2 | 9·0 *g* |
| 9·4 | 35 | 6·0 | 31·0 | |
| 10·0 | 36 | 13·5 | 28·4 | |
| 6·9 | 37 | 18·0 | 6·0 | 6·0 GScr |
| 7·7 | | 23·5 | 2·1 | 7·2 GS |
| 8·8 | | 30·5 | 22·1 | |
| 9·8 | | 33·5 | 8·3 | |
| 10·1 | 38 | 45·5 | 42·8 | |
| 9·0 | 39 | 8·8 | 14·1 | 9·2 |
| 9·0 | | 27·5 | 20·5 | |
| 8·0 | | 41·3 | 16·1 | 8·8 |
| 8·8 | | 46·3 | 0·4 | 9·2 |
| 10·4 | | 57·5 | 36·9 | |
| 9·6 | | 58·7 | 29·9 | |
| 9·1 | 40 | 12·0 | 30·5 | 9·0 |
| 9·8 | | 19·5 | 37·0 | |
| 10·2 | | 22·5 | 34·9 | |
| 7·5 | | 50·5 | 56·2 | 7·8 GSc*g* |
| 8·8 | 41 | 57·5 | 25·5 | |
| 8·0 | 45 | 3·0 | 29·9 | 8·8 S |
| 9·8 | | 36·5 | 30·8 | |
| 9·4 | 46 | 15·5 | 11·1 | 9·5 |
| 9·1 | | 19·5 | 49·4 | 9·5 *g* |
| 9·8 | 47 | 53·0 | 7·6 | |
| 9·6 | 48 | 30·5 | 7·9 | |
| 9·8 | 49 | 39·2 | 28·3 | |
| 9·8 | | 46·2 | 23·6 | |
| 9·6 | | 48·7 | 22·1 | |
| 10·1 | 50 | 20·7 | 23·8 | |
| 9·8 | 51 | 12·2 | 12·4 | |
| 9·8 | 52 | 55·2 | 37·3 | |
| 10·6 | 53 | 8·2 | 44·6 | |
| 9·1 | | 21·2 | 4·4 | 9·5 |
| 9·6 | | 53·2 | 11·2 | |
| 8·4 | 54 | 14·2 | 9·8 | |
| 9·8 | | 45·2 | 9·6 | |
| 9·1 | 55 | 12·2 | 27·4 | 9·0 |
| 9·2 | | 34·2 | 32·4 | 9·5 |
| 9·6 | 56 | 29·2 | 6·9 | |
| 9·5 | | 56·7 | 10·4 | |
| 10·6 | 57 | 35·8 | 24·2 | |
| 9·8 | 58 | 6·2 | 33·4 | |
| 10·1 | | 22·2 | 5·6 | |
| 9·6 | 59 | 42·2 | 8·7 | |



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# ZONE—66°

### 1—45.

| mag. | 0h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·2 | 1 | 19·7 | 16·8 | *g* |
| 7·9 | | 23·7 | 37·5 | 7·5 GS*g* |
| 10·4 | | 54·7 | 14·9 | |
| 9·6 | 2 | 37·2 | 30·3 | *g* |
| 8·6 | 3 | 20·2 | 43·4 | *g* |
| 8·4 | | 44·7 | 3·2 | *g* |
| 9·6 | | 46·7 | 38·5 | *g* |
| 10·4 | 6 | 52·2 | 20·8 | |
| 9·2 | 7 | 23·7 | 38·2 | 9·0 *g* |
| 10·4 | 8 | 7·9 | 0·4 | *g* |
| 10·0 | | 14·2 | 34·6 | 9·5 *g* |
| 9·8 | | 40·7 | 18·3 | |
| 10·1 | 9 | 45·7 | 46·4 | |
| 9·6 | 10 | 55·7 | 19·8 | *g* |
| 9·2 | 11 | 28·7 | 21·3 | 9·5 *g* |
| 9·8 | | 51·7 | 17·1 | 10·0 *g* |
| 10·0 | 12 | 45·7 | 18·3 | |
| 9·8 | 13 | 36·7 | 35·3 | |
| 9·8 | | 38·7 | 20·0 | |
| 9·8 | 15 | 5·7 | 8·8 | |
| 8·0 | | 36·7 | 26·7 | 8·0 *g* |
| 7·2 | | 39·6 | 59·9 | 8·0 GS*g* |
| 10·6 | 17 | 21·7 | 34·6 | |
| 10·2 | 18 | 49·9 | 55·6 | |
| 9·8 | 19 | 12·2 | 59·9 | |
| 8·0 | | 17·4 | 5·5 | *g* |
| 9·6 | | 21·6 | 2·7 | *g* |
| 9·8 | | 43·7 | 28·7 | *g* |
| 9·0 | 22 | 20·9 | 52·5 | 9·5 G*g* |
| 10·8 | | 30·1 | 16·9 | |
| 8·2 | | 32·5 | 36·2 | 9·0 G*g* |
| 9·4 | | 38·6 | 35·9 | 10·0 G*g* |
| 9·4 | 24 | 18·1 | 51·2 | 9·2 *g* |
| 10·0 | | 46·6 | 19·6 | |
| 10·4 | 26 | 22·6 | 25·0 | |
| 9·4 | 27 | 2·6 | 47·0 | *g* |
| 10·6 | | 3·6 | 40·8 | |
| 10·0 | 28 | 5·1 | 11·0 | |
| 9·8 | | 20·6 | 27·2 | |
| 10·6 | 30 | 36·6 | 29·4 | |
| 9·8 | 31 | 17·6 | 55·8 | *g* |
| 10·0 | 32 | 34·6 | 56·0 | *g* |
| 7·8 | | 40·9 | 43·9 | 7·5 G*g* |
| 10·4 | | 58·4 | 12·6 | |
| 10·2 | 34 | 53·9 | 30·5 | |

### 46—90.

| mag. | 0h.—1h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·4 | 35 | 29·4 | 32·6 | 9·5 G*g* |
| 6·0 | 37 | 7·4 | 9·3 | 6·0 GS*gg* |
| 9·4 | | 9·9 | 4·3 | 9·5 *g* |
| 9·8 | | 19·4 | 5·5 | *g* |
| 6·8 | | 21·4 | 17·6 | 7·0 GS*gg* |
| 9·8 | 38 | 58·2 | 58·3 | *g* |
| 10·4 | 39 | 13·9 | 7·7 | |
| 7·2 | | 20·4 | 18·7 | 6·5 GS*g* |
| 10·6 | | 24·9 | 37·6 | |
| 10·9 | 41 | 23·4 | 27·5 | |
| 9·8 | 43 | 9·9 | 57·6 | *g* |
| 8·8 | | 30·4 | 15·1 | 9·0 *g* |
| 10·9 | | 39·9 | 45·7 | |
| 10·2 | 44 | 9·9 | 31·7 | |
| 10·0 | | 14·9 | 21·1 | *g* |
| 10·8 | | 32·9 | 43·3 | |
| 10·6 | 45 | 4·9 | 34·3 | |
| 9·4 | | 19·9 | 53·1 | *g* |
| 9·2 | 46 | 34·3 | 1·4 | *g* |
| 9·4 | | 54·1 | 1·0 | *g* |
| 8·4 | 48 | 51·9 | 32·7 | 9·0 *g* |
| 9·5 | 49 | 1·4 | 47·7 | *g* |
| 9·8 | | 27·4 | 39·2 | *g* |
| 8·0 | | 39·9 | 8·3 | *8·1* GS*g* : |
| 10·6 | 50 | 30·6 | 59·7 | |
| 10·0 | 51 | 18·4 | 7·1 | |
| 9·0 | 52 | 25·6 | 58·2 | 9·0 *g* |
| 10·0 | | 29·9 | 48·5 | *g* |
| 9·0 | | 58·0 | 26·8 | *g* |
| 10·4 | 53 | 39·9 | 32·4 | |
| 10·8 | 54 | 33·9 | 23·6 | |
| 10·6 | 55 | 10·4 | 38·6 | |
| 10·0 | 57 | 0·7 | 40·7 | *g* |
| 8·8 | | 6·0 | 19·5 | 8·8 *g* |
| 7·8 | | 55·2 | 7·8 | 7·0 GSc*g*r |
| 10·4 | 58 | 40·9 | 10·0 | |
| 9·8 | 59 | 56·3 | 56·7 | *g* |
| 9·5 | 0 | 58·2 | 43·6 | *g* |
| 9·1 | 1 | 45·0 | 19·5 | 9·5 *g* |
| 9·5 | 2 | 9·5 | 31·9 | 9·5 *g* |
| 9·7 | 4 | 21·0 | 52·3 | |
| 7·8 | 6 | 1·5 | 35·2 | 8·5 *g* |
| 8·2 | | 14·0 | 51·0 | 8·0 G*g* |
| 9·1 | 9 | 5·5 | 45·1 | *g* |
| 9·5 | | 46·0 | 3·1 | |

### 91—135.

| mag. | 1h.—2h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·6 | 11 | 4·0 | 8·4 | 10·0 G*g* |
| 9·1 | 12 | 33·0 | 37·5 | 9·0 *g* |
| 9·1 | 15 | 36·5 | 52·0 | 9·0 *g* |
| 9·4 | 17 | 0·5 | 45·6 | 9·0 *g* |
| 9·7 | | 50·0 | 16·5 | |
| 9·7 | 18 | 36·5 | 8·5 | *g* |
| 9·6 | 19 | 3·0 | 49·7 | *g* |
| 9·2 | 20 | 5·0 | 46·4 | *g* |
| 8·1 | | 51·5 | 47·6 | 9·0 *g* |
| 8·8 | 21 | 27·0 | 13·0 | 8·5 *g* |
| 9·8 | | 52·5 | 43·8 | *g* |
| 9·8 | 24 | 37·0 | 7·9 | |
| 8·8 | 27 | 26·5 | 27·0 | 9·5 *g* |
| 9·2 | 31 | 32·0 | 0·4 | 9·5 *g* |
| 9·0 | 33 | 39·5 | 24·9 | *g* |
| 7·6 | 34 | 43·3 | 14·5 | 7·5 GSc*g* |
| 9·2 | 36 | 52·0 | 3·0 | |
| 9·2 | 37 | 47·7 | 27·8 | 9·5 *g* |
| 8·8 | 38 | 24·8 | 38·9 | *g* |
| 9·0 | 40 | 29·5 | 19·9 | |
| 8·7 | 42 | 19·8 | 0·8 | 9·0 *g* |
| 9·2 | | 49·0 | 26·4 | |
| 9·2 | 43 | 13·0 | 17·1 | *g* |
| 9·2 | 44 | 10·0 | 25·9 | |
| 9·2 | | 45·0 | 53·2 | |
| 8·4 | 45 | 7·5 | 23·4 | 9·0 G*g* |
| 9·0 | 49 | 51·5 | 49·9 | 9·0 *g* |
| 9·2 | 51 | 11·0 | 36·0 | *g* |
| 8·4 | | 59·5 | 18·0 | 8·0 G*g* |
| 9·2 | 53 | 13·0 | 16·8 | *g* |
| 8·7 | 54 | 13·0 | 37·3 | 8·5 *g* |
| 9·1 | | 21·0 | 25·9 | |
| 7·4 | | 29·0 | 2·1 | 6·5 G*g* |
| 7·4 | 56 | 12·5 | 3·5 | 7·5 G*g* |
| 7·4 | | 24·0 | 40·4 | 6·5 GSc*g* |
| 8·5 | 58 | 1·0 | 57·1 | 7·8 G*g* |
| 8·4 | 59 | 28·5 | 29·0 | 8·0 GS*g* |
| 8·8 | 0 | 7·5 | 6·9 | *g* |
| 8·7 | 2 | 30·0 | 43·9 | G*g* |
| 7·3 | 3 | 52·0 | 32·3 | 7·0 GSc*g* |
| 9·2 | 5 | 44·0 | 58·9 | 9·0 *g* |
| 9·2 | 8 | 27·5 | 56·5 | 9·0 G*g* |
| 8·5 | 9 | 0·5 | 21·5 | 9·0 G*g* |
| 7·9 | | 46·0 | 44·3 | 8·0 GSc*g* |
| 9·4 | 19 | 0·5 | 28·8 | *g* |

### 136—180.

| mag. | 2h.—3h. m | s | −66° ′ | |
|---|---|---|---|---|
| 8·9 | 19 | 39·3 | 46·8 | 9·5 *g* |
| 9·0 | | 42·3 | 32·7 | *g* |
| 9·4 | | 46·5 | 48·8 | |
| 9·0 | 22 | 59·3 | 50·7 | *g* |
| 8·2 | 25 | 26·8 | 7·3 | 7·5 G*g* |
| 8·9 | | 42·0 | 29·1 | 9·0 G*g* |
| 8·6 | | 58·5 | 37·9 | 8·5 G*g* |
| 9·1 | 26 | 18·5 | 40·2 | *g* |
| 9·5 | | 49·0 | 56·1 | |
| 9·3 | 27 | 6·0 | 30·1 | 9·0 *g* |
| 8·6 | | 39·0 | 20·5 | 8·5 G*g* |
| 9·0 | 28 | 38·0 | 40·9 | *g* |
| 8·3 | 30 | 3·5 | 56·1 | 9·0 G*g* |
| 8·9 | | 50·0 | 11·2 | 8·5 *g* |
| 8·9 | 31 | 27·5 | 9·4 | 9·0 G*g* |
| 8·9 | 32 | 6·5 | 20·1 | 8·5 *g* |
| 9·1 | | 13·0 | 17·3 | *g* |
| 9·5 | 34 | 2·0 | 46·1 | |
| 9·1 | 36 | 33·5 | 13·8 | *g* |
| 7·6 | 37 | 29·0 | 39·0 | 8·0 GSc*g* |
| 8·9 | 40 | 1·5 | 37·3 | 9·0 G*g* |
| 9·0 | 41 | 5·5 | 57·4 | *g* |
| 9·5 | 42 | 10·5 | 16·2 | |
| 9·3 | 43 | 18·0 | 18·0 | |
| 9·0 | | 47·0 | 50·6 | *g* |
| 9·0 | 52 | 16·0 | 50·9 | *g* |
| 9·3 | | 53·5 | 42·4 | *g* |
| 9·5 | 53 | 19·0 | 50·5 | *g* |
| 9·5 | 54 | 51·5 | 38·0 | *g* |
| 8·7 | 56 | 24·7 | 34·7 | *g* |
| 9·6 | 57 | 16·5 | 30·6 | *g* |
| 9·6 | 0 | 40·0 | 9·3 | |
| 8·6 | 1 | 19·2 | 54·3 | 8·5 *g* |
| 8·7 | | 38·0 | 1·1 | *g* |
| 7·6 | 5 | 55·5 | 23·8 | 8·0 GS*g* |
| 9·6 | 6 | 25·0 | 44·7 | *g* |
| 9·6 | | 42·5 | 11·0 | *g* |
| 9·6 | 7 | 28·0 | 9·3 | *g* |
| 8·6 | 8 | 14·0 | 51·0 | 9·0 *g* |
| 8·3 | | 52·5 | 58·1 | 8·8 G*g* |
| 9·6 | 9 | 4·5 | 33·9 | |
| 9·6 | | 39·5 | 28·1 | |
| 9·6 | 10 | 12·0 | 42·7 | |
| 9·6 | | 33·0 | 11·8 | |
| 8·3 | 11 | 58·5 | 17·5 | 8·5 GS*g* |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 73 | 8·3 |
| | 20 | 70 | 8·3 |
| | 30 | 67 | 8·3 |
| | 40 | 63 | 8·2 |
| | 50 | 60 | 8·2 |
| 1 | 0 | 57 | 8·1 |
| | 10 | 54 | 8·0 |
| | 20 | 51 | 7·9 |
| | 30 | 47 | 7·7 |
| | 40 | 44 | 7·6 |
| | 50 | 41 | 7·4 |
| 2 | 0 | 38 | 7·2 |
| | 10 | 36 | 7·0 |
| | 20 | 33 | 6·8 |
| | 30 | 30 | 6·6 |
| | 40 | 27 | 6·4 |
| | 50 | 25 | 6·2 |
| 3 | 0 | 22 | 5·9 |
| | 10 | 20 | 5·6 |
| | 20 | 18 | 5·4 |



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25 prec.

| h | m | a + (s) | δ + (′) |
|---|---|---|---|
| 3 | 10 | 20 | 5.6 |
| | 20 | 18 | 5.4 |
| | 30 | 16 | 5.1 |
| | 40 | 14 | 4.8 |
| | 50 | 12 | 4.5 |
| 4 | 0 | 10 | 4.2 |
| | 10 | 9 | 3.9 |
| | 20 | 7 | 3.5 |
| | 30 | 6 | 3.2 |
| | 40 | 5 | 2.9 |
| | 50 | 3 | 2.5 |
| 5 | 0 | 3 | 2.2 |
| | 10 | 2 | 1.8 |
| | 20 | 1 | 1.5 |
| | 30 | 1 | 1.1 |

## 181—240.

| mag. | 3h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.6 | 12 | 4.0 | 52.5 | g |
| 9.4 | 13 | 46.5 | 5.6 | 9.0 g |
| 8.9 | 15 | 30.0 | 59.9 | g |
| 7.7 | 17 | 23.0 | 20.2 | 7.5 GSg |
| 7.2 | | 31.0 | 10.8 | 7.5 GSg |
| 9.6 | | 54.0 | 51.1 | |
| 9.1 | 18 | 42.0 | 54.0 | g |
| 7.6 | | 57.0 | 14.2 | 7.5 Gg |
| 7.7 | 20 | 51.5 | 13.5 | 8.0 Gg |
| 8.8 | 21 | 14.0 | 0.0 | 8.5 Gg |
| 9.6 | 22 | 54.0 | 2.9 | |
| 8.5 | 24 | 41.0 | 55.3 | 8.5 g |
| 9.6 | | 54.5 | 4.2 | |
| 9.1 | 25 | 32.5 | 17.1 | g |
| 5.8 | 29 | 35.5 | 54.7 | 6.0 GScg |
| 8.7 | | 48.5 | 42.9 | 8.0 Gg |
| 8.5 | 30 | 33.0 | 4.1 | 8.2 Gg |
| 8.7 | | 43.0 | 7.3 | g |
| 6.9 | 33 | 1.0 | 10.8 | 7.0 GSg |
| 8.4 | 36 | 20.0 | 56.1 | 8.7 g |
| 9.6 | 37 | 11.0 | 29.4 | |
| 9.6 | | 36.5 | 26.7 | 9.5 g |
| 7.9 | 40 | 23.5 | 52.5 | 7.7 GSg |
| 9.4 | 41 | 29.5 | 34.8 | g |
| 10.1 | | 30.0 | 21.1 | |
| 9.7 | | 30.0 | 22.8 | |
| 10.1 | | 44.5 | 17.3 | |
| 9.2 | | 59.8 | 26.0 | |
| 9.7 | 42 | 3.5 | 5.8 | g |
| 9.7 | | 14.0 | 5.1 | |
| 10.1 | 43 | 1.5 | 33.0 | |
| 9.2 | | 5.0 | 10.9 | g |
| 9.1 | | 56.5 | 1.3 | g |
| 9.4 | 44 | 2.5 | 13.4 | |
| 7.5 | 45 | 15.5 | 53.4 | 7.5 GSg |
| 10.1 | | 40.0 | 6.6 | |
| 10.1 | 46 | 26.0 | 26.9 | |
| 9.7 | | 37.0 | 12.3 | |
| 9.2 | | 40.0 | 12.2 | |
| 10.1 | 47 | 34.0 | 24.9 | |
| 9.8 | | 53.5 | 9.3 | |
| 9.7 | 49 | 17.0 | 17.9 | |
| 7.8 | | 36.5 | 43.1 | 8.0 GSg |
| 9.5 | 50 | 40.0 | 8.9 | |
| 9.0 | 51 | 24.0 | 17.8 | 9.5 g |
| 9.2 | 52 | 7.5 | 41.2 | g |
| 9.0 | | 29.0 | 52.7 | g |
| 10.1 | | 35.5 | 52.7 | |
| 8.5 | | 36.5 | 26.9 | 9.2 g |
| 9.2 | | 44.5 | 2.9 | |
| 10.0 | 53 | 57.0 | 45.4 | g |
| 8.3 | | 58.5 | 48.9 | 8.5 g |
| 10.1 | 54 | 41.0 | 10.9 | |
| 10.1 | 55 | 30.0 | 56.3 | |
| 9.1 | | 43.0 | 9.7 | g |
| 10.1 | 56 | 28.5 | 10.2 | |
| 10.1 | 57 | 20.3 | 50.9 | |
| 10.1 | | 28.5 | 12.1 | |
| 10.1 | | 29.5 | 57.1 | |
| 8.3 | | 52.5 | 13.9 | 7.8 GSg |

## 241—300.

| mag. | 3h.–4h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.8 | 58 | 39.0 | 37.6 | |
| 9.8 | | 43.0 | 35.9 | g |
| 10.0 | | 54.5 | 58.7 | g |
| 8.3 | 59 | 28.0 | 31.5 | 8.0 Gg |
| 9.7 | | 43.0 | 22.7 | |
| 10.1 | 0 | 27.5 | 41.0 | |
| 10.1 | | 29.5 | 42.7 | |
| 10.1 | | 44.5 | 29.5 | |
| 10.1 | 1 | 32.0 | 53.3 | |
| 10.0 | | 38.5 | 53.9 | |
| 9.5 | 3 | 17.0 | 51.3 | |
| 9.8 | | 26.0 | 32.3 | |
| 10.1 | | 42.5 | 5.7 | |
| 9.4 | 4 | 3.0 | 17.2 | 9.0 g |
| 9.0 | | 28.0 | 7.6 | 9.5 g |
| 9.8 | 6 | 14.5 | 38.0 | |
| 8.3 | | 44.5 | 46.6 | 8.2 Gg |
| 10.1 | 7 | 9.0 | 17.9 | |
| 8.7 | 8 | 52.0 | 22.1 | 8.2 Gg |
| 10.1 | 9 | 40.0 | 11.5 | |
| 10.1 | 10 | 20.0 | 46.9 | |
| 9.8 | | 27.0 | 30.2 | g |
| 10.1 | | 29.5 | 8.4 | |
| 8.3 | 11 | 27.0 | 56.4 | 8.2 GSg |
| 9.8 | 12 | 53.0 | 21.9 | |
| 10.1 | 13 | 50.0 | 46.8 | |
| 8.3 | 15 | 7.0 | 31.5 | 8.8 g |
| 10.1 | | 26.5 | 23.0 | |
| 8.0 | | 47.5 | 13.0 | 8.2 GSg |
| 8.3 | 16 | 11.2 | 59.1 | 8.0 GScg |
| 8.1 | | 55.5 | 0.9 | 8.5 Gg |
| 8.2 | 18 | 32.8 | 15.9 | 8.5 Ggg |
| 10.1 | | 36.8 | 20.4 | |
| 10.1 | | 53.3 | 5.3 | |
| 9.5 | 20 | 8.8 | 30.4 | g |
| 8.2 | | 15.5 | 32.0 | 8.0 GSg |
| 9.8 | | 20.0 | 17.3 | |
| 9.2 | | 20.3 | 7.7 | |
| 9.5 | 21 | 5.5 | 31.8 | g |
| 8.8 | | 52.0 | 1.3 | 9.0 Gg |
| 9.2 | 22 | 3.2 | 18.6 | |
| 8.8 | | 35.0 | 8.6 | 8.5 g |
| 9.1 | | 49.5 | 25.1 | |
| 9.5 | | 58.3 | 10.2 | g |
| 8.1 | 24 | 47.0 | 5.5 | 8.2 Gg |
| 9.8 | 25 | 29.0 | 57.8 | |
| 9.2 | 26 | 7.2 | 58.5 | |
| 9.8 | | 16.0 | 28.5 | |
| 9.8 | | 22.7 | 0.5 | |
| 9.3 | | 51.5 | 10.9 | |
| 9.4 | 27 | 21.0 | 33.9 | g |
| 9.9 | 28 | 2.2 | 57.9 | |
| 8.9 | 29 | 2.5 | 56.7 | 8.5 g |
| 9.2 | | 32.0 | 22.8 | Kg |
| 9.8 | | 52.0 | 36.5 | |
| 8.9 | 30 | 10.0 | 15.1 | 8.5 Gg |
| 9.9 | | 12.5 | 21.7 | |
| 9.6 | | 31.5 | 0.9 | |
| 9.3 | | 42.0 | 1.9 | |
| 9.3 | 31 | 50.5 | 38.5 | |

## 301—360.

| mag. | 4h.–5h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.8 | 32 | 41.5 | 12.9 | |
| 9.2 | 33 | 38.5 | 7.9 | g |
| 8.5 | | 56.5 | 26.7 | 8.5 g |
| 9.1 | 34 | 2.0 | 50.5 | |
| 9.5 | | 4.5 | 36.1 | |
| 9.2 | | 45.5 | 46.7 | |
| 8.6 | 36 | 25.0 | 40.7 | 9.2 Gg |
| 9.8 | | 43.0 | 22.1 | |
| 8.8 | 37 | 10.5 | 21.9 | 9.5 g |
| 8.6 | | 13.0 | 42.5 | 8.8 g |
| 9.5 | | 31.0 | 49.3 | |
| 8.9 | 39 | 0.5 | 15.6 | g |
| 9.5 | 41 | 2.0 | 0.9 | |
| 9.2 | | 15.0 | 8.5 | Gg |
| 9.2 | | 43.0 | 1.9 | |
| 9.8 | | 57.5 | 35.9 | |
| 8.6 | 42 | 43.0 | 45.7 | 9.0 g |
| 9.1 | 43 | 14.0 | 35.1 | g |
| 8.4 | | 18.2 | 58.3 | 8.7 g |
| 7.5 | 45 | 32.5 | 17.9 | 7.5 GSg |
| 8.6 | | 37.5 | 44.7 | 9.0 g |
| 8.5 | 46 | 41.5 | 13.5 | 9.0 g |
| 9.9 | | 43.0 | 16.4 | g |
| 9.7 | | 54.0 | 26.5 | |
| 9.1 | | 59.0 | 3.3 | |
| 8.9 | 47 | 5.5 | 20.1 | g |
| 9.6 | | 31.5 | 23.3 | |
| 8.9 | 48 | 4.0 | 41.3 | 9.5 g |
| 9.0 | | 52.0 | 46.2 | 9.0 g |
| 9.3 | 49 | 19.0 | 10.5 | |
| 9.5 | | 53.5 | 35.1 | |
| 9.6 | 50 | 25.0 | 8.3 | |
| 9.4 | | 45.0 | 10.9 | |
| 9.9 | 52 | 4.5 | 26.5 | |
| 9.9 | | 9.0 | 55.9 | |
| 9.9 | | 49.5 | 2.9 | |
| 9.9 | 53 | 18.5 | 37.9 | |
| 8.0 | | 19.0 | 52.5 | 7.0 GScg |
| 9.4 | 54 | 48.5 | 56.9 | |
| 9.5 | | 51.0 | 52.7 | |
| 9.6 | 55 | 17.0 | 26.9 | |
| 9.5 | 56 | 9.0 | 49.9 | 9.5 |
| 9.1 | | 21.0 | 39.8 | |
| neb | | 30.5 | 36.0 | |
| 9.9 | | 44.5 | 35.9 | |
| 9.9 | | 54.0 | 34.7 | |
| 9.8 | 57 | 31.5 | 38.9 | |
| 9.8 | | 38.5 | 19.8 | g |
| 9.0 | 58 | 0.5 | 26.8 | 9.5 g |
| 8.9 | | 40.7 | 23.1 | g |
| 8.8 | | 43.3 | 54.9 | 9.5 g |
| 10.0 | 59 | 21.5 | 44.7 | |
| 9.3 | 0 | 10.5 | 11.7 | g |
| 9.5 | | 10.8 | 22.6 | |
| 9.8 | | 11.5 | 1.2 | |
| 9.5 | | 28.5 | 39.1 | |
| 9.3 | | 34.0 | 31.3 | |
| 9.3 | | 40.3 | 1.4 | |
| 10.0 | | 43.5 | 6.8 | |
| 10.0 | | 57.0 | 6.4 | |

## 361—420.

| mag. | 5h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10.0 | 1 | 1.0 | 3.2 | |
| 9.3 | | 46.5 | 4.2 | |
| neb | 2 | 5.0 | 17.0 | |
| 8.8 | | 19.0 | 53.6 | 9.5 g |
| 10.0 | | 45.0 | 27.6 | |
| 9.5 | | 45.5 | 32.7 | g |
| 10.0 | | 47.5 | 25.9 | |
| 10.0 | | 51.5 | 2.1 | |
| 9.4 | 3 | 21.5 | 45.9 | g |
| 9.4 | | 25.5 | 48.5 | g |
| neb | 4 | 3.5 | 36.1 | |
| 9.1 | 5 | 8.0 | 54.1 | |
| 10.0 | | 48.5 | 23.8 | |
| 8.9 | 6 | 4.0 | 7.8 | 8.2 Gg |
| 9.5 | 7 | 34.0 | 22.9 | |
| 10.0 | | 41.0 | 21.4 | |
| 10.0 | 8 | 46.5 | 31.5 | |
| 8.9 | | 58.0 | 19.7 | g |
| 9.5 | 9 | 25.5 | 49.5 | |
| 8.8 | | 56.0 | 34.4 | 8.0 Gg |
| 9.7 | 10 | 26.0 | 13.9 | |
| 8.8 | 11 | 10.5 | 50.1 | 9.0 g |
| 9.3 | 13 | 8.5 | 21.5 | |
| 10.0 | | 28.0 | 21.0 | |
| 9.3 | | 37.0 | 28.5 | |
| 9.5 | | 57.5 | 50.8 | |
| 9.5 | 14 | 4.0 | 41.3 | |
| 9.8 | | 37.0 | 36.5 | |
| 9.8 | 15 | 20.5 | 4.5 | |
| 9.4 | 16 | 1.0 | 41.9 | g |
| 9.7 | | 15.0 | 15.9 | g |
| 10.0 | | 20.0 | 38.9 | |
| 10.0 | | 45.5 | 4.9 | |
| 10.0 | 18 | 28.5 | 0.9 | |
| 9.8 | | 38.0 | 55.5 | |
| 8.9 | 19 | 21.0 | 6.1 | 9.0 g |
| 8.8 | | 44.0 | 33.8 | 8.5 g |
| 9.5 | | 47.5 | 21.1 | |
| 7.3 | | 48.0 | 10.8 | 8.0 GSg |
| 8.9 | | 52.0 | 43.7 | g |
| 10.0 | | 59.0 | 54.6 | |
| 9.8 | 20 | 1.0 | 44.1 | |
| 10.0 | | 2.0 | 11.8 | |
| 10.0 | 21 | 18.2 | 0.6 | |
| 10.0 | 22 | 1.0 | 13.5 | |
| 10.0 | | 17.5 | 48.1 | |
| 9.8 | | 48.0 | 7.9 | |
| 9.1 | 23 | 2.5 | 31.9 | g |
| 10.0 | | 41.0 | 45.7 | |
| 10.0 | | 51.0 | 29.6 | |
| 9.5 | 24 | 49.5 | 56.8 | |
| 8.4 | 25 | 16.5 | 12.5 | Gg |
| 8.4 | 26 | 1.0 | 32.8 | g |
| 9.4 | | 5.0 | 41.9 | |
| 9.5 | 27 | 39.5 | 20.0 | |
| 9.2 | 28 | 7.5 | 37.9 | g |
| 10.0 | | 7.5 | 13.5 | |
| 8.5 | 29 | 7.5 | 46.9 | 8.0 Gg |
| 8.4 | | 12.0 | 42.4 | 9.0 g |
| 10.0 | | 13.3 | 58.4 | |



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## 421—480.

| mag. | 5h. m | s | −66° ′ | |
|---|---|---|---|---|
| 7·7 | 29 | 21·0 | 31·9 | 8·5 GS*g* |
| 9·2 | | 36·5 | 8·0 | |
| 9·1 | 30 | 24·0 | 39·9 | *g* |
| neb | | 25·5 | 58·4 | |
| 8·5 | | 41·0 | 37·9 | 9·0 G*g* |
| 8·5 | 31 | 38·5 | 45·8 | 9·0 *g* |
| 10·0 | | 43·0 | 15·4 | |
| 10·0 | | 55·0 | 26·2 | |
| 10·0 | 32 | 15·0 | 29·0 | |
| 9·1 | | 54·0 | 28·0 | *g* |
| 8·2 | | 57·8 | 1·6 | 8·5 *g* |
| 10·0 | 34 | 3·0 | 56·0 | |
| 8·9 | | 49·3 | 58·8 | *g* |
| 9·5 | 35 | 2·0 | 58·5 | *g* |
| 10·0 | | 47·5 | 52·2 | |
| 10·0 | 36 | 1·0 | 2·0 | |
| 9·3 | | 17·5 | 21·8 | 9·0 *g* |
| 9·8 | | 20·5 | 45·0 | |
| 5·7 | | 53·5 | 37·8 | 6·0 GS*g* |
| 10·0 | 37 | 6·0 | 52·0 | |
| 10·1 | 39 | 4·0 | 51·9 | |
| 9·4 | 40 | 2·5 | 59·0 | 9·5 *g* |
| 9·4 | | 11·5 | 57·8 | 9·5 *g* |
| 9·6 | 41 | 37·0 | 43·9 | |
| 10·1 | | 41·5 | 50·5 | |
| 8·8 | | 50·0 | 8·8 | 9·0 *g* |
| 10·1 | 42 | 42·5 | 8·1 | |
| 9·4 | | 56·0 | 35·1 | |
| 10·1 | 43 | 25·5 | 28·0 | |
| 10·1 | | 28·5 | 12·1 | |
| 9·6 | 44 | 24·0 | 47·9 | |
| 10·0 | 45 | 5·0 | 32·0 | |
| 9·9 | 46 | 2·5 | 25·0 | |
| 9·6 | | 3·5 | 0·0 | |
| 9·3 | 47 | 16·5 | 44·1 | *g* |
| 8·9 | | 58·5 | 42·1 | *g* |
| 8·7 | 48 | 21·5 | 39·9 | *g* |
| 9·4 | | 25·0 | 35·5 | *g* |
| 9·6 | | 53·5 | 15·9 | |
| 9·2 | 49 | 43·5 | 4·9 | *g* |
| 8·9 | | 58·5 | 30·1 | *g* |
| 9·4 | 50 | 0·5 | 19·5 | |
| 5·0 | | 0·5 | 55·9 | 6·5 GSc*gt* |
| 9·7 | | 14·0 | 56·1 | |
| 9·6 | | 22·0 | 37·8 | |
| 9·4 | | 29·0 | 34·8 | |
| 9·9 | | 39·0 | 24·3 | |
| 9·4 | | 59·0 | 24·8 | |
| 9·6 | 51 | 7·5 | 44·8 | |
| 9·7 | | 29·5 | 15·3 | |
| 9·6 | | 54·5 | 16·1 | |
| 9·4 | 52 | 17·5 | 39·1 | |
| 9·1 | 53 | 21·0 | 25·1 | |
| 10·0 | | 21·0 | 16·9 | |
| 10·1 | 54 | 31·0 | 57·2 | |
| 9·1 | | 42·0 | 30·1 | *g* |
| 10·0 | 56 | 21·0 | 34·5 | |
| 8·9 | | 51·0 | 18·9 | *g* |
| 9·4 | | 51·0 | 39·5 | |
| 9·7 | 57 | 37·5 | 9·9 | |

## 481—540.

| mag. | 5h.—6h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·7 | 57 | 44·0 | 12·1 | |
| 10·1 | | 50·5 | 16·0 | |
| 10·1 | 58 | 0·0 | 9·3 | |
| 9·1 | | 10·5 | 20·5 | *g* |
| 9·9 | | 19·0 | 41·1 | |
| 9·9 | 59 | 44·5 | 36·2 | |
| 9·0 | 0 | 13·0 | 13·3 | *g* |
| 9·4 | | 33·0 | 3·1 | |
| 9·4 | 1 | 1·0 | 55·7 | |
| 9·1 | | 39·0 | 35·1 | *g* |
| 9·3 | 3 | 52·0 | 28·5 | *g* |
| 9·6 | | 53·5 | 46·1 | |
| 5·7 | 6 | 0·5 | 1·5 | 5·7 GS*g* |
| 9·7 | | 19·0 | 4·0 | *g* |
| 9·4 | 7 | 54·0 | 58·8 | *g* |
| 9·9 | 8 | 3·5 | 42·5 | |
| 9·8 | | 21·0 | 17·2 | |
| 9·1 | 10 | 3·0 | 30·5 | *g* |
| 10·0 | | 47·5 | 6·3 | |
| 9·1 | 11 | 26·5 | 55·0 | *g* |
| 9·9 | 12 | 37·0 | 40·4 | |
| 9·4 | | 59·5 | 0·5 | 9·0 *g* |
| 9·4 | 13 | 19·5 | 10·3 | *g* |
| 7·7 | | 43·5 | 38·4 | 7·5 GS*gg* |
| 8·4 | | 48·5 | 8·0 | 8·2 *g* |
| 9·6 | | 48·5 | 45·4 | 9·5 G*g* |
| 7·3 | 15 | 34·0 | 14·7 | 8·0 GS*g* |
| 10·1 | | 35·5 | 12·0 | |
| 8·5 | | 47·0 | 42·5 | 9·0 G*g* |
| 9·7 | 16 | 36·5 | 57·0 | |
| 9·6 | | 48·0 | 1·0 | |
| 9·6 | 17 | 8·5 | 47·1 | *g* |
| 9·7 | | 24·5 | 0·4 | |
| 9·6 | 18 | 28·0 | 7·3 | |
| 9·9 | 19 | 6·0 | 17·1 | |
| 8·4 | | 14·3 | 0·0 | 8·5 *g* |
| 10·0 | | 47·0 | 14·0 | |
| 9·4 | | 49·7 | 45·2 | |
| 9·7 | | 52·5 | 44·4 | |
| 9·3 | | 59·5 | 21·7 | *g* |
| 9·6 | 20 | 5·5 | 21·8 | *g* |
| 8·7 | | 8·7 | 29·5 | 9·0 S*g* |
| 9·0 | | 20·5 | 20·4 | 9·5 *g* |
| 9·8 | | 37·0 | 34·1 | |
| 9·4 | 21 | 22·5 | 55·2 | *g* |
| 9·4 | | 42·0 | 36·4 | |
| 9·7 | | 56·0 | 14·2 | |
| 10·0 | 22 | 20·0 | 29·1 | |
| 8·7 | | 33·0 | 14·5 | 8·5 *g* |
| 10·0 | | 37·5 | 23·8 | |
| 9·1 | 23 | 17·5 | 56·2 | 9·0 *g* |
| 9·2 | | 23·0 | 36·8 | *g* |
| 10·0 | | 52·0 | 5·3 | |
| 9·4 | 24 | 24·0 | 54·3 | *g* |
| 9·5 | 25 | 10·0 | 24·6 | |
| 10·0 | | 30·5 | 21·0 | |
| 9·8 | | 56·0 | 49·1 | |
| 10·0 | 26 | 6·5 | 29·6 | |
| 10·0 | | 26·0 | 52·2 | |
| 9·6 | | 44·5 | 15·3 | |

## 541—600.

| mag. | 6h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·1 | 26 | 50·7 | 0·7 | 9·5 *g* |
| 10·0 | | 55·5 | 17·1 | |
| 10·0 | 27 | 3·0 | 36·7 | |
| 9·1 | | 32·5 | 35·7 | *g* |
| 9·4 | | 32·5 | 38·1 | *g* |
| 9·3 | | 51·0 | 48·1 | *g* |
| 10·0 | | 58·5 | 15·7 | |
| 9·2 | 28 | 0·0 | 40·2 | 8·5 G*g* |
| 10·0 | | 0·5 | 32·5 | |
| 9·4 | | 14·5 | 55·3 | *g* |
| 9·5 | | 22·0 | 51·4 | |
| 9·3 | | 36·0 | 20·1 | |
| 9·4 | | 41·0 | 50·2 | *g* |
| 10·0 | | 43·0 | 56·1 | |
| 10·0 | 29 | 1·0 | 10·1 | |
| 9·2 | | 43·0 | 32·9 | |
| 10·0 | 31 | 2·0 | 35·4 | |
| 8·8 | | 4·0 | 46·6 | 7·3 GS*g* |
| 9·8 | | 6·0 | 26·0 | |
| 10·0 | | 16·0 | 5·4 | |
| 10·0 | | 24·5 | 17·0 | |
| 9·7 | | 30·0 | 16·1 | |
| 9·8 | | 31·0 | 31·5 | |
| 10·0 | | 51·0 | 26·7 | |
| 10·0 | | 51·5 | 29·8 | |
| 9·6 | 32 | 1·0 | 45·8 | *g* |
| 9·4 | | 33·0 | 10·3 | |
| 9·6 | 33 | 27·5 | 34·9 | |
| 9·4 | | 43·0 | 28·0 | |
| 9·5 | 34 | 10·5 | 51·2 | |
| 10·0 | | 30·0 | 12·8 | |
| 9·6 | | 46·0 | 29·1 | |
| 10·0 | | 51·5 | 6·4 | |
| 9·2 | 35 | 20·0 | 42·8 | *g* |
| 9·3 | | 44·0 | 35·1 | |
| 9·5 | 37 | 22·0 | 23·0 | |
| 9·3 | | 45·0 | 15·8 | 9·0 *g* |
| 10·0 | | 52·0 | 59·1 | |
| 9·4 | | 58·5 | 32·6 | |
| 9·4 | | 59·0 | 42·6 | |
| 10·0 | 38 | 31·3 | 2·9 | |
| 9·6 | | 33·5 | 29·5 | |
| 9·3 | 39 | 56·0 | 56·3 | *g* |
| 10·0 | 40 | 5·0 | 36·3 | |
| 10·0 | | 23·0 | 38·6 | |
| 9·5 | | 23·0 | 34·1 | |
| 10·0 | | 40·5 | 55·9 | |
| 10·0 | | 57·0 | 46·1 | *g* |
| 9·3 | 41 | 46·0 | 49·2 | *g* |
| 9·3 | | 59·0 | 58·9 | |
| 10·0 | 42 | 23·5 | 42·3 | |
| 10·0 | | 51·0 | 26·3 | |
| 9·2 | | 53·5 | 5·3 | |
| 8·1 | 43 | 10·0 | 22·2 | 8·5 *g* |
| 10·0 | | 17·0 | 25·4 | |
| 9·4 | | 28·0 | 34·0 | |
| 9·3 | | 39·5 | 8·1 | |
| 9·6 | 44 | 25·0 | 56·1 | *g* |
| 9·3 | | 46·0 | 28·8 | *g* |
| 8·8 | | 52·0 | 43·7 | 9·0 *g* |

## 601—660.

| mag. | 6h.—7h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·3 | 45 | 20·7 | 59·1 | |
| 9·3 | | 31·0 | 12·2 | 9·0 *g* |
| 9·7 | 46 | 41·0 | 30·7 | |
| 9·8 | | 50·5 | 4·5 | |
| 9·1 | 48 | 36·5 | 0·2 | 8·5 G*g* |
| 9·2 | 49 | 27·0 | 11·2 | |
| 9·9 | | 44·0 | 45·1 | |
| 7·9 | | 49·0 | 8·6 | 7·0 GS*g* |
| 9·5 | 50 | 16·5 | 49·5 | |
| 10·0 | | 46·0 | 41·9 | |
| 10·0 | | 51·5 | 9·1 | |
| 9·6 | 51 | 12·2 | 58·0 | |
| 9·7 | | 32·7 | 58·1 | |
| 9·3 | | 40·0 | 33·5 | *g* |
| 9·8 | | 43·5 | 51·1 | |
| 9·1 | 52 | 13·0 | 13·0 | *g* |
| 10·0 | | 19·0 | 38·2 | |
| 9·1 | | 20·0 | 40·0 | *g* |
| 9·8 | | 38·0 | 40·1 | *g* |
| 9·2 | 53 | 2·0 | 11·1 | *g* |
| 10·0 | | 3·0 | 38·8 | |
| 9·1 | 54 | 2·0 | 49·1 | *g* |
| 9·6 | | 13·5 | 13·5 | *g* |
| 9·2 | | 49·0 | 33·8 | |
| 9·5 | 55 | 10·0 | 51·1 | |
| 10·0 | | 32·5 | 19·1 | |
| 10·0 | | 43·5 | 6·8 | |
| 10·0 | 56 | 23·0 | 27·1 | |
| 9·4 | | 29·0 | 4·4 | 10·0 *g* |
| 10·0 | | 38·5 | 7·8 | *g* |
| 9·3 | 57 | 6·5 | 52·1 | *g* |
| 8·7 | | 43·5 | 49·0 | 9·0 *g* |
| 9·6 | | 46·0 | 57·2 | *g* |
| 9·4 | | 50·7 | 3·1 | |
| 9·5 | 58 | 52·5 | 4·0 | |
| 9·2 | 59 | 27·8 | 55·2 | *g* |
| 9·2 | | 30·0 | 14·5 | |
| 9·5 | 0 | 2·5 | 2·3 | |
| 9·2 | | 14·0 | 58·7 | *g* |
| 9·7 | | 41·5 | 39·7 | |
| 9·3 | | 48·3 | 37·1 | *g* |
| 9·3 | 1 | 21·0 | 7·6 | |
| 9·7 | | 52·5 | 46·0 | |
| 9·2 | | 58·5 | 40·8 | |
| 9·2 | 2 | 7·5 | 45·2 | *g* |
| 8·3 | 3 | 2·0 | 42·2 | 7·8 GS*g* |
| 9·7 | | 6·5 | 11·1 | |
| 9·7 | | 41·0 | 16·0 | |
| 9·7 | | 48·0 | 15·1 | |
| 9·3 | | 57·0 | 25·4 | |
| 9·4 | 4 | 2·0 | 37·1 | *g* |
| 9·3 | | 42·0 | 51·2 | |
| 9·2 | | 53·0 | 15·5 | |
| 9·2 | 5 | 53·0 | 55·4 | |
| 8·3 | 6 | 39·0 | 49·0 | 7·5 GS*g* |
| 9·7 | 7 | 19·5 | 12·2 | |
| 9·2 | 8 | 29·0 | 30·7 | |
| 9·1 | 10 | 7·0 | 47·3 | *g* |
| 8·8 | | 32·0 | 6·8 | 9·0 *g* |
| 9·4 | | 41·5 | 55·7 | *g* |

25 prec.

| h | m | α s | δ ′ |
|---|---|---|---|
| | | | + |
| 5 | 20 | +1 | 1·5 |
| | 30 | +1 | 1·1 |
| | 40 | 0 | 0·7 |
| | 50 | 0 | 0·4 |
| 6 | 0 | −1 | 0·0 |
| | | | − |
| | 10 | 0 | 0·4 |
| | 20 | 0 | 0·7 |
| | 30 | +1 | 1·1 |
| | 40 | +1 | 1·5 |
| | 50 | +2 | 1·8 |
| 7 | 0 | +3 | 2·2 |
| | 10 | +3 | 2·5 |



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| 25 prec. | | a | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 7 | 10 | 3 | 2·5 |
| | 20 | 5 | 2·9 |
| | 30 | 6 | 3·2 |
| | 40 | 7 | 3·5 |
| | 50 | 9 | 3·9 |
| 8 | 0 | 10 | 4·2 |
| | 10 | 12 | 4·5 |
| | 20 | 14 | 4·8 |
| | 30 | 16 | 5·1 |
| | 40 | 18 | 5·4 |

**661—720.**

| mag. | $7^{h.}$ m | s | − 66° ′ | |
|---|---|---|---|---|
| 8·3 | 10 | 48·0 | 51·2 | 7·2 GS*g* |
| 8·8 | | 55·0 | 53·4 | 9·5 *g* |
| 9·3 | 12 | 6·0 | 8·8 | |
| 9·6 | | 49·0 | 14·9 | |
| 9·7 | 14 | 15·0 | 4·7 | |
| 9·1 | | 27·5 | 8·9 | |
| 9·1 | | 47·5 | 19·2 | *g* |
| 9·3 | | 56·5 | 44·0 | |
| 8·5 | 15 | 56·5 | 34·7 | 9·0 *g* |
| 9·7 | 16 | 10·0 | 3·1 | |
| 9·4 | | 24·5 | 2·8 | |
| 9·5 | | 28·0 | 24·2 | |
| 8·8 | | 43·0 | 46·8 | 9·0 *g* |
| 9·7 | 17 | 2·0 | 24·1 | |
| 9·1 | | 11·0 | 20·6 | 9·5 *g* |
| 9·2 | | 15·8 | 59·9 | *g* |
| 9·4 | 18 | 8·0 | 15·5 | *g* |
| 9·1 | | 23·0 | 51·6 | *g* |
| 9·7 | 19 | 0·0 | 26·2 | |
| 8·8 | | 1·5 | 57·2 | 8·1 G*g* |
| 9·2 | 20 | 28·0 | 24·9 | *g* |
| 9·4 | | 50·0 | 42·7 | |
| 9·4 | 21 | 13·5 | 5·1 | |
| 9·0 | | 41·0 | 47·3 | *g* |
| 9·2 | | 43·0 | 52·4 | |
| 8·9 | | 45·5 | 3·4 | *g* |
| 7·8 | 22 | 23·0 | 17·6 | 8·5 S*g* |
| 9·7 | | 29·5 | 48·1 | |
| 8·9 | 23 | 40·0 | 17·5 | 9·0 *g* |
| 9·0 | | 58·0 | 25·2 | *g* |
| 9·7 | 24 | 57·5 | 42·0 | |
| 9·3 | 25 | 31·0 | 47·1 | |
| 9·2 | | 39·0 | 12·1 | *g* |
| 9·7 | 26 | 15·0 | 34·3 | |
| 9·7 | | 22·5 | 49·1 | |
| 8·9 | | 23·0 | 36·6 | 9·0 *g* |
| 9·3 | | 58·0 | 45·2 | *g* |
| 9·7 | 27 | 9·0 | 22·5 | |
| 9·7 | | 10·5 | 23·7 | |
| 8·3 | | 31·5 | 43·2 | 8·5 G*g* |
| 9·4 | | 54·0 | 8·5 | *g* |
| 9·7 | | 56·5 | 21·1 | |
| 9·4 | 28 | 14·5 | 15·3 | |
| 9·7 | | 49·0 | 12·6 | *g* |
| 9·2 | 29 | 26·5 | 17·8 | *g* |
| 9·0 | 30 | 19·0 | 4·9 | 8·5 *g* |
| 8·6 | 31 | 1·0 | 54·8 | 8·1 G*g* |
| 9·4 | | 29·5 | 48·0 | |
| 9·6 | 32 | 38·5 | 38·1 | |
| 9·5 | 33 | 21·0 | 2·3 | |
| 9·7 | | 30·5 | 26·7 | |
| 8·9 | | 42·0 | 4·8 | *g* |
| 8·8 | 34 | 13·0 | 22·1 | 8·5 *g* |
| 9·4 | | 20·5 | 51·0 | |
| 9·6 | | 41·0 | 8·6 | |
| 9·4 | 36 | 1·0 | 43·4 | |
| 9·0 | 37 | 4·5 | 38·6 | *g* |
| 9·4 | | 33·5 | 10·4 | |
| 9·2 | | 50·5 | 12·9 | |
| 9·4 | 38 | 3·0 | 54·3 | |

**721—780.**

| mag. | $7^{h.}$ m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·1 | 38 | 9·0 | 48·6 | *g* |
| 9·7 | | 24·5 | 3·7 | |
| 9·0 | | 29·7 | 25·8 | Gg*g* |
| 9·7 | | 42·5 | 55·0 | |
| 9·7 | 39 | 11·0 | 45·7 | |
| 9·4 | | 17·2 | 16·0 | |
| 9·7 | | 58·5 | 25·0 | |
| 9·5 | 40 | 16·7 | 12·6 | |
| 9·7 | | 40·0 | 13·9 | |
| 9·3 | 41 | 1·7 | 56·9 | |
| 9·7 | | 10·0 | 53·7 | |
| 9·7 | | 33·5 | 8·2 | |
| 8·5 | | 45·5 | 36·1 | 7·5 GSg*g* |
| 9·7 | | 47·0 | 3·4 | |
| 9·1 | | 49·0 | 34·9 | 8·5 *g* |
| 9·0 | | 58·0 | 2·6 | *g* |
| 8·8 | 43 | 31·5 | 53·9 | 8·0 GS*g* |
| 9·6 | | 39·5 | 0·9 | |
| 9·4 | | 59·0 | 28·6 | |
| 9·7 | 44 | 6·5 | 57·9 | |
| 9·7 | | 25·5 | 8·5 | |
| 9·6 | | 30·0 | 58·9 | |
| 8·7 | 45 | 9·0 | 45·7 | 8·5 G*g* |
| 9·4 | | 53·0 | 41·9 | |
| 8·6 | | 58·5 | 23·8 | 8·5 *g* |
| 9·5 | | 59·5 | 30·6 | *g* |
| 9·7 | 46 | 22·5 | 18·3 | |
| 9·4 | | 23·5 | 45·4 | |
| 9·7 | | 27·0 | 45·7 | |
| 9·5 | | 56·5 | 46·7 | |
| 9·7 | | 58·0 | 59·5 | |
| 9·1 | 47 | 38·7 | 1·9 | 9·0 *g* |
| 9·4 | | 50·0 | 34·4 | |
| 9·4 | | 58·5 | 2·0 | |
| 9·7 | 49 | 3·5 | 53·9 | |
| 9·4 | | 26·5 | 23·9 | |
| 9·6 | | 31·5 | 29·9 | |
| 9·7 | 50 | 4·0 | 54·8 | |
| 8·7 | | 7·5 | 22·4 | *g* |
| 9·7 | | 39·0 | 44·1 | |
| 9·4 | | 48·5 | 31·9 | |
| 9·4 | | 50·5 | 14·1 | |
| 9·5 | 51 | 13·5 | 56·4 | |
| 9·7 | | 25·5 | 3·0 | |
| 9·3 | | 26·5 | 16·6 | *g* |
| 9·7 | | 41·5 | 55·1 | |
| 9·6 | 52 | 11·5 | 46·6 | |
| 9·7 | | 53·5 | 40·6 | |
| 9·0 | 53 | 36·0 | 44·1 | *g* |
| 9·7 | | 48·0 | 36·9 | |
| 9·7 | 54 | 7·5 | 31·8 | |
| 9·6 | | 25·5 | 32·5 | |
| 9·1 | | 54·5 | 34·6 | |
| 9·4 | 55 | 21·5 | 39·6 | |
| 9·5 | | 23·5 | 8·6 | |
| 9·1 | 56 | 10·0 | 15·5 | |
| 9·4 | | 12·5 | 32·1 | |
| 9·0 | | 26·0 | 25·7 | *g* |
| 9·0 | | 27·5 | 51·9 | *g* |
| 9·3 | | 59·0 | 40·2 | |

**781—840.**

| mag. | $7^{h.}$—$8^{h.}$ m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·4 | 57 | 15·5 | 20·2 | |
| 9·3 | | 29·0 | 12·0 | |
| 8·3 | | 44·5 | 25·9 | 8·5 *g* |
| 9·5 | 58 | 17·0 | 53·3 | |
| 9·3 | | 18·0 | 12·3 | |
| 9·3 | 59 | 52·0 | 42·0 | |
| 9·4 | 0 | 47·5 | 17·3 | |
| 9·1 | 1 | 11·5 | 4·9 | |
| 9·7 | | 16·0 | 18·0 | |
| 9·4 | | 41·5 | 7·0 | |
| 9·3 | 2 | 17·0 | 15·0 | 9·0 *g* |
| 8·6 | | 29·5 | 28·9 | 8·5 G*g* |
| 9·3 | | 47·0 | 9·8 | *g* |
| 9·5 | 3 | 20·5 | 57·2 | |
| 9·1 | | 38·0 | 20·9 | |
| 7·8 | | 45·0 | 51·0 | 8·0 GS*g* |
| 9·3 | 4 | 0·0 | 37·6 | |
| 9·5 | | 17·5 | 6·6 | |
| 9·3 | | 57·5 | 5·8 | |
| 9·1 | 6 | 28·5 | 47·3 | |
| 9·5 | 7 | 49·5 | 47·9 | |
| 9·3 | | 51·0 | 22·3 | |
| 9·7 | 8 | 34·5 | 51·8 | |
| 9·7 | 10 | 15·5 | 17·4 | |
| 9·7 | | 37·0 | 30·9 | |
| 8·9 | | 43·5 | 58·8 | 8·5 *g* |
| 9·3 | 11 | 35·5 | 0·7 | 9·0 *g* |
| 9·6 | 12 | 10·7 | 59·0 | |
| 9·4 | | 17·5 | 53·9 | 8·5 |
| 8·8 | | 44·0 | 13·1 | 9·0 *g* |
| 9·4 | 13 | 27·0 | 45·0 | G |
| 9·4 | 14 | 2·0 | 21·0 | G |
| 9·4 | | 45·5 | 48·9 | |
| 9·7 | 15 | 3·5 | 24·4 | |
| 9·4 | | 25·5 | 29·0 | |
| 9·5 | | 38·5 | 45·6 | |
| 9·4 | | 55·0 | 3·4 | |
| 9·0 | 16 | 4·7 | 57·5 | 8·5 G*g* |
| 8·8 | | 57·5 | 7·1 | 8·5 *g* |
| 9·3 | 17 | 11·5 | 32·0 | |
| 9·7 | | 12·0 | 52·7 | |
| 9·7 | | 18·0 | 12·7 | |
| 9·1 | | 24·5 | 28·8 | |
| 9·4 | | 24·5 | 14·0 | |
| 8·9 | 18 | 18·5 | 13·3 | 8·8 *g* |
| 8·7 | | 49·7 | 6·0 | 9·0 G*g* |
| 10·0 | 19 | 0·0 | 16·1 | |
| 9·7 | | 4·5 | 38·7 | |
| 9·6 | | 5·2 | 5·9 | |
| 10·0 | | 12·0 | 27·2 | |
| 10·0 | | 19·5 | 33·9 | |
| 9·2 | | 19·8 | 47·3 | |
| 10·0 | | 20·5 | 57·8 | |
| 9·8 | | 21·5 | 6·2 | |
| 9·8 | | 48·0 | 1·7 | |
| 8·8 | | 55·0 | 19·9 | 9·0 G*g* |
| 10·0 | 20 | 3·0 | 25·8 | |
| 8·5 | | 15·5 | 23·6 | 8·5 G*g* |
| 9·7 | | 31·2 | 13·0 | |
| 8·4 | | 54·3 | 56·0 | 7·8 GS*g* |

**841—900.**

| mag. | $8^{h.}$ m | s | − 66° ′ | |
|---|---|---|---|---|
| 10·0 | 20 | 54·5 | 10·3 | |
| 9·0 | | 55·5 | 0·0 | |
| 10·0 | 22 | 29·0 | 51·0 | |
| 10·0 | | 42·0 | 22·3 | |
| 9·2 | 23 | 1·0 | 53·7 | |
| 9·6 | | 31·5 | 29·3 | |
| 9·2 | | 40·5 | 22·7 | |
| 9·2 | | 41·5 | 14·5 | |
| 9·2 | 24 | 30·5 | 48·8 | *g* |
| 10·0 | | 35·5 | 5·5 | |
| 9·5 | | 46·0 | 50·0 | |
| 9·2 | | 53·0 | 1·8 | |
| 9·8 | | 56·5 | 34·4 | |
| 10·0 | 25 | 24·5 | 33·8 | |
| 10·0 | | 28·0 | 52·5 | |
| 9·6 | | 51·0 | 32·8 | |
| 9·2 | 26 | 13·5 | 56·6 | |
| 9·2 | | 46·0 | 21·4 | 9·0 *g* |
| 9·2 | 27 | 25·0 | 44·8 | *g* |
| 9·6 | 28 | 0·5 | 42·9 | |
| 7·5 | | 31·0 | 43·1 | 7·5 GS*g* |
| 10·0 | | 42·0 | 16·8 | |
| 10·0 | | 43·5 | 18·1 | |
| 9·4 | | 44·5 | 35·8 | |
| 9·2 | | 56·0 | 15·5 | |
| 9·8 | 29 | 19·0 | 21·0 | |
| 7·8 | | 48·5 | 26·4 | GS*g* |
| 9·9 | | 56·0 | 18·0 | |
| 10·0 | 30 | 0·5 | 23·1 | |
| 10·0 | | 29·0 | 53·8 | |
| 9·6 | | 46·5 | 47·1 | |
| 9·5 | | 47·2 | 0·4 | |
| 9·4 | 31 | 5·0 | 12·7 | |
| 10·0 | | 24·0 | 36·8 | |
| 9·5 | | 52·0 | 30·9 | |
| 9·2 | 32 | 8·0 | 35·6 | 8·5 |
| 8·4 | | 21·5 | 5·6 | 8·5 *g* |
| 9·8 | | 32·5 | 55·9 | |
| 9·6 | | 33·0 | 47·9 | |
| 8·6 | | 39·0 | 5·7 | 8·5 *g* |
| 9·2 | 33 | 34·5 | 45·4 | |
| 9·2 | | 40·5 | 10·6 | |
| 8·9 | | 49·0 | 53·6 | 8·8 *g* |
| 9·8 | 34 | 16·5 | 0·4 | |
| 9·8 | | 22·5 | 9·0 | |
| 9·2 | | 35·0 | 29·0 | |
| 8·8 | 35 | 17·5 | 49·0 | 8·3 *g* |
| 9·6 | | 21·0 | 50·5 | |
| 10·0 | | 24·0 | 14·5 | |
| 10·0 | | 42·0 | 10·9 | |
| 9·8 | 36 | 37·0 | 59·9 | |
| 9·6 | 37 | 28·0 | 17·4 | |
| 9·8 | 38 | 7·5 | 19·1 | |
| 10·0 | | 26·2 | 2·9 | |
| 10·0 | | 31·5 | 9·9 | |
| 8·9 | | 55·0 | 20·4 | 9·0 *g* |
| 10·0 | | 59·0 | 23·1 | |
| 8·7 | 39 | 20·5 | 25·8 | 9·0 *g* |
| 6·5 | | 36·0 | 22·2 | 7·0 GS*g* |
| 9·9 | | 38·0 | 11·8 | |

## 901—960.

| mag. | 8h.–9h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10.0 | 40 | 32.0 | 20.9 | |
| 10.0 | | 32.5 | 23.8 | |
| 9.3 | 41 | 29.0 | 20.6 | |
| 9.7 | 42 | 0.5 | 22.0 | |
| 10.0 | | 14.5 | 48.9 | |
| 8.9 | | 18.2 | 57.7 | 9.0 |
| 9.2 | | 29.0 | 34.9 | |
| 9.6 | | 38.0 | 46.4 | |
| 9.2 | | 41.0 | 43.9 | |
| 9.6 | | 45.0 | 11.5 | *g* |
| 10.0 | 43 | 21.0 | 26.1 | |
| 10.0 | | 41.0 | 12.8 | |
| 9.3 | 44 | 27.5 | 5.8 | |
| 9.6 | | 42.5 | 14.5 | |
| 8.0 | | 53.0 | 4.7 | 8.7 *g* |
| 9.5 | 46 | 32.5 | 53.0 | 10.0 |
| 9.8 | | 42.5 | 33.5 | |
| 9.8 | 47 | 10.5 | 15.2 | |
| 9.9 | | 11.0 | 33.9 | |
| 9.8 | | 12.5 | 9.7 | |
| 9.4 | | 30.5 | 38.8 | |
| 9.6 | | 39.7 | 57.4 | |
| 9.6 | | 45.0 | 15.1 | |
| 9.2 | 48 | 19.0 | 38.1 | |
| 10.0 | | 45.5 | 10.7 | |
| 9.3 | | 49.5 | 13.4 | |
| 5.9 | | 52.5 | 19.6 | 6.0 GSc*gr* |
| 8.8 | | 59.0 | 51.9 | 8.5 *g* |
| 10.0 | 49 | 32.5 | 54.9 | |
| 9.9 | | 42.5 | 34.1 | |
| 8.7 | | 43.0 | 30.6 | 8.0 *g* |
| 9.5 | | 54.0 | 57.2 | |
| 10.0 | 50 | 11.0 | 22.9 | |
| 10.0 | 51 | 10.0 | 40.0 | |
| 9.6 | | 21.0 | 50.6 | |
| 9.2 | 52 | 1.0 | 8.0 | 9.3 |
| 10.0 | | 11.5 | 10.1 | 10.0 |
| 8.5 | | 17.0 | 19.6 | 8.5 G*g* |
| 8.9 | | 18.0 | 12.7 | 9.0 |
| 9.6 | 53 | 1.5 | 34.3 | |
| 10.0 | | 23.0 | 38.8 | 9.5 |
| 8.1 | | 32.5 | 17.5 | 8.5 G*g* |
| 8.7 | | 37.0 | 47.0 | 8.2 G*g* |
| 10.0 | 54 | 8.5 | 21.0 | |
| 9.2 | | 49.0 | 20.8 | |
| 9.2 | | 50.0 | 35.2 | |
| 8.8 | | 51.0 | 33.0 | |
| 9.6 | 55 | 5.5 | 51.8 | |
| 9.0 | | 21.0 | 48.0 | 8.5 *g* |
| 10.0 | | 42.5 | 29.5 | |
| 8.4 | 56 | 33.5 | 10.9 | 9.2 *g* |
| 9.7 | 57 | 2.0 | 59.9 | |
| 9.5 | | 17.5 | 26.4 | |
| 9.0 | 59 | 11.8 | 49.6 | |
| 10.0 | | 25.0 | 31.9 | |
| 9.6 | | 35.0 | 7.6 | |
| 8.4 | | 38.8 | 18.0 | 9.0 *g* |
| 8.7 | | 42.5 | 13.1 | *g* |
| 9.3 | | 47.5 | 58.9 | |
| 9.4 | 0 | 0.7 | 41.6 | |

## 961—1020.

| mag. | 9h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.4 | 0 | 32.0 | 43.9 | |
| 10.0 | | 36.0 | 5.1 | |
| 9.2 | | 40.3 | 58.6 | |
| 9.2 | 1 | 4.0 | 50.9 | |
| 8.9 | | 14.5 | 54.6 | *g* |
| 9.4 | | 38.5 | 43.6 | |
| 9.5 | | 46.5 | 21.9 | |
| 9.2 | | 56.5 | 35.4 | |
| 9.4 | 2 | 2.0 | 33.1 | |
| 9.2 | | 53.5 | 11.9 | |
| 9.1 | 3 | 15.5 | 42.2 | |
| 9.5 | | 17.5 | 11.6 | |
| 9.0 | | 36.0 | 6.8 | 9.5 *g* |
| 9.5 | 5 | 35.5 | 35.4 | |
| 9.4 | 7 | 12.5 | 44.2 | |
| 9.4 | | 21.5 | 50.9 | |
| 9.2 | | 32.0 | 13.7 | |
| 8.8 | | 35.0 | 1.7 | 9.5 *g* |
| 9.5 | | 59.0 | 28.1 | |
| 9.5 | 8 | 26.0 | 51.5 | |
| 9.5 | | 40.0 | 27.9 | |
| 9.5 | | 40.0 | 29.9 | |
| 8.7 | | 59.5 | 20.8 | 9.5 *g* |
| 9.5 | 9 | 20.5 | 14.0 | |
| 8.9 | | 23.5 | 12.2 | 9.5 *g* |
| 8.8 | | 28.5 | 34.0 | *g* |
| 9.5 | | 32.0 | 49.5 | |
| 8.9 | | 32.0 | 33.6 | *g* |
| 9.5 | | 44.0 | 29.0 | |
| 8.9 | 10 | 11.0 | 12.6 | 9.0 *g* |
| 9.4 | | 43.0 | 19.5 | |
| 9.0 | | 58.5 | 59.1 | |
| 9.0 | 11 | 20.5 | 16.8 | |
| 9.2 | | 25.5 | 3.6 | |
| 9.5 | 12 | 40.5 | 43.0 | |
| 9.0 | | 54.5 | 31.0 | |
| 8.8 | 13 | 18.0 | 13.0 | *g* |
| 8.8 | | 44.5 | 54.4 | 9.5 |
| 8.6 | 14 | 28.0 | 36.2 | 10.0 *g* |
| 8.8 | 15 | 13.2 | 2.0 | 9.2 *g* |
| 8.5 | | 32.0 | 9.9 | 9.0 *g* |
| 8.0 | | 42.0 | 31.3 | 6.8 GSc*g* |
| 9.5 | 17 | 18.0 | 52.0 | |
| 9.5 | | 18.5 | 53.2 | |
| 8.7 | | 22.0 | 54.0 | 8.5 GS*g* |
| 9.2 | 18 | 0.0 | 35.0 | |
| 9.1 | | 17.0 | 50.3 | |
| 9.5 | 19 | 19.5 | 32.3 | |
| 9.5 | | 32.5 | 37.0 | |
| 9.1 | 20 | 12.8 | 58.6 | |
| 9.5 | | 28.5 | 35.1 | |
| 9.5 | 21 | 15.5 | 29.0 | |
| 9.1 | | 23.7 | 57.2 | G*g* |
| 8.6 | | 45.5 | 9.1 | G*g* |
| 9.2 | 22 | 47.0 | 16.2 | |
| 7.8 | 24 | 50.5 | 1.9 | 8.0 *g* |
| 9.4 | 25 | 31.5 | 52.9 | |
| 6.6 | 26 | 3.0 | 9.3 | 6.5 GSc*g* |
| 9.0 | | 37.0 | 12.9 | |
| 9.4 | | 42.0 | 4.3 | |

## 1021—1080.

| mag. | 9h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.5§ | 27 | 45.1 | 42.1 | G*g* |
| 8.8 | | 46.0 | 39.0 | 8.5 *g* |
| 9.5 | 28 | 7.0 | 44.4 | G*g* |
| 8.5 | | 36.0 | 48.0 | G*g* |
| 8.0 | 29 | 2.0 | 10.0 | 7.0 GSc*gr* |
| 9.2 | | 36.0 | 46.5 | G*g* |
| 9.1 | | 39.0 | 45.7 | G*g* |
| 9.5 | | 51.5 | 16.7 | |
| 9.4 | 32 | 35.5 | 29.9 | |
| 8.8 | 33 | 25.0 | 43.0 | *g* |
| 8.2 | 34 | 57.0 | 6.9 | *g* |
| 8.6 | 35 | 47.5 | 8.0 | *g* |
| 7.8 | 36 | 6.0 | 17.7 | 8.0 GSc*gr* |
| 8.8 | | 6.5 | 6.1 | *g* |
| 9.2 | 38 | 26.0 | 41.3 | |
| 8.6 | | 44.5 | 10.0 | G*g* |
| 9.4 | 39 | 2.0 | 34.0 | |
| 9.5 | | 19.0 | 3.7 | *g* |
| 9.4 | | 25.0 | 20.3 | |
| 9.4 | | 26.0 | 10.4 | |
| 9.7 | | 27.0 | 7.2 | |
| 7.2 | | 29.3 | 20.5 | 7.0 GS*g* |
| 9.5 | | 36.5 | 28.3 | |
| 9.6 | | 36.5 | 41.9 | |
| 9.2 | | 54.0 | 34.5 | |
| 9.7 | 40 | 6.5 | 39.6 | |
| 9.4 | | 22.0 | 4.9 | |
| 9.2 | | 23.2 | 13.9 | G |
| 9.8 | | 29.0 | 5.9 | |
| 9.8 | | 44.5 | 16.9 | |
| 9.2 | | 49.5 | 12.4 | |
| 8.6 | 41 | 12.5 | 26.9 | 9.5 *g* |
| 9.2 | | 21.0 | 4.3 | |
| 9.9 | | 23.5 | 42.3 | |
| 9.6 | | 26.5 | 22.9 | |
| 9.9 | | 30.5 | 26.4 | |
| 9.4 | | 52.5 | 54.2 | |
| 9.6 | 42 | 8.0 | 48.0 | |
| 9.2 | | 15.5 | 44.4 | |
| 9.4 | | 20.0 | 17.9 | |
| 8.0 | | 26.5 | 13.9 | 8.0 GS*gr* |
| 9.9 | | 27.0 | 57.9 | |
| 9.3 | | 29.0 | 15.7 | |
| 9.4 | | 29.0 | 5.2 | |
| 9.6 | | 38.5 | 53.8 | |
| 9.9 | | 47.0 | 6.6 | |
| 9.4 | | 51.0 | 33.3 | |
| 9.9 | | 52.0 | 41.4 | |
| 8.9 | | 52.5 | 59.9 | 9.0 |
| 9.9 | | 54.5 | 57.0 | |
| 9.9 | 43 | 0.0 | 7.9 | |
| 9.6 | | 18.0 | 0.9 | |
| 9.8 | | 25.5 | 0.3 | |
| 9.6 | | 29.0 | 36.6 | |
| 9.3 | | 33.5 | 25.2 | |
| 9.4 | | 39.0 | 27.1 | |
| 9.9 | 44 | 3.0 | 19.7 | |
| 9.7 | | 17.0 | 37.9 | |
| 9.6 | | 21.0 | 10.4 | |
| 9.5 | | 37.5 | 0.2 | |

## 1081—1140.

| mag. | 9h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.1 | 44 | 42.5 | 54.3 | |
| 9.5 | | 44.0 | 18.6 | |
| 9.3 | | 44.5 | 38.4 | |
| 9.6 | | 54.5 | 41.8 | |
| 8.9 | 45 | 1.5 | 16.9 | 9.0 GS*gr* |
| 9.2 | | 13.0 | 28.0 | |
| 9.5 | | 29.0 | 23.0 | |
| 9.9 | | 31.0 | 11.9 | |
| 9.9 | | 43.5 | 27.4 | |
| 9.6 | | 48.0 | 11.5 | |
| 9.6 | 46 | 0.0 | 24.8 | |
| 9.9 | | 2.0 | 10.9 | |
| 9.6 | | 3.5 | 26.4 | |
| 9.9 | | 25.0 | 2.9 | |
| 8.9 | | 43.0 | 54.7 | 9.0 |
| 9.6 | 47 | 3.0 | 2.9 | |
| 9.9 | | 16.0 | 58.9 | |
| 8.5 | | 16.5 | 9.4 | 9.0 *g* |
| 9.5 | | 20.0 | 2.9 | |
| 9.9 | | 33.5 | 58.3 | |
| 8.5 | | 39.0 | 33.2 | 8.5 G*g* |
| 9.3 | | 43.0 | 39.6 | |
| 9.3 | | 48.5 | 35.3 | |
| 9.9 | | 49.5 | 7.3 | |
| 9.4 | | 58.5 | 45.2 | |
| 9.9 | 48 | 2.0 | 51.0 | |
| 9.5 | | 13.0 | 15.9 | |
| 9.0 | | 18.5 | 50.9 | |
| 9.9 | | 36.0 | 31.1 | |
| 8.4 | | 55.0 | 12.4 | G*g* |
| 8.5 | 49 | 20.0 | 32.2 | G*g* |
| 9.4 | | 33.5 | 5.3 | |
| 9.7 | 50 | 2.0 | 56.4 | |
| 9.7 | | 6.0 | 52.3 | |
| 9.9 | | 23.0 | 22.8 | |
| 9.4 | | 25.5 | 20.9 | |
| 9.5 | | 25.5 | 11.0 | |
| 9.5 | | 34.5 | 35.0 | |
| 9.7 | | 55.5 | 38.9 | |
| 8.5 | | 57.0 | 43.8 | G*g* |
| 9.9 | 51 | 3.5 | 5.1 | |
| 9.0 | | 42.0 | 35.2 | |
| 9.9 | | 47.5 | 15.0 | |
| 9.4 | 52 | 23.0 | 32.3 | |
| 9.8 | | 23.5 | 37.3 | |
| 9.9 | | 29.5 | 17.0 | |
| 9.9 | | 46.0 | 7.0 | |
| 9.4 | | 47.5 | 53.1 | |
| 9.3 | 53 | 1.5 | 45.9 | |
| 9.8 | | 13.5 | 32.0 | |
| 9.6 | | 15.0 | 57.5 | 9.0 |
| 9.7 | | 40.0 | 30.8 | |
| 9.9 | | 48.0 | 58.3 | |
| 9.5 | 54 | 1.5 | 23.0 | |
| 9.8 | | 20.0 | 20.9 | |
| 9.9 | | 42.5 | 46.9 | |
| 9.9 | | 53.0 | 1.1 | |
| 9.3 | 55 | 1.5 | 29.0 | |
| 8.0 | | 11.5 | 24.9 | *g* |
| 9.9 | | 18.0 | 32.0 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 8 | 40 | 18 | 5.4 |
| | 50 | 20 | 5.6 |
| 9 | 0 | 22 | 5.9 |
| | 10 | 25 | 6.2 |
| | 20 | 27 | 6.4 |
| | 30 | 30 | 6.6 |
| | 40 | 33 | 6.8 |
| | 50 | 36 | 7.0 |
| 10 | 0 | 38 | 7.2 |

§ This star is contained on check plate, not on measuring plate, which is far poorer.



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 9 | 50 | 36 | 7·0 |
| 10 | 0 | 38 | 7·2 |
| | 10 | 41 | 7·4 |
| | 20 | 44 | 7·6 |
| | 30 | 47 | 7·7 |
| | 40 | 51 | 7·9 |

**1141—1200.**

| mag. | 9ʰ·–10ʰ· m | s | −66° ′ | |
|---|---|---|---|---|
| 9·8 | 55 | 49·5 | 18·5 | |
| 9·8 | | 54·5 | 4·8 | |
| 9·8 | | 59·0 | 24·6 | |
| 9·1 | 56 | 6·0 | 48·0 | |
| 9·6 | | 17·0 | 8·8 | |
| 9·6 | | 35·5 | 43·8 | |
| 9·9 | | 39·5 | 35·1 | |
| 9·9 | 57 | 17·0 | 28·4 | |
| 9·9 | | 24·0 | 10·5 | |
| 9·4 | | 24·5 | 17·7 | |
| 9·9 | | 33·5 | 22·3 | |
| 9·0 | | 46·5 | 7·0 | |
| 9·6 | | 57·5 | 52·5 | |
| 9·2 | 58 | 30·0 | 30·7 | |
| 9·2 | | 34·0 | 18·9 | *g* |
| 9·9 | 59 | 4·8 | 0·2 | |
| 9·9 | | 9·5 | 30·7 | |
| 9·4 | | 15·0 | 18·3 | |
| 8·9 | | 17·5 | 52·2 | 9·0 *g* |
| 9·8 | | 27·0 | 1·2 | |
| 9·9 | | 37·0 | 49·2 | |
| 9·2 | | 38·5 | 24·9 | 9·5 |
| 9·9 | | 50·0 | 23·1 | |
| 9·6 | | 58·0 | 39·6 | |
| 9·8 | 0 | 2·0 | 4·6 | |
| 9·9 | | 14·0 | 2·4 | |
| 9·4 | | 55·0 | 11·6 | |
| 9·6 | 1 | 32·0 | 22·6 | 9·5 |
| 9·9 | | 32·0 | 22·9 | |
| 9·8 | | 53·5 | 19·6 | |
| 9·0 | | 57·0 | 6·7 | 8·5 *g* |
| 8·5 | | 57·5 | 39·0 | *g* |
| 9·5 | 2 | 0·5 | 2·7 | |
| 9·5 | | 9·3 | 1·0 | |
| 9·9 | | 31·5 | 59·9 | |
| 8·5 | | 52·0 | 54·9 | 9·0 *g* |
| 9·9 | 3 | 25·0 | 11·3 | |
| 9·9 | | 40·5 | 52·4 | |
| 9·5 | | 51·0 | 45·8 | |
| 9·5 | 4 | 5·0 | 31·4 | |
| 9·6 | | 13·5 | 25·0 | |
| 9·4 | | 32·5 | 3·9 | |
| 9·2 | | 38·0 | 4·2 | |
| 9·9 | 5 | 3·5 | 7·8 | |
| 9·4 | | 31·5 | 12·1 | 9·5 |
| 9·6 | | 32·0 | 46·9 | |
| 9·6 | | 43·5 | 26·0 | |
| 9·2 | | 51·3 | 1·6 | |
| 9·2 | | 53·5 | 28·0 | 9·0 *g* |
| 9·9 | 6 | 13·5 | 18·2 | |
| 9·0 | | 19·3 | 58·3 | G |
| 9·7 | | 29·5 | 41·4 | |
| 9·7 | | 47·5 | 58·3 | |
| 7·0 | 7 | 1·0 | 38·8 | 7·5 GS*g* |
| 9·3 | | 21·5 | 23·8 | 9·0 *g* |
| 9·5 | | 36·0 | 17·7 | |
| 9·4 | | 41·5 | 4·3 | |
| 9·5 | | 55·5 | 40·9 | |
| 9·5 | | 58·0 | 3·6 | |
| 9·2 | 8 | 26·5 | 22·2 | |

**1201—1260.**

| mag. | 10ʰ· m | s | −66° ′ | |
|---|---|---|---|---|
| 8·8 | 8 | 58·5 | 4·5 | 8·0 *g* |
| 9·9 | 9 | 11·0 | 19·6 | |
| 9·7 | | 26·0 | 11·5 | |
| 9·4 | | 53·0 | 27·9 | |
| 9·2 | 10 | 5·5 | 9·3 | *g* |
| 9·8 | | 37·0 | 9·0 | |
| 8·5 | 11 | 9·5 | 31·2 | 7·5 G*g* |
| 8·7 | | 33·0 | 40·5 | 8·0 G*g* |
| 8·5 | | 38·0 | 39·8 | 7·0 GS*g* |
| 8·8 | | 45·5 | 16·0 | 8·5 |
| 9·2 | 12 | 32·0 | 52·9 | |
| 9·5 | | 51·5 | 56·8 | |
| 9·4 | | 55·5 | 38·3 | |
| 9·4 | 13 | 1·5 | 36·9 | |
| 9·9 | | 53·0 | 57·0 | |
| 9·6 | | 58·0 | 44·0 | |
| 9·9 | | 59·5 | 45·2 | |
| 8·9 | 14 | 24·5 | 47·3 | 8·5 *g* |
| 9·9 | | 28·0 | 13·6 | |
| 9·9 | | 48·0 | 3·0 | |
| 9·7 | | 54·0 | 21·6 | 10·0 |
| 8·6 | 15 | 11·0 | 10·1 | 9·0 *g* |
| 8·8 | | 14·0 | 19·7 | 8·5 *g* |
| 9·0 | | 42·0 | 43·1 | 8·0 G*g* |
| 9·0 | 16 | 0·0 | 45·7 | 9·0 *g* |
| 7·2 | | 27·5 | 32·4 | 8·0 GS*g*r |
| 9·8 | | 31·0 | 14·5 | |
| 9·3 | | 35·0 | 43·0 | |
| 9·9 | 17 | 8·0 | 28·9 | |
| 9·4 | | 12·0 | 46·8 | 9·0 |
| 8·6 | | 15·0 | 53·8 | 9·0 G*y* |
| 8·7 | | 15·5 | 53·5 | 9·0 G*g* |
| 9·6 | | 32·5 | 7·6 | |
| 9·9 | | 32·5 | 25·9 | |
| 9·9 | | 53·5 | 50·8 | |
| 9·6 | 18 | 24·0 | 58·3 | |
| 9·6 | | 48·5 | 51·0 | |
| 9·2 | 19 | 0·7 | 2·4 | G |
| 9·9 | | 2·0 | 34·1 | |
| 9·8 | | 3·0 | 50·6 | |
| 9·6 | | 12·8 | 39·5 | |
| 9·9* | | 14·5 | 57·9 | |
| 6·0 | | 15·3 | 15·9 | 5·0 GSc*g*r |
| 9·1 | | 28·2 | 6·0 | 9·5 |
| 9·5 | | 30·3 | 14·8 | |
| 9·8 | | 46·0 | 28·4 | |
| 8·5 | | 51·9 | 0·8 | 9·0 *g* |
| 9·6 | | 59·7 | 39·2 | |
| 9·7 | 20 | 1·0 | 27·6 | |
| 9·9 | | 4·0 | 7·1 | |
| 9·2 | | 5·6 | 1·2 | 9·5 |
| 9·9 | | 23·0 | 51·8 | |
| 9·9 | | 40·5 | 31·6 | |
| 9·4 | | 40·5 | 32·6 | |
| 9·8 | | 49·5 | 40·4 | |
| 9·6 | 21 | 3·0 | 22·2 | |
| 9·2 | | 8·0 | 51·8 | 8·5 |
| 9·8 | | 12·0 | 33·6 | |
| 9·9 | | 38·0 | 41·5 | |
| 9·0 | 22 | 8·5 | 0·0 | G*g* |

**1261—1320.**

| mag. | 10ʰ· m | s | −66° ′ | |
|---|---|---|---|---|
| 9·8 | 22 | 11·0 | 8·8 | |
| 8·9 | | 19·5 | 58·9 | *8·2* |
| 9·6 | | 25·0 | 32·7 | |
| 9·4 | | 30·5 | 54·7 | |
| 9·7 | | 40·0 | 31·1 | |
| 9·2 | | 42·0 | 34·7 | |
| 9·8 | | 42·0 | 14·1 | |
| 9·1 | | 43·5 | 52·7 | 9·5 |
| 9·8 | | 49·5 | 34·9 | |
| 9·6 | | 53·0 | 43·7 | |
| 9·6 | 23 | 0·0 | 38·9 | |
| 9·8 | | 9·0 | 17·4 | |
| 9·2 | | 15·0 | 55·1 | 8·8 |
| 9·6 | | 21·5 | 11·9 | |
| 9·5 | | 24·5 | 37·2 | |
| 9·8 | | 36·5 | 16·7 | |
| 9·9 | | 37·5 | 12·9 | |
| 8·8 | | 58·5 | 44·0 | 8·5 *g* |
| 9·5 | 24 | 2·0 | 59·0 | |
| 9·6 | | 18·5 | 20·6 | |
| 9·0 | | 21·5 | 8·0 | 9·5 *g* |
| 9·5 | | 33·5 | 33·5 | |
| 9·7 | | 51·5 | 1·9 | |
| 9·9 | | 56·0 | 30·3 | |
| 8·5 | | 58·0 | 3·5 | 9·0 G*g* |
| 9·8 | 25 | 3·0 | 56·9 | |
| 9·8 | | 5·5 | 19·0 | |
| 9·8 | | 35·5 | 49·9 | |
| 9·5 | | 44·5 | 16·9 | |
| 9·6 | 26 | 2·0 | 42·1 | |
| 7·4 | | 16·0 | 20·5 | 6·8 GS*g* |
| 9·9 | | 18·0 | 40·1 | |
| 9·2 | | 37·5 | 13·3 | 9·5 |
| 9·2 | | 42·0 | 51·4 | |
| 8·8 | | 47·0 | 9·8 | 8·5 G*g* |
| 9·4 | | 56·0 | 26·8 | |
| 9·8 | | 59·0 | 19·9 | |
| 9·8 | 27 | 1·2 | 57·4 | |
| 9·6 | | 27·0 | 50·9 | |
| 9·7 | | 54·0 | 49·3 | |
| 9·7 | 28 | 5·5 | 42·9 | |
| 9·3 | | 8·0 | 18·7 | |
| 9·7 | | 10·0 | 43·2 | |
| 9·9 | | 21·0 | 49·7 | |
| 9·8 | | 41·0 | 47·7 | |
| 9·8 | | 48·0 | 32·3 | |
| 9·7 | 29 | 3·0 | 31·3 | |
| 9·9 | | 6·5 | 48·1 | |
| 9·7 | | 11·5 | 52·7 | |
| 9·9 | | 16·0 | 25·9 | |
| 9·9 | | 19·0 | 2·4 | |
| 9·8 | | 20·0 | 16·9 | |
| 9·6 | | 21·0 | 28·7 | |
| 9·7 | | 30·0 | 52·3 | |
| 9·2 | 30 | 0·5 | 18·3 | |
| 9·7 | | 1·5 | 5·9 | |
| 9·8 | | 2·0 | 24·0 | |
| 9·6 | | 19·5 | 43·7 | |
| 9·8 | | 30·0 | 56·0 | |
| 9·1 | | 32·0 | 54·1 | |

**1321—1380.**

| mag. | 10ʰ· m | s | −66° ′ | |
|---|---|---|---|---|
| 9·2 | 30 | 35·5 | 42·5 | |
| 9·9 | | 36·0 | 0·9 | |
| 9·6 | | 39·5 | 45·7 | |
| 9·2 | | 42·0 | 0·2 | |
| 9·7 | | 49·0 | 13·5 | |
| 8·8 | | 50·0 | 31·0 | 9·0 *g* |
| 9·8 | | 51·5 | 16·9 | |
| 9·6 | | 53·0 | 35·7 | |
| 9·0 | | 54·5 | 9·0 | 9·5 |
| 9·7 | | 57·0 | 43·7 | |
| 9·9 | | 58·0 | 36·3 | |
| 9·2 | | 58·0 | 45·3 | 9·5 |
| 9·4 | 31 | 0·5 | 48·3 | |
| 9·3 | | 7·5 | 51·0 | |
| 9·9 | | 10·0 | 25·3 | |
| 9·3 | | 19·0 | 34·9 | |
| 9·3 | | 27·0 | 39·9 | |
| 9·2 | | 42·0 | 24·4 | 9·5 *g* |
| 9·8 | | 47·5 | 25·7 | |
| 9·3 | 32 | 15·5 | 48·3 | |
| 9·2 | | 17·0 | 30·3 | 9·5 |
| 9·8 | | 30·5 | 3·2 | |
| 9·8 | | 50·0 | 28·5 | |
| 9·8 | | 58·0 | 7·9 | |
| 9·7 | 33 | 4·5 | 20·3 | |
| 9·0 | | 11·0 | 38·0 | 9·5 |
| 9·9 | | 25·5 | 35·8 | |
| 9·9 | | 35·5 | 23·7 | |
| 9·6 | | 43·5 | 7·7 | |
| 9·6 | 34 | 15·5 | 40·7 | |
| 9·6 | | 36·5 | 7·7 | |
| 9·9 | | 40·5 | 56·2 | |
| 9·5 | | 46·0 | 0·7 | |
| 9·8 | | 50·0 | 51·1 | |
| 9·6 | 35 | 0·0 | 7·6 | |
| 9·6 | | 11·5 | 56·7 | |
| 8·2 | | 12·0 | 0·6 | 8·5 *g* |
| 9·2 | | 16·5 | 25·9 | 9·0 *g* |
| 8·8 | | 19·0 | 30·7 | 8·0 *g* |
| 9·9 | 36 | 7·0 | 41·6 | |
| 9·5 | | 9·5 | 1·2 | |
| 9·8 | | 25·0 | 46·7 | |
| 9·2 | | 29·0 | 11·7 | |
| 9·0 | | 31·0 | 19·3 | 9·8 |
| 9·6 | | 32·5 | 45·8 | |
| 9·0 | | 34·0 | 24·7 | |
| 9·2 | | 42·0 | 58·0 | 9·1 G*g* |
| 9·9 | | 47·0 | 45·8 | |
| 9·6 | | 50·5 | 9·3 | |
| 9·9 | 37 | 2·0 | 57·1 | |
| 9·9 | | 6·0 | 52·1 | |
| 9·8 | | 10·0 | 1·3 | |
| 9·4 | | 25·0 | 45·0 | |
| 9·8 | | 42·5 | 36·5 | |
| 9·8 | | 44·0 | 13·5 | |
| 9·9 | 38 | 2·0 | 9·3 | |
| 9·5 | | 2·0 | 10·8 | |
| 9·8 | | 16·5 | 57·9 | |
| 9·6 | | 26·0 | 29·9 | |
| 9·8 | | 28·5 | 26·1 | |



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### 1381—1440.

| mag. | 10h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·8 | 38 | 36·5 | 56·9 | |
| 9·8 | | 49·0 | 28·7 | |
| 9·6 | | 54·0 | 7·0 | |
| 9·4 | | 58·5 | 50·7 | |
| 9·0 | 39 | 3·0 | 49·5 | 9·5 g |
| 9·2 | | 6·0 | 38·0 | 8·5 g |
| 9·6 | | 19·5 | 48·8 | 9·5 g |
| 9·8 | | 23·5 | 25·7 | |
| 9·8 | | 30·0 | 28·5 | |
| 9·2 | | 35·8 | 57·8 | 8·5 g |
| 9·7 | 40 | 0·0 | 43·2 | |
| 9·8 | | 0·8 | 58·1 | |
| 9·8 | | 1·5 | 22·8 | |
| 9·8 | | 2·0 | 17·0 | |
| 9·2 | | 5·5 | 11·2 | |
| 9·6 | | 7·0 | 39·8 | |
| 9·6 | | 7·5 | 38·0 | |
| 9·5 | | 15·5 | 17·0 | |
| 8·6 | | 15·8 | 1·2 | 8·8 g |
| 9·9 | | 20·0 | 7·8 | |
| 9·9 | | 23·0 | 51·1 | |
| 9·0 | | 48·0 | 5·0 | 9·5 g |
| 9·6 | | 51·0 | 57·4 | |
| 9·2 | 41 | 16·0 | 22·6 | |
| 9·9 | | 25·5 | 15·3 | |
| 9·9 | | 29·5 | 13·2 | |
| 9·2 | | 30·0 | 17·0 | |
| 9·8 | | 32·5 | 41·7 | |
| 9·6 | | 39·0 | 57·2 | |
| 9·6 | 42 | 10·5 | 2·7 | |
| 9·5 | | 15·0 | 58·2 | |
| 9·0 | | 19·5 | 9·8 | 9·5 g |
| 9·8 | | 39·0 | 7·0 | |
| 9·6 | | 46·0 | 17·8 | |
| 9·8 | 43 | 5·5 | 13·0 | |
| 9·9 | | 6·5 | 12·0 | |
| 9·6 | | 7·0 | 15·2 | |
| 9·9 | | 10·5 | 7·7 | |
| 9·9 | | 51·5 | 4·0 | |
| 9·6 | 44 | 3·0 | 6·8 | |
| 9·6 | | 3·5 | 37·9 | |
| 9·7 | | 6·0 | 31·3 | |
| 8·2 | | 21·5 | 38·7 | 8·5 Gg |
| 8·9 | | 33·0 | 55·0 | 9·0 g |
| 9·5 | | 34·0 | 28·7 | |
| 9·4 | | 58·0 | 14·5 | |
| 9·5 | 45 | 15·5 | 53·2 | 9·2 |
| 9·7 | | 42·0 | 20·4 | |
| 9·5 | 46 | 9·0 | 5·2 | |
| 9·6 | | 30·0 | 17·6 | |
| 9·6 | | 40·5 | 35·6 | |
| 9·7 | | 42·5 | 47·0 | |
| 9·7 | | 45·5 | 54·9 | |
| 8·0 | | 53·0 | 9·2 | 7·8 GSg |
| 9·8 | | 53·5 | 23·0 | |
| 9·5 | | 56·0 | 10·4 | 9·5 |
| 9·6 | 47 | 0·0 | 21·4 | |
| 9·6 | | 2·5 | 39·0 | |
| 9·9 | | 20·5 | 4·0 | |
| 9·8 | | 22·5 | 5·3 | |

### 1441—1500.

| mag. | 10h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·5 | 47 | 27·0 | 11·5 | 9·5 |
| 9·8 | | 29·0 | 21·0 | |
| 9·9 | | 29·5 | 53·8 | |
| 9·3 | | 45·0 | 48·0 | |
| 9·5 | | 54·5 | 59·0 | |
| 9·8 | | 57·5 | 3·0 | |
| 9·2 | 48 | 23·0 | 51·4 | 9·0 |
| 9·5 | | 23·0 | 32·2 | 10·0 |
| 9·8 | | 25·0 | 6·5 | |
| 9·4 | | 32·5 | 19·0 | |
| 9·6 | | 50·5 | 31·5 | 9·5 |
| 9·8 | | 53·0 | 55·0 | |
| 9·6 | 49 | 3·5 | 48·6 | 9·0 |
| 9·9 | | 20·0 | 54·7 | |
| 9·1 | | 21·0 | 9·1 | 9·0 g |
| 9·9 | | 26·0 | 26·3 | |
| 9·4 | | 39·5 | 41·3 | 9·0 g |
| 9·8 | | 40·0 | 53·5 | |
| 9·6 | | 42·0 | 38·6 | |
| 9·8 | | 45·5 | 30·9 | |
| 8·9 | | 47·5 | 37·0 | 9·0 g |
| 9·9 | | 56·0 | 33·2 | |
| 9·6 | 50 | 4·5 | 55·0 | |
| 9·4 | | 35·0 | 1·2 | |
| 9·9 | | 39·0 | 30·0 | |
| 9·8 | | 53·0 | 56·2 | |
| 9·6 | | 57·0 | 30·8 | |
| 9·9 | 51 | 8·5 | 37·5 | 9·5 |
| 9·9 | | 49·0 | 58·5 | |
| 9·6 | | 51·0 | 50·9 | |
| 9·3 | | 55·5 | 7·0 | |
| 9·7 | 52 | 1·0 | 54·4 | |
| 9·4 | | 23·5 | 36·8 | |
| 9·2 | | 27·5 | 1·1 | |
| 9·6 | | 36·5 | 35·2 | |
| 9·6 | | 40·0 | 54·2 | |
| 9·6 | 53 | 11·0 | 11·8 | |
| 9·8 | | 46·0 | 37·8 | |
| 9·3 | | 50·0 | 15·6 | |
| 9·6 | 54 | 0·5 | 15·4 | |
| 9·7 | | 2·5 | 39·2 | |
| 9·8 | | 15·0 | 46·8 | |
| 9·2 | | 15·0 | 54·0 | 9·5 |
| 9·9 | | 19·0 | 22·1 | |
| 9·8 | | 19·5 | 4·0 | |
| 9·4 | | 32·0 | 22·9 | |
| 9·6 | | 45·0 | 48·1 | |
| 9·8 | | 48·0 | 37·1 | |
| 9·8 | 55 | 14·5 | 11·0 | |
| 9·6 | | 22·0 | 57·2 | |
| 9·8 | | 25·0 | 17·8 | |
| 9·5 | | 54·5 | 47·0 | |
| 9·9 | | 58·0 | 19·4 | |
| 9·9 | 56 | 3·5 | 6·2 | |
| 9·4 | | 16·5 | 11·6 | |
| 9·9 | | 20·0 | 0·7 | |
| 9·8 | | 22·0 | 41·2 | |
| 9·6 | | 28·5 | 29·2 | |
| 9·6 | | 30·5 | 53·2 | |
| 9·6 | | 34·5 | 51·3 | |

### 1501—1560.

| mag. | 10h.–11h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·0 | 56 | 40·0 | 56·9 | 8·0 g |
| 9·7 | 57 | 0·0 | 1·0 | |
| 9·2 | | 9·5 | 33·9 | |
| 9·6 | | 14·0 | 14·2 | |
| 9·8 | | 26·5 | 41·4 | |
| 9·2 | | 52·5 | 37·2 | 9·0 g |
| 9·1 | 58 | 18·0 | 27·2 | 8·3 Gg |
| 9·8 | | 22·3 | 1·6 | |
| 9·9 | | 30·5 | 19·1 | |
| 9·7 | | 34·5 | 19·9 | |
| 9·6 | | 37·0 | 58·0 | |
| 9·7 | | 40·5 | 16·4 | |
| 9·8 | | 45·0 | 32·0 | |
| 9·9 | | 45·5 | 29·2 | |
| 9·7 | | 51·5 | 40·1 | |
| 9·6 | 59 | 12·5 | 37·0 | |
| 9·5 | | 29·5 | 7·2 | 9·5 g |
| 9·7 | | 32·0 | 52·0 | |
| 9·6 | | 32·8 | 10·1 | |
| 9·4 | | 42·8 | 8·6 | 9·5 |
| 9·5 | | 45·8 | 45·5 | |
| 9·5 | | 46·0 | 44·9 | |
| 9·1 | | 48·2 | 50·4 | |
| 8·5 | | 51·3 | 12·8 | 8·5 Gg |
| 9·6 | 0 | 21·8 | 56·1 | |
| 9·9 | | 26·5 | 6·6 | |
| 9·9 | | 28·0 | 57·0 | |
| 9·9 | | 29·8 | 2·2 | |
| 9·3 | | 49·0 | 16·3 | 9·5 |
| 9·7 | 1 | 8·0 | 39·9 | |
| 9·7 | | 22·5 | 42·1 | |
| 9·3 | | 50·0 | 56·2 | 10·0 |
| 9·7 | 2 | 5·0 | 26·5 | |
| 9·7 | | 19·0 | 56·9 | |
| 9·7 | | 40·0 | 0·9 | |
| 9·3 | | 57·5 | 29·9 | 9·5 |
| 9·7 | | 59·0 | 23·9 | 9·5 |
| 9·2 | 3 | 10·0 | 26·3 | 9·5 |
| 9·2 | | 15·0 | 27·3 | 9·5 |
| 9·0 | | 20·0 | 48·1 | 9·2 g |
| 9·7 | | 31·5 | 16·1 | |
| 9·4 | | 56·5 | 33·7 | |
| 9·5 | 4 | 1·0 | 45·5 | |
| 9·0 | | 42·0 | 29·9 | 9·4 g |
| 9·4 | | 48·0 | 20·5 | 9·0 g |
| 9·7 | 5 | 58·5 | 2·7 | |
| 9·5 | 7 | 10·5 | 42·5 | 10·0 |
| 9·6 | | 33·0 | 42·7 | |
| 9·7 | | 45·5 | 57·7 | |
| 8·2 | | 49·0 | 25·1 | 8·5 g |
| 9·2 | 8 | 11·5 | 26·1 | |
| 8·6 | | 15·0 | 10·1 | 8·5 Gg |
| 9·7 | | 50·5 | 9·2 | |
| 9·2 | | 55·0 | 4·5 | |
| 9·7 | 9 | 3·5 | 38·7 | |
| 9·7 | | 7·0 | 46·3 | |
| 9·7 | | 7·5 | 45·5 | |
| 9·2 | | 31·5 | 23·5 | 10·0 |
| 9·7 | | 50·0 | 9·7 | 9·5 |
| 9·0 | 10 | 22·5 | 2·7 | 9·5 |

### 1561—1620

| mag. | 11h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·2 | 10 | 28·5 | 43·6 | 9·5 |
| 9·1 | | 49·0 | 57·5 | |
| 9·6 | | 53·0 | 13·0 | 9·5 |
| 9·7 | | 54·0 | 20·0 | |
| 9·7 | 11 | 1·0 | 58·0 | |
| 9·5 | | 27·0 | 41·7 | |
| 8·8 | | 43·5 | 14·5 | 9·0 g |
| 9·0 | | 54·0 | 10·8 | 9·5 Gg |
| 9·7 | 12 | 2·0 | 44·5 | |
| 9·4 | 13 | 22·0 | 57·5 | 9·5 |
| 9·3 | | 39·0 | 45·2 | |
| 8·1 | 14 | 53·5 | 21·9 | 8·0 Gg |
| 8·9 | 15 | 4·5 | 34·3 | 9·0 |
| 9·1 | | 11·5 | 43·5 | |
| 9·4 | | 33·0 | 38·5 | |
| 9·6 | | 53·5 | 18·9 | |
| 9·6 | 16 | 58·0 | 49·5 | |
| 9·7 | 17 | 45·0 | 6·9 | |
| 9·7 | 18 | 53·5 | 26·1 | 9·5 |
| 9·6 | | 56·0 | 57·5 | |
| 8·5 | | 59·0 | 18·9 | 8·5 g |
| 9·2 | 19 | 18·0 | 53·0 | 8·1 g |
| 9·3 | | 22·0 | 7·3 | |
| 7·6 | | 29·0 | 26·4 | 8·2 Gg |
| 9·7 | 20 | 6·5 | 20·7 | |
| 9·4 | | 23·0 | 33·5 | |
| 9·5 | | 56·0 | 16·0 | 9·3 |
| 8·8 | 21 | 9·5 | 23·5 | 9·0 g |
| 9·7 | 22 | 8·5 | 57·0 | |
| 9·0 | | 55·5 | 54·6 | 10·0 |
| 9·6 | | 59·5 | 33·6 | |
| 9·4 | 23 | 6·0 | 2·4 | |
| 9·3 | | 21·0 | 18·6 | |
| 9·4 | | 54·5 | 32·7 | 9·5 G |
| 9·4 | 24 | 11·5 | 2·5 | 9·5 |
| 8·1 | | 19·5 | 23·1 | 8·5 g |
| 9·7 | | 37·5 | 30·3 | |
| 9·7 | | 42·5 | 3·5 | |
| 9·7 | 25 | 15·5 | 10·1 | |
| 9·0 | | 25·5 | 53·0 | 9·3 |
| 8·4 | | 41·5 | 43·6 | 9·0 g |
| 9·4 | | 51·5 | 15·6 | |
| 9·5 | | 56·5 | 20·9 | |
| 8·7 | 26 | 34·0 | 20·9 | 9·5 g |
| 7·7 | | 47·0 | 16·2 | 6·5 GSg |
| 9·7 | 27 | 22·5 | 5·6 | |
| 8·9 | | 30·0 | 17·9 | 10·0 |
| 9·7 | | 32·5 | 28·2 | |
| 8·6 | | 44·5 | 21·7 | 8·0 Gg |
| 9·6 | | 51·0 | 43·6 | |
| 9·3 | 29 | 39·5 | 14·1 | 10·0 |
| 9·2 | | 43·0 | 14·1 | 10·0 |
| 9·5 | | 43·5 | 56·1 | |
| 9·0 | 30 | 4·5 | 52·7 | |
| 9·3 | | 19·5 | 40·4 | |
| 9·2 | | 22·5 | 3·9 | |
| 8·9 | | 37·0 | 7·7 | 9·5 |
| 9·4 | | 40·5 | 7·0 | |
| 9·2 | | 42·0 | 3·3 | |
| 9·7 | | 51·0 | 26·0 | g |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 30 | 47 | 7·7 |
| | 40 | 51 | 7·9 |
| | 50 | 54 | 8·0 |
| 11 | 0 | 57 | 8·1 |
| | 10 | 60 | 8·2 |
| | 20 | 63 | 8·2 |
| | 30 | 67 | 8·3 |
| | 40 | 70 | 8·3 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 67 | 8·3 |
| | 40 | 70 | 8·3 |
| | 50 | 73 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8·3 |
| | 20 | 84 | 8·3 |
| | 30 | 87 | 8·3 |
| | 40 | 90 | 8·2 |

### 1621—1680.

| mag. | 11h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·7 | 30 | 57·0 | 45·0 | |
| 9·3 | | 58·5 | 55·1 | |
| 8·9 | 31 | 10·8 | 56·6 | 9·0 |
| 8·8 | | 32·5 | 43·0 | 9·0 g |
| 9·2 | | 33·0 | 49·1 | |
| 8·6 | | 39·5 | 12·4 | 8·8 g |
| 9·7 | | 40·5 | 53·0 | 9·0 |
| 9·7 | | 42·5 | 53·2 | |
| 7·5 | 32 | 9·5 | 55·6 | 6·8 GSg |
| 9·1 | | 51·0 | 17·5 | 9·5 g |
| 9·7 | 33 | 10·0 | 58·0 | |
| 9·2 | | 33·0 | 57·1 | 9·5 |
| 9·2 | 37 | 21·5 | 56·3 | |
| 9·6 | | 21·5 | 3·1 | |
| 9·7 | | 30·5 | 21·1 | g |
| 9·9 | 38 | 8·0 | 41·3 | |
| 9·2 | | 40·2 | 36·7 | 9·0 g |
| 9·0 | 39 | 25·5 | 31·1 | 9·0 g |
| 9·7 | | 26·4 | 0·2 | |
| 4·6 | | 40·6 | 2·3 | 4·0 GSgr |
| 9·0 | 40 | 36·0 | 10·0 | 9·0 g |
| 9·4 | | 59·5 | 10·2 | 9·5 |
| 8·6 | 41 | 20·5 | 55·9 | 8·8 g |
| 9·7 | | 21·5 | 20·7 | |
| 9·4 | | 24·7 | 59·5 | 9·0 |
| 9·8 | | 40·5 | 22·6 | |
| 9·9 | | 41·8 | 3·0 | |
| 8·2 | | 44·0 | 59·9 | 7·0 GScg |
| 7·5 | 42 | 14·5 | 7·3 | 5·5 GSgr |
| 9·5 | | 27·0 | 17·7 | g |
| 8·8 | 43 | 28·0 | 46·9 | 9·0 g |
| 9·2 | | 37·5 | 23·7 | |
| 9·9 | | 48·7 | 8·1 | |
| 8·9 | | 51·5 | 48·9 | 9·5 |
| 9·6 | 44 | 8·5 | 28·5 | |
| 9·9 | | 20·0 | 43·3 | 9·5 |
| 9·9 | | 20·0 | 17·9 | |
| 9·2 | | 51·0 | 47·9 | |
| 9·9 | 45 | 47·5 | 47·5 | |
| 9·4 | | 54·5 | 5·9 | 9·5 g |
| 9·9 | 46 | 26·5 | 37·1 | |
| 9·9 | | 30·5 | 4·1 | 9·5 g |
| 9·9 | 47 | 3·5 | 40·7 | |
| 9·9 | | 10·0 | 8·3 | |
| 9·9 | | 15·0 | 25·0 | |
| 9·9 | | 30·5 | 45·7 | 9·0 |
| 9·2 | | 37·0 | 57·0 | 8·0 g |
| 9·9 | | 39·2 | 29·0 | |
| 9·8 | | 41·5 | 13·3 | |
| 9·1 | | 59·0 | 19·9 | g |
| 8·8 | 48 | 0·0 | 58·6 | 8·0 g |
| 8·8 | | 19·5 | 45·6 | 9·0 g |
| 9·4 | 49 | 7·0 | 10·5 | |
| 9·4 | | 11·5 | 52·1 | |
| 9·9 | | 30·5 | 46·4 | |
| 9·9 | 50 | 18·5 | 3·9 | |
| 9·9 | | 30·5 | 20·5 | |
| 9·8 | | 31·2 | 28·6 | |
| 9·9 | 51 | 8·5 | 8·5 | |
| 9·9 | | 10·0 | 50·5 | |

### 1681—1740.

| mag. | 11h.–12h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·7 | 51 | 33·0 | 14·1 | |
| 9·4 | | 54·0 | 23·7 | 9·5 g |
| 9·9 | 52 | 3·5 | 42·5 | |
| 9·9 | | 17·5 | 0·1 | |
| 9·9 | | 32·0 | 53·9 | |
| 9·3 | 53 | 21·0 | 9·1 | |
| 9·0 | | 55·5 | 21·9 | 9·0 g |
| 9·4 | 54 | 38·5 | 11·9 | 9·0 g |
| 9·9 | 55 | 33·0 | 37·7 | |
| 9·9 | | 42·8 | 57·2 | |
| 9·9 | | 45·5 | 31·5 | |
| 9·9 | | 54·0 | 22·7 | |
| 9·6 | 56 | 1·0 | 11·6 | 9·0 g |
| 9·4 | | 7·5 | 7·0 | |
| 9·9 | | 54·0 | 29·4 | |
| 8·6 | 58 | 3·0 | 6·6 | 9·0 g |
| 8·8 | | 8·5 | 21·1 | 9·5 g |
| 9·5 | | 9·5 | 57·0 | |
| 9·5 | | 19·7 | 2·0 | |
| 9·5 | | 52·0 | 19·0 | |
| 9·3 | | 55·0 | 32·2 | 9·0 g |
| 9·9 | 59 | 54·0 | 39·3 | |
| 9·6 | 0 | 35·0 | 30·9 | 9·0 g |
| 8·8 | 1 | 38·0 | 17·2 | 9·0 g |
| 9·5 | | 47·5 | 15·0 | |
| 9·9 | 2 | 59·5 | 51·0 | |
| 7·3 | 3 | 4·0 | 45·4 | 8·0 GSg |
| 9·1 | | 13·0 | 1·4 | g |
| 9·9 | | 17·0 | 44·0 | 9·2 g |
| 9·9 | | 23·0 | 1·0 | g |
| 8·8 | | 53·0 | 28·8 | 8·5 g |
| 9·7 | 5 | 14·0 | 49·6 | |
| 9·2 | | 17·5 | 0·0 | 8·5 g |
| 9·9 | | 38·5 | 15·0 | |
| 9·7 | | 41·5 | 49·4 | |
| 8·9 | | 50·0 | 55·0 | g |
| 8·8 | 6 | 40·0 | 59·0 | 9·0 g |
| 9·4 | 7 | 2·0 | 42·8 | |
| 9·3 | | 5·0 | 11·2 | 8·5 g |
| 9·9 | | 12·0 | 8·7 | 9·0 g |
| 9·2 | | 24·5 | 11·3 | |
| 9·2 | | 49·0 | 33·0 | |
| 8·2 | | 55·5 | 57·6 | 8·7 g |
| 9·3 | 8 | 16·0 | 14·0 | g |
| 9·9 | | 25·5 | 53·8 | |
| 9·9 | | 43·5 | 32·2 | |
| 9·8 | | 50·0 | 2·4 | |
| 9·0 | | 59·5 | 40·9 | 9·5 g |
| 9·1 | 9 | 33·0 | 48·6 | 9·2 g |
| 9·6 | 10 | 29·5 | 39·9 | |
| 9·9 | | 42·0 | 37·1 | g |
| 8·8 | | 49·5 | 16·2 | 8·5 Gg |
| 9·2 | 11 | 4·5 | 59·0 | 9·0 g |
| 9·4 | | 29·0 | 34·2 | 9·0 g |
| 9·4 | 12 | 41·0 | 49·6 | 9·5 g |
| 9·2 | 13 | 2·0 | 18·8 | g |
| 9·4 | | 14·5 | 20·0 | g |
| 9·9 | | 18·0 | 30·9 | |
| 9·7 | | 52·0 | 51·0 | |
| 8·8 | | 52·5 | 47·7 | g |

### 1741—1800.

| mag. | 12h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·9 | 13 | 56·0 | 5·2 | |
| 8·8 | | 57·5 | 50·6 | 8·0 g |
| 9·1 | 14 | 2·0 | 48·9 | 9·5 g |
| 9·9 | | 12·5 | 25·2 | |
| 9·2 | | 17·0 | 55·9 | 8·5 g |
| 9·9 | | 24·5 | 31·0 | |
| 5·5 | 15 | 9·5 | 49·6 | 6·0 GSg |
| 8·8 | | 21·0 | 34·6 | 9·0 g |
| 9·6 | | 46·0 | 12·0 | |
| 9·9 | | 47·0 | 49·3 | |
| 9·2 | | 52·0 | 36·4 | |
| 7·6 | 16 | 30·0 | 56·8 | 7·0 GScg |
| 9·1 | | 52·0 | 4·8 | 9·0 g |
| 9·9 | 17 | 22·0 | 51·0 | |
| 8·7 | | 23·0 | 22·0 | 9·0 g |
| 9·9 | | 30·5 | 49·0 | |
| 8·3 | | 48·5 | 56·4 | 7·5 GSg |
| 9·0 | 18 | 5·5 | 22·6 | 9·5 g |
| 9·8 | 19 | 6·5 | 53·2 | |
| 10·0 | | 13·5 | 42·6 | |
| 9·6 | | 13·8 | 41·0 | |
| 10·0 | | 22·5 | 40·8 | |
| 10·0 | | 36·0 | 39·0 | |
| 10·0 | | 50·0 | 15·1 | |
| 9·4 | 20 | 4·8 | 4·4 | |
| 9·4 | | 5·0 | 11·2 | |
| 9·5 | | 7·3 | 28·9 | |
| 10·0 | | 19·0 | 36·4 | |
| 9·9 | | 26·0 | 14·8 | g |
| 9·2 | | 27·0 | 15·2 | 8·8 |
| 10·0 | | 55·5 | 59·9 | |
| 9·5 | 21 | 4·0 | 56·7 | 9·2 g |
| 9·6 | | 21·0 | 39·6 | g |
| 9·2 | | 23·0 | 20·8 | |
| 9·6 | | 25·0 | 34·0 | |
| 9·5 | | 27·0 | 12·8 | |
| 9·2 | | 38·5 | 18·8 | |
| 8·8 | | 49·5 | 58·1 | 8·8 g |
| 9·2 | | 59·5 | 12·6 | |
| 9·3 | 22 | 11·5 | 42·2 | g |
| 10·0 | | 16·5 | 4·8 | |
| 9·5 | | 22·0 | 38·8 | |
| 8·1 | | 24·5 | 10·0 | 7·5 Gg |
| 9·4 | | 30·0 | 29·8 | |
| 9·5 | | 30·5 | 0·8 | |
| 10·0 | 23 | 14·0 | 59·8 | |
| 9·7 | | 29·0 | 44·6 | |
| 10·0 | | 31·0 | 25·2 | |
| 9·8 | | 38·0 | 13·6 | |
| 10·0 | | 43·5 | 55·8 | |
| 10·0 | | 45·0 | 11·6 | |
| 10·0 | | 50·0 | 36·0 | |
| 10·0 | | 51·5 | 28·1 | |
| 10·0 | | 54·5 | 58·8 | 9·5 |
| 9·6 | | 59·5 | 4·0 | |
| 10·0 | 24 | 6·5 | 42·4 | |
| 10·0 | | 19·5 | 30·8 | |
| 10·0 | | 22·5 | 34·8 | |
| 9·5 | | 23·5 | 11·0 | |
| 9·7 | | 26·0 | 29·8 | |

### 1801—1860.

| mag. | 12h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·7 | 24 | 40·0 | 31·8 | |
| 9·4 | | 59·5 | 4·1 | |
| 10·0 | 25 | 3·0 | 16·5 | |
| 10·0 | | 5·0 | 28·5 | |
| 10·0 | | 30·5 | 39·3 | |
| 9·9 | 26 | 1·0 | 31·9 | |
| 10·0 | | 6·5 | 51·1 | |
| 10·0 | | 19·0 | 39·1 | |
| 9·6 | | 39·0 | 32·3 | |
| 10·0 | | 45·0 | 9·1 | |
| 9·2 | | 50·5 | 49·9 | |
| 10·0 | | 56·5 | 58·2 | |
| 9·8 | 27 | 14·0 | 21·3 | |
| 9·8 | | 26·0 | 43·7 | |
| 9·2 | | 30·5 | 44·7 | |
| 10·0 | | 31·5 | 54·0 | |
| 9·6 | | 52·5 | 8·3 | |
| 9·6 | | 53·5 | 17·9 | |
| 9·3 | | 56·5 | 57·2 | |
| 9·9 | 28 | 0·0 | 37·9 | |
| 9·2 | | 1·0 | 6·1 | 9·5 |
| 10·0 | | 3·5 | 1·5 | |
| 9·0 | | 15·5 | 58·8 | 9·5 |
| 9·2 | | 17·5 | 14·5 | 8·5 g |
| 9·6 | | 25·5 | 39·2 | |
| 9·9 | | 31·5 | 57·1 | |
| 9·9 | | 33·5 | 18·9 | |
| 9·2 | | 35·0 | 50·9 | 9·0 g |
| 10·0 | | 35·0 | 35·5 | |
| 10·0 | | 46·5 | 22·7 | |
| 10·0 | | 50·5 | 49·5 | |
| 10·0 | | 59·0 | 33·4 | |
| 8·7 | 29 | 7·5 | 36·7 | 9·0 g |
| 7·8 | | 8·0 | 28·9 | 7·5 GSg |
| 10·0 | | 11·5 | 15·9 | |
| 9·5 | | 22·0 | 21·9 | |
| 8·4 | | 22·0 | 31·5 | 8·5 g |
| 10·0 | | 26·0 | 50·3 | |
| 10·0 | | 26·0 | 59·2 | |
| 9·9 | | 31·0 | 26·4 | |
| 9·1 | | 32·5 | 25·7 | 9·5 g |
| 10·0 | | 40·5 | 26·8 | |
| 10·0 | | 41·0 | 7·9 | |
| 10·0 | | 44·5 | 55·8 | |
| 10·0 | | 47·0 | 29·2 | |
| 10·0 | | 48·5 | 5·7 | |
| 10·0 | | 50·5 | 12·1 | |
| 9·9 | | 51·0 | 52·0 | |
| 10·0 | | 53·0 | 4·9 | |
| 9·4 | 30 | 9·0 | 8·9 | |
| 9·5 | | 17·5 | 34·5 | |
| 9·3 | | 27·5 | 22·9 | 9·0 g |
| 9·3 | | 36·0 | 13·6 | 9·5 g |
| 9·1 | | 37·5 | 19·9 | g |
| 9·5 | | 42·5 | 21·1 | |
| 9·6 | 31 | 14·5 | 52·6 | |
| 9·5 | | 15·5 | 26·7 | |
| 9·8 | | 16·5 | 33·2 | |
| 8·9 | | 27·0 | 0·6 | 8·0 Gg |
| 9·2 | | 27·5 | 10·9 | |



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## 1861—1920.

| mag. | 12h. m | s | −66° ′ | |
|---|---|---|---|---|
| 6·7 | 31 | 28·0 | 30·3 | 7·0 GS*g* |
| 9·5 | 32 | 6·0 | 5·3 | |
| 9·7 | | 8·5 | 17·7 | |
| 10·0 | | 21·5 | 37·2 | |
| 10·0 | | 25·5 | 1·9 | |
| 8·6 | | 26·5 | 21·1 | 8·5 G*g* |
| 10·0 | | 37·5 | 40·9 | |
| 9·6 | | 37·5 | 29·9 | |
| 9·9 | | 41·5 | 30·6 | |
| 9·6 | | 43·0 | 36·9 | |
| 10·0 | | 54·0 | 1·4 | |
| 9·2 | 33 | 8·5 | 47·6 | |
| 9·8 | | 18·5 | 31·5 | |
| 10·0 | | 19·0 | 31·9 | |
| 10·0 | | 20·5 | 35·1 | |
| 9·7 | | 28·0 | 53·9 | |
| 9·9 | | 34·5 | 26·4 | |
| 10·0 | | 36·5 | 8·3 | |
| 9·2 | | 40·5 | 7·9 | |
| 9·5 | 34 | 7·5 | 2·7 | |
| 8·8 | | 7·5 | 16·9 | 8·5 G*g* |
| 9·4 | | 15·0 | 33·5 | |
| 9·6 | | 16·5 | 5·5 | |
| 9·4 | | 19·0 | 5·2 | |
| 9·8 | | 21·0 | 46·5 | |
| 9·4 | | 33·0 | 47·9 | |
| 10·0 | | 48·0 | 2·3 | |
| 10·0 | | 52·2 | 59·0 | |
| 9·2 | | 55·0 | 41·8 | |
| 9·8 | | 58·0 | 50·7 | |
| 10·0 | 35 | 11·0 | 24·7 | |
| 9·4 | | 15·5 | 31·9 | |
| 10·0 | | 23·0 | 26·1 | |
| 9·6 | | 25·0 | 4·9 | |
| 10·0 | | 41·0 | 28·9 | |
| 9·2 | | 42·5 | 41·9 | |
| 9·6 | | 45·0 | 2·9 | |
| 9·0 | | 51·0 | 0·1 | 9·2 *g* |
| 9·8 | 36 | 0·0 | 12·9 | |
| 10·0 | | 8·0 | 4·9 | |
| 8·8 | | 19·0 | 53·7 | 8·0 *g* |
| 9·4 | | 24·5 | 52·5 | |
| 10·0 | | 27·0 | 37·9 | |
| 9·8 | | 30·5 | 30·7 | |
| 10·0 | | 32·0 | 6·3 | |
| 9·6 | | 39·0 | 24·9 | |
| 10·0 | | 57·0 | 1·9 | |
| 9·6 | 37 | 1·0 | 37·5 | |
| 10·0 | | 10·5 | 28·9 | |
| 10·0 | | 35·0 | 13·5 | |
| 9·2 | | 36·5 | 7·7 | 10·0 |
| 9·9 | | 39·0 | 8·3 | |
| 9·9 | | 40·0 | 48·6 | |
| 9·5 | | 49·8 | 56·9 | 9·5 G |
| 9·6 | | 56·0 | 35·3 | |
| 8·5 | | 58·5 | 55·5 | 9·0 G*g* |
| 9·8 | 38 | 0·0 | 10·9 | 10·0 |
| 9·6 | | 5·0 | 31·9 | |
| 9·8 | | 7·5 | 57·0 | |
| 9·2 | | 11·0 | 35·5 | |

## 1921—1980.

| mag. | 12h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10·0 | 38 | 18·5 | 37·6 | |
| 9·6 | | 22·5 | 13·5 | |
| 9·3 | | 22·5 | 29·3 | |
| 9·4 | | 25·5 | 55·4 | |
| 9·9 | | 28·0 | 47·0 | |
| 9·8 | | 46·0 | 51·6 | |
| 8·8 | | 54·0 | 7·9 | 8·6 *g* |
| 9·6 | 39 | 9·0 | 29·9 | |
| 9·1 | | 11·0 | 21·1 | *g* |
| 9·6 | | 15·0 | 30·6 | |
| 9·8 | | 28·0 | 37·9 | |
| 9·7 | | 29·5 | 17·1 | |
| 9·6 | | 31·0 | 48·5 | |
| 10·0 | | 40·0 | 41·3 | |
| 9·9 | | 50·0 | 30·5 | |
| 9·6 | | 51·0 | 5·7 | |
| 9·6 | | 54·0 | 10·9 | |
| 10·0 | | 54·0 | 16·7 | |
| 9·2 | | 56·0 | 57·7 | |
| 10·0 | 40 | 12·5 | 51·9 | |
| 10·0 | | 25·0 | 42·9 | |
| 10·0 | | 26·5 | 22·3 | |
| 9·6 | | 38·0 | 49·0 | |
| 8·1 | | 39·0 | 26·7 | 7·8 GS*g* : |
| 9·1 | | 45·5 | 4·9 | 10·0 |
| 9·7 | | 47·5 | 32·1 | |
| 8·2 | | 49·5 | 40·3 | 8·8 *g* |
| 9·6 | | 51·5 | 11·5 | |
| 9·9 | | 52·5 | 31·4 | |
| 10·0 | 41 | 18·0 | 50·5 | |
| 9·6 | | 40·0 | 49·7 | |
| 9·9 | | 49·0 | 18·5 | |
| 10·0 | | 51·5 | 51·7 | |
| 10·0 | 42 | 12·5 | 0·0 | |
| 10·0 | | 20·5 | 2·9 | |
| 10·0 | | 26·0 | 3·7 | |
| 9·9 | | 32·0 | 23·7 | |
| 10·0 | | 47·5 | 32·2 | |
| 10·0 | | 55·5 | 49·1 | |
| 9·0 | 43 | 3·0 | 44·3 | 9·0 *g* |
| 10·0 | | 7·5 | 14·9 | |
| 10·0 | | 10·0 | 8·7 | |
| 9·4 | | 17·5 | 57·7 | |
| 9·6 | | 38·5 | 16·5 | |
| 8·9 | | 41·5 | 10·4 | *g* |
| 9·6 | | 50·5 | 25·1 | |
| 9·7 | | 51·5 | 52·9 | |
| 9·8 | | 52·0 | 34·3 | |
| 8·2 | 44 | 4·0 | 10·5 | 8·5 *g* |
| 9·2 | | 25·0 | 29·9 | |
| 9·6 | | 29·5 | 14·9 | |
| 10·0 | | 39·5 | 28·1 | |
| 10·0 | | 41·5 | 27·7 | |
| 10·0 | | 42·0 | 22·2 | |
| 9·5 | 45 | 1·5 | 52·9 | |
| 9·3 | | 2·0 | 14·7 | |
| 9·5 | | 18·5 | 37·5 | 9·0 *g* |
| 9·7 | | 19·0 | 6·1 | |
| 8·9 | | 39·0 | 13·9 | *g* |
| 9·5 | | 40·0 | 28·9 | |

## 1981—2040.

| mag. | 12h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10·0 | 45 | 41·5 | 7·7 | |
| 8·8 | | 53·0 | 43·4 | 9·5 *g* |
| 9·2 | 46 | 1·0 | 12·3 | *g* |
| 9·2 | | 9·5 | 39·9 | 9·0 *g* |
| 10·0 | | 22·5 | 11·5 | |
| 10·0 | 47 | 8·5 | 24·9 | |
| 9·2 | | 9·5 | 27·5 | |
| 9·5 | | 31·5 | 21·2 | |
| 10·0 | | 33·5 | 24·5 | |
| 9·1 | | 40·5 | 49·7 | *g* |
| 10·0 | | 41·5 | 33·5 | |
| 10·0 | | 54·5 | 9·9 | |
| 9·2 | 48 | 10·0 | 35·9 | 9·5 |
| 9·4 | | 18·0 | 37·0 | |
| 8·8 | | 18·5 | 16·7 | 9·0 *g* |
| 9·7 | | 19·5 | 6·2 | *g* |
| 9·2 | | 19·5 | 6·7 | *g* |
| 10·0 | | 21·5 | 6·9 | |
| 9·1 | | 21·5 | 51·9 | 9·0 *g* |
| 9·7 | | 28·0 | 40·8 | |
| 9·0 | | 42·0 | 56·7 | 9·2 *g* |
| 8·9 | | 43·0 | 51·9 | 9·2 *g* |
| 10·0 | | 44·5 | 15·6 | |
| 9·8 | | 49·0 | 48·7 | |
| 9·8 | | 55·5 | 38·9 | |
| 9·4 | 49 | 0·0 | 37·0 | |
| 9·2 | | 14·0 | 3·1 | |
| 10·0 | | 17·0 | 28·3 | |
| 8·9 | | 28·5 | 31·9 | 8·5 *g* |
| 9·4 | | 41·0 | 28·6 | 9·5 *g* |
| 9·1 | 50 | 0·0 | 49·5 | |
| 10·0 | | 6·5 | 9·9 | |
| 10·0 | | 15·5 | 23·9 | |
| 10·0 | | 18·0 | 19·9 | |
| 9·3 | | 18·5 | 32·9 | |
| 9·6 | | 19·0 | 30·2 | |
| 10·0 | | 20·0 | 57·4 | |
| 9·2 | | 23·5 | 40·9 | 10·0 |
| 9·5 | | 29·0 | 42·0 | |
| 9·1 | | 29·5 | 47·5 | 9·1 *g* |
| 10·0 | 51 | 12·0 | 21·1 | |
| 9·4 | | 17·5 | 31·9 | |
| 8·6 | | 25·0 | 37·1 | 9·0 *g* |
| 8·4 | | 28·5 | 56·1 | 8·8 *g* |
| 10·0 | 52 | 9·5 | 46·7 | |
| 9·4 | | 13·0 | 44·2 | |
| 10·0 | | 18·0 | 7·9 | |
| 8·2 | | 19·5 | 10·3 | 9·0 S*g* |
| 9·6 | | 47·5 | 2·9 | |
| 8·9 | 53 | 9·5 | 55·9 | 9·5 *g* |
| 9·2 | | 11·5 | 50·9 | |
| 9·9 | | 12·0 | 32·9 | |
| 9·5 | | 28·5 | 7·8 | *g* |
| 9·2 | | 55·5 | 36·8 | |
| 9·6 | | 59·0 | 13·4 | |
| 10·0 | 54 | 10·0 | 48·2 | |
| 10·0 | | 10·5 | 59·3 | |
| 8·9 | | 17·0 | 2·1 | 9·0 *g* |
| 9·1 | | 20·5 | 45·7 | 8·0 *g* |
| 9·0 | | 23·0 | 6·5 | 9·5 *g* |

## 2041—2100.

| mag. | 12h.–13h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·4 | 54 | 25·5 | 26·9 | |
| 10·0 | | 28·5 | 4·9 | |
| 9·6 | | 53·0 | 58·1 | |
| 9·9 | | 53·0 | 50·5 | |
| 10·0 | 55 | 18·5 | 27·7 | |
| 10·0 | | 21·0 | 54·9 | |
| 9·5 | | 28·5 | 8·1 | |
| 9·8 | | 47·0 | 0·7 | |
| 10·0 | | 47·0 | 46·7 | |
| 9·4 | | 50·0 | 9·3 | |
| 9·6 | | 53·0 | 44·6 | |
| 9·9 | 56 | 32·0 | 27·1 | |
| 9·8 | | 35·0 | 10·3 | |
| 8·8 | | 39·5 | 10·9 | 9·0 *g* |
| 9·2 | | 53·0 | 57·2 | |
| 9·6 | | 58·5 | 58·7 | |
| 10·0 | 57 | 24·0 | 39·8 | |
| 9·9 | | 24·5 | 41·1 | |
| 9·2 | | 45·5 | 33·1 | |
| 8·9 | 58 | 1·5 | 22·3 | 9·0 *g* |
| 8·9 | | 3·0 | 4·9 | *g* |
| 9·1 | | 10·5 | 55·9 | |
| 9·8 | | 11·0 | 13·4 | |
| 9·0 | | 15·5 | 24·9 | *g* |
| 10·0 | | 19·0 | 54·7 | |
| 9·6 | | 19·5 | 24·1 | |
| 10·0 | | 19·5 | 6·9 | |
| 9·3 | | 25·0 | 5·7 | |
| 9·8 | | 26·5 | 15·9 | |
| 8·8 | | 31·0 | 10·9 | 9·0 *g* |
| 9·8 | | 33·5 | 55·9 | |
| 9·8 | | 43·0 | 48·4 | |
| 9·6 | | 51·5 | 53·5 | |
| 9·6 | | 53·7 | 3·0 | |
| 8·6 | | 57·5 | 17·3 | 9·0 *g* |
| 9·9 | 59 | 7·5 | 42·0 | |
| 9·9 | | 13·0 | 4·0 | |
| 9·9 | | 21·0 | 42·4 | |
| 9·6 | | 25·5 | 10·0 | |
| 9·4 | | 34·0 | 33·2 | 9·0 *g* |
| 9·8 | | 56·0 | 57·2 | |
| 9·6 | 0 | 6·8 | 48·2 | |
| 9·9 | | 20·5 | 4·0 | |
| 9·9 | | 21·3 | 44·2 | |
| 9·3 | | 30·0 | 20·0 | *g* |
| 9·7 | | 36·0 | 41·8 | |
| 9·9 | | 42·0 | 48·1 | |
| 9·5 | | 53·5 | 24·3 | |
| 9·8 | 1 | 2·0 | 33·4 | |
| 9·8 | | 31·0 | 50·7 | |
| 9·3 | | 33·5 | 19·0 | *g* |
| 8·5 | | 49·0 | 3·8 | 9·0 *g* |
| 9·0 | | 56·5 | 53·0 | 9·5 *g* |
| 9·9 | | 59·5 | 10·8 | 9·5 |
| 9·4 | 2 | 2·0 | 48·0 | |
| 9·4 | | 15·0 | 13·2 | 9·0 *g* |
| 9·5 | | 21·5 | 59·6 | |
| 9·9 | | 26·0 | 47·0 | |
| 9·9 | | 32·5 | 59·4 | |
| 9·5 | | 40·5 | 2·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 30 | 87 | 8·3 |
| | 40 | 90 | 8·2 |
| | 50 | 93 | 8·2 |
| 13 | 0 | 97 | 8·1 |
| | 10 | 100 | 8·0 |



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25 prec.

| h | m | α + (s) | δ − (′) |
|---|---|---|---|
| 13 | 0 | 97 | 8·1 |
| | 10 | 100 | 8·0 |
| | 20 | 103 | 7·9 |
| | 30 | 106 | 7·7 |
| | 40 | 109 | 7·6 |
| | 50 | 112 | 7·4 |

## 2101—2160.

| mag. | $13^{h}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9·8 | 2 | 46·0 | 19·0 | |
| 9·6 | | 49·0 | 53·0 | |
| 9·6 | | 49·0 | 49·6 | |
| 9·2 | | 49·5 | 54·0 | 8·8 *g* |
| 9·9 | | 56·0 | 48·4 | |
| 9·4 | | 56·0 | 5·9 | |
| 9·5 | 3 | 1·0 | 30·6 | |
| 9·6 | | 1·5 | 20·4 | 9·0 *g* |
| 9·9 | | 2·2 | 41·3 | |
| 8·9 | | 18·5 | 48·0 | 8·8 *g* |
| 9·9 | | 19·2 | 9·6 | |
| 9·9 | | 30·0 | 42·3 | |
| 9·0 | | 33·0 | 47·0 | 9·5 *g* |
| 9·8 | | 40·0 | 38·7 | |
| 9·7 | | 57·0 | 2·8 | |
| 9·5 | | 59·5 | 0·0 | 9·5 *g* |
| 9·9 | 4 | 8·0 | 43·6 | |
| 9·8 | | 13·0 | 43·6 | |
| 9·4 | | 28·0 | 25·6 | |
| 9·7 | | 39·5 | 45·2 | |
| 9·7 | | 49·0 | 40·0 | 9·5 |
| 9·5 | 5 | 10·0 | 14·2 | |
| 9·5 | | 36·5 | 8·0 | |
| 9·5 | | 37·0 | 3·1 | |
| 9·7 | 6 | 7·0 | 5·9 | |
| 9·7 | | 17·5 | 29·0 | |
| 9·5 | | 46·5 | 24·1 | |
| 9·7 | | 54·0 | 32·0 | |
| 9·3 | 7 | 3·0 | 21·0 | *g* |
| 9·4 | | 10·5 | 0·6 | |
| 9·5 | | 32·0 | 5·0 | |
| 9·6 | | 40·0 | 30·6 | |
| 9·8 | | 42·5 | 58·8 | |
| 9·7 | | 49·5 | 26·2 | |
| 9·7 | | 52·5 | 49·8 | |
| 9·4 | | 56·5 | 59·2 | |
| 9·3 | 8 | 7·5 | 34·0 | |
| 9·8 | | 7·5 | 46·4 | |
| 9·4 | | 19·5 | 15·3 | |
| 9·6 | | 20·5 | 53·1 | |
| 9·6 | | 37·5 | 54·0 | |
| 7·4 | | 49·0 | 7·4 | 5·5 GS*g* |
| 9·8 | | 49·5 | 28·3 | |
| 9·5 | | 53·0 | 46·0 | |
| 9·2 | | 53·0 | 56·0 | 9·0 *g* |
| 9·0 | 9 | 12·0 | 17·6 | 8·5 *g* |
| 9·6 | | 24·5 | 17·8 | |
| 9·8 | | 24·5 | 16·5 | |
| 9·1 | | 28·5 | 46·6 | 8·5 *g* |
| 9·5 | | 29·5 | 17·2 | |
| 9·6 | | 31·0 | 13·6 | |
| 9·9 | | 41·5 | 20·4 | |
| 9·5 | | 46·5 | 48·0 | |
| 9·8 | | 58·0 | 1·0 | |
| 9·9 | 10 | 6·5 | 7·1 | |
| 9·3 | | 9·5 | 11·0 | *g* |
| 9·7 | | 20·0 | 51·0 | |
| 9·5 | | 30·5 | 43·2 | 8·7 *g* |
| 9·9 | | 33·0 | 13·5 | |
| 9·9 | | 39·3 | 58·4 | |

## 2161—2220.

| mag. | $13^{h}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9·0 | 10 | 40·0 | 57·8 | 9·5 *g* |
| 9·5 | | 51·0 | 11·4 | |
| 9·5 | 11 | 8·5 | 7·3 | |
| 7·5 | | 11·5 | 42·4 | 7·7 G*g* |
| 9·9 | | 14·5 | 18·2 | |
| 9·6 | | 35·5 | 23·8 | *g* |
| 9·3 | 12 | 12·0 | 50·2 | |
| 9·6 | | 13·5 | 10·2 | |
| 9·7 | | 23·0 | 22·2 | |
| 9·8 | | 39·5 | 21·0 | |
| 7·3 | | 53·5 | 52·7 | 7·5 GS*g* |
| 9·7 | | 56·0 | 2·0 | |
| 9·8 | 13 | 13·0 | 14·4 | |
| 9·9 | | 15·5 | 9·4 | |
| 9·9 | | 25·0 | 56·2 | |
| 9·7 | | 29·0 | 38·0 | |
| 9·2 | | 30·0 | 42·8 | |
| 9·9 | | 50·5 | 42·4 | |
| 9·9 | 14 | 6·5 | 59·0 | |
| 9·8 | | 17·0 | 6·7 | |
| 9·9 | | 27·5 | 32·0 | |
| 9·6 | | 37·0 | 19·2 | |
| 9·7 | | 38·0 | 40·0 | |
| 9·7 | | 51·0 | 46·1 | |
| 9·7 | | 59·5 | 11·0 | |
| 9·2 | 15 | 9·5 | 46·7 | 9·5 |
| 9·5 | | 12·0 | 47·0 | |
| 9·2 | | 24·5 | 11·8 | 9·0 *g* |
| 9·7 | | 29·0 | 21·6 | |
| 9·9 | | 29·5 | 32·2 | |
| 9·9 | | 34·5 | 40·7 | |
| 7·7 | | 35·5 | 39·6 | 8·0 G*g* |
| 9·0 | | 38·0 | 37·7 | 10·0 G*g* |
| 9·8 | | 40·5 | 13·6 | |
| 9·3 | | 57·0 | 1·0 | |
| 9·9 | 16 | 0·0 | 42·2 | |
| 9·5 | | 11·0 | 11·7 | |
| 9·7 | | 15·5 | 41·8 | |
| 9·2 | | 16·0 | 37·6 | *g* |
| 9·1 | | 19·5 | 39·6 | 9·0 *g* |
| 9·4 | | 27·5 | 55·6 | |
| 9·6 | | 34·5 | 31·0 | |
| 9·7 | | 36·5 | 3·6 | |
| 9·8 | | 36·5 | 55·0 | |
| 9·8 | | 40·5 | 42·6 | |
| 9·9 | | 43·0 | 49·7 | |
| 9·7 | | 52·0 | 24·0 | |
| 9·8 | | 58·5 | 3·8 | |
| 9·1 | | 59·0 | 35·0 | |
| 9·9 | | 59·0 | 56·4 | |
| 9·9 | 17 | 0·5 | 46·3 | |
| 9·8 | | 6·5 | 35·0 | |
| 9·9 | | 16·5 | 17·2 | |
| 9·2 | | 32·5 | 5·7 | 9·0 |
| 9·9 | | 36·0 | 59·0 | |
| 9·5 | 18 | 6·5 | 31·0 | |
| 9·5 | | 15·5 | 48·0 | |
| 9·9 | | 15·5 | 31·6 | |
| 9·5 | | 16·0 | 46·7 | |
| 9·8 | | 18·5 | 43·1 | |

## 2221—2280.

| mag. | $13^{h}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9·9 | 18 | 27·0 | 11·0 | |
| 8·9 | | 29·0 | 22·1 | 7·7 G*g* |
| 9·2 | | 41·0 | 10·7 | 9·5 |
| 8·0 | | 45·0 | 5·8 | 8·0 G*g* |
| 9·6 | | 49·5 | 25·0 | |
| 9·3 | | 53·5 | 3·8 | 9·5 |
| 9·6 | 19 | 26·0 | 52·1 | |
| 9·5 | 20 | 1·0 | 48·9 | |
| 9·9 | | 3·5 | 17·3 | |
| 9·9 | | 7·0 | 46·2 | |
| 9·0 | | 12·5 | 19·1 | 8·8 *g* |
| 9·5 | | 24·0 | 52·2 | |
| 9·6 | | 28·5 | 44·2 | |
| 9·6 | | 33·5 | 31·5 | |
| 9·7 | | 35·0 | 2·6 | |
| 9·3 | | 58·0 | 42·0 | |
| 9·7 | 21 | 4·5 | 14·7 | |
| 9·2 | | 29·5 | 22·6 | 9·5 *g* |
| 9·6 | | 53·0 | 27·9 | |
| 9·7 | | 55·0 | 38·2 | |
| 9·9 | 22 | 8·5 | 29·2 | |
| 9·6 | | 9·5 | 40·5 | |
| 9·5 | | 32·5 | 25·2 | |
| 9·9 | | 37·0 | 20·1 | |
| 9·3 | | 56·0 | 46·3 | 9·5 *g* |
| 9·4 | 23 | 3·0 | 42·1 | |
| 9·9 | | 9·0 | 15·0 | |
| 8·3 | | 9·5 | 55·6 | 8·7 *g* |
| 9·5 | | 28·5 | 49·1 | |
| 9·1 | | 31·0 | 56·1 | 9·2 *g* |
| 9·5 | 24 | 7·0 | 2·4 | |
| 9·7 | | 20·5 | 50·0 | |
| 9·9 | | 21·0 | 46·4 | |
| 9·7 | | 21·5 | 50·0 | |
| 9·0 | | 55·0 | 5·4 | 8·0 G*g* |
| 9·5 | 25 | 6·5 | 17·7 | |
| 9·5 | | 12·5 | 15·4 | |
| 9·9 | | 29·0 | 59·0 | |
| 9·5 | | 29·5 | 27·0 | |
| 9·7 | | 40·0 | 53·6 | |
| 9·4 | | 41·5 | 22·0 | |
| 9·7 | 26 | 2·0 | 22·7 | |
| 9·3 | | 8·0 | 39·1 | *g* |
| 9·9 | | 9·0 | 36·8 | |
| 9·4 | | 25·0 | 34·7 | |
| 9·9 | | 37·5 | 36·1 | |
| 9·9 | | 47·8 | 58·3 | |
| 9·9 | | 49·3 | 48·4 | |
| 9·9 | | 51·3 | 11·5 | |
| 9·6 | 27 | 6·5 | 0·5 | |
| 9·4 | | 43·0 | 42·2 | |
| 9·3 | 29 | 4·0 | 24·1 | |
| 9·4 | | 14·5 | 45·5 | |
| 9·2 | | 52·2 | 1·4 | |
| 9·3 | | 56·5 | 30·5 | |
| 9·4 | | 57·5 | 21·3 | *g* |
| 9·8 | 30 | 22·3 | 6·4 | |
| 9·8 | | 40·5 | 38·7 | |
| 9·9 | | 43·0 | 4·3 | |
| 9·6 | | 43·0 | 3·2 | |

## 2281—2340.

| mag. | $13^{h}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9·9 | 30 | 50·3 | 59·2 | |
| 9·4 | | 54·5 | 39·1 | |
| 9·4 | 31 | 17·5 | 17·5 | *g* |
| 9·6 | | 22·0 | 14·0 | |
| 9·2 | | 32·5 | 39·6 | |
| 9·9 | | 59·5 | 0·9 | |
| 9·7 | 32 | 5·5 | 46·2 | |
| 9·7 | | 12·0 | 3·6 | |
| 9·4 | | 17·0 | 36·0 | |
| 9·9 | | 35·5 | 6·0 | |
| 9·8 | | 55·0 | 34·1 | |
| 9·5 | 33 | 11·0 | 15·1 | |
| 9·7 | | 25·5 | 11·5 | |
| 9·7 | | 30·0 | 19·7 | |
| 9·5 | | 37·5 | 47·6 | *g* |
| 9·6 | | 40·0 | 9·7 | |
| 8·8 | | 59·0 | 50·1 | *g* |
| 9·9 | 34 | 2·0 | 57·1 | |
| 9·0 | | 8·5 | 46·1 | *g* |
| 9·6 | | 14·0 | 21·3 | |
| 9·8 | | 16·0 | 27·1 | |
| 9·9 | | 19·3 | 1·1 | |
| 9·9 | | 30·5 | 34·1 | |
| 9·7 | | 38·0 | 14·0 | |
| 9·8 | 35 | 7·5 | 55·0 | |
| 9·0 | | 31·0 | 11·0 | 8·5 *g* |
| 9·9 | | 45·0 | 56·2 | |
| 9·8 | | 58·0 | 55·2 | |
| 7·6 | 36 | 11·0 | 7·6 | 7·5 GS*g* |
| 9·8 | | 45·0 | 51·8 | |
| 9·9 | 37 | 15·5 | 8·4 | |
| 9·9 | | 29·5 | 42·9 | |
| 9·9 | | 36·3 | 51·5 | |
| 8·8 | | 41·0 | 7·6 | 9·5 |
| 9·9 | 38 | 0·5 | 51·1 | |
| 9·8 | | 9·0 | 49·2 | |
| 9·9 | | 19·8 | 59·0 | |
| 9·8 | | 20·0 | 37·1 | |
| 9·4 | | 22·5 | 53·1 | |
| 9·6 | | 26·0 | 59·0 | |
| 9·9 | | 49·0 | 13·2 | |
| 9·8 | | 49·0 | 11·2 | |
| 9·8 | | 52·3 | 18·0 | |
| 9·2 | | 52·5 | 48·5 | 9·5 *g* |
| 9·0 | 39 | 11·0 | 49·7 | 9·5 *g* |
| 10·0* | | 17·0 | 58·5 | |
| 9·8 | | 32·8 | 49·0 | |
| 9·2 | | 42·7 | 41·1 | *g* |
| 10·0 | | 54·0 | 39·0 | |
| 9·5 | 40 | 8·5 | 41·8 | |
| 8·5 | | 18·7 | 21·5 | *g* |
| 10·0 | | 24·5 | 2·7 | |
| 9·8 | | 26·0 | 13·6 | |
| 9·1 | | 34·7 | 25·3 | *g* |
| 10·0 | | 39·5 | 43·8 | |
| 9·4 | | 39·7 | 35·3 | |
| 10·0 | | 40·5 | 33·1 | |
| 8·8 | 41 | 2·5 | 11·9 | 8·5 *g* |
| 9·8 | | 4·0 | 34·9 | |
| 9·4 | | 7·0 | 40·9 | |

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## 2341—2400.

| mag. | 13h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·4 | 41 | 17·0 | 43·6 | |
| 9·7 | | 19·0 | 20·4 | |
| 9·9 | | 22·0 | 40·9 | |
| 9·5 | | 23·5 | 19·7 | |
| 8·8 | | 38·0 | 5·1 | |
| 10·0 | | 43·0 | 58·5 | |
| 9·9 | | 43·5 | 27·9 | |
| 9·2 | | 50·0 | 11·9 | 8·5 g |
| 10·0 | | 58·5 | 31·3 | |
| 9·7 | 42 | 32·5 | 39·6 | |
| 10·0 | | 41·5 | 55·1 | |
| 9·4 | | 44·0 | 15·8 | |
| 9·4 | | 55·3 | 1·9 | |
| 9·9 | | 57·5 | 15·6 | |
| 9·8 | 43 | 9·0 | 6·5 | |
| 9·4 | | 22·0 | 29·3 | |
| 9·8 | | 24·0 | 34·4 | |
| 9·9 | | 29·0 | 41·9 | |
| 10·0 | | 37·5 | 34·7 | |
| 9·9 | | 51·5 | 41·0 | |
| 9·9 | | 54·5 | 38·9 | |
| 9·2 | 44 | 13·0 | 4·0 | |
| 9·9 | | 15·5 | 28·6 | |
| 9·2 | | 29·0 | 9·9 | |
| 10·0 | | 34·0 | 46·9 | |
| 10·0 | | 41·0 | 56·7 | |
| 9·1 | | 43·0 | 29·3 | g |
| 9·9 | | 54·0 | 58·2 | |
| 9·5 | 45 | 0·5 | 18·6 | |
| 8·4 | | 15·5 | 16·9 | 8·0 GSg |
| 8·8 | | 19·0 | 16·7 | 9·0 Ggg |
| 9·4 | | 39·0 | 38·9 | |
| 9·8 | | 41·0 | 13·8 | |
| 10·0 | | 52·0 | 44·8 | |
| 9·3 | 46 | 1·5 | 18·0 | |
| 10·0 | | 3·5 | 57·7 | |
| 9·8 | | 9·5 | 17·1 | |
| 9·6 | | 12·5 | 18·6 | |
| 9·4 | | 28·5 | 11·9 | |
| 9·2 | | 31·0 | 4·6 | |
| 9·2 | | 39·0 | 33·3 | g |
| 10·0 | | 40·5 | 32·5 | |
| 10·0 | 47 | 12·0 | 41·4 | |
| 9·4 | | 21·0 | 23·8 | |
| 9·2 | | 29·0 | 28·4 | g |
| 10·0 | | 32·0 | 40·1 | |
| 9·2 | 48 | 1·0 | 12·0 | |
| 9·4 | | 3·0 | 6·1 | |
| 10·0 | | 19·0 | 55·9 | |
| 9·2 | | 30·5 | 38·2 | |
| 9·9 | | 34·0 | 34·9 | |
| 9·9 | 49 | 2·0 | 45·7 | |
| 9·6 | | 20·5 | 44·0 | |
| 8·6 | 50 | 1·0 | 6·0 | 8·0 g |
| 9·2 | | 11·0 | 53·2 | |
| 9·4 | | 16·0 | 9·8 | |
| 9·6 | | 16·5 | 26·4 | |
| 8·9 | | 34·0 | 40·0 | 7·8 Gg |
| 9·9 | | 35·0 | 56·1 | |
| 8·0 | | 41·5 | 53·7 | 8·0 Gg |

## 2401—2460.

| mag. | 13h.—14h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·6 | 50 | 49·5 | 29·8 | |
| 9·4 | 51 | 2·0 | 56·1 | |
| 9·6 | | 8·0 | 45·9 | |
| 9·9 | | 46·5 | 37·0 | |
| 8·4 | | 56·0 | 12·3 | 8·5 g |
| 8·8 | 52 | 33·0 | 34·2 | 9·0 g |
| 8·7 | | 39·0 | 24·7 | 9·0 g |
| 8·6 | | 44·0 | 55·7 | 7·8 GSg |
| 9·7 | | 44·0 | 42·5 | |
| 9·6 | | 48·5 | 11·3 | g |
| 8·5 | | 51·0 | 10·9 | 8·2 |
| 9·4 | | 52·0 | 41·9 | |
| 9·0 | | 57·0 | 42·6 | |
| 9·8 | 53 | 21·0 | 51·1 | |
| 9·4 | | 41·8 | 1·8 | |
| 9·4 | | 47·0 | 39·3 | |
| 9·5 | | 50·5 | 22·8 | |
| 9·4 | | 58·0 | 54·0 | |
| 8·1 | 54 | 4·5 | 7·8 | 8·0 g |
| 10·0 | | 17·5 | 54·0 | |
| 9·6 | | 27·5 | 18·9 | |
| 10·0 | | 40·0 | 40·4 | |
| 9·2 | | 57·0 | 51·9 | g |
| 9·7 | 55 | 9·0 | 50·8 | |
| 10·0 | | 11·0 | 20·6 | |
| 9·8 | | 17·0 | 58·9 | |
| 9·9 | | 25·0 | 0·8 | |
| 9·4 | | 33·5 | 49·5 | |
| 9·6 | | 56·5 | 48·9 | |
| 9·8 | 56 | 2·0 | 51·5 | |
| 10·0 | | 8·0 | 45·1 | |
| 9·4 | | 14·5 | 42·0 | |
| 9·9 | | 17·0 | 9·9 | |
| 10·0 | | 23·0 | 54·0 | |
| 9·4 | | 24·5 | 40·5 | |
| 9·3 | | 25·5 | 53·0 | |
| 9·4 | | 36·5 | 41·6 | |
| 9·8 | | 41·5 | 51·1 | |
| 9·4 | | 44·8 | 0·0 | |
| 9·9 | 57 | 5·3 | 58·9 | |
| 9·4 | | 11·0 | 52·9 | |
| 9·8 | | 13·5 | 50·6 | |
| 9·6 | | 21·0 | 55·9 | 9·5 |
| 9·5 | | 22·5 | 49·9 | |
| 10·0 | | 26·0 | 37·6 | |
| 9·8 | | 31·8 | 57·1 | |
| 9·8 | | 41·5 | 44·9 | |
| 10·0 | | 47·0 | 4·9 | |
| 9·4 | | 53·0 | 48·9 | |
| 9·9 | | 54·5 | 31·0 | |
| 9·2 | 58 | 22·5 | 27·5 | 9·5 g |
| 10·0 | | 30·5 | 48·8 | |
| 9·9 | | 44·0 | 39·0 | |
| 9·9 | | 48·0 | 43·5 | |
| 10·0 | | 54·5 | 3·5 | |
| 9·4 | 59 | 34·5 | 7·0 | g |
| 10·0 | | 35·5 | 40·1 | |
| 8·8 | | 39·0 | 30·5 | g |
| 9·4 | | 53·5 | 49·3 | |
| 9·9 | 0 | 23·5 | 8·6 | |

## 2461—2520.

| mag. | 14h m | s | −66° ′ | |
|---|---|---|---|---|
| 10·0 | 0 | 49·0 | 25·0 | |
| 10·0 | | 49·0 | 27·9 | |
| 8·2 | | 50·5 | 0·5 | 8·5 g |
| 9·4 | | 53·0 | 5·0 | g |
| 9·9 | 1 | 41·0 | 56·2 | |
| 9·7 | | 41·5 | 3·1 | |
| 9·3 | | 45·0 | 31·9 | |
| 9·9 | | 46·8 | 58·8 | |
| 9·6 | | 48·0 | 43·0 | |
| 9·8 | | 52·0 | 17·0 | |
| 9·6 | 2 | 19·0 | 42·9 | |
| 9·9 | | 38·5 | 14·9 | |
| 9·8 | | 53·5 | 38·7 | |
| 9·7 | | 57·0 | 26·6 | |
| 9·6 | 3 | 23·0 | 33·7 | |
| 8·9 | | 27·0 | 5·6 | |
| 9·1 | | 29·5 | 39·4 | g |
| 9·0 | | 42·5 | 21·6 | g |
| 9·6 | 4 | 4·0 | 53·9 | |
| 9·6 | | 21·5 | 48·7 | |
| 9·6 | | 43·0 | 41·5 | |
| 9·9 | | 59·0 | 49·7 | |
| 9·9 | 5 | 44·2 | 58·9 | |
| 9·4 | 6 | 12·0 | 22·0 | |
| 10·0 | | 16·0 | 53·3 | |
| 9·0 | | 20·0 | 18·9 | g |
| 9·9 | | 32·0 | 34·9 | |
| 9·8 | | 35·0 | 36·5 | |
| 9·8 | | 45·0 | 24·9 | |
| 5·7 | | 45·8 | 0·2 | 6·0 GSg |
| 8·8 | | 51·0 | 34·9 | g |
| 9·8 | 7 | 12·0 | 5·1 | |
| 8·8 | | 12·0 | 33·3 | g |
| 9·8 | | 16·5 | 27·7 | |
| 10·0 | | 25·5 | 58·9 | |
| 10·0 | | 27·5 | 5·9 | |
| 9·4 | | 28·5 | 4·9 | |
| 9·6 | | 36·0 | 33·3 | g |
| 9·6 | | 46·0 | 20·9 | g |
| 9·4 | | 52·0 | 59·4 | 9·0 |
| 10·0 | 8 | 21·5 | 0·0 | |
| 9·7 | | 37·5 | 29·6 | |
| 9·9 | | 52·5 | 53·4 | |
| 9·6 | 9 | 4·0 | 7·0 | |
| 8·0 | | 40·0 | 13·3 | 8·5 g |
| 9·9 | 10 | 0·5 | 21·9 | |
| 9·2 | | 6·0 | 11·4 | |
| 10·0 | | 33·0 | 37·9 | |
| 8·9 | | 34·0 | 33·5 | g |
| 10·0 | | 34·5 | 36·1 | |
| 8·7 | 11 | 44·5 | 8·8 | g |
| 10·0 | 12 | 1·0 | 38·6 | |
| 9·1 | | 12·0 | 32·9 | g |
| 8·8 | | 35·5 | 33·7 | g |
| 9·2 | | 36·5 | 41·5 | |
| 8·8 | | 45·5 | 0·3 | |
| 9·4 | 13 | 11·5 | 14·1 | |
| 8·6 | | 20·0 | 3·5 | 9·0 Gg |
| 7·3 | | 31·0 | 4·4 | 7·0 GScgr |
| 9·9 | | 40·0 | 14·0 | |

## 2521—2580.

| mag. | 14h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·8 | 13 | 49·0 | 6·9 | |
| 9·6 | | 50·0 | 13·7 | |
| 9·5 | 14 | 6·5 | 27·9 | |
| 10·0 | | 9·0 | 13·7 | |
| 9·6 | | 14·5 | 18·3 | |
| 9·8 | | 14·5 | 53·1 | |
| 9·9 | | 17·0 | 42·9 | |
| 9·2 | 15 | 26·2 | 56·6 | |
| 9·4 | | 39·0 | 3·8 | |
| 8·4 | | 55·5 | 55·2 | 8·5 g |
| 9·8 | 16 | 20·5 | 21·9 | |
| 9·9 | | 33·5 | 55·9 | |
| 9·0 | | 34·5 | 50·7 | 8·0 g |
| 10·0 | | 48·0 | 45·9 | g |
| 10·0 | | 49·5 | 5·0 | |
| 10·0 | 17 | 2·5 | 21·1 | |
| 10·0 | | 5·0 | 21·2 | |
| 7·0 | | 6·0 | 0·2 | 7·0 Gg |
| 9·2 | | 21·0 | 30·8 | |
| 9·5 | 18 | 0·5 | 35·3 | |
| 9·4 | | 3·5 | 54·4 | |
| 9·9 | | 14·5 | 1·4 | |
| 9·5 | | 24·3 | 31·5 | |
| 9·4 | | 28·8 | 58·1 | |
| 9·0 | | 30·0 | 31·3 | 9·5 g |
| 9·0 | | 37·5 | 9·4 | 9·0 g |
| 9·2 | | 42·3 | 20·9 | |
| 10·0 | 19 | 33·5 | 26·1 | |
| 9·5 | 20 | 10·8 | 33·8 | g |
| 10·0 | | 27·3 | 16·9 | |
| 9·8 | | 34·5 | 46·3 | Gg |
| 9·8 | | 41·7 | 48·0 | |
| 9·2 | | 56·0 | 26·2 | 9·5 |
| 10·0 | 21 | 38·5 | 28·4 | |
| 9·4 | | 54·0 | 7·4 | |
| 9·2 | 22 | 0·5 | 0·2 | |
| 9·4 | | 52·0 | 5·5 | |
| 8·1 | | 55·0 | 37·9 | 8·0 Gg |
| 9·8 | | 56·0 | 27·5 | |
| 10·0 | 23 | 18·5 | 16·5 | |
| 9·0 | | 23·5 | 33·5 | 9·5 g |
| 8·9 | | 28·5 | 31·6 | 9·0 g |
| 9·3 | | 33·0 | 1·6 | |
| 9·4 | 24 | 18·5 | 16·6 | |
| 8·5 | 25 | 0·5 | 52·6 | 8·0 GSg |
| 9·6 | | 12·2 | 58·7 | |
| 9·0 | | 23·0 | 9·2 | g |
| 9·6 | | 38·0 | 17·6 | |
| 9·6 | | 41·5 | 4·2 | |
| 10·0 | | 46·0 | 10·9 | |
| 9·0 | | 47·0 | 28·0 | 8·5 g |
| 9·7 | | 54·0 | 3·9 | |
| 8·8 | 26 | 21·0 | 7·8 | g |
| 9·4 | | 32·5 | 13·5 | |
| 9·3 | | 37·5 | 5·0 | |
| 9·6 | | 40·5 | 27·7 | |
| 9·7 | | 41·0 | 40·8 | |
| 9·9 | | 46·0 | 31·1 | |
| 9·3 | | 56·5 | 11·6 | |
| 9·2 | | 57·0 | 26·9 | |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 13 | 40 | 109 | 7·6 |
| | 50 | 112 | 7·4 |
| 14 | 0 | 115 | 7·2 |
| | 10 | 118 | 7·0 |
| | 20 | 121 | 6·8 |
| | 30 | 124 | 6·6 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 14 | 20 | 121 | 6·8 |
| | 30 | 124 | 6·6 |
| | 40 | 126 | 6·4 |
| | 50 | 129 | 6·2 |
| 15 | 0 | 131 | 5·9 |
| | 10 | 133 | 5·6 |
| | 20 | 136 | 5·4 |
| | 30 | 138 | 5·1 |
| | 40 | 140 | 4·8 |

## 2581—2640.

| mag. | 14h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 10·0 | 26 | 58·5 | 11·7 | |
| 9·8 | 27 | 0·5 | 17·2 | |
| 9·9 | | 2·5 | 54·4 | |
| 9·3 | | 3·0 | 17·4 | |
| 9·6 | | 3·0 | 9·3 | |
| 10·0 | | 8·0 | 6·2 | |
| 9·4 | | 9·5 | 25·9 | |
| 8·4 | | 33·0 | 46·9 | 8·5 GSg |
| 9·6 | | 34·0 | 33·2 | 9·0 g |
| 10·0 | | 44·0 | 51·0 | |
| 9·9 | 28 | 54·0 | 12·2 | |
| 9·4 | 29 | 9·0 | 11·2 | |
| 9·6 | | 12·0 | 37·1 | |
| 9·3 | | 15·0 | 15·2 | |
| 9·9 | | 43·0 | 35·2 | |
| 10·0 | | 51·5 | 33·4 | |
| 8·6 | 30 | 0·5 | 16·4 | 9·0 g |
| 8·8 | | 12·0 | 3·8 | 9·5 |
| 10·0 | | 13·0 | 0·1 | |
| 8·0 | | 22·5 | 24·1 | 8·0 g |
| 9·6 | | 24·0 | 27·9 | |
| 9·4 | | 29·0 | 3·1 | |
| 9·4 | | 35·0 | 20·9 | |
| 9·4 | | 37·0 | 56·4 | |
| 8·9 | | 37·5 | 57·6 | g |
| 8·8 | | 51·0 | 32·2 | 9·5 |
| 9·4 | | 56·0 | 3·4 | |
| 9·6 | 31 | 5·5 | 15·2 | |
| 9·7 | | 6·5 | 4·7 | |
| 9·6 | | 21·5 | 4·9 | |
| 9·6 | | 23·0 | 38·8 | |
| 9·2 | | 28·5 | 54·4 | Gg |
| 9·6 | | 41·5 | 14·1 | |
| 9·2 | | 58·5 | 11·6 | |
| 10·0 | 32 | 27·0 | 24·8 | |
| 8·5 | | 55·0 | 14·5 | 9·0 g |
| 9·4 | 33 | 17·5 | 10·1 | |
| 8·8 | | 34·5 | 52·1 | g |
| 9·8 | | 39·8 | 4·9 | |
| 9·2 | | 41·5 | 12·9 | |
| 10·0 | | 59·5 | 22·1 | |
| 9·8 | 34 | 14·5 | 3·5 | |
| 9·2 | | 19·0 | 33·5 | |
| 9·7 | | 42·0 | 39·9 | |
| 9·4 | | 44·0 | 25·1 | |
| 10·0 | | 53·8 | 23·1 | 9·0 g |
| 9·9 | 35 | 39·0 | 44·2 | |
| 9·8 | | 49·5 | 5·1 | |
| 9·9 | | 56·5 | 4·3 | |
| 10·0 | 36 | 2·0 | 9·3 | |
| 10·0 | | 8·5 | 56·1 | |
| 9·3 | | 21·0 | 0·0 | |
| 9·6 | | 24·0 | 53·8 | |
| 9·6 | | 44·0 | 22·0 | |
| 8·6 | 37 | 9·5 | 21·7 | g |
| 9·2 | | 14·0 | 5·3 | |
| 9·7 | | 16·5 | 13·4 | |
| 9·9 | | 20·0 | 11·2 | |
| 9·3 | | 22·5 | 0·2 | |
| 9·2 | | 23·5 | 8·3 | |

## 2641—2700.

| mag. | 14h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 10·0 | 37 | 23·8 | 37·1 | |
| 10·0 | | 34·5 | 17·3 | |
| 9·6 | | 42·5 | 9·3 | |
| 8·2 | 38 | 4·0 | 2·9 | 8·5 Gg |
| 6·4 | | 11·5 | 3·9 | 6·0 GSg |
| 9·3 | | 16·5 | 19·0 | g |
| 8·4 | | 17·0 | 3·4 | 9·0 Gg |
| 8·3 | | 44·0 | 41·9 | Gg |
| 9·6 | 39 | 2·0 | 32·7 | |
| 9·2 | | 10·5 | 20·1 | |
| 9·3 | | 30·0 | 19·7 | |
| 8·3 | | 44·0 | 58·5 | 7·5 Gg |
| 8·4 | 40 | 17·8 | 0·0 | 9·0 |
| 9·4 | | 20·0 | 2·6 | |
| 10·0 | 41 | 13·0 | 29·2 | |
| 8·9 | | 20·0 | 33·0 | 8·5 Gg |
| 9·2 | | 35·5 | 52·2 | 9·5 g |
| 10·0 | 42 | 7·0 | 3·4 | |
| 9·0 | | 28·0 | 5·7 | 9·5 |
| 8·9 | | 36·5 | 2·7 | 8·5 g |
| 9·4 | | 42·5 | 33·6 | |
| 9·2 | 43 | 6·0 | 18·8 | |
| 9·4 | | 15·5 | 49·3 | |
| 9·3 | | 18·5 | 3·2 | |
| 9·7 | | 30·0 | 49·0 | |
| 9·8 | 44 | 8·0 | 2·4 | |
| 9·4 | | 29·5 | 20·7 | |
| 9·8 | | 30·5 | 7·2 | 9·5 |
| 9·6 | | 32·0 | 38·0 | |
| 8·0 | | 40·5 | 8·8 | 8·0 g |
| 9·9 | | 49·5 | 20·7 | |
| 10·0 | | 51·0 | 42·1 | |
| 10·0 | | 57·0 | 11·0 | |
| 9·9 | 45 | 10·0 | 19·6 | |
| 9·6 | | 20·8 | 2·0 | |
| 9·0 | | 57·0 | 49·0 | g |
| 9·6 | 46 | 3·5 | 8·2 | |
| 8·5 | | 25·0 | 21·6 | 7·8 Gg |
| 9·6 | | 44·0 | 43·2 | |
| 9·6 | | 56·5 | 30·4 | |
| 9·4 | 47 | 12·5 | 41·0 | |
| 9·2 | | 33·5 | 46·1 | |
| 9·2 | | 48·5 | 34·7 | |
| 10·0 | 48 | 13·5 | 32·2 | |
| 10·0 | | 58·5 | 33·9 | |
| 9·2 | 49 | 6·0 | 52·0 | |
| 9·7 | | 23·0 | 51·2 | |
| 10·0 | | 24·0 | 9·9 | |
| 10·0 | | 35·5 | 47·0 | |
| 9·4 | 50 | 38·5 | 38·7 | |
| 8·6 | | 39·0 | 36·2 | 9·0 g |
| 10·0 | | 41·5 | 38·3 | |
| 9·4 | | 54·5 | 53·9 | 8·5 g |
| 10·0 | 51 | 16·5 | 23·0 | |
| 9·4 | | 28·0 | 1·0 | |
| 9·7 | | 29·5 | 55·7 | |
| 9·3 | | 36·0 | 6·7 | |
| 9·7 | | 36·5 | 15·9 | |
| 8·6 | | 42·0 | 48·7 | g |
| 9·6 | | 50·0 | 55·1 | g |

## 2701—2760.

| mag. | 14h.–15h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 9·3 | 52 | 50·0 | 45·5 | |
| 8·8 | | 54·0 | 19·0 | g |
| 9·3 | 53 | 12·5 | 18·3 | |
| 9·3 | | 19·5 | 37·1 | |
| 10·0 | | 33·0 | 41·9 | |
| 9·4 | | 53·5 | 45·5 | g |
| 9·3 | | 58·0 | 1·5 | g |
| 9·9 | 54 | 31·5 | 46·0 | |
| 8·4 | | 37·0 | 20·5 | 8·5 g |
| 10·0 | 55 | 16·5 | 18·4 | |
| 9·7 | | 19·0 | 33·0 | |
| 10·0 | | 34·5 | 31·7 | |
| 9·9 | | 53·5 | 13·8 | |
| 9·9 | 56 | 16·0 | 58·0 | |
| 9·2 | | 36·0 | 34·2 | |
| 9·4 | | 54·0 | 17·9 | |
| 9·6 | 57 | 8·5 | 33·8 | |
| 9·9 | | 12·8 | 7·8 | |
| 10·0 | | 14·5 | 38·3 | |
| 8·9 | | 16·5 | 24·2 | g |
| 8·7 | | 31·0 | 58·5 | 8·5 g |
| 9·4 | | 51·5 | 20·2 | |
| 8·2 | | 53·0 | 6·9 | 8·0 g |
| 9·3 | 58 | 14·0 | 49·6 | |
| 7·6 | | 24·0 | 36·0 | 6·5 GSgr |
| 9·3 | | 49·8 | 10·8 | |
| 9·6 | 59 | 4·0 | 14·2 | |
| 9·2 | | 8·5 | 46·2 | |
| 9·5 | | 36·8 | 1·0 | |
| 9·2 | | 41·8 | 37·0 | |
| 8·6 | | 43·5 | 23·7 | 8·5 g |
| 9·2 | | 48·3 | 5·0 | |
| 10·0* | 0 | 45·5 | 32·6 | |
| 9·2 | 1 | 4·0 | 39·0 | |
| 9·2 | | 37·0 | 52·0 | 9·5 |
| 9·4 | | 40·5 | 24·9 | |
| 8·5 | 2 | 1·5 | 54·2 | 9·0 g |
| 9·5 | | 2·0 | 42·8 | |
| 10·0 | | 56·0 | 53·0 | |
| 9·4 | 3 | 32·0 | 19·2 | |
| 8·8 | | 52·0 | 25·1 | g |
| 9·7 | 4 | 41·0 | 15·0 | |
| 10·0 | | 54·5 | 29·2 | |
| 10·0 | 5 | 10·0 | 21·9 | |
| 9·2 | 6 | 9·0 | 7·0 | |
| 9·2 | | 13·0 | 7·2 | |
| 9·2 | | 31·5 | 4·4 | |
| 8·8 | 7 | 41·0 | 33·0 | g |
| 9·2 | | 52·5 | 3·8 | |
| 8·9 | 8 | 3·0 | 38·2 | g |
| 9·9 | | 13·8 | 53·5 | |
| 8·4 | | 28·0 | 43·8 | 8·5 g |
| 8·0 | | 37·3 | 2·0 | 7·0 GSg |
| 8·9 | | 49·0 | 41·0 | 9·5 g |
| 8·9 | | 52·8 | 5·5 | 9·5 Sg |
| 9·6 | 9 | 6·5 | 4·7 | |
| 9·2 | | 20·5 | 9·3 | |
| 9·4 | | 28·5 | 58·0 | |
| 9·4 | | 43·0 | 2·6 | |
| 10·0 | | 50·5 | 28·0 | |

## 2761—2820.

| mag. | 15h. m | s | − 66° ′ | |
|---|---|---|---|---|
| 10·0 | 10 | 5·0 | 21·7 | |
| 10·0 | | 33·5 | 29·2 | |
| 9·1 | | 48·0 | 56·4 | |
| 8·5 | 11 | 13·0 | 8·4 | 8·0 Gg |
| 8·8 | | 37·0 | 54·0 | 9·5 |
| 9·2 | | 54·5 | 36·0 | |
| 8·8 | | 58·5 | 52·0 | 9·5 |
| 9·1 | 12 | 11·5 | 52·8 | 10·0 |
| 9·2 | | 22·5 | 49·4 | |
| 9·7 | | 26·5 | 15·1 | |
| 8·9 | 13 | 0·5 | 10·6 | 9·0 g |
| 8·8 | | 31·5 | 32·8 | g |
| 10·0 | | 54·0 | 6·0 | |
| 9·7 | 14 | 2·0 | 45·1 | |
| 8·9 | | 33·5 | 25·0 | g |
| 9·4 | 15 | 2·3 | 57·5 | 9·5 |
| 9·9 | | 10·0 | 13·1 | |
| 9·6 | 17 | 34·0 | 3·1 | |
| 9·9 | | 41·1 | 22·3 | |
| 9·8 | 18 | 16·0 | 4·2 | |
| 9·4 | | 19·0 | 44·9 | |
| 9·5 | | 53·0 | 19·1 | |
| 10·0 | | 58·5 | 40·9 | |
| 9·0 | 20 | 35·5 | 42·1 | g |
| 9·7 | | 51·5 | 11·5 | g |
| 9·1 | | 55·5 | 58·3 | 9·5 S |
| 9·5 | 21 | 29·5 | 25·2 | g |
| 9·5 | | 34·7 | 1·4 | g |
| 7·9 | | 58·5 | 54·5 | 8·0 GSg |
| 9·0 | 22 | 13·0 | 56·8 | 9·0 g |
| 9·4 | | 27·0 | 6·2 | |
| 8·6 | | 32·5 | 30·3 | g |
| 9·6 | 23 | 5·0 | 1·3 | |
| 9·7 | | 26·5 | 59·2 | |
| 9·9 | 24 | 41·5 | 15·2 | |
| 8·8 | 25 | 0·5 | 7·4 | 7·5 GSg |
| 9·6 | | 10·5 | 59·3 | |
| 8·6 | | 15·5 | 7·5 | 9·5 g |
| 9·3 | | 19·0 | 52·3 | g |
| 9·3 | 26 | 11·5 | 40·5 | 9·5 g |
| 10·0 | | 14·5 | 3·0 | |
| 9·4 | | 19·5 | 40·4 | g |
| 9·3 | | 25·5 | 7·1 | |
| 9·9 | 27 | 21·5 | 12·1 | |
| 9·8 | | 38·0 | 41·2 | |
| 8·4 | | 56·5 | 5·5 | 8·5 g |
| 10·0 | 28 | 32·5 | 54·1 | |
| 9·2 | | 49·5 | 8·1 | 9·0 g |
| 9·2 | 29 | 7·5 | 23·5 | 9·0 g |
| 9·6 | | 9·5 | 36·3 | |
| 10·0 | | 25·0 | 7·1 | |
| 9·0 | | 58·5 | 10·8 | g |
| 9·4 | 30 | 43·0 | 26·1 | 8·8 g |
| 9·7 | 32 | 16·0 | 20·1 | |
| 8·4 | | 16·0 | 7·0 | 8·5 GSgr |
| 10·0 | | 29·0 | 59·7 | |
| 9·4 | | 58·0 | 40·1 | 8·5 g |
| 9·2 | | 58·5 | 26·9 | g |
| 9·3 | 33 | 20·5 | 27·9 | 8·5 g |
| 9·6 | | 22·0 | 36·1 | |



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## 2821—2880.

| mag. | 15h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·3 | 34 | 10·0 | 3·1 | |
| 9·8 | 35 | 11·5 | 35·1 | |
| 9·8 | | 16·5 | 27·2 | |
| 9·7 | | 48·5 | 58·2 | |
| 9·6 | 36 | 16·0 | 27·1 | |
| 9·6 | | 32·5 | 55·5 | |
| 9·6 | 37 | 2·5 | 35·9 | 9·0 *g* |
| 9·7* | | 4·5 | 47·1 | *g* |
| 9·7 | | 42·5 | 11·7 | 9·5 *g* |
| 9·4 | | 54·3 | 58·6 | |
| 8·7 | | 56·5 | 47·4 | 9·0 *g* |
| 9·0 | 38 | 12·0 | 6·1 | 9·5 *g* |
| 9·3 | | 45·0 | 32·9 | |
| 9·6 | | 58·0 | 8·5 | |
| 9·6 | 39 | 26·0 | 43·5 | |
| 9·3 | 40 | 12·5 | 39·9 | |
| 9·0 | 41 | 14·2 | 14·9 | 7·5 *g* |
| 9·4 | | 31·0 | 4·0 | |
| 9·3 | | 40·0 | 8·7 | 9·5 *g* |
| 9·7 | | 45·5 | 42·1 | |
| 9·4 | 42 | 20·0 | 22·2 | |
| 9·4 | | 49·0 | 31·9 | |
| 9·7 | | 59·0 | 38·7 | |
| 9·6 | 43 | 0·0 | 18·0 | |
| 9·5 | | 9·5 | 35·5 | |
| 9·6 | 44 | 1·0 | 24·0 | |
| 9·3 | | 9·0 | 20·0 | |
| 9·0 | | 32·0 | 28·6 | 9·5 *g* |
| 9·3 | | 35·0 | 3·0 | 9·5 *g* |
| 9·0 | 45 | 9·0 | 37·8 | *g* |
| 8·3 | | 46·5 | 46·0 | 8·5 *g* |
| 9·1 | | 54·5 | 29·3 | *g* |
| 9·7 | 46 | 5·5 | 15·2 | |
| 9·7 | | 44·0 | 27·0 | |
| 9·2 | 47 | 16·0 | 21·2 | |
| 9·2 | | 19·0 | 12·7 | |
| 9·2 | | 27·0 | 53·7 | |
| 9·1 | | 39·5 | 40·9 | *g* |
| 8·9 | | 50·0 | 18·5 | *g* |
| 9·2 | 48 | 11·8 | 58·0 | |
| 9·6 | | 18·5 | 5·8 | |
| 9·1 | | 31·0 | 41·8 | |
| 9·7 | | 31·5 | 41·1 | |
| 9·2 | | 57·8 | 58·7 | |
| 9·2 | 49 | 22·0 | 48·4 | |
| 8·9 | | 30·5 | 29·2 | 8·0 G |
| 9·6 | | 42·5 | 19·6 | |
| 9·6 | | 59·5 | 33·1 | |
| 9·4 | 50 | 7·5 | 9·5 | |
| 9·7 | | 8·5 | 3·3 | 9·5 *g* |
| 9·1 | | 25·5 | 58·0 | |
| 9·0 | | 38·0 | 46·1 | *g* |
| 8·8 | | 46·5 | 1·2 | 9·0 *g* |
| 9·3 | | 51·5 | 14·5 | |
| 8·8 | | 52·5 | 11·9 | *g* |
| 9·3 | 51 | 12·5 | 28·9 | |
| 8·3 | | 30·0 | 15·8 | 8·2 *g* |
| 9·4 | | 30·5 | 39·2 | 9·5 *g* |
| 9·4 | | 44·0 | 23·9 | |
| 9·6 | | 54·0 | 6·7 | |

## 2881—2940.

| mag. | 15h.–16h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·6 | 52 | 20·0 | 39·9 | |
| 9·5 | | 59·0 | 34·9 | |
| 8·8 | | 59·5 | 5·3 | 9·5 *g* |
| 9·6 | 53 | 26·0 | 39·2 | |
| 9·7 | 54 | 11·5 | 51·9 | |
| 9·3 | | 29·0 | 51·8 | |
| 9·3 | | 35·5 | 11·9 | |
| 9·6 | 55 | 28·5 | 40·6 | |
| 9·1 | | 30·0 | 40·9 | |
| 9·5 | | 41·0 | 14·4 | |
| 9·7 | | 43·0 | 43·0 | |
| 8·3 | | 44·5 | 55·5 | 8·5 *g* |
| 9·4 | | 55·0 | 48·2 | |
| 8·5 | 56 | 22·0 | 58·8 | 9·0 *g* |
| 9·6 | | 28·5 | 0·9 | |
| 9·7 | | 28·5 | 57·5 | |
| 9·4 | | 34·5 | 52·9 | |
| 9·4 | | 44·5 | 52·1 | |
| 9·2 | | 56·0 | 0·8 | *g* |
| 9·4 | 57 | 16·5 | 56·2 | *g* |
| 8·8 | 58 | 26·0 | 28·2 | 9·5 *g* |
| 9·1 | | 51·0 | 54·9 | *g* |
| 9·7 | | 54·0 | 56·9 | |
| 9·0 | | 55·5 | 1·2 | 8·5 *g* |
| 9·7 | 59 | 2·2 | 2·4 | |
| 9·4 | | 20·5 | 38·5 | |
| 9·3 | | 49·0 | 18·3 | *g* |
| 9·4 | 0 | 15·5 | 40·3 | |
| 9·7 | 1 | 31·0 | 4·6 | |
| 9·7 | | 33·5 | 11·2 | |
| 8·8 | | 45·5 | 44·9 | 8·5 G*g* |
| 9·0 | 2 | 8·5 | 21·0 | *g* |
| 9·6 | | 34·5 | 59·0 | |
| 9·4 | | 44·2 | 39·6 | *g* |
| 9·6 | 3 | 26·0 | 39·8 | |
| 9·2 | | 45·0 | 26·6 | |
| 9·5 | | 51·2 | 49·4 | *g* |
| 9·2 | 4 | 17·5 | 46·0 | |
| 8·8 | | 59·5 | 55·6 | 9·0 *g* |
| 8·8 | 5 | 21·0 | 1·2 | *g* |
| 9·7 | | 42·2 | 1·0 | |
| 9·2 | 6 | 8·5 | 10·6 | |
| 9·0 | | 34·0 | 47·8 | 9·0 *g* |
| 9·7 | | 35·0 | 41·7 | |
| 9·7 | | 53·2 | 56·6 | |
| 9·6 | 7 | 2·5 | 14·6 | |
| 9·2 | | 12·0 | 31·3 | 9·0 *g* |
| 9·2 | 8 | 19·2 | 14·3 | *g* |
| 9·2 | 9 | 11·0 | 29·4 | 9·0 *g* |
| 9·7 | | 24·2 | 1·0 | |
| 9·1 | | 28·5 | 42·8 | |
| 9·3 | | 33·2 | 14·5 | 9·5 *g* |
| 9·3 | | 55·0 | 58·0 | |
| 9·2 | | 57·5 | 12·8 | *g* |
| 9·3 | 10 | 26·5 | 41·1 | |
| 9·3 | | 27·5 | 33·8 | |
| 9·6 | | 34·5 | 38·0 | |
| 9·6 | | 35·2 | 14·0 | *g* |
| 9·7 | | 41·0 | 3·0 | |
| 7·3 | | 41·0 | 35·0 | 7·0 GS*g* |

## 2941—3000.

| mag. | 16h. m | s | −66° ′ | |
|---|---|---|---|---|
| 8·8 | 10 | 52·0 | 35·0 | 9·5 *g* |
| 9·3 | 11 | 30·0 | 50·2 | |
| 9·1 | | 35·0 | 24·7 | |
| 9·6 | 12 | 4·5 | 33·4 | |
| 9·6 | | 10·0 | 12·9 | |
| 9·7 | | 47·5 | 50·2 | |
| 9·3 | 13 | 9·0 | 10·2 | 9·5 *g* |
| 9·0 | | 11·5 | 44·4 | *g* |
| 8·6 | | 32·0 | 23·7 | *g* |
| 9·7 | | 35·0 | 29·4 | |
| 9·1 | 14 | 1·0 | 12·0 | |
| 9·3 | | 34·5 | 58·4 | |
| 9·7 | | 50·8 | 3·9 | |
| 8·6 | 15 | 21·0 | 2·9 | 9·0 *g* |
| 9·1 | | 35·0 | 17·1 | *g* |
| 9·0 | | 43·5 | 4·8 | *g* |
| 9·6 | | 45·5 | 27·4 | |
| 9·3 | 16 | 11·5 | 44·6 | |
| 9·4 | | 30·5 | 3·3 | |
| 9·3 | 17 | 1·0 | 54·7 | 9·8 *g* |
| 9·6 | | 36·0 | 35·0 | *g* |
| 9·6 | | 42·0 | 30·0 | |
| 9·0 | | 47·0 | 35·5 | *g* |
| 9·1 | | 48·0 | 53·0 | 9·5 *g* |
| 9·6 | 18 | 11·0 | 20·6 | |
| 9·3 | | 36·0 | 28·0 | |
| 9·2 | | 39·0 | 30·0 | |
| 9·1 | | 42·0 | 26·0 | *g* |
| 9·7 | 19 | 8·8 | 28·1 | |
| 8·8 | | 15·0 | 45·3 | *g* |
| 9·1 | | 22·3 | 56·1 | 9·2 *g* |
| 9·0 | | 52·8 | 44·6 | 9·5 *g* |
| 9·0 | 20 | 37·8 | 35·4 | *g* |
| 9·7 | 21 | 20·5 | 46·0 | |
| 9·0 | | 36·2 | 6·0 | |
| 9·2 | 22 | 58·0 | 40·0 | *g* |
| 9·0 | 23 | 3·5 | 50·7 | |
| 8·7 | | 19·5 | 51·5 | 8·2 *g* |
| 9·7 | | 29·0 | 2·4 | |
| 7·7 | 24 | 6·0 | 44·2 | 7·5 GS*g* |
| 9·0 | | 19·0 | 16·1 | *g* |
| 8·5 | | 19·5 | 43·1 | 7·0 G*g* |
| 9·0 | | 38·5 | 42·7 | 8·8 G*g* |
| 9·6 | | 39·0 | 44·8 | |
| 9·7 | 25 | 19·5 | 58·7 | |
| 9·2 | | 27·5 | 11·5 | |
| 9·5 | | 37·3 | 0·3 | |
| 9·0 | 26 | 2·5 | 45·6 | 9·0 *g* |
| 8·8 | | 13·0 | 17·0 | *g* |
| 8·7 | | 17·0 | 40·0 | 9·0 *g* |
| 8·2 | | 41·5 | 50·9 | 9·2 |
| 9·7 | 27 | 38·0 | 50·0 | |
| 9·2 | 28 | 17·0 | 22·5 | 9·0 *g* |
| 8·9 | | 21·5 | 1·6 | 8·0 *g* |
| 9·2 | | 33·5 | 48·2 | *g* |
| 9·2 | | 42·5 | 9·4 | 9·2 G*g* |
| 9·7 | | 58·5 | 32·1 | |
| 9·5 | 29 | 30·0 | 33·8 | |
| 9·7 | | 53·5 | 38·7 | |
| 9·7 | 30 | 28·0 | 34·7 | |

## 3001—3060

| mag. | 16h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·7 | 30 | 58·5 | 41·4 | |
| 9·7 | 31 | 24·5 | 5·2 | *g* |
| 8·9 | | 28·5 | 2·9 | *g* |
| 9·7 | | 36·5 | 39·4 | |
| 8·7 | 32 | 58·0 | 15·2 | 8·7 *g* |
| 9·7 | 33 | 12·5 | 22·1 | |
| 9·0 | | 18·5 | 47·2 | 8·5 *g* |
| 9·6 | | 59·0 | 38·0 | |
| 5·7 | 34 | 6·0 | 52·4 | 5·9 GSc*g* |
| 9·7 | | 18·5 | 11·5 | |
| 8·9 | | 26·0 | 4·2 | *g* |
| 8·8 | | 29·5 | 34·6 | 8·5 *g* |
| 9·0 | | 48·5 | 38·6 | 9·0 *g* |
| 9·7 | 35 | 6·0 | 34·4 | |
| 9·7 | | 25·0 | 9·4 | |
| 9·0 | | 55·0 | 33·2 | |
| 8·4 | 36 | 8·5 | 51·1 | 7·5 G*g* |
| 9·7 | | 59·5 | 12·2 | |
| 7·9 | 37′ | 34·0 | 47·9 | 8·0 G*g* |
| 9·3 | | 58·5 | 48·2 | *g* |
| 9·2 | 38 | 36·5 | 33·0 | *g* |
| 9·5 | | 39·5 | 28·2 | *g* |
| 8·9 | | 40·0 | 31·9 | *g* |
| 9·5 | 39 | 14·0 | 11·2 | |
| 9·5 | | 32·0 | 52·2 | |
| 9·5 | 40 | 32·0 | 40·1 | |
| 8·9 | | 33·0 | 25·0 | *g* |
| 9·7 | | 50·5 | 22·1 | *g* |
| 9·3 | 41 | 36·5 | 58·0 | |
| 9·7 | | 37·5 | 12·9 | |
| 9·5 | | 51·5 | 31·1 | *g* |
| 9·2 | | 55·0 | 49·6 | |
| 9·2 | 42 | 4·5 | 32·2 | *g* |
| 8·9 | | 6·0 | 16·6 | *g* |
| 9·7 | | 21·0 | 36·2 | *g* |
| 8·6 | | 41·0 | 5·6 | *g* |
| 8·5 | | 56·0 | 53·2 | 8·8 *g* |
| 8·5 | 44 | 4·7 | 57·3 | 8·0 G*g* |
| 8·7 | | 54·5 | 45·6 | *g* |
| 9·6 | 45 | 2·0 | 0·6 | |
| 8·7 | | 29·5 | 38·6 | *g* |
| 8·7 | | 33·5 | 56·9 | 9·5 *g* |
| 8·7 | | 50·5 | 50·5 | 8·2 G |
| 9·3 | | 50·5 | 17·9 | *g* |
| 8·9 | | 55·0 | 26·4 | *g* |
| 9·7 | 46 | 40·5 | 40·0 | |
| 9·0 | 47 | 19·0 | 0·9 | *g* |
| 9·5 | | 21·5 | 6·6 | *g* |
| 8·6 | 48 | 30·0 | 18·9 | *g* |
| 9·0 | 49 | 2·5 | 51·9 | *g* |
| 8·6 | | 29·5 | 13·3 | *g* |
| 8·6 | | 51·5 | 43·7 | 9·0 *g* |
| 9·0 | | 54·0 | 5·1 | *g* |
| 9·2 | 50 | 33·0 | 36·8 | *g* |
| 9·7 | 52 | 4·0 | 34·7 | |
| 8·6 | | 19·0 | 29·6 | 9·0 *g* |
| 9·3 | 53 | 8·5 | 15·2 | *g* |
| 9·3 | | 26·0 | 31·9 | 9·0 *g* |
| 9·3 | 54 | 3·5 | 13·6 | *g* |
| 8·9 | 55 | 6·5 | 36·8 | 8·5 *g* |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 30 | 138 | 5·1 |
| | 40 | 140 | 4·8 |
| | 50 | 142 | 4·5 |
| 16 | 0 | 143 | 4·2 |
| | 10 | 145 | 3·9 |
| | 20 | 146 | 3·5 |
| | 30 | 148 | 3·2 |
| | 40 | 149 | 2·9 |
| | 50 | 150 | 2·5 |
| 17 | 0 | 151 | 2·2 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| | | + | − |
| h | m | s | ′ |
| 16 | 50 | 150 | 2.5 |
| 17 | 0 | 151 | 2.2 |
| | 10 | 152 | 1.8 |
| | 20 | 153 | 1.5 |
| | 30 | 153 | 1.1 |
| | 40 | 153 | 0.7 |
| | 50 | 154 | 0.4 |
| 18 | 0 | 154 | 0.0 |
| | | | + |
| | 10 | 154 | 0.4 |

## 3061—3120.

| mag. | $16^{h.}$–$17^{h.}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9.0 | 56 | 10.5 | 54.0 | 9.0 g |
| 9.7 | | 29.5 | 30.8 | g |
| 8.7 | | 34.0 | 38.0 | g |
| 9.0 | | 48.0 | 1.6 | g |
| 9.7 | | 49.0 | 12.9 | g |
| 9.8 | 57 | 5.0 | 32.0 | |
| 9.6 | | 6.5 | 22.2 | |
| 9.2 | | 30.5 | 46.0 | g |
| 8.8 | | 44.5 | 55.9 | g |
| 8.8 | 59 | 46.8 | 26.8 | 8.0 GSgg |
| 9.2 | 0 | 6.3 | 26.8 | 9.0 Ggg |
| 9.5 | | 36.0 | 2.4 | |
| 9.0 | | 46.8 | 55.0 | 9.0 Gg |
| 8.8 | 2 | 43.0 | 23.0 | g |
| 9.6 | | 51.0 | 24.5 | |
| 9.2 | | 55.5 | 3.4 | |
| 9.0 | 3 | 14.5 | 26.2 | g |
| 9.2 | | 37.0 | 37.0 | |
| 9.8 | 4 | 24.0 | 33.1 | |
| 7.6 | | 40.0 | 48.0 | 7.5 GScg |
| 9.0 | | 45.0 | 12.0 | 9.5 g |
| 9.5 | 5 | 5.0 | 4.5 | |
| 9.6 | | 11.5 | 3.0 | |
| 9.8 | 6 | 0.5 | 2.0 | |
| 8.8 | | 9.5 | 33.7 | g |
| 9.2 | 7 | 31.5 | 37.0 | g |
| 9.8 | | 59.0 | 55.0 | |
| 9.6 | 8 | 29.0 | 17.8 | |
| 9.2 | | 57.5 | 14.0 | g |
| 9.2 | | 58.0 | 40.5 | |
| 9.2 | 9 | 11.5 | 8.3 | |
| 9.6 | | 21.5 | 3.6 | |
| 9.3 | | 31.5 | 15.8 | |
| 9.2 | | 51.5 | 15.3 | g |
| 8.8 | | 52.0 | 8.2 | Gg |
| 8.8 | 10 | 39.0 | 12.6 | 8.5 g |
| 9.9 | | 40.0 | 55.0 | |
| 9.9 | | 42.0 | 19.1 | |
| 9.8 | | 52.0 | 24.6 | |
| 9.9 | | 56.2 | 17.6 | |
| 8.6 | 11 | 11.0 | 9.0 | 9.0 g |
| 9.8 | | 13.5 | 50.0 | |
| 9.9 | | 53.0 | 30.6 | |
| 9.9 | 12 | 34.0 | 24.3 | |
| 8.3 | | 49.0 | 15.8 | 7.5 GSg |
| 8.8 | 13 | 10.0 | 7.2 | 9.5 g |
| 9.2 | | 24.5 | 52.7 | |
| 8.8 | | 31.2 | 0.9 | 9.5 g |
| 9.3 | | 37.5 | 5.0 | 9.5 g |
| 8.9 | 14 | 29.0 | 44.6 | g |
| 9.0 | 15 | 21.5 | 10.0 | Gg |
| 9.9 | | 40.5 | 29.6 | |
| 9.5 | | 54.7 | 58.0 | |
| 8.8 | 16 | 11.5 | 2.2 | 9.5 g |
| 9.6 | 17 | 23.5 | 39.0 | |
| 7.2 | | 35.0 | 45.6 | 7.5 Gg |
| 9.6 | 18 | 20.0 | 3.8 | 9.5 g |
| 9.6 | 20 | 5.0 | 53.4 | |
| 9.9 | | 13.0 | 39.0 | g |
| 9.9 | | 55.0 | 28.7 | g |

## 3121—3180.

| mag. | $17^{h.}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 8.9 | 21 | 8.0 | 58.2 | 9.0 g |
| 9.6 | | 11.5 | 17.4 | |
| 8.8 | 22 | 43.0 | 47.8 | 10.0 g |
| 8.2 | 23 | 15.0 | 46.2 | 8.0 GSg |
| 9.9 | 24 | 9.5 | 30.2 | g |
| 8.5 | | 17.0 | 4.2 | g |
| 8.4 | | 41.0 | 26.0 | g |
| 9.8 | 25 | 31.5 | 32.0 | g |
| 8.2 | | 33.0 | 6.0 | 9.0 g |
| 9.0 | 26 | 5.5 | 36.4 | 9.5 g |
| 9.9 | 29 | 10.5 | 2.7 | |
| 9.5 | | 19.3 | 1.9 | |
| 8.4 | 30 | 52.0 | 44.2 | 9.0 g |
| 9.5 | 32 | 52.5 | 25.0 | |
| 9.2 | 34 | 1.0 | 3.0 | 9.0 g |
| 7.6 | 35 | 24.7 | 8.9 | 8.2 Gg |
| 8.5 | 37 | 8.2 | 44.9 | 9.0 g |
| 10.3 | 38 | 47.9 | 56.6 | |
| 10.3 | | 54.9 | 37.9 | |
| 10.3 | 39 | 3.9 | 37.9 | |
| 10.2 | | 42.4 | 6.9 | |
| 10.0 | | 50.4 | 29.7 | |
| 10.3 | | 57.9 | 29.9 | |
| 9.7 | 40 | 13.9 | 47.7 | |
| 8.6 | | 16.0 | 42.1 | 9.0 g |
| 9.6 | | 16.9 | 7.1 | |
| 9.4 | | 25.5 | 0.2 | g |
| 9.5 | | 50.7 | 58.8 | g |
| 9.6 | | 57.4 | 29.3 | |
| 10.2 | 41 | 1.9 | 24.9 | |
| 10.0 | | 37.4 | 7.7 | |
| 8.5 | | 46.0 | 3.8 | 8.0 g |
| 10.3 | | 55.4 | 16.9 | |
| 10.3 | | 57.4 | 19.1 | |
| 9.7 | 42 | 1.4 | 43.3 | |
| 10.2 | | 19.9 | 16.9 | |
| 10.3 | | 47.4 | 20.5 | |
| 9.9 | | 48.4 | 5.5 | |
| 10.3 | 43 | 8.4 | 19.5 | |
| 10.3 | | 9.4 | 37.8 | |
| 9.7 | | 9.9 | 6.9 | |
| 9.1 | | 13.7 | 30.0 | |
| 9.9 | | 14.9 | 29.7 | |
| 10.0 | | 49.4 | 17.2 | |
| 9.6 | | 53.4 | 0.2 | |
| 9.4 | | 56.5 | 43.6 | |
| 8.4 | 44 | 23.9 | 10.1 | g |
| 9.8 | | 26.9 | 38.3 | |
| 10.3 | | 41.9 | 38.7 | |
| 10.0 | | 46.4 | 39.9 | |
| 10.0 | 45 | 10.4 | 6.0 | |
| 10.2 | | 17.4 | 57.2 | |
| 10.0 | | 25.9 | 53.8 | |
| 10.0 | | 40.4 | 20.8 | |
| 9.7 | | 52.5 | 1.1 | |
| 9.9 | 46 | 28.9 | 35.0 | |
| 9.6 | | 32.9 | 26.6 | |
| 10.2 | | 37.4 | 41.4 | |
| 10.2 | | 39.9 | 17.8 | |
| 9.8 | | 52.9 | 25.8 | |

## 3181—3240.

| mag. | $17^{h.}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 8.6 | 46 | 57.9 | 1.8 | Gg |
| 9.5 | 47 | 7.4 | 48.9 | |
| 10.3 | | 11.9 | 22.4 | |
| 9.7 | | 22.4 | 7.9 | |
| 10.0 | | 24.4 | 21.3 | |
| 9.9 | | 27.9 | 12.4 | |
| 8.9 | | 50.4 | 45.4 | 9.5 g |
| 9.0 | | 52.4 | 36.2 | g |
| 10.2 | 48 | 0.9 | 32.2 | |
| 10.2 | | 0.9 | 7.2 | |
| 10.2 | | 1.4 | 20.1 | |
| 10.3 | | 4.9 | 9.8 | |
| 10.0 | | 13.4 | 59.0 | |
| 10.3 | | 24.4 | 50.8 | |
| 9.2 | | 26.4 | 23.6 | 9.2 g |
| 10.3 | | 41.9 | 50.4 | |
| 9.6 | | 44.9 | 41.1 | |
| 8.0 | | 56.9 | 26.8 | 8.8 Gg |
| 10.0 | | 57.4 | 34.6 | |
| 9.2 | 49 | 1.4 | 33.1 | |
| 10.2 | | 13.9 | 14.5 | |
| 9.0 | | 15.9 | 22.3 | |
| 10.2 | | 17.5 | 1.2 | |
| 9.1 | | 22.9 | 21.4 | |
| 10.3 | | 33.9 | 21.7 | |
| 8.8 | 50 | 3.4 | 5.2 | 8.8 g |
| 9.6 | | 11.9 | 17.5 | |
| 10.3 | | 16.9 | 9.2 | |
| 10.2 | | 33.9 | 42.0 | |
| 10.3 | | 37.9 | 22.4 | |
| 8.0 | | 44.9 | 31.7 | 7.5 GScg |
| 9.1 | 51 | 1.4 | 5.4 | 9.5 g |
| 9.8 | | 2.9 | 26.6 | |
| 10.3 | | 19.9 | 4.2 | |
| 9.8 | | 43.4 | 48.3 | |
| 10.0 | 52 | 17.7 | 50.0 | |
| 10.3 | | 24.7 | 56.5 | |
| 9.4 | | 27.7 | 6.0 | |
| 10.3 | | 46.2 | 48.6 | |
| 9.5 | | 51.7 | 20.2 | |
| 9.7 | | 57.2 | 19.2 | |
| 9.2 | 53 | 9.7 | 31.7 | |
| 10.3 | | 17.2 | 59.3 | |
| 10.2 | | 20.2 | 38.4 | |
| 9.8 | | 27.7 | 45.5 | |
| 10.2 | | 35.7 | 39.6 | |
| 9.7 | 54 | 3.2 | 55.4 | |
| 10.3 | | 12.2 | 21.7 | |
| 10.2 | | 23.2 | 21.9 | |
| 9.9 | | 28.2 | 18.3 | |
| 10.3 | | 39.7 | 57.3 | |
| 9.9 | | 48.2 | 55.6 | |
| 9.4 | 55 | 20.2 | 15.6 | 10.0 g |
| 9.6 | | 47.2 | 2.8 | |
| 10.2 | | 47.2 | 56.7 | |
| 9.8 | | 54.7 | 7.0 | |
| 9.6 | | 54.7 | 16.4 | |
| 9.5 | | 56.2 | 44.0 | |
| 10.0 | | 56.7 | 43.6 | |
| 9.9 | 56 | 1.2 | 8.2 | |

## 3241—3300.

| mag. | $17^{h.}$–$18^{h.}$ m | s | −66° ′ | |
|---|---|---|---|---|
| 9.9 | 56 | 13.7 | 5.4 | |
| 9.4 | | 17.2 | 41.9 | |
| 9.5 | | 19.7 | 1.4 | |
| 10.2 | | 34.2 | 21.6 | |
| 10.2 | | 37.2 | 14.6 | |
| 10.2 | | 43.2 | 10.8 | |
| 10.0 | | 44.2 | 7.5 | |
| 8.8 | 57 | 14.7 | 37.5 | 8.0 g |
| 10.0 | | 17.2 | 16.5 | |
| 10.2 | | 18.2 | 9.3 | |
| 10.2 | | 21.2 | 38.0 | |
| 10.3 | | 26.2 | 51.9 | |
| 10.3 | 58 | 13.2 | 54.6 | |
| 9.0 | | 20.7 | 24.8 | 9.2 g |
| 8.9 | | 33.7 | 45.4 | 9.0 g |
| 9.5 | | 53.3 | 26.0 | |
| 10.3 | 59 | 1.3 | 20.2 | |
| 10.3 | | 5.3 | 54.3 | |
| 10.3 | | 9.8 | 38.5 | |
| 9.2 | | 17.8 | 32.0 | g |
| 10.3 | | 27.8 | 33.2 | |
| 9.6 | | 28.3 | 28.4 | |
| 10.3 | | 37.3 | 54.3 | |
| 10.0 | 0 | 8.3 | 6.8 | |
| 10.0 | | 12.3 | 35.6 | |
| 10.3 | | 12.8 | 9.6 | |
| 9.4 | | 27.3 | 41.4 | g |
| 10.3 | | 31.8 | 52.2 | |
| 10.2 | | 50.3 | 41.7 | |
| 10.3 | | 55.3 | 30.8 | |
| 9.1 | 1 | 6.3 | 38.6 | |
| 10.2 | | 9.3 | 22.1 | |
| 9.4 | | 10.3 | 10.3 | |
| 8.8 | | 37.8 | 42.8 | g |
| 9.9 | | 38.3 | 26.5 | |
| 10.3 | | 38.3 | 4.3 | |
| 9.9 | | 45.8 | 33.3 | |
| 9.1 | | 47.3 | 43.3 | |
| 9.7 | | 50.3 | 46.0 | |
| 7.0 | | 56.3 | 50.4 | 7.5 Gg |
| 8.4 | 2 | 15.3 | 50.5 | 8.0 g |
| 9.8 | | 17.3 | 27.6 | |
| 10.3 | | 30.8 | 50.9 | |
| 9.0 | | 38.3 | 15.5 | 8.8 g |
| 10.3 | 3 | 13.8 | 26.3 | |
| 10.3 | | 36.8 | 30.2 | |
| 10.2 | | 38.3 | 12.1 | |
| 10.0 | 4 | 4.8 | 44.4 | |
| 9.7 | | 6.8 | 38.9 | |
| 10.0 | | 11.8 | 56.9 | |
| 9.4 | | 16.8 | 22.2 | |
| 10.0 | | 26.3 | 17.4 | |
| 9.8 | | 35.8 | 32.9 | |
| 9.5 | | 47.8 | 41.5 | |
| 9.7 | | 52.8 | 34.5 | |
| 9.4 | 5 | 44.0 | 36.3 | |
| 10.2 | 6 | 12.0 | 16.0 | |
| 10.3 | | 28.0 | 39.0 | |
| 10.0 | | 44.5 | 49.1 | |
| 10.2 | | 51.5 | 42.6 | |

## 3301—3360.

| mag. | 18h. m | s | −66° ′ | |
|---|---|---|---|---|
| 8.1 | 6 | 56.5 | 41.6 | 7.5 Gg |
| 10.0 | | 59.5 | 9.1 | |
| 8.9 | 7 | 6.5 | 28.6 | 9.2 g |
| 9.4 | | 21.5 | 16.0 | g |
| 10.2 | | 22.0 | 14.5 | |
| 10.3 | | 40.5 | 25.7 | |
| 9.2 | | 48.0 | 7.3 | |
| 10.3 | | 51.0 | 45.9 | |
| 9.6 | | 53.0 | 2.4 | g |
| 9.0 | | 56.0 | 13.0 | 9.0 g |
| 9.4 | 8 | 2.5 | 10.3 | 8.5 g |
| 10.3 | | 10.5 | 2.0 | |
| 9.4 | | 16.0 | 22.2 | |
| 10.2 | | 25.0 | 31.4 | |
| 9.6 | | 26.5 | 7.9 | |
| 10.3 | | 27.5 | 20.3 | |
| 8.9 | | 38.5 | 1.1 | g |
| 9.2 | | 49.5 | 43.0 | |
| 9.9 | | 52.5 | 47.4 | |
| 10.2 | 9 | 13.5 | 8.5 | |
| 8.7 | | 49.5 | 9.2 | g |
| 9.9 | | 49.5 | 17.7 | |
| 10.0 | | 51.5 | 23.8 | |
| 10.3 | | 52.0 | 43.2 | |
| 10.3 | 10 | 6.0 | 11.3 | |
| 10.2 | | 28.0 | 57.7 | |
| 9.8 | | 58.2 | 1.4 | |
| 9.1 | 11 | 7.0 | 44.1 | g |
| 10.3 | | 16.5 | 30.8 | |
| 9.1 | | 26.5 | 40.3 | g |
| 8.6 | | 33.0 | 56.3 | 8.5 g |
| 9.1 | | 47.0 | 53.2 | g |
| 9.7 | 12 | 11.0 | 12.4 | |
| 9.6 | | 46.5 | 39.0 | |
| 10.3 | | 50.0 | 12.8 | |
| 9.7 | | 51.8 | 8.7 | |
| 10.2 | | 54.3 | 8.9 | |
| 10.2 | | 55.8 | 7.2 | |
| 9.0 | 13 | 11.3 | 42.9 | 9.5 g |
| 9.9 | | 34.3 | 32.3 | |
| 10.2 | | 38.8 | 7.1 | |
| 10.3 | | 46.8 | 50.4 | |
| 10.2 | 14 | 1.8 | 42.1 | |
| 8.8 | | 12.3 | 16.6 | 9.0 g |
| 10.3 | | 14.8 | 18.6 | |
| 10.3 | | 18.8 | 59.1 | |
| 9.6 | | 26.4 | 59.8 | |
| 10.0 | | 30.8 | 50.8 | |
| 9.9 | | 34.3 | 22.6 | |
| 9.9 | | 35.3 | 23.3 | |
| 10.3 | 15 | 0.8 | 53.1 | |
| 10.2 | | 8.3 | 10.0 | |
| 9.0 | | 19.3 | 31.4 | g |
| 9.2 | | 54.8 | 22.8 | |
| 9.7 | 16 | 23.3 | 8.7 | |
| 10.0 | | 29.9 | 58.1 | |
| 9.1 | | 31.8 | 38.0 | g |
| 8.9 | | 51.4 | 54.6 | 8.2 g |
| 10.2 | | 54.8 | 21.2 | |
| 9.2 | 17 | 3.3 | 41.0 | |

## 3361—3420.

| mag. | 18h.—19h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10.3 | 17 | 48.8 | 23.0 | |
| 10.2 | 18 | 8.8 | 6.4 | |
| 8.2 | | 31.8 | 31.2 | 8.8 g |
| 10.3 | | 38.8 | 22.2 | |
| 10.2 | | 48.8 | 36.0 | |
| 9.6 | | 49.8 | 50.5 | |
| 10.3 | | 50.3 | 12.5 | |
| 9.5 | | 50.3 | 9.5 | g |
| 10.0 | | 57.8 | 4.1 | |
| 10.3 | 19 | 11.8 | 49.7 | |
| 9.8 | | 21.8 | 32.6 | |
| 9.5 | | 28.8 | 5.0 | g |
| 10.3 | | 45.3 | 26.2 | |
| 10.3 | | 57.8 | 41.1 | |
| 10.2 | 20 | 1.8 | 14.0 | |
| 10.3 | | 18.3 | 36.3 | |
| 10.2 | | 31.8 | 9.1 | |
| 10.3 | | 39.8 | 59.0 | |
| 9.9 | | 49.3 | 22.4 | |
| 7.7 | 21 | 31.2 | 21.7 | 7.0 GScgt |
| 8.7 | 22 | 6.5 | 2.3 | g |
| 8.5 | | 24.3 | 15.7 | 8.8 g |
| 8.3 | 23 | 43.0 | 58.7 | 7.8 Gg |
| 9.6 | 30 | 9.0 | 39.3 | g |
| 8.5 | | 17.0 | 49.5 | 9.5 g |
| 9.1 | | 21.5 | 24.5 | g |
| 9.6 | | 23.0 | 17.9 | |
| 9.4 | 31 | 15.0 | 14.0 | g |
| 9.6 | 33 | 1.0 | 14.8 | g |
| 8.8 | | 4.0 | 7.6 | g |
| 9.3 | | 42.5 | 46.2 | |
| 9.6 | 34 | 20.5 | 49.4 | |
| 8.8 | 35 | 2.5 | 13.0 | g |
| 9.1 | | 44.0 | 9.2 | g |
| 9.6 | 36 | 48.0 | 36.1 | |
| 8.8 | | 59.0 | 22.7 | g |
| 8.6 | 38 | 13.5 | 54.8 | 9.5 g |
| 9.6 | 39 | 41.0 | 58.2 | |
| 9.6 | 41 | 16.0 | 39.1 | |
| 9.3 | | 30.0 | 49.0 | |
| 7.8 | 44 | 38.5 | 28.8 | 8.0 GSg |
| 8.5 | 45 | 47.5 | 3.7 | 9.0 Gg |
| 9.4 | 46 | 53.5 | 30.8 | |
| 7.2 | 47 | 21.0 | 48.8 | 6.5 GScg : |
| 8.6 | 48 | 19.5 | 34.0 | 8.2 g |
| 8.5 | | 29.5 | 20.6 | 8.0 g |
| 9.6 | 49 | 15.5 | 29.4 | g |
| 9.3 | 51 | 20.0 | 3.6 | 9.5 g |
| 9.6 | | 31.0 | 2.1 | g |
| 9.1 | | 32.0 | 27.4 | 9.0 g |
| 8.1 | 55 | 45.3 | 35.5 | 8.8 g |
| 9.3 | 57 | 35.3 | 3.3 | g |
| 7.2 | 59 | 0.7 | 4.3 | 7.5 GSgg |
| 9.5 | 1 | 22.5 | 36.7 | g |
| 9.5 | | 31.0 | 23.7 | |
| 9.5 | 4 | 7.0 | 57.6 | |
| 6.0 | | 37.0 | 52.4 | 6.0 GScg |
| 9.1 | 5 | 18.0 | 11.8 | g |
| 9.5 | 7 | 10.0 | 29.0 | g |
| 9.2 | 8 | 21.5 | 6.8 | |

## 3421—3480.

| mag. | 19h.—20h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.1 | 8 | 49.0 | 30.8 | |
| 8.7 | 9 | 3.0 | 56.9 | 8.8 g |
| 9.5 | | 27.0 | 32.2 | |
| 8.9 | 10 | 0.5 | 9.6 | g |
| 8.7 | | 9.0 | 23.7 | 8.5 g |
| 8.5 | | 23.5 | 48.7 | 8.0 Gg |
| 8.9 | | 27.5 | 21.9 | 9.5 g |
| 9.5 | | 44.0 | 59.5 | 9.0 g |
| 9.1 | | 48.0 | 40.1 | g |
| 9.5 | 11 | 1.0 | 35.1 | |
| 8.5 | 12 | 47.0 | 42.7 | g |
| 9.2 | 13 | 36.3 | 58.9 | g |
| 9.5 | 14 | 53.0 | 14.2 | Ggg |
| 8.1 | 15 | 5.0 | 21.8 | 8.0 Ggg |
| 9.5 | | 7.0 | 45.9 | g |
| 8.9 | 17 | 4.0 | 52.9 | g |
| 8.4 | 19 | 2.0 | 48.3 | 8.0 Gg |
| 9.5 | 23 | 40.0 | 40.9 | 9.5 g |
| 9.5 | | 41.0 | 40.3 | 9.0 g |
| 9.5 | 24 | 38.5 | 4.2 | 9.5 g |
| 8.2 | | 40.5 | 2.3 | 8.5 GSg |
| 7.3 | 26 | 19.5 | 11.2 | 7.0 GScg |
| 8.9 | | 34.0 | 49.7 | g |
| 8.8 | 27 | 2.5 | 19.9 | 9.0 g |
| 6.7 | | 29.7 | 57.6 | 6.7 GScg |
| 8.8 | 28 | 51.5 | 50.7 | 9.5 g |
| 7.8 | 29 | 30.5 | 8.0 | 6.5 GSg |
| 9.5 | 30 | 12.5 | 6.8 | g |
| 9.2 | 31 | 31.5 | 35.9 | |
| 7.9 | | 47.5 | 34.7 | 7.8 GSg : |
| 9.2 | 32 | 33.5 | 3.9 | |
| 8.7 | 34 | 3.0 | 27.3 | 9.5 g |
| 9.5 | | 7.5 | 10.5 | g |
| 8.9 | 37 | 9.5 | 7.6 | 8.5 Gg |
| 8.5 | | 24.0 | 16.9 | 7.5 GSg |
| 7.9 | 38 | 0.7 | 53.0 | g |
| 9.2 | | 17.0 | 5.4 | g |
| 9.2 | | 22.5 | 17.9 | g |
| 8.9 | 39 | 9.5 | 27.6 | g |
| 9.9 | | 52.8 | 7.0 | g |
| 9.0 | 40 | 44.0 | 1.5 | g |
| 9.3 | | 51.5 | 27.9 | g |
| 9.2 | 43 | 34.0 | 52.9 | g |
| 9.5 | 45 | 41.0 | 43.8 | g |
| 9.0 | 47 | 3.5 | 56.4 | 9.5 g |
| 8.9 | 50 | 24.0 | 25.8 | 8.5 Gg |
| 9.2 | | 40.0 | 9.7 | g |
| 9.6 | 52 | 52.5 | 41.0 | g |
| 9.3 | 53 | 44.0 | 47.2 | |
| 8.6 | 54 | 27.5 | 9.6 | 8.0 Gg |
| 9.5 | | 29.5 | 14.6 | 9.0 g |
| 8.9 | 55 | 31.0 | 12.0 | 8.5 g |
| 8.0 | 56 | 24.0 | 42.6 | 7.0 GScg |
| 4.3 | | 28.0 | 30.0 | 3.0 GScgtλ |
| 9.9 | 0 | 4.5 | 39.4 | Gg |
| 9.8 | | 31.0 | 49.0 | g |
| 9.9 | 5 | 53.5 | 12.0 | g |
| 9.2 | 6 | 56.5 | 14.0 | g |
| 9.9 | 7 | 27.3 | 4.1 | g |
| 9.6 | 8 | 9.3 | 34.1 | g |

## 3481—3540.

| mag. | 20h.—21h. m | s | −66° ′ | |
|---|---|---|---|---|
| 8.2 | 8 | 56.5 | 51.3 | 8.5 Gg |
| 9.8 | 10 | 23.5 | 50.0 | |
| 9.9 | | 43.5 | 24.0 | g |
| 9.6 | 11 | 34.0 | 18.2 | g |
| 8.0 | 12 | 16.5 | 34.3 | 8.5 Gg |
| 9.8 | | 18.3 | 11.6 | g |
| 9.9 | | 44.5 | 0.1 | |
| 9.2 | 14 | 25.5 | 40.2 | 9.5 g |
| 9.5 | | 43.0 | 15.0 | g |
| 9.6 | 18 | 2.0 | 48.4 | 9.5 g |
| 8.8 | | 32.2 | 16.1 | 9.5 g |
| 7.7 | 20 | 36.7 | 13.8 | 8.0 g |
| 9.6 | 21 | 24.5 | 26.3 | 9.0 g |
| 9.2 | 24 | 22.5 | 9.7 | g |
| 9.3 | 26 | 22.5 | 22.8 | |
| 8.2 | | 54.0 | 57.4 | 8.0 g |
| 9.3 | 27 | 38.5 | 53.0 | g |
| 9.4 | 31 | 37.0 | 20.8 | g |
| 9.0 | 32 | 30.5 | 8.8 | g |
| 8.8 | 33 | 10.5 | 56.6 | g |
| 4.3 | | 39.0 | 38.8 | GScgtrλ |
| 9.2 | 34 | 44.0 | 36.9 | g |
| 9.6 | 37 | 11.0 | 20.8 | g |
| 8.8 | 38 | 48.0 | 1.0 | 9.5 g |
| 9.6 | 39 | 1.5 | 7.8 | g |
| 9.3 | 40 | 24.0 | 10.2 | g |
| 8.9 | | 58.5 | 59.6 | 9.0 g |
| 9.6 | 41 | 48.5 | 43.7 | g |
| 9.6 | 42 | 15.5 | 41.3 | 9.0 g |
| 8.2 | 44 | 35.5 | 37.0 | 8.9 Gg |
| 9.4 | 46 | 6.5 | 23.8 | g |
| 9.3 | 49 | 35.5 | 32.8 | g |
| 9.3 | 50 | 10.5 | 1.0 | g |
| 8.9 | 54 | 5.5 | 44.6 | g |
| 9.6 | 55 | 26.5 | 42.0 | |
| 9.6 | 56 | 35.5 | 11.9 | g |
| 9.4 | | 44.8 | 10.4 | g |
| 10.4 | 57 | 5.5 | 40.4 | |
| 10.4 | 58 | 2.5 | 58.2 | |
| 7.4 | | 19.5 | 17.8 | 7.5 Gg |
| 9.6 | | 44.5 | 41.4 | |
| 9.3 | 0 | 40.8 | 7.9 | 9.5 g |
| 10.2 | | 41.0 | 48.8 | |
| 9.3 | | 52.0 | 50.9 | g |
| 9.6 | | 53.0 | 46.4 | |
| 10.2 | | 56.5 | 51.0 | |
| 8.6 | 1 | 7.8 | 47.3 | 8.0 g |
| 10.4 | | 15.5 | 48.4 | |
| 10.4 | 2 | 20.5 | 36.8 | |
| 9.4 | | 53.0 | 48.8 | 9.0 g |
| 10.4 | 3 | 36.5 | 56.9 | |
| 9.2 | | 58.5 | 44.8 | g |
| 10.4 | 4 | 15.5 | 23.6 | |
| 9.9 | | 32.5 | 44.2 | |
| 10.4 | | 35.5 | 4.0 | |
| 9.6 | | 52.0 | 40.0 | |
| 9.6 | 5 | 23.0 | 12.8 | |
| 9.0 | 6 | 26.0 | 5.8 | 9.5 g |
| 10.4 | | 32.5 | 14.8 | |
| 10.4 | 7 | 7.0 | 46.9 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 0 | 154 | 0.0 |
| | 10 | 154 | 0.4 |
| | 20 | 153 | 0.7 |
| | 30 | 153 | 1.1 |
| | 40 | 153 | 1.5 |
| | 50 | 152 | 1.8 |
| 19 | 0 | 151 | 2.2 |
| | 10 | 150 | 2.5 |
| | 20 | 149 | 2.9 |
| | 30 | 148 | 3.2 |
| | 40 | 146 | 3.5 |
| | 50 | 145 | 3.9 |
| 20 | 0 | 143 | 4.2 |
| | 10 | 142 | 4.5 |
| | 20 | 140 | 4.8 |
| | 30 | 138 | 5.1 |
| | 40 | 136 | 5.4 |
| | 50 | 133 | 5.6 |
| 21 | 0 | 131 | 5.9 |
| | 10 | 129 | 6.2 |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 21 | 0 | 131 | 5·9 |
| | 10 | 129 | 6·2 |
| | 20 | 126 | 6·4 |
| | 30 | 124 | 6·6 |
| | 40 | 121 | 6·8 |
| | 50 | 118 | 7·0 |
| 22 | 0 | 115 | 7·2 |
| | 10 | 112 | 7·4 |
| | 20 | 109 | 7·6 |
| | 30 | 106 | 7·7 |
| | 40 | 103 | 7·9 |
| | 50 | 100 | 8·0 |
| 23 | 0 | 97 | 8·1 |
| | 10 | 93 | 8·2 |
| | 20 | 90 | 8·2 |
| | 30 | 87 | 8·3 |
| | 40 | 84 | 8·3 |

## 3541—3600.

| mag. | 21h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·6 | 7 | 32·0 | 13·9 | |
| 10·3 | | 46·0 | 16·0 | |
| 9·0 | 8 | 18·0 | 53·8 | 9·0 Gg |
| 10·2 | | 20·0 | 27·8 | |
| 9·0 | | 28·0 | 53·6 | 9·5 Gg |
| 10·2 | | 32·5 | 42·0 | |
| 9·2 | | 43·0 | 28·8 | 9·5 g |
| 10·4 | 9 | 9·0 | 6·5 | |
| 10·0 | | 44·2 | 1·9 | |
| 10·2 | | 50·5 | 40·1 | |
| 9·6 | 10 | 6·5 | 33·2 | |
| 10·2 | | 20·0 | 4·4 | |
| 10·0 | | 41·0 | 20·9 | |
| 9·2 | 11 | 18·0 | 15·8 | g |
| 10·4 | | 25·5 | 31·8 | |
| 9·4 | | 51·5 | 20·8 | |
| 9·3 | 13 | 11·5 | 0·5 | 9·5 g |
| 9·9 | | 35·0 | 55·6 | g |
| 9·6 | | 53·0 | 56·7 | g |
| 9·2 | 14 | 10·0 | 9·4 | g |
| 10·4 | | 25·0 | 43·6 | |
| 10·4 | 15 | 31·5 | 15·8 | |
| 8·8 | | 46·0 | 31·2 | g |
| 10·4 | | 50·0 | 22·4 | |
| 9·3 | 17 | 7·0 | 47·2 | 9·5 g |
| 9·8 | | 10·0 | 49·7 | |
| 9·9 | 18 | 10·0 | 46·8 | |
| 9·2 | 19 | 52·0 | 18·0 | g |
| 9·3 | 20 | 10·5 | 13·7 | g |
| 10·4 | 21 | 6·5 | 33·1 | |
| 8·9 | 22 | 20·5 | 21·5 | 8·0 Gg |
| 9·6 | 23 | 6·0 | 50·2 | g |
| 9·2 | | 57·5 | 47·7 | 9·5 g |
| 9·6 | 24 | 32·5 | 15·5 | g |
| 10·2 | | 47·0 | 19·5 | |
| 10·4 | 28 | 29·5 | 20·9 | |
| 10·2 | 33 | 12·5 | 43·9 | |
| 9·6 | 34 | 1·5 | 1·3 | g |
| 10·4 | | 22·0 | 18·5 | g |
| 9·9 | | 37·0 | 51·6 | |
| 9·6 | 35 | 10·0 | 47·8 | g |
| 10·2 | 37 | 6·0 | 51·7 | |
| 9·6 | | 22·5 | 56·6 | |
| 9·6 | | 35·0 | 39·0 | g |
| 9·6 | 38 | 26·5 | 42·3 | |
| 7·2 | | 51·0 | 4·8 | 7·0 Gg |
| 10·2 | 39 | 21·5 | 38·3 | |
| 10·4 | 40 | 14·3 | 42·7 | |
| 10·2 | | 32·7 | 0·8 | |
| 10·2 | 41 | 16·0 | 29·9 | |
| 9·7 | | 39·7 | 7·4 | g |
| 9·4 | 42 | 4·6 | 20·1 | |
| 9·6 | 43 | 42·8 | 34·1 | g |
| 9·3 | 44 | 5·0 | 1·8 | g |
| 9·4 | | 18·0 | 2·8 | g |
| 9·8 | | 43·3 | 23·5 | |
| 8·9 | | 45·2 | 58·0 | g |
| 9·2 | 45 | 10·1 | 9·7 | g |
| 9·0 | | 56·6 | 44·6 | 9·0 g |
| 9·8 | 46 | 8·1 | 2·7 | |

## 3601—3660.

| mag. | 21h.—22h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10·2 | 46 | 35·0 | 30·8 | |
| 9·6 | 48 | 47·6 | 9·2 | g |
| 9·3 | 49 | 12·1 | 9·1 | 9·0 g |
| 8·8 | | 26·6 | 40·5 | 8·0 g |
| 8·9 | 50 | 38·9 | 51·9 | g |
| 8·4 | 51 | 4·3 | 24·3 | g |
| 10·0 | | 50·6 | 41·8 | |
| 10·2 | 52 | 7·9 | 14·0 | |
| 9·8 | | 16·6 | 4·2 | |
| 9·2 | | 58·4 | 19·7 | g |
| 10·2 | 53 | 21·7 | 35·8 | |
| 10·0 | | 30·5 | 0·6 | |
| 10·0 | 55 | 7·8 | 25·8 | |
| 10·2 | | 45·1 | 36·0 | |
| 8·0 | 56 | 34·3 | 16·3 | 7·5 GSg |
| 10·1 | 57 | 1·1 | 34·3 | g |
| 10·2 | | 13·3 | 57·6 | |
| 9·1 | | 48·2 | 29·3 | g |
| 8·8 | 58 | 4·2 | 20·2 | g |
| 9·2 | | 19·1 | 39·3 | g |
| 9·6 | | 37·0 | 42·3 | |
| 10·2 | 59 | 4·0 | 56·5 | |
| 10·2 | | 28·7 | 21·2 | |
| 9·4 | 0 | 13·2 | 58·4 | g |
| 10·1 | | 51·0 | 47·5 | |
| 9·4 | | 55·1 | 31·6 | g |
| 9·1 | 1 | 18·5 | 7·9 | g |
| 10·0 | | 25·1 | 33·3 | |
| 10·1 | | 28·1 | 49·1 | |
| 8·1 | | 35·5 | 57·2 | 8·5 g |
| 9·6 | | 45·5 | 47·2 | g |
| 9·3 | | 52·8 | 54·9 | 10·0 g |
| 9·6 | 2 | 50·8 | 11·7 | g |
| 10·2 | | 52·6 | 29·9 | |
| 10·2 | 3 | 2·4 | 23·9 | |
| 10·0 | | 24·8 | 13·0 | |
| 8·4 | | 52·8 | 17·1 | 8·5 g |
| 9·0 | 4 | 0·8 | 56·2 | |
| 9·4 | | 13·5 | 5·6 | |
| 9·0 | 5 | 10·6 | 32·8 | 9·0 g |
| 10·0 | 6 | 32·0 | 6·8 | |
| 9·3 | | 59·5 | 0·5 | |
| 10·2 | 7 | 8·0 | 49·8 | |
| 9·6 | | 12·8 | 13·0 | g |
| 9·8 | 8 | 0·8 | 12·8 | |
| 9·8 | | 27·8 | 14·9 | |
| 10·2 | | 29·0 | 44·8 | |
| 9·6 | | 47·5 | 49·9 | |
| 10·2 | 9 | 15·3 | 15·6 | |
| 10·0 | 10 | 42·1 | 37·3 | |
| 9·2 | | 49·0 | 49·3 | g |
| 9·6 | 12 | 34·2 | 23·9 | |
| 9·4 | | 40·3 | 53·2 | g |
| 9·8 | | 50·6 | 32·7 | |
| 9·7 | | 51·8 | 10·7 | |
| 9·6 | 13 | 3·0 | 48·8 | g |
| 10·2 | | 31·7 | 37·0 | |
| 9·7 | 14 | 30·6 | 8·9 | g |
| 9·8 | 15 | 7·2 | 38·8 | |
| 8·9 | | 8·9 | 53·6 | 8·2 Gg |

## 3661—3720.

| mag. | 22h. m | s | −66° ′ | |
|---|---|---|---|---|
| 7·0 | 15 | 36·4 | 15·1 | 7·5 Gg |
| 9·2 | | 52·6 | 45·7 | g |
| 9·4 | 16 | 21·7 | 33·4 | |
| 9·2 | | 26·9 | 18·1 | g |
| 9·8 | 17 | 14·3 | 24·5 | |
| 9·6 | | 54·3 | 49·8 | |
| 9·7 | 18 | 2·2 | 35·1 | g |
| 9·0 | | 35·3 | 42·9 | g |
| 9·3 | 19 | 13·4 | 13·5 | |
| 8·7 | 20 | 29·8 | 51·7 | g |
| 9·7 | | 37·5 | 33·7 | |
| 9·4 | 21 | 0·4 | 35·5 | g |
| 10·0 | | 1·3 | 53·2 | |
| 9·0 | | 9·5 | 1·8 | g |
| 9·6 | | 14·0 | 35·1 | g |
| 9·8 | | 31·5 | 50·2 | |
| 9·0 | 22 | 33·5 | 34·9 | |
| 8·8 | 23 | 13·5 | 47·8 | 9·5 g |
| 10·0 | | 40·5 | 33·8 | |
| 8·6 | | 53·5 | 4·2 | 9·0 g |
| 9·4 | 26 | 35·0 | 45·7 | 10·0 g |
| 10·0 | | 40·5 | 43·7 | |
| 8·8 | | 48·0 | 3·9 | 9·5 g |
| 8·6 | 27 | 27·0 | 45·2 | 9·0 g |
| 8·2 | 28 | 21·0 | 30·1 | g |
| 8·2 | | 50·0 | 12·8 | 7·5 Gg |
| 9·8 | 29 | 56·0 | 17·9 | |
| 10·0 | 30 | 8·5 | 35·4 | |
| 9·4 | 31 | 22·5 | 33·0 | g |
| 8·2 | | 40·0 | 25·7 | 8·5 g |
| 9·4 | | 50·5 | 6·0 | g |
| 8·5 | | 51·0 | 21·3 | 9·0 g |
| 9·2 | 32 | 5·0 | 47·9 | |
| 9·4 | | 32·0 | 49·6 | |
| 8·5 | | 38·5 | 11·4 | 8·5 g |
| 9·0 | 33 | 3·5 | 13·9 | 9·5 g |
| 9·2 | | 22·3 | 59·0 | g |
| 9·0 | 35 | 29·0 | 52·9 | g |
| 9·5 | | 31·0 | 1·0 | |
| 10·0 | | 33·0 | 25·1 | |
| 10·0 | | 45·0 | 59·5 | |
| 10·0 | 36 | 28·0 | 19·4 | |
| 9·4 | | 33·0 | 15·1 | |
| 8·4 | | 33·5 | 48·3 | 9·0 g |
| 10·0 | | 55·5 | 41·8 | |
| 8·2 | 37 | 5·0 | 45·2 | 8·0 Gg |
| 10·0 | | 53·0 | 23·1 | |
| 9·8 | 38 | 5·0 | 7·0 | g |
| 7·6 | 39 | 10·5 | 13·0 | 6·5 GScgr |
| 9·0 | | 46·0 | 2·6 | 9·5 g |
| 8·7 | 40 | 3·8 | 57·2 | g |
| 9·1 | 41 | 25·5 | 43·6 | 9·5 g |
| 7·8 | | 42·0 | 42·6 | 8·0 g |
| 8·4 | 42 | 23·0 | 22·6 | 8·5 g |
| 9·4 | | 32·0 | 24·5 | |
| 9·4 | | 39·5 | 26·7 | |
| 9·8 | 43 | 19·0 | 21·0 | |
| 8·5 | | 39·0 | 36·5 | 8·0 Gg |
| 9·8 | 46 | 13·5 | 2·0 | |
| 9·0 | 47 | 2·0 | 22·6 | 9·0 g |

## 3721—3780.

| mag. | 22h.—23h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9·7 | 47 | 41·5 | 29·5 | |
| 9·4 | 49 | 8·5 | 43·0 | g |
| 10·0 | 50 | 9·5 | 31·7 | |
| 7·8 | | 11·5 | 2·3 | 8·0 Gg |
| 8·8 | | 17·0 | 11·0 | 9·0 Gg |
| 9·2 | | 21·0 | 35·0 | g |
| 9·5 | 51 | 36·5 | 9·3 | |
| 9·7 | | 39·5 | 59·5 | g |
| 10·0 | 52 | 5·8 | 57·5 | g |
| 10·0 | | 10·8 | 58·2 | |
| 10·0 | | 17·0 | 40·8 | |
| 8·2 | | 32·5 | 20·0 | 9·0 g |
| 10·0 | | 39·0 | 34·7 | |
| 9·8 | | 40·5 | 27·5 | |
| 9·2 | 53 | 20·0 | 51·6 | g |
| 8·5 | | 55·5 | 41·0 | 8·5 Gg |
| 9·6 | 54 | 44·0 | 47·8 | |
| 9·6 | 55 | 48·2 | 46·9 | g |
| 9·8 | | 52·0 | 58·7 | |
| 9·4 | 57 | 39·0 | 34·2 | g |
| 9·0 | | 58·5 | 0·9 | 8·5 g |
| 9·4* | 58 | 46·0 | 36·1 | g |
| 9·6 | 59 | 20·2 | 25·9 | |
| 10·1 | 0 | 14·0 | 45·0 | |
| 8·8 | 1 | 1·2 | 53·3 | 9·0 g |
| 9·4 | 2 | 25·5 | 59·0 | 9·5 g |
| 9·4 | | 27·1 | 1·0 | g |
| 9·6 | | 31·3 | 34·6 | g |
| 10·0 | 3 | 31·5 | 22·6 | |
| 9·4 | 4 | 10·5 | 13·2 | g |
| 10·1 | | 17·0 | 18·8 | |
| 10·1 | | 44·5 | 41·6 | |
| 9·6 | 5 | 0·5 | 26·6 | |
| 9·1 | 6 | 7·0 | 20·2 | g |
| 9·4 | | 35·0 | 34·2 | |
| 9·1 | | 39·0 | 31·3 | |
| 8·2 | | 53·0 | 53·8 | 9·0 g |
| 8·8 | 7 | 3·5 | 15·7 | 8·0 Gg |
| 9·2 | 8 | 11·5 | 18·6 | g |
| 9·4 | | 46·5 | 4·3 | |
| 9·8 | 9 | 9·0 | 41·0 | g |
| 8·6 | | 11·0 | 24·0 | 9·0 g |
| 9·1 | | 18·0 | 53·7 | 10·0 g |
| 9·4 | | 34·5 | 6·8 | |
| 10·1 | 10 | 22·5 | 33·7 | |
| 9·0 | 12 | 23·5 | 49·0 | 9·2 g |
| 9·2 | | 59·5 | 34·9 | g |
| 9·0 | 15 | 21·0 | 49·8 | 9·5 g |
| 9·6 | | 25·5 | 14·0 | |
| 10·1 | 17 | 29·0 | 37·9 | |
| 9·6 | | 51·0 | 57·0 | g |
| 10·0 | 18 | 25·5 | 7·0 | |
| 10·0 | 19 | 57·0 | 23·5 | |
| 8·8 | 20 | 19·0 | 15·1 | 8·5 g |
| 9·6 | | 54·5 | 20·1 | |
| 8·8 | 21 | 15·5 | 46·4 | 9·0 g |
| 9·6 | | 44·0 | 11·8 | |
| 9·4 | 22 | 20·0 | 36·4 | g |
| 9·4 | 24 | 1·0 | 3·0 | g |
| 9·4 | | 11·0 | 58·1 | Ggg |



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### 3781—3792.

| mag. | 23h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.4 | 24 | 29.0 | 6.9 | *g* |
| 10.0 | 27 | 15.5 | 8.0 | |
| 8.8 | 28 | 13.0 | 31.1 | *g* |
| 9.8 | 29 | 52.0 | 20.4 | |
| 10.1 | 30 | 32.0 | 8.8 | |
| 9.0 | | 53.0 | 1.5 | *g* |
| 8.0 | 32 | 35.5 | 56.8 | 8.0 G*g* |
| 9.4 | | 48.5 | 59.1 | 9.0 *g* |
| 9.2 | | 50.0 | 12.0 | *g* |
| 9.2 | 33 | 49.5 | 10.1 | *g* |
| 8.2 | 36 | 41.5 | 7.6 | 8.8 G*g* |
| 8.8 | 37 | 1.5 | 11.0 | 9.2 G*g* |

### 3793—3803.

| mag. | 23h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10.1 | 37 | 27.3 | 56.0 | |
| 10.4 | 40 | 9.3 | 20.3 | |
| 10.4 | | 10.3 | 19.6 | |
| 9.8 | 41 | 4.4 | 25.3 | |
| 9.1 | 42 | 0.6 | 5.4 | 8.8 G*g* |
| 10.0 | | 8.8 | 27.1 | |
| 7.7 | | 38.0 | 57.0 | 7.2 G*g* |
| 10.4 | | 41.8 | 2.9 | *g* |
| 7.4 | 43 | 8.4 | 20.0 | 7.0 G*g* |
| 10.6 | | 51.4 | 59.0 | |
| 8.6 | 44 | 25.2 | 0.8 | 8.0 GS*g* |

### 3804—3814.

| mag. | 23h. m | s | −66° ′ | |
|---|---|---|---|---|
| 10.2 | 44 | 31.1 | 59.0 | *g* |
| 9.6 | 45 | 25.7 | 23.5 | |
| 10.2 | | 59.7 | 55.0 | |
| 10.0 | 46 | 1.7 | 48.0 | *g* |
| 10.4 | | 16.2 | 31.3 | |
| 10.4 | | 46.7 | 18.0 | |
| 7.4 | | 59.7 | 38.7 | 7.5 GSc*g*r |
| 9.6 | 47 | 6.2 | 16.4 | |
| 10.4 | 48 | 22.2 | 19.5 | |
| 9.1 | | 42.7 | 55.4 | *g* |
| 9.6 | | 43.2 | 2.6 | *g* |

### 3815—3825.

| mag. | 23h. m | s | −66° ′ | |
|---|---|---|---|---|
| 9.0 | 49 | 51.2 | 27.9 | *g* |
| 10.4 | 50 | 52.7 | 4.9 | |
| 8.3 | | 57.2 | 28.2 | 8.0 GS*g* |
| 9.0 | 52 | 48.7 | 13.1 | 9.0 GS*g* |
| 4.4 | 53 | 24.7 | 16.2 | 4.5 GSc*g*tr |
| 9.9 | 54 | 22.7 | 9.8 | |
| 9.6 | | 23.2 | 20.5 | 9.0 G*g* |
| 9.0 | 57 | 7.2 | 31.3 | 9.0 *g* |
| 9.8 | | 52.2 | 33.1 | *g* |
| 9.1 | 58 | 51.9 | 2.9 | 9.5 *g* |
| 9.6 | 59 | 26.7 | 18.8 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 20 | 90 | 8.2 |
| | 30 | 87 | 8.3 |
| | 40 | 84 | 8.3 |
| | 50 | 80 | 8.3 |
| 0 | 0 | 77 | 8.4 |

## ZONE—67°

### 1—30.

| mag. | 0h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8.8 | 1 | 22.4 | 35.5 | 8.5 G*g* |
| 9.1 | 2 | 14.4 | 12.5 | *g* |
| 9.1 | | 17.4 | 7.0 | *g* |
| 9.1 | | 31.9 | 27.2 | 9.0 *g* |
| 10.4 | 3 | 18.7 | 8.7 | |
| 9.2† | | 21.0 | 54.0 | *g* |
| 9.1 | 4 | 3.9 | 3.6 | 10.0 |
| 10.0 | | 35.4 | 9.7 | |
| 10.4 | 5 | 56.4 | 7.7 | |
| 10.4 | 6 | 30.4 | 36.1 | |
| 9.8 | 7 | 6.9 | 17.0 | |
| 10.0 | 8 | 8.4 | 36.3 | |
| 8.2 | 9 | 45.4 | 37.1 | *g* |
| 10.4 | 10 | 1.4 | 38.5 | |
| 8.2 | | 29.4 | 23.1 | S*g* |
| 8.2 | 11 | 23.4 | 15.7 | G*g* |
| 7.9 | | 47.4 | 3.3 | 8.5 S*g* |
| 8.9† | | 48.0 | 50.4 | *g* |
| 10.0 | | 52.4 | 33.6 | |
| 9.8 | 12 | 56.4 | 7.7 | |
| 9.2 | 15 | 5.9 | 36.8 | *g* |
| 8.7 | | 26.9 | 5.5 | 8.5 *g* |
| 9.4 | | 38.9 | 10.6 | *g* |
| 9.6 | 17 | 4.4 | 12.3 | |
| 10.0 | | 35.9 | 33.2 | |
| 10.4 | 18 | 6.4 | 30.9 | |
| 9.1 | | 58.4 | 10.2 | |
| 9.8 | 20 | 47.0 | 2.2 | *g* |
| 9.6 | 22 | 5.6 | 8.6 | *g* |
| 10.0 | 24 | 30.9 | 26.6 | |

### 31—60.

| mag. | 0h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10.6 | 24 | 38.4 | 2.1 | |
| 9.4 | | 47.5 | 37.4 | *g* |
| 10.2 | 26 | 35.4 | 9.6 | |
| 10.0 | 27 | 5.6 | 25.0 | |
| 10.8 | | 48.9 | 9.6 | |
| 9.2 | | 56.4 | 27.2 | *g* |
| 9.4 | 28 | 15.4 | 36.4 | 9.5 *g* |
| 10.2 | | 17.9 | 15.0 | |
| 10.0 | 29 | 1.9 | 10.2 | |
| 10.2 | | 12.4 | 35.0 | |
| 9.2 | | 34.9 | 29.2 | 10.0 *g* |
| 10.4 | | 53.4 | 39.3 | |
| 9.4‡ | 30 | 47.0 | 53.1 | *g* |
| 9.8 | 31 | 11.9 | 38.4 | |
| 10.9 | 32 | 44.6 | 35.8 | |
| 10.9 | 33 | 8.4 | 12.2 | |
| 10.0 | | 18.9 | 11.0 | |
| 9.2 | 35 | 54.4 | 12.0 | 9.5 *g* |
| 10.2 | | 58.4 | 27.3 | |
| 10.4 | 36 | 18.4 | 4.3 | |
| 9.6 | 38 | 24.6 | 40.4 | *g* |
| 10.4 | | 58.4 | 38.2 | |
| 10.9 | 39 | 27.4 | 34.9 | |
| 10.4 | 41 | 15.6 | 38.0 | |
| 9.8 | 46 | 54.9 | 38.2 | |
| 10.0 | 47 | 30.4 | 39.2 | |
| 8.9 | | 57.3 | 34.8 | *g* |
| 10.6 | 48 | 43.3 | 37.1 | |
| 9.6 | 49 | 36.8 | 8.3 | *g* |
| 10.2 | 50 | 51.3 | 18.1 | |

### 61—90.

| mag. | 0h.–1h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10.2 | 52 | 33.3 | 32.9 | |
| 7.6 | 53 | 1.6 | 14.2 | 7.2 GSc*gg* |
| 10.5 | 54 | 16.3 | 12.3 | |
| 10.2 | | 32.3 | 7.9 | |
| 8.9‡ | 55 | 13.0 | 55.5 | G*g* |
| 9.5 | 56 | 3.3 | 8.3 | |
| 10.0 | | 18.0 | 0.5 | |
| 10.2 | | 29.3 | 14.9 | |
| 10.6 | 58 | 36.3 | 10.9 | |
| 10.2 | 0 | 41.4 | 36.7 | |
| 9.6 | | 55.1 | 25.3 | *g* |
| 9.7 | 3 | 27.4 | 29.8 | |
| 9.8† | 4 | 22.1 | 58.4 | |
| 8.7 | | 35.1 | 32.9 | 8.5 G*g* |
| 8.8 | 5 | 2.0 | 28.0 | 8.8 G*g* |
| 9.7 | | 41.0 | 0.9 | |
| 9.9† | 6 | 10.6 | 49.7 | *g* |
| 9.7 | 9 | 24.5 | 18.3 | |
| 9.5 | 10 | 31.1 | 25.1 | *g* |
| 10.0† | | 38.1 | 55.1 | |
| 6.2 | 12 | 43.0 | 3.5 | 6.7 GSc*g*r |
| 9.2 | 13 | 2.0 | 17.7 | 9.0 S*g* |
| 9.7 | | 32.5 | 33.1 | *g* |
| 7.8† | | 35.6 | 46.3 | 8.0 GSc*g* |
| 8.3 | 14 | 22.0 | 20.1 | 8.0 GS*g* |
| 9.1 | 15 | 14.5 | 27.3 | 9.0 *g* |
| 9.6 | 17 | 7.5 | 26.9 | |
| 8.4 | | 34.0 | 6.1 | 9.0 G*g* |
| 6.9 | | 37.5 | 2.4 | 7.0 GSc*g* |
| 9.4 | 19 | 28.0 | 29.5 | 9.5 *g* |

### 91—120.

| mag. | 1h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8.7 | 19 | 29.0 | 31.3 | 8.5 *g* |
| 9.7 | 20 | 56.0 | 33.1 | *g* |
| 8.8† | 22 | 36.6 | 50.3 | 9.0 *g* |
| 9.9† | 23 | 25.1 | 57.1 | |
| 7.6 | 27 | 6.0 | 8.5 | 8.2 G*g* |
| 9.8 | | 18.5 | 2.3 | *g* |
| 9.5† | 28 | 19.1 | 55.9 | |
| 10.0† | 29 | 9.6 | 44.0 | |
| 9.9† | | 53.6 | 49.0 | 9.0 *g* |
| 9.9† | 30 | 14.6 | 46.5 | |
| 10.2† | 31 | 9.6 | 54.0 | |
| 7.8† | | 23.0 | 46.5 | 8.0 G*g* |
| 9.2† | | 38.7 | 44.7 | *g* |
| 8.7 | 32 | 14.5 | 21.8 | 9.0 *g* |
| 9.7 | | 53.5 | 21.5 | |
| 8.4† | 33 | 29.1 | 43.0 | 8.8 *g* |
| 8.6 | 34 | 20.4 | 11.6 | 7.5 GS*g* |
| 8.2† | 36 | 48.5 | 52.0 | 8.0 G*g* |
| 9.7† | | 57.0 | 43.0 | |
| 9.7† | 37 | 13.7 | 49.0 | 8.5 *g* |
| 9.6§ | | 44.0 | 37.9 | |
| 8.1 | 38 | 48.5 | 28.2 | *g* |
| 8.6† | 39 | 0.5 | 41.1 | *g* |
| 9.4 | | 28.8 | 18.3 | *g* |
| 9.7 | | 52.2 | 40.1 | *g* |
| 9.3 | 40 | 7.5 | 12.8 | |
| 9.3 | | 55.5 | 4.6 | |
| 8.7 | 43 | 30.8 | 9.2 | 9.5 *g* |
| 9.2 | | 40.5 | 28.5 | |
| 9.2 | 45 | 51.5 | 2.6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8.4 |
| | 10 | 73 | 8.3 |
| | 20 | 70 | 8.3 |
| | 30 | 66 | 8.3 |
| | 40 | 63 | 8.2 |
| | 50 | 59 | 8.2 |
| 1 | 0 | 56 | 8.1 |
| | 10 | 53 | 8.0 |
| | 20 | 49 | 7.9 |
| | 30 | 46 | 7.7 |
| | 40 | 43 | 7.6 |
| | 50 | 40 | 7.4 |

§ From Plates 224, 241.



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| h | m | prec. α + s | δ + ′ |
|---|---|---|---|
| 1 | 40 | 43 | 7·6 |
|  | 50 | 40 | 7·4 |
| 2 | 0 | 36 | 7·2 |
|  | 10 | 33 | 7·0 |
|  | 20 | 31 | 6·8 |
|  | 30 | 28 | 6·6 |
|  | 40 | 25 | 6·4 |
|  | 50 | 22 | 6·2 |
| 3 | 0 | 20 | 5·9 |
|  | 10 | 17 | 5·6 |
|  | 20 | 15 | 5·4 |
|  | 30 | 13 | 5·1 |
|  | 40 | 11 | 4·8 |
|  | 50 | 9 | 4·5 |
| 4 | 0 | 7 | 4·2 |
|  | 10 | 5 | 3·9 |
|  | 20 | 4 | 3·5 |
|  | 30 | 2 | 3·2 |
|  | 40 | 1 | 2·9 |
|  | 50 | 0 | 2·5 |
|  |  | — |  |
| 5 | 0 | 1 | 2·2 |

## 121—180.

| mag. | 1h.–2h. m | s | –67° ′ | |
|---|---|---|---|---|
| 8·9 | 46 | 15·5 | 11·8 | 9·0 G*g* |
| 9·2 |  | 45·5 | 19·0 | |
| 10·3† | 47 | 43·5 | 46·9 | |
| 9·5† |  | 52·0 | 47·5 | |
| 9·2 | 48 | 0·0 | 16·2 | |
| 9·2 | 49 | 52·5 | 29·3 | |
| 9·2 | 51 | 1·0 | 30·7 | 9·5 *g* |
| 9·2 |  | 32·5 | 35·6 | 9·0 *g* |
| 9·2 |  | 40·5 | 19·5 | |
| 10·8‡ | 53 | 2·8 | 29·7 | |
| 9·0‡ | 54 | 53·0 | 52·6 | 9·0 *g* |
| 10·8‡ | 55 | 56·5 | 34·3 | |
| 10·2‡ | 56 | 25·5 | 47·6 | |
| 10·2‡ |  | 36·5 | 48·4 | |
| 9·3 |  | 54·5 | 21·2 | |
| 9·5‡ | 57 | 57·0 | 48·4 | 9·0 *g* |
| 10·1‡ | 2 | 55·0 | 30·8 | *g* |
| 10·2‡ | 4 | 57·5 | 53·4 | |
| 10·8‡ |  | 58·7 | 39·3 | |
| 9·6‡ | 6 | 1·2 | 49·2 | |
| 9·3 | 8 | 38·5 | 3·4 | *g* |
| 9·0 |  | 41·0 | 23·1 | *g* |
| 9·2 | 11 | 4·0 | 1·1 | 8·7 G*g* |
| 8·9 |  | 11·5 | 22·5 | 8·5 G*g* |
| 8·9‡ | 12 | 4·2 | 50·6 | 9·0 *g* |
| 9·5‡ |  | 7·7 | 58·3 | *g* |
| 10·6‡ |  | 57·7 | 52·9 | |
| 9·2– | 17 | 3·0 | 9·2 | |
| 9·1 | 19 | 8·0 | 23·8 | |
| 9·3 |  | 27·0 | 22·9 | |
| 9·5 | 20 | 26·0 | 31·6 | |
| 10·1‡ | 21 | 22·3 | 39·0 | |
| 10·8‡ |  | 36·3 | 39·8 | |
| 8·0 | 22 | 51·5 | 3·5 | 7·0 GSc*g* |
| 9·9‡ | 23 | 19·3 | 58·0 | |
| 9·1 | 25 | 2·5 | 18·4 | *g* |
| 9·5 |  | 3·5 | 28·7 | |
| 8·8‡ |  | 29·3 | 43·3 | *g* |
| 9·1 |  | 40·0 | 9·9 | |
| 10·8‡ |  | 47·6 | 58·2 | |
| 8·2 | 26 | 28·8 | 19·4 | *g* |
| 10·8‡ | 28 | 8·0 | 39·6 | |
| 9·1 |  | 56·5 | 0·7 | |
| 10·4‡ | 29 | 55·6 | 59·4 | |
| 9·9‡ | 32 | 4·7 | 57·4 | |
| 9·0 |  | 9·0 | 10·1 | 7·5 G |
| 9·4 | 33 | 16·0 | 21·3 | |
| 9·4 |  | 36·5 | 26·7 | |
| 10·4‡ | 35 | 4·5 | 39·0 | |
| 6·8‡ |  | 50·0 | 50·4 | 7·0 GSc*g* |
| 9·5 | 36 | 11·0 | 14·3 | |
| 8·9 |  | 38·0 | 9·3 | |
| 8·2 | 37 | 23·0 | 29·5 | 7·0 GSc*g* |
| 10·6‡ | 38 | 4·7 | 59·2 | |
| 9·4‡ |  | 12·6 | 38·3 | *g* |
| 10·4‡ |  | 24·6 | 59·4 | |
| 9·5 |  | 28·0 | 28·1 | |
| 8·9‡ |  | 48·5 | 53·7 | *g* |
| 9·0 | 40 | 29·5 | 26·3 | *g* |
| 9·4 |  | 34·0 | 29·7 | |

## 181—240.

| mag. | 2h.–3h. m | s | –67° ′ | |
|---|---|---|---|---|
| 6·6 | 41 | 17·0 | 14·5 | 6·5 GSc*g* |
| 8·3† |  | 40·5 | 48·8 | 9·0 G*g* |
| 9·5 | 42 | 23·0 | 4·5 | |
| 8·5 | 43 | 10·5 | 31·8 | G*g* |
| 8·6† |  | 54·5 | 53·6 | *g* |
| 9·5 |  | 56·0 | 27·4 | |
| 9·5 | 45 | 0·5 | 3·3 | *g* |
| 7·6† |  | 5·0 | 47·9 | G*g* |
| 9·6† | 46 | 32·0 | 48·5 | 10·0 G*g* |
| 9·5 | 49 | 9·0 | 26·8 | |
| 9·5 | 50 | 1·5 | 5·1 | |
| 8·6† |  | 33·2 | 49·1 | 8·5 G*g* |
| 9·4 | 54 | 6·0 | 13·0 | *g* |
| 8·5† |  | 57·2 | 44·9 | *g* |
| 8·6 | 56 | 1·0 | 21·4 | *g* |
| 10·2† |  | 12·5 | 43·8 | |
| 8·6† |  | 30·2 | 52·2 | *g* |
| 8·8† |  | 33·6 | 38·4 | *g* |
| 10·2† | 58 | 0·7 | 52·8 | |
| 9·4– | 59 | 1·0 | 6·2 | 9·5 |
| 8·6† |  | 11·6 | 35·6 | 7·5 G*g* |
| 9·6 | 1 | 19·5 | 19·7 | *g* |
| 9·6 | 4 | 31·5 | 5·0 | *g* |
| 9·6 |  | 32·5 | 20·9 | |
| 10·2† | 5 | 44·8 | 58·4 | *g* |
| 10·2† | 6 | 10·2 | 36·6 | |
| 10·0† |  | 18·7 | 53·7 | *g* |
| 9·6 | 7 | 12·5 | 32·1 | |
| 10·2† | 8 | 24·1 | 37·4 | *g* |
| 9·6 |  | 31·5 | 16·2 | |
| 7·4† | 9 | 1·1 | 58·7 | 8·0 GS*g* |
| 8·9 | 10 | 24·5 | 6·2 | 10·0 |
| 9·1 |  | 36·5 | 19·5 | 10·0 *g* |
| 9·5† | 12 | 28·6 | 38·9 | 9·0 *g* |
| 8·5 |  | 39·5 | 7·1 | 8·5 G*g* |
| 9·6 | 13 | 15·0 | 20·8 | *g* |
| 6·3 | 16 | 35·5 | 22·7 | 6·5 GSc*g* |
| 9·3 | 17 | 7·5 | 9·2 | |
| 9·1† | 18 | 31·1 | 36·4 | 9·5 *g* |
| 9·4† | 21 | 14·8 | 57·7 | *g* |
| 9·7‡ |  | 40·5 | 56·9 | |
| 9·1‡ |  | 41·3 | 37·0 | 10·0 *g* |
| 8·7 | 22 | 31·5 | 21·1 | *g* |
| 9·7‡ | 23 | 0·0 | 48·5 | |
| 9·1 |  | 9·0 | 13·9 | |
| 9·3‡ |  | 11·8 | 56·3 | |
| 9·6 | 25 | 32·5 | 16·2 | |
| 9·2‡ |  | 48·3 | 46·8 | *g* |
| 9·6 |  | 55·5 | 21·6 | |
| 9·8‡ | 26 | 0·0 | 58·3 | |
| 9·3 |  | 48·0 | 6·0 | *g* |
| 9·7‡ | 27 | 25·5 | 47·9 | *g* |
| 9·7‡ |  | 50·0 | 44·2 | *g* |
| 9·0‡ | 28 | 36·5 | 38·5 | *g* |
| 8·7‡ | 29 | 17·3 | 57·9 | 9·0 *g* |
| 7·7– | 31 | 35·0 | 9·0 | 7·5 GS*g* |
| 7·5‡ | 32 | 1·5 | 50·0 | 7·5 GS*g* |
| 9·7‡ |  | 14·5 | 57·2 | |
| 9·2‡ |  | 20·0 | 51·4 | 9·0 G*g* |
| 9·4‡ | 34 | 22·5 | 45·1 | *g* |

## 241—300.

| mag. | 3h.–4h. m | s | –67° ′ | |
|---|---|---|---|---|
| 9·6‡ | 34 | 59·0 | 34·5 | |
| 10·1 | 35 | 35·5 | 29·8 | |
| 10·1 | 36 | 22·0 | 2·1 | *g* |
| 10·1 | 37 | 32·5 | 20·0 | |
| 9·6‡ |  | 40·0 | 36·8 | |
| 8·8‡ | 39 | 2·5 | 37·8 | *g* |
| 9·8‡ |  | 19·0 | 54·0 | |
| 8·8 | 40 | 32·5 | 7·7 | 9·0 *g* |
| 9·8‡ | 41 | 5·7 | 57·5 | |
| 9·8 |  | 15·5 | 20·2 | |
| 9·1‡ |  | 37·5 | 40·5 | 8·0 *g* |
| 10·1 |  | 54·0 | 12·9 | |
| 8·2 | 43 | 17·8 | 5·3 | 8·2 G*g* |
| 9·5 |  | 46·5 | 3·9 | *g* |
| 8·8 | 45 | 54·5 | 11·8 | 8·5 G*g* |
| 9·8 | 46 | 5·5 | 9·1 | *g* |
| 9·2‡ |  | 25·5 | 46·3 | *g* |
| 9·2 |  | 42·5 | 4·6 | 8·2 *g* |
| 9·6‡ | 47 | 13·0 | 42·3 | *g* |
| 10·0 |  | 16·0 | 0·1 | |
| 10·1 |  | 26·0 | 33·9 | |
| 10·1 | 48 | 19·5 | 28·8 | |
| 10·1 | 49 | 54·5 | 1·9 | |
| 10·1 | 50 | 7·0 | 11·1 | |
| 9·8‡ |  | 10·5 | 56·1 | |
| 9·4 |  | 40·0 | 14·1 | *g* |
| 9·7‡ | 51 | 29·0 | 56·2 | |
| 8·8 |  | 46·0 | 11·6 | *g* |
| 9·1 |  | 48·0 | 6·0 | *g* |
| 9·7‡ | 52 | 24·0 | 44·7 | |
| 9·0‡ | 53 | 31·5 | 47·3 | *g* |
| 10·1 | 54 | 42·5 | 25·7 | |
| 9·7‡ |  | 49·5 | 46·9 | |
| 10·1 |  | 50·5 | 24·6 | |
| 10·1 | 55 | 42·5 | 26·5 | |
| 8·7 | 57 | 12·0 | 11·8 | 9·0 *g* |
| 10·1 |  | 19·5 | 13·9 | |
| 9·8‡ |  | 50·0 | 52·3 | |
| 10·1 | 59 | 6·5 | 10·0 | |
| 9·2 | 0 | 12·5 | 29·8 | 9·2 *g* |
| 10·0 | 1 | 17·5 | 15·0 | |
| 9·2 | 3 | 52·0 | 30·5 | *g* |
| 9·5 | 4 | 27·0 | 8·5 | |
| 9·8‡ |  | 47·0 | 58·0 | |
| 10·0 | 5 | 32·1 | 26·2 | |
| 10·1 | 6 | 5·7 | 30·1 | |
| 9·0 |  | 39·0 | 30·1 | 8·5 *g* |
| 9·7† | 9 | 9·0 | 56·2 | |
| 9·2† |  | 33·0 | 38·9 | 9·0 G*g* |
| 9·0† |  | 37·8 | 38·8 | 8·5 G*g* |
| 9·7† | 10 | 58·0 | 59·0 | |
| 8·9† | 11 | 37·0 | 52·5 | 9·0 *g* |
| 10·1 | 12 | 1·5 | 20·0 | |
| 9·6† |  | 42·0 | 51·1 | |
| 10·1 | 13 | 25·0 | 27·1 | |
| 8·4 |  | 36·5 | 3·4 | 8·8 *g* |
| 8·7 |  | 49·0 | 25·2 | 8·5 *g* |
| 9·4 |  | 49·0 | 6·2 | |
| 10·1 | 14 | 0·0 | 28·1 | |
| 9·6† |  | 16·0 | 45·1 | |

## 301—360.

| mag. | 4h. m | s | –67° ′ | |
|---|---|---|---|---|
| 9·8 |  | 39·0 | 13·6 | *g* |
| 9·6† | 15 | 47·5 | 54·5 | *g* |
| 10·1 | 17 | 27·5 | 9·2 | |
| 9·3† |  | 43·5 | 45·0 | *g* |
| 9·7 |  | 48·0 | 32·7 | 9·5 |
| 9·6† | 18 | 4·5 | 43·0 | |
| 9·2 |  | 34·3 | 35·0 | 9·5 *g* |
| 9·7† | 20 | 21·5 | 28·2 | |
| 10·0– |  | 42·6 | 27·3 | 9·0 *g* |
| 9·2 | 21 | 24·3 | 17·4 | *g* |
| 9·1 |  | 28·8 | 16·4 | *g* |
| 9·3 | 22 | 48·5 | 13·4 | *g* |
| 9·3† |  | 48·0 | 41·3 | |
| 9·4 |  | 58·0 | 20·1 | *g* |
| 9·3 | 23 | 13·0 | 12·0 | |
| 6·8 |  | 28·5 | 1·5 | 7·2 GS*g* |
| 9·1† | 25 | 42·5 | 51·0 | *g* |
| 9·8 |  | 51·5 | 32·7 | |
| 9·9 | 27 | 16·0 | 11·0 | |
| 9·7† | 28 | 32 5 | 37·7 | |
| 9·0 |  | 34·5 | 13·1 | |
| 9·2 | 29 | 18·0 | 0·2 | *g* |
| 9·8 |  | 34·0 | 30·0 | |
| 9·2† | 30 | 39·0 | 41·3 | |
| 9·5 | 31 | 17·5 | 24·1 | |
| 9·2 | 32 | 39·0 | 11·1 | |
| 9·0 |  | 59·0 | 34·4 | 8·8 G*g* |
| 9·5 | 33 | 4·0 | 25·9 | |
| 9·2 |  | 51·5 | 26·2 | 9·2 *g* |
| 8·9 | 34 | 14·0 | 32·9 | 9·2 *g* |
| 8·8 | 35 | 28·5 | 9·7 | 8·8 G*g* |
| 9·5 | 36 | 31·0 | 12·1 | 9·0 *g* |
| 8·9 |  | 31·0 | 28·9 | 9·2 *g* |
| 9·6 |  | 59·0 | 0·2 | |
| 9·8 | 37 | 29·5 | 30·3 | |
| 9·4† |  | 30·2 | 57·3 | *g* |
| 9·5 |  | 47·0 | 33·0 | |
| 9·2 |  | 52·0 | 21·9 | |
| 9·8 | 40 | 10·5 | 15·0 | |
| 8·8 | 41 | 24·0 | 8·0 | 8·2 *g* |
| 9·5 | 42 | 18·0 | 26·7 | |
| 8·9† |  | 44·5 | 38·2 | 9·0 G*g* |
| 9·0 | 43 | 32·0 | 1·8 | 10·0 *g* |
| 9·5 | 46 | 16·0 | 29·8 | |
| 9·8 |  | 59·0 | 20·0 | |
| 9·5 | 47 | 20·5 | 22·9 | *g* |
| 9·9 |  | 25·0 | 25·9 | *g* |
| 8·9 |  | 39·0 | 27·8 | *g* |
| 9·1 | 48 | 0·5 | 22·9 | *g* |
| 9·8 |  | 50·5 | 0·6 | |
| 9·8 |  | 55·5 | 4·1 | |
| 7·6† | 49 | 3·0 | 55·6 | 8·5 G*g* |
| 9·8 |  | 15·0 | 2·6 | K |
| 9·4 |  | 19·5 | 34·8 | |
| 9·5‡ | 50 | 24·5 | 52·1 | |
| 8·8 | 52 | 35·8 | 21·1 | 9·0 *g* |
| 9·6‡ |  | 38·5 | 33·9 | |
| 9·1 | 53 | 24·0 | 7·3 | |
| 9·6‡ |  | 29·5 | 34·6 | |
| 9·0 | 54 | 21·0 | 28·9 | 9·0 *g* |



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## 361—420.

| mag. | 4h.–5h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·9 | 54 | 31·5 | 27·1 | |
| 9·9 | | 43·5 | 26·4 | |
| 9·6‡ | | 49·0 | 46·8 | |
| 9·0 | 55 | 9·0 | 21·9 | g |
| 9·6‡ | | 13·5 | 57·8 | |
| 9·4 | | 15·0 | 7·7 | |
| 9·4‡ | | 25·5 | 37·8 | |
| 9·2 | | 51·7 | 29·8 | g |
| 9·9 | 56 | 14·8 | 29·1 | |
| 9·8 | | 40·0 | 4·9 | |
| 9·2‡ | 57 | 21·5 | 46·1 | g |
| 9·4‡ | | 31·0 | 39·6 | |
| 9·4 | | 37·5 | 22·8 | |
| 9·9 | 58 | 5·0 | 13·9 | |
| 9·8 | | 9·0 | 25·7 | |
| 9·1▬ | | 48·0 | 17·2 | g |
| 9·4‡ | 59 | 19·0 | 55·6 | |
| 9·6‡ | | 53·0 | 43·4 | |
| 9·8 | 1 | 28·0 | 16·8 | |
| 9·0‡ | | 28·0 | 37·4 | 9·2 g |
| 9·6‡ | | 28·0 | 30·7 | |
| 9·1 | 3 | 3·3 | 5·0 | g |
| 9·4 | | 8·0 | 7·8 | g |
| 9·4‡ | | 36·5 | 48·1 | |
| 10·0 | 4 | 17·0 | 29·9 | |
| 9·4 | | 19·5 | 25·1 | |
| 9·4 | | 21·2 | 30·1 | |
| 9·4 | | 32·5 | 27·8 | |
| 9·4 | 5 | 40·5 | 1·0 | g |
| 9·5‡ | 6 | 19·0 | 41·3 | |
| 9·1 | | 27·0 | 32·9 | |
| 8·9 | 8 | 56·0 | 19·3 | 9·5 g |
| 9·5 | 9 | 6·0 | 19·8 | 9·5 g |
| 9·7 | 11 | 58·0 | 28·3 | |
| 9·3 | 12 | 22·5 | 14·2 | g |
| 9·7 | | 25·8 | 28·0 | |
| 9·8 | | 46·2 | 0·5 | |
| 9·2 | | 52·0 | 24·4 | |
| 9·1‡ | 13 | 10·0 | 53·2 | g |
| 10·0 | | 25·0 | 26·1 | |
| 6·3 | | 51·0 | 19·5 | 5·0 GScg |
| 9·1‡ | | 51·5 | 43·1 | g |
| 10·0 | 14 | 3·5 | 31·0 | |
| 10·0 | | 12·0 | 28·0 | |
| 10·0 | | 12·0 | 24·0 | |
| 9·7‡ | | 13·0 | 35·5 | |
| 9·6‡ | | 39·5 | 36·6 | |
| 9·6‡ | | 56·0 | 49·8 | |
| 9·5 | 15 | 19·5 | 24·6 | |
| 8·7‡ | 16 | 59·5 | 40·3 | Gg |
| 9·4 | 18 | 2·0 | 31·1 | |
| 9·1 | | 31·7 | 33·1 | g |
| 9·6‡ | | 48·5 | 39·9 | |
| 9·4‡ | 19 | 2·0 | 46·9 | |
| 10·0 | | 17·0 | 26·9 | |
| 9·7‡ | | 38·8 | 59·1 | |
| 10·0 | | 41·0 | 31·7 | |
| 9·2 | 20 | 18·5 | 17·0 | |
| 9·4 | | 20·5 | 18·4 | |
| 9·5 | | 30·0 | 25·2 | |

## 421—480.

| mag. | 5h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4 | 20 | 30·5 | 14·1 | |
| 10·0 | | 38·0 | 6·1 | |
| 9·4‡ | | 42·0 | 37·7 | |
| 10·0 | 21 | 44·5 | 13·1 | |
| 10·0 | 22 | 36·0 | 29·0 | |
| 9·1 | | 48·5 | 28·1 | g |
| 9·3 | 23 | 6·0 | 18·1 | |
| 9·7‡ | | 6·0 | 54·8 | |
| 9·5 | | 9·5 | 18·1 | |
| 9·3 | 25 | 20·5 | 30·3 | g |
| 9·7‡ | | 50·5 | 52·7 | |
| 9·2‡ | | 51·5 | 52·5 | g |
| 9·6‡ | 26 | 20·0 | 36·0 | |
| 9·1‡ | | 26·0 | 39·1 | 10·0 |
| 9·6‡ | | 31·0 | 35·9 | |
| 9·0‡ | | 50·0 | 55·4 | g |
| 10·0 | 27 | 2·7 | 34·8 | |
| 9·6‡ | | 16·0 | 45·5 | |
| 9·5 | | 30·5 | 18·8 | |
| 9·5 | 28 | 10·0 | 26·5 | |
| 10·0 | | 10·5 | 5·6 | |
| 8·7‡ | | 13·0 | 41·5 | 10·0 g |
| 9·8 | | 34·5 | 30·1 | |
| 9·7‡ | | 40·5 | 46·0 | |
| 9·2‡ | | 48·5 | 58·1 | g |
| 9·8 | | 56·0 | 5·2 | |
| 8·9 | 30 | 3·5 | 13·1 | g |
| 10·0 | | 19·0 | 21·1 | |
| 9·0‡ | | 20·0 | 49·8 | g |
| 9·6‡ | | 34·0 | 37·7 | |
| neb | | 54·0 | 22·4 | |
| 10·0 | 31 | 27·3 | 2·7 | |
| neb | | 29·5 | 3·7 | |
| 9·3 | | 54·5 | 33·2 | |
| 9·4‡ | 32 | 21·5 | 53·9 | g |
| 9·6‡ | | 32·5 | 46·1 | |
| neb‡ | | 37·5 | 36·2 | |
| 8·9 | | 41·0 | 10·4 | g |
| 9·7‡ | | 41·0 | 46·1 | |
| neb‡ | | 46·0 | 46·9 | |
| 10·0 | 34 | 8·0 | 7·2 | g |
| 9·5 | | 18·5 | 25·4 | g |
| 10·0 | | 21·5 | 19·8 | g |
| 8·7 | | 30·5 | 6·2 | g |
| 9·8 | | 33·0 | 23·0 | |
| 10·0 | | 40·0 | 12·2 | |
| 9·5 | | 42·5 | 3·3 | |
| 9·3 | | 47·5 | 13·2 | |
| 9·8 | | 51·0 | 2·3 | |
| 9·4 | 35 | 5·5 | 25·9 | |
| 9·5 | | 9·5 | 6·0 | |
| 9·3 | | 11·0 | 25·8 | |
| 8·8 | | 17·0 | 33·1 | g |
| 9·6‡ | | 40·0 | 27·7 | |
| 9·0‡ | 36 | 3·5 | 56·7 | 10·0 g |
| 9·9† | | 6·5 | 30·8 | |
| 10·0 | | 8·5 | 8·4 | |
| 9·9† | | 13·3 | 31·9 | |
| 10·1† | | 20·0 | 42·0 | |
| 10·1† | | 34·5 | 34·8 | |

## 481—540.

| mag. | 5h. m | s | −67° ′ | |
|---|---|---|---|---|
| neb▬ | 36 | 36·5 | 3·9 | |
| 10·1† | | 52·5 | 35·2 | ? |
| 10·0 | 37 | 14·8 | 9·6 | |
| 9·9† | 38 | 2·8 | 47·2 | |
| 9·0 | | 37·0 | 15·2 | g |
| 8·4 | 39 | 44·3 | 6·3 | 9·0 Gg |
| 10·2† | | 53·0 | 25·5 | |
| 10·0† | 40 | 4·5 | 40·8 | |
| 9·6 | | 25·0 | 29·2 | |
| 9·6 | 41 | 4·0 | 11·1 | |
| 10·0† | | 15·5 | 25·3 | |
| 7·0 | | 59·5 | 27·6 | 7·5 GSg |
| × 9·7† | 42 | 2·5 | 32·4 | |
| 10·0 | | 14·5 | 24·0 | |
| × 9·7 | | 44·5 | 23·0 | |
| 7·9 | | 53·0 | 11·4 | 8·0 ĜSg |
| 10·1 | 43 | 28·0 | 6·1 | |
| 9·6† | 44 | 9·5 | 44·9 | |
| 9·7 | | 37·0 | 15·1 | |
| 10·1 | | 40·0 | 16·7 | |
| 10·1† | 45 | 9·5 | 22·6 | |
| 9·4 | | 14·0 | 13·4 | |
| 10·0 | | 14·5 | 5·7 | |
| 10·0 | | 15·5 | 6·7 | |
| 9·8† | | 23·0 | 31·3 | |
| 9·4 | | 31·5 | 7·3 | |
| 9·3† | 46 | 9·5 | 54·4 | 9·0 g |
| 9·9† | | 24·0 | 53·0 | |
| 7·8† | | 29·0 | 45·0 | 8·5 GSg |
| 10·1† | | 34·5 | 36·5 | |
| 9·1† | | 44·0 | 44·5 | 9·5 g |
| 10·1 | 47 | 1·0 | 15·8 | |
| 8·9 | | 4·5 | 28·1 | 9·0 g |
| 10·1† | | 15·5 | 42·1 | |
| 9·1† | | 45·5 | 47·7 | 8·5 g |
| 8·4 | 50 | 31·0 | 5·1 | g |
| 9·6† | | 40·5 | 46·0 | |
| 10·0† | 51 | 36·5 | 40·4 | |
| 9·3 | | 50·0 | 5·8 | g |
| 9·4 | 52 | 17·5 | 6·1 | |
| 9·5† | | 49·0 | 35·7 | g |
| 9·6 | | 53·5 | 1·0 | |
| 10·0† | | 56·5 | 57·0 | |
| 9·8† | 53 | 2·0 | 42·1 | |
| 9·6 | | 13·0 | 17·1 | |
| 10·1† | | 41·5 | 39·1 | |
| 10·1† | 54 | 19·0 | 38·4 | |
| 9·4 | 55 | 22·0 | 12·4 | 9·5 g |
| 9·6† | | 25·5 | 43·7 | 9·5 g |
| 9·0† | | 50·5 | 34·8 | 8·5 Gg |
| 8·8 | 56 | 12·0 | 5·1 | 9·0 g |
| 9·0† | | 22·5 | 33·1 | 8·5 Gg |
| 10·0† | | 41·5 | 36·8 | |
| 10·0 | 57 | 11·5 | 7·1 | |
| 9·1 | | 40·0 | 26·1 | 9·0 g |
| 9·9 | | 40·5 | 9·5 | |
| 10·0† | | 43·5 | 39·1 | |
| 10·1 | | 53·5 | 8·0 | |
| 10·2† | | 58·5 | 31·2 | |
| 9·3† | 58 | 25·5 | 41·3 | |

## 541—600.

| mag. | 5h.–6h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·3 | 58 | 43·5 | 28·6 | 9·0 g |
| 9·7 | 59 | 16·0 | 4·2 | |
| 9·4 | | 43·5 | 1·3 | |
| 8·9† | 0 | 4·0 | 50·7 | g |
| 10·0 | | 42·5 | 32·6 | |
| 9·2† | 2 | 10·5 | 51·7 | 9·0 g |
| 10·0† | | 15·5 | 37·3 | |
| 9·9† | | 41·0 | 40·6 | |
| 7·5 | 3 | 23·5 | 18·0 | 7·0 GSg |
| 10·0 | | 28·0 | 11·3 | |
| 10·0 | 4 | 29·0 | 22·4 | |
| 9·6 | 5 | 7·5 | 30·4 | |
| 9·6† | | 15·0 | 41·1 | |
| 10·1 | 6 | 26·5 | 16·6 | |
| 9·1 | | 41·0 | 24·1 | 8·5 Gg |
| 9·9 | | 56·5 | 14·4 | |
| 8·2 | 7 | 6·0 | 15·8 | 7·0 GSg |
| 9·7† | | 40·0 | 45·0 | |
| 10·1† | 8 | 10·0 | 31·1 | |
| 10·1 | 10 | 16·0 | 26·1 | |
| 9·1 | | 48·5 | 26·0 | g |
| 9·7† | 11 | 4·5 | 55·9 | g |
| 9·4 | 13 | 34·5 | 32·1 | g |
| 9·6 | 14 | 0·5 | 32·6 | |
| 9·4 | | 5·5 | 30·5 | g |
| 9·9† | | 56·7 | 59·9 | |
| 9·2† | 15 | 6·5 | 56·1 | g |
| 9·7† | 16 | 41·7 | 59·1 | |
| 10·1▬ | 17 | 10·7 | 22·0 | |
| 9·8 | 18 | 6·0 | 24·3 | |
| 10·0 | 19 | 23·0 | 29·2 | |
| 9·2 | | 32·6 | 32·3 | g |
| 9·5† | 20 | 50·0 | 53·1 | g |
| 9·8 | | 56·5 | 23·2 | |
| 10·0‡ | 21 | 3·0 | 33·0 | |
| 9·6 | | 13·0 | 24·1 | |
| 9·5 | | 30·2 | 22·1 | g |
| 8·8 | | 32·5 | 31·1 | 9·5 g |
| 9·6 | | 50·0 | 10·8 | g |
| 10·0‡ | 22 | 3·5 | 56·8 | |
| 9·8 | | 9·5 | 5·8 | |
| 10·1‡ | | 13·0 | 33·4 | |
| 10·1‡ | | 14·5 | 52·0 | |
| 10·1‡ | | 35·0 | 59·9 | |
| 9·8‡ | | 52·0 | 44·1 | |
| 9·3 | 23 | 3·0 | 8·7 | g |
| 9·2 | | 25·5 | 21·2 | g |
| 10·1‡ | 24 | 13·5 | 36·7 | |
| 9·7 | | 37·5 | 17·0 | |
| 9·5‡ | | 52·0 | 56·9 | g |
| 9·4‡ | 25 | 6·5 | 37·0 | |
| 9·2‡ | | 27·0 | 40·3 | |
| 9·6 | | 30·0 | 2·4 | |
| 8·8 | | 33·5 | 25·0 | g |
| 10·0 | | 47·7 | 31·1 | |
| 10·0‡ | 26 | 16·0 | 51·4 | |
| 9·6 | | 19·0 | 7·3 | |
| 9·5‡ | | 54·0 | 37·0 | |
| 9·2 | 27 | 11·5 | 34·2 | g |
| 10·0 | | 35·5 | 16·8 | |

25 prec.

| h | m | α − s | δ + ′ |
|---|---|---|---|
| 4 | 50 | 0 | 2·5 |
| 5 | 0 | 1 | 2·2 |
| | 10 | 2 | 1·8 |
| | 20 | 3 | 1·5 |
| | 30 | 3 | 1·1 |
| | 40 | 4 | 0·7 |
| | 50 | 4 | 0·4 |
| 6 | 0 | 4 | 0·0 |
| | | | − |
| | 10 | 4 | 0·4 |
| | 20 | 4 | 0·7 |
| | 30 | 3 | 1·1 |



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| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | s | ′ |
| | | − | − |
| 6 | 20 | 4 | 0.7 |
| | 30 | 3 | 1.1 |
| | 40 | 3 | 1.5 |
| | 50 | 2 | 1.8 |
| 7 | 0 | 1 | 2.2 |
| | 10 | 0 | 2.5 |
| | | + | |
| | 20 | 1 | 2.9 |
| | 30 | 2 | 3.2 |
| | 40 | 4 | 3.5 |
| | 50 | 5 | 3.9 |
| 8 | 0 | 7 | 4.2 |

**601—660.**

| mag. | 6h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9.2 | 27 | 45.5 | 18.2 | g |
| 9.1 | 28 | 10.0 | 15.4 | g |
| 9.8 | | 30.5 | 7.5 | |
| 9.7 | | 45.0 | 9.0 | |
| 9.2‡ | | 56.0 | 56.2 | 9.0 g |
| 10.0 | 29 | 25.0 | 2.8 | |
| 9.8 | | 42.0 | 7.9 | |
| 10.0 | 30 | 10.5 | 11.3 | |
| 8.9 | | 51.0 | 30.6 | 9.0 g |
| 8.9 | | 56.0 | 1.9 | 9.0 g |
| 8.4 | 31 | 32.0 | 29.2 | 8.0 Gg |
| 9.7 | | 32.0 | 6.1 | |
| 9.8‡ | | 39.0 | 47.1 | |
| 9.9‡ | | 48.0 | 46.5 | |
| 9.8‡ | 32 | 4.5 | 45.1 | |
| 9.9‡ | | 22.5 | 44.8 | |
| 9.5 | | 27.5 | 18.7 | |
| 10.1‡ | 33 | 10.0 | 53.5 | |
| 9.5 | | 22.5 | 7.6 | |
| 9.8‡ | | 35.5 | 39.3 | |
| 9.2 | | 41.5 | 14.6 | |
| 9.9‡ | 34 | 3.0 | 48.2 | |
| 10.0 | | 5.5 | 30.0 | |
| 9.4 | | 24.0 | 7.1 | |
| 10.0‡ | | 51.5 | 50.0 | |
| 10.0 | | 58.0 | 16.3 | |
| 9.7 | 35 | 11.0 | 25.9 | |
| 8.8 | | 30.0 | 7.1 | 8.5 Gg |
| 9.6 | | 36.5 | 13.8 | |
| 8.8‡ | | 59.0 | 40.2 | 9.5 g |
| 9.8 | 36 | 3.5 | 30.9 | |
| 9.7 | | 33.0 | 22.0 | |
| 10.0‡ | | 55.5 | 57.4 | |
| 8.6 | 37 | 18.5 | 21.4 | g |
| 10.0‡ | | 19.0 | 59.5 | |
| 9.7 | | 20.0 | 27.9 | |
| 10.0‡ | | 33.0 | 39.4 | |
| 9.6 | | 33.0 | 0.7 | |
| 9.3 | | 55.5 | 8.8 | |
| 9.7 | 38 | 42.0 | 32.1 | |
| 10.0 | 39 | 7.0 | 6.1 | |
| 10.0 | | 39.0 | 16.6 | |
| 9.8‡ | 40 | 10.0 | 47.8 | |
| 10.0‡ | 42 | 0.0 | 38.9 | |
| 6.8‡ | | 43.0 | 43.0 | GSg |
| 9.6 | 43 | 14.0 | 25.9 | |
| 10.0 | | 14.5 | 21.1 | |
| 10.0‡ | | 29.5 | 36.2 | |
| 10.0 | | 33.0 | 5.3 | |
| 8.5 | 44 | 29.0 | 34.1 | g |
| 10.0‡ | | 43.5 | 47.0 | |
| 8.6‡ | 45 | 16.0 | 41.3 | g |
| 9.4 | | 23.0 | 18.0 | |
| 9.4‡ | | 30.0 | 47.1 | g |
| 9.4 | | 35.5 | 29.7 | |
| 10.0 | | 49.5 | 32.1 | |
| 9.4 | 46 | 12.0 | 22.4 | |
| 9.6 | | 39.5 | 17.1 | g |
| 9.2 | | 44.5 | 12.0 | g |
| 10.0‡ | | 52.5 | 42.0 | 9.5 g |

**661—720.**

| mag. | 6h.–7h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10.0‡ | 47 | 27.0 | 43.2 | 9.5 |
| 10.0‡ | 48 | 1.0 | 56.3 | |
| 9.7 | | 17.5 | 34.9 | |
| 8.7 | 49 | 13.5 | 12.1 | 8.2 g |
| 10.0 | | 19.8 | 1.5 | |
| 9.4‡ | | 21.0 | 53.6 | g |
| 9.7 | | 26.8 | 0.9 | |
| 9.4 | | 28.5 | 13.0 | g |
| 9.7 | | 55.5 | 7.5 | 9.5 g |
| 8.8 | | 56.5 | 31.9 | 9.0 g |
| 9.8 | 50 | 49.5 | 23.4 | |
| 9.6 | 51 | 48.5 | 6.8 | |
| 10.0‡ | 52 | 1.0 | 51.0 | |
| 9.5 | | 14.0 | 34.5 | |
| 8.6‡ | 54 | 30.5 | 59.9 | g |
| 9.6‡ | 55 | 8.0 | 44.0 | g |
| 9.1 | | 45.0 | 14.1 | g |
| 8.9 | 56 | 50.0 | 3.5 | 9.2 g |
| 9.4– | 57 | 17.9 | 0.4 | g |
| 10.0‡ | | 59.0 | 55.0 | |
| 10.0‡ | 58 | 7.0 | 37.1 | |
| 9.5 | | 28.7 | 14.1 | g |
| 9.7 | | 50.5 | 33.1 | |
| 9.7 | 59 | 11.0 | 32.5 | |
| 10.0‡ | | 44.0 | 47.8 | |
| 6.8‡ | 0 | 2.0 | 44.7 | 6.0 GScgg |
| 9.0 | | 25.3 | 5.7 | g |
| 9.2 | | 38.7 | 21.8 | |
| 9.4‡ | 1 | 1.0 | 42.0 | 9.5 |
| 9.7 | 2 | 31.0 | 11.2 | |
| 9.8‡ | | 51.0 | 36.4 | |
| 9.4 | | 59.5 | 34.1 | |
| 9.0 | 3 | 2.5 | 12.3 | g |
| 9.4‡ | | 8.0 | 49.5 | g |
| 9.7 | | 8.5 | 11.3 | |
| 9.7 | | 39.5 | 25.9 | |
| 9.2 | 4 | 28.5 | 30.3 | |
| 9.7 | | 29.5 | 14.8 | |
| 9.9‡ | | 52.0 | 39.6 | |
| 10.2† | 5 | 46.5 | 59.1 | |
| 10.3† | | 59.5 | 55.7 | |
| 10.3† | 6 | 9.0 | 59.8 | |
| 9.4† | | 43.2 | 46.6 | |
| 10.3† | | 50.0 | 50.2 | |
| 10.0† | | 50.5 | 51.7 | |
| 9.3 | | 54.5 | 5.7 | 9.0 g |
| 9.7 | | 55.5 | 13.2 | |
| 9.6 | 7 | 25.4 | 25.6 | |
| 9.4 | | 26.5 | 12.2 | |
| 7.6† | | 54.8 | 44.1 | 8.5 GSgg |
| 10.2† | 9 | 5.0 | 28.3 | |
| 9.6 | | 14.0 | 22.4 | |
| 10.4† | | 23.0 | 59.9 | |
| 9.1 | 10 | 0.5 | 8.5 | |
| 10.4† | | 27.5 | 36.7 | |
| 9.7 | | 30.0 | 20.1 | |
| 10.4† | | 32.5 | 32.1 | |
| 9.6 | | 46.8 | 1.0 | |
| 8.4† | 11 | 6.0 | 44.9 | 7.5 GSg |
| 7.9 | 12 | 16.5 | 33.6 | 7.5 GSg |

**721—780.**

| mag. | 7h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9.5 | 12 | 29.5 | 26.6 | 9.5 |
| 9.7 | 13 | 29.5 | 5.0 | |
| 9.0 | 14 | 19.0 | 27.3 | 8.5 g |
| 9.6 | | 44.0 | 23.8 | |
| 9.5 | | 48.5 | 9.0 | |
| 8.2† | 15 | 2.5 | 50.5 | 8.2 Gg |
| 9.7 | | 20.0 | 13.7 | |
| 9.4† | | 35.0 | 49.1 | 9.2 G |
| 9.9† | | 50.5 | 54.6 | |
| 5.5† | 16 | 52.0 | 43.6 | 4.0 GScgtλ |
| 8.8† | 17 | 19.0 | 40.0 | 9.3 g |
| 9.8† | | 42.5 | 50.8 | |
| 9.8† | | 49.0 | 52.4 | g |
| 9.7 | 18 | 1.0 | 26.9 | |
| 9.1 | 19 | 6.5 | 8.9 | g |
| 9.3 | | 18.5 | 18.0 | g |
| 9.5 | | 43.0 | 15.3 | |
| 10.2† | 20 | 38.0 | 44.7 | |
| 9.5 | 21 | 11.5 | 3.1 | 9.8 g |
| 9.8† | | 44.5 | 55.0 | g |
| 8.5 | 22 | 16.5 | 3.2 | 9.0 g |
| 8.7 | | 41.5 | 7.2 | 8.2 g |
| 9.7 | | 59.5 | 28.5 | |
| 9.7 | 23 | 4.5 | 13.3 | |
| 9.6† | | 9.5 | 38.4 | |
| 7.9† | | 28.5 | 46.3 | g |
| 9.6 | | 50.0 | 21.1 | |
| 10.4† | | 59.5 | 31.0 | |
| 9.0 | 24 | 12.5 | 27.1 | g |
| 9.8† | | 19.5 | 57.1 | |
| 9.3 | | 55.5 | 5.2 | |
| 9.7 | | 56.5 | 19.6 | |
| 10.3† | 25 | 1.5 | 30.4 | |
| 9.3 | | 15.0 | 12.1 | |
| 9.7 | 26 | 15.5 | 10.4 | |
| 9.7† | | 23.0 | 41.3 | |
| 9.8† | 27 | 0.5 | 42.0 | |
| 9.7 | | 50.0 | 21.4 | |
| 9.1† | | 54.5 | 53.8 | g |
| 9.7 | 28 | 6.0 | 7.7 | |
| 9.7 | | 16.0 | 4.1 | |
| 10.3† | | 26.5 | 51.0 | |
| 8.5† | 29 | 32.0 | 53.3 | 9.0 g |
| 10.4† | | 48.0 | 28.9 | |
| 10.4† | | 54.5 | 53.6 | |
| 10.4† | | 56.5 | 27.2 | |
| 9.3 | 30 | 19.5 | 33.3 | |
| 9.6 | | 30.0 | 31.2 | |
| 9.5 | | 49.5 | 4.1 | |
| 9.1 | | 50.0 | 16.4 | g |
| 8.8 | | 59.7 | 33.0 | 9.5 g |
| 9.7 | 31 | 13.0 | 0.9 | |
| 8.9 | | 55.0 | 8.2 | 8.8 g |
| 10.4† | 32 | 1.0 | 38.6 | |
| 9.7 | | 10.0 | 15.8 | |
| 9.7 | | 47.0 | 27.9 | |
| 9.6 | 33 | 27.0 | 23.9 | |
| 9.9† | 34 | 0.5 | 42.5 | |
| 10.4† | | 33.0 | 59.9 | |
| 10.4† | | 39.5 | 30.8 | |

**781—840.**

| mag. | 7h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9.2 | 35 | 13.5 | 15.2 | |
| 8.7 | | 31.3 | 0.9 | 8.0 g |
| 9.1 | | 43.5 | 14.0 | g |
| 9.2† | | 54.5 | 36.8 | g |
| 7.5 | | 56.5 | 5.7 | 7.5 GSg |
| 8.6 | 36 | 18.5 | 19.4 | g |
| 9.6 | 37 | 25.0 | 6.1 | |
| 7.9 | | 52.7 | 9.5 | 7.5 GSg |
| 9.0 | 38 | 11.3 | 11.2 | 9.5 |
| 9.8† | | 27.0 | 39.9 | |
| 7.6† | | 30.5 | 58.9 | 8.5 g |
| 8.9 | | 35.7 | 10.1 | 9.0 |
| 10.3† | 39 | 26.0 | 50.1 | |
| 9.7– | | 55.0 | 27.4 | |
| 10.0† | 40 | 17.5 | 58.9 | |
| 9.0† | | 19.0 | 58.4 | g |
| 9.0 | | 20.5 | 13.8 | |
| 9.4 | 41 | 9.2 | 21.2 | |
| 8.5 | | 14.3 | 22.8 | Gg |
| 9.6 | | 15.5 | 7.2 | |
| 8.9 | | 29.5 | 23.9 | g |
| 9.2† | | 36.5 | 43.8 | |
| 9.0† | 42 | 1.5 | 48.2 | g |
| 10.4† | | 6.5 | 41.4 | |
| 9.5 | 44 | 23.0 | 19.2 | |
| 10.4† | | 31.0 | 48.1 | |
| 9.2† | 45 | 11.0 | 49.2 | |
| 9.7 | | 13.0 | 0.1 | |
| 8.8 | | 22.0 | 13.9 | 9.0 g |
| 10.4† | | 26.0 | 49.0 | |
| 8.0 | | 37.0 | 7.4 | 8.2 GSg |
| 9.6 | | 42.5 | 21.6 | |
| 9.7 | | 53.5 | 17.6 | |
| 9.7 | 46 | 1.5 | 31.1 | |
| 9.1 | | 24.0 | 26.1 | |
| 9.5 | | 24.0 | 16.9 | |
| 9.7 | 47 | 27.5 | 24.6 | |
| 10.3† | | 40.5 | 36.4 | |
| 9.7 | | 46.0 | 15.9 | |
| 9.8† | 48 | 2.8 | 55.1 | |
| 8.9 | | 18.0 | 7.5 | 8.5 g |
| 10.2† | | 25.3 | 54.7 | |
| 9.1 | | 33.0 | 1.1 | |
| 10.3† | | 53.8 | 56.1 | |
| 9.8† | | 56.2 | 46.1 | |
| 8.3† | | 56.5 | 47.2 | 9.0 g |
| 9.7 | 49 | 7.0 | 21.9 | |
| 9.7 | | 22.5 | 23.0 | |
| 9.9† | | 26.5 | 38.3 | |
| 8.3 | 50 | 35.5 | 20.9 | GSg |
| 9.7 | 51 | 44.5 | 8.1 | |
| 10.4† | | 52.0 | 51.3 | |
| 9.7 | | 54.0 | 10.0 | |
| 9.7 | | 59.5 | 7.1 | |
| 10.4† | 52 | 5.5 | 36.4 | |
| 9.1 | | 59.0 | 12.9 | |
| 10.0‡ | 53 | 11.5 | 41.7 | |
| 8.8 | | 21.0 | 7.6 | 9.0 g |
| 8.8‡ | | 22.3 | 40.7 | 9.5 g |
| 9.5 | | 29.0 | 13.1 | |

### 841—900.

| mag. | $7^{h}$–$8^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4‡ | 53 | 54·0 | 47·4 | |
| 9·7 | | 55·0 | 10·9 | |
| 9·0‡ | 54 | 3·8 | 48·9 | 9·5 *g* |
| 10·0‡ | | 33·7 | 58·1 | |
| 9·7 | 55 | 25·5 | 31·5 | |
| 9·7 | | 29·5 | 2·5 | |
| 9·7 | | 39·0 | 12·2 | |
| 9·4 | | 46·2 | 24·6 | |
| 9·7 | | 47·0 | 10·6 | |
| 8·8 | 56 | 3·7 | 26·1 | *g* |
| 9·2‡ | | 13·5 | 44·4 | |
| 9·2 | | 41·5 | 21·1 | 9·5 *g* |
| 9·4 | 57 | 2·0 | 2·5 | |
| 8·8 | | 19·5 | 20·0 | 9·0 *g* |
| 9·7 | | 42·0 | 2·7 | |
| 10·0‡ | | 46·0 | 36·1 | |
| 9·7 | 58 | 15·0 | 28·1 | |
| 8·4 | | 23·5 | 20·2 | 8·5 *g* |
| 10·0‡ | | 40·0 | 57·0 | |
| 9·8‡ | 59 | 38·0 | 36·3 | |
| 9·7 | 0 | 2·0 | 12·7 | |
| 9·9‡ | | 5·5 | 48·0 | |
| 10·0‡ | | 40·0 | 57·6 | |
| 9·7 | | 51·0 | 11·1 | |
| 8·8 | 1 | 45·0 | 22·0 | *g* |
| 8·2 | | 48·0 | 26·4 | *g* |
| 9·8‡ | | 53·0 | 55·8 | |
| 9·4 | | 56·5 | 11·1 | *g* |
| 9·7 | 2 | 13·0 | 29·0 | |
| 9·3 | | 21·5 | 11·1 | |
| 10·0‡ | 4 | 10·0 | 30·4 | |
| 9·6 | | 16·5 | 0·9 | |
| 9·9‡ | | 34·0 | 44·0 | |
| 9·7‡ | | 37·0 | 36·2 | |
| 9·7 | 5 | 41·0 | 30·4 | |
| 9·7 | 6 | 0·5 | 9·1 | |
| 9·8‡ | | 32·0 | 48·4 | |
| 9·7 | 7 | 0·0 | 12·2 | |
| 9·3 | | 47·5 | 23·9 | |
| 9·7‡ | | 50·0 | 49·2 | *g* |
| 9·3 | 8 | 14·0 | 12·2 | |
| 9·7 | | 19·5 | 3·6 | |
| 9·7 | | 28·0 | 18·1 | |
| 9·7 | | 43·0 | 22·9 | |
| 9·5 | 9 | 28·0 | 6·7 | |
| 9·6 | | 31·0 | 13·0 | |
| 9·4 | | 48·5 | 29·9 | |
| 9·2 | 10 | 1·0 | 30·0 | |
| 8·8 | | 26·5 | 17·3 | *g* |
| 9·1 | | 38·5 | 23·0 | |
| 9·9‡ | 11 | 11·5 | 51·3 | |
| 9·0 | | 19·5 | 7·9 | 9·0 *g* |
| 9·2‡ | 12 | 9·2 | 58·9 | |
| 8·8 | | 27·0 | 8·7 | 8·2 G*g* |
| 9·6 | | 42·0 | 21·0 | |
| 10·0‡ | | 51·5 | 41·9 | |
| 9·4 | 13 | 48·0 | 16·1 | |
| 10·0‡ | | 48·5 | 45·1 | |
| 10·0‡ | 14 | 2·5 | 45·4 | |
| 9·7 | | 27·5 | 12·9 | |

### 901—960.

| mag. | $8^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4‡ | 14 | 53·0 | 41·8 | |
| 9·6 | 15 | 41·5 | 27·4 | G |
| 9·6‡ | | 50·5 | 52·0 | *g* |
| 9·4‡ | | 58·0 | 54·7 | |
| 9·5‡ | 16 | 8·5 | 45·6 | |
| 9·7 | | 9·5 | 5·0 | |
| 10·0‡ | | 26·0 | 30·7 | |
| 9·8‡ | | 38·5 | 41·1 | |
| 9·7 | | 52·0 | 28·0 | |
| 9·9‡ | 17 | 8·0 | 57·9 | |
| 9·3 | | 22·0 | 2·1 | |
| 9·1 | | 23·0 | 19·2 | *g* |
| 9·7‡ | | 28·0 | 45·9 | |
| 9·5 | | 28·5 | 33·7 | |
| 9·7 | | 53·3 | 24·7 | |
| 9·7 | | 58·7 | 5·2 | |
| 9·0 | 18 | 1·7 | 17·9 | *g* |
| 9·3‡ | | 43·7 | 56·4 | 9·0 *g* |
| 9·2 | | 49·7 | 11·6 | |
| 9·7 | 19 | 18·0 | 1·0 | |
| 9·4‡ | | 31·5 | 46·6 | *g* |
| 8·6‡ | | 42·0 | 45·7 | *g* |
| 9·4‡ | 21 | 6·5 | 44·0 | |
| 9·8 | | 31·5 | 19·6 | |
| 10·0 | 22 | 23·0 | 22·8 | |
| 10·0‡ | | 24·5 | 57·8 | |
| 9·5‡ | | 28·0 | 58·9 | |
| 10·0‡ | | 52·0 | 40·7 | |
| 10·0 | | 53·0 | 17·4 | |
| 9·7‡ | 23 | 50·0 | 50·0 | |
| 10·0‡ | 24 | 1·0 | 51·4 | |
| 10·0 | | 11·0 | 34·0 | |
| 9·8 | | 23·5 | 7·8 | |
| 10·0‡ | | 42·5 | 55·1 | |
| 9·2 | | 26·0 | 28·7 | |
| 9·2 | 25 | 21·0 | 27·0 | *g* |
| 9·8 | | 54·0 | 2·3 | |
| 10·0‡ | 26 | 33·0 | 53·6 | |
| 9·7 | | 45·5 | 8·0 | |
| 10·0 | 27 | 44·0 | 15·0 | |
| 10·0 | | 46·0 | 1·5 | |
| 9·8‡ | 28 | 11·5 | 55·0 | 9·5 |
| 10·0 | 29 | 2·0 | 9·3 | |
| 9·6‡ | | 47·5 | 37·0 | |
| 9·5 | | 52·5 | 15·0 | |
| 9·3‡ | 30 | 18·5 | 36·0 | *g* |
| 10·0 | | 39·5 | 13·4 | |
| 9·4‡ | | 55·5 | 58·1 | *g* |
| 8·6‡ | | 56·5 | 41·3 | 9·0 *g* |
| 10·0 | | 59·5 | 11·4 | |
| 9·8‡ | 31 | 22·0 | 43·0 | |
| 10·0 | 32 | 17·5 | 28·8 | |
| 9·4‡ | 33 | 1·5 | 52·3 | |
| 10·0 | | 10·0 | 26·4 | |
| 10·1† | | 46·5 | 49·1 | |
| 10·1† | 34 | 2·0 | 38·5 | |
| 9·5 | | 39·0 | 18·4 | |
| 10·0 | | 59·0 | 25·6 | |
| 10·0 | 35 | 5·0 | 33·0 | |
| 10·0 | | 7·5 | 13·1 | |

### 961—1020.

| mag. | $8^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 10·1† | 35 | 15·5 | 37·0 | |
| 9·6† | | 39·3 | 50·1 | |
| 10·0† | | 42·0 | 36·1 | |
| 9·1 | | 46·5 | 18·2 | *g* |
| 10·0 | 36 | 34·5 | 0·1 | |
| 9·9† | | 35·3 | 54·1 | |
| 10·0 | | 35·5 | 20·0 | |
| 9·3 | | 51·2 | 34·1 | *g* |
| 9·4† | 37 | 1·8 | 41·8 | |
| 8·8 | | 15·0 | 7·6 | 9·2 *g* |
| 9·6 | | 21·5 | 21·0 | |
| 10·0 | | 31·5 | 7·2 | |
| 8·8† | | 33·3 | 43·1 | *g* |
| 10·0 | | 58·5 | 4·7 | |
| 8·4 | | 59·0 | 23·6 | |
| 9·9 | 38 | 9·5 | 29·7 | |
| 8·0 | | 52·5 | 5·2 | 8·0 *g* |
| 8·8 | 39 | 11·8 | 9·8 | 9·0 *g* |
| 8·8 | | 14·0 | 22·3 | 8·0 *g* |
| 9·8† | | 54·0 | 46·1 | |
| 10·0 | | 55·0 | 21·1 | |
| 9·2 | 40 | 4·5 | 21·8 | 8·5 *g* |
| 10·0 | | 13·0 | 24·0 | |
| 8·8 | | 18·5 | 5·9 | |
| 9·8 | | 51·0 | 12·0 | |
| ? 9·9† | | 55·0 | 57·1 | |
| 9·1 | 42 | 15·0 | 23·9 | 9·0 |
| 9·2 | | 24·0 | 26·5 | |
| 10·0† | | 43·0 | 59·0 | |
| 8·1† | | 43·5 | 45·3 | 6·5 GSc*g* |
| 9·4 | | 48·5 | 3·0 | |
| 9·2 | 43 | 8·5 | 33·0 | |
| 9·2 | | 10·0 | 34·4 | |
| 9·2 | | 13·5 | 0·2 | |
| 9·7† | | 21·5 | 43·4 | |
| 9·0† | | 44·5 | 50·0 | 9·0 *g* |
| 9·5 | 45 | 0·0 | 31·6 | |
| 9·4† | | 42·0 | 44·0 | *g* |
| 9·1 | 46 | 25·5 | 8·0 | 8·5 *g* |
| 9·7 | | 49·0 | 0·9 | |
| 9·5 | 47 | 22·5 | 34·9 | |
| 9·9† | 48 | 13·0 | 37·1 | |
| 9·3 | | 48·2 | 27·2 | |
| 10·0 | 49 | 55·0 | 0·6 | |
| 9·4† | 50 | 0·5 | 59·7 | G*g*g |
| 10·0 | | 31·8 | 1·9 | |
| 9·5 | | 44·0 | 16·6 | |
| 10·1† | | 46·0 | 47·1 | |
| 8·9 | 51 | 22·0 | 23·7 | *g* |
| 10·1† | 52 | 23·5 | 36·1 | |
| 10·0† | | 40·5 | 39·6 | |
| 10·0† | 53 | 0·5 | 49·1 | |
| 9·1 | | 21·0 | 24·4 | 9·5 |
| 10·0 | | 40·0 | 9·2 | |
| 9·1 | 54 | 19·0 | 13·7 | 9·0 |
| 9·8 | | 46·0 | 29·1 | |
| 9·6 | 55 | 58·2 | 1·3 | |
| 7·0† | 57 | 25·0 | 39·1 | GS*g* |
| 9·0† | | 33·5 | 47·7 | G*g* |
| 9·4 | 58 | 18·2 | 27·9 | |

### 1021—1080.

| mag. | $8^{h}$–$9^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 7·5† | 58 | 22·0 | 36·3 | GS*g* |
| 8·7 | 59 | 0·0 | 26·9 | G*g* |
| 10·0 | | 12·0 | 22·6 | |
| 10·0† | | 45·0 | 44·1 | |
| 9·6 | 0 | 0·2 | 32·2 | |
| 9·5 | | 42·2 | 2·2 | |
| 9·4† | | 44·5 | 51·3 | |
| 10·1† | 1 | 2·5 | 49·2 | |
| 10·0 | | 31·5 | 13·0 | |
| 8·5 | 2 | 9·5 | 7·5 | 8·2 G*g* |
| 9·0 | 3 | 13·0 | 12·6 | |
| 10·1† | | 21·0 | 58·8 | |
| 10·0† | | 33·0 | 45·5 | |
| 8·7† | | 42·5 | 36·5 | 8·0 G*g* |
| 9·5 | | 51·0 | 18·3 | 9·0 |
| 8·8 | 4 | 0·5 | 26·7 | 9·5 *g* |
| 9·3 | | 48·5 | 1·5 | |
| 8·4† | 5 | 18·5 | 59·1 | 9·0 S*g* |
| 8·8† | | 28·0 | 44·5 | |
| 9·4 | 6 | 28·5 | 15·4 | |
| 9·4 | | 55·5 | 33·1 | *g* |
| 10·0† | 8 | 28·0 | 39·1 | |
| 9·0† | | 33·5 | 48·3 | *g* |
| 9·5 | 9 | 4·5 | 6·9 | |
| 9·4† | | 31·0 | 44·9 | |
| 9·5 | 10 | 0·5 | 24·5 | |
| 7·6 | | 3·5 | 12·4 | 8·0 GS*g* |
| 9·4 | | 4·5 | 22·7 | |
| 9·4 | | 59·5 | 9·8 | |
| 9·4. | 11 | 41·0 | 18·0 | |
| 10·0† | 12 | 18·5 | 57·2 | |
| 9·9† | | 45·0 | 47·0 | |
| 8·2† | | 52·5 | 45·9 | 8·0 *g* |
| 10·0† | | 52·5 | 28·1 | |
| 9·2 | 13 | 8·0 | 33·9 | 9·5 |
| 9·5 | | 20·5 | 35·0 | 9·0 *g* |
| 9·5 | | 54·0 | 1·2 | |
| 8·8† | 14 | 50·0 | 41·3 | |
| 9·5 | 15 | 0·0 | 26·0 | |
| 9·0† | | 11·0 | 38·8 | 10·0 |
| 8·4 | | 12·0 | 9·0 | 6·6 GS*g* |
| 9·6† | 16 | 22·1 | 39·1 | 9·0 *g* |
| 9·0 | | 30·5 | 0·5 | 9·5 |
| 9·2† | | 44·5 | 55·3 | |
| 9·1 | | 58·5 | 9·0 | |
| 9·0 | 17 | 4·5 | 12·0 | |
| 8·9 | | 32·0 | 16·6 | *g* |
| 9·4† | 18 | 27·0 | 50·3 | G*g* |
| 9·6‡ | | 32·0 | 50·0 | |
| 8·5‡ | | 42·8 | 49·7 | G*g* |
| 8·7‡ | | 50·8 | 35·6 | *g* |
| 9·4‡ | 19 | 21·5 | 57·3 | |
| 9·3 | 20 | 11·2 | 31·0 | |
| 9·5‡ | | 41·3 | 53·1 | |
| 9·4‡ | 21 | 10·2 | 46·1 | |
| 9·6‡ | | 37·5 | 48·5 | |
| 8·9 | | 43·0 | 22·0 | *g* |
| 8·9‡ | 22 | 21·0 | 39·1 | |
| 9·2 | | 33·5 | 14·2 | |
| 8·3 | | 49·5 | 23·0 | *g* |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 7 | 50 | 5 | 3·9 |
| 8 | 0 | 7 | 4·2 |
| | 10 | 9 | 4·5 |
| | 20 | 11 | 4·8 |
| | 30 | 13 | 5·1 |
| | 40 | 15 | 5·4 |
| | 50 | 17 | 5·6 |
| 9 | 0 | 20 | 5·9 |
| | 10 | 22 | 6·2 |
| | 20 | 25 | 6·4 |
| | 30 | 28 | 6·6 |



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25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 9 | 20 | 25 | 6·4 |
| | 30 | 28 | 6·6 |
| | 40 | 31 | 6·8 |
| | 50 | 33 | 7·0 |
| 10 | 0 | 36 | 7·2 |
| | 10 | 40 | 7·4 |
| | 20 | 43 | 7·6 |
| | 30 | 46 | 7·7 |

**1081—1140.**

| mag. | $9^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·3‡ | 22 | 55·5 | 45·0 | |
| 8·6‡ | 23 | 12·3 | 49·3 | *g* |
| 9·0‡ | | 56·3 | 52·0 | *g* |
| 9·6‡ | 24 | 30·8 | 45·7 | |
| 9·6‡ | 25 | 32·5 | 32·0 | |
| 8·3 | | 47·0 | 28·0 | *g* |
| 9·6‡ | 26 | 53·5 | 56·1 | |
| 9·3‡ | 27 | 29·3 | 43·2 | |
| 8·4‡ | 28 | 40·3 | 38·0 | 9·0 *g* |
| 9·1‡ | 29 | 13·0 | 56·6 | 8·5 *g* |
| 9·2‡ | | 22·0 | 47·3 | 9·0 *g* |
| 9·5‡ | 30 | 0·0 | 56·8 | |
| 9·2‡ | | 29·0 | 41·1 | |
| 8·4 | | 29·0 | 5·2 | G*g* |
| 9·2‡ | | 57·5 | 57·1 | |
| 9·5 | 31 | 37·5 | 34·0 | |
| 9·6‡ | 33 | 3·0 | 54·7 | |
| 7·5‡ | | 22·5 | 39·0 | 8·0 GS*g* |
| 9·1 | 34 | 45·0 | 24·8 | 9·0 *g* |
| 9·5‡ | 35 | 20·0 | 32·8 | |
| 9·5 | | 52·5 | 21·2 | |
| 8·6 | 36 | 39·0 | 0·5 | 8·3 *g* |
| 9·5 | 37 | 19·5 | 25·7 | |
| 9·5 | | 20·3 | 27·4 | |
| 9·5– | | 28·5 | 13·9 | 8·5 |
| 9·6‡ | 38 | 3·5 | 58·5 | |
| 8·4‡ | | 55·5 | 52·3 | 9·2 |
| 9·9 | 39 | 6·0 | 13·9 | |
| 9·3‡ | | 8·5 | 47·1 | |
| 8·7 | | 9·2 | 22·1 | 8·5 *g* |
| 7·1‡ | | 12·5 | 56·1 | 7·2 GS*g* |
| 9·1‡ | | 43·5 | 58·0 | 10·0 |
| 9·0‡ | 40 | 8·5 | 52·1 | 8·2 *g* |
| 9·9 | | 23·5 | 17·1 | |
| 9·9 | | 46·0 | 22·7 | |
| 9·6‡ | 41 | 18·5 | 59·0 | |
| 9·5 | | 40·0 | 24·2 | |
| 9·2 | | 54·0 | 7·1 | G |
| 9·9 | 42 | 2·5 | 3·9 | |
| 9·3‡ | | 22·5 | 44·9 | |
| 9·6 | | 25·7 | 34·1 | |
| 9·4 | | 35·7 | 10·5 | |
| 9·9 | | 43·0 | 5·9 | |
| 9·9 | | 57·0 | 2·3 | |
| 9·4‡ | 43 | 7·0 | 37·6 | |
| 9·5‡ | | 22·0 | 47·5 | |
| 9·9 | | 36·5 | 23·4 | |
| 9·9 | | 36·5 | 21·9 | |
| 8·7 | | 40·5 | 5·0 | 8·2 *g* |
| 9·7 | | 52·5 | 20·3 | |
| 9·6 | 44 | 3·5 | 18·9 | |
| 9·6‡ | | 9·0 | 46·1 | |
| 9·5 | | 11·0 | 4·1 | |
| 9·6‡ | | 11·0 | 50·9 | |
| 9·4 | | 14·0 | 33·1 | |
| 9·2 | | 19·0 | 5·7 | 9·0 |
| 9·2 | | 19·0 | 14·9 | |
| 9·2 | | 39·0 | 1·5 | 9·0 |
| 8·2‡ | | 41·0 | 41·7 | 8·0 *g* |
| 9·9 | | 50·0 | 5·3 | |

**1141—1200.**

| mag. | $9^{h}$–$10^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·0 | 44 | 56·5 | 28·4 | 8·5 *g* |
| 9·4 | | 58·0 | 18·7 | |
| 9·4 | 45 | 10·5 | 18·6 | |
| 9·6 | | 19·0 | 7·5 | |
| 9·6‡ | | 51·0 | 42·9 | |
| 9·2 | 46 | 0·5 | 21·9 | |
| 9·4‡ | | 20·5 | 43·8 | |
| 9·3 | 47 | 9·5 | 28·9 | |
| 7·7‡ | | 20·0 | 50·1 | 7·0 GS*g* |
| 9·6 | | 31·0 | 16·9 | |
| 9·6 | | 31·5 | 27·5 | |
| 9·4 | | 47·0 | 30·9 | |
| 9·9 | | 47·5 | 0·9 | |
| 9·4‡ | 48 | 6·0 | 45·9 | |
| 9·6‡ | | 7·0 | 46·9 | |
| 9·2 | | 41·2 | 29·4 | |
| 9·6 | | 42·5 | 25·6 | |
| 8·3 | 49 | 30·5 | 0·6 | 8·2 *g* |
| 9·2 | | 52·0 | 30·1 | 9·0 |
| 8·8‡ | 50 | 2·0 | 45·0 | 9·0 *g* |
| 9·0‡ | | 2·5 | 48·8 | 8·8 *g* |
| 9·2 | | 16·0 | 9·6 | 9·0 *g* |
| 9·8 | | 47·5 | 18·1 | |
| 9·4‡ | 51 | 6·5 | 41·4 | |
| 8·8 | | 29·0 | 7·7 | 8·8 *g* |
| 9·9 | | 38·0 | 29·8 | |
| 9·0‡ | 53 | 16·0 | 55·8 | |
| 9·2 | 54 | 3·5 | 18·0 | *g* |
| 9·6 | | 18·5 | 0·0 | |
| 9·8 | | 33·5 | 23·2 | |
| 9·6‡ | | 48·0 | 56·1 | |
| 9·5 | 55 | 5·0 | 20·0 | 9·0 |
| 9·6 | | 19·5 | 28·4 | |
| 9·6 | | 42·0 | 30·3 | |
| 9·4‡ | | 49·0 | 51·3 | |
| 9·7 | 56 | 1·0 | 28·1 | |
| 8·9‡ | | 4·0 | 53·8 | 9·0 |
| 8·7 | | 55·5 | 4·0 | 8·8 *g* |
| 8·8 | 57 | 18·5 | 32·9 | 8·0 *g* |
| 9·6‡ | | 20·0 | 35·6 | 9·2 |
| 9·8 | | 20·0 | 24·8 | |
| 9·6 | | 48·5 | 30·4 | |
| 9·9 | 58 | 39·0 | 15·3 | |
| 9·4 | 59 | 10·0 | 12·8 | |
| 9·0 | | 12·0 | 21·2 | 9·0 |
| 9·9 | | 38·0 | 30·0 | |
| 9·6‡ | 0 | 14·0 | 55·6 | |
| 9·6‡ | | 26·0 | 51·2 | |
| 9·5‡ | | 55·0 | 38·2 | |
| 9·2‡ | 1 | 17·0 | 48·0 | |
| 9·3 | | 21·5 | 23·3 | |
| 9·9 | 2 | 15·0 | 1·4 | |
| 9·3‡ | | 15·5 | 48·7 | 9·5 |
| 9·3 | | 27·5 | 23·1 | |
| 9·6 | | 30·5 | 23·8 | |
| 9·2 | | 34·0 | 10·1 | |
| 9·7 | | 48·5 | 34·9 | |
| 7·9‡ | | 49·0 | 41·4 | 7·8 GS*g* |
| 9·9 | | 53·0 | 10·0 | |
| 9·2 | | 56·0 | 1·9 | 9·0 *g* |

**1201—1260.**

| mag. | $10^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·2 | 3 | 21·0 | 22·8 | 9·5 |
| 9·9 | | 53·5 | 31·4 | |
| 9·9 | 4 | 3·5 | 20·2 | |
| 8·4‡ | | 24·5 | 44·0 | 8·8 *g* |
| 9·5 | | 40·5 | 23·4 | |
| 9·8 | | 47·3 | 1·7 | |
| 8·8‡ | | 55·0 | 42·8 | 8·0 *g* |
| 9·8 | 5 | 34·0 | 32·8 | |
| 9·8† | | 44·5 | 40·2 | |
| 8·7† | | 52·0 | 53·2 | 8·5 |
| 9·9 | | 59·5 | 21·1 | |
| 9·6 | 6 | 8·0 | 21·9 | |
| 8·6† | | 17·5 | 41·4 | 8·2 *g* |
| 9·4† | | 33·5 | 58·4 | |
| 9·9 | | 34·0 | 21·8 | |
| 7·3 | 7 | 14·5 | 13·6 | 7·3 GS*g* |
| 9·0 | | 19·0 | 23·1 | 9·2 |
| 9·9† | | 19·0 | 58·5 | |
| 9·2 | | 28·5 | 16·4 | 10·0 |
| 9·9† | | 30·0 | 45·0 | |
| 9·9 | | 52·0 | 29·1 | |
| 8·2 | | 57·0 | 16·4 | 7·0 GS*g* |
| 9·9 | | 58·4 | 29·1 | |
| 9·1 | 8 | 8·5 | 22·1 | 9·4 |
| 9·0† | | 14·5 | 39·5 | |
| 8·9† | | 43·2 | 41·2 | |
| 9·4 | | 48·0 | 20·0 | 9·5 |
| 9·9† | | 55·0 | 48·1 | |
| 9·9 | | 57·0 | 18·2 | |
| 9·4† | 9 | 3·0 | 38·2 | |
| 8·6 | | 3·0 | 27·0 | 8·0 |
| 9·9† | | 7·5 | 49·7 | |
| 9·4 | | 12·5 | 15·4 | 9·5 |
| 9·9 | | 35·5 | 34·1 | |
| 9·9 | | 37·0 | 30·8 | |
| 9·8† | | 37·5 | 51·0 | |
| 9·9† | 10 | 1·5 | 31·2 | |
| 9·9† | | 6·0 | 51·9 | |
| 7·2 | | 31·0 | 26·3 | 7·0 GS*g* |
| 9·9 | | 33·0 | 22·2 | 9·0 |
| 9·0 | | 34·5 | 22·1 | 9·0 |
| 9·8 | | 57·0 | 32·7 | |
| 8·4† | | 57·5 | 41·3 | 8·5 *g* |
| 9·9 | 11 | 4·5 | 32·8 | |
| 9·4 | | 9·0 | 33·0 | |
| 9·4† | | 20·0 | 36·6 | 8·5 |
| 9·9† | | 22·5 | 54·2 | |
| 9·9† | | 26·0 | 45·4 | |
| 9·9† | | 27·5 | 53·2 | |
| 9·9† | | 51·5 | 35·0 | |
| 9·7† | | 52·5 | 45·4 | |
| 9·3† | | 54·5 | 45·4 | |
| 9·0† | | 58·5 | 44·0 | |
| 9·8 | 12 | 6·5 | 27·1 | |
| 9·9 | | 21·5 | 27·7 | |
| 9·5† | | 24·5 | 46·2 | |
| 9·6† | | 30·5 | 53·6 | |
| 9·8† | | 31·5 | 47·2 | |
| 9·8† | | 45·0 | 49·0 | |
| 9·4† | | 57·0 | 51·9 | : |

**1261—1320.**

| mag. | $10^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·8 | 12 | 59·5 | 29·4 | |
| 9·7† | 13 | 15·5 | 56·1 | |
| 9·8† | | 24·5 | 47·2 | |
| 9·7 | | 36·5 | 16·0 | |
| 9·4† | | 38·0 | 57·2 | *g* |
| 8·4 | | 54·7 | 31·1 | |
| 9·3 | 14 | 4·5 | 34·8 | |
| 9·3† | | 17·5 | 57·2 | |
| 9·8† | | 40·0 | 43·8 | |
| 9·4† | | 46·5 | 53·6 | |
| 9·7† | | 50·0 | 53·9 | |
| 9·2 | | 54·5 | 24·1 | 9·5 |
| 9·9 | | 58·5 | 15·3 | |
| 9·9 | 15 | 13·5 | 6·5 | |
| 9·8† | | 16·0 | 55·3 | |
| 9·6† | | 21·5 | 55·4 | |
| 9·7† | | 22·0 | 42·1 | |
| 8·9 | | 34·0 | 15·0 | |
| 9·6† | | 37·5 | 29·4 | |
| 9·4 | | 41·0 | 6·2 | |
| 9·9† | | 53·0 | 40·0 | |
| 9·2 | 16 | 1·5 | 25·3 | 9·5 |
| 8·4 | | 18·5 | 34·5 | 8·5 *g* |
| 9·3 | | 20·5 | 16·7 | 9·5 |
| 9·9† | | 29·0 | 50·8 | |
| 9·7† | | 36·5 | 40·9 | |
| 9·3† | | 37·5 | 35·5 | |
| 9·8 | | 53·0 | 17·5 | |
| 9·8 | 17 | 3·0 | 23·9 | |
| 9·6 | | 3·5 | 22·9 | |
| 9·9 | | 7·0 | 0·2 | |
| 7·6 | | 15·0 | 26·2 | 8·0 G*g* |
| 9·9† | | 20·0 | 31·5 | |
| 8·0† | | 26·5 | 40·6 | 8·0 *g* |
| 9·7† | | 31·5 | 51·4 | |
| 9·0† | | 49·0 | 44·8 | |
| 8·5 | 18 | 4·0 | 8·6 | |
| 9·9† | | 13·0 | 43·4 | |
| 9·4† | | 36·0 | 53·9 | |
| 9·3 | | 46·5 | 12·1 | |
| 9·4 | | 59·0 | 23·5 | |
| 9·2 | | 59·5 | 11·2 | |
| 9·9† | 19 | 8·5 | 33·2 | |
| 9·9† | | 23·0 | 59·8 | |
| 9·9 | | 27·7 | 7·2 | |
| 9·9† | | 33·0 | 38·1 | |
| 9·6– | | 35·3 | 1·3 | |
| 9·9† | | 36·5 | 35·0 | |
| 9·8 | | 42·5 | 29·0 | |
| 9·9 | | 47·0 | 1·7 | |
| 9·9 | | 50·0 | 7·1 | |
| 8·3† | | 51·5 | 46·4 | 9·0 G*g* |
| 8·6† | | 58·5 | 38·6 | 8·2 G*g* |
| 9·7 | 20 | 1·0 | 1·8 | |
| 9·9 | | 11·5 | 33·1 | |
| 9·8 | | 24·0 | 9·5 | |
| 9·9† | | 35·0 | 27·8 | |
| 9·6† | | 37·5 | 50·5 | |
| 9·8† | | 38·0 | 27·4 | |
| 8·6 | | 40·3 | 29·7 | 8·0 GS*g* |



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### 1321—1380.

| mag. | 10h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4† | 20 | 55·0 | 53·2 | |
| 9·8† | 21 | 5·5 | 52·9 | |
| 9·8† | | 42·5 | 55·2 | |
| 9·5 | | 50·0 | 28·0 | 9·0 |
| 9·9 | | 57·5 | 9·0 | |
| 9·8† | 22 | 0·5 | 48·3 | |
| 9·4† | | 10·0 | 49·6 | 9·5 |
| 9·6† | | 14·0 | 43·8 | |
| 9·0† | | 22·0 | 42·2 | 8·2 *g* |
| 9·9 | | 22·5 | 1·5 | |
| 9·9 | | 31·5 | 0·3 | |
| 9·4† | | 33·0 | 41·2 | |
| 9·9 | | 44·0 | 2·6 | |
| 9·9† | | 45·0 | 25·7 | |
| 9·8† | | 56·7 | 58·8 | |
| 9·4† | 23 | 19·5 | 52·8 | |
| 9·5† | | 23·0 | 46·6 | |
| 7·8† | | 30·0 | 51·7 | 8·2 *g* |
| 9·8 | | 30·5 | 19·2 | |
| 9·9† | | 32·5 | 30·5 | |
| 9·6 | | 35·5 | 27·6 | |
| 9·9 | | 44·5 | 6·6 | |
| 9·2† | | 45·0 | 39·0 | 8·5 *g* |
| 9·5 | | 56·5 | 21·4 | |
| 9·7 | 24 | 6·5 | 22·8 | |
| 9·7† | | 12·5 | 37·2 | |
| 9·9† | | 20·5 | 28·4 | |
| 9·4 | | 21·5 | 31·6 | 10·0 |
| 9·9 | | 22·0 | 12·7 | |
| 9·4† | | 29·0 | 57·3 | |
| 9·9 | | 31·5 | 34·8 | |
| 9·7† | | 33·5 | 44·9 | |
| 9·6 | | 36·5 | 24·0 | |
| 9·8† | | 42·0 | 38·2 | |
| 9·6 | | 42·5 | 26·0 | |
| 9·6† | | 45·5 | 50·7 | |
| 9·7† | | 52·0 | 41·8 | |
| 9·8† | | 55·0 | 42·2 | |
| 9·8† | 25 | 4·0 | 46·4 | |
| 9·8† | | 8·5 | 45·2 | |
| 9·4† | | 9·0 | 58·8 | |
| 9·2† | | 9·5 | 36·2 | 9·8 |
| 9·8† | | 11·5 | 52·2 | |
| 9·9 | | 36·0 | 9·0 | |
| 9·8† | | 39·0 | 47·2 | |
| 9·8 | 26 | 1·0 | 0·0 | |
| 9·9† | | 6·5 | 28·2 | |
| 7·9† | | 26·0 | 54·8 | 8·0 *g* |
| 9·9† | | 27·0 | 53·8 | |
| 9·0† | | 42·0 | 55·2 | 9·5 *g* |
| 9·6† | 27 | 4·0 | 36·4 | |
| 9·9† | | 4·5 | 28·8 | |
| 9·7† | | 4·5 | 28·5 | |
| 9·8† | | 9·0 | 41·1 | |
| 8·1 | | 19·0 | 3·7 | 7·5 GS*g* |
| 9·9† | | 20·5 | 25·8 | |
| 9·8 | | 28·0 | 25·9 | |
| 9·9† | | 30·0 | 37·8 | |
| 9·8 | | 39·5 | 20·4 | |
| 9·6† | 28 | 0·0 | 59·2 | |

### 1381—1440.

| mag. | 10h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6† | 28 | 22·0 | 43·0 | |
| 9·8† | | 24·5 | 30·8 | |
| 9·4† | | 32·5 | 57·3 | |
| 9·7 | | 47·0 | 22·0 | |
| 9·9† | | 50·0 | 48·3 | |
| 9·7 | 29 | 9·5 | 24·4 | |
| 9·0 | | 20·0 | 3·0 | 9·5 |
| 9·8 | | 21·0 | 5·1 | |
| 9·9† | | 25·0 | 41·0 | |
| 9·9† | | 34·0 | 54·2 | |
| 9·2† | | 40·5 | 57·3 | 9·0 *g* |
| 9·8 | | 47·0 | 4·9 | |
| 9·9† | | 49·0 | 57·0 | |
| 9·8† | 30 | 6·0 | 59·2 | |
| 9·6† | | 11·0 | 50·1 | |
| 9·9† | | 20·5 | 57·2 | |
| 9·2† | | 22·5 | 48·8 | 8·5 G*g* |
| 9·8 | | 25·0 | 11·3 | |
| 9·6 | | 45·5 | 2·3 | |
| 9·4† | | 54·0 | 59·1 | |
| 9·9 | 31 | 15·0 | 28·9 | |
| 9·4† | | 20·0 | 46·0 | |
| 9·9† | | 20·0 | 45·6 | |
| 9·9 | | 45·5 | 9·6 | |
| 9·5† | | 54·0 | 39·5 | |
| 9·2 | | 55·5 | 3·9 | |
| 9·9 | | 58·5 | 12·8 | |
| 9·2 | 32 | 3·0 | 1·7 | |
| 9·5† | | 8·5 | 47·2 | |
| 9·6† | | 13·0 | 52·9 | |
| 9·9 | | 25·0 | 2·0 | |
| 9·6 | | 31·5 | 24·9 | *g* |
| 9·9 | | 32·5 | 9·8 | |
| 9·8† | | 33·0 | 59·6 | |
| 9·9 | | 36·5 | 30·5 | |
| 8·6† | | 39·0 | 35·6 | *g* |
| 9·3† | | 41·0 | 54·8 | |
| 9·6 | | 42·0 | 20·9 | |
| 9·5 | | 53·5 | 31·1 | *g* |
| 9·5 | | 56·5 | 24·1 | |
| 9·9 | | 59·5 | 23·7 | |
| 9·9 | 33 | 0·0 | 4·2 | |
| 9·4† | | 0·0 | 48·1 | |
| 9·8 | | 10·0 | 28·1 | |
| 9·7† | | 14·0 | 50·8 | |
| 9·8 | | 16·0 | 33·9 | |
| 9·8 | | 17·5 | 17·1 | |
| 9·6 | | 21·5 | 28·6 | |
| 9·6† | | 23·5 | 44·2 | |
| 9·9 | | 30·5 | 12·0 | |
| 9·7† | | 50·0 | 38·2 | |
| 9·6† | | 54·0 | 38·2 | |
| 9·8† | | 54·0 | 49·2 | |
| 9·4 | 34 | 10·5 | 30·9 | *g* |
| 9·8† | | 17·0 | 55·2 | |
| 9·4† | | 23·0 | 57·0 | |
| 9·9† | | 44·0 | 46·1 | |
| 9·7 | 35 | 4·5 | 8·1 | 9·5 |
| 9·9† | | 6·0 | 55·1 | |
| 9·6 | | 15·0 | 14·0 | |

### 1441—1520.

| mag. | 10h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·8† | 35 | 35·0 | 45·4 | |
| 9·9 | | 39·5 | 21·2 | |
| 9·9 | | 43·0 | 24·6 | |
| 9·9† | 36 | 3·5 | 43·6 | |
| 9·2 | | 7·0 | 2·3 | |
| 9·9† | | 27·0 | 26·5 | |
| 9·6 | | 31·0 | 24·1 | |
| 9·5† | | 52·5 | 56·2 | |
| 9·9† | 37 | 9·5 | 48·2 | |
| 9·9† | | 9·5 | 27·2 | |
| 9·4† | | 10·0 | 36·2 | |
| 9·7† | | 15·0 | 48·8 | |
| 9·7† | | 23·5 | 55·2 | |
| 9·2 | | 31·5 | 3·3 | 8·2 G*g* |
| 9·9† | | 35·5 | 33·2 | |
| 8·9 | | 37·0 | 14·8 | 8·5 *g* |
| 9·6† | | 42·0 | 46·0 | |
| 9·9† | | 58·0 | 50·3 | |
| 8·8 | 38 | 6·0 | 14·4 | 8·5 *g* |
| 9·7 | | 14·0 | 28·1 | |
| 9·1 | | 27·0 | 23·1 | 9·5 |
| 9·9† | | 31·0 | 40·8 | |
| 9·9† | | 37·0 | 28·1 | |
| 9·5 | | 38·5 | 12·9 | 9·5 |
| 9·6 | | 38·5 | 27·1 | |
| 9·0 | | 47·5 | 7·2 | 9·5 |
| 9·9† | | 48·5 | 51·0 | |
| 9·6 | | 50·5 | 9·8 | |
| 9·4† | 39 | 9·0 | 37·2 | |
| 9·5 | | 13·5 | 26·6 | |
| 9·6 | | 20·0 | 24·2 | |
| 9·7 | | 23·5 | 6·3 | |
| 9·7 | | 38·5 | 25·6 | |
| 9·5 | | 40·5 | 32·2 | *g* |
| 9·6 | | 43·0 | 1·7 | |
| 9·8† | | 45·0 | 50·8 | |
| 9·8† | | 45·5 | 50·6 | |
| 9·2 | | 48·0 | 6·2 | 9·3 |
| 9·8 | 40 | 0·5 | 3·4 | |
| 9·9 | | 6·5 | 2·5 | |
| 9·5 | | 8·5 | 13·3 | |
| 9·9† | | 15·5 | 54·8 | |
| 8·3† | | 18·0 | 55·9 | 9·0 *g* |
| 9·6 | | 21·5 | 8·3 | |
| 8·4† | | 31·0 | 35·4 | *g* |
| 9·7† | | 31·5 | 52·2 | |
| 9·9† | | 34·0 | 51·1 | |
| 9·6 | | 40·0 | 24·0 | |
| 9·5 | 41 | 1·5 | 11·8 | |
| 9·2 | | 9·0 | 9·6 | |
| 9·9† | | 21·0 | 39·3 | |
| 9·6† | | 34·0 | 57·0 | |
| 9·9† | | 37·0 | 57·8 | |
| 8·7 | | 40·5 | 28·4 | 8·5 *g* |
| 9·8 | | 42·0 | 31·9 | |
| 9·9† | | 45·0 | 55·6 | |
| 9·9 | | 56·5 | 28·2 | |
| 8·6† | 42 | 12·5 | 39·0 | *g* |
| 9·7† | | 17·5 | 50·6 | |
| 9·9† | | 19·0 | 32·1 | |

### 1521—1580.

| mag. | 10h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6† | 42 | 19·5 | 49·9 | |
| 9·8 | | 25·0 | 28·3 | |
| 9·9† | | 30·0 | 39·0 | |
| 9·0† | | 34·0 | 35·8 | 9·0 *g* |
| 9·4 | | 38·0 | 1·9 | |
| 9·9† | | 46·5 | 47·7 | |
| 9·9† | | 50·5 | 51·1 | |
| 9·8 | | 56·0 | 29·3 | |
| 9·4 | | 58·0 | 18·0 | |
| 9·7 | 43 | 17·0 | 4·1 | |
| 9·4 | | 24·5 | 1·0 | |
| 9·8† | | 46·5 | 40·2 | |
| 9·9† | 44 | 2·0 | 44·8 | |
| 9·8† | | 3·5 | 36·0 | |
| 9·7 | | 17·5 | 28·1 | |
| 9·4 | | 20·0 | 9·3 | |
| 9·6 | | 25·0 | 30·6 | |
| 9·8 | | 40·5 | 27·3 | |
| 9·7† | | 40·5 | 48·8 | |
| 9·8† | | 42·5 | 59·9 | |
| 8·9† | | 50·0 | 38·8 | 9·5 |
| 9·9 | | 57·0 | 5·3 | |
| 8·5† | | 59·0 | 42·2 | 8·0 *g* |
| 9·7† | 45 | 1·0 | 46·1 | |
| 9·7† | | 4·0 | 32·0 | |
| 9·4† | | 8·0 | 53·2 | |
| 9·2 | | 9·0 | 21·7 | 9·5 *g* |
| 9·9† | | 20·0 | 40·0 | |
| 9·8† | | 25·0 | 42·2 | |
| 9·9† | | 29·0 | 37·2 | |
| 9·6† | | 35·5 | 44·6 | |
| 9·9† | | 38·5 | 56·8 | |
| 9·2 | | 48·5 | 27·6 | 8·0 *g* |
| 9·8† | | 59·5 | 34·4 | |
| 9·5 | 46 | 2·0 | 26·5 | 9·0 *g* |
| 9·6† | | 18·5 | 42·3 | |
| 8·4† | | 39·5 | 42·1 | 8·5 *g* |
| 9·9† | | 41·0 | 43·3 | |
| 9·4 | | 42·0 | 5·2 | |
| 9·4 | | 47·5 | 1·2 | |
| 9·8 | | 59·0 | 34·9 | |
| 9·6 | 47 | 22·0 | 31·3 | |
| 9·6 | | 33·0 | 6·4 | |
| 9·6 | | 43·5 | 5·3 | |
| 9·6 | | 45·5 | 6·2 | |
| 8·6† | | 46·0 | 53·0 | 8·8 *g* |
| 9·9† | | 58·5 | 43·2 | |
| 9·8 | | 59·0 | 18·0 | |
| 9·8 | 48 | 1·5 | 17·5 | |
| 9·9† | | 7·0 | 28·2 | |
| 9·9† | | 20·0 | 41·2 | |
| 8·8 | | 25·0 | 32·8 | 7·0 GS*g* |
| 9·9 | | 26·5 | 9·1 | |
| 9·5 | | 26·5 | 21·5 | |
| 9·9 | | 33·0 | 14·4 | |
| 9·9† | | 35·0 | 32·2 | |
| 9·5 | | 37·5 | 14·5 | |
| 9·4† | | 39·5 | 58·0 | |
| 9·4 | 49 | 4·0 | 28·2 | |
| 9·7† | | 9·0 | 52·7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 20 | 43 | 7·6 |
| | 30 | 46 | 7·7 |
| | 40 | 49 | 7·9 |
| | 50 | 53 | 8·0 |



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| 25 prec. h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 49 | 7·9 |
| | 50 | 53 | 8·0 |
| 11 | 0 | 56 | 8·1 |
| | 10 | 59 | 8·2 |
| | 20 | 63 | 8·2 |
| | 30 | 66 | 8·3 |
| | 40 | 70 | 8·3 |

## 1581—1620.

| mag. | 10h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·9 | 49 | 16·5 | 13·1 | |
| 9·9 | | 21·5 | 29·7 | |
| 9·5† | | 23·0 | 41·2 | |
| 9·9 | | 30·5 | 22·6 | |
| 9·7† | | 38·5 | 37·0 | |
| 9·8† | | 40·0 | 40·9 | |
| 9·6† | | 41·5 | 56·2 | |
| 9·6† | | 42·0 | 56·0 | |
| 9·2 | | 43·0 | 5·4 | |
| 9·6† | | 46·0 | 54·6 | |
| 9·9 | | 49·0 | 22·2 | |
| 9·6 | | 50·5 | 17·1 | |
| 9·9 | 50 | 1·5 | 23·6 | |
| 9·6 | | 3·0 | 4·3 | |
| 9·8† | | 10·0 | 34·9 | |
| 9·5 | | 11·5 | 23·0 | |
| 9·6† | | 13·5 | 55·4 | |
| 9·7 | | 19·0 | 4·6 | |
| 9·6† | | 26·3 | 41·7 | |
| 9·0† | | 27·5 | 38·0 | 9·5 |
| 9·8† | | 29·5 | 59·2 | |
| 8·1† | | 36·3 | 40·0 | 8·0 g |
| 9·8 | | 41·5 | 22·9 | |
| 9·9† | | 44·0 | 36·1 | |
| 9·5 | | 46·5 | 8·3 | |
| 9·8 | | 47·0 | 2·0 | |
| 9·7† | | 52·0 | 41·1 | |
| 9·8 | | 53·5 | 28·5 | |
| 9·4† | | 59·5 | 41·3 | |
| 9·8 | 51 | 22·5 | 12·2 | |
| 9·4† | | 26·0 | 53·7 | 8·5 g |
| 9·5 | | 28·5 | 34·8 | |
| 9·9 | | 33·0 | 30·8 | |
| 9·9 | 52 | 7·0 | 33·2 | |
| 9·2 | | 8·5 | 6·9 | 9·5 |
| 9·7† | | 11·5 | 25·5 | |
| 9·9 | | 13·5 | 20·8 | |
| 9·4 | | 24·0 | 16·6 | |
| 9·2 | | 32·3 | 27·5 | g |
| 9·6† | | 40·5 | 46·3 | |
| 9·2 | | 47·0 | 9·1 | 9·8 |
| 9·7 | | 55·0 | 16·2 | |
| 9·8† | 53 | 26·5 | 59·7 | |
| 9·8 | | 27·5 | 17·5 | |
| 9·2† | | 27·5 | 45·1 | |
| 9·8† | | 32·0 | 30·3 | |
| 9·0 | | 37·0 | 29·8 | g |
| 9·9 | | 38·5 | 25·0 | |
| 9·8† | | 44·5 | 55·7 | |
| 9·7† | | 46·5 | 49·7 | |
| 9·5 | 54 | 7·5 | 11·1 | |
| 9·8 | | 22·5 | 16·2 | |
| 9·8† | | 25·0 | 28·8 | |
| 9·8† | | 33·0 | 56·1 | |
| 9·2 | | 41·0 | 31·0 | |
| 9·8 | | 41·0 | 4·3 | |
| 9·9 | | 41·5 | 32·8 | |
| 9·8† | | 44·0 | 27·7 | |
| 9·8† | | 55·5 | 39·7 | |
| 9·5† | 55 | 0·0 | 40·9 | |

## 1621—1680.

| mag. | 10h.—11h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6 | 55 | 10·0 | 18·3 | |
| 9·2‡ | | 37·0 | 45·6 | |
| 9·6 | | 53·0 | 14·4 | |
| 9·7 | | 56·0 | 0·3 | |
| 9·8 | | 58·5 | 2·1 | |
| 9·3‡ | 56 | 51·5 | 54·3 | |
| 9·5 | 57 | 4·0 | 11·1 | |
| 9·1 | | 13·0 | 2·3 | |
| 8·4‡ | | 24·0 | 46·1 | 9·0 g |
| 9·9 | | 34·5 | 5·2 | |
| 9·2 | | 35·5 | 32·9 | 9·0 g |
| 9·1‡ | | 53·5 | 36·3 | |
| 9·8 | 58 | 0·0 | 10·5 | |
| 9·3‡ | | 0·5 | 41·3 | |
| 9·5 | | 5·0 | 25·8 | |
| 9·2 | | 16·8 | 14·2 | 8·5 Sg |
| 9·6‡ | | 49·0 | 57·2 | |
| 9·2‡ | 59 | 26·5 | 50·2 | |
| 9·9 | | 38·3 | 7·0 | |
| 9·1 | | 49·5 | 3·9 | 9·5 |
| 8·8 | | 51·5 | 20·5 | 8·5 g |
| 9·6 | | 57·8 | 21·0 | |
| 9·0 | 0 | 24·0 | 18·3 | 9·0 g |
| 8·8 | | 49·2 | 13·7 | 8·8 Sg |
| 9·4‡ | 1 | 2·0 | 57·4 | |
| 9·0 | | 19·0 | 21·6 | 9·2 g |
| 8·2 | | 51·5 | 15·0 | 7·8 Gg |
| 9·4 | | 51·5 | 12·3 | |
| 9·4 | | 52·0 | 3·0 | |
| 9·7 | 2 | 41·0 | 15·9 | |
| 9·2‡ | | 37·5 | 44·6 | |
| 9·7 | | 47·5 | 7·5 | |
| 9·7 | 3 | 1·5 | 31·0 | |
| 9·0‡ | | 7·0 | 36·0 | |
| 8·8‡ | | 9·5 | 55·5 | 9·0 g |
| 8·8 | | 12·5 | 34·7 | 8·5 g |
| 9·2 | | 14·0 | 11·7 | |
| 9·6‡ | | 20·0 | 38·6 | 9·5 |
| 9·2 | | 30·7 | 31·1 | 8·5 g |
| 9·3 | | 39·0 | 15·2 | |
| 8·9‡ | 4 | 4·0 | 40·5 | |
| 9·6‡ | | 11·0 | 54·3 | |
| 9·0 | | 32·5 | 4·9 | 9·5 G |
| 9·4‡ | | 34·0 | 55·0 | |
| 9·0 | 5 | 6·0 | 24·2 | 8·5 g |
| 9·5 | | 21·5 | 11·8 | |
| 9·7 | | 30·7 | 28·0 | |
| 9·5 | | 39·5 | 4·0 | |
| 9·7 | | 44·0 | 16·8 | |
| 9·6‡ | | 57·0 | 53·9 | |
| 9·5 | 6 | 17·5 | 3·3 | |
| 9·6‡ | | 18·5 | 37·6 | |
| 8·9‡ | | 26·5 | 47·6 | 9·5 |
| 8·9‡ | | 40·2 | 59·3 | |
| 9·7 | | 40·5 | 3·2 | |
| 9·5 | | 51·5 | 19·7 | |
| 9·3 | 7 | 23·5 | 7·0 | 9·0 |
| 8·1 | | 39·5 | 19·6 | 8·2 GSg |
| 9·5 | | 45·0 | 30·9 | |
| 9·7 | | 48·0 | 27·7 | |

## 1681—1740.

| mag. | 11h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·7 | 8 | 3·0 | 19·7 | 10·0 |
| 9·2‡ | | 18·0 | 49·5 | 8·5 |
| 9·6‡ | | 45·5 | 52·0 | |
| 9·0 | | 58·5 | 6·2 | |
| 9·2 | 9 | 1·5 | 4·2 | |
| 9·7 | | 12·5 | 1·4 | |
| 9·6‡ | | 13·0 | 53·3 | 9·0 |
| 9·7 | | 38·0 | 34·4 | |
| 8·4‡ | | 56·5 | 38·8 | 7·5 GSg |
| 9·2 | 10 | 31·5 | 9·8 | |
| 9·7 | | 32·0 | 17·7 | |
| 9·7 | | 42·0 | 32·6 | |
| 9·5 | | 43·0 | 5·0 | |
| 8·8 | 11 | 7·5 | 31·0 | 7·5 GSg |
| 9·6 | | 13·5 | 33·6 | |
| 9·5‡ | | 20·5 | 39·9 | |
| 9·0 | | 21·7 | 33·0 | 9·0 |
| 9·6‡ | | 55·5 | 47·1 | |
| 9·0‡ | | 57·5 | 39·9 | |
| 9·4 | 12 | 7·0 | 18·8 | |
| 9·0‡ | | 8·0 | 43·2 | |
| 8·8 | | 11·5 | 21·0 | 9·0 Gg |
| 8·5 | | 13·0 | 8·4 | 6·7 GSgr |
| 8·4 | | 32·0 | 26·1 | 7·2 GSg |
| 9·0 | | 49·5 | 16·3 | 9·0 Gg |
| 8·4‡ | 13 | 0·0 | 45·2 | g |
| 9·6 | | 1·0 | 28·9 | |
| 9·2‡ | | 4·5 | 46·1 | |
| 9·5 | | 9·5 | 27·1 | |
| 9·7 | | 18·3 | 5·3 | 9·5 G |
| 9·0 | | 40·5 | 1·9 | 10·0 |
| 8·9‡ | | 42·5 | 58·3 | g |
| 9·2 | | 48·0 | 32·4 | 9·0 g |
| 8·9‡ | 14 | 21·0 | 35·5 | 8·5 g |
| 9·6‡ | | 22·5 | 49·7 | |
| 9·7 | | 28·0 | 11·3 | |
| 9·2 | 15 | 5·5 | 5·7 | 8·4 Gg |
| 9·5‡ | | 13·2 | 57·2 | |
| 9·7 | | 16·0 | 30·0 | |
| 9·4 | | 39·5 | 29·9 | |
| 9·0 | | 45·0 | 12·0 | |
| 9·7 | | 48·0 | 7·4 | |
| 9·2 | 16 | 5·5 | 31·3 | 9·0 g |
| 9·1‡ | | 43·0 | 59·1 | |
| 9·4 | | 49·5 | 20·9 | |
| 9·7 | | 51·5 | 3·7 | 9·5 |
| 9·1 | 17 | 13·5 | 6·2 | 9·5 |
| 9·4 | | 52·5 | 13·7 | |
| 8·9 | | 57·5 | 35·0 | 9·0 g |
| 9·6 | 18 | 7·5 | 4·8 | 9·0 g |
| 9·0 | | 16·0 | 33·9 | 9·0 g |
| 9·6‡ | | 24·5 | 59·1 | |
| 9·4 | 19 | 31·0 | 12·1 | |
| 9·4 | | 37·0 | 13·4 | |
| 9·5 | | 37·5 | 34·5 | |
| 9·6‡ | | 43·0 | 54·3 | |
| 9·4 | | 52·5 | 1·9 | |
| 9·0‡ | | 53·0 | 51·4 | |
| 9·5 | 20 | 10·0 | 5·1 | |
| 8·8 | | 10·5 | 21·0 | 10·0 g |

## 1741—1800.

| mag. | 11h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4 | 20 | 16·5 | 30·1 | |
| 9·7 | | 40·7 | 30·9 | |
| 8·8‡ | 21 | 28·0 | 55·2 | 9·0 g |
| 9·6‡ | | 28·7 | 58·4 | |
| 9·4 | 22 | 19·5 | 31·3 | |
| 9·6‡ | | 42·0 | 41·8 | |
| 9·5 | | 58·5 | 11·9 | |
| 9·4 | 23 | 20·5 | 8·8 | |
| 9·6‡ | | 57·0 | 29·1 | |
| 9·6‡ | 24 | 4·0 | 53·8 | |
| 8·9‡ | | 12·5 | 45·2 | 9·3 Gg |
| 9·2 | 25 | 5·5 | 17·1 | 9·5 g |
| 9·5 | | 19·0 | 29·7 | |
| 9·3 | | 23·0 | 24·4 | |
| 8·3 | 26 | 6·5 | 2·6 | 8·5 g |
| 9·3 | | 8·0 | 25·0 | |
| 9·2 | | 16·0 | 23·0 | 9·5 |
| 8·6 | | 21·0 | 22·0 | 9·0 Gg |
| 9·1‡ | | 57·0 | 41·9 | |
| 9·6‡ | 27 | 14·0 | 32·5 | |
| 9·6‡ | | 26·5 | 36·6 | |
| 9·1‡ | | 26·5 | 37·3 | |
| 9·0‡ | | 28·5 | 51·1 | 10·0 |
| 9·6‡ | | 32·0 | 57·6 | |
| 8·2‡ | 29 | 4·0 | 54·5 | 8·8 g |
| 8·3‡ | | 22·5 | 45·6 | 8·5 g |
| 9·4 | | 29·0 | 12·8 | |
| 8·8 | | 29·0 | 27·5 | g |
| 9·7 | | 29·5 | 14·0 | |
| 9·4‡ | | 44·0 | 39·8 | |
| 9·7 | | 49·5 | 13·6 | |
| 8·6 | | 58·5 | 14·4 | 9·5 Gg |
| 9·4‡ | 30 | 1·0 | 57·3 | |
| 9·4 | | 40·2 | 34·7 | |
| 8·9‡ | 31 | 22·0 | 54·0 | |
| 9·3‡ | 32 | 2·0 | 45·3 | |
| 9·6‡ | | 5·5 | 46·3 | |
| 9·5 | | 13·5 | 25·4 | g |
| 8·7‡ | | 41·0 | 45·8 | g |
| 9·6‡ | 33 | 9·5 | 29·6 | |
| 9·7 | | 45·5 | 24·5 | g |
| 9·7 | 34 | 1·0 | 6·6 | |
| 9·6‡ | | 15·5 | 41·3 | |
| 9·4 | | 31·5 | 15·3 | 9·5 |
| 9·4 | | 41·5 | 10·9 | |
| 9·4 | | 49·0 | 9·2 | |
| 9·0 | 35 | 0·5 | 27·8 | g |
| 9·6‡ | | 20·3 | 47·8 | |
| 9·3 | | 21·5 | 19·9 | |
| 9·7 | | 25·5 | 31·9 | g |
| 9·6‡ | | 46·5 | 49·4 | |
| 8·8 | | 52·0 | 13·2 | 8·3 Gg |
| 9·2 | 36 | 26·5 | 8·9 | 9·5 |
| 8·8 | | 30·5 | 19·1 | 9·0 g |
| 9·2 | | 31·5 | 28·7 | 9·5 |
| 9·0‡ | | 40·3 | 42·3 | 9·0 Gg |
| 9·4 | | 42·5 | 19·5 | |
| 9·5‡ | | 58·3 | 40·9 | |
| 9·6‡ | 37 | 2·3 | 36·3 | |
| 9·6† | | 7·0 | 34·5 | |



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## 1801—1860.

| mag. | 11h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8·9† | 37 | 8·0 | 48·9 | 9·0 *g* |
| 9·6† | | 13·5 | 46·7 | |
| 9·4 | | 32·5 | 11·9 | |
| 7·8† | | 47·3 | 47·2 | 7·0 GS*g* |
| 8·8 | 38 | 9·5 | 26·8 | 8·2 *g* |
| 9·0 | | 11·0 | 14·9 | |
| 9·6† | | 31·5 | 32·4 | |
| 9·0† | | 34·5 | 32·5 | |
| 9·6† | | 34·5 | 37·9 | |
| 8·6 | 39 | 20·9 | 0·3 | 9·0 *g* |
| 9·6‡ | | 37·5 | 35·5 | |
| 9·0† | | 38·2 | 46·2 | |
| 9·7 | | 39·5 | 33·3 | |
| 9·7 | 40 | 7·5 | 2·2 | |
| 9·8 | | 29·0 | 12·5 | |
| 9·3 | | 33·8 | 26·0 | 9·0 |
| 8·8 | | 39·8 | 11·4 | *g* |
| 9·4 | 41 | 10·5 | 8·7 | |
| 9·0 | | 50·5 | 4·3 | 9·2 |
| 9·8 | | 51·5 | 17·9 | |
| 8·2† | 42 | 14·5 | 50·4 | 8·0 *g* |
| 9·2 | | 27·0 | 19·9 | 9·0 *g* |
| 9·2† | | 40·0 | 49·9 | |
| 9·2 | | 41·0 | 15·3 | 9·5 |
| 9·2 | | 52·0 | 9·9 | 9·2 G*g* |
| 9·4† | 43 | 20·0 | 49·7 | |
| 9·6† | | 36·5 | 31·4 | |
| 9·8 | | 45·5 | 19·2 | |
| 9·2 | | 55·5 | 16·9 | |
| 9·4† | 44 | 10·0 | 49·1 | |
| 9·6† | | 23·5 | 54·7 | |
| 9·7 | | 25·0 | 4·0 | |
| 9·4 | | 31·5 | 29·5 | 8·0 *g* |
| 9·9 | | 35·0 | 0·9 | |
| 9·9 | | 44·0 | 31·1 | |
| 8·8 | | 54·5 | 23·1 | 7·5 GS*g* |
| 9·2† | 45 | 12·0 | 56·7 | |
| 9·2† | | 26·0 | 57·5 | |
| 9·9 | | 29·0 | 9·0 | |
| 9·6† | | 30·0 | 52·3 | 9·0 |
| 9·0 | | 33·0 | 28·7 | 9·2 *g* |
| 9·0 | | 46·0 | 27·9 | 8·0 *g* |
| 9·2 | | 55·5 | 21·6 | 9·0 *g* |
| 9·8 | | 58·5 | 34·0 | |
| 9·4 | 46 | 9·0 | 4·8 | 9·5 |
| 9·2† | | 36·5 | 47·7 | 9·0 |
| 9·4 | | 39·0 | 18·8 | |
| 9·9 | | 44·5 | 26·2 | |
| 9·5 | 47 | 14·0 | 26·0 | |
| 9·2† | | 19·0 | 50·0 | 9·5 |
| 9·2† | | 20·5 | 36·6 | |
| 9·5 | | 37·5 | 27·3 | |
| 9·5 | | 43·5 | 32·5 | |
| 8·9† | 48 | 28·5 | 37·7 | 9·2 *g* |
| 8·4† | 49 | 20·0 | 40·4 | 9·2 *g* |
| 9·8 | | 21·5 | 16·6 | |
| 9·5 | | 21·5 | 0·3 | |
| 8·7† | | 32·5 | 51·2 | 8·0 G*g* |
| 9·2 | | 47·0 | 5·0 | 9·5 |
| 9·9 | 50 | 15·0 | 12·0 | |

## 1861—1920.

| mag. | 11h.—12h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·9 | 50 | 21·0 | 16·8 | |
| 9·3 | | 25·0 | 4·0 | 9·5 |
| 8·8† | | 31·5 | 37·1 | *g* |
| 9·6 | 51 | 3·0 | 2·3 | |
| 9·5† | | 10·0 | 39·6 | |
| 9·8 | | 25·0 | 10·2 | |
| 9·9 | | 27·0 | 32·6 | 9·5 G |
| 9·9 | | 28·3 | 0·4 | |
| 9·9 | | 31·0 | 20·5 | |
| 9·4 | | 44·5 | 22·2 | |
| 9·4 | | 56·0 | 34·8 | |
| 9·4† | | 58·5 | 50·8 | |
| 9·9 | 52 | 25·5 | 11·0 | |
| 9·4† | | 32·0 | 49·0 | |
| 9·4† | | 40·5 | 56·4 | |
| 9·9 | 53 | 0·0 | 27·3 | *g* |
| 9·0† | | 17·5 | 41·6 | |
| 9·9 | | 26·0 | 19·0 | |
| 7·6† | | 31·5 | 38·4 | 7·8 G*g* |
| 9·4† | | 50·0 | 52·3 | |
| 8·9 | | 52·0 | 4·9 | 9·2 |
| 8·6† | 54 | 4·0 | 39·4 | 8·8 G*g* |
| 9·0 | | 7·0 | 32·4 | *g* |
| 9·6† | | 37·0 | 50·7 | |
| 9·5 | 55 | 10·0 | 13·0 | 8·8 G |
| 9·9 | | 39·5 | 14·8 | |
| 9·2 | | 46·5 | 26·5 | 9·5 |
| 9·1 | | 52·0 | 9·3 | 8·3 G*g* |
| 9·9 | 56 | 8·5 | 26·8 | |
| 8·8 | | 25·0 | 24·0 | 9·2 *g* |
| 7·9† | | 28·5 | 53·4 | *g* |
| 9·5 | | 38·0 | 11·9 | |
| 9·4 | | 39·5 | 26·8 | 9·5 |
| 8·2† | 57 | 16·0 | 36·4 | 8·5 G*g* |
| 9·6 | | 52·5 | 1·1 | |
| 5·8† | 58 | 11·5 | 38·0 | 6·0 GS*g* |
| 8·6† | | 44·0 | 43·0 | 8·6 *g* |
| 9·6† | | 59·0 | 56·7 | |
| 9·0† | | 59·0 | 52·4 | 8·0 *g* |
| 8·2 | 59 | 3·0 | 9·2 | 8·0 G*g* |
| 9·2 | | 7·5 | 20·0 | |
| 9·5 | | 19·5 | 2·2 | |
| 8·0† | | 50·5 | 57·4 | 6·9 GS*g* |
| 9·2† | | 53·0 | 41·6 | |
| 9·2† | 0 | 32·0 | 48·0 | |
| 9·4 | | 48·0 | 31·6 | 9·5 |
| 8·8 | 1 | 22·0 | 11·2 | 8·8 *g* |
| 9·9 | | 57·0 | 18·2 | |
| 9·2 | 2 | 8·0 | 6·7 | 9·0 *g* |
| 8·0† | | 11·5 | 56·6 | 7·9 G*g* |
| 9·6 | | 15·5 | 6·2 | 9·2 *g* |
| 9·2 | | 53·5 | 7·0 | 9·1 *g* |
| 9·8 | 3 | 7·0 | 18·0 | |
| 9·9 | | 15·0 | 18·6 | |
| 8·8 | 4 | 13·0 | 2·4 | 9·0 *g* |
| 8·2 | | 23·0 | 33·8 | 7·2 GS*g* |
| 9·9 | | 33·0 | 33·3 | |
| 8·8 | | 49·5 | 5·6 | 9·0 *g* |
| 9·2 | 5 | 30·0 | 22·3 | 9·5 |
| 9·6† | 7 | 25·0 | 56·2 | 9·0 |

## 1921—1980.

| mag. | 12h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8·5 | 7 | 33·0 | 2·8 | 9·0 *g* |
| 9·4 | | 41·0 | 7·0 | 9·0 *g* |
| 9·9 | | 52·0 | 31·0 | |
| 9·4† | 8 | 45·5 | 37·7 | |
| 9·1 | | 51·5 | 12·0 | 8·2 *g* |
| 9·7 | 9 | 14·5 | 27·1 | |
| 9·5 | | 46·5 | 3·2 | 9·5 |
| 9·6 | 10 | 15·5 | 24·7 | : |
| 9·2† | | 23·5 | 45·7 | |
| 9·2† | | 32·0 | 53·1 | |
| 6·6 | | 49·5 | 15·8 | 4·8 GSc*g*r |
| 9·6† | 11 | 3·0 | 43·2 | |
| 9·9 | 12 | 20·0 | 14·0 | |
| 9·9 | | 42·5 | 35·0 | |
| 9·6 | 13 | 12·0 | 3·7 | |
| 9·0† | | 26·5 | 59·0 | |
| 9·9 | 14 | 12·0 | 14·0 | |
| 9·9 | | 31·0 | 20·0 | |
| 7·2† | 15 | 13·5 | 36·8 | 6·5 GS*g* |
| 9·9 | | 37·5 | 1·0 | |
| 8·1 | | 50·5 | 7·2 | 8·2 G*g* |
| 9·9 | 16 | 3·5 | 10·7 | |
| 9·9 | 17 | 11·5 | 2·9 | |
| 9·7 | | 17·5 | 14·2 | *g* |
| 8·5† | | 44·0 | 47·3 | 9·0 *g* |
| 8·3† | | 57·5 | 44·5 | 8·5 *g* |
| 9·3 | 18 | 25·7 | 17·1 | *g* |
| 9·1† | | 37·0 | 43·7 | 8·2 G*g* |
| 9·9 | | 38·0 | 2·0 | |
| 9·5† | 19 | 15·0 | 43·5 | 9·5 |
| 9·6‡ | | 29·5 | 46·6 | |
| 9·6‡ | | 57·0 | 41·7 | |
| 9·6 | 20 | 16·0 | 25·3 | |
| 9·9 | | 52·0 | 5·2 | |
| 9·5‡ | | 53·5 | 38·1 | |
| 9·9 | | 55·5 | 11·4 | |
| 8·9‡ | 21 | 5·0 | 57·8 | 9·5 |
| 9·6 | | 12·5 | 10·0 | |
| 9·5‡ | | 15·0 | 51·2 | |
| 9·6 | | 20·0 | 7·1 | *g* |
| 9·5‡ | | 44·5 | 59·2 | |
| 9·2‡ | | 59·8 | 53·9 | 9·3 |
| 9·4‡ | 22 | 0·0 | 53·0 | |
| 10·0 | | 31·5 | 24·5 | |
| 9·6 | | 52·0 | 31·5 | |
| 10·0 | | 54·5 | 34·1 | |
| 10·0 | | 57·0 | 28·7 | |
| 10·0 | | 57·5 | 8·3 | |
| 9·7 | 23 | 15·5 | 18·1 | |
| 9·6 | | 29·5 | 31·0 | *g* |
| 9·4‡ | | 34·5 | 54·6 | |
| 9·2‡ | | 42·5 | 45·5 | |
| 9·4‡ | | 59·0 | 47·6 | |
| 10·0 | 24 | 1·0 | 0·2 | 9·5 |
| 10·0 | | 4·0 | 34·5 | |
| 9·5‡ | | 15·5 | 50·1 | 9·5 |
| 9·4 | | 26·0 | 4·7 | |
| 9·7‡ | | 34·5 | 37·0 | 9·5 |
| 9·7‡ | | 36·0 | 49·2 | |
| 9·2‡ | | 43·0 | 40·1 | 9·0 *g* |

## 1981—2040.

| mag. | 12h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10·0 | 24 | 47·0 | 27·1 | |
| 9·6 | | 51·0 | 18·1 | |
| 9·5‡ | | 51·0 | 54·4 | |
| 9·4‡ | | 54·5 | 54·7 | |
| 10·0 | | 58·0 | 28·9 | |
| 9·9 | 25 | 9·5 | 30·0 | |
| 9·2 | | 11·5 | 11·9 | |
| 9·7 | | 18·5 | 10·5 | *g* |
| 8·3 | | 24·0 | 25·3 | 9·0 *g* |
| 9·5‡ | | 47·5 | 41·1 | |
| 9·0‡ | | 52·0 | 54·1 | |
| 9·3‡ | | 54·0 | 52·1 | |
| 9·9 | 26 | 9·5 | 9·7 | |
| 10·0 | | 30·0 | 6·1 | |
| 9·7 | | 48·5 | 28·4 | |
| 9·8 | | 53·0 | 10·6 | |
| 10·0 | 27 | 6·5 | 22·0 | |
| 9·2 | | 8·0 | 2·1 | 9·5 |
| 10·0 | | 10·5 | 9·8 | |
| 9·6‡ | | 12·5 | 42·9 | |
| 9·0 | | 15·5 | 12·5 | |
| 9·8 | | 20·0 | 15·9 | |
| 9·5‡ | | 26·0 | 35·4 | |
| 8·5‡ | | 30·0 | 49·0 | 9·0 |
| 8·2 | | 36·5 | 4·1 | 7·0 GS*g* |
| 9·1 | | 37·0 | 14·6 | |
| 10·0 | | 42·5 | 27·5 | |
| 9·7‡ | 28 | 9·5 | 52·3 | |
| 7·4‡ | | 10·5 | 39·7 | 8·0 GS*g* |
| 9·5‡ | | 13·5 | 42·1 | 9·5 |
| 9·2 | | 27·0 | 17·1 | *g* |
| 10·0 | | 30·0 | 18·1 | |
| 9·4 | | 40·5 | 5·9 | |
| 10·0 | | 42·0 | 15·3 | |
| 9·0 | | 52·0 | 31·5 | 9·5 *g* |
| 9·4 | | 57·0 | 2·0 | |
| 10·0 | 29 | 3·0 | 32·1 | |
| 9·5 | | 16·0 | 34·2 | |
| 9·8 | | 19·5 | 5·9 | |
| 9·0‡ | | 32·0 | 55·4 | |
| 9·2 | | 51·5 | 9·3 | 9·5 |
| 9·7‡ | 30 | 2·5 | 48·0 | |
| 9·4 | | 5·0 | 2·0 | |
| 9·9 | | 5·5 | 1·0 | |
| 8·5 | | 15·5 | 10·5 | 8·5 *g* |
| 9·4‡ | | 34·5 | 35·1 | |
| 9·8 | | 43·5 | 11·2 | |
| 9·0 | 31 | 3·5 | 11·3 | |
| 9·6 | | 51·5 | 12·0 | |
| 10·0 | 32 | 3·5 | 28·1 | ? |
| 9·7 | | 19·0 | 22·5 | |
| 9·1‡ | | 26·5 | 54·0 | |
| 9·0 | | 30·5 | 15·9 | 9·5 *g* |
| 9·2 | | 36·5 | 7·9 | 9·0 *g* |
| 10·0 | 33 | 0·5 | 16·3 | |
| 9·8 | | 9·5 | 9·1 | |
| 9·4 | | 13·0 | 25·9 | |
| 8·8 | | 22·5 | 3·2 | 8·9 *g* |
| 10·0 | | 37·0 | 21·7 | |
| 8·2‡ | | 48·5 | 53·2 | 9·0 *g* |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 30 | 66 | 8·3 |
| | 40 | 70 | 8·3 |
| | 50 | 73 | 8·3 |
| 12 | 0 | 77 | 8·4 |
| | 10 | 80 | 8 3 |
| | 20 | 84 | 8·3 |
| | 30 | 87 | 8·3 |
| | 40 | 91 | 8·2 |



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| 25 prec. | | | |
|---|---|---|---|
| h | m | a + s | δ − ′ |
| 12 | 30 | 87 | 8·3 |
| | 40 | 91 | 8·2 |
| | 50 | 94 | 8·2 |
| 13 | 0 | 98 | 8·1 |
| | 10 | 101 | 8·0 |
| | 20 | 104 | 7·9 |

## 2041—2100.

| mag. | 12h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10·0 | 33 | 50·5 | 15·0 | |
| 9·6‡ | 34 | 5·5 | 46·8 | |
| 9·8 | | 21·0 | 7·3 | |
| 8·8 | | 23·5 | 6·3 | 8·9 Gg |
| 9·6 | 35 | 5·5 | 9·3 | 9·0 |
| 9·7 | | 20·5 | 28·2 | |
| 9·2 | | 24·0 | 29·9 | 9·0 g |
| 9·6 | | 30·0 | 33·1 | |
| 10·0 | 36 | 10·5 | 6·6 | |
| 9·7‡ | | 11·0 | 49·4 | |
| 9·6 | | 25·5 | 26·2 | |
| 8·7‡ | | 55·0 | 52·1 | 9·5 g |
| 9·5 | | 57·0 | 14·3 | |
| 10·0 | | 59·0 | 16·6 | |
| 9·9 | 37 | 8·0 | 15·7 | |
| 10·0 | | 21·0 | 1·7 | |
| 10·0 | | 22·0 | 14·0 | |
| 9·8 | | 29·5 | 11·9 | |
| 9·3 | | 31·5 | 6·2 | |
| 9·8 | | 35·5 | 30·9 | |
| 9·9 | | 38·0 | 6·7 | |
| 9·4 | 38 | 19·0 | 1·1 | |
| 8·6‡ | | 28·0 | 40·8 | 9·5 |
| 4·1 | | 37·5 | 25·3 | 3·2 GSgctrλ |
| 9·9 | | 44·5 | 0·9 | |
| 9·4‡ | | 44·5 | 58·5 | |
| 10·0 | | 57·0 | 33·0 | |
| 9·1 | 39 | 2·5 | 31·9 | 8·8 Gg |
| 9·7 | | 16·5 | 34·1 | |
| 9·9 | | 18·0 | 24·1 | |
| 9·9 | | 38·2 | 32·1 | |
| 9·3 | 40 | 3·5 | 15·2 | |
| 9·4‡ | | 18·5 | 41·5 | |
| 8·2‡ | | 20·0 | 35·5 | 8·8 g |
| 9·7‡ | | 35·5 | 44·0 | 9·5 |
| 9·5 | | 36·5 | 15·5 | |
| 10·0 | 41 | 1·0 | 10·1 | |
| 9·8 | | 5·0 | 6·4 | |
| 8·1‡ | | 5·5 | 44·8 | 8·0 Gg |
| 9·2 | | 14·5 | 25·0 | |
| 9·3 | | 28·5 | 28·2 | |
| 10·0 | | 29·0 | 7·0 | |
| 9·4‡ | | 40·0 | 39·0 | 9·5 |
| 9·2 | | 47·5 | 16·3 | |
| 9·3 | | 57·5 | 16·3 | 9·0 g |
| 9·0‡ | 42 | 9·0 | 56·1 | |
| 9·5‡ | | 13·0 | 54·9 | |
| 9·6 | | 21·0 | 12·3 | |
| 9·4‡ | | 29·0 | 47·1 | 9·0 |
| 9·1 | | 50·0 | 24·4 | 9·0 g |
| 9·2 | | 50·5 | 14·1 | |
| 8·1‡ | | 52·5 | 41·4 | 8·5 g |
| 9·2 | | 53·5 | 26·8 | 8·5 g |
| 8·8‡ | 43 | 0·0 | 40·0 | 9·5 |
| 10·0 | | 8·5 | 5·2 | |
| 9·6 | | 17·0 | 29·5 | |
| 10·0 | | 37·5 | 33·1 | |
| 10·0 | | 50·0 | 3·7 | |
| 9·4 | | 52·0 | 2·1 | |
| 9·3‡ | | 52·5 | 42·1 | 9·5 |

## 2101—2160.

| mag. | 12h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10·0 | 43 | 57·0 | 31·0 | |
| 9·6 | 44 | 0·0 | 34·1 | |
| 9·2 | | 2·0 | 8·3 | |
| 9·6‡ | | 2·0 | 56·4 | |
| 10·0 | | 46·5 | 10·2 | |
| 9·2‡ | 45 | 15·0 | 39·2 | |
| 9·2 | | 46·0 | 4·9 | |
| 9·6‡ | | 48·0 | 38·4 | |
| 10·0 | | 58·0 | 28·9 | |
| 9·6 | | 58·5 | 25·3 | |
| 9·6 | 46 | 3·5 | 17·1 | |
| 10·0 | | 4·5 | 21·5 | |
| 9·7‡ | | 26·5 | 47·1 | |
| 9·9 | | 37·0 | 5·9 | |
| 9·2‡ | 47 | 20·5 | 49·1 | |
| 9·5‡ | | 22·0 | 39·0 | |
| 8·4 | | 34·0 | 35·1 | 8·5 g |
| 9·4‡ | | 34·5 | 45·2 | |
| 9·2‡ | | 58·5 | 48·4 | |
| 9·4‡ | | 58·5 | 58·8 | |
| 9·4‡ | 48 | 9·0 | 49·9 | |
| 10·0 | | 16·5 | 8·1 | |
| 10·0 | | 21·5 | 6·5 | |
| 9·4 | | 33·5 | 30·1 | |
| 9·5‡ | | 40·5 | 52·7 | |
| 10·0 | 49 | 5·5 | 3·4 | |
| 9·4‡ | | 19·0 | 38·6 | |
| 10·0 | | 29·0 | 15·1 | |
| 7·5 | | 29·0 | 16·9 | 7·0 GSgr |
| 9·5 | | 33·5 | 13·7 | |
| 9·3 | | 40·5 | 13·1 | 9·0 |
| 9·6‡ | | 42·5 | 39·1 | |
| 8·9‡ | | 44·5 | 48·3 | |
| 10·0 | 50 | 2·5 | 4·1 | g |
| 9·2 | | 4·0 | 8·9 | 8·8 g |
| 9·2‡ | | 4·5 | 38·3 | |
| 9·1‡ | | 10·0 | 44·6 | |
| 9·8 | | 12·0 | 8·9 | |
| 9·5 | | 32·0 | 27·9 | |
| 9·5 | | 32·2 | 33·3 | g |
| 9·9 | | 48·5 | 7·1 | |
| 9·6 | | 53·0 | 12·9 | |
| 9·6 | 51 | 4·0 | 9·3 | |
| 9·7‡ | | 4·0 | 46·0 | |
| 9·2 | | 6·0 | 2·1 | |
| 9·2 | | 30·0 | 7·5 | |
| 10·0 | | 36·5 | 24·5 | |
| 9·1‡ | | 49·0 | 53·0 | |
| 9·4 | 52 | 1·0 | 11·9 | |
| 9·5‡ | | 19·0 | 52·7 | |
| 8·8‡ | | 22·0 | 55·8 | 9·5 g |
| 9·5‡ | | 40·0 | 39·0 | |
| 9·4‡ | 53 | 4·5 | 57·3 | |
| 9·4 | | 20·0 | 35·1 | |
| 9·5 | | 23·0 | 24·5 | 9·5 g |
| 10·0 | | 30·0 | 21·9 | |
| 8·4 | | 31·5 | 10·9 | 8·5 g |
| 9·4‡ | | 41·5 | 39·0 | |
| 9·0‡ | 54 | 3·0 | 50·9 | 9·0 |
| 9·6‡ | | 19·0 | 52·5 | |

## 2161—2220.

| mag. | 12h.—13h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8·7‡ | 54 | 23·0 | 38·0 | |
| 9·6‡ | | 46·0 | 45·4 | |
| 9·4 | | 47·5 | 33·1 | 9·5 g |
| 9·1 | 55 | 4·2 | 28·1 | 10·0 g |
| 9·6‡ | | 11·0 | 32·9 | |
| 9·8‡ | | 11·0 | 48·0 | |
| 9·5 | | 12·7 | 27·0 | |
| 9·6‡ | | 25·0 | 40·8 | |
| 10·0 | 56 | 2·0 | 19·1 | |
| 9·2 | | 12·5 | 27·7 | 9·5 g |
| 9·6‡ | 57 | 19·5 | 39·7 | |
| 9·1 | | 39·5 | 20·0 | 9·5 g |
| 8·7‡ | | 39·5 | 40·9 | g |
| 9·0‡ | | 45·0 | 54·0 | 9·0 |
| 9·2 | | 58·0 | 29·3 | 9·0 g |
| 9·6‡ | 58 | 3·0 | 49·0 | |
| 8·9 | | 7·5 | 4·7 | 9·0 g |
| 8·6 | | 19·0 | 26·1 | 8·5 g |
| 10·0 | | 20·5 | 31·8 | |
| 10·0 | | 30·7 | 20·9 | |
| 9·9 | | 46·0 | 23·7 | |
| 9·5 | 59 | 11·3 | 27·9 | |
| 9·6 | | 19·0 | 3·7 | 9·0 |
| 9·9 | | 21·5 | 0·0 | |
| 9·2 | | 22·8 | 17·6 | |
| 9·6‡ | | 34·0 | 53·0 | |
| 9·8 | | 38·2 | 33·7 | |
| 9·8 | | 48·0 | 5·0 | |
| 9·6 | | 58·8 | 23·3 | |
| 9·6 | 0 | 6·5 | 21·8 | |
| 9·4 | | 10·0 | 15·9 | |
| 8·6 | | 11·8 | 7·7 | 7·0 GSgg |
| 8·9 | | 18·0 | 13·1 | 9·2 g |
| 9·5‡ | | 40·0 | 51·0 | |
| 9·6 | | 40·5 | 9·7 | |
| 9·5 | | 41·9 | 25·5 | |
| 9·7 | | 52·0 | 1·1 | |
| 9·8 | | 53·2 | 25·5 | |
| 9·5‡ | | 59·0 | 52·4 | |
| 8·7‡ | 1 | 36·0 | 43·5 | |
| 9·5‡ | | 48·0 | 37·0 | |
| 9·4 | | 52·0 | 9·7 | 9·5 |
| 9·7 | 2 | 57·0 | 4·9 | |
| 9·2‡ | 3 | 8·0 | 46·4 | |
| 9·0‡ | | 21·5 | 50·5 | |
| 8·9‡ | | 25·5 | 44·2 | |
| 9·5‡ | | 28·0 | 57·0 | |
| 9·1 | | 51·5 | 4·3 | |
| 9·8 | 4 | 3·0 | 23·7 | |
| 9·7 | | 14·0 | 5·2 | |
| 9·4‡ | | 34·0 | 50·5 | |
| 9·8‡ | | 46·5 | 48·1 | |
| 7·9‡ | 5 | 0·0 | 50·1 | 8·3 Gg |
| 9·7 | | 6·0 | 30·6 | |
| 9·4‡ | | 6·5 | 44·5 | |
| 9·5‡ | | 19·0 | 46·6 | |
| 9·0 | | 20·5 | 15·8 | 9·0 g |
| 9·3 | | 39·5 | 30·0 | |
| 9·9 | 6 | 2·0 | 11·0 | |
| 9·7† | | 16.0 | 54·1 | |

## 2221—2280.

| mag. | 13h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·9 | 6 | 24·5 | 10·7 | |
| 9·9 | | 36·5 | 35·8 | |
| 8·8 | | 42·0 | 12·8 | 8·0 GSg |
| 5·6 | | 47·5 | 13·9 | 5·2 GSgr |
| 9·9 | 7 | 6·0 | 13·6 | |
| 9·9† | | 14·2 | 47·9 | |
| 8·6† | | 29·3 | 53·8 | 9·2 g |
| 9·4† | | 45·0 | 41·8 | |
| 9·9 | 8 | 11·5 | 10·0 | |
| 9·9 | | 16·0 | 8·2 | |
| 9·1† | | 32·5 | 58·9 | |
| 9·9 | | 36·5 | 22·0 | |
| 9·3† | | 38·5 | 57·4 | |
| 9·7† | | 50·7 | 49·0 | |
| 8·6 | 9 | 16·0 | 22·7 | 8·5 GSg |
| 9·3† | | 17·2 | 51·2 | 9·0 g |
| 7·2† | | 19·5 | 50·2 | 7·0 GSg |
| 9·9 | | 29·0 | 0·0 | |
| 9·3 | | 35·0 | 32·6 | |
| 9·8 | | 37·0 | 25·0 | |
| 9·5 | | 51·5 | 30·8 | |
| 8·9 | 10 | 9·0 | 11·3 | |
| 9·8† | | 37·5 | 53·1 | |
| 9·5 | | 45·5 | 14·0 | |
| 9·9 | | 59·5 | 31·4 | |
| 9·3† | 11 | 18·7 | 42·0 | |
| 9·9 | | 29·5 | 21·8 | |
| 9·9† | | 39·5 | 35·7 | |
| 9·6 | | 52·0 | 9·9 | |
| 9·9 | | 56·0 | 25·1 | |
| 9·9 | 12 | 48·5 | 9·0 | |
| 9·9 | | 53·5 | 9·6 | |
| 9·4† | | 55·5 | 58·3 | |
| 9·5† | | 58·5 | 50·1 | |
| 9·6 | 13 | 7·0 | 4·0 | |
| 9·9 | | 9·5 | 15·2 | |
| 9·5 | | 24·5 | 21·8 | |
| 9·4 | | 53·0 | 23·9 | g |
| 9·4 | | 58·5 | 18·6 | g |
| 9·3 | | 59·5 | 34·0 | |
| 9·8 | 14 | 16·0 | 4·0 | |
| 9·5 | | 28·5 | 33·0 | |
| 9·9† | | 38·0 | 52·8 | |
| 9·9 | | 57·5 | 34·2 | |
| 9·9† | | 57·5 | 50·2 | |
| 9·7 | 15 | 5·0 | 15·4 | |
| 9·8 | | 5·5 | 7·0 | |
| 9·9 | | 42·5 | 31·4 | |
| 9·9† | 16 | 2·5 | 37·8 | |
| 9·9 | | 5·5 | 26·1 | |
| 9·3 | | 6·5 | 10·0 | |
| 9·8 | | 29·0 | 10·0 | |
| 9·5 | | 32·5 | 13·3 | |
| 8·5 | | 40·5 | 31·3 | 8·5 g |
| 8·0† | | 43·0 | 52·6 | 7·7 GSg |
| 9·7 | | 48·0 | 33·6 | |
| 9·9† | | 57·0 | 40·8 | |
| 9·5† | 17 | 40·0 | 42·1 | |
| 9·6 | | 47·5 | 1·0 | |
| 9·5 | 18 | 20·5 | 6·6 | |



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## 2281—2340.

| mag. | 13h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·9† | 18 | 33·5 | 53·1 | |
| 9·3† | 19 | 5·5 | 39·0 | 9·5 |
| 9·2 | | 7·0 | 27·0 | 9·2 g |
| 9·1† | | 17·5 | 58·4 | |
| 9·7 | | 18·5 | 17·0 | |
| 7·4 | | 36·0 | 13·1 | 7·6 GSg |
| 8·4† | | 49·0 | 49·0 | 8·8 g |
| 9·0 | 20 | 23·0 | 3·2 | 9·0 |
| 9·7† | | 23·5 | 59·5 | |
| 9·9† | | 23·5 | 40·6 | |
| 9·9 | | 40·5 | 20·0 | |
| 9·9 | | 42·0 | 12·3 | |
| 9·9 | | 54·5 | 20·1 | |
| 9·9† | 21 | 15·0 | 50·2 | |
| 9·6 | | 18·5 | 6·7 | |
| 9·8 | 22 | 6·0 | 27·1 | |
| 9·3 | | 58·2 | 28·5 | |
| 9·7† | 23 | 0·0 | 56·9 | |
| 9·9† | | 10·5 | 39·6 | |
| 9·5 | | 16·0 | 16·8 | |
| 9·6 | 24 | 5·0 | 29·1 | |
| 9·9 | | 5·5 | 34·1 | |
| 9·5 | | 17·0 | 23·8 | |
| 9·9† | | 33·5 | 47·4 | |
| 8·5† | | 46·5 | 52·5 | 9·0 g |
| 9·7 | 25 | 18·5 | 1·8 | |
| 9·9† | | 24·5 | 38·9 | |
| 9·9 | | 59·5 | 13·3 | |
| 9·3 | 26 | 20·0 | 1·4 | |
| 9·7 | | 20·5 | 25·2 | |
| 9·7 | | 33·5 | 25·9 | |
| 9·7† | | 54·0 | 46·5 | |
| 9·8 | 27 | 0·5 | 19·8 | |
| 9·2† | | 26·5 | 54·2 | |
| 9·9 | | 37·0 | 7·4 | |
| 9·7 | | 59·5 | 24·1 | |
| 9·4 | 28 | 5·5 | 6·3 | |
| 8·9 | | 12·5 | 4·3 | 9·5 g |
| 9·9 | | 28·5 | 15·3 | |
| 9·0 | | 44·0 | 4·3 | 9·5 g |
| 9·5† | 29 | 33·5 | 50·4 | 9·0 g |
| 9·2 | | 37·0 | 13·7 | 9·0 g |
| 9·5 | | 39·0 | 14·2 | |
| 9·9 | | 56·0 | 27·1 | |
| 7·8 | 30 | 8·7 | 1·8 | 7·8 GSg |
| 9·3 | | 16·2 | 31·6 | |
| 9·1† | | 23·0 | 58·4 | |
| 9·6† | | 25·0 | 40·3 | |
| 9·8 | | 28·0 | 5·3 | |
| 9·3 | | 55·0 | 21·1 | 9·5 g |
| 9·4 | | 57·0 | 19·1 | 9·0 g |
| 9·9 | | 59·0 | 18·1 | |
| 9·9† | 31 | 9·5 | 27·5 | |
| 9·7† | | 23·5 | 56·2 | |
| 9·9† | | 25·0 | 28·7 | |
| 9·7† | | 41·0 | 54·7 | |
| 9·4† | | 58·5 | 37·7 | |
| 9·3 | 32 | 2·0 | 4·6 | |
| 8·4 | | 15·5 | 14·8 | 8·5 g |
| 9·4 | | 31·2 | 27·3 | 9·0 g |

## 2341—2400.

| mag. | 13h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·5† | 32 | 58·0 | 35·9 | |
| 9·5 | 33 | 9·0 | 14·3 | |
| 9·9 | | 12·0 | 9·2 | |
| 9·9† | | 17·0 | 39·3 | |
| 9·7† | | 44·5 | 47·2 | |
| 9·6† | | 53·0 | 38·9 | |
| 9·4 | | 56·0 | 11·0 | |
| 9·9† | 34 | 1·0 | 58·3 | |
| 9·9 | | 12·0 | 17·1 | |
| 9·8† | | 27·5 | 55·7 | |
| 9·7 | | 37·0 | 7·1 | |
| 9·8 | 35 | 4·0 | 16·1 | |
| 9·9† | | 11·0 | 57·7 | |
| 9·8† | | 26·5 | 45·6 | |
| 8·6† | | 34·0 | 50·4 | 9·5 g |
| 9·9 | | 41·0 | 11·5 | |
| 9·6 | | 45·5 | 31·2 | |
| 9·1 | | 46·5 | 22·2 | g |
| 9·9 | | 48·5 | 11·5 | |
| 9·6† | 36 | 12·0 | 51·9 | |
| 9·9 | | 14·5 | 13·1 | |
| 9·4† | | 21·5 | 50·2 | |
| 9·9† | | 22·5 | 33·2 | |
| 9·0† | | 33·5 | 51·8 | 8·5 g |
| 9·9† | | 38·0 | 32·4 | |
| 9·1† | | 46·0 | 56·2 | 9·5 |
| 9·9† | | 50·3 | 58·0 | |
| 9·6 | | 52·0 | 2·6 | |
| 9·1 | 37 | 2·7 | 30·4 | g |
| 9·4 | | 39·5 | 27·3 | |
| 9·6† | 38 | 5·0 | 36·6 | |
| 9·7† | | 9·0 | 45·0 | |
| 9·9† | | 13·5 | 58·3 | 9·5 |
| 8·9 | | 48·0 | 31·1 | 8·0 Gg |
| 9·9 | | 55·5 | 34·5 | |
| 9·6 | | 57·6 | 0·2 | |
| 9·7 | 39 | 10·7 | 34·9 | |
| 9·7 | | 18·2 | 7·0 | |
| 9·4 | | 33·5 | 17·4 | |
| 9·7 | | 37·0 | 3·4 | |
| 9·7 | | 38·3 | 11·9 | |
| 9·9† | | 39·5 | 36·0 | |
| 10·0 | | 43·0 | 0·9 | |
| 9·9† | 40 | 4·0 | 26·9 | |
| 9·3 | | 5·0 | 24·8 | 9·5 |
| 9·6 | | 9·0 | 18·5 | |
| 9·6 | | 10·4 | 27·2 | |
| 9·3 | | 29·3 | 3·7 | |
| 9·4† | | 33·5 | 45·5 | |
| 10·0 | | 40·5 | 23·3 | |
| 9·4 | | 48·0 | 1·6 | |
| 9·6 | | 50·8 | 30·7 | |
| 9·9† | | 59·0 | 26·9 | |
| 9·3† | 41 | 7·0 | 59·7 | |
| 9·6 | | 20·5 | 10·0 | |
| 10·0 | | 29·0 | 28·6 | |
| 9·9 | | 34·5 | 31·1 | |
| 9·2 | | 39·5 | 7·9 | |
| 9·9† | | 51·2 | 58·2 | |
| 9·1 | | 58·7 | 33·9 | |

## 2401—2460.

| mag. | 13h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10·0 | 42 | 5·0 | 32·0 | |
| 9·8 | | 6·7 | 25·9 | |
| 9·6 | | 13·0 | 24·1 | |
| 10·0 | | 13·0 | 1·5 | |
| 9·8 | | 30·0 | 4·7 | |
| 9·6† | | 30·5 | 40·8 | |
| 8·5 | | 42·0 | 8·9 | 8·8 g |
| 9·8 | | 47·0 | 1·7 | |
| 9·2 | 43 | 18·5 | 16·0 | |
| 9·0† | | 19·0 | 55·8 | g |
| 9·4 | | 21·5 | 17·0 | |
| 10·0 | | 38·0 | 17·3 | |
| 9·8 | | 52·0 | 17·5 | |
| 10·0 | | 55·0 | 17·8 | |
| 9·4 | 44 | 5·5 | 18·3 | |
| 9·2 | | 15·0 | 9·9 | 9·5 g |
| 7·8† | | 28·0 | 53·3 | GSg |
| 9·4 | | 29·0 | 9·5 | |
| 9·2 | | 32·7 | 29·9 | |
| 10·0 | | 34·0 | 15·9 | |
| 9·2 | | 47·5 | 21·0 | |
| 9·8† | | 57·0 | 36·4 | |
| 8·0† | 45 | 0·5 | 37·1 | 8·5 GSg |
| 9·8† | | 10·5 | 38·5 | |
| 9·9 | | 18·5 | 27·9 | |
| 8·1 | | 21·0 | 2·1 | 6·5 GSg |
| 9·5† | | 24·0 | 52·5 | |
| 10·0 | 46 | 6·5 | 2·9 | |
| 9·2 | | 24·0 | 19·5 | |
| 9·4 | | 43·2 | 24·9 | |
| 9·5 | | 47·0 | 11·5 | 9·5 |
| 9·0† | | 57·0 | 45·1 | |
| 9·4 | 47 | 3·5 | 8·5 | |
| 10·0 | | 30·0 | 23·2 | |
| 9·9 | | 32·0 | 13·9 | ? |
| 9·9† | | 39·0 | 38·2 | |
| 8·4† | | 51·0 | 37·3 | 9·0 g |
| 8·6 | | 53·5 | 23·4 | 7·5 GSg |
| 9·9 | 48 | 7·0 | 0·3 | |
| 9·5† | | 8·0 | 58·2 | |
| 9·6 | | 11·5 | 0·3 | |
| 9·3† | | 15·0 | 46·5 | |
| 10·0 | | 16·0 | 25·9 | |
| 9·0 | | 21·5 | 26·1 | g |
| 9·6† | | 32·0 | 57·2 | |
| 9·9 | | 47·5 | 31·4 | |
| 7·8 | 49 | 43·5 | 13·7 | 7·8 GSg |
| 9·4† | | 47·0 | 38·1 | |
| 9·2 | 50 | 2·0 | 14·1 | 8·2 GSg |
| 8·8 | | 16·5 | 2·1 | g |
| 9·7† | | 19·5 | 43·7 | |
| 9·2 | | 25·7 | 25·5 | |
| 9·0 | | 29·5 | 1·9 | g |
| 9·5† | | 34·5 | 36·5 | |
| 9·2 | | 38·5 | 17·9 | |
| 9·8 | | 56·5 | 16·1 | |
| 10·0 | | 57·0 | 2·6 | |
| 9·9† | 51 | 7·0 | 47·0 | |
| 8·6† | | 14·0 | 46·8 | g |
| 9·3† | | 32·8 | 47·7 | |

## 2461—2520.

| mag. | 13h.–14h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·2 | 51 | 35·5 | 22·5 | |
| 9·9 | | 37·0 | 33·6 | |
| 10·0 | | 42·0 | 17·7 | |
| 10·0 | | 42·5 | 16·8 | |
| 10·0 | | 53·5 | 13·7 | |
| 9·4† | 52 | 1·8 | 36·5 | |
| 9·8 | | 8·5 | 10·2 | |
| 9·8 | | 38·0 | 20·5 | |
| 9·8 | | 52·0 | 18·2 | |
| 9·7† | | 52·0 | 41·1 | |
| 9·9 | 53 | 34·0 | 20·1 | |
| 7·2† | | 41·0 | 54·1 | g |
| 9·9 | | 46·5 | 0·7 | |
| 9·4 | | 50·5 | 27·0 | g |
| 9·9† | 54 | 2·0 | 52·9 | |
| 9·7† | | 10·5 | 36·9 | |
| 9·9† | | 39·0 | 49·2 | |
| 9·8 | | 40·0 | 4·2 | |
| 9·9 | | 47·5 | 11·1 | |
| 8·9 | | 52·5 | 2·1 | 8·2 Gg |
| 9·8 | | 59·0 | 5·8 | |
| 9·7 | 55 | 10·5 | 14·1 | |
| 9·4 | | 12·5 | 28·5 | |
| 9·1‡ | | 30·5 | 40·2 | |
| 9·9 | | 50·5 | 30·1 | |
| 9·4 | | 58·5 | 21·4 | |
| 9·9 | 56 | 7·5 | 18·9 | |
| 9·4‡ | | 35·0 | 51·5 | |
| 9·4‡ | | 40·5 | 39·6 | 9·5 |
| 9·4 | | 40·5 | 18·4 | |
| 8·6‡ | 57 | 4·3 | 58·0 | g |
| 9·2 | | 13·0 | 9·9 | g |
| 8·8‡ | | 48·5 | 48·9 | |
| 8·8 | | 51·0 | 32·7 | 9·0 Gg |
| 10·0 | 58 | 11·0 | 24·3 | |
| 9·6 | | 17·0 | 17·8 | |
| 9·8 | | 18·0 | 22·1 | |
| 8·7‡ | | 25·5 | 44·7 | 9·0 g |
| 9·7 | | 27·0 | 16·0 | |
| 9·2‡ | | 41·0 | 35·8 | |
| 10·0 | | 57·0 | 17·5 | |
| 9·2‡ | 59 | 1·0 | 55·0 | g |
| 8·6 | | 2·0 | 32·5 | 8·0 Gg |
| 9·9 | | 8·0 | 3·3 | |
| 9·8 | | 11·0 | 4·9 | |
| 9·3‡ | | 17·5 | 42·0 | |
| 9·8 | | 21·0 | 6·4 | |
| 9·1‡ | | 42·0 | 36·7 | 10·0 |
| 9·4‡ | | 49·0 | 41·5 | |
| 9·1 | 0 | 9·0 | 24·8 | 9·0 g |
| 9·9 | | 17·0 | 17·9 | |
| 9·6 | | 51·0 | 3·0 | |
| 8·9 | | 52·5 | 27·5 | 9·0 g |
| 9·7 | 1 | 30·5 | 3·1 | |
| 9·5 | | 32·5 | 7·7 | |
| 9·6 | | 33·0 | 5·1 | |
| 9·4‡ | | 39·5 | 50·2 | |
| 9·4 | | 57·5 | 2·9 | 9·0 g |
| 9·2 | | 57·5 | 13·2 | |
| 9·9 | 2 | 10·0 | 29·4 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 13 | 10 | 101 | [illegible]·0 |
| | 20 | 104 | 7·9 |
| | 30 | 108 | 7·7 |
| | 40 | 111 | 7·6 |
| | 50 | 114 | 7·4 |
| 14 | 0 | 117 | 7·2 |
| | 10 | 120 | 7·0 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 0 | 117 | 7·2 |
| | 10 | 120 | 7·0 |
| | 20 | 123 | 6·8 |
| | 30 | 126 | 6·6 |
| | 40 | 129 | 6·4 |
| | 50 | 131 | 6·2 |
| 15 | 0 | 134 | 5·9 |

## 2521—2580.

| mag. | 14h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4‡ | 2 | 40·0 | 55·8 | 9·5 g |
| 9·8 | | 41·5 | 28·4 | |
| 9·2‡ | 3 | 5·5 | 38·8 | |
| 10·0 | | 22·0 | 17·8 | |
| 7·7‡ | 4 | 2·5 | 36·0 | 8·0 GSg |
| 9·8 | | 2·5 | 25·9 | |
| 8·3‡ | | 32·0 | 56·1 | 8·5 g |
| 10·0 | | 42·0 | 30·5 | |
| 9·5 | | 43·5 | 12·7 | 9·5 g |
| 9·2‡ | | 45·5 | 48·3 | |
| 9·8 | | 51·5 | 9·1 | g |
| 8·0 | 5 | 10·0 | 7·2 | 8·5 g |
| 9·4‡ | | 10·0 | 44·6 | |
| 8·0 | | 14·5 | 4·2 | 8·0 g |
| 9·1 | | 34·5 | 26·9 | |
| 7·7‡ | | 44·8 | 57·2 | g |
| 10·0 | 6 | 2·5 | 11·6 | |
| 9·6 | | 3·5 | 23·0 | |
| 9·4 | | 8·5 | 8·3 | |
| 10·0 | | 14·5 | 1·4 | |
| 9·6 | | 27·0 | 25·0 | |
| 9·4 | | 30·0 | 3·9 | |
| 9·4 | | 34·5 | 17·4 | |
| 7·9† | 7 | 0·0 | 49·2 | g |
| 10·0 | | 24·0 | 17·0 | |
| 9·2 | | 34·0 | 4·0 | 8·5 |
| 8·0 | | 45·0 | 27·6 | 8·0 GSg |
| 9·1 | 8 | 4·5 | 28·0 | 9·3 Gg |
| 9·3 | | 19·0 | 27·0 | 8·7 Gg |
| 9·6 | | 22·0 | 14·6 | |
| 9·9 | | 32·0 | 33·0 | |
| 10·0 | | 45·0 | 26·7 | |
| 9·1 | 9 | 20·0 | 35·0 | 9·0 g |
| 9·4‡ | | 34·5 | 35·2 | |
| 8·7 | | 53·0 | 5·1 | 9·0 g |
| 9·0‡ | 10 | 3·5 | 57·4 | 9·2 g |
| 9·0‡ | | 4·0 | 42·6 | |
| 10·0 | | 12·0 | 26·0 | |
| 9·2 | | 16·0 | 10·9 | G |
| 9·0‡ | | 31·0 | 38·0 | g |
| 9·9 | | 58·0 | 20·8 | |
| 9·8 | 11 | 21·0 | 31·9 | |
| 8·4‡ | 12 | 6·3 | 56·8 | 8·5 g |
| 9·2 | | 13·0 | 22·8 | |
| 9·4‡ | | 30·5 | 52·4 | |
| 9·8 | | 41·5 | 17·9 | |
| 9·5‡ | | 41·5 | 46·6 | |
| 9·2 | | 47·0 | 31·7 | |
| 9·7 | 13 | 12·5 | 21·3 | |
| 9·1‡ | | 16·5 | 55·3 | |
| 9·5‡ | | 22·5 | 37·4 | |
| 9·5‡ | 14 | 1·5 | 54·0 | |
| 10·0 | | 37·0 | 12·8 | |
| 6·9‡ | | 45·5 | 37·4 | 6·0 GScgr |
| 8·7‡ | | 55·5 | 47·5 | 8·0 Gg |
| 8·8‡ | 15 | 9·0 | 46·0 | 9·0 g |
| 10·0 | | 48·0 | 8·4 | |
| 9·8 | | 50·0 | 4·9 | |
| 8·7‡ | 16 | 35·0 | 40·5 | Gg |
| 9·8 | | 40·0 | 1·3 | |

## 2581—2640.

| mag. | 14h. m | s | −67° ′ | |
|---|---|---|---|---|
| 10·0 | 16 | 51·0 | 17·9 | |
| 9·2‡ | | 55·5 | 41·4 | |
| 9·4‡ | 17 | 0·0 | 47·4 | |
| 8·9‡ | | 9·5 | 51·0 | |
| 9·8 | | 21·5 | 13·0 | g |
| 9·4‡ | 18 | 37·0 | 37·1 | Gg |
| 9·1 | | 40·0 | 3·7 | 9·5 g |
| 9·1 | | 42·5 | 18·5 | g |
| 9·3‡ | 19 | 20·5 | 42·9 | |
| 9·0‡ | | 33·5 | 59·5 | |
| 9·9 | 20 | 24·5 | 25·1 | |
| 10·0 | | 42·5 | 1·5 | |
| 9·7 | | 46·7 | 5·6 | |
| 9·4‡ | | 49·0 | 58·5 | |
| 7·6 | | 52·3 | 9·4 | 6·5 GSggr |
| 9·9 | 21 | 4·5 | 25·5 | |
| 9·0‡ | | 6·5 | 50·1 | 8·5 Gg |
| 9·6 | | 33·2 | 35·3 | |
| 9·3 | | 49·0 | 11·3 | g |
| 9·6 | | 52·5 | 0·5 | |
| 8·6‡ | 22 | 30·0 | 47·0 | g |
| 8·7 | | 57·0 | 35·0 | g |
| 6·9 | 23 | 24·0 | 3·8 | 7·5 GSggr |
| 8·3 | 24 | 24·5 | 1·5 | 8·0 Ggg |
| 9·6 | | 48·0 | 25·8 | |
| 9·8 | 25 | 8·0 | 11·3 | |
| 9·6 | | 28·5 | 16·4 | 9·5 g |
| 9·6‡ | 26 | 22·5 | 43·7 | |
| 9·4 | | 39·0 | 4·5 | |
| 9·3 | | 43·5 | 5·7 | |
| 9·6‡ | | 53·5 | 53·1 | |
| 9·4 | | 55·0 | 3·2 | |
| 9·3 | 27 | 9·5 | 23·0 | |
| 9·4 | | 16·5 | 28·6 | |
| 9·4 | | 17·0 | 33·6 | 9·0 g |
| 7·6 | | 18·5 | 22·4 | 6·5 GSg |
| 9·2 | | 21·5 | 32·7 | g |
| 9·4‡ | | 28·0 | 53·1 | |
| 9·4 | | 51·5 | 26·7 | |
| 9·5‡ | | 54·2 | 59·1 | |
| 9·8 | 28 | 6·0 | 31·9 | 9·0 g |
| 7·0‡ | | 51·0 | 39·6 | 7·0 GSg |
| 9·4‡ | 29 | 23·0 | 48·2 | |
| 9·9 | | 32·8 | 1·1 | 9·5 g |
| 9·4 | | 41·5 | 16·8 | |
| 10·0 | 30 | 0·0 | 0·5 | |
| 9·6 | | 21·0 | 13·6 | |
| 9·6 | | 21·5 | 4·7 | |
| 9·6 | | 32·0 | 8·9 | |
| 10·0 | | 58·5 | 15·8 | |
| 10·0 | 31 | 1·0 | 15·7 | |
| 8·5‡ | | 8·0 | 43·9 | 8·0 g |
| 9·8 | | 8·5 | 5·2 | |
| 9·0‡ | | 12·5 | 44·1 | 10·0 g |
| 10·0 | 33 | 25·5 | 24·8 | |
| 9·0 | | 35·5 | 6·4 | g |
| 9·7 | | 52·5 | 22·5 | |
| 10·0 | 34 | 20·5 | 22·2 | |
| 10·0 | | 37·0 | 11·7 | |
| 9·6 | 35 | 12·0 | 30·1 | |

## 2641—2700.

| mag. | 14h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4‡ | 35 | 37·8 | 41·9 | |
| 8·8 | | 38·0 | 14·2 | 9·0 g |
| 8·9 | | 45·0 | 35·4 | 8·5 g |
| 9·2 | | 48·0 | 3·2 | |
| 9·6† | | 51·8 | 53·9 | |
| 9·6 | 36 | 21·5 | 5·4 | g |
| 9·2 | | 23·5 | 16·2 | |
| 9·8† | | 25·8 | 36·0 | |
| 9·8† | | 27·3 | 36·6 | |
| 9·8† | | 37·8 | 31·7 | |
| 8·9 | | 53·3 | 28·0 | |
| 7·4† | 37 | 1·1 | 59·5 | 7·5 GSg |
| 9·8† | | 5·3 | 43·0 | |
| 8·6 | | 12·5 | 18·4 | 9·0 g |
| 9·6† | | 28·8 | 58·2 | |
| 9·7† | | 32·8 | 58·0 | |
| 9·6† | | 41·3 | 27·5 | |
| 9·7† | | 55·8 | 52·1 | |
| 9·6† | 38 | 18·8 | 25·2 | |
| 9·6 | | 21·5 | 20·2 | g |
| 9·4 | | 50·3 | 27·0 | |
| 9·8† | 39 | 8·3 | 36·3 | |
| 9·8† | | 21·3 | 37·0 | |
| 8·9† | | 34·1 | 57·2 | g |
| 9·4† | | 54·3 | 44·2 | |
| 8·8† | 40 | 0·4 | 41·5 | |
| 8·6† | | 2·3 | 57·2 | 8·5 g |
| 9·5† | | 6·8 | 52·4 | |
| 9·2 | | 12·0 | 28·6 | |
| 9·8† | | 18·3 | 32·7 | |
| 9·0 | | 52·1 | 29·1 | g |
| 9·4† | | 55·3 | 40·4 | |
| 9·7† | | 58·8 | 27·2 | |
| 9·2 | 41 | 51·0 | 31·0 | g |
| 9·6† | 42 | 2·1 | 45·0 | |
| 8·5† | | 23·1 | 52·5 | 7·5 Gg |
| 9·7† | | 26·6 | 49·0 | |
| 9·7 | | 29·0 | 3·4 | |
| 10·0 | | 43·0 | 17·0 | |
| 10·0 | 43 | 18·0 | 3·0 | |
| 9·0† | | 28·1 | 52·2 | |
| 9·5† | | 28·6 | 26·6 | |
| 9·0 | | 35·5 | 7·9 | g |
| 9·8† | | 45·1 | 54·3 | |
| 8·8 | | 46·5 | 22·1 | 9·5 g |
| 9·4 | 44 | 10·0 | 21·3 | |
| 9·2 | | 17·5 | 34·1 | |
| 9·7† | | 25·6 | 53·0 | |
| 9·8† | | 28·6 | 52·7 | |
| 9·6 | | 30·5 | 3·6 | |
| 9·2 | | 32·0 | 34·4 | |
| 9·5† | | 44·1 | 37·0 | |
| 9·8† | | 49·6 | 33·4 | |
| 9·4† | 45 | 9·1 | 38·8 | |
| 9·4† | | 18·6 | 45·2 | |
| 9·6† | | 24·1 | 46·0 | |
| 9·6 | | 25·7 | 29·5 | |
| 9·6† | | 27·1 | 32·8 | |
| 9·2† | | 29·6 | 37·8 | |
| 9·6† | | 57·1 | 57·8 | |

## 2701—2760.

| mag. | 14h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6† | 46 | 1·1 | 51·2 | |
| 9·6 | | 39·5 | 34·2 | |
| 9·2 | | 44·0 | 6·1 | g |
| 9·6† | 47 | 9·1 | 49·9 | |
| 9·6† | | 13·6 | 52·8 | |
| 9·4† | | 18·6 | 43·8 | |
| 8·8† | | 24·1 | 56·0 | 10·0 g |
| 9·4† | | 26·9 | 54·4 | |
| 9·1† | | 32·1 | 41·8 | |
| 9·8† | | 36·1 | 34·4 | |
| 9·8† | 48 | 2·6 | 58·4 | |
| 8·8 | | 3·0 | 3·0 | 9·5 g |
| 9·5† | | 13·6 | 53·0 | |
| 9·6† | 49 | 1·1 | 45·5 | |
| 19·0 | | 27·5 | 4·7 | |
| 9·4 | | 37·0 | 10·2 | |
| 9·6 | | 51·5 | 15·1 | |
| 9·8† | 50 | 2·6 | 58·4 | |
| 6·8 | | 7·5 | 28·8 | 7·0 GSgr |
| 9·7† | | 12·1 | 33·6 | |
| 10·0 | | 25·5 | 19·9 | |
| 9·6† | | 33·0 | 58·6 | |
| 9·6 | 51 | 7·0 | 33·2 | |
| 9·8† | | 18·0 | 56·8 | |
| 9·8† | | 26·0 | 40·4 | |
| 9·4† | | 30·8 | 56·9 | |
| 9·8† | | 40·5 | 56·9 | |
| 9·4† | 52 | 16·0 | 46·8 | |
| 9·6† | | 23·0 | 35·0 | |
| 9·6† | | 27·5 | 55·0 | |
| 9·6† | | 35·0 | 53·4 | |
| 9·8† | | 54·5 | 46·0 | |
| 9·0 | | 54·5 | 9·7 | |
| 9·3† | 53 | 16·0 | 38·0 | |
| 9·8† | | 18·0 | 58·7 | |
| 9·4 | | 22·5 | 3·2 | |
| 9·6† | | 27·5 | 59·7 | |
| 9·5† | | 28·0 | 59·4 | |
| 8·5† | | 36·0 | 37·9 | 9·5 g |
| 9·6† | | 38·5 | 51·3 | |
| 9·2† | | 43·0 | 39·2 | 9·5 g |
| 9·5† | | 59·0 | 52·8 | 10·0 |
| 8·8 | | 59·5 | 10·4 | g |
| 8·9 | 54 | 4·0 | 19·3 | |
| 9·6 | | 15·0 | 11·5 | |
| 9·8† | | 26·5 | 34·4 | |
| 9·4 | | 28·5 | 9·8 | g |
| 9·8† | | 36·5 | 36·3 | |
| 9·2† | | 42·5 | 52·8 | 9·5 g |
| 9·4† | 55 | 1·5 | 35·5 | |
| 9·7† | | 6·0 | 35·4 | |
| 9·6 | | 12·5 | 25·7 | |
| 9·7† | | 22·0 | 39·6 | |
| 8·9† | | 51·0 | 43·1 | g |
| 9·8† | | 55·2 | 41·3 | |
| 9·5† | | 55·5 | 29·2 | |
| 9·7† | 56 | 6·0 | 52·7 | |
| 9·4† | | 48·0 | 56·3 | |
| 9·6† | 57 | 7·5 | 37·0 | |
| 9·4† | | 15·0 | 35·6 | |

## 2761—2820.

| mag. | 14h.–15h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6† | 57 | 21·0 | 56·3 | |
| 9·5† | | 24·0 | 38·5 | |
| 9·4† | | 42·0 | 51·2 | |
| 9·7 | | 44·0 | 0·6 | 9·0 |
| 9·6† | | 47·5 | 39·9 | |
| 9·6 | | 50·0 | 11·1 | |
| 9·6† | | 52·0 | 43·0 | |
| 9·8† | 58 | 10·5 | 54·9 | |
| 9·2 | | 12·5 | 16·9 | |
| 9·6 | | 30·3 | 18·6 | |
| 8·4† | 59 | 2·5 | 42·0 | g |
| 9·7† | | 16·5 | 46·4 | |
| 8·8 | | 23·5 | 5·8 | 8·5 g |
| 9·3† | | 40·5 | 49·3 | |
| 9·6† | | 48·0 | 29·1 | |
| 9·1 | | 54·1 | 30·3 | 7·5 Gg |
| 9·8† | 0 | 6·0 | 59·5 | |
| 9·2† | | 7·0 | 44·5 | |
| 9·6† | | 16·5 | 51·0 | |
| 7·6 | | 22·5 | 13·8 | 7·5 GSg |
| 9·8† | | 24·5 | 44·7 | |
| 9·2† | | 27·0 | 42·8 | |
| 9·8† | | 45·0 | 35·8 | |
| 9·8† | 1 | 12·5 | 33·6 | |
| 9·6† | | 29·5 | 55·5 | |
| 9·5† | | 52·5 | 34·9 | |
| 9·0 | 2 | 0·0 | 15·9 | 9·5 |
| 9·6† | | 13·5 | 45·2 | |
| 9·9 | | 28·5 | 13·2 | |
| 9·8† | | 29·5 | 56·4 | |
| 9·7 | | 31·5 | 30·8 | g |
| 9·8 | | 38·0 | 25·1 | |
| 9·8† | | 40·5 | 42·9 | |
| 9·9 | | 41·5 | 15·9 | 9·5 |
| 9·2 | | 44·0 | 1·8 | |
| 9·7 | | 48·0 | 28·9 | g |
| 9·1 | | 52·5 | 7·8 | 9·5 g |
| 9·0† | 3 | 3·5 | 47·4 | |
| 8·6 | | 26·0 | 36·9 | 8·5 g |
| 9·4† | | 29·6 | 45·7 | |
| 9·2† | | 33·0 | 39·8 | |
| 10·0 | | 55·5 | 33·0 | |
| 10·0 | | 58·0 | 30·9 | |
| 9·5† | 4 | 24·5 | 44·8 | |
| 9·7† | | 31·9 | 58·5 | |
| 9·4† | | 32·5 | 28·0 | |
| 8·6 | | 58·5 | 0·9 | 8·8 g |
| 8·5† | 5 | 5·5 | 50·0 | 9·0 g |
| 8·4 | | 7·5 | 24·5 | g |
| 9·3† | | 9·9 | 56·8 | |
| 8·5 | | 16·5 | 11·5 | 9·0 g |
| 9·7 | | 24·0 | 31·9 | g |
| 9·5† | | 46·5 | 46·9 | |
| 10·0 | | 54·0 | 17·6 | |
| 9·6† | 6 | 14·0 | 35·7 | |
| 9·4 | | 20·0 | 15·6 | |
| 9·7† | | 22·5 | 31·7 | |
| 9·8† | | 33·0 | 31·9 | |
| 9·6 | | 47·0 | 34·9 | |
| 9·8† | | 49·8 | 57·7 | |

## 2821—2880.

| mag. | 15h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·8† | 6 | 50·3 | 50·5 | |
| 8·9 | | 51·0 | 27·9 | |
| 9·9 | 7 | 11·0 | 33·5 | g |
| 9·0 | | 13·5 | 28·9 | g |
| 9·8† | | 24·3 | 32·8 | |
| 9·7† | | 33·8 | 57·0 | |
| 10·0 | | 40·2 | 30·8 | |
| 9·8† | | 55·8 | 51·1 | |
| 9·4 | 8 | 10·4 | 29·9 | g |
| 9·7† | | 14·3 | 35·9 | |
| 8·8 | | 22·5 | 18·2 | g |
| 9·8† | | 50·8 | 45·0 | |
| 10·0 | | 55·4 | 27·6 | |
| 9·5† | 9 | 3·3 | 54·0 | |
| 9·4 | | 6·5 | 8·0 | |
| 6·6 | | 17·5 | 1·3 | 6·5 GSg |
| 8·0 | | 26·7 | 1·2 | 8·5 g |
| 9·2† | | 46·3 | 57·5 | |
| 9·3† | 10 | 10·8 | 45·6 | |
| 9·7 | | 23·0 | 1·7 | |
| 9·8† | | 56·3 | 49·8 | |
| 9·4† | 11 | 4·2 | 56·6 | |
| 9·6† | | 9·8 | 44·7 | |
| 9·3† | | 19·8 | 54·2 | |
| 9·8† | | 47·3 | 36·2 | |
| 9·8† | 12 | 4·3 | 53·9 | |
| 9·8† | | 5·2 | 30·7 | |
| 9·1 | | 8·4 | 30·3 | g |
| 9·8† | | 18·8 | 26·4 | |
| 9·8† | | 19·3 | 40·2 | |
| 9·6† | | 21·3 | 35·7 | |
| 9·7† | | 33·8 | 39·4 | |
| 9·4† | | 34·4 | 36·9 | |
| 9·9 | | 40·5 | 14·0 | g |
| 9·8† | 13 | 1·3 | 31·7 | |
| 8·7† | | 11·1 | 49·8 | 9·5 g |
| 9·5† | | 27·3 | 52·3 | |
| 9·2† | | 29·2 | 55·0 | |
| 9·5† | 14 | 7·8 | 49·1 | |
| 9·4† | | 17·3 | 38·8 | |
| 9·8† | | 19·3 | 29·2 | |
| 9·7† | | 19·8 | 27·8 | |
| 9·5 | | 20·5 | 17·5 | |
| 7·5† | | 29·2 | 51·8 | 6·5 GScgr |
| 9·2 | | 39·0 | 23·8 | |
| 9·8† | | 47·2 | 34·7 | |
| 9·6 | | 49·0 | 29·0 | |
| 9·7† | 15 | 23·3 | 39·3 | |
| 9·8† | | 30·3 | 29·0 | |
| 9·6† | | 37·5 | 28·4 | |
| 10·0 | | 46·5 | 6·5 | |
| 9·8† | | 50·5 | 32·0 | |
| 9·6† | | 54·0 | 33·6 | |
| 9·5† | 16 | 8·5 | 50·2 | |
| 9·8† | | 25·5 | 53·6 | |
| 9·8† | | 32·5 | 36·1 | |
| 9·7† | | 57·0 | 37·4 | |
| 8·4† | 17 | 7·6 | 44·2 | 8·5 g |
| 9·5† | | 14·0 | 51·7 | |
| 9·0† | | 16·5 | 54·6 | 8·5 g |

## 2881—2940.

| mag. | 15h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8·9† | 17 | 19·0 | 58·2 | g |
| 9·4† | | 29·5 | 35·6 | |
| 8·9 | | 43·0 | 22·4 | g |
| 9·1† | 18 | 1·5 | 56·2 | |
| 7·2 | | 18·5 | 2·8 | 8·0 GSg |
| 9·7† | | 20·0 | 36·2 | |
| 9·4† | | 23·0 | 55·0 | |
| 9·6† | | 28·5 | 36·3 | |
| 9·8† | | 51·0 | 31·0 | |
| 8·7† | | 59·0 | 51·1 | g |
| 9·2† | 19 | 10·0 | 48·9 | |
| 9·4† | | 10·3 | 58·9 | |
| 8·5 | | 10·5 | 12·2 | g |
| 9·2 | | 11·5 | 8·1 | 9·5 g |
| 9·1 | | 11·5 | 19·8 | g |
| 9·7 | | 31·5 | 5·7 | 8·5 g |
| 9·8† | | 39·0 | 48·2 | |
| 9·6† | | 39·5 | 39·1 | |
| 9·8 | 20 | 20·0 | 10·0 | |
| 9·8† | | 29·5 | 44·2 | |
| 9·0† | | 39·5 | 41·8 | 9·0 g |
| 9·7† | | 45·5 | 43·1 | |
| 10·0 | | 46·5 | 6·2 | |
| 9·7† | 21 | 17·0 | 48·8 | |
| 9·5† | | 42·7 | 37·9 | |
| 9·8† | 22 | 52·0 | 39·4 | |
| 9·8† | | 54·5 | 31·7 | |
| 9·7† | 23 | 1·5 | 57·4 | |
| 8·5† | | 8·8 | 45·6 | 8·5 g |
| 9·2 | | 21·0 | 0·3 | |
| 9·7† | | 29·5 | 41·8 | |
| 8·4† | | 29·7 | 57·1 | g |
| 9·6† | | 59·0 | 32·4 | |
| 9·8† | 24 | 0·0 | 22·1 | |
| 9·8 | | 11·0 | 25·5 | |
| 9·8 | | 35·5 | 5·6 | |
| 9·7† | | 39·0 | 52·0 | |
| 9·8† | | 43·0 | 36·6 | |
| 8·6† | | 45·8 | 51·4 | g |
| 9·8† | 25 | 10·0 | 32·1 | |
| 8·2 | | 11·0 | 3·8 | 8·8 g |
| 9·8† | | 11·0 | 51·9 | |
| 9·6† | | 13·0 | 38·2 | |
| 9·3‡ | | 14·0 | 43·7 | 9·0 g |
| 9·0‡ | | 30·7 | 47·5 | |
| 9·6‡ | 26 | 47·0 | 51·2 | |
| 8·8‡ | 27 | 44·5 | 51·2 | 9·0 g |
| 9·4‡ | 28 | 12·5 | 33·2 | |
| 9·5‡ | | 40·5 | 26·2 | |
| 9·0 | 29 | 2·0 | 24·1 | g |
| 9·2‡ | | 31·0 | 57·3 | 9·0 g |
| 8·6 | | 40·5 | 10·8 | 9·3 g |
| 9·2 | | 50·5 | 36·4 | g |
| 9·6‡ | 30 | 25·0 | 50·3 | |
| 8·8‡ | | 31·5 | 49·1 | |
| 9·2 | | 32·0 | 9·3 | g |
| 9·4 | 31 | 48·5 | 28·2 | g |
| 8·3‡ | 32 | 16·0 | 40·6 | 9·2 g |
| 9·4 | | 20·5 | 3·8 | 9·0 g |
| 9·0‡ | | 23·5 | 57·9 | g |

## 2941—3000.

| mag. | 15h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6‡ | 32 | 27·5 | 25·2 | |
| 9·8 | | 56·5 | 36·0 | 9·2 g |
| 9·4‡ | 33 | 20·5 | 59·2 | |
| 9·5‡ | | 31·5 | 51·6 | |
| 10·0 | | 56·5 | 11·0 | |
| 10·0 | 34 | 16·5 | 33·0 | |
| 9·0 | | 22·5 | 2·8 | 9·5 g |
| 9·4 | | 33·0 | 0·2 | 9·2 g |
| 9·4‡ | | 33·5 | 47·5 | |
| 9·2‡ | | 40·5 | 41·5 | |
| 10·0 | | 41·0 | 2·0 | |
| 9·5‡ | 35 | 26·5 | 33·0 | |
| 10·0 | | 37·0 | 19·4 | |
| 9·1‡ | | 42·0 | 44·6 | |
| 9·6‡ | | 48·0 | 25·2 | |
| 9·6‡ | | 53·0 | 47·6 | |
| 8·6‡ | | 59·5 | 44·1 | |
| 9·1‡ | 36 | 2·5 | 42·9 | |
| 9·3‡ | | 49·5 | 44·7 | |
| 9·6‡ | | 56·5 | 40·4 | |
| 9·1‡ | 37 | 33·0 | 54·8 | g |
| 10·0 | | 46·0 | 2·8 | |
| 8·5‡ | | 50·5 | 43·6 | g |
| 9·4 | | 59·3 | 20·7 | g |
| 10·0 | 38 | 13·5 | 37·1 | |
| 9·6‡ | | 34·0 | 25·9 | g |
| 8·8‡ | | 38·0 | 44·5 | g |
| 10·0 | | 48·0 | 9·3 | |
| 9·7 | 39 | 13·0 | 22·1 | 8·5 g |
| 9·4 | | 22·0 | 29·6 | |
| 9·5‡ | | 53·5 | 53·5 | |
| 9·4‡ | 40 | 15·0 | 35·9 | |
| 7·7 | | 35·7 | 15·4 | 7·0 GSg |
| 9·6‡ | | 53·5 | 46·2 | |
| 9·7 | 41 | 8·5 | 20·8 | |
| 9·2 | | 17·5 | 31·4 | |
| 9·6 | | 21·0 | 20·2 | g |
| 8·9‡ | | 24·5 | 48·3 | 8·5 g |
| 9·5‡ | | 27·0 | 42·2 | |
| 9·3‡ | | 50·5 | 59·8 | |
| 9·5 | | 59·0 | 1·2 | |
| 9·4‡ | 42 | 43·5 | 45·4 | |
| 9·6 | 43 | 29·0 | 14·2 | |
| 9·1 | | 38·0 | 2·7 | g |
| 9·4 | | 40·5 | 1·8 | 9·0 |
| 9·3 | | 54·0 | 14·0 | |
| 8·6 | 44 | 1·0 | 3·9 | 9·5 g |
| 8·1‡ | | 9·0 | 52·5 | g |
| 9·2‡ | | 18·0 | 46·8 | |
| 9·6 | | 29·0 | 8·2 | |
| 9·6 | | 31·5 | 7·5 | |
| 9·7 | | 35·0 | 17·0 | |
| 8·9 | | 53·5 | 7·7 | 9·5 g |
| 9·4‡ | 45 | 9·5 | 50·2 | |
| 9·2 | | 21·0 | 27·9 | g |
| 8·6‡ | | 30·0 | 58·2 | 9·0 g |
| 9·1 | | 44·5 | 19·5 | |
| 9·2‡ | 46 | 19·0 | 47·0 | |
| 9·6‡ | | 32·5 | 39·5 | |
| 9·0‡ | 47 | 33·0 | 36·3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| | 50 | 131 | 6·2 |
| 15 | 0 | 134 | 5·9 |
| | 10 | 136 | 5·6 |
| | 20 | 139 | 5·4 |
| | 30 | 141 | 5·1 |
| | 40 | 143 | 4·8 |
| | 50 | 145 | 4·5 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 40 | 143 | 4·8 |
| | 50 | 145 | 4·5 |
| 16 | 0 | 147 | 4·2 |
| | 10 | 148 | 3·9 |
| | 20 | 150 | 3·5 |
| | 30 | 151 | 3·2 |
| | 40 | 153 | 2·9 |
| | 50 | 154 | 2·5 |

### 3001—3060.

| mag. | 15h.–16h. m s | −67° ′ | |
|---|---|---|---|
| 9·0 | 47 47·5 | 31·6 | |
| 9·1 | 49·5 | 0·0 | 9·5 |
| 9·7 | 56·2 | 3·4 | 9·0 |
| 9·4‡ | 48 0·0 | 36·6 | |
| 9·2 | 8·0 | 1·7 | 9·5 |
| 9·2‡ | 27·5 | 50·2 | g |
| 8·3‡ | 35·0 | 45·2 | g |
| 9·3 | 45·5 | 17·9 | |
| 9·5 | 50 33·5 | 31·8 | |
| 9·3 | 49·0 | 33·8 | |
| 9·4‡ | 51 32·5 | 53·2 | 9·5 |
| 9·3 | 52 37·0 | 2·9 | |
| 9·2‡ | 51·5 | 44·7 | |
| 9·6‡ | 59·0 | 44·2 | |
| 9·1 | 54 9·5 | 14·1 | g |
| 9·4‡ | 28·0 | 45·8 | |
| 9·1‡ | 46·0 | 38·2 | |
| 9·1 | 50·0 | 28·2 | g |
| 9·3 | 55 9·0 | 33·7 | |
| 9·7 | 30·0 | 16·3 | |
| 9·3 | 35·0 | 17·4 | |
| 9·3 | 49·0 | 34·1 | |
| 9·2‡ | 56 28·5 | 45·4 | |
| 9·3 | 49·0 | 30·4 | |
| 9·4‡ | 59·5 | 35·3 | |
| 9·3 | 57 14·0 | 21·9 | g |
| 9·6 | 16·0 | 23·2 | g |
| 9·3 | 58 52·0 | 33·8 | |
| 9·1‡ | 59 54·0 | 55·6 | |
| 9·3 | 0 1·0 | 33·3 | |
| 8·9 | 11·0 | 34·5 | g |
| 8·9‡ | 14·0 | 40·1 | |
| 9·7 | 17·5 | 34·1 | |
| 9·6‡ | 46·5 | 48·9 | |
| 9·6‡ | 59·0 | 56·9 | |
| 9·6‡ | 1 10·0 | 29·0 | |
| 9·1 | 33·5 | 28·5 | |
| 9·7 | 50·0 | 33·7 | g |
| 9·0‡ | 2 2·5 | 50·6 | 10·0 |
| 9·0‡ | 14·5 | 47·5 | 9·5 g |
| 9·6‡ | 27·5 | 42·1 | |
| 9·2 | 29·0 | 18·2 | |
| 9·3 | 30·0 | 6·7 | |
| 8·9‡ | 41·5 | 44·0 | |
| 9·7 | 3 1·0 | 15·0 | |
| 9·6 | 3·0 | 17·7 | g |
| 9·4‡ | 19·0 | 46·7 | |
| 9·5 | 21·5 | 22·7 | |
| 9·7 | 45·0 | 5·8 | |
| 9·6 | 47·5 | 19·1 | g |
| 9·4‡ | 59·0 | 51·7 | |
| 8·9‡ | 4 21·5 | 45·8 | 9·0 g |
| 9·3 | 30·5 | 10·9 | |
| 6·6‡ | 38·5 | 37·2 | 6·5 GScg |
| 8·3 | 42·5 | 18·9 | g |
| 9·3 | 5 1·5 | 24·1 | |
| 9·2 | 7·5 | 5·9 | 9·5 g |
| 9·0‡ | 18·0 | 56·5 | |
| 10·1† | 57·5 | 48·3 | |
| 8·9 | 6 55·0 | 28·2 | 9·5 g |

### 3061—3120.

| mag. | 16h. m s | −67° ′ | |
|---|---|---|---|
| 9·4† | 6 57·7 | 57·5 | |
| 10·0† | 7 4·5 | 24·9 | |
| 10·0† | 11·5 | 51·3 | |
| 9·1 | 15·3 | 27·5 | 8·5 g |
| 9·2† | 23·2 | 58·6 | |
| 10·0† | 25·5 | 49·9 | |
| 8·8† | 26·2 | 42·1 | 9·0 g |
| 8·6† | 46·7 | 41·1 | 9·0 g |
| 10·0† | 47·5 | 31·8 | |
| 10·0† | 51·5 | 35·9 | |
| 9·6† | 58·2 | 51·4 | |
| 8·8 | 59·0 | 3·4 | 10·0 |
| 9·6 | 8 19·0 | 12·9 | |
| 9·6 | 22·0 | 11·8 | |
| 10·0† | 44·5 | 48·1 | |
| 9·2† | 53·0 | 45·2 | |
| 9·6† | 57·0 | 53·0 | |
| 9·6† | 59·0 | 42·9 | |
| 8·8 | 59·0 | 4·9 | 8·0 g |
| 9·6† | 9 2·0 | 46·6 | |
| 9·1 | 7·5 | 6·1 | |
| 8·4 | 16·7 | 1·1 | 8·5 g |
| 9·6 | 35·0 | 1·2 | 9·5 g |
| 9·7 | 10 15·0 | 19·6 | |
| 9·6† | 16·5 | 28·9 | |
| 9·8† | 21·0 | 47·1 | |
| 9·7 | 35·5 | 0·3 | |
| 10·0† | 52·0 | 32·4 | |
| 9·6† | 55·5 | 30·4 | |
| 9·6† | 56·5 | 38·5 | |
| 9·4† | 11 6·5 | 53·1 | |
| 10·0† | 11·0 | 28·9 | |
| 10·0† | 16·0 | 33·0 | |
| 9·8† | 26·0 | 53·0 | |
| 10·0† | 40·0 | 32·3 | |
| 9·4† | 43·0 | 52·2 | |
| 10·0† | 12 11·5 | 56·1 | |
| 10·1† | 24·5 | 56·3 | |
| 8·6† | 34·5 | 49·8 | 9·0 g |
| 9·7 | 40·0 | 8·1 | g |
| 9·7 | 43·5 | 7·0 | |
| 10·0† | 45·5 | 49·0 | |
| 10·1† | 51·5 | 27·4 | |
| 10·1† | 13 11·5 | 56·9 | |
| 9·0 | 29·0 | 17·4 | 9·0 g |
| 10·1† | 46·5 | 38·1 | |
| 9·7 | 14 13·5 | 17·9 | 9·5 |
| 10·0† | 20·0 | 59·9 | |
| 10·0† | 25·5 | 27·5 | |
| 9·3 | 49·5 | 4·9 | |
| 9·2† | 51·5 | 35·9 | g |
| 10·1† | 51·5 | 53·7 | |
| 9·4 | 52·5 | 6·9 | |
| 10·1† | 15 14·0 | 42·9 | |
| 9·3 | 31·5 | 27·2 | |
| 10·1† | 59·0 | 25·0 | |
| 9·0 | 16 24·5 | 11·9 | 8·5 g |
| 9·2† | 41·0 | 43·3 | |
| 9·0 | 47·5 | 28·9 | 8·5 g |
| 9·4† | 17 1·0 | 41·5 | |

### 3121—3180.

| mag. | 16h. m s | −67° ′ | |
|---|---|---|---|
| 10·0† | 17 8·5 | 34·2 | |
| 10·1† | 42·0 | 32·0 | |
| 9·3 | 42·5 | 17·1 | 9·5 |
| 10·1† | 47·5 | 46·0 | |
| 9·0 | 48·8 | 2·1 | 9·5 g |
| 9·7 | 49·5 | 14·7 | |
| 7·7† | 18 0·0 | 47·4 | 8·5 g |
| 9·6† | 1·5 | 39·5 | |
| 9·7 | 8·5 | 23·1 | |
| 9·3 | 13·0 | 7·3 | |
| 9·6† | 24·0 | 33·8 | |
| 10·0† | 37·0 | 58·7 | |
| 9·7 | 39·5 | 30·9 | |
| 8·9 | 19 34·4 | 0·9 | 9·0 g |
| 9·7 | 20 1·5 | 13·7 | |
| 9·7 | 7·0 | 29·7 | |
| 9·7 | 11·5 | 22·9 | |
| 9·6 | 20·5 | 4·7 | |
| 10·1† | 28·5 | 35·6 | |
| 9·7 | 32·8 | 9·6 | g |
| 9·2† | 36·0 | 57·0 | g |
| 9·6† | 49·0 | 56·5 | g |
| 10·1† | 21 9·5 | 43·0 | |
| 9·0† | 10·0 | 59·8 | g |
| 10·1† | 20·0 | 51·1 | |
| 9·4† | 37·5 | 53·5 | |
| 9·0 | 22 5·7 | 4·9 | |
| 9·7 | 7·5 | 18·1 | |
| 8·8† | 9·0 | 53·4 | 9·5 g |
| 9·4† | 11·0 | 45·2 | |
| 10·1† | 22·0 | 38·2 | |
| 8·2 | 25·0 | 2·5 | 8·2 g |
| 9·8† | 42·5 | 57·0 | |
| 10·1† | 48·0 | 50·0 | |
| 9·6† | 49·0 | 48·7 | |
| 9·2† | 54·0 | 57·0 | |
| 8·2 | 58·5 | 4·5 | 8·7 g |
| 8·5 | 23 5·5 | 12·5 | 8·5 g |
| 9·6† | 9·0 | 58·5 | |
| 9·2 | 19·5 | 1·3 | |
| 10·0† | 22·0 | 26·1 | |
| 8·6 | 24·0 | 11·0 | 8·0 g |
| 9·5 | 25·0 | 30·9 | |
| 10·1† | 28·0 | 58·1 | |
| 9·4† | 45·0 | 53·0 | 9·0 g |
| 10·1† | 47·0 | 59·9 | |
| 9·7† | 24 5·0 | 38·4 | |
| 9·4† | 12·5 | 41·1 | |
| 8·6 | 12·5 | 9·7 | 8·7 g |
| 10·0† | 28·5 | 46·0 | |
| 9·5 | 59·0 | 21·9 | |
| 9·0† | 25 18·0 | 45·9 | 9·0 g |
| 10·0† | 21·5 | 54·5 | |
| 10·1† | 35·5 | 53·1 | |
| 9·3 | 41·5 | 30·2 | |
| 9·4† | 52·5 | 51·0 | g |
| 9·2† | 26 17·5 | 40·2 | |
| 10·0† | 20·0 | 50·0 | |
| 9·6† | 44·0 | 45·8 | |
| 10·0† | 51·5 | 59·9 | |

### 3181—3240.

| mag. | 16h. m s | −67° ′ | |
|---|---|---|---|
| 10·0† | 27 48·0 | 25·0 | |
| 9·6† | 51·5 | 25·1 | |
| 9·5 | 52·0 | 22·0 | |
| 9·4† | 28 2·5 | 36·7 | |
| 10·1† | 29 2·5 | 40·2 | |
| 10·0† | 7·5 | 40·0 | |
| 9·8† | 11·5 | 31·2 | |
| 9·7 | 14·5 | 21·9 | |
| 9·2† | 28·0 | 53·1 | g |
| 9·0 | 34·0 | 14·0 | 8·0 Sg |
| 10·1† | 47·0 | 26·2 | |
| 9·5 | 30 13·5 | 3·0 | |
| 9·7 | 24·0 | 0·5 | |
| 8·7 | 25·5 | 11·2 | 9·5 Gg |
| 10·1† | 28·5 | 37·3 | |
| 6·8 | 43·5 | 11·1 | 6·5 GScg |
| 10·1† | 56·5 | 54·7 | |
| 9·8† | 31 6·5 | 56·5 | |
| 9·6 | 18·5 | 0·2 | |
| 9·2 | 49·5 | 11·5 | |
| 9·3 | 32 39·0 | 21·0 | |
| 7·3 | 33 11·5 | 30·6 | 7·5 GSg |
| 9·6† | 20·5 | 58·7 | |
| 7·0† | 34 2·0 | 52·1 | 7·0 GScg |
| 9·7 | 16·0 | 5·5 | |
| 8·7 | 35 0·0 | 29·1 | 9·0 g |
| 9·6† | 32·5 | 55·0 | |
| 9·2† | 45·0 | 49·5 | |
| 10·1† | 45·5 | 48·9 | |
| 10·0† | 52·5 | 51·0 | |
| 8·2 | 36 9·3 | 2·2 | 8·0 g |
| 9·6† | 18·0 | 44·9 | |
| 9·5 | 25·0 | 14·7 | |
| 9·6† | 25·5 | 46·7 | g |
| 10·0† | 37·0 | 37·2 | |
| 8·7 | 39·0 | 25·6 | g |
| 9·4† | 40·0 | 51·2 | g |
| 9·7 | 45·5 | 33·8 | g |
| 10·1† | 37 8·0 | 56·1 | |
| 9·7 | 18·0 | 33·2 | g |
| 10·0† | 33·5 | 58·4 | |
| 9·2 | 36·5 | 35·0 | g |
| 10·1† | 44·0 | 28·1 | |
| 8·9 | 52·5 | 7·5 | 8·5 g |
| 10·0† | 58·0 | 59·6 | |
| 9·6† | 38 0·0 | 56·3 | |
| 10·1† | 45·0 | 35·8 | |
| 8·6† | 47·0 | 50·3 | g |
| 8·7 | 48·0 | 20·1 | 8·8 g |
| 9·2† | 58·0 | 51·0 | g |
| 9·3 | 39 28·5 | 24·1 | |
| 7·8 | 30·5 | 27·5 | 7·0 GScg |
| 10·1† | 31·5 | 25·9 | |
| 9·6† | 42·0 | 39·5 | |
| 9·8† | 55·5 | 28·0 | 9·2 g |
| 10·0† | 40 13·0 | 54·0 | |
| 10·0† | 15·0 | 58·0 | |
| 10·0† | 31·5 | 26·7 | g |
| 8·4 | 53·0 | 33·8 | 9·0 g |
| 9·2 | 56·5 | 27·9 | |



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### 3241—3300.

| mag. | 16h.–17h. m | s | − 67° ′ | |
|---|---|---|---|---|
| 9·2 | 41 | 40·0 | 7·9 | 9·5 g |
| 10·1† | 42 | 2·0 | 59·0 | |
| 10·1† | | 17·5 | 56·1 | |
| 9·4† | | 38·0 | 44·7 | |
| 9·2† | | 49·0 | 57·7 | |
| 9·6† | 43 | 19·0 | 52·4 | |
| 10·1† | | 36·0 | 33·0 | |
| 9·6† | | 36·5 | 38·7 | |
| 10·0† | | 52·0 | 55·1 | |
| 9·6 | | 57·5 | 24·0 | |
| 9·4† | 44 | 9·5 | 50·9 | g |
| 9·4† | | 20·5 | 59·9 | |
| 10·1† | | 25·0 | 38·0 | |
| 9·7 | | 39·0 | 15·2 | |
| 10·1† | | 48·0 | 47·0 | |
| 9·7† | | 53·0 | 39·0 | |
| 7·8 | 45 | 36·0 | 18·9 | 8·0 g |
| 9·6† | | 54·5 | 54·2 | |
| 8·8 | 46 | 2·0 | 35·0 | 9·0 g |
| 8·2 | | 53·0 | 0·0 | 8·5 g |
| 9·5 | 47 | 28·5 | 33·4 | |
| 10·0† | | 33·0 | 35·0 | |
| 9·5 | | 59·5 | 20·1 | |
| 10·1† | 48 | 15·5 | 47·0 | |
| 9·5 | | 43·0 | 34·3 | |
| 10·1† | 49 | 3·0 | 37·9 | |
| 10·0† | | 10·5 | 53·1 | |
| 10·1† | | 28·0 | 25·2 | |
| 9·7 | | 49·5 | 6·7 | |
| 8·4 | 50 | 11·0 | 35·0 | g |
| 10·0† | | 12·0 | 27·1 | |
| 10·0† | | 22·5 | 54·4 | |
| 8·6† | | 36·8 | 42·0 | g |
| 9·0 | | 47·5 | 29·1 | g |
| 9·0† | 51 | 3·7 | 58·2 | g |
| 8·8† | | 12·3 | 37·9 | g |
| 9·6† | 52 | 41·5 | 58·8 | |
| 9·6 | | 45·5 | 17·9 | |
| 10·0† | 53 | 15·5 | 35·4 | |
| 9·6‡ | | 57·8 | 59·8 | g |
| 9·2‡ | 54 | 0·0 | 56·2 | g |
| 9·5 | | 22·5 | 7·9 | 9·3 g |
| 9·6‡ | | 50·5 | 43·5 | |
| 7·3 | 55 | 2·5 | 0·8 | 8·0 Gg |
| 9·0 | | 26·0 | 24·6 | 9·0 g |
| 9·4‡ | | 51·0 | 41·1 | |
| 8·9 | | 58·5 | 31·7 | 8·5 g |
| 9·7 | 56 | 2·0 | 18·8 | |
| 9·8‡ | | 12·5 | 36·0 | |
| 9·7 | 57 | 19·5 | 0·9 | |
| 9·7 | | 32·7 | 9·7 | |
| 9·5– | 58 | 9·2 | 24·9 | |
| 9·9 | 59 | 53·5 | 16·0 | |
| 9·8‡ | 0 | 21·0 | 43·2 | |
| 8·7 | | 30·3 | 1·8 | 9·0 Gg |
| 7·8 | | 31·3 | 2·2 | 6·5 GScg |
| 9·8 | | 41·5 | 19·6 | |
| 9·8 | | 44·5 | 11·6 | |
| 9·0 | | 58·8 | 12·7 | 8·5 g |
| 9·4‡ | 1 | 26·0 | 50·9 | g |

### 3301—3360.

| mag. | 17h. m | s | − 67° ′ | |
|---|---|---|---|---|
| 8·2‡ | 1 | 28·5 | 40·8 | 9·0 g |
| 9·3 | | 58·0 | 1·5 | g |
| 9·2 | 2 | 9·5 | 4·9 | g |
| 9·4 | 3 | 8·5 | 15·9 | |
| 9·6‡ | | 18·0 | 40·4 | |
| 9·5 | | 21·5 | 15·7 | |
| 9·1‡ | 4 | 29·0 | 48·0 | |
| 9·8‡ | | 33·0 | 38·1 | |
| 9·7‡ | 5 | 2·0 | 39·7 | 8·8 g |
| 6·6‡ | 8 | 57·0 | 38·1 | 5·5 GScg |
| 9·8 | 10 | 8·5 | 10·3 | |
| 8·0‡ | | 22·0 | 47·9 | 9·0 g |
| 9·2 | | 48·5 | 3·9 | g |
| 9·0 | 11 | 33·0 | 6·1 | g |
| 9·6 | | 45·0 | 4·0 | |
| 9·0 | 12 | 29·5 | 14·0 | 9·0 g |
| 9·5 | | 33·0 | 26·3 | |
| 9·2 | 13 | 3·5 | 7·8 | 9·0 g |
| 9·1‡ | | 7·5 | 56·7 | |
| 9·2 | | 24·0 | 3·9 | g |
| 8·5 | | 24·5 | 13·4 | 8·5 g |
| 9·2 | | 34·5 | 23·1 | |
| 9·8 | | 41·5 | 6·6 | |
| 9·8‡ | 14 | 2·0 | 52·8 | g |
| 9·6 | | 8·5 | 19·2 | |
| 9·7‡ | 15 | 44·5 | 48·0 | |
| 8·8 | 16 | 14·5 | 17·7 | |
| 8·8 | | 27·0 | 10·0 | 7·5 Gg |
| 9·6 | 17 | 13·5 | 9·0 | 8·5 g |
| 9·9 | | 26·0 | 18·6 | |
| 8·4 | | 27·5 | 26·9 | g |
| 9·2 | 18 | 14·0 | 17·3 | |
| 9·2 | | 55·5 | 8·7 | |
| 9·4 | 19 | 0·0 | 17·0 | |
| 9·8‡ | | 9·0 | 28·7 | |
| 9·4 | | 15·5 | 24·2 | 9·5 |
| 7·8‡ | | 23·0 | 57·9 | 8·0 g |
| 8·6 | | 29·0 | 18·5 | 9·0 g |
| 9·8 | 21 | 4·5 | 21·8 | |
| 9·6‡ | 23 | 31·5 | 57·0 | |
| 9·0 | 24 | 6·0 | 29·9 | g |
| 9·4‡ | 25 | 41·0 | 44·1 | |
| 7·2‡ | 27 | 33·5 | 46·5 | 6·5 GScgg |
| 9·8 | 29 | 24·0 | 16·2 | g |
| 9·6 | | 42·5 | 2·4 | g |
| 9·1‡ | 30 | 24·0 | 38·1 | g |
| 9·5 | | 29·5 | 17·9 | g |
| 8·8 | | 47·0 | 19·9 | g |
| 9·8 | 31 | 1·7 | 25·8 | |
| 9·8‡ | | 48·0 | 44·6 | |
| 8·4 | 32 | 2·0 | 3·9 | g |
| 9·6 | | 23·5 | 11·9 | |
| 9·6 | 33 | 17·5 | 33·9 | |
| 9·5 | | 20·0 | 17·9 | |
| 9·9 | | 24·0 | 18·0 | |
| 8·2 | 35 | 1·0 | 19·5 | g |
| 9·5† | | 7·1 | 48·3 | |
| 8·0† | | 7·3 | 38·3 | g |
| 9·4† | | 8·1 | 31·8 | g |
| 8·8† | | 22·0 | 35·2 | g |

### 3361—3420.

| mag. | 17h. m | s | − 67° ′ | |
|---|---|---|---|---|
| 9·8† | 35 | 26·6 | 51·3 | |
| 9·8 | | 30·0 | 22·6 | |
| 9·8† | 36 | 17·6 | 57·4 | |
| 9·3† | | 18·1 | 45·2 | g |
| 9·6† | | 22·6 | 48·3 | |
| 8·7† | | 32·3 | 36·6 | g |
| 9·3 | 37 | 3·0 | 26·0 | g |
| 9·9 | | 7·0 | 3·4 | |
| 9·8† | | 19·1 | 53·6 | |
| 9·8† | | 32·6 | 54·9 | |
| 9·0† | | 40·5 | 35·6 | |
| 8·8 | | 43·5 | 5·3 | 9·5 g |
| 8·6 | 38 | 32·3 | 33·7 | 8·0 g |
| 9·8† | | 48·1 | 47·3 | |
| 9·8– | | 50·3 | 18·0 | |
| 8·8† | | 54·1 | 40·9 | g |
| 10·2 | 39 | 10·6 | 9·5 | |
| 10·3 | | 16·1 | 24·6 | |
| 10·2 | | 17·6 | 20·3 | |
| 9·8† | | 38·1 | 51·0 | |
| 9·9 | | 59·1 | 4·0 | |
| 9·9 | 40 | 1·1 | 9·9 | |
| 9·6† | | 4·1 | 42·0 | |
| 9·1† | | 15·6 | 56·5 | |
| 9·6† | | 22·1 | 40·8 | |
| 9·6 | | 27·1 | 33·0 | |
| 9·9 | | 30·1 | 14·6 | |
| 9·5† | | 32·6 | 48·1 | |
| 10·2 | | 47·1 | 3·2 | |
| 9·8 | | 53·6 | 28·7 | |
| 9·0 | | 57·8 | 11·4 | |
| 10·2 | 41 | 18·6 | 22·8 | |
| 10·3 | | 26·1 | 15·9 | |
| 10·2 | | 32·6 | 16·4 | |
| 9·8† | | 56·6 | 55·3 | |
| 8·3 | | 59·8 | 1·7 | 8·5 g |
| 9·4 | 42 | 3·1 | 14·0 | |
| 10·0 | | 9·1 | 10·9 | |
| 9·8† | | 14·6 | 47·7 | |
| 10·3 | | 23·6 | 36·2 | |
| 9·1 | | 35·6 | 0·5 | |
| 9·8† | | 37·1 | 55·9 | |
| 9·4 | | 40·1 | 8·1 | |
| 8·3 | 43 | 4·8 | 13·0 | 7·5 Gg |
| 8·7 | | 6·3 | 33·9 | g |
| 9·4 | | 6·6 | 5·6 | g |
| 9·4 | | 7·1 | 38·3 | |
| 9·8 | | 58·1 | 15·6 | |
| 10·2 | 44 | 7·6 | 2·6 | |
| 9·8† | | 19·1 | 42·6 | |
| 9·9 | | 42·1 | 36·3 | |
| 10·0 | | 42·6 | 4·1 | |
| 10·0 | | 49·1 | 21·1 | |
| 10·2 | | 52·6 | 6·7 | |
| 10·2 | | 57·1 | 9·4 | |
| 9·6 | 45 | 27·6 | 33·7 | |
| 9·2 | | 40·6 | 24·6 | |
| 10·3 | | 46·6 | 25·9 | |
| 10·3 | | 57·6 | 13·2 | |
| 9·8† | 46 | 2·0 | 59·1 | |

### 3421—3480.

| mag. | 17h.–18h. m | s | − 67° ′ | |
|---|---|---|---|---|
| 8·6 | 46 | 37·1 | 10·3 | g |
| 9·8 | | 40·6 | 4·1 | |
| 9·5 | | 46·6 | 15·7 | |
| 10·3 | | 53·6 | 37·1 | |
| 10·2 | 47 | 7·1 | 36·5 | |
| 10·3 | | 8·6 | 13·9 | |
| 9·4 | | 32·3 | 30·6 | |
| 10·3 | 48 | 15·1 | 30·4 | |
| 10·2 | | 17·1 | 10·5 | |
| 9·8† | | 37·6 | 57·1 | |
| 10·2 | | 49·6 | 33·6 | |
| 9·8 | | 54·6 | 13·7 | |
| 9·0 | 49 | 38·1 | 33·0 | 8·5 g |
| 7·8† | | 40·1 | 50·4 | g |
| 9·4† | | 41·5 | 56·5 | |
| 10·3 | | 46·1 | 3·5 | |
| 9·4† | | 46·6 | 53·6 | |
| 9·5† | | 57·1 | 51·4 | |
| 9·7 | 50 | 16·1 | 28·5 | |
| 9·5 | | 17·1 | 26·0 | |
| 10·0 | | 27·1 | 0·1 | |
| 10·0 | 51 | 10·6 | 7·9 | |
| 10·3 | | 12·6 | 0·2 | |
| 10·3 | | 18·6 | 2·9 | |
| 10·2 | | 20·6 | 25·3 | |
| 9·0† | | 28·6 | 46·8 | g |
| 10·3 | | 36·1 | 4·0 | |
| 10·3 | | 51·6 | 37·0 | |
| 10·3 | | 51·6 | 5·1 | |
| 9·4† | 52 | 35·6 | 41·2 | g |
| 9·0 | | 52·6 | 27·8 | 9·5 g |
| 10·2 | 53 | 21·6 | 14·1 | |
| 9·0† | | 22·6 | 40·6 | g |
| 9·3† | | 33·1 | 54·4 | |
| 10·2 | | 46·1 | 3·9 | |
| 10·3 | | 47·1 | 16·4 | |
| 9·0 | | 54·1 | 31·9 | g |
| 9·2 | 54 | 2·1 | 28·1 | |
| 9·5 | | 10·1 | 37·5 | |
| 8·6† | | 10·6 | 49·3 | 8·5 g |
| 10·0 | | 23·6 | 37·2 | |
| 9·3† | | 25·6 | 49·8 | 9·5 g |
| 9·6 | | 37·1 | 31·0 | g |
| 9·6 | | 51·1 | 4·9 | |
| 10·2 | 55 | 21·9 | 0·9 | |
| 9·8 | | 25·6 | 29·7 | |
| 9·6 | | 42·1 | 36·9 | |
| 9·5† | | 59·1 | 47·3 | |
| 10·2 | 56 | 22·1 | 27·1 | |
| 10·3 | 57 | 1·6 | 38·0 | |
| 9·9 | | 25·6 | 12·8 | |
| 9·7 | | 48·4 | 0·8 | |
| 9·4 | | 59·6 | 0·2 | |
| 9·8† | 58 | 4·4 | 41·2 | |
| 10·2 | | 10·6 | 22·7 | |
| 10·3 | | 33·6 | 27·2 | |
| 10·0 | | 45·1 | 27·7 | |
| 9·8† | | 48·6 | 48·0 | |
| 10·0 | 59 | 7·8 | 37·5 | |
| 9·8† | 0 | 11·6 | 44·9 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 16 | 40 | 153 | 2·9 |
| | 50 | 154 | 2·5 |
| 17 | 0 | 155 | 2·2 |
| | 10 | 156 | 1·8 |
| | 20 | 156 | 1·5 |
| | 30 | 157 | 1·1 |
| | 40 | 157 | 0·7 |
| | 50 | 157 | 0·4 |
| 18 | 0 | 157 | 0·0 |
| | | | + |
| | 10 | 157 | 0·4 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 0 | 157 | 0·0 |
| | 10 | 157 | 0·4 |
| | 20 | 157 | 0·7 |
| | 30 | 157 | 1·1 |
| | 40 | 156 | 1·5 |
| | 50 | 156 | 1·8 |
| 19 | 0 | 155 | 2·2 |
| | 10 | 154 | 2·5 |
| | 20 | 153 | 2·9 |
| | 30 | 151 | 3·2 |
| | 40 | 150 | 3·5 |
| | 50 | 148 | 3·9 |
| 20 | 0 | 147 | 4·2 |
| | 10 | 145 | 4·5 |

## 3481—3540.

| mag. | 18h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·0† | 0 | 14·6 | 49·7 | g |
| 9·1† | | 21·6 | 56·0 | |
| 9·0† | | 49·6 | 49·1 | g |
| 10·2 | | 50·6 | 20·2 | |
| 9·6 | | 54·1 | 4·8 | |
| 9·9 | 1 | 8·6 | 6·8 | |
| 9·9 | | 10·6 | 6·2 | |
| 10·3 | | 30·1 | 2·4 | |
| 10·3 | | 37·1 | 6·0 | |
| 9·8 | | 56·6 | 4·6 | |
| 9·5† | | 58·6 | 50·4 | |
| 9·3† | 2 | 2·6 | 49·2 | g |
| 9·8 | | 11·6 | 4·2 | |
| 10·0 | | 33·1 | 6·0 | |
| 9·1 | | 35·1 | 21·1 | g |
| 9·8 | | 37·6 | 33·7 | |
| 10·3 | | 47·6 | 4·9 | |
| 9·9 | | 57·1 | 16·0 | |
| 9·2 | 3 | 10·6 | 10·4 | |
| 10·2 | | 23·4 | 1·1 | |
| 8·9† | | 28·1 | 40·8 | g |
| 10·3 | | 59·0 | 13·9 | |
| 9·3† | 4 | 8·1 | 53·2 | 9·0 g |
| 9·7 | | 12·8 | 38·9 | |
| 10·3 | | 14·5 | 17·5 | |
| 9·6 | | 20·8 | 38·3 | |
| 8·2† | | 36·1 | 53·8 | 8·0 g |
| 7·7 | | 46·5 | 23·3 | 8·0 Gg |
| 9·8† | 6 | 11·1 | 47·8 | |
| 8·6 | | 16·5 | 21·9 | 8·0 Gg |
| 10·0 | | 36·0 | 18·2 | |
| 9·8 | | 36·0 | 28·1 | |
| 10·2 | 7 | 25·0 | 10·3 | |
| 9·8 | | 33·7 | 0·7 | |
| 9·2 | | 54·0 | 23·3 | g |
| 10·3 | 8 | 21·5 | 39·3 | |
| 10·3 | | 28·0 | 39·6 | |
| 9·8 | | 31·0 | 18·4 | |
| 8·8 | 9 | 57·0 | 10·9 | 6·5 Gg |
| 9·6† | 10 | 5·2 | 57·5 | |
| 9·2† | | 7·1 | 55·4 | 8·5 g |
| 9·5† | | 8·1 | 47·6 | |
| 10·3 | | 12·0 | 2·4 | |
| 10·3 | | 17·0 | 17·7 | |
| 9·5 | | 21·0 | 18·5 | |
| 9·6† | | 24·1 | 44·0 | |
| 9·8 | | 47·0 | 22·5 | |
| 9·8† | | 51·1 | 48·2 | |
| 10·0 | | 56·0 | 17·0 | |
| 10·3 | 11 | 4·0 | 14·4 | |
| 9·6 | | 6·5 | 20·1 | |
| 8·9 | | 37·3 | 31·3 | g |
| 9·6† | | 48·6 | 53·0 | |
| 10·3 | 12 | 9·0 | 16·3 | |
| 9·7 | | 27·5 | 7·9 | |
| 9·8 | | 51·5 | 7·2 | |
| 10·2 | | 54·5 | 30·9 | |
| 10·0 | | 57·5 | 20·7 | |
| 9·8† | 13 | 3·6 | 51·6 | |
| 9·8† | | 12·1 | 49·6 | |

## 3541—3600.

| mag. | 18h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·6† | 13 | 33·6 | 45·8 | |
| 10·3 | 15 | 7·5 | 34·8 | |
| 10·3 | | 32·5 | 0·3 | |
| 9·8 | | 33·5 | 24·7 | |
| 10·3 | | 33·5 | 23·4 | |
| 9·8 | 16 | 11·0 | 16·9 | |
| 9·9 | | 20·0 | 15·5 | |
| 8·4 | | 26·5 | 38·1 | 8·5 Gg |
| 9·4 | | 34·0 | 15·3 | |
| 9·3† | | 42·9 | 57·2 | |
| 10·2 | 17 | 17·0 | 32·0 | |
| 9·4 | | 22·9 | 13·0 | |
| 7·6 | | 28·4 | 0·6 | 7·5 Gg |
| 10·3 | | 38·9 | 14·2 | |
| 9·0† | 18 | 8·1 | 47·6 | 9·0 g |
| 8·5† | | 31·6 | 47·0 | 8·5 g |
| 9·8† | | 58·6 | 44·4 | |
| 10·2 | 19 | 4·0 | 34·9 | |
| 9·4 | | 59·9 | 17·3 | |
| 9·8† | 20 | 0·1 | 46·6 | |
| 9·8 | | 7·7 | 35·8 | |
| 9·0† | | 21·1 | 53·3 | 8·8 g |
| 9·3† | | 23·5 | 58·6 | |
| 9·4 | | 37·9 | 11·9 | g |
| 9·1 | | 51·7 | 26·9 | |
| 9·1 | | 51·7 | 16·3 | g |
| 9·8 | | 51·9 | 25·6 | |
| 9·8† | 21 | 3·1 | 48·6 | |
| 9·9 | | 9·4 | 15·8 | |
| 9·8_ | | 14·9 | 20·7 | |
| 9·6 | | 21·6 | 29·7 | |
| 9·1† | | 29·1 | 43·4 | 9·5 g |
| 9·6 | | 31·5 | 8·4 | |
| 8·5 | 22 | 9·6 | 37·2 | 9·5 g |
| 9·4† | | 18·8 | 51·9 | |
| 9·8† | | 38·6 | 47·0 | |
| 9·3 | | 46·5 | 1·4 | |
| 9·6 | | 48·5 | 6·8 | |
| 9·6† | | 51·1 | 46·0 | |
| 9·8† | 23 | 31·6 | 32·8 | |
| 9·3 | 24 | 31·0 | 13·5 | |
| 9·4† | | 34·6 | 28·8 | |
| 9·5† | 25 | 13·6 | 26·2 | |
| 9·0‡ | 27 | 18·0 | 37·3 | g |
| 9·6‡ | | 24·0 | 34·8 | g |
| 9·6‡ | | 47·5 | 59·9 | |
| 9·3 | 29 | 7·5 | 5·1 | |
| 9·0‡ | 30 | 5·0 | 52·5 | g |
| 9·6‡ | | 24·0 | 31·3 | |
| 8·8 | 32 | 3·5 | 3·2 | g |
| 9·1 | | 16·5 | 2·4 | g |
| 8·8‡ | | 38·0 | 58·2 | 8·0 Gg |
| 9·3 | | 51·0 | 29·7 | |
| 9·5‡ | 33 | 27·5 | 52·9 | g |
| 9·4 | 36 | 42·0 | 2·5 | 9·0 g |
| 8·5 | | 59·5 | 25·0 | 8·0 Gg |
| 9·6 | 37 | 13·5 | 7·3 | |
| 9·6 | 38 | 55·0 | 9·1 | |
| 8·2‡ | 40 | 30·5 | 48·9 | 9·2 g |
| 9·5‡ | 41 | 36·0 | 46·9 | |

## 3601—3660.

| mag. | 18h.—19h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4 | 43 | 5·0 | 10·4 | g |
| 8·5‡ | | 26·5 | 49·2 | 8·5 g |
| 6·6 | 44 | 3·0 | 23·1 | 4·8 GSc |
| 9·0‡ | | 57·0 | 54·3 | g |
| 9·0 | 45 | 59·0 | 32·0 | g |
| 8·9 | 46 | 57·5 | 19·2 | g |
| 8·9 | 47 | 37·5 | 33·1 | g |
| 8·4‡ | | 43·0 | 49·1 | g |
| 8·7 | 48 | 39·0 | 23·2 | g |
| 9·6 | 49 | 36·5 | 24·3 | g |
| 9·6‡ | 50 | 31·5 | 27·9 | g |
| 8·6 | 54 | 26·5 | 0·7 | 8·5 g |
| 9·6‡ | 56 | 16·0 | 46·1 | g |
| 8·4‡ | | 26·5 | 43·7 | 8·0 Gg |
| 9·6* | 58 | 25·0 | 21·1 | 9·0 g |
| 8·6‡ | 0 | 5·0 | 47·3 | 9·0 g |
| 8·5_ | | 8·0 | 16·9 | 8·5 Ggg |
| 9·5 | | 56·0 | 23·0 | Ggg |
| 8·9‡ | | 59·0 | 55·0 | 8·5 g |
| 9·5 | 1 | 1·0 | 24·3 | ? |
| 7·0‡ | | 19·5 | 39·4 | 7·0 GSgg |
| 9·2‡ | 2 | 7·8 | 58·0 | g |
| 8·4 | 3 | 19·0 | 18·0 | 8·0 g |
| 8·9 | | 45·0 | 31·0 | g |
| 9·6‡ | 4 | 1·7 | 52·2 | 8·5 g |
| 7·5 | | 13·7 | 22·6 | 7·5 Gg |
| 9·2 | | 25·0 | 32·5 | |
| 9·5 | | 52·0 | 5·4 | |
| 10·3† | 5 | 33·6 | 56·7 | |
| 9·1 | 6 | 4·5 | 8·1 | g |
| 9·0† | | 23·0 | 58·5 | g |
| 9·1† | | 24·1 | 44·9 | g |
| 10·4† | | 39·6 | 54·0 | |
| 10·4† | 8 | 14·6 | 52·5 | |
| 9·7† | | 31·6 | 53·8 | |
| 9·5 | 9 | 18·0 | 6·4 | 9·0 |
| 9·4 | | 55·0 | 26·9 | |
| 10·0† | 10 | 42·1 | 58·0 | |
| 9·6† | 11 | 49·1 | 59·6 | g |
| 9·4 | 12 | 7·5 | 27·6 | g |
| 10·2† | | 18·1 | 55·1 | |
| 9·5† | | 25·1 | 45·2 | g |
| 8·9 | | 44·0 | 32·0 | g |
| 10·4† | | 59·1 | 53·4 | |
| 10·3† | 14 | 13·1 | 48·0 | |
| 7·9 | 17 | 5·5 | 33·3 | 8·0 GSg |
| 8·9 | | 8·8 | 33·7 | 9·0 Gg |
| 9·5 | | 41·0 | 6·6 | g |
| 9·5 | 18 | 49·5 | 4·0 | 9·0 g |
| 10·2† | 19 | 14·7 | 55·0 | |
| 10·4† | 20 | 49·7 | 46·0 | |
| 9·1† | 21 | 36·2 | 49·0 | 9·5 g |
| 9·5 | 22 | 49·5 | 26·1 | |
| 10·0† | | 55·2 | 47·1 | g |
| 9·5† | 23 | 23·7 | 48·9 | g |
| 8·9 | 24 | 21·0 | 27·7 | g |
| 9·9† | | 39·2 | 39·6 | |
| 10·4† | | 49·8 | 59·8 | |
| 8·5† | 26 | 6·2 | 53·6 | g |
| 10·4† | | 17·7 | 58·9 | |

## 3661—3720.

| mag. | 19h.—20h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·5 | 26 | 43·5 | 20·2 | |
| 9·1† | 27 | 7·7 | 43·9 | g |
| 8·8 | 28 | 20·5 | 15·0 | g |
| 10·4† | 30 | 19·2 | 54·0 | |
| 9·5 | | 24·0 | 12·2 | |
| 10·3† | | 38·2 | 53·8 | |
| 9·0 | | 41·5 | 7·8 | 9·0 g |
| 7·9 | 31 | 10·0 | 14·8 | Gg |
| 9·1† | | 24·7 | 47·5 | g |
| 8·2 | | 33·5 | 14·1 | 8·0 Gg |
| 10·4† | 32 | 32·5 | 58·5 | |
| 8·5 | 33 | 0·0 | 22·0 | 9·0 g |
| 9·2 | | 24·5 | 25·9 | g |
| 8·9 | | 31·0 | 34·8 | g |
| 8·1 | | 40·0 | 20·3 | 8·0 Gg |
| 9·5 | 34 | 5·5 | 1·7 | |
| 10·2† | | 27·2 | 39·1 | |
| 10·2† | | 30·2 | 54·6 | |
| 9·7† | 35 | 14·2 | 35·3 | |
| 7·7_ | 37 | 35·0 | 7·0 | 7·0 GSg |
| 10·3† | 38 | 30·7 | 54·4 | |
| 9·9 | | 47·5 | 10·2 | |
| 9·2 | | 58·0 | 7·5 | g |
| 9·9 | 40 | 13·5 | 15·3 | |
| 8·9 | 42 | 8·2 | 25·6 | g |
| 9·5† | | 15·7 | 35·6 | g |
| 9·2 | | 24·0 | 21·0 | g |
| 10·0† | 43 | 35·7 | 59·4 | |
| 9·3 | 44 | 5·5 | 17·9 | |
| 9·9† | | 36·2 | 35·0 | |
| 9·9† | 45 | 4·7 | 36·0 | |
| 8·3† | 46 | 13·7 | 37·9 | g |
| 9·1† | 47 | 46·2 | 54·9 | |
| 10·0† | | 49·2 | 37·1 | |
| 6·9 | 48 | 12·0 | 16·5 | 6·0 GScg |
| 8·1 | | 49·5 | 10·8 | 9·0 g |
| 9·5 | 49 | 27·0 | 28·3 | g |
| 6·9 | | 41·5 | 16·6 | 5·5 GScg |
| 9·8 | 50 | 51·0 | 2·1 | 9·0 g |
| 9·2† | 51 | 40·6 | 51·8 | g |
| 10·4† | 52 | 25·2 | 51·1 | |
| 10·3† | | 26·2 | 33·3 | |
| 7·1† | 53 | 2·6 | 38·7 | 6·5 GSg |
| 9·7† | | 28·7 | 51·5 | |
| 9·8‡ | 54 | 14·7 | 38·3 | g |
| 9·5 | | 43·5 | 13·1 | |
| 8·9 | | 51·5 | 5·9 | g |
| 8·9 | 56 | 22·5 | 0·4 | g |
| 9·6‡ | 57 | 7·0 | 35·9 | g |
| 9·5 | | 56·5 | 5·1 | 9·5 g |
| 9·6‡ | 58 | 1·0 | 50·2 | g |
| 9·5 | | 10·5 | 21·8 | |
| 9·9 | 59 | 22·5 | 20·9 | |
| 9·2 | | 43·5 | 11·5 | g |
| 8·9 | 0 | 26·0 | 26·4 | g |
| 9·2‡ | 1 | 17·5 | 37·1 | 9·0 g |
| 8·7‡ | | 40·5 | 49·5 | g |
| 9·8‡ | 3 | 27·0 | 31·5 | |
| 8·8 | | 34·5 | 1·7 | g |
| 7·2‡ | 5 | 3·0 | 49·7 | 7·0 GSg |



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**3721—3780.**

| mag. | $20^{h}$–$21^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·8‡ | 5 | 27·7 | 34·7 | g |
| 9·6 | | 39·0 | 33·7 | g |
| 9·2‡ | 6 | 9·0 | 47·0 | g |
| 9·0 | | 46·5 | 20·7 | g |
| 9·8‡ | 8 | 3·0 | 45·3 | |
| 8·6 | | 10·0 | 22·8 | g |
| 8·9 | 9 | 24·5 | 9·9 | 9·5 Gg |
| 9·6‡ | | 32·0 | 56·2 | g |
| 7·2‡ | | 34·0 | 42·0 | 7·5 GSg |
| 6·7 | | 41·0 | 8·3 | 6·8 GScgr |
| 9·3‡ | | 42·5 | 55·9 | g |
| 8·0‡ | 12 | 12·5 | 59·6 | 8·5 Gg |
| 9·9 | | 27·0 | 17·3 | |
| 9·2‡ | 13 | 16·0 | 59·2 | g |
| 9·0‡ | | 41·0 | 58·8 | g |
| 9·8‡ | 15 | 36·5 | 19·5 | g |
| 8·6 | 17 | 45·0 | 22·2 | |
| 8·9 | 18 | 22·5 | 25·6 | g |
| 9·5– | 19 | 10·5 | 13·4 | |
| 9·4 | | 41·7 | 1·4 | g |
| 9·6 | 21 | 30·5 | 26·8 | g |
| 8·4 | 22 | 36·2 | 9·5 | 8·0 Gg |
| 7·3 | | 45·0 | 9·0 | 7·5 Gg |
| 9·4‡ | 23 | 13·0 | 40·1 | g |
| 9·6 | 24 | 10·0 | 1·3 | g |
| 9·8‡ | | 33·5 | 44·1 | g |
| 9·0 | | 51·0 | 15·8 | 9·0 g |
| 9·0‡ | 25 | 9·5 | 50·8 | 8·5 g |
| 9·8‡ | 26 | 39·5 | 44·1 | g |
| 9·8‡ | 28 | 32·5 | 56·5 | g |
| 9·8‡ | 29 | 2·0 | 53·9 | g |
| 8·9 | | 39·0 | 3·8 | g |
| 8·4 | 30 | 11·0 | 29·1 | 9·0 g |
| 5·2 | | 27·0 | 11·9 | 6·0 GScgt |
| 9·6 | 31 | 10·5 | 23·5 | g |
| 10·0† | 33 | 2·0 | 55·0 | g |
| 8·8 | | 55·5 | 19·8 | 8·0 Gg |
| 8·6 | 34 | 17·5 | 15·7 | 9·0 g |
| 9·6† | | 22·0 | 36·9 | |
| 8·7† | 38 | 52·2 | 38·5 | g |
| 8·7† | | 52·5 | 36·5 | g |
| 10·0† | 39 | 12·5 | 46·0 | g |
| 9·2 | 40 | 20·5 | 27·3 | 9·0 g |
| 9·2† | 43 | 44·0 | 53·0 | 9·5 g |
| 9·4 | 46 | 7·0 | 0·1 | |
| 9·2† | | 30·0 | 45·2 | g |
| 8·4 | | 53·5 | 13·5 | g |
| 9·6 | 49 | 53·5 | 20·5 | g |
| 10·0† | 51 | 2·5 | 47·2 | g |
| 8·5† | | 59·5 | 52·8 | g |
| 8·9 | 54 | 7·0 | 26·7 | g |
| 10·0† | 56 | 5·0 | 36·2 | g |
| 9·3 | | 56·3 | 23·9 | g |
| 9·3– | 57 | 5·5 | 32·0 | g |
| 9·2† | 58 | 28·0 | 40·1 | g |
| 10·0† | | 35·0 | 40·9 | |
| 10·4 | 59 | 37·0 | 34·0 | |
| 9·6 | 1 | 58·8 | 26·1 | 9·0 g |
| 9·2 | 2 | 55·0 | 27·5 | 8·2 g |
| 10·4 | 3 | 29·0 | 25·0 | |

**3781—3840.**

| mag. | $21^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 9·2 | 3 | 48·5 | 17·6 | 9·0 g |
| 10·0† | 5 | 3·0 | 59·2 | g |
| 9·9 | 6 | 1·0 | 1·6 | |
| 10·0† | | 28·0 | 59·8 | g |
| 9·0 | 7 | 46·0 | 19·0 | 9·0 g |
| 10·0† | 8 | 22·5 | 52·4 | |
| 9·8† | 9 | 29·0 | 46·8 | 8·5 g |
| 9·6† | 10 | 9·5 | 38·7 | 9·0 g |
| 9·2† | | 17·0 | 45·6 | 9·0 g |
| 9·2 | | 36·0 | 14·6 | g |
| 9·2 | | 39·0 | 26·2 | g |
| 7·8 | | 47·0 | 11·6 | Gg |
| 10·4 | 11 | 1·5 | 19·9 | |
| 9·3 | | 19·5 | 17·0 | g |
| 10·4 | 12 | 41·0 | 22·0 | |
| 9·2 | 13 | 8·5 | 27·4 | |
| 10·4 | 14 | 30·0 | 34·2 | |
| 10·2 | 16 | 23·5 | 10·1 | |
| 9·3 | 17 | 8·0 | 23·1 | 8·5 g |
| 8·2 | | 25·5 | 20·0 | 8·0 Gg |
| 9·9 | | 55·0 | 17·5 | g |
| 8·9† | | 55·5 | 44·2 | 9·5 g |
| 10·4 | 18 | 37·5 | 32·4 | |
| 9·9 | 20 | 28·5 | 20·0 | |
| 9·4 | | 46·1 | 32·1 | |
| 10·2 | 22 | 24·5 | 24·9 | |
| 9·5‡ | | 54·5 | 43·2 | g |
| 10·0‡ | 24 | 13·5 | 43·3 | g |
| 8·7 | | 26·0 | 16·5 | 9·0 g |
| 9·6 | | 39·5 | 7·5 | |
| 10·0‡ | 25 | 25·5 | 58·3 | g |
| 8·8‡ | | 37·7 | 53·3 | 8·5 g |
| 9·9 | 26 | 2·5 | 11·1 | |
| 9·5‡ | | 6·0 | 46·8 | g |
| 9·5 | 27 | 10·0 | 18·0 | |
| 9·2 | | 20·3 | 1·1 | 9·0 g |
| 9·2 | 28 | 44·7 | 18·8 | 9·5 g |
| 9·8‡ | 29 | 26·5 | 48·7 | |
| 9·7 | 30 | 2·0 | 32·7 | |
| 9·6 | | 11·0 | 17·2 | g |
| 9·5‡ | | 21·0 | 58·2 | g |
| 10·2 | 31 | 50·5 | 19·7 | |
| 10·2 | 32 | 45·0 | 14·8 | |
| 10·1 | | 53·7 | 0·4 | 9·0 g |
| 9·3 | 33 | 15·5 | 23·2 | g |
| 9·5‡ | 34 | 4·5 | 40·4 | g |
| 10·4 | | 44·0 | 17·1 | |
| 10·4 | 35 | 8·5 | 11·1 | |
| 9·2‡ | | 11·0 | 40·4 | g |
| 10·0‡ | | 42·0 | 52·7 | g |
| 10·2 | 36 | 25·0 | 30·1 | |
| 10·2 | | 29·3 | 29·9 | |
| 8·0– | 37 | 34·4 | 22·7 | 8·5 Gg |
| 10·2 | | 51·3 | 20·8 | |
| 10·2 | | 55·6 | 8·5 | |
| 10·2 | 38 | 29·8 | 23·1 | |
| 9·5‡ | 40 | 34·0 | 50·0 | g |
| 10·0‡ | 41 | 53·0 | 54·2 | g |
| 10·2 | 42 | 19·1 | 3·7 | |
| 10·0 | | 41·3 | 5·9 | g |

**3841—3900.**

| mag. | $21^{h}$–$22^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 10·2 | 42 | 57·4 | 17·9 | |
| 9·4‡ | 43 | 6·0 | 49·9 | g |
| 9·4 | | 35·6 | 36·3 | g |
| 9·2 | 44 | 57·3 | 29·2 | g |
| 10·2 | 45 | 27·7 | 0·5 | |
| 9·2 | 46 | 21·7 | 2·6 | 9·2 g |
| 8·3‡ | 47 | 53·5 | 42·8 | 8·5 g |
| 9·6 | 48 | 34·9 | 18·5 | g |
| 9·4‡ | | 54·5 | 57·0 | g |
| 10·0‡ | 50 | 24·0 | 51·0 | |
| 10·2 | | 49·9 | 15·1 | |
| 9·7 | 52 | 3·9 | 16·6 | |
| 9·6 | 53 | 56·9 | 11·0 | |
| 9·0 | 54 | 35·8 | 27·1 | 9·5 g |
| 10·2 | 55 | 57·7 | 39·4 | |
| 9·6‡ | 56 | 24·5 | 50·0 | |
| 9·6‡ | 57 | 3·5 | 42·0 | g |
| 9·2 | | 47·2 | 35·6 | g |
| 7·8 | 58 | 33·6 | 6·4 | g |
| 10·1 | | 43·2 | 38·8 | |
| 10·2 | | 46·4 | 10·7 | |
| 9·3‡ | 59 | 3·5 | 44·1 | g |
| 10·1 | 0 | 32·4 | 11·9 | |
| 10·1 | | 38·4 | 16·6 | |
| 10·1 | 2 | 9·6 | 5·1 | |
| 9·7 | 3 | 8·9 | 19·7 | |
| 8·0 | 4 | 8·3 | 23·9 | g |
| 8·8 | | 8·9 | 12·6 | g |
| 9·2 | | 46·1 | 4·1 | g |
| 10·0† | | 46·1 | 47·4 | |
| 9·6‡ | | 46·8 | 47·1 | g |
| 9·7 | | 57·1 | 32·8 | |
| 10·2† | 5 | 19·4 | 53·1 | |
| 10·0 | | 40·9 | 17·4 | |
| 9·6 | | 59·6 | 4·6 | |
| 9·6 | 6 | 2·9 | 0·8 | |
| 10·1 | | 24·2 | 20·6 | |
| 9·7 | 8 | 15·2 | 32·5 | |
| 8·8‡ | | 28·0 | 49·0 | 9·0 g |
| 8·8 | 9 | 9·6 | 37·9 | g |
| 9·4 | 10 | 15·7 | 33·6 | g |
| 7·4 | | 41·7 | 30·5 | 8·5 g |
| 9·5† | | 50·6 | 55·1 | 9·5 g |
| 9·1 | 11 | 7·8 | 28·9 | 10·0 g |
| 10·2 | | 10·9 | 15·9 | |
| 7·7† | 12 | 42·6 | 42·6 | 8·5 Gg |
| 9·7 | 13 | 27·7 | 40·0 | 9·5 g |
| 10·2 | | 31·1 | 2·8 | |
| 10·4† | | 50·4 | 50·8 | |
| 8·6 | 14 | 39·7 | 33·1 | g |
| 9·3† | 15 | 21·4 | 57·2 | |
| 8·6 | | 34·3 | 29·3 | g |
| 10·0 | 16 | 10·9 | 13·2 | |
| 9·1 | | 59·0 | 5·7 | 9·5 g |
| 8·7† | 17 | 28·4 | 44·6 | 9·0 Gg |
| 9·6– | 19 | 49·6 | 27·2 | g |
| 9·7 | | 56·9 | 20·4 | |
| 9·4 | 21 | 24·5 | 10·2 | |
| 8·8 | | 25·5 | 1·9 | 8·5 Gg |
| 7·8† | | 43·4 | 56·6 | Gg |

**3901—3960.**

| mag. | $22^{h}$–$23^{h}$ m | s | −67° ′ | |
|---|---|---|---|---|
| 10·4† | 22 | 6·4 | 59·0 | |
| 10·0 | | 31·5 | 8·2 | |
| 10·2† | 23 | 0·9 | 49·2 | |
| 9·3† | | 21·9 | 42·5 | 9·5 g |
| 9·4 | 24 | 11·5 | 11·9 | 9·0 g |
| 9·0 | | 36·0 | 6·3 | 10·0 g |
| 10·4† | | 48·6 | 58·5 | |
| 10·0 | 25 | 43·5 | 28·8 | |
| 9·2 | 27 | 19·0 | 33·8 | 9·5 g |
| 9·0† | 28 | 41·6 | 44·6 | g |
| 9·7† | 29 | 41·6 | 49·6 | |
| 9·4 | | 57·0 | 30·0 | |
| 9·0† | 31 | 54·9 | 56·2 | g |
| 9·5 | 32 | 22·5 | 13·3 | g |
| 9·2 | 35 | 38·0 | 8·9 | |
| 8·9† | 36 | 41·4 | 48·4 | 9·5 g |
| 9·7† | 37 | 17·0 | 47·6 | g |
| 9·0† | | 28·5 | 51·0 | g |
| 8·4 | 39 | 25·0 | 27·2 | g |
| 9·4 | | 57·5 | 25·0 | g |
| 9·2 | 40 | 20·0 | 3·3 | |
| 10·0† | | 34·0 | 56·0 | |
| 10·4† | | 35·3 | 45·8 | |
| 9·8 | 43 | 57·5 | 26·2 | |
| 8·8 | 44 | 22·0 | 23·3 | 8·5 g |
| 9·8 | | 25·0 | 30·6 | |
| 8·9† | 46 | 6·0 | 55·8 | g |
| 10·0 | | 37·0 | 33·5 | |
| 9·0 | 47 | 13·0 | 19·0 | g |
| 9·0 | | 21·0 | 28·7 | g |
| 10·0† | 48 | 4·0 | 49·3 | g |
| 8·5 | 49 | 48·5 | 0·3 | 8·0 g |
| 10·0 | 50 | 25·0 | 7·3 | |
| 8·6 | 51 | 39·0 | 5·7 | g |
| 9·5 | | 41·0 | 10·3 | g |
| 8·6 | | 47·0 | 30·0 | 8·5 g |
| 8·4 | 53 | 34·0 | 32·9 | 9·5 Gg |
| 9·8 | | 39·5 | 32·4 | Gg |
| 9·9‡ | | 48·8 | 38·6 | |
| 10·4† | 55 | 4·0 | 51·5 | |
| 8·9‡ | 56 | 45·0 | 48·1 | 8·5 g |
| 9·2 | 58 | 20·0 | 5·3 | g |
| 9·0 | | 39·2 | 7·0 | g |
| 8·8– | 59 | 42·7 | 19·6 | g |
| 9·8‡ | 0 | 14·0 | 44·0 | |
| 9·6 | | 23·5 | 20·3 | g |
| 9·0 | 1 | 33·2 | 11·5 | g |
| 7·8 | | 42·5 | 9·0 | 8·0 g |
| 7·5 | 2 | 10·8 | 32·1 | 6·5 GScgr |
| 10·0 | 3 | 44·0 | 6·9 | |
| 10·0 | 6 | 46·5 | 6·9 | |
| 9·2 | 7 | 43·0 | 4·9 | g |
| 8·4 | | 49·0 | 34·2 | 8·5 Gg |
| 8·6‡ | | 52·0 | 51·1 | 8·5 g |
| 10·0 | | 57·0 | 24·5 | g |
| 8·6‡ | 8 | 4·0 | 48·1 | 9·0 g |
| 9·6 | | 10·5 | 8·3 | |
| 8·8 | 9 | 18·5 | 31·3 | g |
| 9·0‡ | | 26·0 | 36·3 | 9·0 g |
| 8·8‡ | | 29·5 | 35·3 | 8·5 g |

**25 prec.**

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 20 | 0 | 147 | 4·2 |
| | 10 | 145 | 4·5 |
| | 20 | 143 | 4·8 |
| | 30 | 141 | 5·1 |
| | 40 | 139 | 5·4 |
| | 50 | 136 | 5·6 |
| 21 | 0 | 134 | 5·9 |
| | 10 | 131 | 6·2 |
| | 20 | 129 | 6·4 |
| | 30 | 126 | 6·6 |
| | 40 | 123 | 6·8 |
| | 50 | 120 | 7·0 |
| 22 | 0 | 117 | 7·2 |
| | 10 | 114 | 7·4 |
| | 20 | 111 | 7·6 |
| | 30 | 108 | 7·7 |
| | 40 | 104 | 7·9 |
| | 50 | 101 | 8·0 |
| 23 | 0 | 98 | 8·1 |
| | 10 | 94 | 8·2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 23 | 10 | 94 | 8·2 |
| | 20 | 91 | 8·2 |
| | 30 | 87 | 8·3 |
| | 40 | 84 | 8·3 |
| | 50 | 80 | 8·3 |
| 0 | 0 | 77 | 8·4 |

### 3961—3970.

| mag. | 23h. m | s | −67° ′ | |
|---|---|---|---|---|
| 9·4 | 9 | 40·0 | 30·6 | *g* |
| 9·2 | 13 | 56·0 | 8·0 | |
| 10·1 | 15 | 12·5 | 17·9 | |
| 7·8 | 19 | 41·5 | 16·0 | 7·0 GS*g* |
| 9·6 | | 46·0 | 19·6 | |
| 8·8‡ | 20 | 39·0 | 35·8 | 8·5 G*g* |
| 8·6‡ | 21 | 56·0 | 54·3 | 8·5 *g* |
| 10·0 | 28 | 19·0 | 17·2 | |
| 9·1 | 29 | 20·5 | 27·9 | *g* |
| 9·1 | | 34·5 | 7·2 | *g* |

### 3971—3980.

| mag. | 23h. m | s | −67° ′ | |
|---|---|---|---|---|
| 8·6‡ | 30 | 50·2 | 44·2 | 9·0 *g* |
| 9·8 | 31 | 57·0 | 20·9 | |
| 9·6 | 32 | 15·0 | 18·1 | |
| 10·0 | 34 | 23·5 | 25·3 | |
| 9·8 | 35 | 18·0 | 23·0 | |
| 9·4† | | 26·5 | 34·7 | |
| 9·4 | | 30·5 | 2·2 | |
| 9·0 | | 55·0 | 17·6 | *g* |
| 9·6 | 38 | 0·5 | 22·5 | *g* |
| 8·2† | 39 | 5·7 | 32·7 | 8·5 G*g* |

### 3981—3990.

| mag. | 23h. m | s | −67° ′ | |
|---|---|---|---|---|
| 7·1 | 41 | 6·9 | 15·8 | 7·0 GSc*g* |
| 10·4 | | 58·4 | 0·6 | |
| 9·5 | 42 | 4·2 | 27·8 | |
| 9·6 | 45 | 11·7 | 4·4 | |
| 9·4 | | 29·9 | 21·0 | *g* |
| 8·8 | 46 | 28·7 | 20·4 | 9·0 *g* |
| 9·3† | 48 | 14·0 | 56·1 | *g* |
| 9·6 | 49 | 34·4 | 22·8 | |
| 9·6 | 51 | 14·4 | 21·0 | *g* |
| 10·4 | | 15·4 | 11·8 | |

### 3991—4000.

| mag. | 23h. m | s | −67° ′ | |
|---|---|---|---|---|
| 7·4† | 51 | 19·5 | 42·1 | *g* |
| 9·6 | 52 | 27·9 | 29·9 | *g* |
| 9·8 | | 41·4 | 4·4 | *g* |
| 9·2† | | 58·0 | 40·6 | *g* |
| 9·8 | 53 | 5·4 | 19·6 | |
| 9·6 | | 33·9 | 25·5 | *g* |
| 7·7 | 54 | 6·4 | 22·6 | 8·0 G*g* |
| 10·1 | | 42·9 | 38·4 | |
| 9·8 | 58 | 8·4 | 34·1 | |
| 9·5 | 59 | 18·9 | 12·1 | *g* |

# ZONE—68°.

PLATE 529—532.

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 73 | 8·3 |
| | 20 | 69 | 8·3 |
| | 30 | 66 | 8·3 |
| | 40 | 62 | 8·2 |
| | 50 | 58 | 8·2 |
| 1 | 0 | 55 | 8·1 |
| | 10 | 51 | 8·0 |
| | 20 | 48 | 7·9 |
| | 30 | 44 | 7·7 |
| | 40 | 41 | 7·6 |
| | 50 | 38 | 7·4 |
| 2 | 0 | 34 | 7·2 |
| | 10 | 31 | 7·0 |

### 1—30.

| mag. | 0h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·4 | 3 | 35·0 | 8·8 | 9·5 *g* |
| 9·2 | 4 | 2·0 | 1·0 | 9·5 *g* |
| 9·3 | 7 | 32·5 | 53·6 | *g* |
| 8·1 | 10 | 1·5 | 35·6 | GS*g* |
| 9·2 | 11 | 13·0 | 9·1 | *g* |
| 9·2 | 12 | 2·0 | 11·6 | *g* |
| 9·2 | 13 | 10·0 | 16·0 | *g* |
| 8·8 | | 38·5 | 4·9 | *g* |
| 8·5 | 16 | 31·0 | 19·2 | 8·0 G*g* |
| 9·3 | 17 | 54·0 | 24·4 | *g* |
| 8·6 | 19 | 48·7 | 26·2 | 8·0 *g* |
| 9·3 | 20 | 40·0 | 52·2 | 9·5 *g* |
| 8·3 | 21 | 4·7 | 24·9 | 8·5 *g* |
| 9·6 | 26 | 4·0 | 23·6 | *g* |
| 9·4 | | 56·7 | 42·0 | 9·5 *g* |
| 9·3 | 27 | 24·0 | 51·1 | 9·0 *g* |
| 9·6 | | 54·0 | 36·3 | *g* |
| 9·1 | 28 | 14·5 | 6·2 | 8·5 S*g* |
| 9·4 | 29 | 0·5 | 34·9 | 9·0 *g* |
| 9·3 | 30 | 32·0 | 18·2 | *g* |
| 9·6 | 31 | 4·0 | 50·8 | *g* |
| 8·7 | 32 | 34·0 | 38·1 | *g* |
| 9·3 | 33 | 1·0 | 16·3 | |
| 9·4 | 34 | 14·5 | 15·8 | 9·0 *g* |
| 8·2 | 35 | 32·0 | 52·2 | 8·5 GS*g* |
| 9·6 | 37 | 13·0 | 46·6 | *g* |
| 9·6 | 40 | 38·0 | 33·3 | *g* |
| 8·2 | 42 | 32·5 | 23·6 | 9·0 *g* |
| 8·3 | 43 | 31·0 | 12·9 | 8·5 *g* |
| 9·6 | 44 | 0·0 | 42·0 | *g* |

### 31—60.

| mag. | 0h.–1h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·1 | 47 | 27·5 | 50·6 | *g* |
| 9·2 | 49 | 55·5 | 7·5 | G*g* |
| 9·4 | | 58·0 | 7·4 | G*g* |
| 9·6 | 52 | 23·5 | 10·4 | *g* |
| 8·9 | 53 | 17·0 | 52·2 | 8·2 G*g* |
| 9·3 | 54 | 56·0 | 41·9 | *g* |
| 9·6 | 56 | 0·0 | 46·0 | 9·0 *g* |
| 9·6 | 58 | 40·0 | 42·7 | *g* |
| 9·6 | | 52·5 | 19·4 | *g* |
| 9·4 | 1 | 45·3 | 38·7 | 10·0 *g* |
| 9·9 | 5 | 50·5 | 7·8 | *g* |
| 9·8 | | 55·0 | 48·1 | |
| 9·6 | 6 | 58·5 | 42·8 | Gg*g* |
| 10·3 | 7 | 12·0 | 53·0 | |
| 10·3 | | 19·5 | 52·2 | |
| 10·3 | 9 | 2·7 | 48·9 | |
| 7·2 | 12 | 12·3 | 5·6 | 7·5 GSc*g*g |
| 10·0 | | 17·0 | 3·1 | |
| 9·5 | 13 | 16·0 | 58·5 | |
| 8·6 | 15 | 46·0 | 5·0 | 9·0 G*g* |
| 8·2 | 16 | 19·0 | 43·5 | 8·5 G*g* |
| 10·2 | 17 | 51·5 | 31·2 | |
| 8·6 | 19 | 28·5 | 38·0 | 8·5 *g* |
| 9·2 | | 43·0 | 58·8 | *g* |
| 9·9 | | 47·5 | 52·2 | |
| 8·4 | 21 | 41·5 | 4·1 | 8·5 *g* |
| 8·4 | 22 | 12·5 | 29·4 | 8·5 G*g* |
| 10·3 | 23 | 6·5 | 24·1 | |
| 7·9 | 24 | 55·5 | 49·2 | 7·8 G*g* |
| 8·4 | 25 | 12·0 | 7·9 | 8·0 *g* |

### 61—90.

| mag. | 1h. m | s | −68° ′ | |
|---|---|---|---|---|
| 10·0 | 25 | 20·5 | 31·9 | |
| 9·4 | | 21·0 | 4·9 | 9·5 *g* |
| 9·7 | 26 | 4·0 | 9·9 | |
| 9·9 | 28 | 9·0 | 23·1 | |
| 9·5 | 29 | 13·5 | 21·2 | *g* |
| 10·0 | | 52·0 | 22·4 | *g* |
| 10·0 | 30 | 12·0 | 10·1 | *g* |
| 8·8 | 32 | 41·0 | 53·3 | 9·0 *g* |
| 8·2 | 34 | 34·0 | 12·3 | 8·2 G*g* |
| 9·0 | 35 | 2·0 | 41·6 | 9·0 *g* |
| 9·7 | | 52·0 | 32·0 | *g* |
| 10·3 | | 53·5 | 27·6 | *g* |
| 8·8 | 36 | 27·0 | 53·5 | 8·0 G*g* |
| 10·2 | 37 | 7·5 | 39·5 | |
| 9·2 | | 10·0 | 25·9 | 9·0 *g* |
| 9·2 | | 29·0 | 38·2 | *g* |
| 8·1 | | 38·0 | 17·7 | 8·5 *g* |
| 9·9 | 38 | 12·5 | 22·5 | |
| 9·6 | | 32·5 | 39·6 | *g* |
| 10·3 | 39 | 59·5 | 9·7 | |
| 10·3 | 40 | 23·5 | 23·1 | |
| 8·6 | 41 | 31·5 | 36·1 | 8·5 *g* |
| 10·3 | 42 | 16·5 | 54·9 | |
| 8·8 | 43 | 5·0 | 19·4 | *g* |
| 9·9 | | 11·5 | 5·5 | |
| 8·8 | | 48·5 | 38·0 | 8·5 *g* |
| 9·4 | 44 | 1·0 | 22·5 | *g* |
| 9·9 | | 39·0 | 59·7 | |
| 9·0 | 45 | 39·5 | 43·2 | *g* |
| 9·9 | 46 | 19·0 | 8·9 | |

### 91—120.

| mag. | 1h.–2h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·8 | 46 | 24·5 | 27·1 | |
| 9·2 | | 49·0 | 26·2 | *g* |
| 10·3 | | 51·0 | 19·8 | *g* |
| 10·2 | 47 | 8·5 | 43·3 | *g* |
| 8·4 | 48 | 34·5 | 44·7 | 9·0 *g* |
| 6·6 | 49 | 25·3 | 33·6 | 7·2 GS*g* |
| 9·5 | | 54·5 | 48·2 | 9·0 *g* |
| 10·0 | | 57·4 | 34·1 | *g* |
| 10·8 | 50 | 13·9 | 35·5 | |
| 10·1 | | 37·7 | 6·5 | |
| 6·2 | 51 | 47·2 | 15·8 | 5·0 GSc*g*t |
| 9·8 | 52 | 12·4 | 31·4 | 9·0 *g* |
| 8·8 | | 29·7 | 28·4 | 9·0 *g* |
| 10·6 | 54 | 24·0 | 50·0 | |
| 10·8 | | 31·5 | 33·6 | |
| 8·9 | 55 | 11·0 | 11·7 | 8·5 G*g* |
| 10·6 | | 31·0 | 24·6 | |
| 10·8 | 56 | 51·5 | 12·0 | |
| 9·5 | 57 | 51·0 | 17·3 | |
| 10·8 | 58 | 10·5 | 12·4 | |
| 10·2 | 0 | 9·5 | 5·3 | |
| 10·8 | 1 | 39·0 | 48·2 | |
| 8·7 | 2 | 16·5 | 53·9 | 8·0 G*g* |
| 10·2 | 7 | 15·0 | 40·1 | *g* |
| 10·4 | | 16·5 | 4·6 | |
| 9·8 | | 30·5 | 23·5 | |
| 10·1 | | 56·0 | 52·2 | *g* |
| 10·8 | 8 | 9·9 | 0·9 | |
| 10·1 | | 19·1 | 43·3 | *g* |
| 10·8 | | 45·1 | 19·7 | |



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### 121—180.

| mag. | 2h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·5 | 8 | 47·6 | 6·5 | *g* |
| 10·6 | 9 | 21·6 | 45·8 | |
| 10·6 | | 37·6 | 22·2 | |
| 10·8 | 10 | 30·6 | 17·9 | |
| 10·1 | 11 | 37·6 | 44·2 | *g* |
| 6·8 | | 38·6 | 25·6 | 6·0 GSc*g* |
| 10·8 | 12 | 16·1 | 36·5 | *g* |
| 7·0 | | 52·6 | 19·6 | 5·8 GSc*g* |
| 9·9 | 13 | 30·6 | 13·4 | *g* |
| 9·6 | 14 | 7·6 | 58·3 | 8·8 *g* |
| 8·8 | | 37·6 | 46·2 | 9·0 *g* |
| 8·4 | 15 | 43·1 | 21·7 | 7·8 G*g* |
| 8·0 | 17 | 1·0 | 15·8 | 8·3 G*g* |
| 6·7 | | 23·0 | 39·5 | 7·5 GS*g* |
| 9·0 | 18 | 30·5 | 41·5 | 8·8 *g* |
| 9·5 | 19 | 38·5 | 20·3 | |
| 10·1 | 20 | 29·5 | 36·4 | *g* |
| 10·8 | 21 | 0·5 | 49·5 | |
| 10·8 | | 22·5 | 5·4 | |
| 8·7 | | 50·7 | 43·1 | 9·0 *g* |
| 8·8 | 22 | 20·7 | 42·7 | 9·0 *g* |
| 10·8 | | 58·7 | 33·3 | |
| 9·5 | 23 | 8·7 | 36·1 | 9·2 *g* |
| 7·6 | | 9·2 | 19·8 | 8·0 G*g* |
| 10·6 | | 12·7 | 33·6 | |
| 10·6 | | 56·2 | 42·1 | *g* |
| 10·1 | 26 | 54·7 | 46·6 | *g* |
| 10·2 | 27 | 47·7 | 39·6 | *g* |
| 10·8 | 28 | 44·7 | 15·1 | *g* |
| 10·4 | | 46·7 | 50·1 | |
| 7·6 | 29 | 1·2 | 31·2 | 8·0 GS*g* |
| 10·2 | 31 | 34·7 | 28·6 | |
| 10·8 | 32 | 10·9 | 52·1 | |
| 9·6 | | 17·4 | 11·2 | |
| 9·5 | | 53·4 | 40·8 | *g* |
| 8·0 | 33 | 20·7 | 42·4 | 9·0 *g* |
| 10·4 | 35 | 13·5 | 25·7 | |
| 10·8 | | 39·0 | 14·1 | |
| 10·8 | 36 | 11·4 | 8·1 | |
| 9·6 | | 29·3 | 5·1 | *g* |
| 3·6 | 37 | 41·0 | 48·2 | 4·0 GSc*g*t |
| 10·8 | 38 | 49·9 | 11·1 | |
| 10·2 | 39 | 0·4 | 35·9 | |
| 9·8 | | 1·7 | 33·0 | *g* |
| 10·2 | | 8·6 | 38·0 | *g* |
| 10·2 | 42 | 5·5 | 35·2 | *g* |
| 8·3 | | 16·4 | 40·4 | *g* |
| 9·8 | 43 | 7·5 | 21·2 | |
| 5·1 | | 37·5 | 8·5 | GSc*g*gtr |
| 10·0 | 48 | 12·5 | 58·3 | *g* |
| 9·6 | | 25·0 | 33·7 | |
| 7·1 | 49 | 4·0 | 2·1 | 7·0 GSc*g* |
| 10·2 | | 42·5 | 6·9 | 9·5 *g* |
| 10·2 | | 54·0 | 25·1 | |
| 10·2 | 51 | 40·8 | 22·3 | |
| 10·2 | | 43·8 | 22·9 | |
| 10·2 | 53 | 3·5 | 10·7 | |
| 10·2 | | 45·8 | 14·1 | *g* |
| 10·2 | 54 | 18·8 | 47·2 | |
| 10·2 | | 27·8 | 39·3 | *g* |

### 181—240.

| mag. | 2h.–3h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8·8 | 55 | 1·0 | 45·4 | *g* |
| 10·2 | 56 | 52·0 | 29·2 | |
| 9·3 | 57 | 15·5 | 38·2 | *g* |
| 10·2 | | 41·5 | 50·6 | |
| 9·2 | 1 | 10·0 | 13·8 | *g* |
| 9·3 | 3 | 21·0 | 21·0 | 9·0 *g* |
| 9·6 | | 24·7 | 13·4 | |
| 9·8 | 4 | 51·2 | 28·5 | 9·5 *g* |
| 9·1 | | 59·2 | 41·2 | 9·5 *g* |
| 10·2 | 5 | 49·7 | 50·0 | |
| 7·9 | 6 | 12·2 | 55·8 | 8·5 *g* |
| 10·2 | | 36·2 | 50·3 | |
| 10·2 | 7 | 17·7 | 18·9 | *g* |
| 10·2 | | 41·7 | 16·5 | *g* |
| 10·2 | 8 | 50·2 | 28·2 | |
| 10·2 | | 57·2 | 9·4 | |
| 8·4 | 9 | 54·7 | 41·2 | 8·5 *g* |
| 8·6 | 11 | 42·2 | 47·1 | 9·0 *g* |
| 10·0 | 12 | 2·2 | 52·6 | *g* |
| 10·0 | 13 | 59·2 | 22·7 | |
| 10·0 | 14 | 47·7 | 45·2 | *g* |
| 10·2 | | 58·2 | 47·1 | *g* |
| 7·7 | 16 | 40·2 | 36·8 | 8·5 GS*g*g |
| 10·2 | | 41·2 | 34·3 | *g* |
| 9·7 | 18 | 40·5 | 42·1 | |
| 7·0 | 20 | 5·8 | 59·0 | 7·0 GS*g* |
| 8·8 | 21 | 7·8 | 55·1 | 8·5 *g* |
| 9·4 | 22 | 37·9 | 56·6 | *g* |
| 9·6 | 23 | 1·0 | 22·4 | |
| 8·1 | | 58·5 | 46·2 | 9·0 *g* |
| 9·8 | 24 | 3·8 | 48·0 | |
| 9·8 | | 26·5 | 28·0 | |
| 8·8 | 25 | 14·8 | 3·1 | 9·5 *g* |
| 9·6 | 26 | 59·0 | 25·0 | *g* |
| 9·3 | 27 | 33·0 | 36·8 | *g* |
| 8·8 | 29 | 42·0 | 37·1 | *g* |
| 9·6 | 30 | 12·5 | 51·6 | |
| 9·6 | 32 | 41·0 | 5·0 | 9·0 |
| 9·6 | 33 | 13·5 | 30·9 | *g* |
| 9·6 | | 46·0 | 17·9 | 9·5 *g* |
| 8·8 | 34 | 13·5 | 14·8 | 9·5 *g* |
| 8·8 | | 25·0 | 16·5 | 8·5 G*g* |
| 8·8 | | 38·0 | 47·8 | 9·5 G |
| 8·1 | 36 | 18·5 | 50·7 | 8·0 GS*g* |
| 9·7 | | 33·0 | 16·5 | |
| 9·4 | 37 | 8·5 | 59·0 | *g* |
| 9·6 | | 13·0 | 20·8 | *g* |
| 9·7 | | 52·0 | 22·7 | |
| 9·9 | 39 | 8·0 | 56·5 | |
| 9·7 | | 42·5 | 49·0 | *g* |
| 8·7 | | 48·0 | 16·0 | 9·0 G |
| 8·8 | 40 | 41·0 | 56·2 | *g* |
| 8·8 | | 59·5 | 33·8 | G*g* |
| 9·4 | 41 | 44·0 | 52·4 | *g* |
| 9·7 | 42 | 13·0 | 19·8 | |
| 9·2 | 43 | 57·0 | 8·0 | 9·5 *g* |
| 9·7 | 44 | 54·0 | 45·0 | *g* |
| 9·7 | 48 | 42·0 | 22·2 | |
| 9·6 | 51 | 21·5 | 53·1 | *g* |
| 9·6 | 56 | 13·0 | 49·4 | *g* |

### 241—300.

| mag. | 3h.–5h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8·6 | 58 | 17·5 | 41·8 | 7·5 GS*g* |
| 9·7 | 3 | 56·0 | 14·5 | |
| 9·7 | 5 | 30·5 | 37·9 | |
| 8·8 | | 59·0 | 2·3 | *g* |
| 9·3 | 7 | 52·0 | 41·0 | *g* |
| 9·4 | 8 | 27·5 | 50·2 | *g* |
| 9·6 | 9 | 54·7 | 49·5 | |
| 9·4 | 11 | 41·0 | 31·7 | 9·5 *g* |
| 9·7 | | 45·5 | 17·0 | |
| 9·0 | 17 | 18·0 | 0·4 | 9·0 G*g* |
| 9·2 | 19 | 14·5 | 37·2 | 9·5 *g* |
| 9·7 | | 18·5 | 50·9 | |
| 8·0 | 20 | 7·5 | 59·8 | 8·0 GS*g* |
| 9·4 | | 9·0 | 22·0 | 9·0 *g* |
| 9·2 | | 33·5 | 4·8 | *g* |
| 9·0 | | 52·0 | 23·6 | 9·5 *g* |
| 9·7 | | 57·0 | 18·6 | *g* |
| 9·7 | 21 | 2·5 | 6·6 | |
| 9·6 | | 11·0 | 55·1 | *g* |
| 9·4 | | 55·5 | 44·4 | |
| 9·7 | 22 | 31·5 | 42·4 | |
| 9·2 | 23 | 2·0 | 10·0 | *g* |
| 9·7 | | 14·5 | 22·0 | |
| 9·6 | 25 | 38·5 | 23·4 | |
| 9·6 | 27 | 33·0 | 6·2 | |
| 8·6 | | 40·5 | 16·3 | 9·0 *g* |
| 9·7 | 29 | 35·0 | 31·0 | |
| 8·1 | 30 | 6·0 | 9·4 | 8·0 GS*g* |
| 9·7 | 35 | 30·5 | 28·8 | *g* |
| 9·0 | | 56·5 | 29·4 | *g* |
| 8·8 | 41 | 54·5 | 50·4 | 8·5 GS*g* |
| 7·9 | 45 | 17·0 | 14·9 | 9·0 GS*g* |
| 9·7 | | 17·5 | 37·1 | *g* |
| 9·6 | | 47·5 | 57·9 | |
| 9·6 | 46 | 53·0 | 20·4 | 10·0 *g* |
| 8·9 | | 53·0 | 57·7 | 9·5 G*g* |
| 7·7 | | 59·5 | 45·9 | 7·5 GS*g* |
| 8·8 | 48 | 25·5 | 58·9 | 9·5 GS*g* |
| 9·7 | | 34·5 | 58·8 | |
| 7·6 | 51 | 35·2 | 16·7 | 7·0 GS*g* |
| 9·2 | | 48·7 | 38·7 | 9·5 *g* |
| 9·2 | | 52·7 | 18·0 | 8·5 G*g* |
| 9·7 | | 56·0 | 28·4 | |
| 9·6 | 53 | 30·5 | 43·9 | |
| 9·4 | | 31·8 | 3·0 | |
| 9·3 | 54 | 4·3 | 36·4 | *g* |
| 9·7 | | 7·0 | 52·9 | |
| 9·4 | | 13·0 | 54·8 | |
| 9·6 | | 35·5 | 12·0 | |
| 9·1 | | 50·3 | 29·6 | *g* |
| 9·6 | 55 | 4·0 | 39·1 | |
| 9·5 | | 20·0 | 51·8 | *g* |
| neb. | | 34·5 | 23·9 | |
| 9·0 | 56 | 35·0 | 30·8 | 9·5 *g* |
| 9·6 | 57 | 32·5 | 36·3 | |
| 9·5 | | 41·0 | 35·9 | |
| 9·6 | | 49·0 | 12·3 | |
| 9·7 | 59 | 12·0 | 27·2 | |
| 9·5 | | 43·5 | 25·2 | |
| 8·3 | 0 | 21·0 | 45·7 | 9·0 GS*g* |

### 301—360.

| mag. | 5h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·7 | 0 | 25·5 | 23·3 | |
| 9·5 | | 44·5 | 23·1 | |
| 9·6 | 1 | 28·5 | 10·1 | *g* |
| 9·1 | | 51·5 | 12·2 | 9·0 *g* |
| 9·0 | 2 | 57·3 | 1·1 | *g* |
| 9·1 | 3 | 32·0 | 40·9 | *g* |
| 9·7 | 4 | 13·0 | 5·0 | |
| 9·6 | 5 | 11·5 | 17·1 | |
| 9·7 | | 12·5 | 17·6 | ? |
| 9·7 | | 27·5 | 51·0 | |
| 8·1 | | 28·5 | 15·1 | 8·5 GS*g* |
| 9·7 | | 36·5 | 12·1 | |
| 9·4 | | 54·5 | 25·1 | |
| 8·9 | 6 | 13·0 | 3·1 | *g* |
| 8·6 | | 26·5 | 34·9 | 9·0 G*g* |
| 9·7 | 7 | 29·0 | 4·6 | |
| 9·6 | | 31·0 | 38·0 | |
| 9·7 | | 52·0 | 41·5 | |
| 9·7 | 8 | 4·5 | 25·0 | |
| 9·6 | | 48·0 | 53·4 | |
| 9·0 | | 54·5 | 37·9 | *g* / |
| neb. | 9 | 16·0 | 54·9 | |
| neb. | | 21·0 | 55·0 | |
| 9·6 | | 22·0 | 3·2 | |
| 9·4 | 10 | 7·5 | 1·3 | K |
| 9·4 | 11 | 0·0 | 55·3 | |
| 9·6 | | 6·0 | 23·7 | |
| 9·7 | 12 | 17·5 | 52·3 | |
| 9·7 | | 24·0 | 0·1 | |
| 9·7 | | 27·5 | 12·3 | |
| 9·4 | | 44·5 | 5·5 | 10·0 *g* |
| 9·7 | | 57·5 | 9·2 | *g* |
| 9·4 | 13 | 18·5 | 34·6 | |
| 9·6 | | 39·0 | 4·2 | |
| 8·4 | | 59·0 | 9·7 | 9·0 GS*g* |
| 9·5 | 15 | 14·0 | 21·0 | |
| 9·4 | | 59·0 | 58·5 | |
| 9·1 | 16 | 2·5 | 12·2 | G*g* |
| 9·7 | | 35·0 | 23·3 | |
| 8·7 | | 41·0 | 16·0 | G*g* |
| 8·6 | 17 | 11·0 | 19·1 | G*g* |
| 9·3 | | 18·0 | 45·3 | |
| 9·5 | | 25·5 | 17·7 | |
| 9·1 | | 36·5 | 15·9 | *g* |
| 8·7 | | 56·0 | 36·1 | 9·5 G*g* |
| 9·6 | 18 | 7·0 | 29·3 | |
| 8·4 | | 11·5 | 43·2 | 8·5 GS*g*g |
| 8·8 | | 33·5 | 29·0 | 9·5 G*g* |
| 9·5 | | 33·5 | 39·1 | |
| 8·6 | | 36·0 | 35·5 | 9·0 G*g*g |
| 9·4 | | 44·0 | 33·1 | |
| 9·4 | | 56·0 | 35·5 | |
| 9·4 | 19 | 7·5 | 9·6 | |
| 9·4 | | 29·0 | 41·6 | |
| 9·3 | | 39·5 | 51·6 | G*g*g |
| 9·2 | | 46·0 | 53·1 | G*g*g |
| 9·2 | | 47·5 | 42·1 | GS*g*g |
| 9·5 | 20 | 29·0 | 5·8 | |
| 9·7 | | 37·0 | 9·7 | |
| 8·8 | 21 | 20·5 | 6·2 | 9·0 *g* |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 2 | 0 | 34 | 7·2 |
| | 10 | 31 | 7·0 |
| | 20 | 28 | 6·8 |
| | 30 | 25 | 6·6 |
| | 40 | 22 | 6·4 |
| | 50 | 19 | 6·2 |
| 3 | 0 | 17 | 5·9 |
| | 10 | 14 | 5·6 |
| | 20 | 12 | 5·4 |
| | 30 | 9 | 5·1 |
| | 40 | 7 | 4·8 |
| | 50 | 5 | 4·5 |
| 4 | 0 | 3 | 4·2 |
| | 10 | 2 | 3·9 |
| | 20 | 0 | 3·5 |
| | | − | |
| | 30 | 2 | 3·2 |
| | 40 | 3 | 2·9 |
| | 50 | 4 | 2·5 |
| 5 | 0 | 5 | 2·2 |
| | 10 | 6 | 1·8 |
| | 20 | 7 | 1·5 |
| | 30 | 7 | 1·1 |



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25 prec.

| h | m | α (s) − | δ (′) + |
|---|---|---|---|
| 5 | 20 | 7 | 1·5 |
| | 30 | 7 | 1·1 |
| | 40 | 8 | 0·7 |
| | 50 | 8 | 0·4 |
| 6 | 0 | 8 | 0·0 |
| | | | − |
| | 10 | 8 | 0·4 |
| | 20 | 8 | 0·7 |
| | 30 | 7 | 1·1 |
| | 40 | 7 | 1·5 |
| | 50 | 6 | 1·8 |
| 7 | 0 | 5 | 2·2 |
| | 10 | 4 | 2·5 |
| | 20 | 3 | 2·9 |

## 361—420.

| mag. | 5h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·4 | 21 | 34·0 | 28·1 | |
| 9·4 | 22 | 32·0 | 43·7 | |
| 9·0 | | 33·5 | 11·3 | 9·5 *g* |
| 9·7 | 23 | 3·0 | 45·2 | |
| 8·9 | | 26·0 | 10·5 | *g* |
| 9·6 | | 39·5 | 0·9 | |
| 9·2 | 25 | 8·5 | 0·3 | 9·5 *g* |
| 9·6 | | 20·0 | 41·1 | |
| 8·5 | | 29·5 | 6·4 | 9·0 *g* |
| 9·6 | | 53·5 | 14·4 | |
| 9·6 | 27 | 2·5 | 12·0 | |
| 9·6 | | 20·0 | 58·0 | |
| 9·2 | | 29·5 | 55·8 | *g* |
| 9·6 | | 38·0 | 56·0 | |
| 7·5 | | 39·0 | 43·2 | 7·0 GSc*g* |
| 9·6 | | 44·0 | 36·0 | |
| 9·2 | 28 | 10·0 | 10·2 | 9·5 *g* |
| 9·6 | 29 | 17·5 | 59·6 | |
| 9·6 | | 22·0 | 8·8 | |
| 9·6 | | 26·0 | 54·5 | |
| 9·2 | 30 | 12·5 | 57·6 | *g* |
| 9·6 | | 44·0 | 1·8 | |
| 9·5 | | 59·5 | 11·9 | |
| 9·4 | 31 | 37·5 | 11·9 | |
| 9·6 | | 42·0 | 50·1 | |
| 9·4 | 32 | 31·5 | 37·7 | |
| 9·6 | 33 | 55·0 | 39·2 | |
| 8·8 | 34 | 17·5 | 1·1 | 9·5 *g* |
| 9·6 | | 57·5 | 5·4 | *g* |
| 9·7 | 35 | 0·0 | 18·0 | |
| 8·9 | | 11·0 | 16·9 | 9·0 G*g* |
| 9·6 | | 11·0 | 18·2 | |
| 9·7 | | 38·5 | 51·0 | |
| 10·0 | | 46·0 | 32·5 | |
| 9·5 | 36 | 10·5 | 38·3 | *g* |
| 9·9 | | 22·5 | 22·1 | |
| 9·6 | 37 | 19·4 | 58·3 | |
| 10·0 | | 24·0 | 12·1 | |
| 10·2 | | 31·0 | 40·8 | |
| 9·3 | | 35·8 | 50·9 | *g* |
| 9·6 | | 41·2 | 56·1 | |
| 10·2 | 38 | 8·5 | 20·8 | |
| 9·2 | | 9·5 | 47·8 | *g* |
| 9·7 | | 11·4 | 3·0 | |
| 9·7 | | 12·5 | 30·0 | |
| 9·8 | | 36·5 | 59·1 | |
| 9·3 | | 44·8 | 30·5 | 9·5 |
| 9·7 | | 48·2 | 49·6 | |
| 10·1 | 39 | 6·5 | 54·3 | |
| 9·6 | | 21·7 | 57·1 | |
| 9·7 | 40 | 9·9 | 0·1 | |
| 10·2 | | 37·5 | 32·2 | |
| 9·8 | | 48·3 | 29·1 | |
| 9·4 | | 49·5 | 48·1 | |
| 9·9 | 41 | 6·7 | 18·3 | |
| 10·1 | | 31·5 | 26·6 | |
| 9·6 | | 32·2 | 53·0 | |
| 8·5 | | 59·5 | 49·5 | 7·8 GS*g*g |
| 9·9 | 42 | 18·3 | 56·1 | 9·0 *g* |
| 8·7 | | 45·5 | 45·9 | 8·8 G*g* |

## 421—480.

| mag. | 5h.–6h. m | s | −68° ′ | |
|---|---|---|---|---|
| 10·1 | 42 | 53·0 | 45·3 | |
| 10·1 | | 57·5 | 44·6 | |
| 10·0 | 43 | 4·0 | 6·9 | |
| 9·6 | | 20·0 | 28·0 | *g* |
| 10·2 | | 29·5 | 36·7 | |
| 10·0 | | 29·5 | 8·5 | |
| 10·2 | | 30·5 | 26·7 | |
| 8·8 | | 53·0 | 38·5 | G*g* |
| 10·0 | 44 | 1·0 | 7·3 | |
| 10·1 | | 7·0 | 31·0 | |
| 8·3 | | 9·5 | 7·9 | 8·0 GS*g* |
| 10·1 | | 40·5 | 15·6 | |
| 10·0 | | 42·0 | 14·0 | |
| 9·5 | 45 | 58·0 | 4·0 | *g* |
| 10·1 | 46 | 20·0 | 53·6 | |
| 10·0 | | 57·0 | 5·9 | |
| 10·0 | 47 | 30·0 | 5·4 | |
| 10·0 | | 33·0 | 31·9 | |
| 9·6 | | 44·0 | 41·3 | |
| 9·0 | 49 | 23·5 | 25·5 | *g* |
| 9·4 | | 41·0 | 33·6 | |
| 9·0 | 51 | 19·5 | 27·4 | *g* |
| 9·5 | | 48·0 | 41·7 | |
| 9·5 | 52 | 24·5 | 4·6 | |
| 10·2 | | 56·0 | 5·4 | |
| 9·9 | | 58·0 | 20·4 | |
| 9·2 | 53 | 5·0 | 12·9 | |
| 9·0 | | 20·7 | 59·5 | 9·0 *g* |
| 9·0 | | 39·5 | 27·7 | *g* |
| 10·0 | | 43·5 | 8·2 | |
| 10·1 | 54 | 26·5 | 19·8 | |
| 9·9 | | 32·0 | 35·1 | |
| 9·7 | 55 | 45·5 | 3·1 | |
| 9·2 | | 46·5 | 40·1 | *g* |
| 10·0 | 56 | 0·0 | 3·8 | |
| 8·6 | | 10·0 | 3·8 | GS*g* |
| 9·3 | | 28·0 | 16·3 | *g* |
| 9·9 | 58 | 4·0 | 29·1 | |
| neb. | 59 | 36·5 | 31·1 | |
| 9·5 | 0 | 29·0 | 27·2 | |
| 10·0 | 2 | 20·5 | 39·6 | |
| 10·0 | 3 | 23·5 | 17·8 | |
| 9·2 | | 26·5 | 15·4 | *g* |
| 10·1 | | 32·0 | 28·3 | |
| 10·0 | | 56·0 | 15·3 | |
| 9·4 | 4 | 13·0 | 2·4 | |
| 9·2 | | 25·0 | 30·9 | *g* |
| 9·8 | 5 | 16·5 | 28·3 | *g* |
| 9·5 | | 41·0 | 23·0 | *g* |
| 9·5 | 7 | 8·5 | 5·5 | *g* |
| 9·9 | | 10·5 | 59·3 | |
| 9·6 | | 35·0 | 15·2 | |
| 9·6 | | 50·0 | 13·7 | |
| 5·1 | 9 | 29·5 | 49·0 | 5·0 GS*g*λ |
| 9·6 | 10 | 7·0 | 11·9 | |
| 10·1 | 11 | 9·0 | 18·3 | |
| 10·0 | | 45·0 | 51·4 | |
| 9·9 | | 51·5 | 32·2 | |
| 9·9 | 12 | 8·0 | 33·6 | |
| 10·1 | | 44·5 | 37·1 | |

## 481—540.

| mag. | 6h. m | s | −68° ′ | |
|---|---|---|---|---|
| 10·2 | 12 | 47·0 | 30·0 | |
| 10·0 | 13 | 23·5 | 5·1 | |
| 9·9 | 14 | 41·5 | 33·9 | |
| 9·1 | 15 | 2·5 | 59·2 | *g* |
| 10·0 | | 5·0 | 10·5 | *g* |
| 10·0 | | 5·0 | 26·2 | |
| 9·9 | 18 | 28·0 | 33·3 | |
| 10·1 | | 41·5 | 13·1 | |
| 10·0 | 19 | 2·5 | 26·5 | |
| 9·7 | | 35·0 | 43·8 | *g* |
| 9·0 | 20 | 0·5 | 46·3 | *g* |
| 10·1 | | 8·0 | 53·3 | |
| 10·1 | | 15·5 | 35·6 | |
| 9·2 | | 27·5 | 22·3 | *g* |
| 8·8 | | 57·8 | 37·3 | *g* |
| 10·2 | | 58·7 | 25·9 | |
| 9·7 | 21 | 11·5 | 19·1 | |
| 9·7 | | 11·8 | 24·9 | |
| 10·2 | | 21·0 | 26·9 | |
| 10·0 | | 34·0 | 47·0 | |
| 9·4 | | 34·5 | 18·9 | |
| 10·0 | | 55·5 | 51·4 | |
| 9·4 | 22 | 4·5 | 42·1 | |
| 10·0 | 23 | 18·5 | 52·6 | |
| 10·0 | | 23·5 | 30·5 | |
| 10·0 | | 30·5 | 30·8 | |
| 10·0 | | 34·5 | 54·4 | |
| 10·0 | 24 | 8·5 | 44·1 | |
| 9·6 | | 22·3 | 9·0 | |
| 9·6 | | 29·5 | 35·6 | |
| 10·1 | | 34·0 | 24·5 | |
| 9·2 | | 37·3 | 31·6 | *g* |
| 10·0 | 25 | 4·5 | 32·1 | |
| 10·0 | | 27·0 | 15·1 | |
| 8·8 | | 34·0 | 43·4 | *g* |
| 9·6 | | 36·5 | 8·9 | |
| 9·6 | | 54·5 | 50·0 | |
| 9·4 | 26 | 8·5 | 39·5 | *g* |
| 9·6 | | 25·0 | 20·1 | |
| 10·1 | | 39·5 | 34·9 | |
| 10·0 | | 51·5 | 43·2 | |
| 10·1 | | 52·5 | 17·6 | |
| 10·1 | | 59·0 | 42·1 | |
| 9·4 | 27 | 7·0 | 38·1 | *g* |
| 10·0 | | 47·5 | 31·1 | |
| 8·5 | | 54·5 | 11·3 | 8·5 *g* |
| 10·0 | 28 | 2·0 | 9·2 | |
| 9·8 | | 13·0 | 2·1 | 9·0 *g* |
| 10·0 | | 59·5 | 31·4 | |
| 9·2 | 29 | 18·5 | 2·7 | 9·0 *g* |
| 9·4 | 30 | 22·5 | 19·5 | *g* |
| 7·8 | 31 | 12·0 | 51·2 | 8·0 G*g* |
| 10·0 | | 26·5 | 35·0 | |
| 8·2 | 32 | 19·0 | 1·3 | 8·0 GS*g* |
| 10·1 | | 25·5 | 3·2 | |
| 8·9 | | 37·5 | 35·9 | 8·5 *g* |
| 9·8 | 33 | 27·0 | 8·3 | |
| 10·0 | | 31·5 | 27·9 | |
| 10·0 | 34 | 44·0 | 22·2 | *g* |
| 8·6 | 35 | 35·0 | 27·2 | 9·0 *g* |

## 541—600.

| mag. | 6h.–7h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·8 | 35 | 48·2 | 59·7 | |
| 10·0 | | 54·0 | 3·1 | |
| 9·6 | 36 | 29·0 | 24·8 | *g* |
| 10·0 | | 36·5 | 18·9 | |
| 10·0 | 37 | 17·5 | 14·0 | |
| 9·0 | | 18·5 | 17·1 | *g* |
| 9·6 | | 40·0 | 21·3 | |
| 10·0 | 39 | 55·0 | 47·0 | |
| 9·6 | 40 | 51·0 | 54·7 | *g* |
| 10·0 | 41 | 25·5 | 41·8 | |
| 10·0 | | 30·5 | 34·3 | |
| 10·0 | | 38·0 | 34·9 | |
| 10·1 | | 59·0 | 54·7 | *g* |
| 10·1 | 42 | 3·5 | 38·1 | |
| 9·8 | | 49·0 | 18·2 | 9·8 |
| 8·5 | | 53·0 | 8·4 | *g* |
| 9·4 | | 55·0 | 34·1 | |
| 9·8 | 43 | 4·5 | 7·8 | *g* |
| 10·0 | | 16·5 | 35·1 | |
| 10·1 | | 29·0 | 27·1 | |
| 10·1 | | 35·5 | 27·1 | |
| 9·8 | 45 | 0·5 | 24·6 | |
| 10·1 | 47 | 6·0 | 47·0 | |
| 10·0 | | 18·0 | 2·1 | |
| 10·0 | | 31·5 | 20·6 | |
| 10·0 | 48 | 18·5 | 27·1 | |
| 8·6 | | 37·5 | 16·7 | *g* |
| 9·4 | 50 | 10·0 | 22·1 | *g* |
| 10·0 | | 56·0 | 11·4 | |
| 9·9 | 51 | 8·5 | 33·2 | 9·0 *g* |
| 8·6 | | 38·5 | 33·6 | 9·0 *g* |
| 10·0 | 52 | 4·0 | 51·7 | 9·5 *g* |
| 9·6 | | 48·0 | 51·9 | |
| 10·2 | 53 | 3·0 | 10·7 | |
| 9·7 | | 3·5 | 54·3 | 9·5 *g* |
| 9·6 | | 5·5 | 51·9 | *g* |
| 9·8 | | 41·7 | 57·1 | 9·5 *g* |
| 9·0 | 54 | 51·5 | 47·4 | 9·0 *g* |
| 8·0 | 56 | 7·0 | 20·3 | GS*g* |
| 8·7 | | 38·5 | 51·1 | 9·0 *g* |
| 10·1 | | 47·0 | 18·5 | |
| 9·9 | 57 | 19·0 | 34·3 | |
| 9·6 | | 33·5 | 20·8 | *g* |
| 8·8 | | 51·5 | 10·6 | *g* |
| 10·0 | 58 | 32·0 | 46·8 | |
| 10·0 | 4 | 45·0 | 31·9 | |
| 9·2 | | 51·5 | 3·4 | 8·5 *g* |
| 9·4 | 5 | 52·0 | 11·9 | 9·0 *g* |
| 8·8 | 6 | 35·7 | 48·9 | 8·5 G*g* |
| 10·4 | | 39·5 | 56·9 | |
| 7·6 | | 41·0 | 38·2 | 6·5 GS*g*g |
| 10·4 | 7 | 3·0 | 32·2 | |
| 9·9 | | 9·8 | 59·3 | |
| 9·8 | | 59·0 | 43·1 | |
| 10·4 | 8 | 1·0 | 38·8 | |
| 10·4 | | 48·5 | 10·0 | |
| 10·4 | | 55·0 | 59·0 | |
| 10·4 | 9 | 3·5 | 31·3 | |
| 10·4 | | 24·5 | 41·0 | |
| 9·8 | | 55·4 | 0·8 | *g* |



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## 601—660.

| mag. | 7h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·6 | 10 | 18·7 | 3·5 | g |
| 10·4 | | 24·0 | 49·0 | |
| 10·0 | | 27·5 | 6·0 | |
| 10·4 | | 34·5 | 23·0 | |
| 10·4 | | 42·5 | 19·6 | |
| 9·9 | 11 | 17·5 | 52·6 | 10·0 g |
| 9·0 | | 20·5 | 52·0 | 9·5 g |
| 8·8 | | 47·0 | 37·2 | 9·0 g |
| 10·2 | 12 | 48·5 | 14·0 | |
| 10·4 | 13 | 0·0 | 47·6 | |
| 10·3 | | 57·5 | 35·8 | |
| 10·2 | | 59·0 | 34·9 | |
| 10·3 | 14 | 20·0 | 28·0 | |
| 9·9 | 15 | 25·0 | 16·4 | |
| 10·2 | | 42·5 | 20·0 | |
| 10·4 | | 49·0 | 5·0 | |
| 10·4 | 16 | 23·0 | 10·7 | |
| 9·8 | | 50·5 | 49·1 | |
| 10·3 | 17 | 8·0 | 58·7 | |
| 10·4 | | 47·5 | 19·4 | |
| 9·8 | 19 | 8·5 | 53·1 | |
| 9·7 | | 44·2 | 59·1 | 10·0 g |
| 9·4 | 20 | 3·5 | 21·7 | g |
| 10·3 | | 24·5 | 59·1 | |
| 9·6 | 21 | 19·5 | 20·2 | g |
| 9·8 | | 44·5 | 4·7 | |
| 9·4 | 22 | 0·8 | 1·0 | |
| 9·8 | | 18·5 | 38·6 | |
| 9·8 | | 55·0 | 16·0 | g |
| 9·6 | 23 | 6·0 | 34·0 | |
| 10·0 | | 24·5 | 10·4 | |
| 10·4 | | 50·5 | 29·8 | |
| 10·3 | | 52·0 | 24·0 | |
| 9·8 | | 59·0 | 25·9 | |
| 9·8 | 24 | 17·5 | 16·4 | g |
| 9·8 | 25 | 51·0 | 2·9 | g |
| 9·6 | 26 | 2·3 | 2·9 | g |
| 9·2 | | 8·5 | 28·9 | 9·0 g |
| 9·8 | | 18·5 | 11·6 | |
| 8·4 | | 27·5 | 39·0 | g |
| 10·2 | | 45·5 | 39·6 | |
| 10·2 | 27 | 13·0 | 20·0 | |
| 10·4 | | 13·5 | 54·8 | |
| 7·4 | | 15·5 | 21·6 | 7·7 GSg |
| 10·4 | | 20·5 | 25·0 | |
| 10·4 | | 34·0 | 25·4 | |
| 10·3 | | 55·0 | 9·0 | |
| 8·6 | 28 | 2·0 | 29·9 | 8·5 g |
| 10·4 | | 3·5 | 36·5 | |
| 10·2 | | 26·5 | 48·0 | |
| 9·0 | 29 | 2·5 | 19·0 | 9·0 g |
| 9·0 | | 48·5 | 7·1 | g |
| 8·4 | 30 | 42·0 | 43·8 | g |
| 10·2 | 31 | 16·0 | 4·8 | |
| 10·4 | 33 | 0·5 | 50·2 | |
| 6·8 | | 29·5 | 29·5 | 7·0 GSgg |
| 10·4 | | 40·0 | 52·0 | |
| 10·3 | 35 | 8·5 | 20·9 | |
| 6·9 | 36 | 30·0 | 46·3 | 7·0 GSg |
| 10·3 | | 33·5 | 23·0 | |

## 661—720.

| mag. | 7h.–8h. m | s | −68° ′ | |
|---|---|---|---|---|
| 10·4 | 36 | 39·5 | 21·7 | |
| 7·7 | | 56·0 | 13·5 | 8·5 g |
| 10·3 | | 57·0 | 49·0 | |
| 10·3 | 37 | 23·0 | 45·4 | |
| 10·4 | 38 | 11·5 | 55·0 | |
| 9·2 | 40 | 52·5 | 46·6 | |
| 10·3 | 41 | 42·0 | 16·8 | |
| 9·6 | | 57·5 | 21·9 | |
| 8·6 | 42 | 24·5 | 54·3 | g |
| 10·4 | 43 | 3·5 | 8·4 | |
| 9·6 | 44 | 39·5 | 8·0 | g |
| 8·8 | | 51·5 | 27·0 | g |
| 9·6 | 46 | 43·5 | 36·2 | |
| 9·6 | 47 | 19·0 | 43·0 | |
| 10·2 | | 48·5 | 57·2 | |
| 9·4 | 48 | 10·5 | 2·3 | g |
| 9·2 | | 37·4 | 1·6 | g |
| 9·7 | | 48·5 | 10·0 | g |
| 10·3 | 49 | 35·5 | 48·4 | |
| 10·0 | 50 | 21·0 | 46·8 | |
| 10·0 | 51 | 17·0 | 13·0 | |
| 9·8 | | 27·5 | 48·0 | |
| 9·6 | | 38·7 | 21·9 | |
| 9·9 | | 45·0 | 31·4 | |
| 9·8 | | 50·3 | 14·0 | |
| 9·9 | | 55·0 | 27·8 | |
| 10·0 | 52 | 2·5 | 53·0 | |
| 9·3 | | 27·3 | 1·6 | |
| 9·3 | | 33·0 | 42·2 | g |
| 9·6 | 53 | 44·0 | 17·0 | G |
| 9·1 | | 50·5 | 34·2 | g |
| 8·7 | 54 | 25·3 | 40·1 | 9·5 g |
| 9·1 | | 41·7 | 48·3 | g |
| 10·0 | | 54·5 | 14·0 | |
| 10·0 | 55 | 3·0 | 47·8 | |
| 10·0 | | 45·5 | 58·3 | |
| 9·2 | | 55·0 | 37·0 | 9·0 g |
| 10·0 | 57 | 22·0 | 56·4 | |
| 10·0 | | 23·5 | 55·9 | |
| 10·0 | | 46·5 | 11·0 | |
| 9·3 | | 57·5 | 57·0 | |
| 9·4 | 58 | 31·0 | 32·0 | |
| 9·4 | | 39·0 | 42·5 | g |
| 10·0 | | 51·5 | 31·0 | |
| 9·4 | 59 | 21·0 | 48·2 | 9·5 g |
| 9·6 | | 34·5 | 42·4 | |
| 9·6 | | 37·5 | 24·0 | |
| 9·7 | | 56·5 | 12·0 | |
| 10·0 | 0 | 7·0 | 4·4 | |
| 9·8 | | 18·5 | 38·9 | |
| 9·9 | | 26·0 | 59·6 | |
| 10·0 | | 46·0 | 52·2 | |
| 9·9 | 1 | 3·5 | 2·2 | |
| 9·4 | | 56·5 | 9·8 | |
| 9·7 | 2 | 0·5 | 53·9 | |
| 10·0 | | 18·0 | 31·0 | |
| 9·5 | | 51·0 | 12·0 | |
| 10·0 | | 54·0 | 56·0 | |
| 9·4 | 3 | 20·0 | 5·6 | g |
| 9·4 | | 21·0 | 59·8 | |

## 721—780.

| mag. | 8h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8·9 | 3 | 23·5 | 48·4 | |
| 10·0 | | 31·5 | 49·8 | |
| 9·4 | | 36·5 | 28·8 | g |
| 10·0 | | 37·0 | 23·8 | |
| 8·0 | | 37·5 | 34·7 | GSg |
| 9·9 | | 41·5 | 17·4 | |
| 10·0 | | 43·0 | 50·5 | |
| 9·9 | | 45·0 | 8·9 | |
| 10·0 | 4 | 44·5 | 47·2 | |
| 9·7 | 5 | 11·5 | 53·0 | |
| 8·4 | 6 | 11·5 | 15·1 | 9·5 Sg |
| 10·0 | | 25·5 | 17·9 | |
| 10·0 | | 51·5 | 3·0 | |
| 8·7 | 7 | 22·0 | 19·4 | 9·5 g |
| 7·6 | | 25·5 | 31·9 | 8·0 Sg |
| 5·0 | | 31·0 | 15·0 | 4·5 GScgt |
| 9·4 | | 32·5 | 20·0 | |
| 9·3 | | 44·0 | 31·4 | |
| 10·0 | 8 | 2·0 | 39·4 | |
| 9·6 | | 8·5 | 1·3 | |
| 10·0 | | 14·0 | 37·1 | |
| 9·7 | | 32·0 | 22·0 | |
| 7·4 | | 37·0 | 37·3 | 8·0 GSg |
| 10·0 | 9 | 4·5 | 25·3 | |
| 8·6 | | 7·5 | 1·2 | |
| 9·4 | 10 | 0·5 | 20·0 | |
| 10·0 | 11 | 0·5 | 8·1 | |
| 10·0 | | 16·5 | 23·2 | |
| 10·0 | | 17·0 | 42·9 | G |
| 9·6 | | 17·5 | 7·0 | |
| 10·0 | | 20·0 | 7·4 | |
| 10·0 | | 27·5 | 9·3 | |
| 10·0 | | 39·0 | 18·8 | |
| 9·3 | 12 | 8·5 | 23·0 | Gg |
| 10·0 | | 17·5 | 56·0 | |
| 10·0 | | 29·0 | 48·4 | G |
| 10·0 | | 31·0 | 54·8 | G |
| 9·2 | 13 | 16·5 | 16·1 | |
| 10·0 | 14 | 20·5 | 11·4 | |
| 9·7 | 15 | 11·5 | 6·2 | |
| 9·5 | | 25·0 | 5·1 | Gg |
| 10·0 | | 51·0 | 8·6 | |
| 9·7 | | 52·5 | 48·6 | |
| 9·2 | | 56·5 | 38·6 | |
| 9·5 | 16 | 51·5 | 44·1 | 8·0 g |
| 9·2 | 17 | 16·5 | 44·1 | 8·0 g |
| 10·0 | | 25·5 | 25·0 | |
| 10·0 | 18 | 2·0 | 55·0 | |
| 9·8 | | 31·5 | 40·0 | |
| 9·2 | | 42·0 | 16·3 | |
| 8·6 | 19 | 0·0 | 36·1 | 8·0 Sg |
| 9·4 | | 9·5 | 50·6 | |
| 9·4 | | 11·5 | 16·0 | |
| 10·0 | | 18·0 | 9·0 | |
| 10·0 | | 27·0 | 32·2 | |
| 9·4 | | 40·0 | 9·6 | |
| 8·0 | | 48·5 | 39·7 | 7·5 GSg |
| 9·1 | 20 | 5·5 | 32·4 | |
| 10·0 | | 59·5 | 37·0 | |
| 9·4 | 22 | 59·5 | 33·2 | |

## 781—840.

| mag. | 8h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·7 | 23 | 21·0 | 10·5 | |
| 10·0 | | 41·5 | 56·1 | |
| 10·0 | 24 | 25·0 | 25·8 | |
| 9·9 | | 41·5 | 49·1 | G |
| 10·0 | | 47·5 | 18·0 | |
| 10·0 | 25 | 20·5 | 40·7 | |
| 9·4 | | 24·5 | 55·8 | |
| 9·7 | 26 | 53·0 | 34·4 | |
| 10·0 | 27 | 36·0 | 53·0 | |
| 8·0 | | 50·0 | 12·0 | 8·0 g |
| 9·6 | 28 | 4·5 | 35·0 | |
| 9·1 | | 12·0 | 33·6 | g |
| 10·0 | | 20·5 | 40·8 | |
| 10·0 | | 37·5 | 51·0 | |
| 9·2 | 29 | 15·5 | 12·1 | 9·0 g |
| 9·7 | 30 | 53·5 | 50·8 | |
| 9·8 | 31 | 5·0 | 16·0 | |
| 10·0 | | 13·5 | 58·0 | |
| 10·0 | | 40·0 | 42·0 | |
| 9·7 | | 43·5 | 1·5 | |
| 9·0 | | 51·0 | 26·1 | 8·2 g |
| 10·0 | 32 | 0·5 | 22·0 | |
| 10·0 | | 4·0 | 18·0 | |
| 10·0 | | 17·5 | 6·1 | |
| 9·8 | | 20·5 | 24·9 | |
| 9·7 | | 41·0 | 9·6 | |
| 8·4 | 33 | 16·5 | 55·0 | 9·0 g |
| 10·0 | | 41·5 | 35·0 | |
| 8·4 | 34 | 29·0 | 0·7 | g |
| 10·0 | | 39·5 | 32·0 | |
| 10·0 | | 42·0 | 11·2 | |
| 10·1 | 35 | 34·5 | 39·0 | |
| 9·4 | | 49·0 | 53·1 | |
| 9·9 | | 51·8 | 47·8 | g |
| 10·0 | 36 | 41·3 | 51·9 | |
| 9·2 | 37 | 58·0 | 0·7 | |
| 10·0 | 38 | 11·0 | 12·1 | |
| 7·4 | | 25·5 | 49·8 | 7·0 GSg |
| 9·5 | | 54·8 | 1·2 | |
| 9·1 | 39 | 0·3 | 51·9 | 9·5 g |
| 10·1 | | 20·0 | 20·9 | |
| 10·1 | | 21·0 | 11·8 | |
| 10·0 | | 40·8 | 10·2 | |
| 10·0 | | 50·3 | 26·5 | |
| 9·9 | 40 | 38·8 | 33·4 | |
| 9·9 | 41 | 17·3 | 13·5 | |
| 10·1 | 42 | 20·5 | 5·6 | |
| 10·0 | | 20·5 | 10·0 | |
| 9·7 | | 20·5 | 35·1 | |
| 9·2 | | 25·5 | 23·0 | g |
| 9·6 | | 32·0 | 12·0 | |
| 10·0 | | 59·0 | 41·3 | |
| 9·9 | 43 | 18·5 | 6·6 | |
| 10·1 | | 31·0 | 22·6 | |
| 9·7 | | 35·5 | 10·0 | |
| 9·9 | | 46·5 | 38·0 | |
| 10·0 | | 56·0 | 16·0 | |
| 9·6 | 45 | 2·5 | 3·0 | |
| 8·8 | | 29·0 | 58·1 | g |
| 10·1 | | 45·5 | 23·8 | |

25 pres.

| h | m | a (s) | δ |
|---|---|---|---|
| 7 | 10 | − 4 | − 2·5 |
| | 20 | 3 | 2·9 |
| | 30 | 2 | 3·2 |
| | 40 | 0 | 3·5 |
| | | + | |
| | 50 | 2 | 3·9 |
| 8 | 0 | 3 | 4·2 |
| | 10 | 5 | 4·5 |
| | 20 | 7 | 4·8 |
| | 30 | 9 | 5·1 |
| | 40 | 12 | 5·4 |
| | 50 | 14 | 5·6 |

| 25 | prec. | | |
|---|---|---|---|
| | | a | δ |
| | | + | − |
| h | m | s | ′ |
| 8 | 40 | 12 | 5·4 |
| | 50 | 14 | 5·6 |
| 9 | 0 | 17 | 5·9 |
| | 10 | 19 | 6·2 |
| | 20 | 22 | 6·4 |
| | 30 | 25 | 6·6 |
| | 40 | 28 | 6·8 |
| | 50 | 31 | 7·0 |
| 10 | 0 | 34 | 7·2 |
| | 10 | 38 | 7·4 |
| | 20 | 41 | 7·6 |

## 841—900.

| mag. | 8h.—9h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·6 | 45 | 52·0 | 25·0 | g |
| 10·0 | 46 | 14·0 | 9·5 | |
| 9·9 | | 16·0 | 39·0 | |
| 10·0 | | 52·0 | 56·0 | |
| 8·8 | 47 | 10·0 | 12·1 | 8·0 Ggg |
| 9·0 | | 21·5 | 54·3 | 8·5 g |
| 9·1 | | 31·0 | 18·2 | 10·0 Ggg |
| 9·6 | | 52·0 | 58·5 | |
| 10·0 | 48 | 18·5 | 58·3 | |
| 9·9 | | 20·0 | 3·2 | Gg |
| 9·7 | 49 | 17·0 | 42·9 | g |
| 9·8 | | 18·3 | 1·4 | |
| 9·9 | | 34·5 | 59·9 | |
| 10·1 | 50 | 34·0 | 21·4 | |
| 10·0 | | 37·0 | 18·6 | Gg |
| 8·3 | | 39·0 | 34·4 | g |
| 9·6 | | 44·5 | 42·4 | |
| 9·5 | 51 | 1·0 | 16·1 | G |
| 9·0 | | 6·0 | 15·5 | Ggg |
| 9·0 | | 55·0 | 38·6 | |
| 10·1 | | 55·0 | 54·1 | |
| 8·6 | 52 | 22·5 | 3·8 | g |
| 8·8 | 53 | 0·0 | 0·1 | g |
| 9·1 | | 6·5 | 3·8 | g |
| 9·0 | | 13·0 | 51·9 | |
| 10·0 | | 57·0 | 1·3 | |
| 10·1 | 54 | 19·0 | 40·5 | |
| 9·4 | | 19·0 | 39·9 | g |
| 8·4 | | 36·0 | 30·8 | 8·5 g |
| 10·0 | 55 | 0·0 | 9·0 | |
| 9·4 | | 12·5 | 3·2 | |
| 8·8 | 56 | 4·5 | 32·2 | 9·0 g |
| 9·1 | | 42·5 | 40·2 | 9·5 g |
| 10·0 | 57 | 12·5 | 28·6 | |
| 9·4 | | 20·0 | 20·6 | |
| 10·1 | | 33·5 | 21·2 | |
| 8·8 | 58 | 9·0 | 14·9 | g |
| 9·8 | 59 | 9·0 | 45·1 | |
| 7·8 | | 43·0 | 11·5 | GSg |
| 9·9 | | 45·5 | 48·9 | |
| 9·0 | | 58·0 | 25·9 | |
| 10·1 | 0 | 4·5 | 13·1 | |
| 10·1 | 1 | 12·0 | 50·0 | |
| 10·1 | | 40·0 | 54·1 | |
| 10·0 | 2 | 37·0 | 39·8 | g |
| 8·5 | | 39·5 | 44·0 | g |
| 9·7 | 3 | 29·0 | 40·0 | |
| 10·0 | | 50·5 | 19·9 | |
| 9·9 | 4 | 3·0 | 31·3 | |
| 10·1 | | 10·5 | 39·4 | |
| 10·1 | 5 | 20·5 | 39·2 | |
| 10·1 | | 24·5 | 32·9 | |
| 10·0 | | 30·0 | 35·1 | |
| 9·7 | | 47·5 | 4·5 | 9·5 |
| 10·0 | | 56·0 | 30·0 | |
| 7·6 | 6 | 7·0 | 15·0 | 8·0 GSgg |
| 8·5 | | 24·0 | 1·4 | 9·0 Sg |
| 10·1 | 7 | 14·0 | 20·0 | |
| 10·0 | | 17·0 | 2·0 | |
| 9·9 | | 35·0 | 49·0 | |

## 901—960.

| mag. | 9h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8·6 | 7 | 50·0 | 24·0 | |
| 8·7 | 8 | 33·0 | 9·0 | 9·0 |
| 10·0 | 9 | 46·5 | 6·9 | |
| 7·3 | | 49·5 | 44·5 | 7·5 GSg |
| 9·0 | | 50·0 | 55·1 | |
| 7·8 | 10 | 15·5 | 41·2 | 7·5 GSg |
| 8·6 | | 28·5 | 13·8 | g |
| 10·1 | 11 | 21·0 | 32·2 | |
| 10·1 | 12 | 5·5 | 19·8 | |
| 8·4 | | 29·5 | 23·9 | 7·5 Gg |
| 8·8 | 13 | 2·5 | 38·1 | g |
| 9·6 | | 23·5 | 56·8 | |
| 10·1 | | 40·0 | 48·7 | |
| 10·1 | 14 | 5·5 | 16·2 | |
| 9·4 | | 16·0 | 56·0 | |
| 10·0 | 15 | 0·5 | 51·5 | |
| 9·1 | | 27·5 | 3·4 | g |
| 6·0 | | 31·5 | 9·9 | 6·0 GScgg |
| 10·1 | | 39·0 | 43·0 | |
| 9·6 | 17 | 21·5 | 32·5 | |
| 9·7 | | 47·0 | 13·7 | |
| 10·1 | | 57·5 | 13·0 | 9·5 |
| 10·0 | 18 | 10·0 | 49·4 | |
| 10·1 | | 18·8 | 57·5 | |
| 10·0 | | 29·5 | 5·8 | |
| 9·2 | 19 | 11·0 | 53·0 | 9·0 g |
| 7·8 | | 20·5 | 46·2 | 8·0 g |
| 10·1 | | 45·5 | 5·2 | |
| 9·8 | 20 | 21·0 | 6·3 | 8·5 |
| 10·1 | | 29·5 | 0·0 | |
| 10·0 | | 31·5 | 34·6 | |
| 9·3 | | 46·0 | 40·4 | |
| 9·2 | | 58·5 | 12·1 | |
| 8·1 | 21 | 1·3 | 40·9 | 8·0 g |
| 9·2 | | 1·5 | 29·5 | |
| 9·4 | | 54·5 | 34·0 | |
| 8·6 | | 55·3 | 5·9 | 8·5 g |
| 9·4 | 22 | 12·8 | 25·8 | |
| 9·6 | | 29·0 | 24·8 | |
| 9·3 | | 54·7 | 54·9 | 9·5 |
| 9·6 | 23 | 4·0 | 48·8 | |
| 9·6 | | 49·5 | 54·8 | |
| 9·2 | 24 | 18·8 | 20·9 | |
| 9·3 | | 20·3 | 40·1 | |
| 8·2 | | 30·5 | 43·5 | 8·5 g |
| 9·6 | | 39·0 | 38·9 | |
| 9·6 | 25 | 41·0 | 33·0 | |
| 9·4 | | 45·5 | 11·6 | |
| 9·4 | 26 | 34·3 | 17·1 | |
| 9·3 | | 39·5 | 37·4 | |
| 9·2 | 27 | 8·0 | 52·2 | |
| 8·6 | | 27·0 | 11·0 | g |
| 9·5 | | 58·0 | 5·3 | |
| 9·5 | | 58·5 | 3·9 | |
| 9·6 | 28 | 0·0 | 40·0 | |
| 9·1 | | 7·0 | 26·0 | g |
| 9·6 | | 19·0 | 9·5 | |
| 9·5 | | 56·0 | 8·6 | |
| 9·6 | 29 | 7·5 | 29·8 | |
| 9·6 | 30 | 18·0 | 7·9 | |

## 961—1020.

| mag. | 9h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·4 | 30 | 27·5 | 8·2 | |
| 8·4 | | 43·5 | 0·8 | 8·5 g |
| 9·6 | 31 | 18·0 | 7·5 | |
| 9·4 | | 28·5 | 38·3 | |
| 9·0 | | 47·8 | 1·9 | |
| 9·3 | 32 | 33·5 | 44·0 | g |
| 9·6 | 35 | 16·5 | 15·9 | |
| 9·3 | | 27·5 | 21·9 | |
| 9·0 | | 55·5 | 34·3 | g |
| 9·6 | 36 | 0·5 | 32·3 | |
| 9·6 | | 23·5 | 23·2 | |
| 8·5 | | 34·5 | 2·5 | 9·5 g |
| 9·6 | 37 | 59·0 | 25·3 | |
| 9·4 | 38 | 42·5 | 56·6 | |
| 9·6 | 39 | 30·8 | 2·6 | |
| 8·8 | 40 | 44·0 | 46·0 | 8·5 g |
| 9·6 | | 51·0 | 24·4 | |
| 9·6 | | 55·5 | 37·8 | |
| 8·6 | 41 | 11·5 | 26·2 | g |
| 8·6 | | 29·8 | 0·9 | 8·5 g |
| 9·6 | | 48·5 | 34·7 | |
| 9·4 | 42 | 33·0 | 4·8 | |
| 8·8 | | 50·5 | 28·0 | |
| 9·3 | 43 | 29·0 | 9·2 | |
| 9·2 | 44 | 7·5 | 35·5 | g |
| 9·1 | | 33·5 | 55·3 | 8·0 g |
| 9·2 | 45 | 4·0 | 59·6 | 8·5 g |
| 8·6 | | 18·5 | 12·2 | 9·0 g |
| 9·2 | | 49·7 | 0·8 | |
| 9·6 | | 51·5 | 57·9 | |
| 9·6 | 46 | 3·0 | 46·4 | |
| 9·6 | | 5·5 | 41·1 | |
| 9·6 | | 11·0 | 35·4 | |
| 9·4 | | 18·0 | 49·1 | |
| 9·4 | | 21·5 | 3·2 | |
| 9·6 | | 50·0 | 17·7 | |
| 9·3 | 47 | 38·0 | 50·8 | |
| 9·3 | 49 | 10·5 | 40·8 | g |
| 9·6 | 50 | 11·0 | 38·6 | g |
| 9·5 | 51 | 26·5 | 31·0 | |
| 9·2 | | 46·5 | 25·6 | 8·5 g |
| 7·0 | 52 | 29·0 | 35·8 | 7·2 GSgr |
| 8·1 | | 33·0 | 13·2 | 8·0 Gg |
| 9·6 | | 44·5 | 54·4 | |
| 9·6 | | 45·0 | 21·0 | |
| 9·5 | 53 | 18·5 | 36·4 | |
| 8·2 | | 21·0 | 14·1 | 8·8 g |
| 8·4 | | 39·0 | 6·6 | 8·5 |
| 9·6 | | 43·5 | 8·0 | 9·0 |
| 9·4 | 54 | 4·5 | 9·4 | |
| 6·4 | | 18·0 | 30·4 | 6·5 GSgr |
| 9·6 | | 32·0 | 59·0 | |
| 9·6 | 56 | 29·5 | 39·6 | |
| 9·6 | 57 | 31·0 | 32·1 | |
| 9·6 | 58 | 1·5 | 29·2 | |
| 9·6 | | 19·5 | 26·0 | |
| 9·6 | | 21·5 | 40·9 | |
| 9·4 | 59 | 16·5 | 4·8 | |
| 9·4 | | 19·0 | 7·7 | |
| 8·3 | | 38·5 | 43·3 | 8·5 g |

## 1021—1080.

| mag. | 10h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·5 | 0 | 29·0 | 37·2 | |
| 9·5 | 1 | 9·0 | 0·9 | 9·5 g |
| 9·6 | | 28·5 | 51·4 | |
| 8·8 | | 41·0 | 45·0 | 9·2 g |
| 9·6 | | 56·0 | 54·4 | |
| 9·6 | 2 | 48·0 | 43·3 | 9·5 g |
| 9·5 | 3 | 32·5 | 40·2 | |
| 9·0 | | 44·0 | 27·1 | g |
| 9·2 | 4 | 9·0 | 5·9 | |
| 9·6 | | 12·5 | 57·0 | |
| 9·6 | | 39·5 | 38·0 | 9·0 g |
| 9·6 | 5 | 9·0 | 7·0 | |
| 9·6 | 6 | 8·5 | 58·6 | |
| 6·0 | | 23·7 | 4·4 | 6·5 GSg |
| 9·9 | | 42·0 | 10·1 | |
| 8·8 | | 44·0 | 11·7 | g |
| 9·8 | 7 | 13·5 | 47·3 | |
| 9·9 | | 14·0 | 13·1 | |
| 9·5 | | 15·5 | 45·8 | |
| 9·7 | | 18·0 | 21·5 | |
| 9·8 | | 22·5 | 44·1 | |
| 9·7 | | 32·0 | 6·8 | |
| 8·8 | | 50·0 | 47·6 | g |
| 9·5 | | 52·3 | 48·9 | |
| 9·9 | | 59·5 | 51·1 | |
| 9·4 | 8 | 4·5 | 9·2 | |
| 9·3 | | 12·3 | 22·6 | |
| 9·4 | | 20·5 | 10·5 | |
| 9·9 | | 26·5 | 58·1 | |
| 9·8 | | 32·0 | 17·0 | |
| 9·7 | | 32·0 | 17·3 | |
| 8·8 | | 32·5 | 10·1 | g |
| 9·4 | | 42·5 | 9·9 | |
| 9·8 | | 49·0 | 43·9 | |
| 9·7 | 9 | 8·0 | 40·0 | |
| 9·9 | | 17·0 | 57·6 | |
| 9·9 | | 20·5 | 2·6 | |
| 9·9 | | 42·0 | 41·0 | |
| 9·2 | | 48·0 | 48·6 | |
| 9·0 | | 52·0 | 59·0 | |
| 9·8 | 10 | 14·0 | 35·9 | |
| 8·7 | | 24·3 | 28·7 | 8·0 g |
| 9·7 | | 45·0 | 49·9 | |
| 9·7 | | 57·0 | 3·1 | |
| 9·8 | | 58·0 | 4·9 | |
| 9·8 | 11 | 14·0 | 3·0 | |
| 8·2 | | 17·5 | 15·1 | 7·2 Gg |
| 9·8 | | 18·5 | 24·1 | |
| 9·6 | | 19·0 | 4·0 | |
| 9·8 | | 27·5 | 6·0 | |
| 9·4 | | 41·0 | 35·0 | |
| 9·5 | | 41·5 | 13·3 | |
| 9·4 | 12 | 3·5 | 13·0 | |
| 9·8 | | 10·5 | 57·4 | |
| 9·9 | | 15·0 | 11·0 | |
| 9·8 | | 24·0 | 30·0 | |
| 9·9 | | 31·5 | 8·8 | |
| 9·4 | | 35·0 | 57·8 | 9·5 |
| 9·9 | | 41·5 | 44·4 | |
| 9·8 | | 42·0 | 52·0 | |



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## 1081—1140.

| mag. | 10h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·9 | 12 | 43·5 | 15·6 | |
| 9·2 | | 56·0 | 17·1 | 9·0 *g* |
| 9·4 | | 58·0 | 16·3 | |
| 9·4 | 13 | 18·5 | 2·2 | |
| 9·4 | | 25·5 | 21·3 | |
| 9·7 | | 33·5 | 40·0 | |
| 9·8 | | 37·0 | 32·0 | |
| 9·6 | | 37·5 | 56·0 | |
| 9·4 | | 52·5 | 41·0 | 9·5 |
| 9·5 | | 53·0 | 44·7 | 9·0 |
| 9·6 | 14 | 21·0 | 29·1 | |
| 9·6 | | 28·0 | 39·0 | |
| 9·3 | | 37·0 | 7·8 | |
| 9·2 | | 39·5 | 15·7 | *g* |
| 9·4 | | 41·0 | 46·0 | |
| 9·7 | | 44·5 | 10·0 | |
| 9·8 | | 50·0 | 10·6 | |
| 9·7 | 15 | 2·5 | 50·0 | |
| 9·9 | | 14·5 | 25·4 | |
| 8·5 | | 17·5 | 48·1 | 9·0 *g* |
| 9·8 | | 20·5 | 4·1 | |
| 9·9 | | 28·5 | 26·9 | |
| 9·8 | | 31·0 | 48·0 | |
| 9·7 | | 37·5 | 41·3 | |
| 9·8 | 16 | 5·0 | 16·8 | |
| 9·5 | | 9·0 | 39·0 | |
| 9·6 | | 23·5 | 3·1 | |
| 9·9 | | 37·5 | 1·1 | |
| 9·9 | | 40·5 | 44·0 | |
| 9·9 | | 48·5 | 20·2 | |
| 9·7 | | 51·0 | 47·2 | |
| 9·8 | | 58·5 | 4·2 | |
| 9·6 | 17 | 0·5 | 44·1 | |
| 9·2 | | 5·0 | 53·9 | |
| 9·9 | | 20·0 | 53·7 | |
| 9·8 | | 38·5 | 4·2 | |
| 9·8 | | 42·0 | 34·9 | |
| 9·8 | | 50·5 | 32·1 | |
| 9·6 | 18 | 12·0 | 40·6 | |
| 9·8 | | 12·5 | 36·1 | |
| 9·4 | | 12·5 | 44·9 | 9·0 *g* |
| 8·3 | | 13·0 | 41·3 | 8·5 *g* |
| 9·2 | | 20·0 | 18·9 | *g* |
| 8·8 | | 20·5 | 42·0 | 8·0 *g* |
| 9·4 | | 24·5 | 44·0 | 9·5 |
| 9·5 | | 25·5 | 40·0 | |
| 9·7 | 20 | 10·0 | 6·9 | |
| 9·8 | | 28·0 | 6·2 | |
| 9·8 | | 58·0 | 39·7 | |
| 9·4 | | 59·5 | 0·9 | |
| 9·5 | 21 | 0·0 | 6·5 | |
| 9·6 | | 3·5 | 42·9 | |
| 9·9 | | 6·5 | 7·0 | |
| 9·8 | | 18·5 | 50·3 | |
| 9·8 | | 21·5 | 20·0 | |
| 9·6 | | 22·0 | 53·7 | |
| 9·8 | | 28·0 | 6·0 | |
| 9·6 | | 28·5 | 22·8 | |
| 9·4 | | 44·0 | 11·5 | |
| 9·8 | | 47·0 | 51·0 | |

## 1141—1200.

| mag. | 10h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·8 | 22 | 5·5 | 20·5 | |
| 9·6 | | 9·0 | 7·3 | |
| 9·5 | | 12·5 | 17·5 | |
| 8·7 | | 21·5 | 44·3 | 9·0 |
| 9·4 | | 23·0 | 25·5 | |
| 9·4 | | 33·0 | 50·2 | |
| 9·8 | | 42·0 | 36·6 | |
| 9·4 | 23 | 1·5 | 38·4 | |
| 9·7 | | 6·0 | 46·1 | |
| 9·6 | | 7·5 | 31·2 | |
| 9·6 | | 12·0 | 57·5 | |
| 9·6 | | 26·8 | 57·4 | |
| 9·8 | | 28·0 | 47·8 | |
| 9·4 | | 30·5 | 31·5 | |
| 9·7 | | 41·5 | 44·7 | |
| 9·7 | | 43·0 | 57·0 | |
| 9·2 | | 43·0 | 37·7 | 9·5 |
| 9·6 | 24 | 1·0 | 59·8 | |
| 9·4 | | 8·0 | 19·1 | |
| 9·9 | | 12·0 | 18·0 | |
| 9·4 | | 12·0 | 28·0 | *g* |
| 9·9 | | 18·5 | 52·5 | |
| 9·4 | | 32·0 | 35·8 | 9·0 |
| 8·4 | | 49·5 | 20·0 | 9·0 *g* |
| 9·7 | | 59·5 | 49·4 | |
| 9·8 | 25 | 15·0 | 41·6 | |
| 9·7 | | 18·5 | 38·0 | |
| 9·4 | | 22·0 | 59·0 | |
| 9·8 | | 24·5 | 20·8 | |
| 9·8 | | 35·0 | 2·0 | |
| 9·9 | | 37·5 | 54·3 | |
| 9·7 | | 55·0 | 49·6 | |
| 9·8 | | 55·0 | 46·2 | |
| 9·2 | | 55·2 | 58·1 | 8·5 *g* |
| 9·8 | 26 | 10·5 | 40·3 | |
| 9·7 | | 22·0 | 14·0 | |
| 9·8 | | 36·0 | 15·2 | |
| 9·7 | | 38·5 | 58·4 | |
| 9·9 | | 39·0 | 45·1 | |
| 9·8 | | 39·0 | 46·5 | |
| 9·2 | | 53·0 | 21·6 | |
| 9·8 | | 58·5 | 19·6 | |
| 8·9 | 27 | 1·5 | 20·1 | 9·8 |
| 7·4 | | 28·0 | 15·3 | 7·5 G*g* |
| 7·6 | | 36·0 | 19·6 | 8·0 *g* |
| 9·6 | | 38·0 | 23·9 | |
| 8·8 | | 46·0 | 31·2 | |
| 9·9 | | 58·0 | 32·0 | |
| 9·8 | | 58·5 | 12·2 | |
| 9·8 | 28 | 7·0 | 29·4 | |
| 9·9 | | 10·5 | 8·0 | |
| 9·6 | | 11·0 | 34·5 | |
| 9·7 | | 13·0 | 24·4 | |
| 9·4 | | 16·5 | 25·0 | |
| 8·9 | | 29·0 | 51·4 | |
| 8·3 | | 32·5 | 8·9 | 8·0 G*g* |
| 9·8 | | 42·0 | 20·0 | |
| 9·8 | | 55·5 | 51·0 | |
| 9·8 | 29 | 4·0 | 23·6 | |
| 9·9 | | 17·5 | 34·8 | |

## 1201—1260.

| mag. | 10h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·7 | 29 | 19·5 | 8·2 | |
| 9·9 | | 24·5 | 59·8 | |
| 9·9 | | 24·5 | 29·9 | |
| 9·9 | | 28·0 | 59·9 | |
| 9·6 | | 30·5 | 2·3 | |
| 9·8 | | 41·0 | 19·0 | |
| 9·9 | | 50·0 | 25·5 | |
| 9·8 | | 54·0 | 10·3 | |
| 9·7 | | 54·5 | 19·9 | |
| 9·2 | | 54·5 | 32·2 | |
| 8·8 | | 58·5 | 24·4 | 9·5 |
| 9·8 | | 59·5 | 17·4 | |
| 9·8 | 30 | 44·5 | 46·0 | |
| 8·8 | | 47·0 | 32·8 | 9·5 |
| 9·9 | | 49·0 | 6·0 | |
| 9·9 | | 58·5 | 57·1 | |
| 9·2 | 31 | 4·5 | 56·4 | 8·8 |
| 9·4 | | 5·0 | 45·0 | |
| 9·2 | | 22·0 | 58·2 | |
| 8·4 | | 23·0 | 42·1 | 7·0 G*g* |
| 9·8 | | 24·5 | 6·2 | |
| 9·9 | | 31·5 | 7·6 | |
| 9·6 | | 39·0 | 39·3 | 9·5 |
| 9·7 | | 41·0 | 1·1 | |
| 9·8 | | 42·5 | 48·3 | |
| 9·8 | | 48·5 | 18·2 | |
| 9·8 | | 48·5 | 48·0 | |
| 9·4 | 32 | 18·0 | 42·7 | |
| 9·2 | | 29·0 | 44·0 | 9·5 |
| 9·9 | | 31·0 | 4·6 | |
| 9·2 | | 34·5 | 39·9 | |
| 9·8 | 33 | 9·0 | 40·1 | |
| 9·4 | | 29·5 | 53·7 | |
| 8·1 | | 34·0 | 42·8 | 8·0 G*g* |
| 9·8 | | 34·5 | 59·1 | |
| 9·4 | | 39·0 | 31·7 | |
| 9·4 | | 48·5 | 45·6 | |
| 9·8 | | 50·5 | 58·8 | |
| 9·4 | | 55·5 | 36·2 | |
| 9·7 | | 59·5 | 35·5 | |
| 9·7 | 34 | 2·0 | 56·0 | |
| 9·7 | | 19·0 | 5·7 | |
| 9·7 | | 24·5 | 45·1 | |
| 9·2 | | 32·5 | 24·4 | |
| 7·8 | | 36·5 | 37·3 | 7·8 *g* |
| 8·8 | | 53·5 | 53·0 | 9·2 |
| 9·5 | 35 | 1·0 | 21·6 | |
| 8·4 | | 3·0 | 48·2 | 9·2 |
| 9·8 | | 4·5 | 17·9 | |
| 9·7 | | 9·5 | 24·0 | |
| 9·8 | | 9·5 | 47·1 | |
| 9·6 | | 14·0 | 59·9 | |
| 9·6 | | 21·5 | 21·0 | |
| 9·4 | | 27·5 | 24·0 | |
| 9·8 | | 34·0 | 8·0 | |
| 9·4 | | 51·5 | 44·6 | |
| 8·9 | 36 | 22·5 | 9·3 | *g* |
| 9·4 | | 24·0 | 22·0 | |
| 9·9 | | 31·5 | 35·0 | |
| 9·8 | | 33·5 | 10·2 | |

## 1261—1320.

| mag. | 10h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·9 | 36 | 39·0 | 20·0 | |
| 9·8 | | 50·5 | 16·9 | |
| 9·9 | 37 | 7·0 | 53·4 | |
| 9·7 | | 16·5 | 19·4 | |
| 9·8 | | 47·0 | 20·8 | |
| 9·7 | | 55·0 | 44·1 | |
| 9·4 | 38 | 0·0 | 53·8 | *g* |
| 9·8 | | 4·0 | 43·8 | |
| 9·5 | | 12·5 | 12·3 | |
| 9·8 | | 18·0 | 13·7 | |
| 9·8 | | 19·0 | 47·9 | |
| 9·8 | | 32·5 | 43·9 | |
| 8·7 | | 38·5 | 27·0 | *g* |
| 9·8 | 39 | 4·5 | 46·0 | |
| 9·6 | | 7·5 | 52·3 | |
| 9·0 | | 29·5 | 24·3 | |
| 9·9 | | 39·0 | 13·7 | |
| 8·3 | | 45·0 | 47·6 | 9·0 *g* |
| 9·8 | | 45·0 | 27·1 | |
| 9·9 | | 48·0 | 56·1 | |
| 9·8 | 40 | 5·0 | 3·6 | |
| 9·8 | | 9·5 | 38·9 | |
| 9·4 | | 9·5 | 27·0 | |
| 9·9 | | 10·0 | 5·6 | |
| 9·8 | | 18·0 | 38·9 | |
| 9·9 | | 18·5 | 21·9 | |
| 9·2 | | 35·5 | 23·6 | |
| 9·5 | | 50·5 | 20·7 | |
| 9·9 | 41 | 24·5 | 11·1 | |
| 9·8 | | 26·5 | 0·7 | |
| 9·4 | | 31·5 | 23·1 | |
| 9·6 | | 38·5 | 16·6 | |
| 9·9 | | 42·5 | 15·8 | |
| 9·7 | 42 | 7·5 | 4·5 | |
| 9·7 | | 9·5 | 6·2 | |
| 9·2 | | 18·5 | 12·1 | |
| 9·9 | | 27·5 | 58·0 | |
| 9·6 | | 39·5 | 6·6 | |
| 9·8 | | 40·0 | 5·0 | |
| 9·9 | | 41·0 | 14·1 | |
| 9·8 | | 42·5 | 59·0 | |
| 7·4 | | 44·0 | 33·0 | 6·8 GS*g* |
| 9·5 | | 48·0 | 2·9 | |
| 9·8 | | 54·5 | 0·1 | |
| 6·5 | 43 | 26·5 | 46·7 | 6·8 GS*g* |
| 9·8 | | 30·5 | 30·0 | |
| 9·5 | | 42·0 | 55·2 | |
| 9·7 | | 58·5 | 31·3 | |
| 9·7 | 44 | 0·5 | 3·4 | |
| 9·8 | | 8·0 | 43·3 | |
| 9·8 | | 9·0 | 44·6 | |
| 9·8 | | 11·5 | 37·0 | |
| 9·4 | | 11·5 | 5·7 | |
| 9·9 | | 13·0 | 34·4 | |
| 9·8 | | 23·0 | 1·2 | |
| 9·8 | | 28·5 | 32·1 | |
| 8·6 | | 37·5 | 57·2 | |
| 9·8 | | 38·0 | 10·6 | |
| 9·4 | | 44·5 | 38·8 | |
| 8·3 | | 45·5 | 6·4 | 9·0 *g* |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 10 | 10 | 38 | 7·4 |
| | 20 | 41 | 7·6 |
| | 30 | 44 | 7·7 |
| | 40 | 48 | 7·9 |
| | 50 | 51 | 8·0 |



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25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 10 | 40 | 48 | 7·9 |
| | 50 | 51 | 8·0 |
| 11 | 0 | 55 | 8·1 |
| | 10 | 58 | 8·2 |
| | 20 | 62 | 8·2 |
| | 30 | 66 | 8·3 |
| | 40 | 69 | 8·3 |

### 1321—1380.

| mag. | 10ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·7 | 44 | 54·5 | 36·7 | |
| 9·8 | 45 | 5·0 | 9·0 | |
| 8·8 | | 8·5 | 5·1 | 9·0 *g* |
| 9·8 | | 13·5 | 35·0 | ? |
| 9·9 | | 18·5 | 42·9 | |
| 9·0 | | 19·0 | 39·3 | |
| 9·8 | | 32·5 | 46·2 | |
| 9·8 | | 32·5 | 13·6 | |
| 9·9 | | 34·5 | 23·1 | |
| 9·0 | | 38·5 | 24·9 | |
| 9·9 | | 49·0 | 3·9 | |
| 9·9 | | 54·5 | 18·9 | |
| 9·3 | 46 | 3·5 | 43·0 | |
| 9·9 | | 21·0 | 13·5 | |
| 9·7 | | 24·5 | 11·0 | |
| 9·9 | | 27·0 | 16·0 | |
| 9·4 | | 31·0 | 17·1 | |
| 9·9 | | 40·0 | 9·6 | |
| 9·8 | | 44·5 | 1·9 | |
| 9·8 | 47 | 30·5 | 41·1 | |
| 9·8 | | 31·5 | 5·9 | |
| 9·0 | | 52·5 | 16·5 | 9·0 |
| 9·9 | 48 | 22·0 | 53·9 | |
| 8·8 | | 22·5 | 23·0 | 9·2 *g* |
| 9·9 | | 37·0 | 18·3 | |
| 8·4 | | 39·5 | 27·3 | 7·7 G*g* |
| 9·6 | 49 | 1·5 | 42·0 | |
| 9·7 | | 7·0 | 36·1 | |
| 9·9 | | 28·0 | 51·5 | |
| 9·6 | | 40·0 | 13·5 | |
| 9·7 | | 43·0 | 10·4 | |
| 9·9 | 50 | 15·0 | 46·6 | |
| 9·8 | | 24·0 | 15·8 | |
| 9·8 | | 34·5 | 35·9 | 9·5 |
| 9·0 | | 39·8 | 36·9 | 9·5 |
| 9·3 | | 41·5 | 10·4 | |
| 9·4 | | 58·7 | 33·2 | 9·0 |
| 9·8 | | 59·5 | 35·0 | |
| 9·7 | 51 | 1·5 | 22·5 | |
| 9·2 | | 14·3 | 14·5 | 9·2 |
| 9·8 | | 14·5 | 30·7 | |
| 9·7 | | 18·0 | 32·0 | |
| 7·8 | | 21·0 | 7·5 | 7·8 *g* |
| 9·4 | | 26·5 | 34·3 | |
| 9·7 | | 36·0 | 31·7 | |
| 9·2 | | 44·0 | 53·8 | |
| 9·9 | | 44·5 | 1·4 | |
| 9·6 | | 44·5 | 31·9 | |
| 9·8 | 52 | 5·5 | 2·5 | |
| 9·8 | | 18·5 | 41·0 | |
| 9·8 | | 24·5 | 8·1 | |
| 9·4 | | 27·0 | 6·1 | 9·0 |
| 7·6 | | 37·4 | 0·1 | 7·5 GS*g* |
| 9·4 | | 38·3 | 53·0 | |
| 9·6 | | 42·5 | 28·6 | |
| 9·4 | | 48·3 | 49·1 | |
| 6·7 | | 56·5 | 22·1 | 7·0 GS*g*r |
| 8·8 | 53 | 0·0 | 38·8 | 9·0 *g* |
| 9·2 | | 7·0 | 33·6 | 9·0 *g* |
| 9·8 | | 7·5 | 11·0 | |

### 1381—1440.

| mag. | 10ʰ—11ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·9 | 53 | 8·5 | 33·7 | |
| 9·8 | | 18·0 | 2·4 | |
| 9·8 | | 18·0 | 20·3 | |
| 9·9 | | 18·0 | 38·0 | |
| 9·7 | | 19·5 | 51·2 | |
| 8·7 | | 21·8 | 5·3 | 9·5 |
| 9·7 | | 24·5 | 12·2 | |
| 9·6 | | 25·3 | 33·8 | |
| 9·8 | | 28·5 | 15·0 | |
| 9·8 | | 31·5 | 34·8 | |
| 9·9 | | 32·0 | 47·7 | |
| 9·9 | | 33·5 | 48·0 | |
| 9·7 | | 37·0 | 16·4 | |
| 9·9 | 54 | 9·0 | 10·6 | |
| 9·2 | | 10·5 | 51·9 | |
| 9·6 | | 10·5 | 47·9 | |
| 9·4 | | 38·5 | 22·0 | |
| 9·8 | | 43·0 | 44·6 | |
| 9·8 | | 49·0 | 52·6 | ? |
| 9·8 | 55 | 7·5 | 3·8 | |
| 9·2 | | 14·7 | 36·9 | |
| 8·0 | | 38·0 | 10·1 | 8·5 G*g* |
| 8·9 | 56 | 15·0 | 30·9 | 9·2 |
| 9·6 | | 37·5 | 46·9 | |
| 9·4 | | 50·0 | 48·4 | |
| 8·9 | 58 | 4·0 | 52·5 | |
| 8·9 | | 4·5 | 41·9 | |
| 9·6 | | 14·5 | 9·9 | |
| 9·6 | | 23·0 | 38·7 | |
| 9·6 | | 41·0 | 6·9 | |
| 9·2 | | 41·5 | 34·2 | |
| 9·5 | | 50·5 | 46·1 | |
| 8·8 | | 51·0 | 5·5 | |
| 9·0 | 59 | 11·5 | 8·1 | |
| 9·0 | | 12·0 | 45·7 | |
| 9·6 | | 31·5 | 14·8 | |
| 9·4 | | 34·5 | 37·4 | |
| 9·6 | | 53·5 | 31·1 | |
| 9·6 | | 55·0 | 3·1 | |
| 8·9 | | 59·3 | 2·1 | |
| 8·6 | | 59·5 | 35·4 | 9·0 *g* |
| 9·3 | 0 | 1·0 | 34·3 | |
| 9·5 | | 25·5 | 48·4 | |
| 9·0 | | 40·5 | 15·8 | |
| 9·4 | | 50·0 | 2·0 | |
| 9·2 | | 54·0 | 34·4 | |
| 9·5 | 1 | 4·5 | 1·3 | |
| 9·2 | | 5·0 | 50·3 | |
| 9·4 | | 25·5 | 9·0 | |
| 8·4 | | 31·0 | 6·5 | 7·5 S*g* |
| 9·4 | | 34·0 | 38·8 | |
| 9·6 | | 34·5 | 38·2 | |
| 9·5 | 3 | 10·5 | 41·9 | |
| 9·1 | | 21·0 | 50·8 | 9·0 *g* |
| 9·4 | | 22·0 | 21·5 | |
| 9·6 | 4 | 17·0 | 58·7 | |
| 9·6 | | 29·5 | 16·0 | |
| 9·3 | | 42·5 | 44·9 | |
| 9·2 | 5 | 21·5 | 42·3 | |
| 9·6 | | 24·0 | 36·9 | |

### 1441—1500.

| mag. | 11ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·6 | 6 | 13·5 | 55·9 | |
| 9·4 | | 22·0 | 55·0 | |
| 9·4 | | 32·0 | 29·0 | |
| 9·2 | | 35·5 | 52·9 | |
| 9·4 | 7 | 25·5 | 9·7 | |
| 9·6 | | 32·5 | 6·4 | |
| 9·4 | | 40·5 | 52·0 | |
| 9·2 | 8 | 43·5 | 13·7 | |
| 9·6 | 9 | 27·5 | 51·4 | |
| 9·4 | | 28·0 | 18·1 | |
| 9·6 | | 32·0 | 22·0 | |
| 8·9 | | 32·5 | 51·0 | 8·8 *g* |
| 9·6 | | 45·0 | 8·0 | |
| 9·0 | | 50·5 | 58·4 | |
| 9·6 | 10 | 0·5 | 37·8 | |
| 9·4 | | 26·5 | 37·0 | |
| 8·7 | | 36·5 | 6·8 | 9·0 *g* |
| 8·7 | 11 | 5·0 | 39·9 | 10·0 |
| 9·4 | | 5·5 | 49·8 | 9·5 |
| 9·2 | | 30·0 | 16·1 | |
| 8·6 | | 31·0 | 10·5 | *g* |
| 9·6 | | 40·5 | 20·0 | |
| 7·8 | | 55·5 | 49·4 | 8·3 *g* |
| 9·2 | 12 | 3·5 | 17·9 | |
| 9·5 | | 14·0 | 53·0 | |
| 9·5 | | 23·5 | 12·0 | |
| 8·0 | | 25·0 | 49·2 | 8·0 *g* |
| 8·8 | | 32·5 | 15·1 | *g* |
| 9·2 | | 50·0 | 39·8 | |
| 9·6 | | 54·0 | 11·6 | |
| 9·6 | 13 | 9·5 | 9·5 | |
| 9·2 | | 10·5 | 11·9 | |
| 8·9 | | 20·0 | 32·9 | |
| 9·4 | | 59·0 | 53·4 | |
| 9·6 | 14 | 23·0 | 26·1 | |
| 9·6 | 15 | 31·0 | 54·0 | |
| 9·2 | | 33·5 | 25·5 | |
| 9·6 | | 34·5 | 53·5 | |
| 9·5 | | 45·0 | 7·0 | |
| 9·5 | | 46·0 | 51·1 | |
| 9·5 | | 55·5 | 4·0 | |
| 9·6 | 16 | 12·0 | 9·7 | |
| 9·5 | | 21·0 | 28·2 | |
| 9·6 | | 21·5 | 16·0 | |
| 9·6 | 17 | 1·0 | 13·5 | |
| 9·6 | | 5·0 | 41·2 | |
| 9·5 | | 49·5 | 41·3 | |
| 8·8 | 18 | 6·0 | 31·7 | 9·2 *g* |
| 9·4 | | 48·5 | 46·8 | |
| 9·2 | | 49·0 | 47·0 | |
| 9·2 | 19 | 0·5 | 9·0 | 9·5 *g* |
| 9·6 | | 13·0 | 53·8 | |
| 8·9 | | 25·5 | 38·2 | |
| 9·6 | | 36·0 | 8·6 | |
| 9·1 | | 37·0 | 45·9 | |
| 9·4 | | 44·0 | 10·4 | |
| 9·4 | | 57·0 | 0·1 | |
| 9·2 | 20 | 18·5 | 9·5 | |
| 8·9 | | 25·5 | 43·9 | 9·5 |
| 9·4 | | 33·5 | 40·2 | |

### 1501—1560.

| mag. | 11ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·3 | 20 | 41·0 | 29·0 | |
| 9·4 | 21 | 5·5 | 15·9 | |
| 9·6 | | 11·5 | 25·2 | |
| 9·5 | | 13·0 | 57·8 | |
| 9·6 | | 22·5 | 16·7 | |
| 8·0 | | 42·5 | 21·5 | 8·0 G*g* |
| 9·2 | | 45·5 | 52·2 | |
| 9·4 | | 49·5 | 1·9 | |
| 9·1 | | 57·5 | 45·5 | |
| 9·2 | 22 | 13·5 | 25·5 | |
| 9·6 | | 49·5 | 27·6 | |
| 9·0 | 23 | 6·0 | 58·1 | |
| 9·2 | | 33·0 | 55·9 | |
| 9·6 | | 37·5 | 3·0 | |
| 9·6 | | 59·5 | 43·1 | 9·5 |
| 9·6 | 25 | 4·0 | 32·9 | |
| 9·6 | | 56·5 | 12·5 | |
| 9·6 | 26 | 5·0 | 24·0 | |
| 9·6 | | 22·5 | 52·5 | |
| 9·2 | | 31·5 | 27·1 | |
| 9·6 | 27 | 3·0 | 48·1 | |
| 9·0 | | 33·5 | 34·9 | |
| 9·1 | | 43·5 | 48·3 | |
| 8·4 | | 48·5 | 9·0 | 9·2 *g* |
| 9·2 | 28 | 30·0 | 23·1 | 9·0 |
| 9·6 | 29 | 34·0 | 58·7 | |
| 9·0 | 30 | 21·5 | 42·0 | 9·0 *g* |
| 9·4 | | 55·5 | 7·0 | 8·5 *g* |
| 9·6 | | 59·0 | 37·3 | |
| 9·6 | 31 | 5·5 | 34·8 | |
| 8·7 | | 6·5 | 33·5 | 9·0 *g* |
| 9·3 | | 15·5 | 15·4 | 9·0 |
| 9·2 | | 21·5 | 20·7 | 9·0 *g* |
| 9·3 | | 25·5 | 10·0 | |
| 9·4 | | 33·5 | 55·3 | 9·3 G |
| 7·3 | | 40·5 | 59·0 | 7·0 GS*g* |
| 9·2 | | 44·0 | 35·0 | |
| 9·4 | 32 | 2·0 | 38·5 | |
| 8·9 | | 28·7 | 59·8 | 9·8 |
| 9·6 | | 32·0 | 53·0 | |
| 9·2 | | 43·5 | 42·6 | |
| 9·5 | | 58·5 | 36·9 | |
| 9·3 | 33 | 0·0 | 52·7 | |
| 8·6 | | 24·5 | 13·5 | 9·0 *g* |
| 8·4 | 34 | 40·5 | 58·8 | 7·4 GS*g* |
| 9·5 | | 49·5 | 29·8 | |
| 8·5 | | 50·5 | 31·1 | 9·0 |
| 9·6 | 35 | 22·5 | 17·0 | |
| 9·6 | | 30·5 | 56·6 | |
| 9·5 | | 44·5 | 29·8 | |
| 8·9 | | 54·0 | 24·9 | 9·0 *g* |
| 8·8 | 36 | 6·7 | 32·7 | 9·0 |
| 9·0 | | 18·3 | 35·7 | |
| 9·6 | 37 | 2·3 | 19·2 | |
| 9·2 | | 13·8 | 16·3 | 9·5 *g* |
| 9·5 | | 29·8 | 59·0 | |
| 9·2 | 38 | 3·0 | 36·1 | |
| 8·8 | | 4·3 | 16·4 | 8·5 *g* |
| 9·3 | | 21·0 | 25·7 | |
| 9·6 | | 54·8 | 23·0 | |



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## 1561—1620.

| mag. | 11h.–12h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8.9 | 39 | 12.0 | 40.3 | 9.5 |
| 9.2 | | 26.3 | 56.8 | |
| 9.6 | | 45.0 | 10.7 | |
| 8.7 | 40 | 14.0 | 6.2 | 9.0 g |
| 9.5 | | 36.5 | 38.8 | |
| 9.1 | 41 | 3.5 | 36.8 | |
| 8.7 | | 47.0 | 17.4 | g |
| 9.2 | 42 | 7.5 | 59.8 | |
| 9.4 | | 52.0 | 11.0 | |
| 8.3 | 43 | 9.0 | 53.3 | 9.2 g |
| 8.2 | | 17.0 | 0.3 | 8.5 g |
| 9.0 | | 43.5 | 37.9 | |
| 9.1 | | 58.0 | 32.9 | |
| 8.4 | 44 | 42.0 | 29.3 | 9.0 |
| 9.2 | 45 | 11.0 | 52.8 | |
| 7.8 | | 19.0 | 10.0 | 8.0 Gg |
| 9.0 | | 40.0 | 46.9 | |
| 9.0 | 46 | 2.5 | 3.7 | |
| 9.2 | | 12.5 | 13.2 | 8.8 Gg |
| 9.0 | 47 | 8.0 | 58.1 | |
| 9.6 | | 27.0 | 7.5 | |
| 9.1 | | 45.5 | 6.3 | 9.5 |
| 8.8 | 48 | 4.0 | 34.3 | |
| 9.5 | | 7.5 | 35.8 | |
| 9.0 | | 12.0 | 13.7 | |
| 9.4 | | 12.5 | 13.3 | |
| 9.4 | 49 | 10.0 | 43.9 | 9.0 |
| 9.4 | | 47.0 | 14.2 | |
| 8.7 | 50 | 2.5 | 7.0 | |
| 9.5 | | 40.0 | 37.9 | 9.0 |
| 8.8 | 51 | 18.5 | 46.9 | |
| 9.3 | | 37.0 | 3.6 | |
| 9.1 | | 47.0 | 11.2 | |
| 8.6 | 52 | 7.5 | 51.3 | 9.0 |
| 9.4 | 53 | 37.5 | 36.3 | |
| 9.5 | 54 | 41.5 | 48.7 | |
| 8.4 | | 42.5 | 29.5 | 8.5 Gg |
| 9.4 | | 51.0 | 18.9 | |
| 9.6 | 55 | 13.0 | 4.8 | |
| 8.2 | | 22.5 | 30.0 | 7.0 GSg |
| 9.4 | | 57.5 | 42.3 | |
| 8.3 | | 57.5 | 7.1 | g |
| 7.6 | 56 | 7.5 | 41.9 | 8.5 Gg |
| 5.7 | | 13.5 | 29.8 | 6.5 GScgr |
| 9.6 | | 14.5 | 16.9 | |
| 8.4 | | 33.0 | 37.3 | 9.0 |
| 9.2 | | 50.0 | 24.6 | |
| 9.0 | | 52.5 | 17.8 | |
| 9.4 | 57 | 42.5 | 11.8 | |
| 7.9 | | 43.0 | 49.5 | 7.2 GSg |
| 9.6 | 58 | 27.5 | 28.0 | |
| 7.1 | 59 | 21.0 | 52.7 | 7.6 GSg |
| 9.6 | | 30.0 | 54.9 | |
| 7.9 | | 39.5 | 25.8 | 7.3 GSg |
| 9.2 | | 40.0 | 57.6 | |
| 8.4 | | 41.0 | 45.2 | 9.2 G |
| 8.8 | | 54.5 | 43.9 | 9.2 G |
| 9.6 | | 58.5 | 17.8 | 9.0 |
| 9.4 | 1 | 7.5 | 23.2 | |
| 9.6 | 2 | 27.5 | 2.2 | |

## 1621—1680.

| mag. | 12h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.2 | 3 | 31.0 | 0.8 | |
| 8.8 | | 32.0 | 56.0 | 9.0 |
| 9.3 | 4 | 8.0 | 18.9 | |
| 9.0 | | 41.0 | 25.1 | 9.0 g |
| 9.2 | | 49.0 | 27.5 | 8.8 g |
| 9.3 | 5 | 42.5 | 51.9 | 8.8 g |
| 9.4 | 6 | 29.0 | 48.2 | |
| 9.5 | | 37.0 | 3.2 | |
| 9.2 | | 41.0 | 6.9 | |
| 9.1 | | 46.5 | 20.6 | 9.0 g |
| 8.7 | 7 | 12.5 | 21.9 | 8.5 g |
| 9.0 | | 54.5 | 35.3 | |
| 9.2 | | 57.5 | 25.0 | |
| 8.8 | 8 | 53.5 | 24.5 | |
| 9.6 | 9 | 22.0 | 26.8 | |
| 8.6 | | 31.0 | 36.7 | 9.5 |
| 8.6 | | 31.0 | 28.8 | 9.5 |
| 8.2 | 10 | 32.0 | 24.2 | 9.0 g |
| 8.1 | 11 | 1.0 | 31.5 | 9.0 g |
| 9.0 | 12 | 51.5 | 44.8 | 10.0 g |
| 9.1 | 14 | 20.0 | 19.0 | 8.8 g |
| 8.0 | | 37.0 | 24.9 | 8.0 Gg |
| 9.4 | | 59.5 | 28.7 | |
| 9.3 | 15 | 7.0 | 19.5 | |
| 9.2 | | 15.0 | 32.6 | |
| 9.3 | | 37.5 | 12.2 | |
| 9.0 | | 37.5 | 24.9 | 8.8 g |
| 9.2 | 16 | 52.5 | 58.8 | |
| 9.6 | 18 | 2.0 | 31.3 | 9.5 |
| 7.4 | | 24.0 | 47.0 | 7.5 GSg |
| 9.6 | | 37.0 | 53.4 | |
| 9.4 | 19 | 0.0 | 10.8 | |
| 9.5 | | 9.5 | 54.9 | |
| 9.1 | | 28.0 | 24.5 | |
| 7.6 | 20 | 53.0 | 2.2 | 7.8 GSg |
| 8.8 | 21 | 28.0 | 31.0 | |
| 9.2 | | 50.5 | 50.5 | |
| 9.1 | 22 | 9.0 | 32.6 | |
| 9.2 | | 16.8 | 23.0 | |
| 9.6 | | 21.0 | 23.1 | |
| 9.5 | | 38.5 | 9.4 | |
| 9.6 | | 42.0 | 49.7 | |
| 9.4 | | 51.0 | 16.8 | |
| 8.8 | 23 | 0.0 | 3.5 | 9.0 g |
| 9.7 | | 4.0 | 23.3 | |
| 9.1 | | 28.7 | 31.3 | 9.0 |
| 9.2 | | 39.0 | 6.1 | |
| 9.4 | | 43.5 | 45.1 | |
| 9.4 | 24 | 7.0 | 51.3 | |
| 9.5 | | 9.5 | 6.9 | |
| 9.3 | | 39.5 | 4.7 | |
| 9.7 | | 48.0 | 20.5 | |
| 9.8 | | 50.0 | 50.1 | |
| 9.4 | | 58.0 | 29.6 | |
| 9.5 | | 58.0 | 6.6 | |
| 8.4 | 25 | 8.3 | 3.6 | 9.5 g |
| 9.2 | | 11.5 | 33.4 | |
| 9.6 | | 31.5 | 0.1 | |
| 9.2 | | 33.7 | 32.8 | |
| 9.2 | | 34.3 | 27.8 | |

## 1681—1740.

| mag. | 12h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.6 | 25 | 34.5 | 19.6 | |
| 8.9 | 26 | 3.0 | 8.6 | 9.2 g |
| 8.8 | | 8.5 | 8.9 | 9.2 g |
| 8.0 | | 23.5 | 3.4 | 8.3 GSg |
| 9.2 | | 32.5 | 15.5 | |
| 9.6 | | 41.0 | 18.3 | |
| 9.4 | | 55.0 | 47.9 | |
| 9.2 | | 58.0 | 5.0 | 9.3 |
| 9.6 | 27 | 1.5 | 44.8 | |
| 9.7 | | 38.0 | 18.8 | |
| 9.6 | | 40.0 | 46.1 | |
| 8.8 | | 49.5 | 26.1 | |
| 9.5 | 28 | 4.5 | 10.2 | |
| 9.3 | | 4.5 | 32.7 | |
| 9.6 | | 9.0 | 19.0 | |
| 8.5 | | 9.5 | 8.5 | 8.8 g |
| 9.7 | | 32.5 | 22.2 | |
| 9.2 | | 38.5 | 22.1 | |
| 9.6 | 29 | 4.5 | 22.6 | |
| 9.5 | | 16.0 | 4.1 | |
| 9.4 | | 22.0 | 9.3 | |
| 3.7 | | 44.5 | 26.7 | 3.0 GScgtrλ |
| 9.4 | 30 | 15.5 | 49.5 | |
| 9.6 | | 25.0 | 47.1 | |
| 8.9 | | 26.5 | 8.2 | 9.8 |
| 8.0 | | 32.0 | 54.9 | 7.8 GSg |
| 8.3 | | 40.5 | 2.9 | 8.8 g |
| 9.5 | 31 | 3.5 | 17.2 | : |
| 8.3 | | 14.5 | 4.6 | 8.5 g |
| 9.2 | | 15.0 | 47.2 | : |
| 9.3 | | 15.5 | 7.3 | |
| 9.5 | | 23.5 | 21.9 | |
| 7.9 | | 42.5 | 51.3 | 8.5 g |
| 9.4 | | 43.5 | 38.5 | |
| 9.4 | | 48.5 | 36.9 | |
| 9.6 | 32 | 3.0 | 24.7 | |
| 9.5 | | 4.5 | 36.3 | |
| 9.6 | | 10.5 | 22.1 | |
| 9.1 | | 17.5 | 51.1 | 9.0 g |
| 9.6 | | 44.5 | 11.7 | |
| 9.4 | | 46.0 | 49.1 | 8.5 g |
| 9.4 | | 52.5 | 41.1 | 9.0 |
| 9.5 | 33 | 2.5 | 36.0 | |
| 9.5 | | 4.5 | 35.3 | |
| 8.8 | | 4.5 | 28.1 | |
| 9.3 | | 50.5 | 17.5 | |
| 9.4 | | 53.0 | 51.3 | |
| 9.6 | 34 | 9.0 | 57.1 | ? |
| 9.3 | | 15.0 | 21.9 | |
| 9.1 | | 22.0 | 27.1 | |
| 7.8 | | 28.5 | 43.3 | 7.0 GSg |
| 8.7 | | 30.5 | 46.1 | |
| 9.6 | | 42.0 | 21.9 | |
| 8.8 | | 58.0 | 18.7 | |
| 9.6 | 35 | 12.0 | 11.5 | |
| 8.4 | | 28.5 | 51.5 | 8.8 g |
| 9.6 | | 35.5 | 13.3 | |
| 9.6 | | 39.0 | 14.1 | |
| 8.2 | | 59.0 | 23.2 | 8.0 G |
| 8.6 | 36 | 21.5 | 45.1 | 9.2 |

## 1741—1800.

| mag. | 12h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.2 | 36 | 43.0 | 25.3 | |
| 9.4 | 37 | 4.0 | 47.9 | |
| 9.4 | | 9.0 | 13.7 | |
| 7.4 | | 21.5 | 20.6 | 7.8 Gg |
| 7.3 | | 22.5 | 8.7 | 6.7 GSg : |
| 9.5 | | 28.5 | 14.0 | |
| 9.5 | | 42.5 | 20.5 | |
| 9.6 | 38 | 5.0 | 36.0 | |
| 9.1 | | 26.5 | 38.3 | 9.0 |
| 9.4 | | 48.5 | 16.1 | |
| 9.4 | | 51.5 | 16.5 | |
| 9.5 | | 58.5 | 0.7 | |
| 9.3 | 39 | 14.0 | 2.1 | |
| 9.4 | | 24.5 | 47.7 | 9.0 |
| 9.3 | | 28.5 | 43.7 | |
| 9.6 | | 39.5 | 12.4 | |
| 9.5 | 40 | 10.0 | 47.2 | |
| 8.8 | | 18.0 | 2.2 | 8.5 g |
| 8.9 | | 22.7 | 59.0 | |
| 9.6 | | 46.0 | 45.2 | |
| 9.4 | | 53.5 | 24.1 | |
| 9.6 | | 57.5 | 0.9 | |
| 9.2 | 41 | 0.5 | 50.3 | |
| 7.9 | | 16.0 | 42.6 | 7.5 Gg |
| 9.1 | | 22.5 | 31.1 | |
| 9.6 | | 32.5 | 11.1 | |
| 9.2 | 42 | 7.5 | 47.7 | |
| 8.4 | | 35.5 | 51.3 | 7.8 Gg |
| 9.2 | | 42.0 | 22.0 | |
| 9.5 | | 42.0 | 11.9 | |
| 8.4 | | 47.5 | 35.5 | 8.5 |
| 9.4 | | 50.0 | 11.0 | |
| 8.8 | 43 | 2.5 | 56.1 | 9.0 |
| 9.0 | | 3.5 | 8.1 | |
| 9.4 | | 7.0 | 56.0 | |
| 9.1 | | 13.0 | 10.3 | 8.5 g |
| 7.2 | | 18.5 | 57.9 | 7.8 Gg |
| 8.9 | | 26.0 | 4.4 | 9.5 |
| 9.4 | | 28.5 | 51.1 | |
| 8.9 | | 50.0 | 21.1 | 9.0 |
| 9.4 | 44 | 2.5 | 42.1 | |
| 9.5 | | 11.0 | 13.5 | |
| 8.6 | | 15.0 | 13.1 | 9.0 |
| 9.4 | | 22.5 | 12.7 | |
| 9.5 | | 35.5 | 57.7 | |
| 9.2 | | 47.5 | 4.1 | |
| 9.4 | 45 | 47.5 | 50.0 | |
| 9.4 | | 52.0 | 39.1 | |
| 9.6 | 46 | 2.0 | 17.5 | |
| 7.9 | | 27.0 | 5.7 | 8.7 g |
| 9.4 | | 54.5 | 20.5 | |
| 9.6 | 47 | 4.0 | 45.3 | |
| 8.6 | | 12.0 | 13.6 | 7.3 Gg |
| 9.2 | | 23.0 | 23.2 | |
| 7.6 | | 34.0 | 19.1 | 7.8 Gg |
| 9.5 | | 40.5 | 33.5 | 9.0 |
| 9.4 | | 49.5 | 1.8 | |
| 9.3 | 48 | 19.0 | 13.5 | 9.5 |
| 9.2 | | 39.0 | 44.1 | |
| 9.5 | | 49.5 | 8.2 | |

25 prec.

| h | m | α + s | δ − |
|---|---|---|---|
| 11 | 30 | 66 | 8.3 |
| | 40 | 69 | 8.3 |
| | 50 | 73 | 8.3 |
| 12 | 0 | 77 | 8.4 |
| | 10 | 81 | 8.3 |
| | 20 | 84 | 8.3 |
| | 30 | 88 | 8.3 |
| | 40 | 92 | 8.2 |
| | 50 | 95 | 8.2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 40 | 92 | 8·2 |
| | 50 | 95 | 8·2 |
| 13 | 0 | 99 | 8·1 |
| | 10 | 102 | 8·0 |
| | 20 | 106 | 7·9 |
| | 30 | 109 | 7·7 |
| | 40 | 113 | 7·6 |
| | 50 | 116 | 7·4 |

**1801—1860.**

| mag. | 12h.–13h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8·8 | 49 | 23·0 | 29·9 | 8·5 G*g* |
| 8·0 | | 24·0 | 40·0 | 8·0 *g* |
| 9·2 | | 50·0 | 34·1 | 9·5 |
| 9·4 | 50 | 8·0 | 37·9 | 9·0 |
| 9·2 | | 42·5 | 2·3 | |
| 9·1 | | 44·0 | 10·1 | 10·0 |
| 9·2 | | 47·5 | 24·2 | |
| 9·4 | | 53·5 | 4·1 | |
| 9·3 | 51 | 1·0 | 10·6 | 9·2 |
| 9·4 | | 54·0 | 28·9 | |
| 9·0 | | 58·5 | 6·3 | |
| 9·4 | 52 | 4·5 | 19·1 | |
| 9·6 | | 20·0 | 5·7 | |
| 8·6 | | 23·5 | 13·5 | 9·2 |
| 9·4 | | 53·0 | 0·8 | |
| 9·4 | 53 | 14·0 | 19·1 | |
| 9·4 | | 44·5 | 0·5 | |
| 7·7 | | 48·0 | 33·3 | 7·8 GSc*g*r |
| 9·4 | | 51·5 | 51·2 | |
| 9·6 | 54 | 8·0 | 29·1 | |
| 9·3 | | 15·0 | 35·3 | |
| 9·5 | | 19·0 | 55·4 | |
| 9·1 | | 32·5 | 4·1 | *g* |
| 8·2 | | 54·0 | 7·3 | 8·3 G*g* |
| 9·2 | 55 | 2·5 | 25·1 | |
| 9·4 | 56 | 4·0 | 39·2 | 9·0 |
| 8·8 | | 7·5 | 15·9 | |
| 8·6 | | 54·0 | 55·5 | 8·0 G*g* |
| 9·0 | | 59·0 | 14·5 | |
| 9·5 | 57 | 12·5 | 14·3 | |
| 9·5 | | 32·0 | 17·4 | |
| 8·6 | | 32·5 | 9·3 | 10·0 |
| 9·6 | | 47·5 | 25·5 | |
| 8·8 | | 52·5 | 37·1 | 8·5 |
| 9·2 | 59 | 43·5 | 42·0 | 8·5 |
| 8·7 | 0 | 31·5 | 44·3 | 9·0 |
| 9·3 | | 52·0 | 7·3 | |
| 9·2 | 1 | 34·5 | 54·1 | |
| 8·8 | | 48·5 | 6·9 | Gk*g* |
| 9·6 | 2 | 51·5 | 15·7 | |
| 9·0 | | 57·5 | 17·1 | |
| 9·6 | 3 | 11·0 | 42·1 | |
| 8·0 | | 17·5 | 15·1 | 8·2 G*g* |
| 9·0 | | 21·5 | 52·1 | 8·5 *g* |
| 9·4 | | 21·5 | 22·9 | |
| 9·0 | | 31·5 | 58·8 | |
| 8·7 | 4 | 2·0 | 13·3 | 9·5 |
| 9·5 | | 7·5 | 15·9 | |
| 9·6 | | 23·0 | 24·1 | |
| 9·2 | | 23·5 | 54·3 | |
| 9·0 | 5 | 1·0 | 10·1 | |
| 9·4 | | 38·5 | 19·8 | |
| 9·7 | | 43·0 | 22·3 | |
| 9·2 | 6 | 17·0 | 0·1 | |
| 9·7 | | 27·3 | 18·8 | |
| 9·6 | | 53·8 | 41·1 | |
| 9·6 | 7 | 13·0 | 52·6 | |
| 8·7 | | 23·2 | 53·3 | 8·2 G*g* |
| 9·9 | | 39·5 | 46·4 | |
| 9·8 | | 43·5 | 49·8 | |

**1861—1920.**

| mag. | 13h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·9 | 7 | 45·0 | 50·0 | |
| 9·0 | 8 | 9·2 | 18·6 | |
| 9·6 | | 17·0 | 23·1 | |
| 9·7 | | 30·0 | 59·1 | 9·5 |
| 9·5 | | 42·0 | 28·8 | |
| 9·2 | | 46·0 | 49·8 | 9·0 *g* |
| 9·9 | | 48·5 | 14·0 | |
| 9·9 | | 53·0 | 57·5 | |
| 9·9 | 9 | 7·5 | 10·2 | |
| 9·9 | | 24·0 | 14·1 | |
| 9·5 | | 30·0 | 22·0 | |
| 9·9 | | 42·0 | 44·1 | |
| 9·0 | 10 | 0·0 | 2·1 | 9·0 *g* |
| 9·7 | | 1·7 | 30·4 | |
| 9·8 | | 2·5 | 6·9 | |
| 9·1 | | 9·5 | 24·9 | |
| 9·9 | | 22·5 | 42·0 | |
| 9·5 | | 28·0 | 43·4 | |
| 9·7 | | 30·0 | 14·2 | 9·0 |
| 9·8 | | 36·0 | 19·3 | |
| 9·2 | | 50·5 | 8·1 | 9·5 *g* |
| 9·5 | | 50·7 | 0·7 | |
| 9·9 | 11 | 0·0 | 45·8 | |
| 8·7 | | 11·5 | 39·3 | 9·5 |
| 9·9 | | 54·0 | 17·0 | |
| 9·3 | | 54·0 | 30·0 | 9·0 |
| 9·5 | 12 | 22·5 | 44·5 | |
| 9·9 | | 41·5 | 9·2 | |
| 9·7 | | 46·0 | 1·1 | |
| 8·2 | | 52·5 | 32·1 | 8·5 *g* |
| 9·9 | 13 | 4·5 | 42·1 | |
| 9·7 | | 4·5 | 43·9 | |
| 9·4 | | 11·0 | 45·2 | |
| 9·6 | | 17·5 | 58·9 | |
| 9·3 | | 26·2 | 59·1 | |
| 9·8 | | 30·0 | 14·0 | |
| 8·6 | | 30·5 | 49·9 | 9·3 |
| 8·8 | | 39·0 | 42·1 | 8·2 G*g* |
| 9·9 | | 44·5 | 11·6 | |
| 9·9 | | 45·0 | 25·8 | |
| 9·9 | | 46·5 | 26·1 | |
| 9·1 | | 52·5 | 16·2 | 8·5 *g* |
| 9·0 | | 59·0 | 22·8 | |
| 9·9 | 14 | 9·0 | 5·2 | |
| 8·6 | | 39·0 | 8·2 | 8·5 *g* |
| 8·6 | | 43·5 | 31·3 | 9·0 |
| 9·9 | 15 | 3·0 | 50·6 | |
| 9·9 | | 10·0 | 2·5 | |
| 9·9 | | 11·0 | 50·8 | |
| 9·3 | | 29·5 | 37·4 | |
| 9·5 | | 39·5 | 52·7 | |
| 9·3 | | 42·0 | 33·0 | |
| 8·6 | | 53·5 | 4·0 | 8·7 G*g* |
| 9·1 | 16 | 21·0 | 16·2 | |
| 9·7 | | 23·0 | 40·5 | |
| 9·6 | | 33·0 | 25·2 | |
| 9·7 | | 37·5 | 33·8 | |
| 9·3 | | 39·5 | 47·1 | 9·0 *g* |
| 8·9 | | 49·0 | 18·0 | 9·2 *g* |
| 9·8 | | 52·0 | 56·0 | |

**1921—1980.**

| mag. | 13h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9·9 | 16 | 52·5 | 57·3 | |
| 9·6 | 17 | 23·0 | 17·6 | |
| 9·9 | | 41·0 | 42·5 | |
| 9·6 | | 54·0 | 27·6 | |
| 9·9 | 18 | 18·0 | 42·6 | |
| 9·9 | | 44·5 | 8·3 | |
| 9·9 | 19 | 12·0 | 47·1 | |
| 9·9 | | 25·5 | 37·6 | |
| 6·4 | | 43·5 | 58·7 | 6·5 GS*g*r |
| 9·7 | | 50·0 | 55·0 | |
| 9·2 | | 53·0 | 14·8 | |
| 9·4 | 20 | 9·0 | 8·8 | |
| 9·0 | 21 | 3·5 | 47·0 | |
| 9·7 | | 11·0 | 57·4 | |
| 9·6 | | 21·0 | 14·1 | |
| 9·8 | | 24·5 | 15·3 | |
| 8·4 | | 35·5 | 58·0 | 9·0 *g* |
| 8·1 | 22 | 22·5 | 28·6 | 8·8 *g* |
| 9·0 | | 33·5 | 10·8 | *g* |
| 9·0 | | 44·0 | 31·6 | 9·2 |
| 9·1 | | 44·0 | 39·2 | |
| 9·9 | | 54·0 | 41·6 | |
| 7·8 | 23 | 25·0 | 31·0 | 8·2 G*g* |
| 7·5 | | 26·0 | 35·0 | 7·0 G*g* |
| 9·9 | | 51·5 | 18·3 | |
| 9·9 | 24 | 16·0 | 18·7 | |
| 9·9 | | 53·0 | 36·6 | |
| 9·9 | 25 | 19·0 | 24·8 | |
| 8·9 | | 56·5 | 20·2 | |
| 8·6 | 26 | 15·0 | 22·3 | 9·5 *g* |
| 9·4 | | 30·0 | 58·1 | |
| 8·0 | | 49·5 | 55·3 | 9·0 *g* |
| 8·8 | | 53·5 | 56·0 | 9·5 *g* |
| 8·6 | 27 | 6·0 | 29·1 | 9·0 *g* |
| 9·6 | | 25·0 | 45·0 | |
| 9·9 | | 28·5 | 57·1 | |
| 9·5 | 28 | 16·0 | 16·8 | |
| 8·2 | | 29·0 | 20·0 | 9·0 *g* |
| 9·1 | | 36·0 | 20·0 | 9·0 *g* |
| 9·3 | | 37·0 | 18·0 | |
| 9·5 | | 42·0 | 46·8 | |
| 8·1 | 29 | 18·0 | 39·2 | *g* |
| 9·8 | | 36·5 | 17·4 | |
| 9·9 | | 37·5 | 4·1 | |
| 9·9 | | 40·0 | 55·6 | |
| 9·4 | | 55·0 | 0·4 | |
| 9·1 | 30 | 13·5 | 28·6 | |
| 9·9 | | 20·5 | 41·9 | |
| 9·6 | | 26·0 | 4·9 | |
| 9·5 | | 38·5 | 1·4 | |
| 9·5 | | 55·0 | 17·1 | |
| 8·5 | 31 | 7·5 | 8·2 | *g* |
| 9·7 | | 17·0 | 1·1 | |
| 9·3 | | 19·0 | 50·0 | |
| 9·5 | | 41·0 | 55·1 | |
| 9·9 | | 46·5 | 0·1 | |
| 9·7 | 32 | 2·5 | 22·0 | |
| 9·4 | | 3·0 | 35·6 | |
| 9·4 | | 25·5 | 32·0 | 9·5 |
| 9·4 | | 34·5 | 57·8 | |

**1981—2040.**

| mag. | 13h. m | s | −68° ′ | |
|---|---|---|---|---|
| 7·6 | 33 | 3·0 | 36·7 | 8·0 *g* |
| 9·9 | | 13·0 | 54·1 | |
| 9·8 | | 39·5 | 21·1 | |
| 8·0 | | 45·0 | 29·6 | 8·0 *g* |
| 9·3 | | 59·5 | 2·7 | |
| 9·2 | 34 | 1·0 | 58·0 | |
| 9·4 | | 2·5 | 42·2 | |
| 9·7 | | 6·5 | 13·6 | |
| 9·5 | | 30·5 | 19·0 | |
| 9·8 | | 53·5 | 2·0 | |
| 9·8 | | 59·5 | 11·2 | |
| 9·3 | 36 | 3·0 | 59·9 | |
| 9·9 | | 19·5 | 15·6 | |
| 9·4 | | 49·5 | 36·0 | |
| 9·9 | | 52·5 | 13·6 | |
| 9·8 | 37 | 4·5 | 26·5 | |
| 9·3 | | 28·0 | 36·0 | |
| 8·6 | | 32·5 | 3·0 | 9·0 *g* |
| 8·5 | | 33·0 | 46·3 | 9·5 *g* |
| 9·4 | 38 | 5·5 | 30·8 | |
| 9·8 | | 13·0 | 21·1 | |
| 9·9 | 39 | 11·0 | 51·8 | |
| 9·9 | | 11·5 | 48·2 | |
| 9·0 | | 14·0 | 49·9 | |
| 9·4 | | 35·0 | 10·0 | |
| 9·8 | | 35·0 | 23·0 | |
| 9·9 | | 43·0 | 32·6 | |
| 9·5 | | 52·0 | 43·3 | 10·0 |
| 9·5 | | 53·5 | 38·4 | |
| 9·7 | 40 | 52·5 | 36·1 | |
| 9·4 | 41 | 30·0 | 18·2 | |
| 9·3 | | 43·5 | 50·8 | |
| 9·5 | | 53·5 | 20·2 | |
| 8·0 | 42 | 5·0 | 46·7 | 6·5 GS*g*r |
| 8·7 | | 41·0 | 27·6 | 9·0 *g* |
| 8·9 | | 56·0 | 50·3 | *g* |
| 9·4 | | 59·0 | 31·0 | |
| 9·2 | 43 | 0·5 | 21·0 | 9·0 *g* |
| 9·7 | | 27·5 | 29·0 | |
| 9·5 | | 32·0 | 39·0 | |
| 8·6 | | 39·0 | 8·8 | |
| 9·3 | | 52·0 | 49·5 | |
| 9·3 | | 56·5 | 8·6 | |
| 9·6 | 44 | 4·0 | 19·7 | |
| 9·2 | | 8·0 | 49·4 | |
| 8·7 | | 11·5 | 20·2 | 9·5 *g* |
| 7·9 | 45 | 29·5 | 15·9 | *g* |
| 9·3 | | 45·5 | 54·4 | |
| 9·8 | | 47·5 | 1·4 | |
| 9·9 | | 49·5 | 23·6 | |
| 9·6 | 46 | 3·5 | 31·2 | |
| 9·0 | | 23·0 | 23·2 | *g* |
| 9·1 | | 28·0 | 19·7 | |
| 9·9 | | 42·5 | 45·1 | |
| 8·2 | 47 | 4·0 | 35·6 | *g* |
| 8·6 | | 39·5 | 19·0 | 9·5 *g* |
| 9·9 | | 59·0 | 43·0 | |
| 9·5 | 48 | 3·5 | 40·8 | *g* |
| 9·9 | | 7·0 | 6·4 | |
| 9·5 | | 14·0 | 28·0 | |

### 2041—2100.

| mag. | 13h.–14h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.9 | 48 | 17.5 | 26.6 | |
| 8.9 | | 18.0 | 10.6 | 9.5 *g* |
| 9.2 | | 19.0 | 9.7 | 10.0 *g* |
| 9.6 | | 20.0 | 11.1 | |
| 9.9 | | 33.0 | 28.0 | |
| 9.9 | | 42.0 | 6.6 | |
| 9.0 | | 45.0 | 37.0 | |
| 9.0 | 49 | 10.0 | 48.3 | *g* |
| 9.0 | | 14.2 | 58.0 | *g* |
| 9.5 | 50 | 14.8 | 13.8 | |
| 9.6 | | 20.5 | 6.9 | |
| 9.7 | | 27.5 | 37.0 | |
| 9.7 | | 28.5 | 55.5 | |
| 9.5 | | 37.7 | 12.4 | |
| 9.9 | | 40.5 | 15.6 | |
| 9.3 | | 42.8 | 17.4 | |
| 9.4 | 51 | 6.8 | 15.4 | |
| 9.9 | | 27.5 | 24.8 | |
| 9.9 | | 34.0 | 18.2 | |
| 9.9 | | 37.0 | 2.1 | |
| 9.9 | | 50.7 | 58.0 | |
| 8.4 | 52 | 10.0 | 26.0 | 9.0 *g* |
| 9.3 | | 27.2 | 59.9 | 10.0 |
| 8.6 | | 30.0 | 59.0 | 8.8 *g* |
| 9.9 | | 43.0 | 35.8 | |
| 7.8 | 53 | 6.0 | 36.6 | 8.5 *g* |
| 9.7 | | 8.5 | 41.3 | |
| 9.6 | | 53.7 | 11.1 | |
| 8.7 | 54 | 13.0 | 6.1 | *g* |
| 8.8 | | 18.0 | 0.9 | *g* |
| 9.5 | | 18.0 | 44.1 | |
| 9.1 | | 30.0 | 21.7 | 9.5 *g* |
| 9.3 | | 30.5 | 20.3 | 9.5 |
| 9.4 | | 50.4 | 0.1 | |
| 9.4 | | 51.5 | 48.1 | |
| 9.5 | 55 | 23.0 | 23.7 | |
| 9.5 | | 24.0 | 1.0 | |
| 9.1 | | 41.5 | 9.7 | 10.0 |
| 9.3 | | 52.5 | 3.7 | |
| 9.4 | | 53.5 | 59.5 | |
| 9.4 | 56 | 7.0 | 49.7 | |
| 9.3 | 57 | 16.0 | 17.5 | |
| 9.4 | | 30.5 | 2.1 | |
| 9.4 | | 44.5 | 15.5 | |
| 9.5 | | 58.5 | 35.0 | |
| 9.3 | 59 | 16.0 | 6.1 | |
| 9.2 | 0 | 45.5 | 19.3 | |
| 9.2 | | 54.5 | 48.7 | |
| 9.4 | 1 | 49.5 | 19.5 | |
| 9.1 | 2 | 7.0 | 12.1 | 9.0 *g* |
| 8.4 | | 27.0 | 5.8 | 8.5 *g* |
| 8.8 | | 47.2 | 1.1 | *g* |
| 9.5 | 3 | 0.0 | 7.1 | |
| 9.6 | | 12.0 | 47.3 | |
| 9.5 | | 27.5 | 52.1 | |
| 9.2 | | 56.0 | 25.1 | |
| 9.6 | 4 | 11.5 | 59.0 | |
| 9.0 | | 32.0 | 48.7 | *g* |
| 8.0 | | 36.0 | 8.5 | 8.5 *g* |
| 9.6 | 5 | 8.5 | 56.9 | |

### 2101—2160.

| mag. | 14h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.6 | 5 | 44.5 | 27.1 | |
| 9.3 | | 48.0 | 42.1 | |
| 9.6 | 7 | 27.0 | 56.8 | 10.0 |
| 9.3 | 8 | 10.0 | 32.4 | *g* |
| 9.0 | 9 | 16.0 | 3.1 | 8.8 *g* |
| 9.5 | | 23.5 | 2.7 | |
| 9.1 | 10 | 10.0 | 11.3 | |
| 8.2 | 11 | 53.0 | 30.3 | 8.0 *g* |
| 9.5 | | 56.0 | 44.1 | |
| 9.0 | 13 | 19.0 | 44.2 | 9.2 |
| 9.1 | | 24.5 | 17.0 | |
| 8.8 | | 44.5 | 49.5 | |
| 9.5 | 14 | 54.5 | 13.6 | |
| 9.5 | 15 | 22.5 | 14.4 | |
| 9.6 | | 24.0 | 53.2 | |
| 8.2 | | 51.0 | 17.2 | *g* |
| 9.2 | 16 | 2.0 | 13.2 | |
| 9.4 | | 7.5 | 59.0 | 9.5 |
| 9.4 | | 14.5 | 30.0 | |
| 8.6 | 17 | 1.5 | 47.2 | 9.5 *g* |
| 8.8 | | 25.5 | 21.9 | 9.0 *g* |
| 9.6 | | 26.0 | 45.1 | |
| 9.3 | 18 | 18.0 | 42.0 | |
| 9.4 | 19 | 58.0 | 24.1 | |
| 9.4 | 21 | 4.0 | 54.2 | |
| 8.3 | | 21.5 | 14.6 | 8.5 *g* |
| 9.5 | | 42.5 | 22.2 | |
| 8.5 | 22 | 48.0 | 35.6 | 8.5 *g* |
| 9.4 | | 48.0 | 14.5 | |
| 8.8 | 23 | 36.0 | 41.1 | 9.0 *g* |
| 9.2 | | 52.0 | 11.1 | |
| 7.4 | 24 | 10.0 | 54.1 | 7.5 G*g* |
| 8.5 | | 41.0 | 7.9 | 9.0 *g* |
| 9.2 | | 47.0 | 23.8 | |
| 7.9 | | 52.5 | 11.2 | 8.0 *g* |
| 7.9 | 25 | 7.5 | 28.1 | 8.0 *g* |
| 9.3 | | 12.5 | 36.9 | |
| 9.5 | | 50.5 | 5.2 | |
| 9.5 | 26 | 28.0 | 9.5 | |
| 9.6 | | 39.0 | 27.2 | |
| 9.2 | | 41.0 | 18.6 | |
| 9.4 | 27 | 7.0 | 55.1 | |
| 7.8 | | 17.5 | 24.2 | 8.0 G*g* |
| 9.2 | | 54.5 | 37.4 | |
| 9.3 | 28 | 10.8 | 59.2 | |
| 8.8 | | 26.5 | 52.2 | |
| 9.5 | | 51.5 | 11.9 | |
| 9.5 | 29 | 15.5 | 43.3 | |
| 8.8 | | 49.0 | 14.3 | *g* |
| 9.0 | | 49.0 | 25.2 | *g* |
| 9.4 | 30 | 26.0 | 50.2 | |
| 8.4 | | 59.0 | 32.8 | 9.0 *g* |
| 8.8 | 31 | 53.5 | 23.4 | 9.0 *g* |
| 9.5 | | 54.0 | 24.8 | |
| 9.5 | 32 | 1.5 | 46.8 | |
| 9.0 | | 27.5 | 5.1 | |
| 8.2 | | 34.0 | 24.4 | 9.0 *g* |
| 9.5 | | 39.0 | 22.3 | 9.5 *g* |
| 9.1 | 33 | 24.5 | 55.2 | 10.0 |
| 9.0 | 35 | 9.7 | 13.6 | *g* |

### 2161—2220.

| mag. | 14h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.6 | 35 | 11.3 | 3.9 | |
| 9.6 | | 27.3 | 42.2 | |
| 9.1 | | 34.3 | 37.8 | *g* |
| 9.5 | | 41.8 | 3.8 | |
| 9.5 | | 48.8 | 45.9 | |
| 9.7 | | 57.8 | 57.8 | |
| 8.4 | 36 | 4.8 | 58.7 | 9.0 *g* |
| 9.6 | | 21.3 | 17.2 | |
| 9.8 | | 26.8 | 16.9 | |
| 9.5 | | 26.8 | 42.6 | |
| 9.6 | | 40.3 | 57.7 | |
| 9.7 | | 43.8 | 22.0 | |
| 9.4 | | 53.3 | 23.3 | |
| 9.2 | | 55.0 | 57.1 | 9.0 |
| 9.1 | | 58.6 | 33.1 | *g* |
| 8.7 | 37 | 0.3 | 10.5 | 9.5 *g* |
| 9.5 | | 6.3 | 15.2 | |
| 8.4 | | 9.4 | 0.2 | 8.5 *g* |
| 9.6 | | 30.3 | 19.0 | |
| 9.0 | | 31.1 | 29.0 | |
| 9.8 | | 49.8 | 7.2 | |
| 9.6 | 38 | 5.8 | 35.4 | |
| 9.2 | | 10.3 | 19.4 | |
| 9.3 | | 10.9 | 23.8 | |
| 6.7 | | 32.2 | 24.6 | 7.0 GS*g* |
| 9.5 | | 34.8 | 34.8 | |
| 9.5 | | 49.8 | 28.4 | |
| 9.8 | 39 | 10.5 | 12.3 | |
| 9.6 | | 57.0 | 44.9 | |
| 9.5 | | 58.5 | 40.3 | |
| 9.0 | | 59.5 | 47.9 | |
| 9.1 | 40 | 13.5 | 25.5 | |
| 9.4 | | 16.0 | 59.1 | |
| 9.5 | | 28.0 | 28.6 | |
| 9.7 | | 28.0 | 13.4 | |
| 9.4 | | 55.5 | 7.7 | |
| 9.5 | | 58.5 | 11.9 | |
| 9.7 | 41 | 6.0 | 25.9 | |
| 9.2 | | 10.5 | 38.3 | |
| 9.4 | | 25.5 | 28.3 | |
| 9.0 | | 41.5 | 8.7 | |
| 9.7 | | 43.0 | 6.3 | |
| 9.4 | | 49.5 | 24.1 | |
| 9.6 | 42 | 3.8 | 46.2 | |
| 9.8 | | 21.8 | 11.2 | |
| 9.4 | | 24.8 | 3.7 | |
| 9.2 | | 47.3 | 14.6 | |
| 7.7 | | 47.8 | 51.4 | 8.0 GS*g* |
| 9.6 | 43 | 3.3 | 35.8 | |
| 9.3 | | 20.8 | 14.5 | |
| 9.6 | | 30.8 | 28.3 | |
| 9.2 | | 47.8 | 27.6 | |
| 9.7 | | 47.8 | 12.3 | |
| 9.3 | | 51.3 | 58.2 | 9.5 *g* |
| 9.8 | | 54.5 | 1.4 | |
| 9.5 | 44 | 4.3 | 30.0 | |
| 9.3 | | 4.3 | 30.2 | |
| 9.3 | | 30.3 | 17.7 | |
| 9.0 | | 31.3 | 39.7 | *g* |
| 9.6 | | 55.8 | 5.8 | |

### 2221—2280.

| mag. | 14h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.2 | 44 | 58.8 | 22.0 | 9.5 *g* |
| 9.6 | 45 | 3.8 | 40.8 | |
| 9.6 | | 24.8 | 44.5 | |
| 9.4 | | 25.8 | 0.7 | |
| 9.6 | | 33.8 | 4.2 | |
| 8.8 | | 47.8 | 19.6 | 9.0 *g* |
| 9.2 | | 52.3 | 38.5 | |
| 9.2 | 46 | 0.8 | 53.0 | 9.0 |
| 9.6 | | 28.3 | 3.6 | |
| 9.7 | | 33.0 | 1.5 | |
| 9.0 | | 43.3 | 28.5 | |
| 8.6 | 47 | 1.3 | 4.9 | 9.0 *g* |
| 9.6 | | 13.8 | 6.8 | |
| 9.5 | | 29.8 | 59.5 | |
| 9.6 | | 43.2 | 26.5 | |
| 9.6 | | 43.2 | 19.4 | |
| 9.6 | | 46.5 | 58.0 | |
| 9.8 | | 57.7 | 6.4 | |
| 9.4 | 48 | 0.2 | 6.3 | |
| 9.6 | | 4.2 | 54.7 | |
| 9.7 | | 8.5 | 10.9 | |
| 9.1 | | 18.2 | 33.6 | |
| 8.1 | | 20.2 | 26.7 | 8.0 G*g* |
| 9.7 | | 20.2 | 11.7 | |
| 9.6 | | 25.2 | 32.5 | |
| 9.8 | | 27.7 | 33.4 | |
| 8.6 | | 30.2 | 42.1 | 8.0 *g* |
| 9.2 | | 31.7 | 9.1 | |
| 9.7 | | 51.2 | 59.0 | |
| 9.4 | | 53.7 | 50.4 | |
| 9.2 | | 59.2 | 37.5 | |
| 9.6 | 49 | 2.7 | 37.7 | |
| 9.6 | | 14.7 | 7.6 | |
| 9.8 | | 20.2 | 36.6 | |
| 9.4 | | 27.7 | 4.9 | |
| 9.0 | | 48.0 | 57.1 | |
| 8.8 | | 48.7 | 42.9 | 8.0 *g* |
| 8.8 | 50 | 16.2 | 53.6 | 9.5 |
| 9.2 | | 24.7 | 34.1 | |
| 9.6 | | 29.2 | 8.3 | |
| 9.8 | | 31.7 | 17.5 | |
| 9.4 | | 33.2 | 58.7 | |
| 9.6 | | 34.7 | 5.5 | |
| 9.3 | | 40.2 | 5.4 | |
| 9.8 | | 42.2 | 54.1 | |
| 9.6 | | 42.7 | 26.5 | |
| 9.7 | | 54.2 | 7.9 | |
| 9.4 | 51 | 14.7 | 44.6 | |
| 9.6 | | 29.2 | 31.3 | |
| 9.3 | | 32.7 | 56.2 | |
| 9.4 | | 45.1 | 13.8 | |
| 9.8 | | 56.1 | 29.1 | |
| 9.6 | | 59.1 | 18.8 | |
| 9.2 | 52 | 23.1 | 15.2 | |
| 9.2 | | 30.6 | 14.3 | |
| 9.6 | | 56.6 | 16.3 | |
| 9.5 | 53 | 0.1 | 50.7 | |
| 9.4 | | 7.1 | 47.8 | |
| 9.5 | | 12.6 | 27.9 | |
| 9.8 | | 13.6 | 34.7 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 13 | 40 | 113 | 7.6 |
| | 50 | 116 | 7.4 |
| 14 | 0 | 119 | 7.2 |
| | 10 | 122 | 7.0 |
| | 20 | 125 | 6.8 |
| | 30 | 128 | 6.6 |
| | 40 | 131 | 6.4 |
| | 50 | 134 | 6.2 |
| 15 | 0 | 137 | 5.9 |



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| 25 prec. | | α + | δ – |
|---|---|---|---|
| h | m | s | ′ |
| 14 | 50 | 134 | 6·2 |
| 15 | 0 | 137 | 5·9 |
| | 10 | 139 | 5·6 |
| | 20 | 142 | 5·4 |
| | 30 | 144 | 5·1 |

## 2281—2340.

$14^{h}$–$15^{h}$ –68°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·8 | 53 | 14·7 | 58·4 | |
| 9·3 | | 25·6 | 9·1 | |
| 9·4 | | 42·1 | 18·3 | |
| 9·8 | | 53·1 | 51·4 | |
| 8·6 | 54 | 16·1 | 16·4 | 9·5 g |
| 9·8 | 55 | 12·1 | 29·1 | |
| 9·8 | | 19·1 | 3·5 | |
| 9·8 | | 27·1 | 28·7 | |
| 9·5 | | 27·1 | 59·3 | |
| 9·6 | | 46·6 | 8·1 | |
| 9·6 | | 46·6 | 6·9 | |
| 9·6 | 56 | 0·1 | 26·5 | |
| 9·3 | | 2·1 | 12·5 | |
| 9·5 | | 9·6 | 15·5 | |
| 9·2 | | 12·1 | 4·3 | |
| 9·1 | | 27·1 | 28·2 | |
| 9·6 | | 35·1 | 4·7 | |
| 9·8 | | 39·1 | 16·5 | |
| 9·1 | | 46·1 | 30·6 | 8·5 g |
| 9·4 | 57 | 2·6 | 29·7 | 10·0 |
| 9·8 | | 4·1 | 38·0 | |
| 9·8 | | 21·1 | 40·0 | |
| 9·8 | | 25·6 | 53·9 | |
| 9·2 | | 40·6 | 20·1 | 9·5 g |
| 9·3 | | 46·6 | 8·9 | |
| 9·4 | | 52·1 | 9·7 | |
| 7·1 | 58 | 8·1 | 14·1 | 7·0 GSg |
| 9·8 | | 10·1 | 56·0 | |
| 9·8 | | 13·1 | 13·6 | |
| 9·8 | | 23·1 | 59·9 | |
| 9·2 | | 37·0 | 39·1 | |
| 9·4 | | 44·5 | 28·6 | |
| 9·7 | | 59·5 | 32·9 | |
| 9·8 | 59 | 11·5 | 35·7 | |
| 9·5 | | 22·5 | 48·3 | 9·5 g |
| 9·3 | | 42·0 | 36·9 | |
| 9·8 | | 59·0 | 0·9 | |
| 9·8 | 0 | 15·5 | 39·5 | |
| 9·4 | | 16·0 | 26·3 | |
| 9·8 | | 23·5 | 20·7 | |
| 9·3 | | 29·5 | 29·4 | |
| 9·5 | | 44·5 | 29·7 | |
| 9·2 | | 47·5 | 21·2 | g |
| 9·6 | | 52·0 | 13·8 | |
| 9·4 | | 58·5 | 11·8 | |
| 9·8 | | 58·5 | 48·6 | |
| 9·7 | 1 | 1·0 | 34·5 | |
| 9·7 | | 10·0 | 37·8 | |
| 9·6 | | 19·5 | 33·9 | |
| 9·8 | | 24·5 | 34·3 | |
| 9·4 | | 30·5 | 4·3 | |
| 8·6 | | 37·6 | 58·4 | g |
| 9·8 | | 40·0 | 37·1 | |
| 9·8 | | 42·5 | 17·7 | |
| 9·6 | | 43·5 | 5·5 | |
| 9·8 | 2 | 18·0 | 27·3 | |
| 9·5 | | 25·5 | 43·7 | |
| 9·8 | | 32·0 | 23·5 | |
| 9·8 | | 33·0 | 32·9 | |
| 9·6 | | 37·3 | 1·3 | |

## 2341—2400.

$15^{h}$ –68°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·7 | 2 | 41·5 | 57·9 | |
| 9·2 | | 52·6 | 59·1 | |
| 9·8 | 3 | 3·5 | 33·1 | |
| 9·5 | | 14·0 | 37·3 | |
| 9·6 | | 17·5 | 26·9 | |
| 9·4 | | 18·5 | 10·4 | |
| 8·8 | | 24·0 | 17·3 | g |
| 9·5 | | 29·0 | 41·2 | |
| 9·8 | | 33·0 | 9·2 | |
| 9·6 | | 36·5 | 39·9 | |
| 9·8 | | 37·5 | 22·1 | |
| 9·6 | | 48·0 | 48·1 | |
| 9·0 | | 54·0 | 8·9 | g |
| 9·6 | | 58·9 | 12·9 | |
| 9·7 | 4 | 4·4 | 22·4 | |
| 9·5 | | 11·4 | 7·0 | |
| 9·6 | | 19·4 | 43·8 | |
| 9·6 | | 22·9 | 5·3 | |
| 9·4 | | 29·4 | 32·8 | |
| 9·4 | | 36·5 | 1·6 | |
| 9·8 | | 44·4 | 4·9 | |
| 9·8 | | 53·9 | 14·6 | |
| 9·6 | 5 | 21·9 | 20·1 | |
| 9·8 | | 23·4 | 56·3 | |
| 9·8 | | 53·9 | 51·9 | |
| 9·7 | 6 | 13·4 | 27·3 | |
| 9·8 | | 18·4 | 11·6 | |
| 9·7 | | 19·0 | 38·4 | |
| 8·0 | | 23·4 | 7·0 | 8·0 g |
| 9·8 | | 26·9 | 12·9 | |
| 8·7 | | 32·8 | 59·9 | 8·8 g |
| 9·8 | | 35·9 | 1·6 | |
| 9·8 | | 47·4 | 44·2 | |
| 9·6 | | 54·9 | 24·4 | |
| 9·8 | | 55·9 | 10·2 | |
| 9·2 | | 55·9 | 11·3 | |
| 9·8 | 7 | 0·9 | 9·6 | |
| 9·8 | | 1·9 | 48·0 | |
| 9·6 | | 2·9 | 8·0 | |
| 9·7 | | 4·4 | 47·7 | |
| 9·8 | | 7·4 | 36·6 | : |
| 9·4 | | 11·4 | 52·4 | |
| 4·3 | | 15·9 | 12·8 | 3·0 GSggtrλ |
| 9·1 | | 21·9 | 39·8 | |
| 9·6 | | 32·9 | 27·8 | |
| 9·6 | | 33·4 | 36·9 | |
| 9·4 | | 41·9 | 47·3 | |
| 9·4 | | 52·9 | 7·4 | |
| 9·4 | 8 | 0·9 | 30·3 | |
| 9·6 | | 3·9 | 9·2 | |
| 9·8 | | 26·9 | 54·3 | |
| 9·6 | | 33·7 | 13·2 | |
| 9·0 | | 37·9 | 8·6 | g |
| 9·5 | | 40·4 | 13·6 | |
| 9·6 | | 41·9 | 14·2 | |
| 9·5 | | 42·4 | 9·2 | |
| 9·6 | 9 | 20·9 | 15·6 | |
| 9·5 | | 33·4 | 1·9 | |
| 9·2 | | 45·9 | 56·6 | |
| 9·0 | | 49·4 | 17·1 | g |

## 2401—2460.

$15^{h}$ –68°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·8 | 9 | 54·8 | 6·3 | |
| 9·2 | | 58·4 | 10·5 | |
| 9·4 | 10 | 0·4 | 8·0 | |
| 8·6 | | 3·4 | 11·8 | g |
| 9·6 | | 5·9 | 46·5 | |
| 9·8 | | 24·4 | 58·4 | |
| 9·6 | | 57·9 | 10·9 | |
| 9·3 | 11 | 2·4 | 28·7 | |
| 9·6 | | 3·4 | 3·1 | |
| 9·4 | | 3·9 | 56·6 | |
| 9·2 | | 11·2 | 28·6 | |
| 8·8 | | 30·5 | 50·9 | g |
| 8·4 | | 37·4 | 9·7 | g |
| 9·3 | | 47·2 | 22·9 | g |
| 9·6 | | 53·9 | 27·1 | |
| 9·2 | | 55·2 | 24·4 | g |
| 9·6 | 12 | 3·9 | 32·4 | |
| 9·8 | | 6·4 | 11·1 | |
| 9·5 | | 17·9 | 36·1 | |
| 9·3 | | 20·2 | 24·9 | |
| 8·8 | | 21·0 | 30·5 | g |
| 9·2 | | 45·9 | 56·0 | |
| 9·6 | | 52·9 | 8·4 | |
| 9·3 | 13 | 10·4 | 17·3 | |
| 9·3 | | 11·8 | 27·2 | |
| 9·8 | | 13·4 | 51·4 | |
| 9·6 | | 22·9 | 41·4 | |
| 9·0 | | 28·7 | 22·2 | g |
| 9·4 | | 34·7 | 5·3 | |
| 8·6 | | 38·4 | 14·6 | 8·5 g |
| 9·8 | | 53·4 | 9·8 | |
| 9·5 | | 57·6 | 58·0 | |
| 9·6 | 14 | 6·9 | 21·1 | |
| 9·6 | | 21·0 | 54·8 | |
| 9·2 | | 26·0 | 55·5 | |
| 9·6 | | 29·0 | 21·6 | |
| 9·6 | | 31·5 | 57·1 | |
| 9·2 | | 47·0 | 13·8 | g |
| 9·6 | | 53·5 | 10·1 | |
| 9·6 | | 59·5 | 44·0 | |
| 8·6 | 15 | 9·3 | 33·8 | g |
| 9·4 | | 20·0 | 33·1 | |
| 9·7 | | 22·5 | 22·0 | |
| 8·7 | | 45·5 | 49·4 | 9·0 g |
| 9·5 | | 53·0 | 57·6 | |
| 8·2 | 16 | 31·7 | 7·0 | 8·5 g |
| 9·8 | | 44·5 | 34·9 | |
| 9·6 | 17 | 22·3 | 16·6 | |
| 9·6 | | 57·7 | 44·8 | |
| 9·6 | | 59·2 | 38·2 | |
| 9·8 | 18 | 14·0 | 23·2 | |
| 9·8 | | 34·0 | 27·4 | |
| 9·4 | | 37·7 | 30·1 | |
| 9·6 | | 41·0 | 57·1 | |
| 9·4 | | 41·7 | 57·5 | |
| 9·0 | | 42·6 | 24·7 | g |
| 9·4 | | 42·7 | 2·7 | |
| 9·2 | | 52·6 | 46·8 | 9·5 g |
| 9·7 | | 56·0 | 48·6 | |
| 9·6 | | 58·0 | 57·2 | |

## 2461—2520.

$15^{h}$ –68°

| mag. | m | s | ′ | |
|---|---|---|---|---|
| 9·6 | 19 | 1·0 | 8·7 | |
| 9·6 | | 3·7 | 44·7 | |
| 9·6 | | 6·0 | 41·1 | |
| 8·6 | | 6·7 | 47·0 | 10·0 g |
| 9·8 | | 7·5 | 1·0 | |
| 9·5 | | 14·2 | 49·9 | |
| 9·8 | | 20·5 | 3·5 | |
| 9·8 | | 22·0 | 30·7 | |
| 9·6 | | 35·7 | 57·5 | |
| 9·4 | | 45·7 | 54·0 | |
| 9·8 | | 53·0 | 19·5 | |
| 9·8 | | 53·5 | 0·0 | |
| 9·6 | | 56·6 | 21·9 | |
| 7·8 | 20 | 2·1 | 44·4 | 9·5 Gg |
| 9·8 | | 4·0 | 10·9 | |
| 9·5 | | 5·0 | 51·0 | |
| 9·7 | | 11·0 | 14·2 | |
| 9·6 | | 12·7 | 41·6 | |
| 8·5 | | 21·4 | 47·6 | 9·5 g |
| 9·4 | | 23·0 | 20·3 | |
| 9·4 | | 44·0 | 20·8 | |
| 9·7 | 21 | 22·5 | 34·8 | |
| 9·7 | | 24·4 | 59·1 | |
| 9·4 | | 44·1 | 34·8 | |
| 9·8 | | 49·0 | 1·2 | |
| 9·0 | 22 | 7·4 | 20·5 | 8·5 g |
| 9·8 | | 10·1 | 58·8 | |
| 9·8 | | 18·5 | 35·3 | |
| 8·1 | | 23·2 | 11·0 | 8·0 Gg |
| 9·8 | | 41·5 | 25·8 | |
| 9·5 | | 45·6 | 26·3 | |
| 9·8 | | 46·5 | 48·5 | |
| 8·5 | | 48·5 | 27·7 | 7·8 GSg |
| 9·7 | | 56·5 | 14·9 | |
| 9·4 | 23 | 0·3 | 6·6 | |
| 9·7 | | 0·5 | 36·3 | |
| 9·6 | | 7·0 | 13·5 | |
| 9·7 | | 13·5 | 43·1 | |
| 9·0 | | 20·8 | 10·5 | 9·0 g |
| 9·4 | | 30·0 | 30·6 | |
| 9·3 | | 41·0 | 41·6 | |
| 9·8 | | 49·0 | 16·0 | |
| 9·7 | | 50·8 | 20·5 | |
| 9·8 | | 51·0 | 12·9 | |
| 9·6 | | 54·2 | 50·7 | |
| 9·6 | | 55·2 | 31·0 | |
| 9·0 | | 55·5 | 15·7 | g |
| 9·5 | | 57·5 | 13·5 | |
| 9·7 | 24 | 9·5 | 34·2 | |
| 9·7 | | 17·5 | 13·0 | |
| 9·6 | | 18·0 | 41·2 | |
| 9·6 | | 36·0 | 23·9 | |
| 9·0 | | 47·5 | 51·4 | g |
| 9·8 | | 50·0 | 15·0 | |
| 9·5 | | 51·5 | 33·6 | |
| 9·8 | | 55·0 | 49·4 | |
| 9·8 | | 59·0 | 27·3 | |
| 9·8 | 25 | 17·5 | 31·3 | |
| 9·0 | | 25·8 | 32·0 | 8·8 g |
| 8·4 | | 28·7 | 4·6 | 8·8 g |



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## 2521—2580.

| mag. | 15ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·5 | 26 | 6·0 | 17·7 | |
| 8·9 | | 38·0 | 46·0 | g |
| 8·9 | | 45·0 | 47·4 | 9·5 g |
| 9·6 | 27 | 1·0 | 8·4 | |
| 9·0 | | 46·0 | 42·2 | |
| 9·6 | 28 | 8·5 | 43·4 | |
| 9·5 | | 15·0 | 42·0 | |
| 9·0 | | 18·5 | 35·0 | g |
| 9·2 | | 35·0 | 5·8 | |
| 9·4 | | 37·3 | 1·2 | |
| 9·5 | | 51·5 | 5·0 | |
| 9·5 | | 58·5 | 40·2 | |
| 9·5 | 29 | 21·0 | 47·2 | |
| 9·2 | | 42·5 | 21·2 | |
| 9·4 | | 45·5 | 14·1 | 8·5 g |
| 9·5 | | 59·5 | 35·4 | |
| 9·2 | 30 | 2·0 | 25·0 | |
| 9·6 | | 28·0 | 39·8 | |
| 9·4 | | 41·5 | 38·8 | |
| 9·5 | 31 | 10·5 | 58·0 | 9·5 |
| 9·4 | | 17·0 | 59·7 | |
| 9·0 | | 29·0 | 10·9 | |
| 8·7 | | 32·0 | 44·8 | g |
| 9·0 | | 47·5 | 43·2 | 8·0 g |
| 9·2 | | 50·0 | 53·4 | 9·2 g |
| 8·6 | 32 | 0·5 | 59·6 | 9·0 g |
| 9·5 | 34 | 5·5 | 27·0 | |
| 8·8 | | 9·5 | 30·7 | |
| 9·2 | | 14·5 | 4·0 | |
| 9·6 | | 16·5 | 14·1 | g |
| 9·6 | | 40·0 | 31·0 | |
| 9·2 | | 44·0 | 22·3 | |
| 9·6 | 35 | 18·0 | 10·7 | |
| 9·0 | | 30·0 | 51·3 | |
| 8·4 | | 31·5 | 36·8 | 9·5 g |
| 9·0 | | 38·0 | 41·1 | |
| 8·6 | 36 | 1·5 | 13·2 | g |
| 9·4 | | 8·0 | 40·5 | |
| 8·8 | | 28·5 | 37·9 | 9·5 g |
| 8·8 | | 35·5 | 36·1 | 9·0 g |
| 8·8 | 37 | 9·0 | 55·1 | 9·0 g |
| 9·3 | | 25·5 | 11·1 | |
| 9·6 | | 47·5 | 27·8 | |
| 9·1 | 38 | 22·5 | 38·0 | |
| 8·4 | | 35·5 | 2·3 | 9·0 g |
| 8·6 | | 38·5 | 32·1 | 9·0 g |
| 9·1 | | 55·0 | 40·1 | 9·5 |
| 8·5 | 39 | 1·5 | 32·2 | 9·2 g |
| 9·4 | | 7·5 | 22·3 | |
| 9·3 | | 11·5 | 20·1 | |
| 9·0 | | 17·0 | 21·2 | |
| 8·8 | | 18·0 | 16·0 | 8·0 g |
| 8·8 | | 22·0 | 13·4 | 9·0 g |
| 9·6 | | 25·5 | 13·6 | |
| 9·0 | | 52·0 | 9·1 | g |
| 9·6 | 40 | 3·5 | 10·1 | |
| 9·6 | | 10·0 | 41·3 | |
| 9·1 | | 16·0 | 42·1 | |
| 9·0 | | 35·0 | 47·1 | |
| 9·6 | | 38·0 | 25·7 | |

## 2581—2640.

| mag. | 15ʰ·–16ʰ· m | s | −68° ′ | |
|---|---|---|---|---|
| 9·3 | 40 | 42·5 | 11·3 | |
| 9·0 | 41 | 24·0 | 27·1 | |
| 9·4 | 42 | 39·5 | 30·1 | |
| 8·4 | | 57·5 | 19·7 | g |
| 7·0 | 43 | 9·5 | 13·7 | GScg |
| 9·4 | | 26·0 | 20·3 | |
| 8·7 | | 29·5 | 31·4 | |
| 8·9 | 44 | 38·0 | 50·2 | |
| 9·5 | | 41·5 | 39·1 | |
| 9·0 | | 43·0 | 16·6 | g |
| 8·5 | 45 | 17·5 | 25·8 | g |
| 9·2 | | 50·0 | 15·2 | |
| 8·2 | 46 | 18·0 | 14·0 | 8·5 g |
| 8·4 | | 55·0 | 8·0 | 8·0 g |
| 9·5 | 47 | 40·5 | 12·0 | |
| 9·6 | 48 | 1·5 | 21·1 | |
| 9·4 | | 17·5 | 55·1 | |
| 8·7 | | 26·5 | 18·9 | 7·5 Gg |
| 9·6 | | 57·5 | 26·7 | |
| 9·6 | 49 | 34·5 | 34·0 | |
| 9·0 | 50 | 28·0 | 2·0 | |
| 9·5 | | 54·5 | 0·4 | |
| 9·6 | | 57·5 | 9·0 | |
| 9·0 | 51 | 23·0 | 46·8 | |
| 9·4 | | 26·5 | 7·6 | |
| 9·6 | | 52·0 | 11·6 | |
| 9·1 | 52 | 10·0 | 40·4 | |
| 9·4 | | 16·5 | 36·0 | |
| 9·6 | | 36·5 | 7·6 | |
| 7·5 | 53 | 18·0 | 5·2 | GSg |
| 9·4 | | 31·5 | 22·4 | |
| 9·6 | 55 | 22·5 | 30·8 | |
| 9·6 | | 26·5 | 18·6 | |
| 9·5 | | 32·5 | 14·6 | |
| 9·6 | | 59·5 | 35·2 | |
| 9·2 | 56 | 4·5 | 11·1 | |
| 9·1 | | 7·0 | 32·0 | |
| 9·5 | | 28·5 | 51·0 | |
| 9·5 | | 58·5 | 11·0 | |
| 9·0 | 57 | 0·0 | 38·6 | 9·0 g |
| 8·4 | 58 | 14·0 | 8·6 | g |
| 9·0 | | 30·0 | 57·0 | |
| 9·6 | | 39·0 | 5·2 | |
| 9·6 | | 45·0 | 21·0 | |
| 9·6 | 59 | 5·0 | 20·0 | |
| 9·3 | | 6·5 | 9·9 | |
| 9·0 | | 27·5 | 7·0 | g |
| 8·6 | | 50·0 | 48·0 | 8·5 g |
| 9·0 | 0 | 11·5 | 6·2 | 9·0 g |
| 9·6 | | 28·5 | 8·0 | 9·5 g |
| 9·2 | 1 | 11·5 | 17·8 | 9·5 g |
| 9·0 | | 24·0 | 13·0 | 9·0 g |
| 9·6 | 2 | 23·5 | 13·0 | |
| 9·6 | | 58·5 | 44·0 | |
| 9·6 | 3 | 0·0 | 1·2 | |
| 9·5 | | 10·5 | 10·3 | |
| 9·6 | | 11·0 | 53·8 | |
| 9·6 | | 26·0 | 38·0 | |
| 9·0 | | 43·0 | 25·6 | g |
| 9·5 | 4 | 27·5 | 22·0 | |

## 2641—2700.

| mag. | 16ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 8·4 | 4 | 31·5 | 29·6 | g |
| 9·2 | 5 | 7·5 | 16·4 | |
| 10·1 | | 43·0 | 25·7 | |
| 9·4 | | 47·0 | 51·9 | |
| 10·0 | | 48·5 | 48·7 | |
| 9·6 | | 52·5 | 59·0 | |
| 10·0 | 6 | 8·5 | 34·9 | |
| 9·8 | | 8·5 | 58·8 | |
| 9·4 | | 20·2 | 57·2 | |
| 10·1 | | 29·5 | 54·6 | |
| 10·0 | | 30·5 | 52·1 | |
| 10·1 | | 31·0 | 37·5 | |
| 10·1 | | 32·5 | 17·0 | |
| 9·6 | | 50·5 | 15·5 | |
| 9·2 | 7 | 0·8 | 37·1 | g |
| 10·0 | | 2·0 | 24·6 | |
| 9·0 | | 2·5 | 46·1 | g |
| 9·8 | | 6·5 | 31·0 | |
| 10·0 | | 6·5 | 25·7 | |
| 10·0 | | 16·5 | 10·6 | |
| 10·0 | | 18·5 | 16·7 | |
| 9·8 | | 22·5 | 41·5 | |
| 9·6 | | 28·7 | 45·9 | |
| 7·4 | | 52·8 | 13·6 | 7·5 GSg |
| 9·8 | 8 | 0·5 | 22·4 | |
| 9·0 | | 15·0 | 0·9 | 8·5 g |
| 10·1 | | 24·0 | 15·3 | |
| 10·0 | | 24·5 | 4·5 | |
| 9·6 | | 39·0 | 23·3 | |
| 10·1 | | 47·5 | 48·7 | |
| 8·8 | | 47·7 | 0·5 | 9·0 g |
| 10·0 | | 51·0 | 52·1 | |
| 9·7 | 9 | 2·5 | 31·1 | |
| 10·1 | | 3·0 | 36·9 | |
| 10·1 | | 20·0 | 18·5 | |
| 10·1 | | 30·0 | 34·7 | |
| 9·0 | | 31·5 | 54·8 | g |
| 9·8 | | 37·5 | 13·5 | |
| 10·0 | | 39·5 | 56·1 | |
| 9·6 | | 44·5 | 58·2 | |
| 10·0 | | 50·0 | 42·6 | |
| 9·4 | | 55·5 | 9·6 | |
| 10·0 | 10 | 11·5 | 42·5 | |
| 8·8 | | 15·0 | 29·1 | g |
| 10·1 | | 16·0 | 4·7 | |
| 10·0 | | 17·5 | 18·9 | |
| 10·1 | | 29·0 | 57·4 | |
| 10·1 | | 35·0 | 58·6 | |
| 9·7 | | 36·5 | 40·4 | |
| 9·4 | | 38·5 | 5·6 | |
| 10·1 | | 38·5 | 58·1 | |
| 9·4 | | 43·0 | 48·6 | g |
| 9·8 | | 56·0 | 20·2 | |
| 10·1 | | 58·0 | 8·7 | |
| 9·4 | 11 | 16·0 | 18·2 | |
| 9·6 | | 24·0 | 35·6 | |
| 10·1 | 12 | 0·5 | 1·9 | |
| 8·8 | | 1·5 | 19·2 | g |
| 10·1 | | 18·0 | 50·0 | |
| 9·8 | | 29·0 | 10·1 | |

## 2701—2760.

| mag. | 16ʰ m | s | −68° ′ | |
|---|---|---|---|---|
| 9·6 | 12 | 42·5 | 0·9 | |
| 9·6 | 13 | 8·0 | 57·9 | |
| 10·0 | | 9·0 | 56·9 | |
| 10·0 | | 12·0 | 27·9 | |
| 10·0 | | 29·0 | 57·9 | |
| 9·6 | | 34·0 | 59·1 | |
| 9·6 | | 49·0 | 22·3 | |
| 9·8 | | 51·0 | 41·8 | |
| 9·4 | | 54·0 | 25·4 | |
| 9·6 | 14 | 0·5 | 37·9 | |
| 9·6 | | 3·5 | 40·9 | g |
| 9·0 | | 6·0 | 11·8 | g |
| 9·7 | | 9·0 | 13·9 | |
| 9·7 | | 22·5 | 39·3 | g |
| 9·8 | | 26·5 | 3·9 | |
| 10·0 | | 32·0 | 6·9 | |
| 9·8 | | 36·0 | 21·9 | |
| 9·4 | | 37·0 | 24·9 | |
| 10·1 | | 38·0 | 54·2 | |
| 10·0 | | 47·0 | 39·3 | |
| 10·1 | | 49·0 | 39·7 | |
| 10·0 | | 52·5 | 10·3 | |
| 9·4 | | 56·0 | 1·2 | |
| 9·4 | 15 | 30·0 | 45·1 | |
| 10·0 | | 40·0 | 44·9 | |
| 8·6 | | 41·5 | 14·6 | g |
| 8·8 | 16 | 10·0 | 7·8 | g |
| 9·6 | | 19·5 | 21·1 | |
| 8·6 | | 20·5 | 9·9 | g |
| 10·1 | | 27·5 | 20·1 | |
| 9·6 | | 42·5 | 7·9 | g |
| 10·0 | 17 | 3·5 | 3·5 | |
| 9·8 | | 7·0 | 16·0 | |
| 9·4 | | 16·5 | 28·5 | g |
| 10·0 | | 42·0 | 46·4 | |
| 10·0 | | 48·5 | 28·9 | |
| 10·0 | | 48·5 | 39·4 | |
| 8·6 | | 53·0 | 0·1 | 8·5 g |
| 10·0 | | 57·5 | 3·4 | |
| 10·1 | | 58·0 | 0·4 | |
| 10·1 | 18 | 0·5 | 2·0 | |
| 10·1 | | 11·0 | 48·9 | |
| 9·2 | | 45·5 | 37·9 | |
| 10·0 | | 56·5 | 10·7 | |
| 10·1 | 19 | 15·0 | 30·6 | |
| 9·6 | | 20·5 | 9·9 | 9·0 |
| 9·0 | | 23·0 | 8·9 | |
| 10·1 | | 37·0 | 44·2 | |
| 10·1 | 20 | 39·0 | 45·9 | |
| 8·8 | | 52·0 | 52·1 | g |
| 9·6 | 21 | 24·5 | 25·2 | |
| 9·2 | | 45·5 | 5·0 | |
| 10·0 | 22 | 0·5 | 45·1 | |
| 9·6 | | 13·0 | 16·0 | |
| 9·7 | | 30·0 | 5·9 | |
| 10·0 | | 35·5 | 6·9 | |
| 10·1 | | 39·0 | 45·6 | |
| 10·0 | | 39·5 | 51·9 | |
| 10·0 | 23 | 38·0 | 17·7 | |
| 9·0 | | 41·0 | 16·1 | g |

25 prec.

| h | m | a + s | δ − ′ |
|---|---|---|---|
| 15 | 20 | 142 | 5·4 |
| | 30 | 144 | 5·1 |
| | 40 | 146 | 4·8 |
| | 50 | 148 | 4·5 |
| 16 | 0 | 150 | 4·2 |
| | 10 | 152 | 3·9 |
| | 20 | 154 | 3·5 |
| | 30 | 155 | 3·2 |



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25 prec.

| h | m | α + s | δ − ' |
|---|---|---|---|
| 16 | 20 | 154 | 3·5 |
| | 30 | 155 | 3·2 |
| | 40 | 156 | 2·9 |
| | 50 | 158 | 2·5 |
| 17 | 0 | 159 | 2·2 |
| | 10 | 160 | 1·8 |
| | 20 | 160 | 1·5 |
| | 30 | 161 | 1·1 |
| | 40 | 161 | 0·7 |
| | 50 | 162 | 0·4 |

## 2761—2820.

| mag. | 16h. m | s | − 68° ' | |
|---|---|---|---|---|
| 8·8 | 23 | 52·0 | 21·6 | g |
| 10·1 | | 59·0 | 3·5 | |
| 9·6 | 24 | 4·5 | 13·5 | |
| 10·0 | | 29·5 | 9·8 | |
| 9·6 | | 48·5 | 52·9 | g |
| 9·8 | | 48·5 | 5·9 | |
| 10·1 | | 54·0 | 41·9 | |
| 9·6 | 25 | 24·5 | 14·3 | |
| 9·8 | | 29·0 | 16·3 | 9·5 |
| 9·8 | | 43·0 | 23·0 | g |
| 7·0 | | 43·0 | 27·6 | 7·5 Gg |
| 9·8 | | 51·0 | 23·4 | |
| 10·0 | 26 | 10·5 | 20·0 | |
| 9·6 | | 14·5 | 22·0 | |
| 10·0 | | 15·5 | 7·8 | |
| 10·1 | | 29·0 | 45·0 | |
| 9·0 | | 30·0 | 16·8 | 9·5 g |
| 9·6 | | 38·0 | 34·8 | |
| 10·0 | | 42·0 | 6·1 | |
| 10·1 | 27 | 27·0 | 27·6 | |
| 10·1 | | 27·5 | 22·1 | |
| 9·4 | | 39·5 | 49·0 | 9·2 g |
| 9·4 | | 42·5 | 4·0 | |
| 9·4 | | 43·5 | 43·4 | g |
| 10·1 | | 51·0 | 1·1 | |
| 10·1 | | 59·0 | 7·7 | |
| 9·4 | 28 | 12·0 | 43·6 | |
| 9·0 | | 20·0 | 30·4 | 9·0 g |
| 5·7 | | 29·0 | 2·7 | 6·5 GScgr |
| 9·8 | | 33·5 | 51·0 | |
| 9·6 | 29 | 18·5 | 50·3 | |
| 9·6 | | 22·0 | 49·3 | |
| 10·1 | | 25·0 | 43·2 | |
| 9·6 | | 34·0 | 6·6 | |
| 10·1 | | 50·0 | 28·9 | |
| 9·6 | 30 | 0·0 | 47·0 | |
| 9·8 | | 15·0 | 43·2 | |
| 10·1 | 31 | 12·0 | 39·3 | |
| 10·1 | | 35·5 | 29·1 | |
| 9·4 | | 35·5 | 33·6 | g |
| 10·1 | 32 | 15·5 | 38·9 | |
| 10·1 | | 29·0 | 8·1 | |
| 9·7 | | 37·5 | 49·9 | |
| 10·1 | | 38·5 | 5·9 | |
| 10·1 | | 41·0 | 18·6 | |
| 9·8 | | 48·5 | 44·9 | |
| 10·0 | | 51·0 | 15·9 | |
| 10·1 | 33 | 3·5 | 20·9 | |
| 9·4 | | 8·5 | 45·5 | |
| 10·0 | | 27·0 | 42·0 | |
| 9·6 | | 30·5 | 31·5 | |
| 10·1 | | 36·0 | 9·1 | |
| 9·8 | | 46·5 | 31·1 | |
| 9·6 | | 59·5 | 9·6 | 9·0 g |
| 8·8 | 34 | 6·0 | 54·9 | 8·5 Gg |
| 9·4 | | 29·0 | 20·6 | |
| 10·0 | | 32·5 | 22·5 | |
| 10·0 | | 44·5 | 18·0 | |
| 10·1 | | 53·0 | 49·5 | |
| 8·4 | | 58·5 | 18·5 | 8·5 g |

## 2821—2880.

| mag. | 16h. m | s | − 68° ' | |
|---|---|---|---|---|
| 9·0 | 35 | 26·0 | 22·3 | 9·5 g |
| 4·8 | | 26·0 | 47·7 | 2·0 GSggtrλ |
| 10·0 | | 34·5 | 46·1 | |
| 10·0 | 37 | 48·0 | 36·9 | |
| 9·8 | | 54·5 | 33·0 | |
| 10·0 | | 54·5 | 18·1 | |
| 9·6 | 38 | 0·0 | 7·5 | |
| 10·0 | | 5·0 | 26·2 | |
| 9·6 | | 39·5 | 24·9 | |
| 10·0 | | 58·5 | 24·0 | |
| 10·1 | 39 | 0·5 | 30·9 | |
| 9·4 | | 14·0 | 18·9 | g |
| 10·1 | | 38·2 | 58·9 | |
| 10·0 | | 39·5 | 53·1 | |
| 10·0 | | 59·5 | 18·4 | |
| 9·2 | 40 | 24·5 | 50·1 | GSg |
| 10·0 | | 49·5 | 6·6 | |
| 10·1 | 41 | 2·5 | 59·9 | |
| 9·4 | | 17·5 | 49·8 | |
| 10·1 | 42 | 56·5 | 48·6 | |
| 10·0 | | 58·5 | 51·5 | |
| 8·6 | 43 | 36·5 | 8·6 | g |
| 10·1 | | 49·5 | 58·1 | |
| 10·1 | 44 | 0·5 | 59·9 | |
| 9·8 | | 45·0 | 28·7 | g |
| 9·0 | | 45·0 | 39·2 | g |
| 9·6 | | 53·0 | 44·2 | g |
| 8·8 | | 56·0 | 15·2 | 7·5 Gg |
| 10·1 | 45 | 0·5 | 18·1 | |
| 10·0 | 46 | 28·0 | 33·7 | |
| 9·8 | | 36·0 | 17·9 | |
| 9·6 | | 52·5 | 34·1 | g |
| 8·2 | 47 | 6·5 | 9·5 | 8·5 g |
| 10·1 | | 13·0 | 8·5 | g |
| 10·0 | | 25·5 | 26·5 | |
| 9·2 | | 29·5 | 14·5 | g |
| 9·8 | | 32·0 | 14·9 | |
| 9·4 | | 32·5 | 17·4 | g |
| 9·8 | | 35·0 | 25·0 | |
| 9·6 | | 36·0 | 56·5 | |
| 9·7 | | 49·5 | 41·9 | |
| 10·1 | 48 | 3·0 | 1·6 | |
| 10·0 | 49 | 10·0 | 52·7 | |
| 9·6 | | 16·0 | 19·7 | |
| 9·2 | | 27·5 | 25·1 | |
| 10·1 | | 36·5 | 42·9 | |
| 10·0 | | 38·0 | 20·1 | |
| 8·3 | | 49·5 | 26·2 | Gg |
| 8·0 | | 58·5 | 39·2 | 8·0 Gg |
| 10·0 | 50 | 17·0 | 53·9 | |
| 9·4 | | 32·5 | 47·9 | |
| 9·6 | | 51·0 | 26·0 | 9·0 g |
| 8·8 | | 56·0 | 28·7 | 9·0 g |
| 9·2 | 51 | 2·0 | 0·4 | |
| 8·1 | | 27·7 | 5·6 | 7·2 GSg |
| 9·8 | | 39·0 | 7·1 | |
| 10·0 | 52 | 16·0 | 34·9 | |
| 9·8 | | 17·5 | 46·3 | |
| 10·0 | | 22·5 | 26·4 | g |
| 10·1 | | 24·5 | 0·2 | |

## 2881—2940.

| mag. | 16h.—17h. m | s | − 68° ' | |
|---|---|---|---|---|
| 9·2 | 52 | 29·0 | 54·1 | g |
| 9·6 | | 35·8 | 55·9 | |
| 10·0 | 53 | 11·8 | 18·4 | |
| 9·4 | | 27·2 | 54·2 | g |
| 9·8 | | 27·3 | 51·3 | |
| 9·4 | 54 | 4·7 | 42·9 | |
| 10·1 | | 29·0 | 53·4 | |
| 10·0 | | 36·0 | 29·9 | |
| 10·0 | 55 | 7·0 | 41·9 | |
| 9·0 | | 22·0 | 48·1 | g |
| 9·6 | | 48·0 | 41·3 | |
| 6·6 | | 49·5 | 40·3 | 7·0 GScg |
| 9·4 | 56 | 18·0 | 3·7 | g |
| 9·0 | 57 | 2·0 | 5·8 | g |
| 9·6 | | 33·0 | 39·1 | 9·0 g |
| 9·7 | | 45·0 | 43·5 | |
| 7·8 | 58 | 12·0 | 28·4 | 7·8 Gg |
| 9·8 | | 43·5 | 5·8 | |
| 9·8 | | 53·0 | 32·3 | |
| 9·8 | | 54·5 | 52·6 | |
| 8·8 | 59 | 20·0 | 41·8 | 9·0 g |
| 8·8 | 0 | 2·0 | 18·2 | g |
| 9·0 | | 2·5 | 39·8 | g |
| 9·6 | 2 | 46·0 | 31·9 | |
| 8·5 | | 51·0 | 10·0 | g |
| 9·1 | 3 | 40·0 | 16·4 | g |
| 9·4 | 5 | 4·5 | 29·9 | |
| 9·8 | | 43·5 | 9·1 | |
| 9·0 | 6 | 2·0 | 22·8 | |
| 8·8 | | 41·0 | 44·1 | g |
| 8·6 | 7 | 12·5 | 57·3 | g |
| 9·0 | | 45·0 | 32·0 | g |
| 9·7 | 9 | 38·5 | 3·7 | |
| 8·1 | 12 | 31·5 | 7·7 | g |
| 9·8 | 15 | 32·0 | 49·4 | g |
| 8·5 | | 45·5 | 27·0 | g |
| 9·7 | 16 | 32·5 | 57·2 | |
| 9·8 | | 59·5 | 1·8 | 9·0 g |
| 9·8 | 17 | 49·5 | 7·1 | |
| 9·7 | 19 | 30·5 | 35·6 | |
| 8·8 | 20 | 27·0 | 39·8 | 9·5 g |
| 8·4 | 22 | 28·0 | 13·9 | g |
| 9·0 | 24 | 11·5 | 48·6 | g |
| 8·2 | | 31·5 | 4·9 | 8·5 g |
| 8·4 | 25 | 1·5 | 26·0 | 7·5 Gg |
| 9·4 | | 44·5 | 42·0 | |
| 9·8 | | 48·0 | 17·3 | g |
| 7·9 | 26 | 29·0 | 4·9 | 8·5 g |
| 9·8 | | 31·0 | 1·9 | 9·5 |
| 9·8 | 27 | 56·0 | 55·4 | |
| 7·4 | 28 | 36·5 | 56·7 | g |
| 8·8 | 29 | 18·5 | 50·7 | g |
| 8·6 | | 54·5 | 51·8 | 8·5 g |
| 9·4 | 30 | 24·5 | 15·6 | g |
| 9·0 | | 35·0 | 57·8 | 8·0 g |
| 7·4 | 32 | 15·0 | 35·0 | g |
| 9·7 | | 29·5 | 58·5 | 9·0 g |
| 9·7 | 33 | 32·0 | 46·2 | |
| 9·3 | 34 | 21·3 | 17·3 | g |
| 9·0 | | 28·3 | 48·0 | |

## 2941—3000.

| mag. | 17h. m | s | − 68° ' | |
|---|---|---|---|---|
| 8·8 | 34 | 46·9 | 49·6 | g |
| 9·5 | | 48·9 | 58·0 | |
| 9·8 | | 56·3 | 47·7 | |
| 9·8 | 35 | 0·2 | 29·2 | |
| 9·6 | | 10·8 | 47·5 | |
| 9·3 | | 38·3 | 19·4 | |
| 9·6 | | 55·3 | 33·3 | |
| 9·8 | 36 | 10·7 | 31·7 | |
| 9·8 | | 12·3 | 45·6 | |
| 8·6 | | 13·6 | 14·7 | g |
| 9·8 | | 20·3 | 8·7 | |
| 9·8 | | 24·3 | 6·7 | |
| 8·9 | | 46·2 | 56·5 | |
| 9·4 | | 53·3 | 12·0 | g |
| 8·3 | 37 | 9·1 | 2·8 | g |
| 8·3 | | 19·4 | 8·9 | g |
| 9·5 | | 27·8 | 33·1 | |
| 9·6 | | 33·3 | 48·3 | |
| 9·5 | | 52·3 | 16·9 | |
| 9·8 | 38 | 9·3 | 28·4 | |
| 9·8 | | 40·3 | 30·9 | |
| 9·3 | | 47·3 | 5·9 | 9·5 g |
| 9·0 | | 56·8 | 59·1 | g |
| 9·4 | 39 | 0·3 | 16·7 | |
| 9·6 | | 7·3 | 8·5 | g |
| 8·7 | | 7·3 | 7·4 | g |
| 9·0 | | 29·6 | 9·3 | g |
| 9·6 | | 29·8 | 29·9 | |
| 9·6 | | 48·8 | 10·1 | |
| 9·3 | | 54·3 | 19·3 | |
| 9·6 | 40 | 4·8 | 19·6 | |
| 9·3 | | 49·3 | 41·7 | |
| 9·1 | | 54·3 | 14·1 | g |
| 8·2 | | 54·8 | 37·1 | 7·5 Gg |
| 9·3 | 41 | 16·8 | 59·8 | |
| 9·8 | | 46·3 | 11·5 | |
| 8·9 | 42 | 3·3 | 29·8 | |
| 9·6 | | 30·3 | 28·7 | |
| 9·3 | | 37·8 | 56·9 | |
| 9·8 | | 39·3 | 51·7 | |
| 9·3 | | 41·7 | 15·6 | |
| 9·2 | | 45·2 | 10·0 | |
| 8·7 | | 55·7 | 21·6 | |
| 9·8 | | 56·7 | 20·4 | |
| 9·3 | 43 | 5·7 | 44·8 | g |
| 9·4 | | 29·2 | 53·9 | |
| 9·3 | | 39·7 | 24·8 | |
| 8·9 | | 55·2 | 43·4 | |
| 9·6 | 44 | 2·7 | 24·7 | |
| 9·6 | | 5·2 | 33·2 | |
| 8·9 | | 13·7 | 15·5 | g |
| 8·4 | | 19·2 | 45·1 | g |
| 9·5 | | 54·2 | 29·2 | |
| 9·6 | 45 | 17·2 | 40·2 | |
| 9·1 | | 17·2 | 1·9 | g |
| 9·4 | | 27·2 | 24·5 | |
| 9·3 | | 35·2 | 3·7 | |
| 9·8 | | 37·2 | 31·9 | |
| 9·8 | | 49·3 | 42·9 | |
| 9·6 | | 56·2 | 11·3 | |



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## 3001—3060.

| mag. | 17h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8.5 | 46 | 19.7 | 8.4 | 7.5 Gg |
| 9.8 | | 40.2 | 45.2 | |
| 9.8 | | 45.2 | 22.3 | |
| 9.6 | | 48.2 | 53.9 | |
| 9.8 | | 54.2 | 23.1 | |
| 9.3 | 47 | 43.2 | 43.6 | |
| 9.6 | | 45.2 | 49.7 | |
| 9.1 | | 49.7 | 49.3 | |
| 9.5 | | 58.2 | 24.5 | |
| 8.9 | 48 | 18.2 | 55.5 | |
| 9.6 | | 22.2 | 32.2 | |
| 9.8 | | 24.2 | 29.7 | |
| 9.8 | | 24.2 | 8.7 | |
| 9.6 | | 34.2 | 28.6 | |
| 9.1 | | 41.2 | 4.8 | |
| 9.6 | | 56.2 | 16.2 | |
| 9.8 | 49 | 5.7 | 32.1 | |
| 9.4 | | 19.7 | 32.6 | |
| 9.2 | | 32.7 | 43.7 | |
| 9.8 | | 43.7 | 23.1 | |
| 9.8 | | 56.2 | 52.6 | |
| 9.6 | 50 | 1.2 | 53.1 | |
| 9.6 | | 13.2 | 22.8 | |
| 9.4 | | 14.7 | 19.5 | g |
| 8.7 | | 55.3 | 18.3 | g |
| 8.8 | | 59.3 | 21.2 | g |
| 9.4 | 51 | 22.3 | 31.7 | |
| 9.8 | | 40.3 | 7.5 | |
| 9.8 | | 45.8 | 4.7 | |
| 9.1 | 52 | 7.3 | 21.1 | |
| 9.5 | | 13.8 | 52.1 | |
| 9.8 | | 59.3 | 48.7 | |
| 9.8 | 53 | 10.3 | 30.9 | |
| 9.6 | | 19.3 | 38.9 | |
| 9.5 | | 28.8 | 15.9 | |
| 9.4 | | 29.1 | 58.8 | g |
| 9.8 | | 39.4 | 30.0 | |
| 9.8 | | 41.4 | 51.3 | |
| 9.8 | | 56.8 | 12.4 | |
| 8.8 | | 59.8 | 37.9 | g |
| 9.8 | 54 | 3.4 | 22.5 | |
| 9.6 | | 9.3 | 6.3 | |
| 9.6 | | 10.8 | 8.3 | |
| 9.4 | | 17.8 | 10.4 | |
| 9.6 | | 21.3 | 32.7 | |
| 9.3 | | 46.8 | 7.6 | g |
| 9.8 | | 52.3 | 28.3 | |
| 9.6 | 55 | 10.8 | 4.2 | |
| 9.1 | | 45.8 | 45.7 | 9.0 g |
| 9.1 | | 46.8 | 6.8 | g |
| 9.4 | | 52.3 | 6.9 | |
| 9.3 | | 59.3 | 39.5 | 9.5 g |
| 9.3 | 56 | 8.3 | 1.8 | g |
| 9.6 | | 9.8 | 30.9 | |
| 9.6 | | 10.3 | 6.8 | |
| 9.6 | | 36.8 | 57.7 | |
| 9.8 | 57 | 3.3 | 43.1 | |
| 9.4 | | 39.8 | 51.4 | |
| 9.3 | | 40.8 | 37.3 | |
| 9.8 | | 59.0 | 0.4 | |

## 3061—3120.

| mag. | 17h.–18h. m | s | −68° ′ | |
|---|---|---|---|---|
| 9.8 | 58 | 12.8 | 17.4 | |
| 9.2 | | 18.3 | 34.5 | |
| 9.5 | 59 | 9.3 | 39.3 | |
| 9.1 | | 18.3 | 44.0 | |
| 8.8 | | 25.3 | 37.6 | g |
| 9.6 | | 32.3 | 21.7 | |
| 9.8 | | 38.3 | 21.0 | |
| 9.3 | 1 | 14.5 | 0.3 | |
| 9.8 | | 19.3 | 58.6 | |
| 9.6 | | 51.8 | 37.1 | |
| 9.1 | | 57.8 | 3.6 | g |
| 9.5 | 2 | 0.8 | 56.4 | |
| 8.8 | | 7.3 | 17.1 | g |
| 9.6 | | 29.8 | 52.9 | |
| 8.8 | 3 | 26.3 | 52.6 | g |
| 8.9 | | 30.8 | 13.8 | |
| 9.3 | | 31.8 | 47.4 | |
| 9.8 | | 48.3 | 50.5 | |
| 9.8 | | 57.3 | 2.1 | |
| 9.8 | 4 | 32.8 | 51.5 | |
| 6.6 | | 38.3 | 15.8 | 6.5 GScg |
| 9.6 | | 53.3 | 24.1 | |
| 9.2 | 5 | 36.8 | 51.7 | g |
| 9.3 | | 53.3 | 6.4 | |
| 9.8 | | 58.8 | 43.5 | |
| 9.0 | 6 | 41.3 | 53.5 | |
| 9.5 | 7 | 11.3 | 5.8 | |
| 8.8 | | 12.8 | 37.3 | |
| 9.8 | | 24.8 | 32.8 | |
| 9.0 | | 35.3 | 15.6 | |
| 9.8 | | 40.8 | 55.4 | |
| 8.8 | | 45.3 | 58.7 | 8.7 Gg |
| 9.6 | 8 | 50.3 | 33.4 | |
| 9.2 | | 54.8 | 31.2 | |
| 9.8 | 9 | 2.8 | 51.2 | |
| 9.0 | | 6.1 | 2.3 | g |
| 9.5 | | 23.3 | 37.1 | |
| 9.8 | | 29.3 | 35.1 | |
| 9.2 | | 45.3 | 14.9 | |
| 8.7 | 10 | 23.3 | 23.8 | 8.5 g |
| 9.8 | | 48.4 | 56.1 | |
| 8.8 | | 53.3 | 44.1 | 8.5 g |
| 9.8 | 11 | 18.8 | 0.4 | |
| 9.8 | | 23.3 | 21.7 | |
| 9.6 | | 29.3 | 59.9 | |
| 8.5 | | 36.7 | 27.9 | 8.5 g |
| 9.3 | | 46.7 | 43.9 | |
| 8.9 | 12 | 5.3 | 27.0 | 8.0 Gg |
| 9.6 | | 17.8 | 22.3 | |
| 9.3 | | 55.3 | 27.5 | 8.5 g |
| 8.2 | 13 | 9.3 | 3.7 | g |
| 8.8 | | 12.3 | 31.5 | 8.5 g |
| 9.3 | | 13.3 | 5.3 | |
| 9.8 | | 24.3 | 37.3 | |
| 9.0 | | 43.8 | 43.1 | |
| 8.8 | 14 | 16.3 | 38.6 | g |
| 9.2 | | 41.8 | 39.3 | g |
| 9.2 | | 55.8 | 9.7 | |
| 9.4 | 15 | 5.8 | 36.8 | |
| 9.8 | | 33.8 | 40.6 | |

## 3121—3180.

| mag. | 18h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8.1 | 15 | 54.8 | 56.1 | 8.0 Gg |
| 9.6 | 16 | 7.8 | 26.3 | |
| 9.6 | | 19.3 | 39.0 | |
| 9.6 | | 29.8 | 53.8 | |
| 8.7 | | 30.8 | 54.4 | 8.0 Gg |
| 9.0 | | 38.8 | 23.5 | 8.5 G |
| 9.8 | | 40.3 | 39.7 | |
| 9.8 | | 59.8 | 36.1 | |
| 9.8 | 17 | 5.0 | 0.6 | |
| 9.5 | | 52.8 | 53.1 | |
| 9.0 | | 59.3 | 46.2 | |
| 9.3 | | 59.3 | 55.7 | |
| 9.5 | 18 | 7.8 | 36.6 | |
| 7.8 | | 17.3 | 1.9 | 8.0 Gg |
| 9.8 | | 35.3 | 37.1 | |
| 8.3 | | 41.3 | 25.2 | 8.5 g |
| 9.6 | | 59.3 | 4.5 | |
| 9.6 | 19 | 2.8 | 12.5 | |
| 9.5 | | 14.8 | 5.1 | |
| 9.6 | 20 | 18.3 | 25.2 | |
| 9.5 | | 19.3 | 22.0 | |
| 9.4 | | 24.9 | 12.3 | |
| 8.4 | | 45.7 | 55.0 | 8.5 Gg |
| 9.4 | | 48.8 | 37.8 | |
| 9.5 | | 49.8 | 40.6 | |
| 9.1 | 21 | 1.8 | 36.5 | |
| 9.6 | | 39.3 | 52.5 | |
| 9.8 | | 49.3 | 44.0 | |
| 9.8 | 22 | 42.3 | 2.4 | |
| 9.8 | 23 | 3.3 | 6.5 | |
| 9.8 | | 20.3 | 46.8 | |
| 9.5 | 24 | 39.2 | 5.9 | |
| 9.8 | | 42.8 | 36.7 | |
| 9.1 | | 47.5 | 28.0 | g |
| 9.8 | 25 | 28.8 | 18.0 | |
| 9.6 | 26 | 22.2 | 19.8 | |
| 9.5 | | 45.2 | 4.8 | g |
| 9.4 | 30 | 18.0 | 52.2 | g |
| 8.5 | 31 | 20.5 | 38.7 | 9.0 g |
| 9.5 | 33 | 17.0 | 1.0 | g |
| 9.2 | | 24.0 | 41.1 | g |
| 9.6 | | 53.5 | 2.7 | |
| 9.6 | 34 | 7.5 | 37.9 | g |
| 9.5 | 35 | 44.5 | 10.1 | g |
| 9.0 | 36 | 36.6 | 0.3 | |
| 9.6 | | 47.0 | 4.9 | |
| 8.9 | 38 | 8.5 | 6.4 | g |
| 9.6 | | 16.5 | 58.4 | |
| 9.6 | | 18.5 | 31.9 | g |
| 8.2 | 40 | 13.0 | 56.4 | 8.2 Gg |
| 9.0 | 42 | 31.5 | 51.3 | g |
| 9.6 | 43 | 49.5 | 29.8 | |
| 9.3 | 45 | 47.5 | 10.0 | 9.0 g |
| 8.8 | 46 | 53.5 | 43.9 | 9.5 g |
| 9.6 | 47 | 30.0 | 40.4 | |
| 8.9 | | 39.0 | 49.1 | 9.0 g |
| 8.2 | 48 | 48.0 | 17.9 | 8.5 g |
| 9.6 | 49 | 3.0 | 49.9 | |
| 9.5 | | 55.0 | 36.6 | |
| 6.5 | 50 | 7.5 | 55.5 | 6.0 GScg |

## 3181—3240.

| mag. | 18h.–19h. m | s | −68° ′ | |
|---|---|---|---|---|
| 8.9 | 50 | 56.5 | 43.3 | 9.0 g |
| 9.6 | 51 | 17.0 | 42.1 | g |
| 9.5 | 52 | 16.5 | 56.0 | g |
| 9.6 | 54 | 4.5 | 12.8 | Gg |
| 6.6 | 56 | 36.0 | 36.7 | 5.8 GScg |
| 7.7 | | 41.5 | 29.2 | 7.5 Gg |
| 9.2 | 57 | 43.0 | 35.4 | 8.0 Gg |
| 9.6 | | 56.5 | 30.6 | 9.0 g |
| 8.4 | 59 | 21.0 | 7.5 | 8.0 Gg |
| 8.9 | 1 | 22.0 | 41.0 | g |
| 9.6 | 2 | 1.5 | 7.0 | 9.5 g |
| 9.0 | | 4.5 | 10.4 | 8.8 g |
| 9.5 | 3 | 45.5 | 30.0 | |
| 9.6 | 4 | 8.0 | 44.0 | g |
| 10.4 | | 38.4 | 17.5 | |
| 9.4 | | 40.4 | 55.8 | |
| 10.4 | | 46.4 | 22.1 | G |
| 9.1 | | 55.7 | 51.2 | |
| 10.3 | 5 | 5.9 | 31.2 | |
| 10.4 | | 32.0 | 0.0 | |
| 10.3 | | 36.4 | 9.4 | |
| 10.4 | | 44.4 | 39.0 | |
| 9.4 | | 50.4 | 18.9 | |
| 10.4 | | 56.4 | 27.5 | |
| 9.2 | 6 | 27.4 | 10.5 | |
| 10.4 | 7 | 17.9 | 50.5 | |
| 9.6 | | 32.2 | 2.1 | g |
| 10.0 | | 41.1 | 59.8 | |
| 10.0 | | 50.4 | 56.3 | |
| 10.2 | 8 | 10.4 | 37.1 | |
| 10.4 | | 19.4 | 13.3 | |
| 10.0 | | 31.4 | 59.8 | |
| 10.3 | | 49.9 | 49.3 | |
| 9.5 | 10 | 3.2 | 57.6 | |
| 9.6 | | 19.4 | 43.8 | |
| 10.0 | | 30.9 | 15.8 | |
| 9.1 | | 45.9 | 32.2 | 9.0 Gg |
| 7.6 | 11 | 1.9 | 36.2 | 6.8 GScg |
| 7.4 | | 10.9 | 29.4 | 7.8 Gg |
| 9.2 | | 22.4 | 6.9 | g |
| 10.4 | | 27.4 | 33.6 | |
| 9.0 | | 35.9 | 1.2 | g |
| 9.1 | 12 | 12.6 | 57.2 | 9.5 g |
| 10.2 | | 39.4 | 26.1 | |
| 10.4 | | 46.4 | 57.3 | |
| 10.3 | 13 | 0.9 | 32.8 | |
| 8.4 | | 4.4 | 14.2 | g |
| 9.6 | | 9.4 | 39.8 | |
| 10.4 | | 13.4 | 3.4 | |
| 8.8 | | 15.9 | 56.0 | 9.0 g |
| 10.0 | | 24.2 | 47.6 | |
| 9.8 | | 33.9 | 7.8 | |
| 10.3 | | 37.9 | 51.8 | |
| 10.3 | | 54.4 | 50.6 | |
| 10.2 | 14 | 13.4 | 27.0 | |
| 10.0 | | 14.4 | 41.4 | |
| 10.0 | | 29.4 | 28.2 | |
| 10.4 | | 40.9 | 29.5 | |
| 9.8 | | 58.9 | 56.5 | g |
| 9.2 | 15 | 17.4 | 8.0 | g |

| h | m | 25 prec. α + s | δ − ′ |
|---|---|---|---|
| 17 | 40 | 161 | 0.7 |
| | 50 | 162 | 0.4 |
| 18 | 0 | 162 | 0.0 |
| | | | + |
| | 10 | 162 | 0.4 |
| | 20 | 161 | 0.7 |
| | 30 | 161 | 1.1 |
| | 40 | 160 | 1.5 |
| | 50 | 160 | 1.8 |
| 19 | 0 | 159 | 2.2 |
| | 10 | 158 | 2.5 |
| | 20 | 157 | 2.9 |



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25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 19 | 10 | 158 | 2·5 |
| | 20 | 157 | 2·9 |
| | 30 | 155 | 3·2 |
| | 40 | 154 | 3·5 |
| | 50 | 152 | 3·9 |
| 20 | 0 | 150 | 4·2 |
| | 10 | 148 | 4·5 |
| | 20 | 146 | 4·8 |
| | 30 | 144 | 5·1 |
| | 40 | 142 | 5·4 |
| | 50 | 139 | 5·6 |
| 21 | 0 | 137 | 5·9 |
| | 10 | 134 | 6·2 |
| | 20 | 131 | 6·4 |
| | 30 | 128 | 6·6 |
| | 40 | 125 | 6·8 |
| | 50 | 122 | 7·0 |
| 22 | 0 | 119 | 7·2 |
| | 10 | 116 | 7·4 |

### 3241—3300.

| mag. | $19^{h}$ m | s | − 68° ′ | |
|---|---|---|---|---|
| 10·4 | 15 | 18·4 | 20·9 | |
| 9·2 | | 36·4 | 25·5 | |
| 10·0 | | 49·4 | 38·8 | |
| 8·5 | | 59·4 | 52·4 | 9·0 g |
| 9·5 | 16 | 9·4 | 19·6 | |
| 9·4 | | 14·4 | 48·0 | 9·0 g |
| 9·9 | | 36·9 | 48·1 | |
| 10·4 | | 38·4 | 26·6 | |
| 10·0 | 17 | 32·9 | 14·5 | |
| 9·9 | 18 | 9·4 | 32·4 | |
| 7·8 | | 9·4 | 41·1 | 6·5 GScg |
| 10·2 | | 12·4 | 46·2 | |
| 9·7 | | 41·9 | 8·3 | g |
| 9·4 | | 46·4 | 56·6 | |
| 9·8 | 19 | 39·4 | 29·4 | |
| 10·0 | | 45·9 | 53·0 | |
| 9·8 | | 57·1 | 58·3 | g |
| 10·4 | | 58·9 | 16·8 | |
| 10·0 | 20 | 54·4 | 44·7 | |
| 8·2 | 21 | 13·9 | 12·2 | 8·0 Gg |
| 8·4 | | 23·4 | 42·6 | 8·5 Gg |
| 10·4 | | 53·4 | 29·2 | |
| 10·2 | 22 | 17·4 | 54·4 | |
| 8·1 | 23 | 33·9 | 35·4 | 9·0 g |
| 9·1 | | 57·4 | 53·6 | g |
| 9·7 | | 59·9 | 48·0 | |
| 10·0 | 24 | 13·9 | 16·2 | |
| 10·2 | 25 | 42·4 | 44·3 | |
| 9·4 | | 56·4 | 45·0 | |
| 10·4 | 26 | 41·9 | 13·8 | |
| 10·2 | | 44·9 | 3·1 | |
| 9·9 | | 46·4 | 15·6 | |
| 9·6 | 27 | 29·4 | 55·1 | 9·0 g |
| 10·4 | | 37·9 | 24·5 | |
| 10·4 | 28 | 47·4 | 37·3 | |
| 10·3 | 29 | 6·4 | 30·5 | |
| 10·3 | | 9·4 | 17·7 | |
| 9·7 | | 14·4 | 54·4 | |
| 10·4 | | 30·4 | 34·1 | |
| 8·8 | | 37·9 | 27·6 | 9·0 g |
| 8·6 | | 40·4 | 35·5 | 9·0 g |
| 10·3 | | 55·9 | 22·3 | |
| 10·0 | 30 | 18·4 | 34·7 | |
| 10·0 | | 22·9 | 32·3 | |
| 10·3 | | 26·9 | 18·7 | |
| 8·8 | | 30·8 | 2·7 | 8·0 g |
| 10·0 | | 35·9 | 47·1 | |
| 10·4 | | 38·4 | 52·4 | |
| 9·7 | | 44·9 | 5·5 | 9·5 g |
| 10·4 | | 45·4 | 48·1 | |
| 9·1 | 31 | 19·5 | 1·1 | 8·5 g |
| 10·4 | | 27·4 | 14·1 | |
| 9·5 | 32 | 0·6 | 58·0 | g |
| 9·6 | | 22·9 | 40·9 | g |
| 10·4 | | 34·4 | 7·5 | |
| 9·2 | | 38·9 | 26·5 | |
| 10·0 | | 47·4 | 27·9 | |
| 10·2 | 33 | 21·9 | 30·8 | |
| 10·2 | | 23·9 | 59·5 | |
| 10·3 | | 38·4 | 5·5 | |

### 3301—3360.

| mag. | $19^{h}$ m | s | − 68° ′ | |
|---|---|---|---|---|
| 9·7 | 33 | 52·4 | 44·8 | |
| 10·4 | | 58·9 | 39·1 | |
| 8·6 | 34 | 13·4 | 56·3 | 8·5 g |
| 9·6 | | 19·9 | 49·0 | |
| 8·8 | | 48·4 | 22·5 | 9·0 g |
| 10·4 | | 58·9 | 30·2 | |
| 9·6 | 35 | 8·9 | 52·9 | 9·0 g |
| 9·8 | | 31·4 | 16·0 | |
| 10·4 | | 38·9 | 15·1 | |
| 10·4 | 36 | 41·4 | 19·2 | |
| 9·9 | 37 | 15·9 | 6·6 | |
| 9·4 | | 30·9 | 34·2 | |
| 9·2 | 38 | 31·9 | 17·7 | g |
| 9·8 | | 32·4 | 0·2 | |
| 9·1 | 39 | 24·4 | 26·8 | 8·5 g |
| 10·3 | | 45·4 | 5·4 | |
| 9·5 | 40 | 9·9 | 42·3 | |
| 10·0 | | 26·4 | 39·3 | |
| 8·8 | | 31·4 | 28·5 | 8·0 g |
| 9·2 | 41 | 18·6 | 56·9 | g |
| 8·5 | | 36·4 | 28·5 | 8·0 Gg |
| 10·4 | 42 | 0·9 | 13·1 | |
| 7·7 | | 1·4 | 34·5 | 8·0 Gg |
| 10·0 | | 10·4 | 26·1 | |
| 10·4 | | 33·4 | 42·3 | |
| 9·8 | | 57·4 | 54·5 | |
| 10·0 | | 57·9 | 25·3 | |
| 9·5 | 43 | 11·4 | 23·4 | |
| 9·7 | | 13·9 | 5·4 | |
| 10·3 | | 13·9 | 26·0 | |
| 10·2 | | 57·4 | 37·1 | |
| 9·0 | 44 | 0·4 | 52·5 | g |
| 9·5 | | 38·4 | 15·5 | g |
| 9·1 | | 39·9 | 37·1 | g |
| 8·2 | 45 | 12·4 | 9·1 | g |
| 9·9 | | 33·4 | 11·1 | |
| 10·4 | 46 | 9·4 | 36·3 | |
| 9·4 | 48 | 10·4 | 41·7 | g |
| 9·6 | | 56·4 | 34·3 | g |
| 9·0 | | 59·4 | 31·1 | g |
| 10·2 | 49 | 27·4 | 46·7 | |
| 9·9 | 50 | 9·4 | 36·9 | g |
| 10·2 | | 24·9 | 27·1 | |
| 10·4 | | 38·9 | 46·9 | |
| 10·0 | | 48·9 | 15·5 | |
| 10·4 | 51 | 16·8 | 37·3 | |
| 9·9 | | 59·4 | 34·5 | |
| 9·6 | 52 | 5·7 | 46·4 | |
| 9·8 | | 24·9 | 55·6 | |
| 9·2 | 53 | 2·4 | 47·3 | g |
| 8·8 | 54 | 0·6 | 46·5 | g |
| 10·3 | | 53·4 | 57·5 | |
| 9·8 | 55 | 36·9 | 25·1 | |
| 10·4 | | 43·8 | 9·8 | |
| 8·8 | | 45·0 | 6·1 | 8·5 g |
| 10·0 | | 45·4 | 33·1 | |
| 8·8 | 58 | 29·5 | 6·5 | 9·0 g |
| 7·9 | | 51·5 | 59·3 | 9·0 g |
| 9·6 | 59 | 31·5 | 50·0 | |
| 9·8 | | 43·0 | 43·1 | |

### 3361—3420.

| mag. | $20^{h}$–$21^{h}$ m | s | − 68° ′ | |
|---|---|---|---|---|
| 9·6 | 1 | 8·5 | 49·4 | g |
| 9·0 | 3 | 4·0 | 48·2 | 8·5 Gg |
| 9·5 | 4 | 53·5 | 19·1 | g |
| 8·6 | 5 | 42·0 | 52·3 | g |
| 9·8 | 9 | 30·0 | 7·4 | |
| 9·8 | | 58·0 | 39·8 | g |
| 9·8 | 11 | 30·5 | 59·1 | |
| 9·8 | 14 | 51·0 | 17·0 | |
| 7·5 | 16 | 41·0 | 9·8 | 7·5 GSg |
| 9·6 | 17 | 39·5 | 4·1 | g |
| 9·0 | 18 | 36·0 | 25·8 | 8·5 g |
| 9·0 | 20 | 40·5 | 26·9 | g |
| 9·0 | | 43·5 | 58·6 | 9·5 g |
| 7·4 | | 52·0 | 47·3 | 8·0 Gg |
| 9·8 | 21 | 8·5 | 26·3 | g |
| 9·8 | 22 | 40·0 | 56·8 | g |
| 9·8 | 26 | 20·5 | 41·0 | g |
| 9·0 | 28 | 11·5 | 45·0 | g |
| 8·4 | 29 | 55·0 | 34·3 | 9·0 g |
| 9·6 | 30 | 43·5 | 46·4 | |
| 9·6 | 31 | 0·5 | 23·1 | g |
| 9·8 | | 0·5 | 1·3 | g |
| 9·8 | 32 | 33·6 | 2·3 | g |
| 10·0 | | 34·5 | 28·1 | |
| 8·5 | 35 | 33·7 | 15·8 | g |
| 9·2 | 37 | 48·0 | 47·7 | g |
| 8·9 | 38 | 20·2 | 9·2 | 9·0 Gg |
| 8·6 | 39 | 15·0 | 0·5 | 8·5 g |
| 8·2 | 40 | 55·5 | 3·7 | 8·5 Gg |
| 10·0 | 41 | 50·0 | 47·1 | |
| 10·0 | 43 | 14·5 | 35·2 | g |
| 8·2 | 45 | 43·0 | 10·3 | 8·0 g |
| 7·2 | 46 | 9·0 | 54·0 | 7·5 GSg |
| 9·2 | | 22·5 | 37·3 | g |
| 10·0 | 47 | 37·5 | 24·1 | |
| 9·8 | 48 | 12·5 | 14·4 | |
| 8·8 | 49 | 18·5 | 45·3 | 9·0 g |
| 6·0 | | 59·5 | 41·5 | 6·5 GScg |
| 7·8 | 52 | 21·5 | 33·5 | 8·0 Gg |
| 8·9 | | 49·0 | 42·1 | 9·0 g |
| 8·5 | 53 | 1·5 | 3·1 | 9·5 g |
| 9·2 | | 7·5 | 12·9 | g |
| 8·9 | | 47·5 | 6·1 | g |
| 10·0 | 54 | 19·0 | 38·2 | |
| 9·2 | | 44·5 | 6·6 | g |
| 8·4 | | 53·5 | 25·7 | 9·0 g |
| 9·8 | | 59·0 | 19·0 | g |
| 8·6 | 56 | 24·5 | 24·7 | 9·0 g |
| 9·0 | 0 | 20·0 | 57·9 | g |
| 10·0 | 3 | 18·0 | 47·1 | |
| 10·0 | 4 | 43·0 | 10·7 | g |
| 10·0 | 9 | 15·0 | 13·7 | g |
| 10·0 | | 36·0 | 3·2 | g |
| 9·2 | | 54·5 | 1·7 | g |
| 10·0 | 12 | 27·0 | 30·3 | g |
| 10·0 | | 36·0 | 2·1 | |
| 9·6 | | 40·0 | 21·1 | g |
| 7·2 | 13 | 40·0 | 45·9 | 7·5 GSg |
| 8·5 | 14 | 14·0 | 9·3 | g |
| 10·0 | | 50·5 | 11·6 | g |

### 3421—3480.

| mag. | $21^{h}$–$22^{h}$ m | s | − 68° ′ | |
|---|---|---|---|---|
| 8·2 | 15 | 21·5 | 38·1 | 9·0 g |
| 10·0 | 16 | 13·0 | 14·6 | 9·5 g |
| 8·9 | | 17·0 | 23·6 | 9·5 g |
| 10·0 | 18 | 54·5 | 1·4 | |
| 9·2 | 19 | 53·3 | 13·7 | g |
| 10·0 | 20 | 37·3 | 3·1 | |
| 9·2 | 21 | 29·3 | 33·2 | g |
| 8·6 | 22 | 30·3 | 13·6 | g |
| 9·3 | | 32·5 | 12·7 | 9·0 g |
| 9·8 | 25 | 1·0 | 36·3 | |
| 9·5 | | 54·9 | 1·7 | 9·5 g |
| 9·0 | 26 | 47·8 | 44·1 | 9·0 g |
| 10·0 | 27 | 36·5 | 21·9 | g |
| 9·8 | | 53·5 | 36·2 | g |
| 9·6 | 29 | 24·0 | 18·9 | 10·0 Gg |
| 9·3 | | 24·5 | 16·7 | 10·0 Gg |
| 9·8 | 30 | 0·5 | 7·4 | |
| 9·6 | | 24·5 | 6·8 | g |
| 10·0 | 32 | 37·5 | 39·1 | |
| 8·6 | 33 | 5·0 | 38·0 | Gg |
| 10·0 | | 24·0 | 44·8 | |
| 9·8 | 35 | 34·5 | 34·7 | |
| 9·8 | | 45·5 | 35·1 | |
| 7·5 | 36 | 20·0 | 10·2 | Gg |
| 9·4 | 37 | 31·0 | 2·3 | g |
| 9·8 | 40 | 3·5 | 16·3 | 9·0 Gg |
| 8·8 | | 22·5 | 39·8 | 8·5 g |
| 9·4 | | 41·5 | 44·0 | g |
| 9·0 | 44 | 5·5 | 33·4 | g |
| 9·0 | 45 | 2·5 | 26·8 | 8·5 g |
| 9·8 | 46 | 54·5 | 43·7 | g |
| 9·1 | 47 | 42·5 | 48·2 | 9·0 g |
| 9·4 | 48 | 20·5 | 51·2 | 9·0 g |
| 9·3 | 50 | 4·5 | 29·6 | g |
| 9·8 | 51 | 14·5 | 20·5 | g |
| 8·6 | 52 | 57·0 | 58·5 | 9·0 Gg |
| 10·0 | 53 | 34·5 | 39·5 | 9·5 g |
| 10·0 | 56 | 34·0 | 0·9 | |
| 10·0 | 57 | 23·5 | 50·1 | |
| 7·6 | | 44·5 | 37·6 | Gg |
| 10·0 | | 47·5 | 16·5 | g |
| 8·8 | 58 | 33·5 | 23·1 | g |
| 8·6 | 59 | 42·0 | 31·6 | 9·0 g |
| 10·0 | 0 | 7·0 | 29·8 | |
| 7·9 | | 49·0 | 56·4 | 8·0 GSg |
| 9·3 | 1 | 12·0 | 54·7 | 10·0 g |
| 9·3 | 2 | 11·0 | 33·1 | 9·2 g |
| 10·0 | | 33·5 | 38·9 | |
| 9·6 | | 51·5 | 20·8 | 9·5 g |
| 8·3 | 4 | 1·7 | 44·5 | 7·0 Gg |
| 10·4 | 5 | 14·3 | 18·1 | |
| 10·4 | | 55·3 | 44·5 | |
| 10·4 | 6 | 20·3 | 47·3 | |
| 9·5 | | 42·6 | 47·6 | |
| 8·5 | | 56·3 | 58·0 | 9·0 g |
| 10·2 | 7 | 14·3 | 5·9 | |
| 9·6 | | 26·4 | 36·5 | g |
| 10·0 | | 56·4 | 58·8 | |
| 9·6 | 8 | 3·3 | 38·7 | |
| 9·4 | | 18·1 | 46·3 | 9·5 g |

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### 3481—3510.

| mag. | 22h. m s | −68° ′ | |
|---|---|---|---|
| 7·6 | 9 13·9 | 55·9 | 7·5 GSg |
| 10·0 | 24·3 | 35·9 | |
| 9·7 | 10 35·7 | 42·6 | |
| 8·9 | 11 26·8 | 57·3 | 9·0 g |
| 10·4 | 12 40·8 | 27·3 | |
| 10·2 | 13 14·3 | 38·5 | |
| 10·4 | 37·8 | 18·3 | |
| 10·4 | 14 29·8 | 35·5 | |
| 9·8 | 16 11·3 | 54·9 | |
| 10·0 | 17 29·8 | 32·6 | |
| 10·4 | 31·0 | 24·1 | |
| 10·4 | 19 12·8 | 26·8 | |
| 5·9 | 24·3 | 7·4 | 6·0 GSg |
| 9·5 | 53·3 | 8·5 | 10·0 g |
| 9·2 | 54·3 | 42·0 | 9·5 g |
| 9·3 | 20 37·8 | 46·8 | g |
| 9·7 | 52·8 | 29·3 | g |
| 9·3 | 59·3 | 14·8 | g |
| 10·4 | 21 9·8 | 55·6 | |
| 10·4 | 18·0 | 31·0 | |
| 9·3 | 22 16·5 | 6·0 | g |
| 10·0 | 45·5 | 52·0 | |
| 10·0 | 55·0 | 45·3 | |
| 10·4 | 23 22·0 | 1·7 | |
| 9·8 | 24 10·5 | 33·2 | g |
| 10·2 | 28·5 | 49·2 | |
| 8·9 | 25 3·5 | 50·8 | 9·5 g |
| 9·4 | 26 44·0 | 33·9 | g |
| 9·8 | 56·0 | 50·3 | 10·0 g |
| 9·6 | 28 45·5 | 42·1 | 9·5 g |

### 3511—3540.

| mag. | 22h. m s | −68° ′ | |
|---|---|---|---|
| 9·7 | 28 51·5 | 53·2 | |
| 9·6 | 29 45·5 | 24·8 | |
| 9·7 | 48·0 | 45·4 | |
| 10·0 | 52·5 | 42·6 | |
| 10·4 | 54·5 | 0·6 | |
| 7·6 | 30 31·0 | 42·4 | 7·2 Gg |
| 10·0 | 31 45·0 | 49·9 | |
| 7·0 | 57·0 | 20·2 | 7·0 Gcgr |
| 8·2 | 33 26·0 | 29·0 | g |
| 9·7 | 35 16·5 | 28·4 | |
| 10·4 | 21·5 | 14·4 | |
| 10·0 | 44·4 | 59·7 | |
| 10·4 | 48·0 | 8·6 | |
| 9·5 | 53·0 | 40·1 | |
| 9·5 | 36 1·0 | 17·0 | g |
| 10·0 | 12·0 | 17·7 | |
| 9·3 | 53·5 | 13·4 | g |
| 7·9 | 56·5 | 54·7 | 8·5 GSg |
| 10·0 | 37 2·0 | 49·3 | |
| 9·5 | 33·5 | 21·4 | g |
| 8·7 | 39 39·0 | 55·7 | g |
| 9·7 | 41·0 | 51·4 | g |
| 9·8 | 45·0 | 5·1 | g |
| 10·0 | 40 53·2 | 25·0 | |
| 10·4 | 41 39·2 | 34·8 | |
| 10·4 | 50·5 | 26·6 | |
| 8·9 | 42 22·0 | 3·4 | 9·5 g |
| 10·0 | 27·2 | 10·5 | |
| 9·5 | 43 43·0 | 16·6 | g |
| 10·4 | 44 31·2 | 55·0 | |

### 3541—3570.

| mag. | 22h.—23h. m s | −68° ′ | |
|---|---|---|---|
| 7·4 | 46 11·5 | 16·4 | 7·5 Gg |
| 9·2 | 47 6·5 | 1·8 | g |
| 10·0 | 45·5 | 47·1 | g |
| 9·8 | 49 31·5 | 20·1 | |
| 9·4 | 50 34·0 | 4·0 | g |
| 8·9 | 39·2 | 43·1 | g |
| 8·4 | 45·3 | 12·7 | g |
| 9·0 | 46·2 | 52·6 | 8·5 g |
| 10·4 | 48·5 | 53·7 | |
| 10·2 | 51 22·2 | 48·7 | |
| 9·7 | 41·5 | 54·5 | g |
| 10·2 | 52 7·2 | 38·7 | |
| 9·0 | 12·0 | 10·9 | g |
| 10·2 | 55 28·0 | 27·2 | g |
| 8·9 | 56 38·0 | 34·5 | g |
| 8·9 | 57 1·0 | 7·3 | g |
| 9·0 | 58 0·0 | 43·0 | g |
| 9·9 | 59 29·0 | 18·3 | g |
| 9·9 | 0 24·0 | 29·9 | g |
| 6·4 | 1 43·0 | 33·1 | 6·5 GScg |
| 8·8 | 46·0 | 24·1 | 8·0 g |
| 9·9 | 3 18·0 | 50·9 | g |
| 8·4 | 5 55·0 | 58·2 | 8·0 Gg |
| 9·9 | 6 26·5 | 26·0 | Gg |
| 9·5 | 7 41·0 | 12·4 | g |
| 9·8 | 42·0 | 3·6 | g |
| 7·2 | 10 34·0 | 9·2 | 6·5 GScg |
| 7·9 | 12 24·5 | 0·6 | 8·5 g |
| 9·9 | 16 46·0 | 20·1 | g |
| 8·8 | 18 50·0 | 43·1 | 9·0 g |

### 3571—3599.

| mag. | 23h. m s | −68° ′ | |
|---|---|---|---|
| 9·2 | 19 12·0 | 54·0 | g |
| 9·6 | 24 28·0 | 36·6 | g |
| 9·6 | 27 5·0 | 1·8 | 9·5 g |
| 9·9 | 30 54·5 | 42·2 | g |
| 9·9 | 31 4·5 | 45·3 | g |
| 9·0 | 52·0 | 36·2 | 9·5 g |
| 7·9 | 34 57·5 | 27·8 | 8·0 g |
| 9·4 | 36 25·3 | 20·2 | g |
| 8·6 | 39·8 | 33·4 | g |
| 9·2 | 39 39·7 | 44·9 | 8·5 g |
| 9·0 | 40 32·7 | 53·7 | g |
| 8·1 | 35·2 | 24·9 | 8·5 g |
| 8·8 | 41 43·0 | 2·3 | 9·0 g |
| 8·8 | 42 43·0 | 38·0 | 9·0 g |
| 8·1 | 45 52·5 | 43·0 | 8·0 g |
| 9·4 | 48 5·0 | 10·9 | g |
| 9·4 | 49 13·0 | 45·0 | g |
| 9·3 | 23·5 | 36·9 | 9·0 g |
| 8·5 | 50 23·5 | 17·5 | 8·5 g |
| 8·9 | 51 21·0 | 46·1 | 9·5 g |
| 8·8 | 55 20·0 | 47·9 | 9·0 g |
| 9·4 | 21·5 | 4·0 | |
| 9·4 | 35·3 | 34·2 | g |
| 9·4 | 38·3 | 58·1 | 9·0 g |
| 9·4 | 56 12·0 | 19·9 | g |
| 9·4 | 58 5·5 | 21·7 | |
| 9·0 | 59 0·0 | 30·7 | 8·5 g |
| 7·9 | 6·5 | 39·2 | 8·0 Gg |
| 9·3 | 51·0 | 51·2 | g |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 22 | 0 | 119 | 7·2 |
| | 10 | 116 | 7·4 |
| | 20 | 113 | 7·6 |
| | 30 | 109 | 7·7 |
| | 40 | 106 | 7·9 |
| | 50 | 102 | 8·0 |
| 23 | 0 | 99 | 8·1 |
| | 10 | 95 | 8·2 |
| | 20 | 92 | 8·2 |
| | 30 | 88 | 8·3 |
| | 40 | 84 | 8·3 |
| | 50 | 81 | 8·3 |
| 0 | 0 | 77 | 8·4 |

## ZONE—69°

### 1—20.

| mag. | 0h. m s | −69° ′ | |
|---|---|---|---|
| 9·3 | 4 38·5 | 14·5 | g |
| 7·6 | 8 15·0 | 36·8 | 8·5 g |
| 8·4 | 9 2·5 | 13·6 | 9·0 g |
| 9·3 | 11·5 | 32·5 | 8·5 Gg |
| 8·6 | 12 8·0 | 45·2 | 8·5 g |
| 8·7 | 53·0 | 15·8 | g |
| 8·4 | 13 43·0 | 47·8 | 9·0 g |
| 9·3 | 14 24·7 | 35·8 | 9·5 g |
| 9·4 | 15 26·0 | 14·4 | g |
| 9·2 | 17 6·3 | 21·2 | 9·5 g |
| 9·6 | 21 37·0 | 1·3 | g |
| 9·0 | 25 36·2 | 43·7 | g |
| 9·4 | 26 10·5 | 38·1 | g |
| 8·9 | 13·5 | 3·0 | g |
| 8·1 | 29 30·0 | 17·1 | 9·0 g |
| 9·0 | 58·0 | 2·0 | 9·0 g |
| 9·0 | 32 39·0 | 5·4 | 9·0 g |
| 9·6 | 56·0 | 40·3 | g |
| 8·9 | 34 11·5 | 25·6 | 9·5 Gg |
| 9·3 | 24·5 | 43·8 | g |

### 21—40.

| mag. | 0h.—1h. m s | −69° ′ | |
|---|---|---|---|
| 8·9 | 35 32·5 | 47·0 | g |
| 9·2 | 36 4·0 | 8·8 | 9·5 g |
| 9·4 | 38 10·5 | 19·4 | 9·5 g |
| 8·9 | 39 7·5 | 24·9 | 9·5 g |
| 8·9 | 41 31·5 | 32·3 | g |
| 8·9 | 44 12·5 | 48·3 | 8·5 g |
| 8·3 | 49 32·0 | 45·9 | 9·0 g |
| 8·3 | 50 37·5 | 18·2 | 9·0 GSg |
| 9·6 | 52 2·0 | 48·5 | g |
| 9·6 | 55 13·5 | 48·9 | g |
| 9·2 | 56 16·5 | 12·7 | 9·5 g |
| 9·4 | 47·5 | 14·7 | 9·0 g |
| 9·6 | 59 24·0 | 50·3 | g |
| §9·6 | 2 50·0 | 14·0 | 9·0 g |
| 9·7§ | 3 35·0 | 9·0 | |
| 9·5 | 4 17·8 | 23·0 | |
| 9·2 | 57·8 | 31·2 | 10·0 Gg |
| 9·2 | 59·6 | 49·2 | g |
| 10·3 | 5 11·8 | 42·2 | |
| 10·3 | 12·8 | 45·7 | |

### 41—60.

| mag. | 1h. m s | −69° ′ | |
|---|---|---|---|
| 9·2 | 5 13·1 | 27·4 | 9·5 g |
| 10·3 | 8 8·8 | 47·2 | G |
| 9·7 | 10 16·8 | 17·8 | |
| 7·7 | 45·4 | 28·9 | 7·5 GSg |
| 5·2 | 11 31·3 | 32·4 | 5·0 GScggr |
| 10·3 | 45·3 | 24·3 | |
| 9·4 | 55·8 | 8·4 | g |
| 10·3 | 12 28·3 | 45·9 | |
| 10·2 | 13 28·3 | 19·0 | |
| 10·3 | 14 0·8 | 41·0 | |
| 10·3 | 10·8 | 48·9 | |
| 9·0 | 14·3 | 11·0 | g |
| 7·2 | 15 47·3 | 33·5 | 7·5 GSg |
| 9·6 | 16 41·8 | 9·4 | |
| 8·0 | 18 55·3 | 44·1 | 8·0 GSg |
| 9·2 | 19 37·8 | 43·7 | g |
| 10·3 | 20 31·8 | 43·1 | g |
| 10·3 | 48·3 | 25·1 | |
| 10·3 | 22 34·3 | 27·1 | |
| 10·2 | 24 24·3 | 27·3 | |

### 61—80.

| mag. | 1h. m s | −69° ′ | |
|---|---|---|---|
| 10·3 | 25 36·3 | 44·8 | |
| 9·8 | 48·8 | 17·2 | |
| 10·3 | 51·8 | 17·3 | |
| 9·0 | 27 58·3 | 55·5 | g |
| 9·4 | 29 1·3 | 0·7 | 9·0 g |
| 9·2 | 2·8 | 11·5 | g |
| 10·3 | 31·3 | 18·6 | |
| 9·8 | 30 23·3 | 55·7 | g |
| 9·4 | 29·8 | 40·4 | 9·0 g |
| 8·8 | 45·3 | 34·4 | 9·0 g |
| 10·2 | 31 6·3 | 32·4 | |
| 10·3 | 18·3 | 9·4 | |
| 9·2 | 24·3 | 47·5 | Gg |
| 10·2 | 28·3 | 47·8 | Gg |
| 9·4 | 36 33·6 | 47·7 | g |
| 10·3 | 39 15·1 | 22·6 | |
| 8·6 | 41 41·1 | 43·0 | 9·0 g |
| 9·8 | 42 19·6 | 45·2 | g |
| 10·3 | 52·1 | 15·2 | |
| 10·3 | 44 9·6 | 9·6 | |

25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 0 | 0 | 77 | 8·4 |
| | 10 | 73 | 8·3 |
| | 20 | 69 | 8·3 |
| | 30 | 65 | 8·3 |
| | 40 | 61 | 8·2 |
| | 50 | 57 | 8·2 |
| 1 | 0 | 54 | 8·1 |
| | 10 | 50 | 8·0 |
| | 20 | 46 | 7·9 |
| | 30 | 43 | 7·7 |
| | 40 | 39 | 7·6 |
| | 50 | 36 | 7·4 |

§ From the rejected plates. Magnitude reduced to scale of plates 531.



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25 prec.

| h | m | α + (s) | δ + (′) |
|---|---|---|---|
| 1 | 40 | 39 | 7·6 |
| | 50 | 36 | 7·4 |
| 2 | 0 | 32 | 7·2 |
| | 10 | 29 | 7·0 |
| | 20 | 26 | 6·8 |
| | 30 | 22 | 6·6 |
| | 40 | 19 | 6·4 |
| | 50 | 16 | 6·2 |
| 3 | 0 | 14 | 5·9 |
| | 10 | 11 | 5·6 |
| | 20 | 8 | 5·4 |
| | 30 | 6 | 5·1 |
| | 40 | 4 | 4·8 |
| | 50 | 1 | 4·5 |
| | | — | |
| 4 | 0 | 1 | 4·2 |
| | 10 | 2 | 3·9 |
| | 20 | 4 | 3·5 |
| | 30 | 6 | 3·2 |
| | 40 | 7 | 2·9 |
| | 50 | 8 | 2·5 |
| 5 | 0 | 10 | 2·2 |
| | 10 | 10 | 1·8 |

## 81—140.

| mag. | 1h.–2h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·6 | 46 | 37·1 | 23·9 | g |
| 10·8 | 49 | 49·0 | 26·2 | |
| 9·6 | 50 | 6·0 | 52·0 | g |
| 9·9 | | 58·0 | 37·4 | |
| 9·2 | | 58·8 | 58·0 | g |
| 10·6 | 52 | 29·9 | 2·4 | |
| 7·6 | | 55·0 | 0·4 | 7·3 GSg |
| 10·8 | 55 | 4·0 | 53·8 | |
| 10·1 | | 14·5 | 45·6 | |
| 10·2 | | 23·3 | 3·2 | |
| 9·2 | 58 | 10·0 | 55·0 | 8·7 g |
| 10·6 | 59 | 43·0 | 47·6 | |
| 9·8 | 0 | 17·5 | 32·8 | |
| 10·1 | 1 | 53·5 | 45·4 | g |
| 9·5 | | 56·5 | 10·0 | 9·0 g |
| 10·8 | 2 | 22·0 | 0·6 | |
| 9·6 | 4 | 8·0 | 27·2 | g |
| 10·4 | | 38·5 | 8·0 | |
| 9·2 | 5 | 59·9 | 34·2 | 9·0 g |
| 10·8 | 6 | 33·4 | 10·9 | |
| 9·0 | 7 | 44·9 | 22·0 | 9·0 Gg |
| 10·6 | 10 | 6·4 | 46·6 | |
| 10·4 | 11 | 13·4 | 17·3 | g |
| 9·8 | | 49·4 | 5·7 | |
| 10·8 | 12 | 24·4 | 46·8 | g |
| 10·8 | 13 | 19·4 | 38·7 | |
| 9·2 | | 41·4 | 37·6 | g |
| 8·8 | | 56·9 | 20·4 | 8·8 Gg |
| 10·4 | 16 | 11·4 | 14·1 | |
| 10·1 | | 38·9 | 8·5 | |
| 10·1 | | 59·9 | 1·1 | |
| 10·8 | 18 | 12·9 | 13·4 | |
| 3·6 | 19 | 30·4 | 13·8 | 4·0GScgtrλ |
| 10·6 | 20 | 58·9 | 4·5 | |
| 9·6 | 21 | 22·4 | 36·0 | 8·5 g |
| 10·8 | | 36·4 | 23·5 | |
| 10·8 | 22 | 32·4 | 1·0 | |
| 10·1 | | 56·9 | 8·9 | g |
| 9·9 | 23 | 24·4 | 12·4 | |
| 9·9 | | 30·4 | 50·4 | g |
| 8·2 | 24 | 14·4 | 11·7 | 7·5 GSg |
| 9·0 | | 39·9 | 24·0 | 9·0 g |
| 9·8 | 25 | 23·9 | 30·7 | |
| 8·9 | 26 | 0·4 | 36·3 | 9·0 Gg |
| 10·1 | 27 | 2·4 | 31·5 | |
| 10·8 | | 29·9 | 7·7 | |
| 8·6 | | 50·4 | 9·7 | 7·5 GSg |
| 10·4 | 28 | 50·4 | 19·8 | |
| 10·8 | 29 | 0·4 | 45·1 | g |
| 9·0 | 31 | 40·9 | 44·8 | 9·0 g |
| 10·8 | 32 | 22·9 | 7·7 | |
| 9·9 | 33 | 49·4 | 3·6 | g |
| 10·8 | 35 | 47·9 | 15·3 | |
| 10·8 | 37 | 28·4 | 48·9 | g |
| 10·8 | 38 | 9·6 | 49·0 | g |
| 10·8 | | 49·4 | 16·3 | |
| 8·4 | | 58·2 | 37·1 | 8·5 Gg |
| 6·8 | 39 | 0·7 | 45·9 | 6·0 GScg |
| 10·6 | | 53·9 | 15·6 | |
| 8·1 | | 58·4 | 13·1 | g |

## 141—200.

| mag. | 2h.–3h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·1 | 41 | 20·9 | 33·5 | 9·0 g |
| 7·4 | | 49·7 | 41·4 | 7·0 GScg |
| 8·6 | | 52·9 | 40·7 | 9·5 g |
| 8·2 | | 57·7 | 54·6 | Gg |
| 10·2 | 42 | 46·0 | 33·3 | |
| 10·2 | 43 | 28·0 | 30·4 | |
| 8·3 | | 54·5 | 42·6 | 9·0 Gg |
| 10·2 | 44 | 29·0 | 54·3 | g |
| 8·8 | | 32·0 | 24·8 | 9·0 g |
| 9·0 | 45 | 17·0 | 36·3 | g |
| 10·2 | 46 | 10·0 | 25·8 | |
| 9·0 | | 58·0 | 21·3 | g |
| 9·8 | 47 | 39·5 | 46·3 | |
| 10·2 | | 46·5 | 41·8 | |
| 10·2 | 49 | 3·5 | 51·9 | |
| 9·8 | | 15·5 | 10·8 | |
| 8·8 | | 47·5 | 41·8 | 9·0 Gg |
| 9·8 | | 59·0 | 43·4 | |
| 9·8 | 52 | 20·0 | 4·7 | |
| 9·3 | 53 | 7·0 | 44·3 | g |
| 9·6 | 54 | 10·0 | 38·7 | |
| 7·7 | 55 | 34·5 | 23·2 | GSg |
| 9·6 | | 51·7 | 1·6 | g |
| 10·2 | 56 | 13·0 | 4·9 | |
| 10·2 | 57 | 30·5 | 18·8 | |
| 10·2 | 58 | 51·0 | 13·0 | |
| 10·2 | 0 | 37·5 | 25·6 | |
| 9·6 | 2 | 3·5 | 37·6 | g |
| 10·0 | 3 | 7·0 | 13·0 | |
| 9·8 | 5 | 29·0 | 46·7 | g |
| 10·2 | | 57·0 | 20·1 | g |
| 9·5 | 6 | 21·5 | 22·0 | g |
| 10·0 | | 38·0 | 38·4 | |
| 6·8 | | 51·0 | 44·5 | 6·5 GScg |
| 9·8 | 8 | 14·0 | 47·4 | g |
| 10·2 | 9 | 4·5 | 3·8 | |
| 10·2 | | 23·5 | 4·1 | |
| 10·2 | 10 | 11·0 | 45·0 | |
| 9·1 | | 11·5 | 31·8 | g |
| 9·0 | 12 | 16·5 | 28·6 | g |
| 9·8 | 13 | 2·0 | 48·1 | |
| 10·2 | 14 | 55·0 | 34·8 | |
| 9·8 | 16 | 1·5 | 18·5 | g |
| 10·0 | | 58·8 | 43·4 | g |
| 9·8 | 19 | 36·5 | 49·9 | g |
| 10·2 | 21 | 48·5 | 58·6 | |
| 9·6 | 22 | 0·5 | 45·1 | 8·5 Gg |
| 9·8 | | 23·5 | 52·0 | g |
| 8·6 | | 24·5 | 12·1 | g |
| 8·8 | | 45·5 | 0·5 | g |
| 9·0 | 24 | 33·5 | 8·8 | 9·5 g |
| 6·3 | 25 | 1·0 | 46·4 | 6·0 GScg |
| 9·1 | 27 | 56·5 | 56·8 | g |
| 9·8 | 28 | 17·5 | 33·1 | |
| 9·8 | 31 | 24·0 | 22·9 | |
| 9·9 | 32 | 33·0 | 38·3 | |
| 8·4 | 33 | 3·5 | 26·0 | 8·5 g |
| 9·6 | | 12·0 | 29·0 | |
| 8·8 | | 39·5 | 6·8 | 8·5 g |
| 9·3 | | 45·5 | 3·4 | g |

## 201—260.

| mag. | 3h.–4h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·2 | 34 | 8·5 | 40·9 | |
| 9·0 | 35 | 28·5 | 36·1 | g |
| 9·1 | 38 | 46·0 | 40·0 | |
| 9·1 | 39 | 29·5 | 22·7 | 8·5 Gg |
| 9·7 | 40 | 25·5 | 3·0 | |
| 9·6 | 41 | 13·5 | 40·0 | |
| 9·2 | | 51·0 | 16·3 | g |
| 9·6 | 42 | 34·5 | 16·4 | |
| 8·9 | 45 | 24·0 | 54·9 | |
| 8·8 | 46 | 32·5 | 49·8 | 8·5 g |
| 9·8 | 47 | 12·0 | 1·6 | |
| 9·9 | 48 | 21·0 | 5·2 | g |
| 9·9 | | 35·0 | 4·9 | g |
| 9·4 | | 54·0 | 43·1 | |
| 8·8 | 50 | 13·0 | 27·0 | 8·5 g |
| 9·0 | 52 | 10·5 | 40·2 | 8·5 g |
| 9·8 | | 23·5 | 17·6 | |
| 9·4 | | 38·5 | 47·4 | g |
| 9·7 | | 40·0 | 8·3 | |
| 9·7 | | 46·5 | 19·9 | |
| 9·6 | | 50·5 | 55·0 | g |
| 9·7 | 53 | 58·0 | 31·6 | |
| 9·3 | 54 | 15·0 | 46·0 | 9·0 g |
| 9·6 | | 52·5 | 7·6 | g |
| 9·6 | 56 | 8·0 | 54·0 | g |
| 9·6 | | 12·5 | 15·7 | |
| 9·7 | 57 | 22·0 | 47·0 | g |
| 9·6 | | 22·0 | 39·9 | |
| 8·4 | | 52·0 | 52·9 | 8·0 g |
| 9·9 | 59 | 29·0 | 34·3 | |
| 9·7 | 0 | 14·0 | 18·9 | |
| 9·7 | | 23·0 | 16·9 | |
| 9·7 | 1 | 55·5 | 20·0 | |
| 8·6 | 2 | 33·5 | 17·2 | 7·5 GSg |
| 9·8 | 5 | 14·8 | 26·8 | |
| 9·0 | | 42·8 | 44·0 | 9·0 g |
| 9·7 | | 55·0 | 1·0 | |
| 9·6 | 6 | 40·5 | 36·0 | g |
| 9·0 | | 45·0 | 35·4 | 9·0 g |
| 9·0 | 7 | 49·7 | 22·7 | 9·0 g |
| 9·7 | | 52·5 | 46·9 | |
| 8·7 | 8 | 28·0 | 1·6 | 8·0 Gg |
| 9·7 | 10 | 3·5 | 34·1 | |
| 9·7 | | 11·0 | 1·1 | |
| 9·4 | 11 | 0·2 | 0·1 | g |
| 9·7 | | 31·5 | 56·0 | |
| 9·7 | | 41·5 | 47·4 | |
| 9·4 | | 46·0 | 9·7 | |
| 9·6 | 12 | 10·5 | 49·0 | g |
| 9·7 | | 17·5 | 56·0 | |
| 9·7 | | 43·0 | 37·3 | |
| 8·9 | 13 | 28·5 | 26·0 | 8·5 Sg |
| 8·8 | 14 | 44·5 | 51·0 | 9·0 g |
| 8·9 | 15 | 5·0 | 2·6 | 9·5 g |
| 9·4 | | 21·5 | 50·6 | g |
| 9·2 | 16 | 32·5 | 5·5 | 8·5 Gg |
| 9·6 | | 58·5 | 17·9 | g |
| 9·6 | 17 | 16·5 | 26·0 | S |
| 9·3 | | 27·5 | 17·3 | g |
| 9·6 | | 32·5 | 13·0 | g |

## 261—320.

| mag. | 4h.–5h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·7 | 17 | 50·5 | 17·7 | |
| 9·2 | 18 | 27·5 | 37·6 | g |
| 8·9 | | 57·0 | 2·0 | g |
| 8·9 | 19 | 31·5 | 59·9 | g |
| 8·8 | 20 | 2·0 | 24·8 | GSg |
| 8·8 | | 21·5 | 41·4 | GSg |
| 9·6 | | 52·5 | 0·6 | g |
| 8·3 | 21 | 53·5 | 54·3 | 8·0 GSg |
| 9·4 | 22 | 21·5 | 52·3 | g |
| 9·6 | 23 | 53·5 | 39·7 | |
| 9·7 | | 58·5 | 9·2 | |
| 9·6 | 24 | 4·0 | 1·8 | |
| 8·6 | | 49·0 | 16·4 | GSg |
| 9·8 | 25 | 6·0 | 40·7 | |
| 8·6 | | 30·5 | 40·0 | 8·5 GSg |
| 9·6 | 29 | 0·5 | 31·3 | |
| 8·2 | | 37·5 | 52·9 | 8·5 GSg |
| 9·1 | 31 | 12·5 | 41·0 | g |
| 8·9 | 33 | 11·5 | 37·4 | g |
| 9·5 | | 48·5 | 34·6 | g |
| 9·6 | | 53·0 | 57·9 | |
| 8·8 | 35 | 19·5 | 20·0 | Gg |
| 9·6 | 36 | 12·5 | 18·0 | |
| 7·6 | 38 | 35·0 | 3·3 | 8·2 GSg |
| 9·5 | 39 | 22·0 | 59·9 | g |
| 8·9 | | 25·5 | 41·6 | 8·5 Gg |
| 9·7 | 40 | 53·0 | 24·0 | |
| 9·6 | 42 | 38·5 | 31·8 | |
| 8·8 | 43 | 7·5 | 18·4 | |
| 9·6 | 49 | 56·0 | 40·0 | |
| 9·7 | | 59·5 | 24·1 | |
| 9·4 | 50 | 11·5 | 55·0 | |
| 9·5 | | 52·5 | 53·0 | g |
| 9·7 | 51 | 11·0 | 44·0 | |
| 9·7 | | 36·0 | 38·1 | |
| 9·6 | | 39·0 | 38·1 | |
| 9·6 | | 47·0 | 46·9 | |
| 9·6 | 52 | 5·5 | 24·0 | |
| 9·4 | | 42·5 | 37·6 | |
| 8·6 | 53 | 8·0 | 36·3 | 9·0 Gg |
| 9·5 | | 14·2 | 0·3 | g |
| 9·6 | 54 | 44·0 | 23·7 | |
| 9·6 | | 55·0 | 24·3 | |
| 9·6 | 55 | 3·0 | 40·9 | |
| 9·2 | | 10·5 | 41·1 | g |
| 9·6 | | 57·0 | 37·3 | |
| 9·6 | 56 | 21·5 | 38·3 | |
| 9·4 | 57 | 7·0 | 1·0 | g |
| 9·5 | | 13·0 | 35·2 | |
| 9·5 | | 59·0 | 2·0 | g |
| 9·6 | 58 | 12·5 | 50·0 | |
| 9·5 | | 19·5 | 11·3 | g |
| 9·4 | | 30·0 | 51·0 | |
| neb. | | 38·5 | 34·7 | |
| 9·2 | 59 | 4·5 | 15·4 | g |
| 9·6 | | 59·5 | 39·9 | |
| 9·6 | 0 | 3·5 | 46·7 | |
| 9·6 | | 24·0 | 28·3 | |
| 9·5 | | 33·5 | 4·3 | g |
| 8·5 | 1 | 14·0 | 31·6 | 9·5 GSg |



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### 321—380.

| | mag. | $5^h$ m s | −69° ′ | |
|---|---|---|---|---|
| | 8·5 | 2 24·5 | 40·1 | 8·5 GSg |
| | 9·6 | 25·5 | 9·8 | g |
| | 9·6 | 3 9·5 | 23·3 | |
| | 9·6 | 12·5 | 30·1 | |
| | 9·6 | 30·0 | 30·5 | |
| | 9·6 | 4 52·5 | 54·8 | |
| | 8·8 | 5 31·5 | 3·9 | g |
| | 9·2 | 38·0 | 20·0 | g |
| | 8·8 | 49·0 | 52·1 | 9·5 g |
| | neb. | 56·5 | 34·1 | |
| | neb. | 7 50·5 | 8·0 | |
| | neb. | 10 0·0 | 0·1 | |
| | 9·7 | 6·5 | 45·2 | |
| | 8·7 | 13·0 | 18·6 | g |
| | neb. | 16·0 | 16·7 | |
| | 8·6 | 24·0 | 52·1 | 9·0 GSg |
| | 9·1 | 11 20·5 | 28·1 | 9·0 g |
| | 9·6 | 48·0 | 53·8 | |
| | 9·6 | 12 20·0 | 51·3 | |
| | 8·8 | 23·5 | 41·4 | 8·5 GSg |
| | 9·4 | 14 27·0 | 40·7 | |
| | 9·6 | 28·5 | 26·2 | |
| | 9·6 | 29·0 | 8·7 | |
| | 9·4 | 33·5 | 28·2 | |
| | 9·6 | 15 22·0 | 22·1 | |
| | 9·4 | 46·0 | 47·6 | |
| | 9·6 | 17 26·0 | 56·2 | |
| | 9·6 | 35·5 | 11·5 | |
| | 8·9 | 52·0 | 43·0 | g |
| | neb. | 18 16·5 | 28·0 | |
| | 9·6 | 21·0 | 54·3 | |
| | 9·4 | 48·5 | 23·5 | |
| | 9·5 | 52·5 | 58·5 | |
| | 9·3 | 19 1·0 | 41·1 | g |
| | neb. | 2·0 | 20·5 | |
| | 9·4 | 6·0 | 22·4 | g |
| | 9·6 | 10·5 | 19·1 | |
| | 9·4 | 19·0 | 29·2 | |
| | neb. | 32·5 | 31·9 | |
| | 9·7 | 35·5 | 39·7 | |
| | 9·4 | 20 18·5 | 46·4 | |
| | 9·4 | 21 7·5 | 9·5 | |
| | 9·5 | 46·0 | 22·5 | g |
| | 9·4 | 22 4·5 | 34·6 | |
| | 9·7 | 12·0 | 33·6 | |
| | 9·7 | 12·5 | 35·3 | |
| | 9·6 | 19·5 | 34·0 | |
| | 9·6 | 23 15·5 | 52·5 | g |
| | 9·7 | 24 13·0 | 40·2 | |
| | 9·3 | 39·0 | 36·6 | g |
| | 9·7 | 26 27·5 | 27·0 | |
| | 9·7 | 30·0 | 28·3 | |
| | 8·9 | 39·5 | 42·0 | g |
| | 9·6 | 49·0 | 11·0 | |
| | 9·6 | 52·5 | 10·6 | |
| | 9·3 | 27 28·0 | 33·0 | g |
| | neb. | 35·0 | 12·0 | |
| | neb. | 28 31·0 | 14·0 | |
| | neb. | 32·0 | 5·1 | |
| | 9·6 | 40·0 | 6·7 | |

### 381—440.

| | mag. | $5^h$ m s | −69° ′ | |
|---|---|---|---|---|
| | 9·6 | 28 41·0 | 6·2 | |
| | 9·6 | 43·0 | 7·8 | |
| | neb. | 29 14·0 | 14·1 | |
| | 8·7 | 31 11·0 | 52·4 | g |
| | 9·4 | 19·0 | 24·9 | |
| | 9·6 | 24·5 | 14·4 | |
| | 9·6 | 42·0 | 8·2 | |
| | 9·4 | 50·5 | 36·6 | |
| | 9·4 | 32 50·2 | 58·2 | |
| | 9·6 | 52·5 | 14·8 | g |
| | 9·4 | 33 23·0 | 18·0 | g |
| | 10·0 | 35 36·5 | 51·4 | |
| | 10·0 | 39·5 | 50·6 | |
| | 10·0 | 41·5 | 50·1 | |
| | 10·0 | 41·5 | 33·4 | |
| | 8·2 | 43·5 | 32·8 | g |
| | 10·0 | 45·5 | 49·4 | |
| | 10·0 | 36 2·5 | 48·4 | |
| | 9·5 | 10·2 | 49·4 | |
| | 10·2 | 21·5 | 18·2 | |
| | 9·5 | 21·7 | 45·0 | |
| | 10·2 | 22·5 | 20·5 | |
| | 9·8 | 22·5 | 31·3 | |
| | 10·0 | 29·5 | 46·1 | |
| | 9·7 | 35·0 | 7·1 | |
| | 9·8 | 48·5 | 14·0 | |
| | 10·1 | 51·0 | 55·6 | |
| | 9·5 | 51·0 | 33·5 | g |
| | 9·4 | 53·5 | 16·0 | |
| | 10·0 | 56·5 | 34·9 | |
| | 10·2 | 57·0 | 47·8 | |
| | 9·5 | 58·0 | 0·0 | |
| | 10·1 | 37 0·5 | 16·0 | |
| | 9·4 | 3·5 | 28·3 | g |
| | 10·0 | 4·0 | 16·0 | |
| | 10·1 | 11·0 | 15·2 | |
| | 10·0 | 13·5 | 11·0 | |
| | 10·1 | 16·5 | 16·5 | |
| | 10·1 | 17·5 | 35·6 | |
| | 9·8 | 24·7 | 27·1 | |
| | 10·2 | 25·3 | 27·8 | |
| | 10·1 | 35·5 | 12·9 | |
| | 9·9 | 37·2 | 33·5 | |
| | 10·2 | 37·5 | 41·6 | |
| | 10·0 | 39·0 | 33·7 | |
| | 10·1 | 40·5 | 27·0 | |
| | 9·8 | 44·0 | 33·9 | |
| | 9·5 | 48·5 | 34·0 | |
| | 9·9 | 49·5 | 15·7 | |
| | 10·2 | 53·0 | 20·3 | |
| | 10·2 | 55·5 | 27·2 | |
| | 10·2 | 38 0·5 | 26·9 | |
| | 9·9 | 1·5 | 33·7 | |
| : | 10·2 | 6·5 | 23·4 | |
| | 10·2 | 6·5 | 42·6 | |
| | 10·1 | 7·5 | 24·2 | |
| | 10·1 | 24·5 | 30·0 | |
| | 10·1 | 30·0 | 31·6 | |
| | 10·1 | 36·5 | 31·5 | |
| × | 10·2 | 38·0 | 14·5 | |

### 441—500.

| | mag. | $5^h$ m s | −69° ′ | |
|---|---|---|---|---|
| × | 10·1 | 38 39·0 | 31·2 | |
| × | 9·9 | 40·0 | 9·1 | |
| | 10·2 | 40·5 | 13·1 | |
| | 10·0 | 59·5 | 30·9 | |
| | 10·1 | 59·5 | 26·1 | |
| | 9·5 | 39 2·2 | 10·2 | g |
| | 10·2 | 3·5 | 4·9 | |
| | 10·1 | 7·0 | 7·9 | |
| | 10·1 | 9·5 | 7·9 | |
| | 9·9 | 29·1 | 9·8 | |
| | 10·1 | 29·4 | 9·0 | |
| | 10·0 | 33·6 | 9·2 | |
| | 10·1 | 34·6 | 8·8 | |
| | 10·1 | 35·0 | 32·6 | |
| | 9·6 | 35·0 | 49·6 | |
| | neb.§ | 35·6 | 9·8 | GSg |
| | 10·0 | 38·4 | 10·1 | |
| | 9·6 | 40·0 | 20·8 | |
| | 9·7 | 41·5 | 27·0 | |
| | 10·1 | 42·0 | 49·1 | |
| | 10·1 | 42·5 | 33·5 | |
| | 9·5 | 44·5 | 5·9 | |
| | 10·1 | 46·0 | 11·9 | |
| | 9·9 | 49·6 | 9·8 | |
| | 10·0 | 50·0 | 30·9 | |
| | neb. | 52·7 | 33·6 | |
| | 8·8 | 57·2 | 48·2 | g |
| | 9·3 | 40 0·5 | 33·1 | |
| | 10·2 | 0·5 | 17·2 | |
| | 10·1 | 11·0 | 20·2 | |
| | 10·1 | 13·0 | 34·2 | |
| | 10·0 | 20·5 | 15·2 | |
| | 9·5 | 29·5 | 30·8 | |
| | 10·2 | 47·0 | 48·1 | |
| | 9·9 | 49·2 | 42·2 | |
| | 10·2 | 41 6·0 | 47·5 | |
| | 10·2 | 10·5 | 43·2 | |
| | 10·1 | 12·0 | 26·2 | |
| | 10·1 | 12·5 | 27·5 | |
| | 10·2 | 15·5 | 38·2 | |
| : | 9·5 | 17·2 | 43·5 | |
| | 10·1 | 19·0 | 31·6 | |
| | 9·8 | 19·5 | 34·4 | |
| | 9·9 | 21·0 | 35·2 | |
| | 10·0 | 21·5 | 18·0 | |
| | 10·1 | 26·0 | 40·1 | |
| | 9·4 | 33·5 | 0·1 | g |
| | 10·2 | 35·0 | 22·6 | |
| | 9·4 | 36·3 | 55·1 | g |
| | 9·9 | 37·0 | 36·9 | |
| | 10·1 | 45·5 | 20·2 | |
| | 10·1 | 46·5 | 46·6 | |
| | 9·7 | 48·0 | 14·1 | |
| | 10·1 | 51·0 | 32·7 | |
| | 9·5 | 54·5 | 18·8 | |
| | 9·9 | 57·0 | 23·9 | |
| | 10·1 | 42 11·5 | 40·1 | |
| | 9·8 | 12·5 | 8·3 | |
| | 9·5 | 23·8 | 37·3 | |
| | 10·1 | 25·0 | 39·6 | |

### 501—560.

| | mag. | $5^h$–$6^h$ m s | −69° ′ | |
|---|---|---|---|---|
| | 10·1 | 42 27·5 | 22·8 | |
| | 10·2 | 30·0 | 28·1 | |
| | 9·7 | 36·5 | 51·3 | |
| | 10·0 | 36·5 | 37·0 | |
| | 10·0 | 55·5 | 15·8 | |
| | 9·9 | 43 2·5 | 16·1 | |
| | 10·0 | 4·0 | 4·9 | |
| | neb. | 4·0 | 15·9 | |
| | 10·0 | 7·5 | 15·5 | |
| | 10·2 | 22·5 | 32·2 | |
| | 10·1 | 29·0 | 7·2 | |
| | 10·1 | 31·5 | 32·9 | |
| | 10·2 | 46·5 | 3·0 | |
| | 9·9 | 52·5 | 36·0 | |
| | 9·8 | 53·0 | 27·1 | : |
| | 10·0 | 44 21·5 | 17·8 | |
| | 9·2 | 45 5·5 | 32·0 | g |
| | 10·1 | 21·5 | 17·4 | |
| | 10·0 | 46 6·0 | 9·6 | |
| | 9·4 | 7·8 | 2·5 | |
| | 10·2 | 51·5 | 35·3 | |
| | 10·0 | 47 35·5 | 30·0 | |
| | 10·0 | 48 36·5 | 24·0 | |
| | 9·4 | 49 7·5 | 47·0 | Ggg |
| | 10·0 | 37·5 | 15·4 | |
| | 10·0 | 37·5 | 30·5 | |
| | 9·9 | 50 11·5 | 53·9 | |
| | 10·0 | 23·0 | 20·3 | |
| | 8·9 | 38·0 | 49·1 | 9·0 Ggg |
| | 9·0 | 51 6·5 | 42·9 | 8·5 Ggg |
| | 9·9 | 16·0 | 36·1 | |
| | 9·6 | 23·0 | 16·1 | g |
| | 10·2 | 52·5 | 12·7 | |
| | 7·8 | 52 13·5 | 55·6 | 8·0 GSgg |
| : | 9·8 | 17·5 | 55·6 | |
| | 9·0 | 58·0 | 49·4 | 9·0 Ggg |
| | 10·0 | 53 34·5 | 43·9 | |
| | 10·0 | 53·5 | 29·3 | |
| | 9·9 | 55·5 | 9·8 | |
| | 9·2 | 54 3·5 | 7·0 | g |
| | 9·4 | 12·0 | 23·4 | |
| | 9·7 | 32·0 | 2·4 | g |
| | 10·0 | 32·0 | 50·0 | |
| | 9·5 | 51·5 | 15·3 | g |
| | 9·9 | 55 8·0 | 7·0 | |
| | 10·2 | 31·5 | 47·6 | |
| | 9·1 | 56 34·5 | 26·6 | g |
| | 10·0 | 52·5 | 5·0 | |
| | 8·0 | 58 16·0 | 29·1 | 8·0 GSgg |
| | 9·9 | 20·5 | 19·0 | |
| | neb. | 32·5 | 12·0 | |
| | 10·1 | 46·5 | 36·8 | |
| | 10·2 | 59 17·0 | 34·6 | |
| | 8·8 | 43·0 | 51·6 | 8·5 Gg |
| | 10·2 | 0 3·2 | 58·2 | |
| | 10·0 | 1 2·5 | 51·5 | 9·5 |
| | 9·6 | 9·5 | 58·1 | 9·5 g |
| | 10·0 | 50·5 | 8·8 | |
| | 10·0 | 2 15·0 | 20·1 | |
| | 10·0 | 30·0 | 10·1 | |

25 prec.

| h m | α − s | δ + ′ |
|---|---|---|
| 5 0 | 10 | 2·2 |
| 10 | 10 | 1·8 |
| 20 | 11 | 1·5 |
| 30 | 12 | 1·1 |
| 40 | 12 | 0·7 |
| 50 | 13 | 0·4 |
| 6 0 | 13 | 0·0 |
| | | − |
| 10 | 13 | 0·4 |

§ Extensive nebula with several ill-defined nuclei.

| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | s | ′ |
| 6 | 0 | 13 | 0·0 |
| | 10 | 13 | 0·4 |
| | 20 | 12 | 0·7 |
| | 30 | 12 | 1·1 |
| | 40 | 11 | 1·5 |
| | 50 | 10 | 1·8 |
| 7 | 0 | 10 | 2·2 |
| | 10 | 8 | 2·5 |
| | 20 | 7 | 2·9 |
| | 30 | 6 | 3·2 |
| | 40 | 4 | 3·5 |
| | 50 | 2 | 3·9 |
| 8 | 0 | 1 | 4·2 |

## 561—620.

| mag. | 6h. m s | −69° ′ | |
|---|---|---|---|
| 9·5 | 2 58·0 | 30·8 | |
| 9·4 | 3 49·5 | 39·6 | 9·0 g |
| 8·9 | 53·5 | 25·2 | 9·0 g |
| 10·0 | 4 43·5 | 37·2 | |
| 9·5 | 53·5 | 41·8 | 9·0 g |
| 9·7 | 5 33·5 | 50·4 | |
| 10·0 | 54·0 | 20·7 | |
| 9·5 | 6 8·5 | 17·1 | g |
| 9·5 | 17·0 | 1·0 | g |
| 9·1 | 48·0 | 53·9 | g |
| 8·6 | 56·5 | 26·5 | g |
| 8·4 | 7 16·5 | 14·1 | g |
| 10·0 | 8 40·5 | 7·9 | |
| 9·2 | 44·0 | 19·1 | |
| 9·0 | 56·5 | 39·7 | 8·5 Gg |
| 10·2 | 9 2·5 | 40·0 | |
| 10·2 | 12·0 | 8·8 | |
| 9·2 | 31·0 | 51·2 | g |
| 9·2 | 12 18·5 | 13·7 | 9·0 g |
| 7·4 | 30·0 | 43·5 | 8·5 GSg |
| 10·0 | 13 4·0 | 12·2 | |
| 7·8 | 35·0 | 12·1 | 8·5 Gg |
| 9·7 | 56·0 | 44·6 | 9·0 g |
| 9·0 | 14 3·0 | 20·0 | 9·5 g |
| 9·7 | 54·0 | 57·8 | |
| 9·5 | 15 24·0 | 5·8 | g |
| 9·0 | 51·0 | 5·2 | g |
| 9·3 | 56·5 | 9·7 | |
| 9·7 | 16 5·0 | 13·1 | g |
| 8·0 | 17 32·5 | 1·6 | 8·0 Gg |
| 10·2 | 18 31·0 | 11·1 | |
| 10·0 | 32·5 | 8·3 | |
| 7·8 | 19 14·0 | 6·2 | 7·5 GSg |
| 10·2 | 56·0 | 0·2 | |
| 9·8 | 20 0·8 | 56·0 | g |
| 10·0 | 0·8 | 12·5 | |
| 10·0 | 13·3 | 6·3 | |
| 7·2 | 21·3 | 43·7 | 7·0 GSg |
| 10·1 | 39·5 | 23·3 | |
| 10·0 | 55·5 | 32·0 | |
| 10·0 | 21 4·0 | 16·4 | |
| 10·0 | 19·5 | 28·0 | |
| 10·0 | 22 50·0 | 22·9 | |
| 9·2 | 23 0·0 | 12·3 | |
| 10·1 | 14·5 | 36·5 | |
| 10·0 | 43·0 | 1·9 | |
| 7·6 | 49·0 | 55·0 | 6·0 GSg |
| 10·0 | 52·5 | 6·0 | |
| 9·2 | 24 31·0 | 22·8 | g |
| 9·6 | 25 40·0 | 16·9 | |
| 10·0 | 54·0 | 13·9 | |
| 10·1 | 26 2·5 | 7·9 | |
| 9·9 | 5·5 | 28·2 | |
| 6·9 | 32·0 | 37·1 | 6·0 GScg |
| 10·1 | 27 5·5 | 1·9 | |
| 10·1 | 13·0 | 2·9 | |
| 10·0 | 33·5 | 37·0 | |
| 9·9 | 50·0 | 51·9 | |
| 9·2 | 59·5 | 12·1 | g |
| 10·0 | 28 30·5 | 12·0 | |

## 621—680.

| mag. | 6h. m s | −69° ′ | |
|---|---|---|---|
| 9·6 | 28 44·5 | 53·3 | |
| 10·0 | 52·0 | 5·4 | |
| 10·1 | 29 24·5 | 8·2 | |
| 9·4 | 57·5 | 54·2 | g |
| 10·0 | 58·5 | 39·4 | |
| 9·6 | 30 11·5 | 31·9 | |
| 10·0 | 40·5 | 16·9 | |
| 9·9 | 31 5·5 | 17·0 | |
| 10·0 | 29·5 | 41·0 | |
| 9·4 | 45·0 | 56·8 | |
| 10·0 | 32 25·5 | 30·8 | |
| 10·0 | 53·0 | 3·4 | |
| 10·0 | 34 34·5 | 37·2 | |
| 9·0 | 35 46·0 | 46·8 | 9·0 g |
| 9·0 | 53·0 | 40·4 | g |
| 10·0 | 36 5·0 | 30·0 | |
| 10·1 | 27·0 | 29·9 | |
| 8·0 | 55·2 | 59·3 | 9·0 g |
| 9·2 | 37 54·0 | 19·9 | g |
| 10·0 | 57·7 | 58·9 | |
| 10·1 | 38 19·5 | 25·9 | |
| 9·7 | 39 23·2 | 58·8 | g |
| 9·4 | 32·0 | 47·9 | |
| 10·0 | 41 41·5 | 12·9 | |
| 10·0 | 42·0 | 10·7 | |
| 9·8 | 42 11·0 | 58·5 | g |
| 10·0 | 28·5 | 52·9 | |
| 9·7 | 52·5 | 19·8 | |
| 7·6 | 43 3·5 | 34·7 | GSg |
| 9·4 | 10·0 | 11·0 | g |
| 10·0 | 22·5 | 41·9 | |
| 8·4 | 55·0 | 10·0 | g |
| 10·1 | 44 41·5 | 44·7 | |
| 10·1 | 45 24·5 | 21·2 | |
| 10·1 | 37·5 | 58·9 | |
| 10·1 | 55·5 | 56·4 | |
| 10·1 | 46 8·0 | 0·9 | |
| 9·2 | 10·0 | 23·2 | |
| 10·1 | 48 9·5 | 10·2 | |
| 9·2 | 34·5 | 9·1 | g |
| 10·1 | 40·0 | 25·5 | |
| 9·4 | 50 33·5 | 10·8 | g |
| 9·4 | 38·5 | 50·0 | g |
| 10·0 | 51 9·0 | 1·9 | |
| 7·7 | 27·5 | 50·0 | GScg |
| 10·1 | 28·0 | 38·9 | |
| 10·1 | 33·5 | 48·4 | |
| 9·2 | 52 38·0 | 15·7 | 9·0 g |
| 9·0 | 38·5 | 28·2 | Gg |
| 9·0 | 54 2·5 | 54·3 | g |
| 9·2 | 46·5 | 5·0 | 9·0 g |
| 8·7 | 55 42·5 | 52·3 | g |
| 9·7 | 43·0 | 57·9 | |
| 10·0 | 56 14·0 | 50·3 | |
| 10·0 | 31·0 | 36·9 | |
| 9·4 | 32·0 | 30·8 | g |
| 10·1 | 57 17·0 | 34·3 | |
| 9·8 | 29·0 | 11·0 | g |
| 9·8 | 29·5 | 27·5 | |
| 9·6 | 58 7·0 | 11·0 | 9·0 g |

## 681—740.

| mag. | 6h.–7h. m s | −69° ′ | |
|---|---|---|---|
| 10·1 | 58 15·0 | 3·0 | |
| 8·6 | 55·5 | 12·4 | 9·0 g |
| 10·1 | 59 5·5 | 58·5 | |
| 9·7 | 0 4·0 | 33·4 | g |
| 9·6 | 18·5 | 36·8 | g |
| 9·0 | 41·5 | 37·8 | 8·5 Gg |
| 9·2 | 4 50·0 | 29·7 | g |
| 10·3 | 50·5 | 57·6 | |
| 10·0 | 55·0 | 4·6 | |
| 10·3 | 5 6·0 | 52·9 | |
| 10·4 | 24·0 | 11·3 | |
| 10·3 | 45·0 | 9·6 | |
| 10·3 | 51·0 | 35·1 | |
| 10·4 | 58·0 | 14·8 | |
| 10·4 | 7 8·0 | 11·7 | |
| 9·8 | 35·7 | 21·9 | |
| 10·3 | 45·0 | 1·5 | |
| 10·4 | 48·5 | 14·9 | |
| 10·0 | 58·5 | 44·9 | |
| 10·3 | 8 20·5 | 50·9 | |
| 10·3 | 9 2·5 | 8·9 | |
| 9·9 | 10 25·0 | 47·8 | |
| 10·4 | 46·0 | 3·9 | |
| 9·8 | 11 26·0 | 37·9 | |
| 7·8 | 12 10·0 | 54·6 | GSg |
| 10·4 | 40·5 | 44·7 | |
| 10·4 | 41·0 | 0·0 | |
| 10·2 | 13 12·0 | 30·3 | |
| 9·9 | 14 2·5 | 17·9 | |
| 10·3 | 33·5 | 21·5 | |
| 9·2 | 15 1·5 | 38·8 | |
| 10·4 | 30·5 | 6·4 | |
| 10·0 | 50·0 | 2·9 | |
| 9·6 | 16 46·5 | 48·4 | 9·5 |
| 8·4 | 19 9·0 | 5·6 | 8·0 g |
| 10·4 | 20·0 | 20·9 | |
| 10·4 | 24·0 | 11·3 | |
| 10·4 | 35·5 | 31·0 | |
| 7·7 | 20 19·0 | 58·2 | 8·0 GSgg |
| 10·4 | 30·0 | 32·6 | |
| 9·6 | 55·0 | 30·9 | g |
| 10·0 | 21 2·5 | 14·7 | |
| 9·4 | 5·0 | 55·8 | 8·8 Gg |
| 9·2 | 20·0 | 12·6 | 9·2 g |
| 9·8 | 23 19·0 | 29·8 | |
| 9·8 | 25·5 | 8·9 | g |
| 10·2 | 26·0 | 11·4 | |
| 8·8 | 30·0 | 50·8 | g |
| 10·4 | 44·0 | 44·0 | |
| 10·3 | 49·5 | 7·6 | |
| 9·5 | 25 11·0 | 52·6 | |
| 10·4 | 40·0 | 1·4 | |
| 9·4 | 57·5 | 6·9 | g |
| 10·0 | 26 35·0 | 0·9 | |
| 10·4 | 51·5 | 53·7 | |
| 7·7 | 27 11·0 | 19·1 | 7·5 GSg |
| 8·0 | 30·0 | 15·5 | 8·0 g |
| 9·7 | 32·0 | 2·8 | |
| 10·3 | 43·0 | 56·2 | |
| 10·3 | 28 55·0 | 30·8 | |

## 741—800.

| mag. | 7h. m s | −69° ′ | |
|---|---|---|---|
| 10·4 | 29 11·0 | 35·5 | |
| 10·2 | 43·5 | 58·5 | |
| 8·5 | 49·0 | 39·1 | g |
| 9·0 | 52·0 | 11·5 | g |
| 10·2 | 31 39·0 | 39·1 | |
| 9·9 | 32 57·5 | 26·6 | |
| 10·4 | 33 4·0 | 33·1 | |
| 9·2 | 34 14·5 | 36·9 | Gg |
| 10·0 | 55·0 | 49·8 | |
| 10·4 | 35 9·0 | 16·8 | |
| 8·0 | 22·0 | 52·1 | 8·8 g |
| 8·0 | 40·0 | 57·9 | 8·2 g |
| 9·6 | 36 59·0 | 35·3 | |
| 10·3 | 37 31·0 | 17·8 | |
| 9·8 | 51·0 | 18·8 | |
| 10·2 | 38 1·5 | 15·4 | |
| 8·0 | 29·5 | 46·8 | 8·5 g |
| 8·2 | 43·2 | 2·3 | 9·0 g |
| 8·9 | 59·0 | 44·1 | 9·5 |
| 9·8 | 39 13·5 | 31·8 | |
| 9·2 | 40·0 | 39·1 | 9·5 |
| 10·2 | 56·2 | 59·6 | |
| 8·4 | 40 29·0 | 10·4 | 9·2 g |
| 8·2 | 55·0 | 33·0 | 7·5 GSg |
| 9·5 | 59·0 | 15·5 | |
| 9·7 | 41 21·0 | 13·7 | |
| 9·5 | 42 38·5 | 8·7 | |
| 7·8 | 43 45·5 | 45·5 | 8·2 GSg |
| 10·3 | 44 15·0 | 31·5 | |
| 6·0 | 33·5 | 30·9 | 6·5 GScg |
| 8·4 | 34·0 | 12·5 | 9·0 Gg |
| 8·8 | 50·0 | 5·7 | |
| 10·4 | 45 44·0 | 25·7 | |
| 10·3 | 45·0 | 26·0 | |
| 8·0 | 46 13·0 | 11·3 | 9·0 g |
| 10·4 | 17·5 | 55·4 | |
| 10·3 | 44·0 | 22·9 | |
| 8·6 | 47 34·0 | 23·3 | g |
| 10·3 | 48 58·5 | 48·5 | |
| 10·0 | 49 20·5 | 30·1 | |
| 9·4 | 49·0 | 28·4 | |
| 9·5 | 59·0 | 8·3 | 9·0 g |
| 9·6 | 50 31·3 | 3·8 | |
| 10·0 | 42·5 | 23·1 | |
| 10·0 | 54·5 | 32·0 | |
| 10·0 | 56·0 | 27·1 | |
| 10·0 | 51 9·0 | 13·9 | |
| 10·0 | 14·5 | 8·6 | |
| 8·4 | 17·5 | 46·0 | 8·5 Gg |
| 9·6 | 24·2 | 4·0 | |
| 9·6 | 47·2 | 54·5 | |
| 9·6 | 53 6·5 | 6·0 | |
| 10·0 | 19·0 | 0·6 | |
| 10·0 | 41·0 | 42·6 | |
| 9·5 | 48·0 | 6·0 | |
| 10·0 | 52·5 | 45·8 | |
| 10·0 | 54·0 | 22·0 | |
| 10·0 | 55·5 | 26·0 | |
| 9·9 | 54 49·5 | 20·6 | |
| 10·0 | 55 24·5 | 40·0 | |

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## 801—860.

| mag. | 7h.–8h. m | s | −69° ′ | |
|---|---|---|---|---|
| 8.8 | 56 | 24.5 | 18.8 | 9.0 *g* |
| 10.0 | | 25.0 | 58.9 | |
| 10.0 | | 53.0 | 35.6 | |
| 10.0 | 57 | 28.0 | 45.0 | |
| 9.9 | | 30.0 | 3.0 | |
| 10.0 | | 33.0 | 54.9 | |
| 9.1 | 58 | 1.0 | 55.2 | |
| 9.5 | | 22.0 | 31.4 | |
| 9.4 | 59 | 4.5 | 20.2 | |
| 9.6 | | 17.5 | 20.6 | |
| 9.8 | | 32.0 | 6.6 | |
| 9.7 | | 35.0 | 27.6 | |
| 10.0 | | 39.0 | 40.0 | |
| 10.0 | | 50.0 | 45.9 | |
| 9.2 | 0 | 11.5 | 16.2 | *g* |
| 8.4 | | 31.5 | 50.0 | 9.0 *g* |
| 9.8 | 1 | 1.5 | 8.2 | |
| 9.8 | | 11.0 | 59.9 | |
| 10.0 | | 14.5 | 16.3 | |
| 8.3 | | 41.0 | 40.5 | 8.5 GS*g* |
| 8.8 | 2 | 0.0 | 40.5 | 9.0 GS*g* |
| 8.6 | | 11.0 | 25.3 | 8.0 GS*g* |
| 9.5 | | 45.5 | 29.1 | |
| 9.2 | 3 | 4.5 | 40.4 | 9.5 G*g* |
| 10.0 | | 21.5 | 1.0 | |
| 6.9 | | 26.0 | 37.0 | 7.0 GS*g* |
| 9.2 | | 35.5 | 41.9 | |
| 10.0 | | 46.0 | 37.3 | |
| 7.4 | 4 | 4.2 | 58.8 | 7.5 GS*g* |
| 10.0 | | 13.5 | 20.0 | |
| 9.6 | | 13.5 | 12.4 | |
| 10.0 | | 22.0 | 14.0 | |
| 10.0 | | 41.0 | 51.8 | |
| 9.8 | | 58.5 | 42.0 | |
| 9.9 | 5 | 21.0 | 3.0 | |
| 10.0 | | 26.5 | 30.9 | |
| 10.0 | | 28.0 | 55.8 | |
| 8.6 | | 31.0 | 30.0 | 77 *g* |
| 10.0 | | 43.5 | 52.0 | |
| 9.4 | 6 | 0.5 | 5.1 | |
| 8.6 | | 1.5 | 11.8 | *g* |
| 10.0 | | 15.0 | 23.4 | |
| 10.0 | | 50.5 | 36.0 | |
| 10.0 | | 58.5 | 12.4 | |
| 10.0 | 7 | 4.0 | 37.0 | |
| 9.7 | | 22.0 | 42.2 | |
| 7.8 | | 51.0 | 31.9 | *g* |
| 9.9 | 8 | 4.5 | 44.0 | |
| 10.0 | | 13.0 | 43.3 | |
| 9.5 | | 35.5 | 1.7 | |
| 9.6 | | 42.5 | 8.2 | |
| 10.0 | 9 | 48.0 | 53.0 | G |
| 9.5 | 10 | 3.0 | 22.0 | |
| 9.7 | | 7.5 | 3.0 | |
| 10.0 | | 17.0 | 18.8 | |
| 10.0 | | 18.0 | 30.8 | |
| 9.1 | | 18.5 | 21.0 | |
| 9.3 | | 38.0 | 14.5 | G |
| 10.0 | 11 | 6.0 | 23.8 | |
| 10.0 | | 12.0 | 28.2 | |

## 861—920.

| mag. | 8h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.6 | 11 | 15.5 | 28.0 | G |
| 8.6 | | 34.5 | 20.0 | 9.5 *g* |
| 10.0 | | 43.0 | 29.8 | |
| 8.4 | | 54.0 | 22.2 | 8.5 G*g* |
| 10.0 | 12 | 24.5 | 57.5 | |
| 9.6 | | 49.5 | 6.0 | |
| 9.8 | 13 | 36.5 | 44.2 | |
| 9.6 | | 37.0 | 34.3 | |
| 9.6 | 14 | 7.0 | 15.2 | |
| 10.0 | | 31.0 | 4.0 | |
| 10.0 | | 37.5 | 3.6 | |
| 8.0 | | 37.5 | 14.2 | 8.5 G*g* |
| 10.0 | 15 | 0.0 | 51.0 | |
| 10.0 | | 8.5 | 52.2 | |
| 10.0 | 16 | 2.0 | 3.0 | |
| 10.0 | | 20.5 | 5.0 | |
| 8.8 | | 36.0 | 51.0 | *g* |
| 9.1 | | 46.5 | 23.4 | |
| 9.2 | 17 | 1.0 | 4.4 | 9.5 *g* |
| 10.0 | | 15.5 | 14.9 | |
| 8.4 | | 27.0 | 13.3 | |
| 9.7 | | 31.0 | 17.9 | |
| 9.6 | | 39.5 | 18.7 | |
| 10.0 | | 49.0 | 4.0 | |
| 9.6 | | 50.0 | 48.0 | *g* |
| 9.8 | | 55.5 | 32.2 | |
| 10.0 | | 55.5 | 43.1 | |
| 9.8 | 18 | 0.0 | 12.0 | |
| 10.0 | | 33.0 | 36.0 | |
| 9.6 | | 56.5 | 47.0 | |
| 10.0 | 19 | 7.0 | 39.0 | |
| 9.6 | | 41.5 | 5.0 | |
| 10.0 | 20 | 5.0 | 36.0 | |
| 9.4 | | 30.0 | 50.6 | |
| 9.4 | | 35.0 | 4.9 | |
| 10.0 | 21 | 18.0 | 34.0 | |
| 9.1 | | 23.5 | 4.3 | 8.0 G*g* |
| 10.0 | 22 | 26.5 | 59.9 | |
| 9.5 | | 46.5 | 45.0 | |
| 10.0 | | 54.0 | 14.5 | |
| 10.0 | 23 | 12.5 | 34.6 | |
| 8.1 | | 14.5 | 50.6 | GS*g* |
| 10.0 | | 16.0 | 44.0 | |
| 10.0 | | 23.0 | 17.4 | |
| 9.1 | | 23.0 | 42.6 | |
| 10.0 | | 34.0 | 12.9 | |
| 9.2 | | 40.0 | 17.1 | 9.0 |
| 9.9 | 24 | 20.3 | 0.5 | S |
| 10.0 | | 22.0 | 26.0 | |
| 9.1 | | 22.5 | 44.8 | *g* |
| 9.2 | | 26.0 | 58.0 | *g* |
| 10.0 | | 29.5 | 45.6 | |
| 8.3 | | 58.0 | 26.3 | 8.5 *g* |
| 10.0 | 25 | 5.5 | 51.8 | |
| 9.6 | | 41.0 | 37.4 | 9.5 |
| 10.0 | | 48.5 | 49.6 | |
| 8.8 | 26 | 34.5 | 19.8 | 8.5 *g* |
| 9.6 | | 56.5 | 33.6 | |
| 5.7 | | 57.0 | 40.6 | 6.0 GSc*g* |
| 10.0 | 27 | 18.5 | 6.0 | |

## 921—980.

| mag. | 8h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.7 | 28 | 3.2 | 58.7 | |
| 10.0 | | 21.0 | 37.6 | |
| 9.9 | | 35.5 | 29.2 | |
| 10.0 | 29 | 46.5 | 29.0 | |
| 9.5 | 30 | 5.5 | 47.0 | |
| 9.8 | | 5.5 | 54.0 | |
| 9.2 | 31 | 3.2 | 2.4 | |
| 10.0 | | 9.5 | 16.0 | |
| 10.0 | | 38.0 | 40.0 | |
| 10.0 | | 39.0 | 28.0 | |
| 9.6 | | 55.0 | 32.0 | |
| 9.4 | | 59.0 | 1.0 | |
| 10.0 | 32 | 40.5 | 20.0 | |
| 8.7 | 33 | 3.0 | 40.8 | 8.5 *g* |
| 10.0 | | 46.7 | 43.9 | |
| 9.8 | | 51.5 | 52.0 | |
| 9.0 | 34 | 32.2 | 26.1 | *g* |
| 10.0 | 35 | 25.0 | 0.0 | |
| 9.6 | 36 | 30.5 | 37.9 | |
| 10.1 | | 38.0 | 8.4 | |
| 10.0 | | 42.3 | 47.7 | |
| 10.0 | 37 | 3.0 | 30.2 | |
| 9.0 | | 9.5 | 13.4 | 8.5 *g* |
| 10.0 | | 10.2 | 29.4 | |
| 10.0 | | 10.4 | 56.7 | |
| 5.5 | 38 | 35.2 | 56.5 | GS*g*r |
| 10.1 | | 54.2 | 5.2 | 9.5 |
| 9.7 | 39 | 9.7 | 57.5 | |
| 9.6 | | 26.9 | 12.7 | 9.0 *g* |
| 10.1 | | 29.1 | 59.6 | |
| 9.8 | 40 | 20.2 | 31.0 | |
| 10.0 | | 21.7 | 23.0 | |
| 9.5 | | 22.5 | 15.0 | |
| 9.9 | | 27.7 | 7.5 | |
| 9.7 | 41 | 2.2 | 8.1 | |
| 9.9 | | 2.2 | 20.0 | |
| 9.7 | | 19.0 | 45.6 | |
| 9.4 | | 23.9 | 3.0 | |
| 10.0 | 44 | 5.7 | 41.2 | |
| 9.7 | | 32.7 | 50.0 | |
| 9.5 | 46 | 10.2 | 37.5 | |
| 9.7 | | 19.7 | 51.6 | |
| 9.4 | | 48.7 | 53.9 | |
| 9.6 | 47 | 0.7 | 24.4 | |
| 10.0 | | 11.7 | 7.0 | |
| 9.0 | | 38.7 | 57.1 | 8.0 *g* |
| 9.7 | 48 | 40.2 | 7.5 | |
| 9.5 | 49 | 8.2 | 39.6 | *g* |
| 9.7 | | 8.2 | 49.6 | |
| 10.1 | | 31.2 | 20.6 | |
| 9.7 | | 49.7 | 39.5 | |
| 10.1 | 50 | 37.7 | 11.0 | |
| 9.6 | | 38.2 | 5.3 | |
| 10.0 | | 54.0 | 2.5 | |
| 9.8 | 51 | 50.2 | 16.0 | |
| 7.5 | | 53.2 | 21.2 | 7.5 GS*g* |
| 10.1 | 52 | 32.2 | 2.1 | |
| 10.1 | | 42.7 | 25.3 | |
| 9.9 | | 50.1 | 59.6 | |
| 10.1 | 53 | 45.2 | 46.8 | |

## 981—1040.

| mag. | 8h.–9h. m | s | −69° ′ | |
|---|---|---|---|---|
| 10.1 | 53 | 58.2 | 45.0 | |
| 8.9 | 54 | 35.7 | 37.0 | *g* |
| 9.6 | | 52.7 | 47.3 | |
| 10.1 | | 52.7 | 16.8 | |
| 9.7 | | 54.7 | 49.0 | |
| 9.7 | | 59.7 | 45.0 | |
| 9.9 | 55 | 32.7 | 46.9 | |
| 10.0 | 56 | 11.2 | 16.0 | |
| 9.6 | | 16.7 | 53.1 | |
| 7.8 | | 18.7 | 9.5 | 8.0 GS*g* |
| 8.6 | | 21.2 | 20.4 | 9.5 |
| 10.0 | | 45.2 | 14.0 | |
| 10.0 | 57 | 59.2 | 39.1 | |
| 10.0 | 58 | 14.7 | 29.5 | |
| 9.6 | | 53.2 | 25.9 | |
| 9.9 | | 59.7 | 14.0 | |
| 8.2 | 59 | 29.2 | 40.4 | *g* |
| 8.6 | | 39.2 | 16.7 | *g* |
| 10.0 | | 54.7 | 30.0 | |
| 10.1 | 0 | 35.7 | 1.8 | |
| 9.9 | | 38.7 | 33.9 | |
| 8.8 | | 41.2 | 28.6 | |
| 9.0 | 1 | 21.0 | 44.9 | *g* |
| 10.1 | 3 | 13.0 | 42.0 | |
| 8.7 | | 45.0 | 5.9 | *g* |
| 9.5 | | 45.0 | 57.0 | |
| 9.6 | 4 | 12.5 | 9.6 | |
| 10.1 | | 23.5 | 32.2 | |
| 7.8 | | 35.5 | 4.3 | GSc*g* |
| 10.1 | | 58.0 | 42.0 | |
| 8.8 | | 59.0 | 43.6 | *g* |
| 10.0 | 5 | 4.0 | 9.8 | |
| 10.0 | | 20.0 | 11.3 | |
| 10.0 | | 40.0 | 12.0 | |
| 10.1 | 7 | 4.5 | 55.0 | |
| 9.7 | | 13.5 | 12.4 | |
| 10.1 | 8 | 14.0 | 16.0 | |
| 9.6 | 9 | 2.5 | 7.7 | |
| 9.0 | | 42.0 | 12.3 | 9.0 *g* |
| 10.1 | 10 | 3.0 | 57.3 | |
| 10.0 | | 47.0 | 11.9 | |
| 9.6 | 11 | 20.0 | 55.7 | |
| 3.4 | | 48.5 | 12.1 | 2.0GSc*g*gtrλ |
| 10.1 | 12 | 37.0 | 13.6 | |
| 10.1 | 13 | 4.0 | 0.8 | |
| 9.4 | | 18.5 | 35.1 | *g* |
| 8.8 | | 29.0 | 20.8 | |
| 8.8 | | 46.5 | 35.7 | *g* |
| 9.0 | 14 | 8.0 | 58.6 | |
| 8.2 | | 36.5 | 7.1 | *g* |
| 9.6 | 15 | 1.0 | 43.0 | |
| 9.6 | | 35.0 | 8.2 | |
| 8.5 | | 36.0 | 6.0 | *g* |
| 8.4 | 16 | 4.0 | 51.7 | |
| 7.3 | | 24.0 | 16.5 | G*g* |
| 10.1 | | 28.0 | 14.7 | |
| 9.0 | | 35.0 | 9.9 | |
| 10.0 | | 40.0 | 26.8 | |
| 9.7 | | 50.0 | 32.0 | |
| 10.0 | 17 | 30.0 | 9.0 | |

25 prec.

| h | m | α − s | δ − ′ |
|---|---|---|---|
| 7 | 50 | 2 | 3.9 |
| 8 | 0 | 1 | 4.2 |
| | | + | |
| | 10 | 1 | 4.5 |
| | 20 | 4 | 4.8 |
| | 30 | 6 | 5.1 |
| | 40 | 8 | 5.4 |
| | 50 | 11 | 5.6 |
| 9 | 0 | 14 | 5.9 |
| | 10 | 16 | 6.2 |
| | 20 | 19 | 6.4 |



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| | | 25 prec. | |
|---|---|---|---|
| | | α | δ |
| | | + | − |
| h | m | s | ′ |
| 9 | 10 | 16 | 6·2 |
| | 20 | 19 | 6·4 |
| | 30 | 22 | 6·6 |
| | 40 | 26 | 6·8 |
| | 50 | 29 | 7·0 |
| 10 | 0 | 32 | 7·2 |
| | 10 | 36 | 7·4 |
| | 20 | 39 | 7·6 |
| | 30 | 43 | 7·7 |

## 1041—1100.

| mag. | 9h. m | s | −69° ′ | |
|---|---|---|---|---|
| 10·0 | 18 | 5·0 | 6·2 | |
| 9·4 | | 20·0 | 30·0 | |
| 9·6 | | 35·5 | 7·0 | |
| 10·1 | | 50·0 | 21·2 | |
| 9·7 | | 53·5 | 26·1 | g |
| 9·6 | 19 | 56·5 | 6·3 | |
| 9·2 | | 59·8 | 30·0 | g |
| 9·4 | 20 | 41·5 | 34·0 | |
| 9·5 | | 45·5 | 43·0 | |
| 9·1 | | 52·0 | 48·0 | |
| 9·4 | 21 | 1·0 | 11·9 | |
| 9·6 | | 27·0 | 41·9 | |
| 9·3 | | 40·0 | 24·0 | |
| 9·6 | 22 | 13·0 | 42·8 | |
| 9·6 | | 45·7 | 11·0 | |
| 8·0 | 23 | 0·2 | 32·0 | GSg |
| 7·4 | | 5·7 | 52·2 | GSg |
| 9·2 | | 15·0 | 26·4 | |
| 8·6 | | 45·5 | 52·1 | GSg |
| 9·0 | | 48·8 | 5·8 | 8·0 g |
| 9·6 | 24 | 3·7 | 25·1 | |
| 9·4 | | 4·5 | 25·1 | |
| 9·5 | | 31·2 | 54·0 | g |
| 9·5 | | 32·5 | 35·9 | |
| 9·6 | 25 | 9·7 | 42·2 | |
| 9·5 | | 20·5 | 53·0 | g |
| 9·4 | | 20·5 | 35·8 | |
| 9·5 | | 22·5 | 12·9 | |
| 9·3 | | 25·0 | 17·6 | |
| 8·6 | | 32·0 | 25·0 | 9·0 g |
| 9·1 | | 33·8 | 6·6 | 9·0 |
| 9·6 | 26 | 9·5 | 53·5 | |
| 9·2 | | 30·8 | 7·1 | |
| 9·4 | 27 | 42·0 | 7·8 | |
| 9·3 | 28 | 1·5 | 58·2 | |
| 9·5 | | 4·0 | 27·9 | |
| 9·4 | | 58·0 | 27·0 | |
| 9·1 | 30 | 2·0 | 22·6 | 8·5 g |
| 7·1 | | 2·5 | 54·9 | GSg |
| 9·6 | | 25·0 | 42·1 | |
| 9·5 | | 53·5 | 25·3 | |
| 9·6 | 31 | 9·5 | 24·1 | |
| 8·5 | | 18·0 | 10·6 | 9·5 g |
| 8·5 | | 20·5 | 2·5 | 9·0 g |
| 8·4 | | 32·0 | 8·0 | 9·0 g |
| 9·6 | | 42·0 | 33·8 | |
| 9·3 | | 53·0 | 8·0 | |
| 9·5 | 32 | 35·0 | 0·6 | |
| 9·5 | 33 | 12·5 | 59·6 | |
| 9·6 | | 44·5 | 49·6 | |
| 9·6 | | 53·5 | 29·0 | |
| 9·2 | 34 | 35·5 | 13·4 | g |
| 9·6 | 35 | 4·5 | 13·4 | |
| 9·6 | 36 | 25·0 | 23·3 | |
| 8·8 | 37 | 7·5 | 18·1 | |
| 9·6 | | 9·0 | 13·4 | |
| 9·6 | | 13·5 | 9·1 | |
| 8·6 | 38 | 34·5 | 43·0 | g |
| 9·0 | | 40·5 | 3·0 | 9·0 g |
| 9·6 | 39 | 2·0 | 21·4 | |

## 1101—1160.

| mag. | 9h.—10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·4 | 39 | 46·0 | 17·0 | |
| 8·8 | | 56·5 | 0·8 | g |
| 9·6 | | 59·5 | 32·8 | |
| 8·8 | 40 | 51·0 | 48·4 | |
| 9·2 | 41 | 23·5 | 42·1 | |
| 8·6 | | 27·0 | 8·3 | 9·0 Gg |
| 9·1 | | 32·5 | 13·7 | |
| 8·0 | | 59·0 | 13·0 | 8·0 GSg |
| 9·0 | 42 | 2·0 | 42·6 | |
| 9·3 | | 9·0 | 1·0 | |
| 9·6 | | 12·5 | 50·1 | |
| 7·3 | | 51·0 | 11·1 | 7·0 GSg |
| 9·4 | 43 | 19·0 | 20·3 | |
| 9·2 | | 22·5 | 16·4 | |
| 7·3 | | 29·5 | 32·3 | 7·5 GSg |
| 9·0 | 44 | 59·5 | 22·9 | |
| 9·5 | 45 | 9·0 | 55·4 | |
| 9·6 | | 20·5 | 32·5 | G |
| 9·6 | | 21·5 | 27·8 | G |
| 9·6 | | 28·0 | 14·4 | |
| 9·5 | | 31·0 | 32·9 | |
| 9·1 | | 41·0 | 21·3 | g |
| 9·1 | | 45·0 | 21·9 | g |
| 9·5 | 46 | 52·0 | 39·1 | |
| 8·0 | | 56·0 | 29·2 | 8·0 Gg |
| 9·3 | 48 | 33·5 | 19·7 | |
| 8·6 | 49 | 34·0 | 12·0 | g |
| 7·2 | 51 | 21·5 | 18·2 | 7·0 GSg |
| 8·9 | | 37·5 | 2·0 | 7·5 Gg |
| 9·6 | | 39·0 | 15·1 | |
| 9·4 | | 41·5 | 17·0 | |
| 9·6 | | 48·5 | 3·8 | |
| 8·5 | 53 | 21·5 | 25·4 | |
| 9·6 | 54 | 43·0 | 59·3 | |
| 9·6 | 56 | 23·0 | 14·3 | |
| 9·2 | 57 | 6·5 | 7·1 | g |
| 9·1 | | 45·5 | 27·9 | |
| 7·9 | 58 | 16·0 | 12·2 | 8·8 g |
| 9·6 | | 52·5 | 15·0 | |
| 9·6 | 59 | 13·0 | 36·2 | |
| 9·4 | | 13·0 | 43·6 | g |
| 9·3 | | 57·0 | 1·1 | 9·0 g |
| 9·2 | 1 | 23·0 | 29·9 | |
| 9·0 | | 44·0 | 26·0 | 9·5 |
| 9·6 | 2 | 49·0 | 46·9 | |
| 9·0 | 3 | 0·0 | 58·9 | 9·2 g |
| 9·3 | | 35·5 | 43·0 | |
| 9·6 | 4 | 28·0 | 2·0 | |
| 8·8 | | 38·5 | 28·1 | |
| 9·6 | 5 | 7·5 | 41·5 | |
| 9·5 | | 7·5 | 59·0 | |
| 9·8 | | 24·5 | 39·3 | |
| 9·5 | | 48·5 | 5·0 | |
| 9·6 | 6 | 5·5 | 44·0 | |
| 8·4 | | 22·5 | 45·0 | 8·2 g |
| 9·0 | 7 | 4·5 | 36·8 | 8·5 g |
| 9·3 | | 6·7 | 55·4 | 9·0 |
| 9·8 | | 18·5 | 48·2 | |
| 9·8 | | 36·5 | 11·1 | |
| 9·8 | | 49·0 | 55·9 | : |

## 1161—1220.

| mag. | 10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·8 | 7 | 51·5 | 2·5 | |
| 9·4 | | 57·0 | 58·4 | |
| 8·6 | | 57·7 | 2·4 | 9·0 |
| 8·6 | 8 | 12·5 | 2·9 | 7·5 g |
| 9·8 | | 24·5 | 16·4 | : |
| 9·8 | | 25·5 | 59·1 | |
| 9·9 | | 36·5 | 22·1 | |
| 8·4 | | 47·5 | 5·1 | 8·5 g |
| 9·9 | | 48·5 | 4·9 | |
| 9·9 | 9 | 8·0 | 26·2 | |
| 9·7 | | 24·5 | 5·8 | |
| 9·0 | | 45·2 | 12·2 | 9·0 g |
| 9·6 | 10 | 4·5 | 20·5 | |
| 9·9 | | 14·5 | 14·6 | |
| 9·4 | | 16·7 | 56·5 | : |
| 9·4 | | 24·7 | 44·7 | |
| 9·4 | | 35·0 | 11·0 | g |
| 4·2 | | 44·8 | 25·0 | 4·0 GSctrλ |
| 9·9 | | 51·5 | 11·3 | |
| 8·9 | | 51·5 | 9·5 | g |
| 9·8 | 11 | 1·5 | 56·1 | |
| 9·8 | | 3·5 | 3·0 | |
| 9·0 | | 22·5 | 1·1 | 9·0 |
| 9·8 | | 30·5 | 53·3 | |
| 9·8 | | 34·0 | 15·1 | |
| 9·7 | | 36·5 | 10·1 | |
| 9·8 | | 58·0 | 14·1 | |
| 9·7 | 12 | 6·5 | 33·0 | |
| 8·1 | | 8·0 | 1·1 | 8·0 Gg |
| 8·8 | | 27·0 | 25·1 | 9·0 g |
| 8·2 | | 38·0 | 38·4 | 8·0 g |
| 9·9 | | 44·0 | 28·4 | |
| 9·8 | | 50·5 | 42·4 | |
| 9·9 | | 52·5 | 48·1 | |
| 9·9 | 13 | 0·5 | 52·1 | |
| 9·2 | | 10·0 | 45·8 | |
| 9·8 | | 17·0 | 58·4 | |
| 9·9 | | 17·5 | 59·1 | |
| 9·8 | | 28·5 | 49·7 | |
| 9·9 | | 52·0 | 1·0 | |
| 9·9 | | 53·0 | 53·0 | |
| 7·9 | 14 | 1·0 | 53·3 | 8·5 g |
| 9·8 | | 4·0 | 13·7 | |
| 9·5 | | 15·5 | 7·5 | |
| 9·9 | | 26·5 | 11·8 | |
| 9·4 | 15 | 40·5 | 29·4 | |
| 9·9 | | 42·5 | 25·7 | |
| 9·2 | | 57·5 | 49·3 | |
| 9·3 | | 59·0 | 38·0 | |
| 9·7 | 16 | 2·5 | 38·7 | |
| 9·8 | | 15·5 | 8·0 | |
| 9·2 | | 15·5 | 17·1 | |
| 9·9 | | 19·0 | 47·3 | |
| 9·4 | | 39·0 | 49·0 | |
| 9·9 | | 50·5 | 21·4 | |
| 9·7 | 17 | 21·5 | 15·9 | |
| 9·8 | | 33·5 | 44·7 | |
| 9·9 | | 38·0 | 2·9 | |
| 9·6 | 18 | 0·5 | 9·1 | |
| 9·7 | | 15·5 | 26·9 | |

## 1221—1280.

| mag. | 10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·7 | 18 | 17·0 | 52·5 | |
| 9·8 | | 31·5 | 27·1 | |
| 9·8 | | 36·5 | 12·5 | |
| 9·9 | | 37·0 | 37·3 | |
| 9·2 | | 42·0 | 27·0 | |
| 9·2 | | 52·5 | 57·7 | |
| 9·4 | 19 | 7·5 | 0·7 | 9·0 |
| 9·8 | | 12·5 | 54·1 | |
| 9·1 | | 20·5 | 54·0 | g |
| 9·4 | | 44·5 | 27·9 | |
| 9·8 | | 51·5 | 6·5 | |
| 9·9 | 20 | 21·5 | 45·5 | |
| 9·8 | | 26·5 | 45·0 | |
| 9·8 | | 32·5 | 53·2 | |
| 8·4 | | 56·5 | 17·0 | 7·5 Gg |
| 9·9 | | 59·0 | 38·1 | |
| 9·7 | 21 | 9·5 | 1·2 | |
| 9·8 | | 22·0 | 9·2 | |
| 9·3 | | 22·5 | 30·1 | |
| 9·4 | | 35·0 | 2·5 | |
| 9·5 | | 56·5 | 42·2 | |
| 9·5 | 22 | 9·0 | 27·1 | |
| 9·6 | | 9·5 | 13·9 | 9·5 |
| 9·8 | | 16·5 | 8·7 | |
| 9·7 | | 20·5 | 48·8 | |
| 9·8 | 23 | 11·0 | 3·0 | |
| 9·2 | | 11·0 | 1·3 | |
| 9·8 | | 16·5 | 17·1 | |
| 9·5 | | 23·5 | 21·9 | |
| 9·4 | | 26·0 | 41·9 | |
| 8·2 | | 32·5 | 14·8 | 8·5 g |
| 9·2 | | 40·5 | 5·0 | |
| 9·9 | | 51·5 | 43·5 | |
| 9·9 | 24 | 18·5 | 16·7 | |
| 9·8 | | 20·5 | 26·0 | |
| 9·9 | | 21·5 | 17·0 | |
| 9·4 | | 46·0 | 45·1 | g |
| 8·6 | | 50·5 | 46·1 | 9·0 g |
| 9·8 | 25 | 1·5 | 51·5 | |
| 9·7 | | 16·5 | 33·7 | |
| 9·7 | | 20·5 | 33·9 | |
| 9·8 | | 22·5 | 31·1 | |
| 9·9 | | 30·5 | 58·1 | |
| 9·4 | | 36·5 | 12·9 | |
| 9·7 | | 36·5 | 27·4 | |
| 8·7 | | 39·5 | 14·4 | g |
| 9·8 | | 59·5 | 6·1 | |
| 9·8 | 26 | 0·5 | 25·0 | |
| 9·8 | | 1·5 | 41·4 | |
| 9·4 | | 7·0 | 19·4 | |
| 9·8 | | 16·0 | 28·8 | |
| 9·8 | | 33·0 | 52·0 | |
| 8·3 | | 33·0 | 35·2 | g |
| 9·6 | | 35·0 | 36·8 | |
| 9·2 | | 46·0 | 12·8 | g |
| 9·9 | | 47·5 | 5·5 | |
| 9·4 | | 55·0 | 44·1 | |
| 9·9 | 27 | 2·5 | 45·8 | |
| 9·8 | | 13·5 | 2·2 | |
| 9·4 | | 18·0 | 44·1 | |



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### 1281—1340.

| mag. | 10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·7 | 27 | 22·5 | 18·3 | |
| 9·9 | | 41·5 | 27·0 | |
| 9·2 | | 48·5 | 31·9 | g |
| 9·8 | 28 | 2·5 | 9·1 | |
| 9·8 | | 6·5 | 6·0 | |
| 9·9 | | 19·5 | 59·1 | |
| 9·4 | | 24·0 | 40·2 | |
| 8·2 | | 32·5 | 26·4 | g |
| 9·7 | | 34·5 | 20·4 | |
| 9·8 | | 53·5 | 5·2 | |
| 9·7 | 29 | 0·0 | 47·0 | |
| 9·4 | | 32·0 | 34·7 | |
| 9·7 | | 52·0 | 29·1 | |
| 9·8 | 30 | 21·0 | 57·1 | |
| 9·5 | | 31·5 | 47·9 | |
| 9·7 | | 46·0 | 59·0 | |
| 9·7 | | 49·5 | 31·5 | |
| 9·6 | 31 | 0·5 | 33·6 | |
| 9·2 | | 1·5 | 42·2 | 8·2 g |
| 9·6 | | 2·0 | 17·8 | |
| 9·8 | | 20·5 | 25·1 | |
| 9·5 | | 22·5 | 35·1 | |
| 9·9 | | 24·0 | 51·7 | |
| 7·9 | | 37·0 | 58·1 | g |
| 9·4 | | 41·0 | 52·1 | g |
| 7·8 | | 50·5 | 10·2 | 8·0 Gg |
| 9·8 | 32 | 7·5 | 18·1 | |
| 9·8 | | 14·5 | 27·0 | |
| 9·4 | | 22·0 | 40·4 | |
| 9·8 | | 25·0 | 40·8 | |
| 9·7 | | 27·0 | 4·0 | |
| 9·8 | | 32·5 | 46·8 | |
| 9·9 | | 36·5 | 9·8 | |
| 9·4 | | 39·0 | 30·3 | |
| 8·5 | | 57·5 | 55·8 | 9·0 g |
| 8·4 | 33 | 43·0 | 47·0 | 8·5 Gg |
| 9·7 | | 54·0 | 52·8 | |
| 9·7 | 34 | 7·0 | 15·3 | |
| 9·6 | | 7·5 | 20·8 | |
| 8·7 | | 7·5 | 59·2 | g |
| 9·8 | | 28·5 | 31·1 | |
| 9·4 | | 49·0 | 19·6 | |
| 7·4 | | 50·0 | 39·6 | 8·0 GSg |
| 9·8 | 35 | 9·0 | 6·5 | |
| 9·7 | | 17·5 | 28·4 | |
| 9·7 | | 46·5 | 18·9 | |
| 9·6 | | 47·5 | 45·5 | |
| 9·3 | | 48·0 | 22·0 | 9·5 |
| 9·8 | | 52·5 | 33·5 | |
| 9·9 | | 57·5 | 25·5 | |
| 9·8 | 36 | 7·5 | 7·3 | |
| 9·4 | | 7·5 | 23·6 | |
| 9·5 | | 22·5 | 15·3 | |
| 9·8 | | 33·5 | 29·0 | |
| 9·6 | | 35·5 | 27·6 | |
| 9·7 | | 37·5 | 28·5 | |
| 9·9 | | 44·5 | 28·6 | |
| 9·8 | 37 | 21·5 | 1·5 | |
| 9·8 | | 27·0 | 13·8 | |
| 9·6 | | 32·0 | 1·6 | |

### 1341—1400.

| mag. | 10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·9 | 37 | 34·5 | 53·9 | |
| 9·0 | | 34·5 | 2·5 | |
| 9·6 | | 40·0 | 31·0 | |
| 9·8 | | 46·5 | 32·2 | |
| 9·9 | | 53·5 | 52·9 | |
| 9·8 | 38 | 10·5 | 19·1 | |
| 9·6 | | 16·5 | 11·9 | |
| 9·8 | | 32·5 | 22·3 | |
| 9·4 | | 33·5 | 28·0 | |
| 9·6 | | 37·0 | 54·8 | |
| 9·4 | | 37·5 | 21·8 | |
| 9·8 | | 41·5 | 25·2 | |
| 9·2 | | 43·5 | 53·2 | |
| 9·4 | | 59·0 | 29·2 | |
| 9·8 | 39 | 3·0 | 54·0 | |
| 9·8 | | 12·5 | 13·2 | |
| 9·8 | | 16·5 | 34·6 | |
| 9·4 | | 17·0 | 28·0 | |
| 9·8 | | 47·5 | 39·6 | |
| 9·8 | 40 | 4·5 | 31·8 | |
| 9·6 | | 5·0 | 10·1 | |
| 9·8 | | 18·5 | 39·2 | |
| 9·4 | | 23·0 | 40·4 | |
| 9·6 | | 42·0 | 56·8 | |
| 9·8 | | 57·5 | 54·1 | |
| 9·8 | 41 | 3·5 | 30·1 | |
| 9·8 | | 38·5 | 1·9 | |
| 9·8 | | 46·5 | 14·2 | |
| 9·9 | | 48·0 | 2·9 | |
| 9·7 | | 57·0 | 36·5 | |
| 9·4 | | 59·0 | 33·9 | |
| 9·2 | | 59·0 | 46·1 | 8·8 g |
| 9·8 | 42 | 9·0 | 50·7 | |
| 9·8 | | 10·5 | 39·0 | |
| 9·8 | | 13·0 | 36·5 | |
| 9·4 | | 17·5 | 54·3 | 9·5 |
| 9·6 | | 50·0 | 12·7 | |
| 9·6 | | 56·0 | 41·7 | |
| 9·9 | | 59·0 | 55·0 | |
| 9·9 | 43 | 17·0 | 17·9 | |
| 9·6 | | 22·0 | 37·8 | g |
| 9·8 | | 25·8 | 1·6 | |
| 9·9 | | 30·5 | 50·1 | |
| 9·8 | | 37·0 | 8·9 | |
| 9·9 | | 43·0 | 54·0 | |
| 9·4 | | 54·0 | 51·7 | 9·0 g |
| 9·8 | | 57·5 | 52·0 | |
| 9·7 | 44 | 13·0 | 35·4 | |
| 9·8 | | 23·0 | 9·0 | |
| 9·7 | | 39·0 | 1·9 | |
| 9·8 | | 44·5 | 23·8 | |
| 9·4 | | 59·0 | 50·1 | |
| 9·2 | 45 | 2·5 | 57·3 | 9·0 g |
| 9·5 | | 12·0 | 25·2 | |
| 9·9 | | 26·5 | 59·7 | |
| 9·8 | | 28·0 | 22·5 | |
| 9·8 | | 28·0 | 20·4 | |
| 9·4 | | 28·5 | 49·1 | 9·5 |
| 9·5 | | 51·5 | 11·7 | |
| 9·9 | | 57·0 | 2·0 | |

### 1401—1460.

| mag. | 10h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·9 | 46 | 25·5 | 0·7 | |
| 9·9 | | 32·5 | 20·1 | |
| 9·8 | | 35·5 | 56·1 | |
| 9·8 | | 41·0 | 12·4 | |
| 9·8 | | 50·0 | 17·8 | |
| 9·9 | | 57·5 | 18·0 | |
| 9·8 | 47 | 1·0 | 43·9 | |
| 9·9 | | 21·5 | 7·0 | |
| 9·6 | | 28·5 | 7·9 | |
| 9·7 | | 31·0 | 13·0 | |
| 9·5 | | 33·5 | 42·1 | |
| 9·8 | | 34·0 | 33·4 | |
| 9·8 | | 38·0 | 2·9 | |
| 9·8 | | 45·0 | 16·0 | |
| 9·8 | | 52·0 | 4·6 | |
| 9·8 | | 58·5 | 35·1 | |
| 9·6 | | 59·0 | 50·0 | |
| 8·8 | 48 | 7·0 | 14·0 | 9·0 g |
| 9·9 | | 12·5 | 48·8 | |
| 9·8 | | 13·0 | 46·0 | |
| 9·9 | | 17·5 | 55·3 | |
| 9·8 | | 35·5 | 17·0 | |
| 9·8 | | 41·0 | 11·1 | |
| 9·7 | | 55·0 | 6·7 | |
| 9·8 | | 56·5 | 50·1 | |
| 9·8 | 49 | 3·5 | 39·1 | |
| 9·8 | | 8·0 | 53·1 | |
| 9·8 | | 12·5 | 15·8 | |
| 9·2 | | 21·0 | 59·0 | |
| 9·4 | | 22·5 | 16·7 | |
| 9·5 | | 38·5 | 28·4 | |
| 9·6 | | 41·0 | 22·2 | |
| 9·8 | | 56·0 | 3·7 | |
| 9·5 | 50 | 0·5 | 34·0 | |
| 9·4 | | 5·5 | 31·8 | |
| 8·5 | | 19·5 | 23·2 | 9·0 g |
| 9·8 | | 32·5 | 12·2 | |
| 9·8 | | 38·0 | 10·2 | |
| 9·8 | | 56·5 | 25·1 | |
| 9·2 | | 59·5 | 21·8 | |
| 9·1 | 51 | 22·0 | 34·9 | |
| 9·2 | | 24·5 | 0·0 | 9·0 g |
| 9·6 | | 33·5 | 57·1 | |
| 9·4 | | 48·4 | 59·1 | |
| 9·7 | | 49·7 | 0·3 | |
| 9·8 | | 57·8 | 2·8 | |
| 8·6 | 52 | 9·0 | 47·0 | g |
| 9·6 | | 23·7 | 33·7 | |
| 9·8 | | 40·5 | 1·0 | |
| 9·4 | | 46·3 | 51·0 | |
| 9·8 | | 51·5 | 58·5 | |
| 9·9 | | 51·5 | 5·3 | |
| 9·0 | | 51·7 | 18·8 | 9·0 g |
| 9·5 | 53 | 10·7 | 26·1 | |
| 9·4 | | 11·7 | 56·2 | |
| 9·4 | | 32·7 | 16·4 | |
| 9·8 | | 38·5 | 8·1 | |
| 8·9 | | 53·0 | 15·7 | 8·0 g |
| 8·9 | 54 | 0·3 | 23·2 | |
| 9·6 | | 16·7 | 29·9 | |

### 1461—1520.

| mag. | 10h.—11h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·2 | 54 | 32·5 | 28·2 | |
| 9·6 | 55 | 5·5 | 14·6 | |
| 9·2 | | 10·0 | 46·8 | |
| 9·2 | | 16·0 | 41·8 | |
| 9·5 | | 35·5 | 28·9 | |
| 9·0 | | 43·5 | 2·0 | 9·7 g |
| 8·1 | | 44·0 | 7·8 | 8·4 g |
| 9·4 | | 54·5 | 35·0 | |
| 9·3 | | 56·0 | 3·4 | |
| 9·2 | 56 | 19·0 | 31·0 | |
| 9·2 | | 33·5 | 39·4 | |
| 9·6 | 58 | 51·0 | 24·3 | |
| 9·5 | 59 | 13·0 | 2·9 | |
| 9·6 | | 46·5 | 3·8 | |
| 8·1 | | 51·5 | 15·2 | 8·0 g |
| 9·5 | | 54·0 | 41·9 | |
| 9·6 | 0 | 40·0 | 18·9 | |
| 9·6 | 1 | 6·5 | 36·0 | |
| 9·6 | | 14·5 | 26·8 | |
| 9·6 | | 32·2 | 59·5 | |
| 9·4 | 2 | 44·5 | L·4 | |
| 9·4 | 4 | 11·5 | 47·0 | |
| 9·4 | | 22·0 | 46·7 | |
| 9·3 | | 26·0 | 49·1 | |
| 8·8 | | 33·2 | 56·4 | g |
| 9·5 | | 38·5 | 21·0 | |
| 8·1 | 5 | 5·5 | 41·2 | 9·0 g |
| 9·2 | | 35·2 | 58·0 | |
| 9·5 | | 40·0 | 42·3 | |
| 9·6 | | 53·5 | 24·0 | |
| 9·2 | 6 | 36·0 | 18·9 | g |
| 9·2 | | 46·0 | 52·8 | |
| 9·3 | 7 | 24·0 | 35·9 | |
| 9·0 | | 33·5 | 51·0 | |
| 9·0 | 8 | 4·5 | 40·1 | 10·0 g |
| 9·5 | | 20·0 | 58·1 | |
| 9·6 | | 20·0 | 43·9 | |
| 9·2 | | 21·5 | 26·0 | g |
| 9·6 | | 46·0 | 24·6 | |
| 7·7 | | 47·2 | 57·4 | 8·0 g |
| 7·6 | 10 | 0·0 | 40·7 | 8·0 GSg |
| 9·6 | | 7·8 | 2·0 | |
| 9·6 | | 13·0 | 46·0 | |
| 9·5 | | 24·0 | 8·1 | |
| 9·2 | | 26·0 | 46·0 | |
| 9·6 | | 44·0 | 32·0 | |
| 9·6 | | 58·5 | 18·0 | |
| 9·6 | 11 | 0·0 | 14·0 | |
| 9·6 | | 33·0 | 44·4 | |
| 7·5 | | 36·0 | 13·4 | 8·0 g |
| 9·6 | | 43·0 | 45·9 | |
| 9·6 | | 58·5 | 23·9 | |
| 8·9 | 12 | 24·0 | 24·1 | |
| 9·4 | | 32·0 | 28·4 | |
| 9·2 | | 33·0 | 25·6 | |
| 9·2 | | 54·0 | 59·0 | g |
| 9·2 | | 59·0 | 12·9 | 8·5 g |
| 9·2 | 13 | 5·0 | 2·4 | |
| 9·2 | | 5·0 | 10·8 | g |
| 9·6 | | 5·5 | 10·0 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 10 | 20 | 39 | 7·6 |
| | 30 | 43 | 7·7 |
| | 40 | 46 | 7·9 |
| | 50 | 50 | 8·0 |
| 11 | 0 | 54 | 8·1 |
| | 10 | 57 | 8·2 |
| | 20 | 61 | 8·2 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 11 | 10 | 57 | 8.2 |
| | 20 | 61 | 8.2 |
| | 30 | 65 | 8.3 |
| | 40 | 69 | 8.3 |
| | 50 | 73 | 8.3 |
| 12 | 0 | 77 | 8.4 |
| | 10 | 81 | 8.3 |
| | 20 | 85 | 8.3 |
| | 30 | 88 | 8.3 |
| | 40 | 92 | 8.2 |
| | 50 | 96 | 8.2 |
| 13 | 0 | 100 | 8.1 |

## 1521—1580.

| mag. | 11h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.0 | 13 | 35.0 | 41.0 | |
| 9.3 | | 50.5 | 31.4 | |
| 9.6 | | 56.5 | 38.8 | |
| 9.6 | | 59.0 | 11.9 | |
| 9.2 | 14 | 1.0 | 48.4 | |
| 9.5 | | 1.5 | 42.2 | |
| 9.6 | | 32.5 | 29.0 | |
| 9.6 | | 34.0 | 49.7 | |
| 9.3 | | 41.0 | 59.6 | |
| 9.4 | | 49.0 | 59.1 | |
| 8.1 | | 55.5 | 56.0 | 8.0 *g* |
| 9.2 | 17 | 13.0 | 39.9 | |
| 9.0 | | 30.5 | 50.1 | |
| 8.5 | | 55.5 | 16.0 | 9.0 |
| 9.2 | 18 | 46.0 | 31.4 | |
| 9.2 | | 47.0 | 11.7 | |
| 8.8 | | 49.0 | 26.9 | 9.5 |
| 9.5 | 19 | 46.0 | 53.0 | |
| 8.8 | | 51.0 | 11.3 | 9.2 *g* |
| 9.2 | 21 | 30.5 | 28.7 | |
| 9.4 | | 39.0 | 22.0 | |
| 9.6 | | 46.0 | 54.5 | 9.0 |
| 9.1 | 22 | 13.5 | 40.3 | |
| 9.0 | | 21.5 | 26.1 | 9.0 *g* |
| 9.6 | 23 | 30.0 | 22.1 | |
| 9.6 | | 42.0 | 29.5 | |
| 9.6 | | 47.5 | 33.4 | |
| 9.0 | 24 | 36.0 | 10.4 | 9.2 |
| 9.6 | 25 | 16.5 | 8.0 | |
| 9.4 | | 27.0 | 14.6 | |
| 9.4 | | 41.0 | 31.2 | |
| 9.2 | | 53.0 | 28.2 | 9.5 *g* |
| 9.6 | 26 | 53.5 | 21.1 | 9.0 |
| 9.2 | 27 | 16.5 | 29.9 | |
| 9.6 | | 40.0 | 43.4 | |
| 9.5 | | 40.0 | 45.8 | |
| 6.8 | 28 | 0.5 | 30.3 | 7.0 GS*g* |
| 9.1 | | 7.5 | 53.8 | 9.0 *g* |
| 9.0 | | 52.0 | 10.4 | 9.0 |
| 8.4 | 30 | 14.5 | 30.9 | 8.8 *g* |
| 9.6 | 31 | 13.5 | 51.9 | |
| 8.9 | | 21.5 | 1.2 | 9.5 |
| 9.2 | | 46.0 | 47.0 | *g* |
| 9.4 | | 52.0 | 13.9 | |
| 9.6 | 32 | 10.0 | 49.0 | |
| 9.2 | | 11.5 | 30.6 | |
| 9.2 | | 19.5 | 31.8 | |
| 9.2 | | 30.0 | 42.0 | |
| 9.2 | 33 | 20.0 | 9.0 | 9.5 |
| 9.5 | 34 | 4.0 | 41.9 | |
| 9.2 | | 4.2 | 45.8 | |
| 9.5 | | 20.0 | 56.4 | |
| 9.6 | 35 | 53.0 | 43.6 | |
| 9.6 | 36 | 11.0 | 34.0 | |
| 9.2 | 37 | 10.3 | 9.3 | 9.0 |
| 9.0 | | 18.0 | 58.0 | 9.0 *g* |
| 9.5 | | 22.8 | 8.8 | |
| 9.5 | 38 | 30.5 | 59.7 | |
| 8.8 | | 31.0 | 23.0 | *g* |
| 8.9 | 39 | 2.5 | 40.8 | |

## 1581—1640.

| mag. | 11h.—12h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.4 | 39 | 2.8 | 24.1 | 9.5 *g* |
| 8.6 | | 22.0 | 15.5 | 9.5 *g* |
| 8.7 | 40 | 40.5 | 34.8 | *g* |
| 8.8 | | 48.0 | 25.9 | *g* |
| 9.1 | | 54.0 | 49.2 | 8.0 G*g* |
| 9.2 | | 55.5 | 43.1 | *g* |
| 9.2 | 41 | 3.0 | 46.8 | 9.0 *g* |
| 8.4 | | 28.0 | 43.2 | 8.5 *g* |
| 9.5 | 42 | 21.5 | 4.4 | |
| 9.5 | 43 | 1.0 | 49.7 | |
| 8.2 | | 1.5 | 45.5 | 8.5 *g* |
| 9.6 | | 14.5 | 16.1 | |
| 9.2 | | 41.0 | 55.4 | |
| 8.9 | | 57.0 | 29.2 | 9.5 |
| 7.1 | | 59.0 | 31.8 | 5.5 GS*g* |
| 9.4 | 44 | 28.0 | 44.8 | |
| 9.2 | | 41.0 | 50.5 | |
| 9.2 | 45 | 10.0 | 29.3 | |
| 9.0 | 46 | 0.5 | 23.0 | |
| 8.6 | | 36.5 | 15.6 | 9.0 *g* |
| 9.4 | | 38.5 | 16.9 | 9.0 *g* |
| 9.4 | | 46.0 | 34.7 | |
| 9.0 | | 48.0 | 11.3 | 8.2 *g* |
| 9.0 | 47 | 53.0 | 14.3 | 8.8 *g* |
| 9.3 | 48 | 17.0 | 18.3 | 8.8 *g* |
| 8.7 | | 20.5 | 16.7 | 9.0 *g* |
| 9.6 | 49 | 6.0 | 48.0 | |
| 9.4 | | 31.5 | 45.0 | |
| 9.4 | | 49.0 | 24.6 | |
| 9.4 | 50 | 8.0 | 24.5 | |
| 9.1 | | 9.5 | 0.3 | 9.0 |
| 7.8 | | 34.0 | 27.5 | 8.5 *g* |
| 9.6 | 51 | 1.5 | 58.9 | |
| 9.3 | 52 | 7.5 | 56.7 | |
| 9.3 | | 28.0 | 29.2 | |
| 9.2 | 53 | 11.0 | 36.8 | |
| 8.3 | | 37.0 | 11.3 | 8.8 *g* |
| 8.5 | 54 | 10.5 | 27.5 | 8.8 *g* |
| 8.7 | | 11.5 | 38.0 | 9.0 *g* |
| 9.3 | | 20.5 | 17.6 | |
| 9.6 | | 43.5 | 21.9 | |
| 8.0 | 55 | 22.5 | 42.7 | 8.0 *g* |
| 9.6 | 57 | 49.0 | 39.9 | |
| 8.9 | | 52.0 | 2.0 | 8.5 *g* |
| 9.5 | 58 | 28.0 | 10.9 | |
| 8.8 | | 31.5 | 18.3 | 7.5 GS*g* |
| 8.8 | | 32.0 | 7.0 | 8.2 GS*g* |
| 9.4 | | 34.5 | 35.1 | |
| 9.5 | 59 | 1.0 | 41.9 | *g* |
| 8.2 | | 4.5 | 12.9 | 9.0 *g* |
| 8.8 | | 45.0 | 7.8 | 9.5 |
| 7.4 | | 49.0 | 6.2 | 7.8 GS*g* |
| 9.6 | 0 | 4.0 | 12.3 | 9.5 |
| 9.5 | | 31.5 | 17.3 | |
| 9.6 | | 44.0 | 41.7 | 9.0 *g* |
| 8.2 | | 45.0 | 44.7 | 9.0 *g* |
| 9.5 | | 54.0 | 47.7 | |
| 9.5 | 1 | 10.0 | 12.3 | 8.8 |
| 9.4 | | 11.0 | 28.4 | |
| 9.5 | | 19.5 | 25.4 | |

## 1641—1700.

| mag. | 12h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.0 | 2 | 49.0 | 30.2 | 9.0 *g* |
| 9.2 | 3 | 39.0 | 17.8 | |
| 9.0 | 4 | 31.0 | 22.3 | |
| 9.6 | | 52.0 | 11.9 | |
| 9.4 | 5 | 12.5 | 2.0 | 8.5 *g* |
| 7.2 | 6 | 4.0 | 27.2 | 6.5 GS*g* |
| 9.2 | 7 | 24.5 | 20.7 | 8.5 G*g* |
| 9.2 | 10 | 22.5 | 39.7 | |
| 9.2 | | 24.5 | 27.4 | |
| 9.4 | | 55.0 | 24.1 | |
| 8.4 | | 57.0 | 40.2 | 9.0 *g* |
| 8.6 | 11 | 5.5 | 14.9 | 8.0 *g* |
| 9.2 | 12 | 25.0 | 47.9 | |
| 8.2 | 13 | 19.5 | 4.9 | 9.2 |
| 9.4 | 14 | 5.0 | 15.3 | |
| 9.4 | 18 | 14.0 | 40.2 | |
| 8.4 | 21 | 1.2 | 51.1 | 8.0 G*g* |
| 9.2 | | 39.7 | 13.0 | 9.0 *g* |
| 9.6 | | 52.5 | 50.4 | 9.2 *g* |
| 9.5 | 22 | 17.5 | 59.0 | |
| 9.6 | | 24.0 | 45.0 | |
| 9.2 | | 48.5 | 33.0 | |
| 9.7 | | 52.5 | 38.6 | |
| 9.1 | 24 | 31.5 | 57.3 | 9.5 *g* |
| 9.6 | | 31.5 | 30.5 | |
| 8.5 | 25 | 28.5 | 14.0 | 8.5 *g* |
| 9.0 | | 44.5 | 14.9 | 9.5 *g* |
| 9.6 | | 54.0 | 38.4 | |
| 9.7 | 26 | 18.0 | 10.0 | |
| 8.7 | | 31.5 | 37.9 | *g* |
| 9.6 | | 48.5 | 50.0 | |
| 9.6 | | 55.0 | 37.0 | |
| 8.9 | | 58.0 | 2.8 | |
| 9.5 | 27 | 2.0 | 33.0 | |
| 9.4 | | 3.0 | 0.2 | |
| 8.6 | | 27.5 | 12.0 | 8.7 *g* |
| 9.0 | | 32.5 | 20.7 | |
| 9.6 | | 44.5 | 18.3 | |
| 8.8 | | 55.5 | 38.0 | 9.0 *g* |
| 9.5 | 28 | 56.5 | 16.9 | |
| 9.6 | 29 | 39.5 | 57.1 | |
| 9.4 | | 42.5 | 47.0 | |
| 8.7 | | 52.0 | 3.0 | 9.5 |
| 8.1 | 30 | 27.5 | 58.6 | 8.5 *g* |
| 9.2 | 32 | 10.0 | 30.0 | |
| 8.2 | | 42.0 | 2.6 | 9.0 *g* |
| 9.7 | | 48.5 | 27.7 | |
| 9.2 | | 52.5 | 28.0 | |
| 7.4 | | 54.0 | 51.7 | 8.0 GS*g* |
| 8.2 | 33 | 15.0 | 44.0 | 8.5 *g* |
| 9.6 | | 27.0 | 1.6 | |
| 9.3 | 34 | 33.0 | 17.8 | |
| 8.8 | | 52.5 | 30.4 | 9.0 *g* |
| 9.6 | 35 | 4.5 | 54.0 | |
| 8.6 | | 10.5 | 18.1 | 8.8 *g* |
| 9.0 | 36 | 21.5 | 49.0 | |
| 9.5 | | 54.5 | 2.7 | |
| 9.7 | 37 | 9.5 | 50.9 | |
| 9.6 | | 26.0 | 1.7 | |
| 9.3 | 38 | 9.0 | 15.6 | |

## 1701—1760.

| mag. | 12h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.0 | 38 | 58.5 | 58.0 | *g* |
| 9.4 | 39 | 33.0 | 35.2 | *g* |
| 9.4 | | 43.0 | 13.9 | |
| 9.7 | 40 | 5.5 | 38.0 | |
| 9.4 | | 15.0 | 51.3 | |
| 8.6 | | 18.0 | 38.4 | *g* |
| 9.2 | 41 | 8.0 | 13.0 | |
| 9.4 | | 53.0 | 11.3 | 9.0 |
| 9.5 | 42 | 31.5 | 50.9 | |
| 9.5 | | 49.0 | 16.8 | |
| 9.6 | | 53.5 | 58.9 | |
| 9.6 | 43 | 27.0 | 19.9 | |
| 9.7 | | 31.5 | 20.6 | |
| 9.0 | 44 | 3.0 | 43.9 | 9.0 *g* |
| 9.5 | | 13.0 | 18.9 | |
| 9.5 | | 21.5 | 14.7 | |
| 9.1 | | 22.5 | 43.7 | |
| 9.5 | | 39.0 | 43.2 | |
| 8.7 | | 42.0 | 50.7 | *g* |
| 8.8 | | 51.5 | 8.2 | |
| 8.4 | 45 | 9.5 | 12.0 | 8.8 *g* |
| 9.7 | | 30.5 | 50.4 | |
| 9.7 | | 51.5 | 41.8 | |
| 8.8 | 46 | 14.5 | 44.1 | 9.5 *g* |
| 8.0 | | 15.0 | 21.4 | 7.5 G*g* |
| 9.4 | 47 | 21.5 | 50.4 | *g* |
| 9.6 | 48 | 1.5 | 59.9 | |
| 9.6 | | 9.0 | 16.5 | |
| 9.5 | | 14.0 | 6.5 | |
| 9.6 | | 22.0 | 26.7 | |
| 9.5 | | 50.0 | 55.0 | |
| 9.2 | 49 | 4.0 | 8.4 | 9.0 |
| 8.4 | | 54.5 | 52.2 | 9.5 *g* |
| 9.4 | 50 | 4.0 | 17.3 | |
| 9.4 | | 4.0 | 10.4 | |
| 9.5 | | 6.5 | 55.3 | |
| 9.4 | | 14.0 | 48.0 | 9.5 |
| 9.2 | | 43.0 | 36.0 | |
| 8.6 | | 54.0 | 29.0 | *g* |
| 9.4 | | 54.0 | 3.5 | |
| 8.0 | 51 | 9.5 | 57.6 | 8.0 G*g* |
| 9.4 | | 38.0 | 3.9 | |
| 8.3 | 52 | 19.0 | 32.0 | 9.0 *g* |
| 9.5 | | 26.0 | 25.9 | |
| 9.0 | | 40.5 | 50.1 | |
| 9.6 | 53 | 20.0 | 13.3 | |
| 8.8 | | 27.5 | 0.0 | 10.0 |
| 9.3 | | 36.0 | 57.5 | |
| 9.5 | | 43.0 | 59.9 | |
| 9.4 | | 59.5 | 3.8 | |
| 9.2 | 54 | 19.8 | 59.0 | |
| 8.0 | 55 | 32.0 | 35.7 | 8.0 *g* |
| 9.4 | | 38.0 | 10.0 | 9.2 *g* |
| 7.9 | 56 | 23.5 | 18.9 | 8.5 *g* |
| 9.6 | | 42.0 | 59.9 | |
| 9.6 | 57 | 17.5 | 4.9 | |
| 8.7 | | 45.5 | 2.7 | 9.1 *g* |
| 9.4 | | 53.5 | 41.0 | *g* |
| 9.4 | 58 | 55.5 | 38.1 | |
| 9.2 | | 57.0 | 46.3 | *g* |

## 1761—1820.

| mag. | 12h.–13h. m | s | −69° ′ | |
|---|---|---|---|---|
| 8.7 | 58 | 57.5 | 50.7 | g |
| 9.6 | 59 | 2.5 | 53.9 | |
| 9.0 | | 7.5 | 11.7 | 9.0 g |
| 9.4 | | 24.5 | 57.0 | |
| 8.0 | 0 | 20.5 | 3.3 | 8.5 Gg |
| 9.4 | | 24.5 | 6.7 | |
| 9.4 | 1 | 34.5 | 19.2 | |
| 8.7 | | 44.5 | 3.0 | 9.0 |
| 9.7 | | 44.5 | 49.9 | |
| 9.5 | 2 | 53.5 | 22.0 | |
| 8.6 | | 54.0 | 20.0 | g |
| 6.9 | 3 | 15.0 | 16.5 | 6.5 GSg |
| 9.0 | | 39.0 | 55.5 | |
| 9.0 | | 45.5 | 39.2 | 9.0 g |
| 9.6 | | 54.5 | 48.0 | |
| 8.2 | 4 | 30.0 | 29.0 | 9.0 g |
| 8.9 | 5 | 20.5 | 38.0 | g |
| 9.6 | | 33.5 | 36.8 | g |
| 9.6 | | 44.0 | 56.4 | |
| 9.6 | | 46.0 | 35.8 | |
| 9.8 | 6 | 17.0 | 7.8 | |
| 9.9 | | 27.0 | 45.3 | |
| 7.3 | | 33.2 | 48.9 | 8.0 GSg |
| 7.7 | | 48.4 | 1.0 | 6.8 GSg |
| 9.9 | | 53.5 | 49.5 | |
| 9.9 | | 56.5 | 2.5 | |
| 8.9 | | 58.5 | 5.9 | |
| 9.9 | 7 | 25.5 | 42.5 | |
| 9.8 | | 30.0 | 49.1 | |
| 8.6 | | 38.6 | 58.1 | 9.0 g |
| 9.8 | | 59.5 | 22.8 | |
| 9.0 | 8 | 5.0 | 31.6 | |
| 9.7 | | 31.0 | 39.8 | |
| 9.8 | | 32.5 | 46.4 | |
| 9.9 | | 41.5 | 6.4 | |
| 9.9 | | 43.0 | 17.5 | |
| 9.0 | 9 | 4.2 | 8.9 | 9.5 |
| 9.5 | | 26.0 | 52.9 | |
| 9.6 | 10 | 9.0 | 34.9 | |
| 9.8 | | 30.5 | 14.0 | |
| 9.7 | | 33.5 | 21.0 | |
| 9.5 | | 34.5 | 5.5 | |
| 9.6 | | 39.0 | 40.3 | |
| 9.9 | | 39.5 | 56.9 | |
| 9.0 | 11 | 19.5 | 52.8 | |
| 9.8 | | 21.5 | 23.8 | |
| 8.2 | | 41.0 | 37.9 | 8.8 g |
| 7.6 | | 50.5 | 1.5 | 7.7 GSgr |
| 9.6 | | 53.5 | 43.6 | |
| 9.4 | 12 | 3.0 | 7.1 | |
| 9.3 | | 9.0 | 9.4 | |
| 9.2 | | 17.0 | 37.0 | 8.2 g |
| 8.7 | | 47.0 | 16.8 | 8.5 Gg |
| 9.9 | | 51.5 | 51.3 | |
| 9.4 | | 52.0 | 45.7 | |
| 7.3 | 13 | 8.5 | 53.6 | 8.0 GSg |
| 9.9 | | 17.5 | 44.4 | |
| 9.9 | | 20.0 | 28.3 | |
| 9.9 | | 29.5 | 29.6 | |
| 9.9 | | 30.5 | 14.0 | |

## 1821—1880.

| mag. | 13h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.5 | 13 | 32.5 | 41.0 | |
| 9.8 | | 45.5 | 10.0 | |
| 9.8 | 14 | 23.5 | 11.1 | |
| 9.9 | | 25.5 | 26.6 | |
| 9.7 | | 33.0 | 40.0 | |
| 9.5 | | 33.5 | 25.9 | |
| 9.7 | | 40.5 | 2.4 | |
| 9.9 | | 45.0 | 20.4 | |
| 8.8 | | 45.5 | 44.0 | 8.7 Gg |
| 9.5 | | 54.0 | 18.3 | |
| 9.9 | 15 | 14.5 | 14.5 | |
| 9.5 | | 30.0 | 52.0 | |
| 9.9 | | 41.5 | 20.0 | |
| 8.0 | | 43.0 | 46.3 | 7.5 GSg |
| 9.4 | | 54.0 | 3.0 | |
| 9.9 | 16 | 6.5 | 50.5 | 9.5 |
| 9.4 | | 19.0 | 6.2 | |
| 5.7 | | 45.0 | 58.5 | 6.0 GSg |
| 9.9 | | 45.5 | 37.2 | |
| 9.3 | 17 | 3.0 | 6.0 | |
| 9.3 | | 6.5 | 48.0 | |
| 9.8 | | 10.0 | 1.1 | |
| 8.8 | | 22.5 | 53.2 | 9.0 g |
| 9.9 | | 46.0 | 50.0 | |
| 9.5 | | 48.5 | 52.0 | |
| 9.9 | | 54.0 | 58.4 | |
| 9.9 | 18 | 42.5 | 44.6 | |
| 9.8 | | 48.5 | 6.0 | |
| 9.8 | | 50.5 | 12.0 | |
| 9.9 | | 53.5 | 46.0 | |
| 9.9 | 19 | 2.5 | 3.2 | |
| 9.9 | | 53.0 | 22.0 | |
| 9.9 | 20 | 6.0 | 9.9 | |
| 9.9 | | 19.0 | 37.9 | |
| 9.3 | | 25.5 | 30.0 | |
| 9.9 | | 32.5 | 5.0 | |
| 9.4 | | 43.5 | 50.8 | |
| 9.6 | | 51.5 | 14.6 | |
| 9.7 | | 55.0 | 54.1 | |
| 9.6 | 21 | 3.5 | 15.3 | |
| 9.6 | | 19.0 | 34.2 | |
| 9.5 | | 19.0 | 23.0 | 9.0 g |
| 9.6 | | 23.0 | 21.9 | 9.0 g |
| 9.5 | | 53.5 | 9.2 | |
| 9.6 | | 54.5 | 14.8 | |
| 9.9 | | 59.0 | 33.8 | |
| 9.4 | 22 | 34.0 | 39.6 | |
| 9.9 | 23 | 0.0 | 13.7 | |
| 9.1 | | 2.5 | 48.6 | |
| 9.9 | | 8.5 | 53.9 | |
| 9.7 | | 43.5 | 38.4 | |
| 9.9 | | 44.5 | 6.9 | |
| 8.8 | | 45.5 | 47.2 | 8.5 g |
| 9.2 | | 45.5 | 47.0 | g |
| 9.9 | | 49.0 | 36.0 | |
| 9.7 | | 50.0 | 37.4 | |
| 9.2 | 24 | 1.0 | 32.6 | g |
| 9.5 | | 22.0 | 49.0 | |
| 9.9 | 25 | 3.5 | 48.1 | |
| 9.6 | | 19.5 | 49.0 | |

## 1881—1940.

| mag. | 13h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.6 | 26 | 3.5 | 35.6 | |
| 9.9 | | 16.5 | 13.1 | |
| 9.1 | | 17.0 | 16.4 | |
| 9.9 | | 32.5 | 35.1 | |
| 9.1 | | 55.5 | 37.8 | 9.5 g |
| 9.2 | 27 | 2.0 | 15.6 | |
| 9.5 | | 12.0 | 31.9 | |
| 9.9 | | 33.0 | 10.0 | |
| 9.3 | | 47.0 | 13.9 | |
| 8.0 | 28 | 32.5 | 46.3 | 9.0 g |
| 9.9 | | 33.5 | 44.1 | |
| 9.7 | | 40.0 | 25.6 | |
| 9.2 | | 46.0 | 4.2 | |
| 9.9 | | 57.0 | 6.9 | |
| 9.3 | 29 | 9.0 | 53.8 | |
| 9.5 | | 10.0 | 5.9 | |
| 9.6 | | 13.5 | 11.1 | |
| 7.7 | | 19.5 | 48.2 | 6.8 GScgg |
| 8.8 | | 19.5 | 32.9 | 9.5 g |
| 8.5 | | 25.0 | 28.5 | 9.5 g |
| 9.9 | | 26.0 | 6.7 | |
| 9.9 | | 55.5 | 43.0 | |
| 9.3 | 30 | 35.0 | 1.7 | |
| 8.6 | 31 | 23.5 | 21.2 | g |
| 8.9 | | 32.5 | 31.7 | |
| 9.7 | | 44.5 | 4.9 | |
| 8.4 | 32 | 19.0 | 6.9 | 9.0 g |
| 9.7 | | 33.0 | 9.6 | |
| 9.3 | | 50.2 | 58.9 | |
| 8.6 | | 58.0 | 47.0 | 8.5 g |
| 9.5 | | 59.5 | 56.9 | |
| 9.5 | 33 | 9.5 | 37.0 | |
| 9.5 | | 49.5 | 41.9 | 9.5 g |
| 9.9 | | 52.3 | 1.6 | |
| 9.4 | 34 | 14.0 | 37.8 | 9.5 g |
| 9.7 | | 20.0 | 52.1 | |
| 9.7 | | 46.0 | 37.9 | |
| 9.9 | | 54.0 | 18.6 | |
| 9.8 | 35 | 12.0 | 50.1 | |
| 9.6 | | 34.0 | 30.8 | |
| 9.7 | | 52.0 | 29.1 | |
| 9.7 | 36 | 34.3 | 2.5 | |
| 9.9 | | 51.5 | 29.4 | |
| 8.7 | 37 | 21.0 | 30.3 | 9.5 g |
| 8.6 | | 22.5 | 52.9 | |
| 9.9 | | 26.0 | 43.3 | |
| 9.8 | | 32.5 | 26.9 | |
| 9.9 | 38 | 26.5 | 14.0 | |
| 9.9 | | 39.0 | 57.2 | |
| 9.0 | | 40.0 | 55.4 | |
| 9.8 | | 54.5 | 41.4 | |
| 9.8 | 39 | 33.5 | 59.9 | |
| 9.6 | | 57.5 | 6.6 | |
| 9.7 | | 59.5 | 53.0 | 9.5 g |
| 9.8 | 40 | 26.0 | 15.0 | |
| 9.5 | | 32.5 | 59.2 | |
| 9.6 | | 59.5 | 25.4 | |
| 9.8 | 41 | 4.0 | 42.0 | |
| 8.8 | | 48.0 | 32.1 | 9.5 |
| 9.7 | | 55.5 | 37.0 | |

## 1941—2000.

| mag. | 13h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.7 | 42 | 7.5 | 55.1 | |
| 9.9 | | 16.0 | 6.5 | |
| 9.5 | | 22.0 | 5.8 | |
| 9.3 | | 46.0 | 49.5 | |
| 7.3 | 43 | 10.0 | 25.6 | 7.5 GSg |
| 9.4 | | 17.5 | 4.3 | |
| 9.0 | | 55.0 | 51.9 | |
| 9.5 | 44 | 6.0 | 2.6 | |
| 9.9 | | 28.5 | 29.3 | |
| 9.9 | | 53.5 | 39.2 | |
| 9.7 | | 54.5 | 12.1 | |
| 9.2 | 45 | 22.5 | 54.9 | |
| 9.2 | | 26.0 | 20.8 | |
| 9.8 | | 31.0 | 16.3 | |
| 9.8 | | 33.0 | 5.0 | |
| 8.6 | 46 | 6.3 | 0.0 | |
| 9.3 | | 25.0 | 53.6 | |
| 8.4 | | 32.5 | 39.4 | 9.5 g |
| 9.9 | 47 | 10.5 | 20.0 | |
| 9.1 | | 20.0 | 30.0 | 9.5 g |
| 9.7 | | 23.0 | 44.9 | |
| 8.4 | | 46.5 | 42.4 | 9.5 g |
| 9.9 | | 48.0 | 0.5 | |
| 9.1 | 48 | 19.0 | 26.2 | |
| 9.5 | | 20.0 | 34.5 | |
| 9.9 | | 20.0 | 23.7 | |
| 9.8 | | 57.0 | 25.8 | |
| 9.4 | 49 | 14.5 | 47.2 | |
| 9.6 | | 20.5 | 39.0 | |
| 9.3 | | 24.5 | 46.5 | |
| 9.5 | | 25.5 | 19.3 | |
| 9.0 | | 33.0 | 20.8 | g |
| 9.1 | 50 | 0.0 | 48.8 | 10.0 |
| 9.9 | | 5.5 | 49.6 | |
| 8.9 | | 22.3 | 47.5 | |
| 9.1 | | 28.8 | 5.7 | 9.5 |
| 9.1 | | 29.0 | 43.7 | 10.0 |
| 9.5 | | 58.3 | 42.2 | |
| 9.5 | 51 | 16.5 | 42.8 | |
| 9.9 | | 30.0 | 0.4 | |
| 9.9 | | 34.5 | 40.2 | |
| 9.3 | | 57.2 | 59.8 | g |
| 9.9 | 52 | 3.0 | 46.1 | |
| 9.5 | | 22.5 | 3.8 | |
| 9.2 | | 24.3 | 18.1 | |
| 9.8 | | 29.0 | 30.5 | |
| 9.4 | 53 | 18.8 | 9.0 | 9.5 |
| 9.3 | | 46.3 | 7.4 | |
| 9.5 | | 46.8 | 50.0 | g |
| 9.9 | | 55.0 | 9.4 | |
| 9.5 | 54 | 30.5 | 18.4 | |
| 7.7 | | 38.8 | 16.0 | 8.0 GSg |
| 8.4 | | 52.0 | 13.7 | 9.0 g |
| 9.7 | | 59.7 | 58.5 | |
| 9.7 | 55 | 10.0 | 46.0 | |
| 9.9 | | 15.5 | 53.8 | |
| 9.0 | | 23.7 | 22.9 | 9.5 g |
| 9.4 | | 50.0 | 8.0 | |
| 9.4 | 56 | 14.5 | 18.8 | 9.5 |
| 9.2 | | 32.5 | 7.3 | |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 12 | 50 | 96 | 8.2 |
| 13 | 0 | 100 | 8.1 |
| | 10 | 104 | 8.0 |
| | 20 | 107 | 7.9 |
| | 30 | 111 | 7.7 |
| | 40 | 115 | 7.6 |
| | 50 | 118 | 7.4 |
| 14 | 0 | 122 | 7.2 |



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| 25 prec. | | α + | δ − |
|---|---|---|---|
| h | m | s | ′ |
| 13 | 50 | 118 | 7·4 |
| 14 | 0 | 122 | 7·2 |
| | 10 | 125 | 7·0 |
| | 20 | 128 | 6·8 |
| | 30 | 131 | 6·6 |
| | 40 | 134 | 6·4 |
| | 50 | 137 | 6·2 |
| 15 | 0 | 140 | 5·9 |

**2001—2060.**

| mag. | 13h.–14h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·6 | 57 | 6·5 | 4·0 | |
| 9·0 | | 7·5 | 47·3 | 9·5 *g* |
| 9·3 | | 24·0 | 21·5 | |
| 9·4 | 58 | 5·5 | 53·3 | |
| 9·0 | | 6·5 | 50·1 | 9·5 *g* |
| 9·2 | 59 | 2·5 | 53·4 | 9·5 *g* |
| 9·2 | | 3·0 | 3·0 | |
| 9·3 | | 11·0 | 49·1 | *g* |
| 9·2 | | 30·5 | 18·6 | *g* |
| 9·3 | | 35·0 | 18·3 | *g* |
| 9·4 | | 53·5 | 2·9 | |
| 8·5 | 0 | 8·5 | 42·6 | 7·0 GS*g* |
| 9·4 | | 25·5 | 29·4 | |
| 7·1 | | 45·0 | 7·5 | 6·5 GS*g* |
| 9·4 | 1 | 33·3 | 59·8 | *g* |
| 8·4 | | 38·5 | 34·8 | 8·2 *g* |
| 9·6 | 2 | 4·5 | 5·2 | |
| 8·7 | 3 | 42·0 | 5·3 | 9·0 *g* |
| 9·4 | 4 | 17·0 | 33·6 | |
| 9·4 | | 20·0 | 24·1 | |
| 9·5 | | 35·0 | 7·9 | |
| 9·4 | | 38·5 | 29·9 | *g* |
| 9·0 | | 50·0 | 49·8 | *g* |
| 9·2 | | 51·5 | 17·2 | |
| 9·4 | | 52·5 | 17·8 | |
| 9·0 | 5 | 46·0 | 25·9 | *g* |
| 9·4 | 6 | 10·0 | 40·5 | |
| 9·5 | | 38·5 | 58·0 | |
| 9·4 | | 41·0 | 59·9 | |
| 9·4 | 7 | 5·0 | 42·1 | *g* |
| 9·1 | 8 | 8·5 | 17·9 | 9·5 *g* |
| 8·8 | | 19·0 | 13·0 | 9·0 *g* |
| 9·2 | 9 | 8·5 | 25·2 | |
| 9·4 | | 12·0 | 19·9 | 9·5 *g* |
| 9·5 | | 34·0 | 14·1 | |
| 9·6 | | 55·5 | 3·0 | |
| 8·2 | 10 | 8·5 | 13·5 | 9·0 *g* |
| 9·4 | | 58·5 | 0·0 | |
| 9·3 | 11 | 1·0 | 42·8 | |
| 9·4 | | 21·0 | 48·4 | |
| 9·3 | 12 | 19·0 | 15·0 | |
| 8·8 | 13 | 10·0 | 23·8 | 9·5 *g* |
| 9·4 | | 53·0 | 4·3 | |
| 9·2 | 14 | 4·5 | 9·9 | |
| 9·5 | | 4·5 | 10·3 | |
| 9·2 | | 25·0 | 27·4 | 9·0 *g* |
| 9·4 | | 41·8 | 58·0 | *g* |
| 9·4 | | 48·5 | 1·2 | |
| 9·6 | 15 | 28·5 | 35·6 | |
| 9·5 | 16 | 12·5 | 6·9 | |
| 9·2 | 18 | 4·0 | 46·9 | |
| 9·4 | | 7·5 | 23·6 | |
| 9·2 | | 17·5 | 9·9 | |
| 8·2 | | 41·0 | 40·5 | 8·5 G*g* |
| 9·0 | | 48·0 | 33·4 | *g* |
| 8·8 | 19 | 20·0 | 12·9 | 9·0 *g* |
| 9·4 | 20 | 37·0 | 12·6 | |
| 9·2 | 21 | 18·3 | 57·1 | |
| 9·4 | | 34·0 | 49·0 | |
| 9·2 | | 39·0 | 31·8 | 8·5 G*g* |

**2061—2120.**

| mag. | 14h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·2 | 21 | 54·0 | 53·0 | |
| 9·4 | 22 | 10·0 | 38·6 | |
| 9·6 | | 15·5 | 6·0 | |
| 8·3 | | 22·2 | 2·0 | 8·2 G*g* |
| 9·4 | | 33·0 | 47·3 | |
| 9·2 | 23 | 23·5 | 17·8 | |
| 9·2 | 24 | 15·0 | 1·0 | |
| 9·0 | | 55·5 | 25·0 | 7·5 G*g* |
| 8·3 | 25 | 9·0 | 44·5 | 9·0 *g* |
| 9·0 | 26 | 46·5 | 48·0 | 9·2 *g* |
| 9·1 | | 49·0 | 28·0 | 9·5 |
| 9·0 | | 54·0 | 52·4 | 9·5 *g* |
| 9·2 | 27 | 10·0 | 8·8 | |
| 8·4 | 28 | 17·5 | 44·7 | 9·0 *g* |
| 9·4 | | 37·0 | 7·0 | |
| 9·5 | | 37·5 | 53·9 | |
| 9·3 | | 40·5 | 51·0 | |
| 9·4 | | 52·0 | 26·9 | *g* |
| 9·4 | 29 | 17·5 | 3·0 | |
| 8·8 | 30 | 20·0 | 50·1 | 9·0 *g* |
| 9·2 | 31 | 48·5 | 43·3 | |
| 9·5 | 32 | 5·5 | 43·0 | |
| 7·6 | 33 | 7·5 | 8·1 | GS*g* |
| 8·6 | | 15·0 | 44·6 | 9·0 *g* |
| 9·5 | | 24·0 | 23·8 | 9·0 |
| 8·4 | | 39·0 | 31·6 | 9·0 *g* |
| 9·3 | | 57·0 | 36·4 | 8·5 G*g* |
| 9·4 | | 57·0 | 30·2 | |
| 8·4 | 34 | 33·3 | 5·2 | 7·0 G*g* |
| 9·7 | 35 | 17·8 | 3·0 | |
| 9·0 | | 19·0 | 41·8 | |
| 9·4 | | 19·5 | 11·7 | |
| 9·4 | | 33·5 | 18·5 | |
| 9·8 | | 44·5 | 50·3 | |
| 9·6 | | 54·0 | 53·9 | |
| 8·8 | 36 | 25·0 | [illegible] | 9·0 *g* |
| 9·5 | | 28·0 | 29·6 | |
| 9·8 | | 28·5 | 7·5 | |
| 9·6 | | 34·0 | 25·0 | |
| 9·8 | | 41·0 | 48·7 | |
| 9·7 | | 49·1 | 58·1 | |
| 9·8 | 37 | 3·0 | 32·5 | |
| 9·6 | | 35·5 | 18·6 | |
| 9·3 | | 51·7 | 37·1 | 9·0 *g* |
| 9·6 | | 58·5 | 40·5 | |
| 9·8 | 38 | 8·5 | 51·4 | |
| 9·8 | | 28·0 | 21·2 | |
| 9·6 | | 36·0 | 43·6 | |
| 9·8 | | 36·0 | 29·6 | |
| 9·2 | | 39·7 | 30·2 | |
| 9·6 | | 49·5 | 18·6 | |
| 9·2 | | 50·7 | 10·0 | |
| 9·6 | | 55·5 | 18·6 | |
| 9·7 | 39 | 2·5 | 30·8 | |
| 9·8 | | 24·5 | 12·4 | |
| 9·6 | | 29·5 | 26·2 | |
| 9·6 | | 33·0 | 11·6 | |
| 9·1 | | 37·5 | 46·1 | |
| 9·3 | | 45·2 | 52·6 | |
| 9·4 | | 47·7 | 17·2 | |

**2121—2180.**

| mag. | 14h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·7 | 39 | 50·0 | 23·4 | |
| 9·2 | 40 | 14·2 | 10·9 | |
| 9·2 | | 35·5 | 0·0 | |
| 9·8 | | 58·0 | 10·4 | |
| 9·4 | 41 | 3·0 | 37·1 | |
| 9·6 | | 3·2 | 34·3 | |
| 9·5 | | 8·5 | 32·8 | |
| 9·8 | | 10·0 | 33·7 | |
| 9·4 | | 15·0 | 32·2 | |
| 8·8 | | 53·0 | 16·1 | *g* |
| 8·3 | | 54·0 | 1·2 | 9·0 *g* |
| 9·2 | | 54·5 | 39·8 | |
| 9·8 | 42 | 0·2 | 34·6 | |
| 9·5 | | 10·0 | 26·4 | |
| 9·8 | | 19·0 | 25·0 | |
| 9·7 | | 20·0 | 26·2 | |
| 9·5 | | 28·2 | 38·5 | |
| 9·8 | | 44·0 | 51·8 | |
| 9·7 | | 59·0 | 59·8 | |
| 9·2 | 43 | 9·0 | 42·0 | |
| 9·6 | | 9·0 | 14·6 | |
| 9·4 | | 9·0 | 29·0 | |
| 9·2 | | 9·5 | 34·9 | 9·0 *g* |
| 9·6 | | 12·0 | 50·0 | |
| 9·7 | | 12·0 | 2·6 | |
| 6·4 | | 28·0 | 20·6 | 6·5 GS*g* |
| 9·4 | | 28·9 | 47·7 | |
| 9·0 | | 39·9 | 2·6 | *g* |
| 9·6 | | 44·9 | 35·3 | |
| 9·8 | | 48·9 | 28·9 | |
| 9·7 | | 49·9 | 28·6 | |
| 9·8 | | 56·4 | 1·3 | |
| 8·6 | 44 | 6·4 | 37·2 | *g* |
| 8·4 | | 8·4 | 49·7 | *g* |
| 8·8 | | 25·4 | 28·5 | 9·0 *g* |
| 9·6 | | 31·9 | 49·3 | |
| 9·8 | | 46·6 | 12·8 | |
| 9·3 | 45 | 7·9 | 49·2 | |
| 9·0 | | 11·0 | 58·7 | |
| 9·6 | | 17·4 | 21·5 | |
| 9·6 | | 23·9 | 8·6 | |
| 9·8 | | 28·9 | 8·6 | |
| 9·8 | | 31·4 | 41·5 | |
| 9·6 | | 42·4 | 20·7 | |
| 9·7 | | 42·9 | 5·9 | |
| 9·8 | | 49·9 | 49·6 | |
| 9·6 | | 51·9 | 47·3 | |
| 9·6 | | 53·9 | 49·5 | |
| 9·7 | 46 | 1·4 | 2·9 | ? |
| 9·5 | | 8·4 | 12·9 | |
| 9·8 | | 12·6 | 38·1 | |
| 9·6 | | 21·4 | 25·5 | |
| 9·8 | | 32·6 | 49·6 | |
| 9·8 | | 39·4 | 50·7 | |
| 8·4 | | 52·4 | 37·3 | *g* |
| 9·8 | | 56·6 | 11·2 | |
| 9·2 | | 57·4 | 3·6 | |
| 9·2 | 47 | 23·9 | 24·6 | |
| 9·8 | | 30·4 | 23·7 | |
| 9·1 | | 44·4 | 1·4 | |

**2181—2240.**

| mag. | 14h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·4 | 47 | 50·9 | 53·3 | |
| 8·2 | | 52·4 | 12·0 | 8·0 *g* |
| 9·6 | | 58·4 | 56·5 | |
| 9·6 | | 58·9 | 9·5 | |
| 9·8 | 48 | 7·9 | 31·5 | |
| 9·6 | | 9·7 | 44·3 | |
| 9·7 | | 24·2 | 56·2 | |
| 9·8 | | 26·2 | 12·4 | |
| 8·6 | | 46·2 | 14·8 | 9·0 *g* |
| 9·4 | 49 | 9·2 | 52·0 | *g* |
| 9·8 | | 21·8 | 34·7 | |
| 9·4 | | 26·2 | 27·0 | |
| 9·8 | | 29·2 | 30·0 | |
| 9·4 | | 29·7 | 26·3 | |
| 9·8 | | 59·2 | 4·0 | |
| 9·4 | 50 | 4·2 | 30·9 | |
| 9·2 | | 7·2 | 29·4 | |
| 9·8 | | 26·8 | 5·8 | |
| 9·8 | | 36·8 | 44·2 | |
| 9·5 | | 46·7 | 21·0 | |
| 9·5 | | 50·7 | 24·4 | |
| 9·5 | | 52·7 | 5·2 | |
| 9·8 | 51 | 16·7 | 21·4 | |
| 9·6 | | 29·2 | 33·7 | |
| 9·7 | | 32·2 | 32·4 | |
| 9·2 | | 39·3 | 56·4 | G *g* |
| 9·8 | | 51·2 | 30·8 | |
| 9·6 | | 59·7 | 36·2 | |
| 9·8 | 52 | 1·2 | 30·0 | |
| 9·8 | | 2·7 | 17·8 | |
| 9·0 | | 6·7 | 32·4 | 8·5 *g* |
| 9·7 | | 6·7 | 59·8 | |
| 9·4 | | 9·2 | 3·8 | |
| 9·2 | | 40·2 | 39·5 | 9·0 *g* |
| 9·7 | | 49·7 | 24·2 | |
| 9·6 | | 56·2 | 25·8 | |
| 8·9 | 53 | 1·2 | 50·4 | |
| 9·3 | | 45·7 | 39·8 | |
| 9·6 | | 59·7 | 16·0 | |
| 9·8 | 54 | 6·2 | 39·4 | |
| 9·5 | | 26·2 | 39·8 | |
| 9·5 | | 30·2 | 23·4 | |
| 9·1 | | 36·1 | 45·7 | 9·0 *g* |
| 9·8 | | 38·1 | 20·7 | |
| 9·8 | | 42·6 | 25·6 | |
| 9·8 | | 48·6 | 38·3 | |
| 9·8 | | 50·1 | 33·5 | |
| 9·8 | 55 | 7·6 | 53·8 | |
| 9·8 | | 20·6 | 53·2 | |
| 9·4 | | 30·1 | 23·9 | |
| 9·8 | | 31·6 | 28·3 | |
| 9·4 | | 36·1 | 0·5 | |
| 8·7 | | 41·6 | 38·5 | 9·0 *g* |
| 9·8 | 56 | 8·1 | 3·6 | |
| 9·7 | | 18·1 | 53·0 | |
| 9·2 | | 27·6 | 6·8 | |
| 9·7 | | 32·1 | 1·1 | |
| 9·5 | | 33·6 | 30·8 | |
| 9·7 | | 45·1 | 3·3 | |
| 9·6 | | 51·6 | 16·4 | |



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## 2241—2300.

| mag. | 14h.–15h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·8 | 56 | 58·7 | 31·1 | |
| 9·6 | 57 | 1·1 | 16·7 | |
| 9·7 | | 28·1 | 14·6 | |
| 9·2 | | 30·6 | 56·2 | *g* |
| 9·4 | | 39·1 | 43·0 | |
| 8·8 | | 52·1 | 41·3 | *g* |
| 9·6 | 58 | 0·6 | 21·9 | |
| 9·8 | | 19·7 | 8·7 | |
| 9·6 | | 30·7 | 30·3 | |
| 9·6 | | 32·6 | 37·2 | |
| 9·6 | | 56·1 | 8·0 | |
| 9·6 | | 58·6 | 44·8 | |
| 9·6 | 59 | 41·1 | 9·0 | |
| 9·4 | | 43·1 | 7·2 | *g* |
| 9·7 | 0 | 10·1 | 45·0 | |
| 9·3 | | 18·6 | 2·6 | *g* |
| 9·4 | | 23·0 | 59·7 | |
| 9·4 | | 31·1 | 59·8 | |
| 9·0 | | 39·1 | 28·8 | *g* |
| 9·3 | | 39·8 | 52·9 | |
| 9·6 | 1 | 0·8 | 38·6 | |
| 9·8 | | 14·5 | 2·9 | |
| 9·6 | | 18·3 | 22·4 | |
| 9·7 | | 23·3 | 11·7 | |
| 9·4 | | 23·3 | 46·9 | |
| 9·8 | 2 | 20·3 | 54·9 | |
| 9·0 | | 21·3 | 36·3 | 6·0 GS*cgr* |
| 9·4 | | 41·8 | 33·1 | *g* |
| 9·4 | | 42·8 | 49·1 | |
| 9·2 | | 50·3 | 28·8 | |
| 9·7 | | 50·5 | 41·6 | |
| 9·1 | | 57·8 | 8·3 | |
| 9·2 | 3 | 3·3 | 19·3 | |
| 9·6 | | 11·8 | 36·3 | |
| 9·3 | | 18·8 | 22·9 | |
| 9·6 | | 24·3 | 26·8 | |
| 9·8 | | 24·5 | 25·2 | |
| 9·6 | | 26·8 | 21·7 | |
| 9·7 | | 35·3 | 15·9 | |
| 9·7 | | 43·3 | 26·5 | |
| 7·6 | | 52·6 | 56·6 | 7·0 GS*g* |
| 9·6 | 4 | 10·8 | 5·4 | |
| 8·4 | | 18·3 | 16·7 | 8·5 *g* |
| 9·5 | | 38·3 | 45·2 | |
| 9·6 | | 42·3 | 45·5 | |
| 9·8 | | 43·3 | 59·5 | |
| 8·0 | | 48·3 | 24·5 | 8·0 *g* |
| 9·6 | | 48·3 | 11·6 | |
| 9·6 | | 52·3 | 11·1 | |
| 9·7 | 5 | 2·8 | 37·0 | |
| 9·2 | | 4·8 | 34·5 | *g* |
| 9·3 | | 5·6 | 58·7 | |
| 9·4 | | 7·8 | 28·4 | |
| 9·8 | | 24·8 | 33·0 | |
| 9·8 | | 32·8 | 50·0 | |
| 9·3 | | 35·3 | 40·6 | |
| 8·0 | 6 | 1·8 | 49·6 | 8·5 *g* |
| 9·6 | | 24·3 | 32·4 | |
| 9·8 | | 28·3 | 18·8 | |
| 9·7 | | 45·8 | 41·4 | |

## 2301—2360.

| mag. | 15h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·4 | 6 | 59·8 | 36·7 | |
| 9·5 | 7 | 37·6 | 0·2 | |
| 9·7 | | 37·8 | 45·4 | |
| 9·4 | | 42·8 | 15·2 | |
| 9·6 | 8 | 0·8 | 9·2 | |
| 9·6 | | 3·8 | 17·8 | |
| 9·8 | | 10·9 | 1·6 | |
| 8·7 | | 11·8 | 7·1 | 9·5 *g* |
| 9·6 | | 30·8 | 55·4 | |
| 9·6 | | 35·8 | 37·6 | |
| 9·7 | | 47·8 | 8·6 | |
| 9·8 | | 49·3 | 55·0 | |
| 9·6 | | 58·8 | 24·3 | |
| 8·9 | 9 | 3·3 | 10·6 | 9·5 *g* |
| 8·6 | | 3·8 | 31·7 | 8·0 G*g* |
| 9·5 | | 24·3 | 28·8 | |
| 9·4 | | 30·8 | 53·7 | 9·2 *g* |
| 9·4 | | 44·8 | 24·6 | |
| 9·5 | | 51·8 | 11·4 | |
| 9·6 | 10 | 18·8 | 47·0 | |
| 9·8 | | 32·8 | 27·0 | |
| 9·4 | | 40·3 | 14·9 | |
| 9·6 | | 56·3 | 3·0 | |
| 9·8 | 11 | 10·8 | 53·4 | |
| 9·6 | | 14·3 | 26·6 | |
| 9·8 | | 20·8 | 37·8 | |
| 9·7 | | 21·8 | 35·2 | |
| 9·6 | | 29·8 | 44·3 | |
| 9·6 | | 33·8 | 10·2 | |
| 9·8 | | 37·3 | 19·2 | |
| 9·8 | | 58·8 | 50·4 | |
| 9·8 | 12 | 16·3 | 29·9 | |
| 9·5 | | 24·3 | 44·0 | |
| 9·5 | | 30·8 | 28·4 | |
| 9·6 | | 39·3 | 25·8 | |
| 9·6 | | 41·3 | 20·5 | |
| 9·6 | | 46·4 | 0·0 | |
| 9·8 | | 53·5 | 35·4 | |
| 9·4 | | 58·5 | 13·6 | |
| 9·5 | 13 | 7·0 | 21·9 | |
| 9·7 | | 32·5 | 38·4 | |
| 8·9 | | 37·0 | 52·6 | 9·0 *g* |
| 9·4 | | 41·0 | 43·1 | |
| 9·4 | | 42·5 | 45·3 | |
| 9·5 | | 50·0 | 3·0 | |
| 9·5 | | 59·0 | 5·0 | |
| 9·8 | 14 | 8·2 | 18·5 | |
| 9·4 | | 11·0 | 14·2 | |
| 9·0 | | 14·0 | 42·0 | 9·0 *g* |
| 9·7 | | 19·5 | 35·8 | |
| 9·6 | | 35·0 | 1·3 | |
| 9·8 | | 46·0 | 20·7 | |
| 9·4 | | 53·0 | 10·8 | *g* |
| 9·4 | 15 | 12·0 | 15·2 | |
| 9·0 | | 20·0 | 27·1 | *g* |
| 9·8 | | 53·0 | 33·6 | |
| 9·3 | | 53·0 | 48·0 | *g* |
| 9·2 | 16 | 14·0 | 23·1 | *g* |
| 8·9 | | 16·5 | 10·8 | *g* |
| 9·8 | | 32·5 | 49·8 | |

## 2361—2420.

| mag. | 15h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·8 | 16 | 33·5 | 25·9 | |
| 9·7 | | 56·5 | 12·2 | |
| 9·7 | 17 | 5·5 | 22·6 | |
| 9·8 | | 9·0 | 55·6 | |
| 9·4 | | 27·0 | 23·7 | |
| 9·5 | | 33·5 | 32·6 | |
| 9·6 | | 37·5 | 46·3 | |
| 8·8 | | 48·6 | 57·4 | 8·0 *g* |
| 9·6 | 18 | 6·8 | 11·5 | |
| 9·0 | | 14·8 | 48·0 | *g* |
| 9·7 | | 16·8 | 39·8 | |
| 9·7 | | 21·3 | 58·8 | |
| 9·8 | | 29·3 | 2·3 | |
| 9·6 | | 36·3 | 12·6 | |
| 9·4 | | 41·8 | 19·7 | |
| 9·3 | 19 | 2·3 | 48·4 | |
| 8·3 | | 4·3 | 24·0 | 7·5 G*g* |
| 9·8 | | 21·5 | 22·1 | |
| 9·2 | | 32·3 | 3·0 | 9·5 *g* |
| 9·8 | | 32·5 | 15·9 | |
| 8·8 | 20 | 6·6 | 30·9 | 9·0 *g* |
| 9·6 | | 11·8 | 43·2 | |
| 9·4 | | 33·8 | 55·9 | |
| 8·9 | | 34·3 | 30·3 | 9·0 *g* |
| 9·3 | | 57·6 | 56·0 | |
| 9·8 | | 58·3 | 46·3 | |
| 8·5 | 21 | 17·6 | 40·8 | 8·5 *g* |
| 9·4 | | 21·8 | 24·5 | |
| 9·8 | | 26·5 | 17·2 | |
| 9·5 | | 27·4 | 43·9 | |
| 9·6 | | 31·1 | 39·2 | |
| 9·6 | | 31·8 | 6·8 | |
| 9·2 | | 32·5 | 36·4 | |
| 9·6 | | 36·8 | 41·6 | |
| 9·4 | | 38·5 | 38·2 | |
| 9·4 | | 58·8 | 8·5 | |
| 9·4 | 22 | 21·4 | 4·0 | |
| 9·2 | | 24·9 | 27·1 | |
| 9·0 | | 44·6 | 55·2 | *g* |
| 9·5 | | 51·4 | 2·3 | |
| 9·0 | | 55·8 | 38·0 | |
| 9·7 | | 58·3 | 56·0 | |
| 9·6 | 23 | 11·6 | 32·0 | |
| 9·8 | | 29·3 | 3·9 | |
| 9·5 | | 48·3 | 34·9 | |
| 9·6 | | 52·8 | 49·6 | |
| 9·5 | 24 | 0·7 | 2·1 | |
| 9·8 | | 4·3 | 28·0 | |
| 9·6 | | 12·1 | 46·5 | |
| 9·6 | | 42·2 | 55·3 | |
| 9·6 | 25 | 52·2 | 12·0 | |
| 9·0 | | 57·0 | 6·8 | 8·5 *g* |
| 8·8 | 26 | 6·5 | 38·8 | 9·0 *g* |
| 9·1 | | 16·5 | 13·1 | 9·0 *g* |
| 9·2 | | 38·5 | 13·2 | |
| 9·2 | | 52·5 | 39·0 | 9·0 *g* |
| 9·0 | 27 | 6·5 | 4·4 | |
| 9·3 | | 6·5 | 35·2 | |
| 9·2 | | 21·0 | 42·1 | *g* |
| 9·1 | | 28·0 | 57·3 | |

## 2421—2480.

| mag. | 15h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·3 | 27 | 36·5 | 37·9 | 9·0 *g* |
| 7·2 | | 38·0 | 48·6 | 6·8 GS*g* |
| 9·3 | | 48·0 | 46·5 | 9·0 |
| 9·6 | 28 | 2·5 | 35·2 | |
| 9·2 | 29 | 0·0 | 47·2 | |
| 7·8 | 30 | 53·0 | 51·5 | 7·5 GS*g* |
| 9·6 | | 57·5 | 39·5 | |
| 9·4 | 31 | 28·5 | 5·2 | |
| 8·5 | | 40·5 | 53·3 | 7·8 GS*g* |
| 9·1 | | 54·5 | 39·2 | |
| 9·4 | | 57·5 | 26·9 | |
| 9·4 | 32 | 24·5 | 38·7 | |
| 9·4 | | 27·5 | 29·1 | |
| 9·2 | | 39·0 | 18·9 | *g* |
| 9·4 | 33 | 2·0 | 1·6 | 8·5 *g* |
| 9·6 | | 4·5 | 27·0 | |
| 9·6 | | 45·0 | 36·3 | |
| 9·6 | | 48·5 | 24·5 | |
| 9·5 | | 51·0 | 18·6 | |
| 9·6 | | 51·5 | 29·9 | |
| 8·7 | | 56·0 | 27·6 | 9·0 *g* |
| 9·3 | 34 | 19·0 | 6·5 | |
| 9·6 | | 29·0 | 33·1 | |
| 9·3 | | 32·0 | 22·0 | 8·0 *g* |
| 9·1 | | 41·0 | 18·2 | *g* |
| 9·2 | 35 | 15·5 | 37·7 | *g* |
| 9·4 | | 39·0 | 32·1 | *g* |
| 9·3 | | 40·0 | 45·6 | |
| 9·5 | | 44·5 | 29·8 | |
| 9·2 | | 52·5 | 1·8 | |
| 9·5 | 36 | 0·3 | 58·9 | |
| 9·1 | | 24·5 | 24·8 | |
| 9·2 | | 44·0 | 0·1 | |
| 9·1 | 38 | 5·5 | 3·3 | *g* |
| 8·4 | | 55·5 | 15·4 | 8·5 *g* |
| 8·8 | 39 | 16·5 | 36·6 | *g* |
| 9·2 | | 41·0 | 39·9 | |
| 9·0 | 41 | 12·0 | 34·0 | *g* |
| 9·1 | | 49·5 | 11·2 | *g* |
| 9·3 | 42 | 49·0 | 6·9 | |
| 9·5 | | 57·5 | 37·1 | |
| 9·0 | 43 | 10·0 | 38·1 | *g* |
| 9·2 | | 22·5 | 53·1 | *g* |
| 8·9 | | 34·0 | 1·2 | *g* |
| 9·0 | | 43·0 | 29·2 | *g* |
| 9·1 | 44 | 52·0 | 57·1 | |
| 9·6 | 45 | 11·5 | 14·2 | |
| 9·6 | | 21·5 | 42·6 | |
| 9·3 | | 23·0 | 25·4 | |
| 9·0 | | 34·5 | 19·6 | *g* |
| 9·2 | 46 | 21·0 | 26·4 | |
| 8·9 | | 37·5 | 25·0 | *g* |
| 9·4 | | 42·0 | 52·4 | |
| 9·6 | | 50·5 | 9·8 | |
| 9·4 | 47 | 55·0 | 8·9 | |
| 9·6 | 48 | 21·0 | 33·4 | |
| 9·6 | | 21·5 | 25·1 | |
| 9·6 | | 38·0 | 7·3 | |
| 9·2 | 49 | 2·0 | 5·2 | 9·5 *g* |
| 9·6 | | 39·5 | 3·8 | 10·0 |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 14 | 50 | 137 | 6·2 |
| 15 | 0 | 140 | 5·9 |
| | 10 | 143 | 5·6 |
| | 20 | 145 | 5·4 |
| | 30 | 148 | 5·1 |
| | 40 | 150 | 4·8 |
| | 50 | 152 | 4·5 |



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25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 15 | 40 | 150 | 4.8 |
| | 50 | 152 | 4.5 |
| 16 | 0 | 154 | 4.2 |
| | 10 | 156 | 3.9 |
| | 20 | 158 | 3.5 |
| | 30 | 159 | 3.2 |
| | 40 | 161 | 2.9 |
| | 50 | 162 | 2.5 |
| 17 | 0 | 163 | 2.2 |
| | 10 | 164 | 1.8 |

## 2481—2540

| mag. | 15h.–16h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.0 | 49 | 47.0 | 32.6 | |
| 9.5 | 50 | 7.0 | 53.1 | |
| 9.6 | | 9.5 | 48.8 | |
| 8.5 | 51 | 6.5 | 29.1 | g |
| 9.2 | | 11.0 | 33.1 | |
| 9.0 | 52 | 20.0 | 42.3 | g |
| 9.6 | | 39.5 | 14.6 | 9.0 g |
| 9.4 | 53 | 50.0 | 51.1 | g |
| 9.0 | 54 | 45.5 | 43.6 | g |
| 8.7 | 56 | 24.0 | 14.9 | 8.0 g |
| 9.6 | | 56.0 | 9.8 | |
| 9.3 | 57 | 40.5 | 43.8 | |
| 9.4 | 58 | 21.5 | 51.5 | 9.5 g |
| 8.8 | | 25.0 | 8.9 | 8.5 g |
| 9.6 | | 32.0 | 10.3 | |
| 9.1 | | 36.5 | 20.7 | |
| 9.4 | 59 | 9.0 | 25.9 | |
| 9.4 | | 21.5 | 38.9 | |
| 8.0 | | 22.5 | 17.1 | 8.0 g |
| 9.4 | 0 | 12.5 | 12.0 | |
| 9.6 | | 34.5 | 52.2 | |
| 9.4 | 1 | 30.0 | 8.0 | g |
| 9.1 | | 47.0 | 35.9 | g |
| 9.4 | 2 | 6.5 | 7.1 | g |
| 9.4 | | 23.0 | 32.0 | |
| 9.6 | | 26.0 | 23.0 | |
| 9.4 | 3 | 26.5 | 48.1 | |
| 9.6 | 5 | 21.0 | 27.1 | |
| 9.6 | | 30.0 | 25.1 | |
| 9.6 | | 31.0 | 33.0 | |
| 9.4 | | 38.1 | 0.1 | |
| 9.2 | | 52.0 | 9.4 | g |
| 9.6 | 6 | 15.5 | 8.0 | |
| 10.0 | | 36.5 | 20.7 | |
| 9.0 | | 51.5 | 58.9 | g |
| 8.8 | | 54.5 | 39.1 | g |
| 10.1 | 7 | 12.5 | 29.0 | |
| 10.0 | | 25.5 | 7.9 | |
| 8.8 | 8 | 11.5 | 20.3 | 9.5 g |
| 10.0 | | 11.5 | 57.4 | |
| 8.6 | | 25.0 | 24.8 | 9.0 Gg |
| 10.1 | | 30.0 | 9.5 | |
| 10.1 | | 39.0 | 20.7 | |
| 10.1 | | 44.0 | 22.6 | |
| 9.8 | | 55.5 | 24.1 | |
| 9.4 | 9 | 0.5 | 27.8 | |
| 10.0 | | 8.5 | 55.0 | |
| 9.6 | | 25.5 | 43.4 | |
| 10.1 | | 30.0 | 32.6 | |
| 9.0 | | 48.0 | 0.0 | g |
| 10.0 | | 55.0 | 6.5 | |
| 9.4 | 10 | 3.0 | 3.4 | g |
| 8.6 | | 4.5 | 2.9 | g |
| 10.1 | | 6.5 | 9.6 | |
| 9.6 | | 45.0 | 9.1 | |
| 8.1 | | 47.5 | 50.5 | 7.5 GSg |
| 10.1 | 11 | 2.0 | 10.2 | |
| 9.4 | | 29.5 | 40.1 | g |
| 9.0 | | 31.5 | 45.6 | g |
| 10.1 | | 39.0 | 50.5 | |

## 2541—2600.

| mag. | 16h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.8 | 11 | 46.5 | 26.8 | |
| 10.0 | | 48.5 | 50.7 | |
| 10.0 | 12 | 10.0 | 30.3 | |
| 10.0 | | 12.5 | 17.0 | |
| 9.0 | | 20.0 | 48.1 | 9.5 g |
| 10.0 | | 37.0 | 8.6 | |
| 10.1 | | 52.0 | 19.4 | |
| 9.4 | | 54.0 | 5.1 | g |
| 9.7 | 13 | 40.0 | 41.8 | |
| 9.2 | | 51.5 | 54.5 | |
| 9.4 | 14 | 8.2 | 3.1 | |
| 10.0 | | 20.5 | 11.0 | |
| 6.9 | | 26.5 | 2.1 | 7.0 GSg |
| 10.0 | | 31.5 | 38.4 | |
| 7.5 | | 38.0 | 34.1 | 7.2 GSg |
| 9.8 | | 46.5 | 56.8 | |
| 10.0 | 15 | 1.0 | 2.8 | |
| 5.1 | | 2.0 | 47.9 | 5.5 GScgr |
| 9.6 | | 11.0 | 54.7 | |
| 9.6 | | 12.0 | 6.0 | |
| 10.1 | | 39.0 | 55.2 | |
| 9.6 | | 51.5 | 47.2 | 9.5 |
| 9.8 | 16 | 41.0 | 6.7 | |
| 9.6 | | 41.5 | 0.9 | |
| 10.1 | | 45.0 | 23.5 | |
| 10.1 | 17 | 10.0 | 27.6 | |
| 9.6 | | 22.0 | 33.9 | |
| 9.4 | | 49.5 | 14.0 | |
| 10.0 | | 55.0 | 49.0 | |
| 10.0 | 18 | 18.0 | 23.7 | |
| 10.0 | | 41.5 | 46.2 | |
| 8.8 | | 50.0 | 1.9 | g |
| 9.2 | | 55.0 | 29.0 | g |
| 9.4 | 19 | 29.5 | 47.8 | |
| 9.4 | | 55.0 | 35.1 | |
| 9.4 | 20 | 8.0 | 9.5 | |
| 9.7 | | 31.0 | 10.1 | |
| 10.1 | | 43.0 | 59.5 | |
| 9.4 | | 52.5 | 42.8 | |
| 10.1 | 21 | 23.0 | 45.9 | |
| 9.6 | | 29.0 | 49.9 | |
| 8.8 | | 41.5 | 44.3 | 9.5 g |
| 10.1 | | 48.5 | 15.3 | |
| 10.1 | 22 | 22.0 | 14.5 | |
| 10.1 | | 37.0 | 32.0 | |
| 9.2 | | 39.0 | 24.0 | g |
| 9.0 | | 44.0 | 20.0 | 9.5 g |
| 10.1 | | 56.5 | 4.4 | |
| 10.0 | 23 | 3.5 | 49.0 | |
| 9.6 | | 57.0 | 43.7 | |
| 10.1 | 24 | 26.5 | 34.7 | |
| 9.4 | 25 | 8.5 | 47.7 | |
| 10.1 | | 36.5 | 28.6 | |
| 10.1 | | 36.5 | 23.0 | |
| 10.1 | | 38.5 | 2.0 | |
| 8.6 | | 49.5 | 54.5 | g |
| 10.0 | | 56.5 | 44.3 | |
| 10.0 | 26 | 29.0 | 56.1 | |
| 10.1 | 27 | 3.0 | 46.1 | |
| 10.0 | | 9.5 | 8.6 | |

## 2601—2660.

| mag. | 16h. m | s | −69° ′ | |
|---|---|---|---|---|
| 8.5 | 27 | 24.5 | 37.6 | g |
| 10.1 | | 25.0 | 18.7 | |
| 9.0 | | 30.5 | 41.9 | g |
| 10.1 | | 39.5 | 51.8 | |
| 10.0 | | 49.0 | 28.8 | |
| 10.0 | | 49.5 | 50.0 | g |
| 8.6 | | 50.0 | 9.2 | 8.5 g |
| 9.4 | 28 | 10.0 | 37.0 | g |
| 9.2 | | 58.0 | 24.3 | 9.0 g |
| 10.1 | 29 | 1.5 | 28.7 | |
| 9.2 | | 16.0 | 43.0 | |
| 9.4 | | 57.0 | 51.6 | |
| 10.0 | 30 | 55.0 | 49.0 | |
| 10.1 | | 59.5 | 19.7 | |
| 10.1 | 31 | 2.0 | 6.0 | |
| 9.6 | | 11.5 | 17.4 | 9.5 g |
| 10.0 | | 40.0 | 23.5 | |
| 9.8 | | 41.0 | 37.1 | |
| 8.6 | | 56.5 | 18.9 | 9.0 g |
| 9.6 | 32 | 6.5 | 24.8 | |
| 9.4 | | 20.5 | 42.5 | |
| 10.1 | | 55.0 | 26.9 | |
| 9.8 | 33 | 31.5 | 24.0 | |
| 10.1 | | 40.5 | 15.0 | |
| 9.0 | | 53.0 | 41.0 | g |
| 9.4 | 34 | 8.0 | 57.6 | |
| 10.0 | | 32.5 | 13.2 | |
| 9.6 | | 50.0 | 54.7 | |
| 9.4 | 35 | 3.0 | 13.9 | |
| 8.6 | | 30.5 | 27.4 | 9.0 g |
| 10.1 | | 47.5 | 39.1 | |
| 9.6 | | 51.0 | 18.0 | 9.0 g |
| 9.6 | | 53.5 | 59.6 | |
| 10.0 | 36 | 12.5 | 34.7 | |
| 9.7 | | 25.5 | 13.1 | |
| 8.4 | 38 | 9.5 | 21.8 | 9.0 g |
| 10.1 | | 36.5 | 5.9 | |
| 10.0 | | 39.5 | 40.1 | |
| 10.1 | | 55.0 | 45.6 | |
| 9.6 | 39 | 4.5 | 54.9 | |
| 9.6 | | 57.0 | 34.8 | g |
| 7.0 | 40 | 8.0 | 57.1 | 7.0 GSg |
| 9.8 | | 54.0 | 42.0 | |
| 10.1 | 41 | 12.5 | 1.5 | |
| 9.2 | | 47.0 | 16.1 | g |
| 10.0 | | 50.5 | 46.9 | |
| 7.2 | 42 | 0.5 | 4.0 | 8.0 GSg |
| 10.0 | | 28.5 | 5.0 | |
| 9.4 | | 29.0 | 40.9 | g |
| 9.4 | | 46.5 | 39.9 | g |
| 9.2 | | 47.0 | 29.8 | g |
| 10.1 | 43 | 2.5 | 12.0 | |
| 9.4 | | 3.0 | 27.5 | |
| 9.8 | | 25.5 | 9.0 | |
| 9.4 | | 31.5 | 59.1 | |
| 10.1 | | 37.0 | 59.7 | |
| 9.8 | | 49.5 | 29.2 | |
| 9.7 | | 55.5 | 57.5 | |
| 10.1 | 44 | 18.5 | 47.5 | |
| 10.1 | | 27.0 | 1.3 | |

## 2661—2720.

| mag. | 16h.–17h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9.6 | 44 | 49.5 | 47.7 | |
| 9.7 | | 53.0 | 22.7 | g |
| 9.7 | 45 | 29.3 | 0.2 | |
| 10.1 | | 49.7 | 0.1 | |
| 9.2 | 46 | 4.5 | 14.3 | g |
| 5.4 | | 8.5 | 4.1 | 6.0 GSg |
| 9.6 | | 21.0 | 47.1 | |
| 10.1 | | 28.5 | 22.3 | |
| 9.4 | | 51.5 | 21.7 | |
| 10.1 | 47 | 35.5 | 42.7 | |
| 9.6 | 48 | 1.0 | 53.0 | |
| 10.0 | | 2.5 | 51.1 | |
| 8.4 | | 21.5 | 13.0 | 8.0 Gg |
| 9.8 | | 31.5 | 10.8 | |
| 8.6 | 49 | 5.3 | 11.0 | 9.2 g |
| 9.0 | | 42.2 | 39.5 | g |
| 10.1 | 50 | 0.0 | 33.1 | |
| 10.1 | | 4.7 | 27.5 | |
| 9.4 | | 41.5 | 40.0 | g |
| 10.1 | 52 | 11.0 | 30.0 | |
| 9.4 | | 25.5 | 33.1 | g |
| 8.8 | | 45.0 | 28.2 | g |
| 10.0 | 53 | 13.0 | 1.0 | |
| 9.6 | | 16.0 | 23.4 | |
| 9.2 | | 25.8 | 58.8 | g |
| 8.4 | | 51.3 | 5.0 | g |
| 10.0 | 54 | 40.5 | 7.7 | |
| 9.8 | 55 | 30.0 | 17.0 | |
| 9.8 | 56 | 2.5 | 41.1 | g |
| 9.8 | | 25.5 | 55.0 | |
| 9.0 | | 55.5 | 59.4 | g |
| 9.8 | 57 | 9.0 | 49.3 | |
| 9.8 | | 19.5 | 1.8 | |
| 9.7 | | 32.5 | 53.6 | |
| 8.5 | | 49.5 | 11.2 | g |
| 9.4 | 58 | 9.5 | 32.3 | |
| 9.8 | | 29.5 | 41.5 | |
| 8.4 | | 42.5 | 55.3 | 9.0 g |
| 9.0 | 59 | 33.0 | 31.4 | 9.5 g |
| 9.8 | 0 | 2.0 | 31.9 | |
| 9.8 | | 51.5 | 58.1 | |
| 9.7 | | 55.5 | 38.8 | |
| 9.1 | 1 | 15.5 | 29.8 | 8.8 g |
| 9.8 | 2 | 4.5 | 37.0 | |
| 9.0 | 3 | 18.5 | 8.4 | |
| 9.6 | | 31.0 | 51.5 | g |
| 9.4 | 4 | 2.0 | 4.5 | |
| 9.1 | | 7.0 | 25.1 | |
| 8.8 | 5 | 10.0 | 4.2 | g |
| 9.7 | | 12.5 | 12.0 | |
| 9.8 | | 25.5 | 11.2 | |
| 9.8 | | 36.0 | 55.7 | g |
| 9.8 | | 45.5 | 16.8 | 9.0 g |
| 8.8 | 6 | 20.5 | 56.4 | 8.7 g |
| 7.2 | | 20.5 | 53.9 | 7.0 GSgg |
| 9.8 | | 33.0 | 8.5 | 9.0 g |
| 9.4 | | 55.0 | 51.7 | |
| 9.0 | 7 | 15.5 | 57.1 | 9.2 g |
| 5.7 | 8 | 10.5 | 59.3 | 6.0 GScg |
| 8.8 | | 26.5 | 58.0 | 9.0 Gg |



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## 2721—2780.

| mag. | 17h. m | s | − 69° ′ | |
|---|---|---|---|---|
| 9·2 | 9 | 6·5 | 29·0 | 8·5 g |
| 8·6 | | 51·0 | 17·2 | 8·0 g |
| 9·4 | 10 | 15·5 | 8·0 | 9·0 g |
| 9·7 | 11 | 26·0 | 48·3 | |
| 9·8 | 12 | 35·0 | 36·1 | |
| 9·8 | 13 | 54·0 | 1·9 | |
| 9·8 | 14 | 3·0 | 44·2 | |
| 9·6 | | 9·5 | 44·0 | |
| 8·5 | | 15·5 | 57·0 | 8·0 g |
| 9·4 | | 18·5 | 33·1 | g |
| 9·1 | | 39·0 | 25·9 | g |
| 9·6 | | 43·5 | 40·7 | |
| 9·1 | 16 | 20·0 | 47·0 | 8·5 g |
| 9·1 | | 27·0 | 25·7 | 9·0 g |
| 9·0 | 19 | 14·5 | 12·8 | |
| 8·4 | 20 | 4·5 | 53·0 | g |
| 9·1 | | 40·5 | 18·1 | g |
| 9·1 | 21 | 47·0 | 40·2 | 8·0 g |
| 9·6 | | 58·5 | 35·2 | g |
| 9·7 | 22 | 42·5 | 14·1 | |
| 9·8 | 23 | 30·5 | 7·9 | |
| 9·8 | | 49·0 | 42·1 | |
| 8·2 | 24 | 25·0 | 12·9 | 8·5 g |
| 9·8 | | 36·0 | 32·2 | |
| 9·6 | | 44·5 | 52·0 | |
| 9·1 | 25 | 17·5 | 43·1 | |
| 9·8 | | 32·5 | 22·5 | |
| 9·0 | 26 | 57·0 | 3·9 | g |
| 9·0 | 27 | 9·5 | 36·7 | g |
| 8·5 | 30 | 30·0 | 57·6 | 9·5 g |
| 8·8 | | 32·5 | 12·9 | g |
| 8·4 | | 53·0 | 44·4 | 8·8 g |
| 9·8 | 32 | 28·0 | 11·0 | |
| 8·5 | 34 | 18·5 | 30·1 | 8·0 g |
| 7·2 | | 39·0 | 52·5 | GS g |
| 8·9 | | 51·7 | 9·3 | g |
| 9·8 | 35 | 3·9 | 40·4 | |
| 7·9 | | 37·7 | 41·6 | 8·5 g |
| 9·6 | | 38·4 | 24·4 | |
| 9·6 | 36 | 17·4 | 37·8 | |
| 9·8 | | 48·9 | 13·3 | |
| 9·5 | | 57·9 | 54·2 | |
| 9·6 | 37 | 18·1 | 29·1 | |
| 9·3 | | 31·6 | 53·4 | |
| 8·5 | | 37·1 | 52·5 | 8·0 g |
| 9·4 | | 37·6 | 37·7 | |
| 9·3 | 38 | 6·1 | 40·6 | |
| 8·8 | | 11·1 | 58·5 | g |
| 9·2 | | 40·0 | 30·2 | g |
| 9·0 | | 42·8 | 48·6 | g |
| 9·8 | 39 | 18·6 | 39·7 | |
| 9·6 | | 28·1 | 21·8 | |
| 9·8 | | 29·6 | 44·9 | |
| 9·8 | | 42·6 | 31·1 | |
| 9·8 | | 53·1 | 8·6 | |
| 8·9 | 40 | 0·3 | 0·8 | g |
| 9·4 | | 4·1 | 35·7 | |
| 9·3 | | 15·1 | 39·5 | |
| 9·8 | | 17·1 | 32·3 | |
| 9·8 | | 17·6 | 7·9 | |

## 2781—2840.

| mag. | 17h. m | s | − 69° ′ | |
|---|---|---|---|---|
| 9·8 | 40 | 33·6 | 35·1 | |
| 9·8 | | 54·3 | 14·6 | |
| 9·8 | 42 | 13·1 | 17·5 | |
| 9·2 | | 17·1 | 55·1 | |
| 9·8 | | 25·1 | 30·5 | |
| 9·8 | | 59·6 | 23·3 | |
| 9·4 | 43 | 8·1 | 58·7 | |
| 9·8 | | 26·1 | 54·1 | |
| 9·2 | | 48·1 | 41·1 | |
| 9·8 | 44 | 39·1 | 45·9 | |
| 9·1 | | 41·1 | 0·9 | g |
| 9·6 | | 50·1 | 5·7 | |
| 9·5 | | 57·1 | 54·9 | |
| 9·5 | 45 | 18·1 | 26·5 | |
| 9·8 | | 24·6 | 7·4 | |
| 9·8 | | 27·6 | 35·6 | |
| 9·3 | | 31·6 | 46·8 | |
| 9·8 | | 59·8 | 22·3 | |
| 8·4 | 46 | 1·8 | 5·4 | 9·0 g |
| 9·8 | | 8·8 | 9·4 | |
| 9·3 | | 38·8 | 13·0 | |
| 9·2 | | 47·3 | 6·0 | |
| 9·6 | | 49·3 | 20·6 | |
| 8·4 | 47 | 22·8 | 12·9 | 8·0 g |
| 9·0 | | 31·3 | 35·1 | g |
| 9·6 | | 33·3 | 6·9 | |
| 9·8 | | 33·8 | 20·0 | |
| 9·6 | | 41·8 | 10·9 | |
| 9·2 | | 52·1 | 59·0 | g |
| 9·8 | 48 | 9·8 | 32·5 | |
| 9·0 | | 22·8 | 18·8 | g |
| 9·1 | | 57·3 | 8·7 | g |
| 8·7 | 49 | 22·8 | 16·0 | 9·0 g |
| 9·8 | | 26·3 | 52·0 | |
| 9·0 | | 39·8 | 26·4 | g |
| 9·1 | 50 | 20·8 | 30·3 | g |
| 9·0 | | 41·3 | 35·5 | 9·0 g |
| 9·5 | 51 | 18·8 | 49·4 | |
| 9·5 | | 23·3 | 41·1 | |
| 9·5 | | 31·3 | 36·8 | |
| 8·4 | | 31·3 | 28·0 | 9·0 g |
| 9·5 | | 32·3 | 39·0 | |
| 9·8 | 52 | 4·3 | 14·7 | |
| 9·6 | | 10·3 | 53·7 | |
| 9·0 | | 22·3 | 54·6 | 9·0 g |
| 9·8 | | 49·3 | 17·6 | |
| 9·1 | 53 | 23·0 | 55·0 | |
| 9·8 | 54 | 7·5 | 25·2 | |
| 9·8 | | 12·5 | 12·6 | |
| 9·8 | | 37·0 | 12·6 | |
| 9·5 | 55 | 33·0 | 49·4 | |
| 9·5 | | 34·5 | 40·4 | |
| 9·8 | | 59·0 | 59·7 | |
| 9·5 | 56 | 50·5 | 33·9 | |
| 9·8 | | 53·5 | 4·9 | |
| 9·8 | | 54·0 | 21·6 | |
| 9·6 | | 56·5 | 21·7 | |
| 9·8 | 57 | 14·5 | 15·2 | |
| 9·6 | 58 | 16·0 | 38·7 | |
| 8·8 | | 51·5 | 56·4 | 8·5 g |

## 2841—2900.

| mag. | 17h.–18h. m | s | − 69° ′ | |
|---|---|---|---|---|
| 9·8 | 58 | 57·0 | 5·1 | |
| 9·8 | 59 | 6·5 | 16·0 | |
| 9·8 | | 19·5 | 29·2 | |
| 9·6 | 0 | 24·0 | 17·0 | |
| 9·3 | | 38·5 | 29·6 | g |
| 9·3 | | 39·5 | 38·9 | |
| 8·8 | | 40·0 | 29·9 | g |
| 9·0 | | 46·5 | 45·8 | g |
| 9·4 | | 49·5 | 26·8 | |
| 9·1 | 1 | 30·0 | 24·1 | g |
| 9·5 | | 44·0 | 35·8 | |
| 9·8 | 2 | 8·0 | 34·9 | |
| 9·8 | | 19·5 | 10·3 | |
| 9·4 | | 55·0 | 58·3 | |
| 9·6 | 3 | 15·5 | 9·8 | |
| 8·8 | | 19·5 | 51·4 | 8·5 g |
| 9·3 | | 43·5 | 33·0 | |
| 9·0 | | 56·0 | 49·4 | g |
| 9·0 | 4 | 48·5 | 23·9 | g |
| 7·7 | | 53·0 | 38·0 | 8·0 GS g |
| 9·4 | 5 | 15·0 | 8·1 | |
| 9·8 | | 23·0 | 15·5 | |
| 9·6 | 6 | 11·0 | 29·7 | |
| 9·3 | | 29·5 | 6·2 | |
| 9·4 | | 46·5 | 19·7 | |
| 9·3 | | 48·5 | 4·9 | |
| 9·4 | 7 | 27·0 | 27·5 | |
| 9·4 | 8 | 20·0 | 31·8 | |
| 9·5 | | 23·5 | 18·9 | |
| 9·8 | | 38·5 | 55·0 | |
| 9·8 | | 56·0 | 47·7 | |
| 9·0 | 9 | 7·0 | 13·2 | |
| 8·6 | | 19·5 | 33·3 | g |
| 9·8 | | 20·0 | 5·4 | |
| 9·8 | | 32·0 | 8·3 | |
| 9·8 | | 54·0 | 16·3 | |
| 9·3 | 10 | 6·0 | 12·8 | |
| 9·6 | | 22·5 | 11·2 | g |
| 8·9 | 11 | 9·6 | 0·9 | |
| 9·8 | | 10·0 | 24·8 | |
| 9·1 | | 12·5 | 14·0 | 9·0 g |
| 9·4 | | 32·0 | 40·8 | |
| 9·3 | 12 | 3·0 | 17·5 | |
| 8·3 | | 37·0 | 34·1 | 7·5 Gg |
| 9·8 | | 44·0 | 6·7 | |
| 7·6 | 13 | 16·0 | 26·4 | 7·5 GS g |
| 9·8 | | 42·0 | 39·6 | |
| 9·8 | 14 | 10·5 | 36·2 | |
| 8·4 | | 21·5 | 22·7 | 7·8 GS g |
| 9·3 | | 54·0 | 12·0 | |
| 9·6 | | 55·0 | 25·0 | |
| 9·8 | | 58·0 | 32·7 | |
| 9·8 | 15 | 52·0 | 8·2 | |
| 8·4 | 17 | 9·0 | 46·9 | g |
| 9·8 | | 22·0 | 35·8 | |
| 8·8 | 18 | 44·5 | 30·7 | 9·5 g |
| 9·8 | 19 | 15·0 | 28·6 | |
| 9·3 | | 25·5 | 26·1 | |
| 9·6 | | 26·0 | 49·6 | |
| 9·3 | | 43·3 | 7·8 | |

## 2901—2960.

| mag. | 18h. m | s | − 69° ′ | |
|---|---|---|---|---|
| 9·3 | 19 | 56·3 | 45·4 | |
| 9·6 | 20 | 0·5 | 56·5 | |
| 8·6 | | 19·0 | 59·2 | g |
| 9·8 | | 19·5 | 17·7 | |
| 9·6 | | 35·5 | 52·0 | |
| 9·6 | | 53·5 | 2·7 | |
| 9·2 | 21 | 16·8 | 10·0 | |
| 9·4 | | 26·5 | 25·7 | g |
| 8·9 | | 38·3 | 24·0 | g |
| 9·8 | 22 | 8·5 | 20·4 | |
| 9·4 | | 29·0 | 20·0 | 8·5 g |
| 9·2 | | 32·8 | 58·4 | 8·0 Gg |
| 9·8 | | 36·5 | 28·0 | |
| 7·9 | | 50·6 | 10·2 | 7·8 Gg |
| 9·8 | 23 | 3·5 | 6·5 | |
| 9·3 | | 12·1 | 49·6 | |
| 9·8 | | 28·5 | 27·2 | |
| 9·4 | | 34·7 | 51·8 | |
| 9·0 | | 55·2 | 59·8 | 10·0 |
| 9·1 | 24 | 10·8 | 30·6 | |
| 8·5 | | 12·4 | 4·7 | 8·5 g |
| 8·9 | | 38·1 | 37·4 | 8·5 g |
| 9·8 | | 52·1 | 6·5 | |
| 9·8 | 26 | 23·1 | 48·3 | |
| 9·6 | | 29·0 | 27·8 | g |
| 9·6 | | 59·0 | 46·0 | |
| 9·6 | 27 | 1·0 | 44·5 | |
| 9·6 | | 19·5 | 29·0 | g |
| 9·6 | | 37·0 | 42·3 | g |
| 8·9 | | 58·5 | 57·3 | g |
| 8·9 | 28 | 16·5 | 8·3 | 8·0 g |
| 9·6 | | 18·0 | 31·0 | |
| 8·4 | | 32·5 | 8·8 | 8·5 g |
| 9·0 | | 33·0 | 42·1 | g |
| 8·4 | | 57·0 | 29·7 | 7·5 GS g |
| 8·8 | 30 | 23·0 | 17·3 | 8·0 g |
| 9·2 | 33 | 10·7 | 0·1 | 9·5 g |
| 9·4 | 34 | 13·5 | 59·0 | |
| 9·6 | | 28·0 | 5·6 | 9·5 g |
| 9·6 | 35 | 1·0 | 5·1 | 9·5 g |
| 9·6 | | 57·0 | 50·8 | g |
| 8·4 | 38 | 34·0 | 18·3 | 8·5 g |
| 9·6 | | 50·5 | 12·9 | |
| 8·5 | 39 | 53·5 | 58·3 | 8·2 Gg |
| 8·9 | | 55·0 | 28·8 | g |
| 9·6 | 41 | 42·0 | 20·9 | g |
| 8·6 | 42 | 5·5 | 56·1 | 8·8 g |
| 9·2 | 44 | 18·0 | 37·7 | g |
| 9·0 | | 18·5 | 53·9 | g |
| 9·4 | | 28·5 | 46·0 | g |
| 9·6 | 48 | 8·0 | 5·0 | g |
| 8·6 | | 16·0 | 37·9 | 8·5 g |
| 8·8 | 49 | 22·0 | 7·9 | g |
| 9·0 | 53 | 30·5 | 16·5 | g |
| 9·6 | 54 | 2·0 | 12·0 | g |
| 9·5 | | 12·0 | 33·2 | 9·5 g |
| 6·9 | | 23·0 | 4·0 | 7·5 Gg |
| 8·8 | | 35·5 | 59·6 | 9·0 g |
| 8·7 | 56 | 3·5 | 24·0 | 9·0 g |
| 8·9 | 57 | 31·5 | 24·6 | g |

25 prec.

| h | m | α + s | δ − ′ |
|---|---|---|---|
| 17 | 0 | 163 | 2·2 |
| | 10 | 164 | 1·8 |
| | 20 | 165 | 1·5 |
| | 30 | 165 | 1·1 |
| | 40 | 166 | 0·7 |
| | 50 | 166 | 0·4 |
| 18 | 0 | 166 | 0·0 |
| | | | + |
| | 10 | 166 | 0·4 |
| | 20 | 166 | 0·7 |
| | 30 | 165 | 1·1 |
| | 40 | 165 | 1·5 |
| | 50 | 164 | 1·8 |
| 19 | 0 | 163 | 2·2 |



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25 prec.

| h | m | α + s | δ + ′ |
|---|---|---|---|
| 18 | 50 | 164 | 1·8 |
| 19 | 0 | 163 | 2·2 |
| | 10 | 162 | 2·5 |
| | 20 | 161 | 2·9 |
| | 30 | 159 | 3·2 |
| | 40 | 158 | 3·5 |
| | 50 | 156 | 3·9 |
| 20 | 0 | 154 | 4·2 |
| | 10 | 152 | 4·5 |
| | 20 | 150 | 4·8 |
| | 30 | 148 | 5·1 |
| | 40 | 145 | 5·4 |
| | 50 | 143 | 5·6 |
| 21 | 0 | 140 | 5·9 |
| | 10 | 137 | 6·2 |
| | 20 | 134 | 6·4 |
| | 30 | 131 | 6·6 |
| | 40 | 128 | 6·8 |
| | 50 | 125 | 7·0 |

## 2961—3020.

| mag. | 18h.–19h. m | s | −69° ′ | |
|---|---|---|---|---|
| 8·8 | 59 | 25·0 | 18·6 | g |
| 6·6 | 3 | 2·5 | 23·9 | 6·5 GScg |
| 8·7 | 4 | 12·8 | 39·8 | 9·0 g |
| 10·0 | 5 | 3·3 | 40·0 | |
| 10·4 | | 9·3 | 16·5 | |
| 9·9 | | 46·3 | 37·8 | |
| 8·4 | | 50·8 | 36·6 | 9·0 g |
| 9·9 | | 52·8 | 50·8 | |
| 9·7 | 6 | 53·3 | 4·9 | g |
| 10·2 | | 54·8 | 10·6 | |
| 9·8 | | 59·6 | 0·7 | |
| 9·9 | 7 | 2·8 | 36·9 | |
| 10·3 | | 16·3 | 46·8 | |
| 10·1 | | 49·3 | 51·1 | |
| 9·8 | | 58·3 | 18·6 | |
| 10·4 | 8 | 2·8 | 34·4 | |
| 10·0 | | 2·8 | 8·4 | |
| 9·1 | | 5·8 | 37·8 | 9·5 g |
| 10·4 | | 14·8 | 40·8 | |
| 10·4 | 9 | 6·3 | 41·3 | |
| 10·3 | | 12·8 | 9·7 | |
| 9·7 | | 23·3 | 47·1 | |
| 8·0 | 10 | 6·1 | 38·4 | g |
| 9·7 | | 22·3 | 13·1 | g |
| 9·7 | | 25·8 | 37·1 | |
| 9·1 | | 32·3 | 12·6 | 9·0 g |
| 9·9 | | 52·8 | 47·0 | |
| 8·2 | | 58·8 | 22·4 | 7·8 Gg |
| 9·5 | 11 | 14·3 | 27·7 | |
| 9·9 | | 33·3 | 15·1 | |
| 9·8 | | 39·3 | 47·0 | |
| 9·2 | 12 | 3·3 | 36·6 | g |
| 10·2 | | 6·3 | 12·6 | |
| 9·0 | | 10·3 | 31·7 | g |
| 10·0 | | 34·8 | 25·8 | |
| 9·9 | 13 | 31·8 | 33·2 | |
| 10·4 | | 57·8 | 39·5 | |
| 9·0 | | 57·8 | 32·5 | 9·0 g |
| 10·4 | 14 | 5·3 | 51·4 | |
| 10·4 | | 9·8 | 19·4 | |
| 9·1 | | 15·8 | 57·7 | g |
| 7·3 | | 39·3 | 52·6 | 7·0 GSg |
| 9·1 | | 39·3 | 26·6 | 9·0 g |
| 10·3 | 15 | 22·3 | 26·4 | |
| 10·4 | | 29·8 | 19·8 | |
| 9·4 | 16 | 8·8 | 21·9 | |
| 9·9 | | 19·3 | 14·1 | |
| 10·0 | | 20·3 | 38·2 | |
| 10·4 | | 43·3 | 10·4 | |
| 8·6 | 17 | 30·3 | 13·5 | 8·8 g |
| 10·4 | | 53·8 | 35·1 | |
| 9·1 | 18 | 7·8 | 15·4 | 9·5 g |
| 10·3 | | 36·3 | 47·4 | |
| 10·4 | 19 | 9·8 | 3·6 | |
| 10·4 | | 59·6 | 34·3 | |
| 9·5 | 20 | 25·8 | 5·2 | g |
| 10·2 | | 42·8 | 25·6 | |
| 9·5 | 21 | 53·3 | 16·9 | |
| 9·6 | 22 | 2·3 | 7·2 | |
| 10·2 | | 3·3 | 53·8 | |

## 3021—3080.

| mag. | 19h. m | s | −69° ′ | |
|---|---|---|---|---|
| 8·1 | 22 | 5·3 | 21·0 | 8·0 GScg |
| 8·4 | | 15·8 | 21·5 | 9·2 Gg |
| 9·1 | | 30·8 | 40·8 | g |
| 8·6 | | 42·8 | 55·9 | 8·5 g |
| 9·6 | | 44·8 | 20·3 | |
| 10·4 | | 51·8 | 20·1 | |
| 10·0 | 23 | 17·8 | 6·5 | |
| 9·2 | | 48·3 | 51·2 | 9·0 g |
| 10·3 | 24 | 29·3 | 28·1 | |
| 10·3 | | 49·3 | 1·3 | |
| 10·3 | 25 | 13·8 | 5·0 | |
| 10·4 | | 19·3 | 47·8 | |
| 10·2 | | 55·8 | 47·3 | |
| 8·2 | 26 | 9·3 | 36·7 | 7·2 GSg |
| 8·0 | | 14·3 | 52·6 | 7·0 GScg |
| 10·0 | | 58·8 | 27·0 | |
| 9·9 | 27 | 1·8 | 18·7 | |
| 9·5 | | 23·3 | 25·3 | |
| 10·4 | | 32·4 | 53·1 | |
| 9·9 | | 52·8 | 55·6 | |
| 9·9 | 29 | 10·3 | 48·6 | |
| 10·0 | | 49·3 | 49·4 | |
| 8·5 | 30 | 5·3 | 43·1 | 9·0 g |
| 10·2 | | 19·3 | 14·6 | |
| 9·0 | | 46·8 | 33·0 | g |
| 9·4 | 31 | 34·8 | 50·8 | g |
| 9·9 | 33 | 14·8 | 15·0 | |
| 10·2 | | 26·8 | 48·4 | |
| 9·6 | | 59·3 | 45·0 | |
| 10·3 | 34 | 4·8 | 31·5 | |
| 9·1 | 35 | 38·3 | 0·9 | 9·0 g |
| 9·1 | | 39·3 | 32·9 | 8·5 g |
| 10·4 | 36 | 46·3 | 48·0 | |
| 8·1 | | 55·8 | 38·4 | 7·5 GScg |
| 8·8 | 38 | 32·8 | 46·0 | g |
| 10·4 | 39 | 32·2 | 51·4 | |
| 10·3 | | 37·3 | 27·1 | |
| 10·2 | | 45·8 | 36·2 | |
| 10·4 | 40 | 27·2 | 17·0 | |
| 9·0 | | 56·3 | 51·3 | g |
| 9·8 | 41 | 55·8 | 25·6 | |
| 8·5 | 42 | 5·8 | 16·3 | 9·0 g |
| 10·2 | | 30·3 | 19·7 | |
| 9·9 | | 33·1 | 2·5 | |
| 9·7 | | 35·3 | 24·2 | |
| 9·9 | 43 | 9·3 | 53·8 | g |
| 9·2 | | 13·0 | 58·5 | |
| 10·0 | | 29·3 | 49·7 | |
| 10·3 | | 52·8 | 23·7 | |
| 10·4 | | 55·3 | 59·7 | |
| 9·4 | 45 | 39·8 | 44·6 | |
| 6·2 | | 44·8 | 29·3 | 6·0 GScg |
| 7·2 | 46 | 4·8 | 5·3 | 7·0 GSg |
| 9·9 | | 21·8 | 21·6 | |
| 9·7 | 47 | 8·8 | 1·7 | g |
| 10·3 | | 9·3 | 3·7 | |
| 9·9 | | 19·3 | 59·6 | |
| 10·3 | | 24·3 | 19·3 | |
| 9·4 | 48 | 24·3 | 28·1 | g |
| 8·3 | | 55·3 | 31·1 | g |

## 3081—3140.

| mag. | 19h.–20h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·1 | 49 | 1·8 | 21·3 | g |
| 9·4 | 50 | 15·8 | 11·9 | g |
| 10·4 | | 19·2 | 22·3 | |
| 9·2 | 51 | 51·3 | 20·1 | g |
| 10·4 | 52 | 26·3 | 50·9 | |
| 9·4 | | 54·3 | 4·3 | g |
| 9·8 | 53 | 18·3 | 52·8 | g |
| 10·4 | | 55·8 | 6·8 | |
| 10·4 | 54 | 13·3 | 41·9 | |
| 7·4 | | 19·3 | 54·3 | 7·5 GSg |
| 10·0 | | 32·3 | 54·9 | |
| 9·1 | | 42·4 | 59·0 | 9·0 g |
| 9·6 | 55 | 47·4 | 56·6 | |
| 9·0 | | 59·0 | 19·2 | g |
| 9·4 | 58 | 40·5 | 32·7 | 10·0 g |
| 8·8 | 59 | 22·0 | 34·2 | 8·5 g |
| 9·2 | | 31·0 | 25·1 | g |
| 8·7 | 0 | 30·5 | 17·9 | g |
| 9·8 | 1 | 2·0 | 0·1 | |
| 9·8 | 2 | 36·0 | 18·3 | |
| 9·6 | 3 | 18·0 | 5·3 | 9·0 g |
| 9·0 | | 40·5 | 10·0 | 9·0 g |
| 9·6 | 5 | 30·5 | 13·9 | g |
| 9·2 | | 44·0 | 30·8 | 9·5 g |
| 9·8 | | 49·5 | 0·1 | |
| 9·6 | 6 | 10·5 | 39·0 | 9·5 g |
| 8·0 | | 26·0 | 49·0 | 9·0 g |
| 8·4 | 7 | 7·0 | 23·8 | 8·5 Gg |
| 9·8 | 9 | 2·0 | 19·9 | g |
| 9·8 | | 42·0 | 45·0 | g |
| 9·0 | 10 | 24·0 | 49·2 | g |
| 9·3 | 12 | 21·0 | 53·2 | g |
| 9·8 | 13 | 27·5 | 13·2 | g |
| 9·5 | 14 | 6·0 | 3·3 | 10·0 g |
| 8·8 | | 53·0 | 18·5 | 9·0 g |
| 9·8 | 15 | 8·5 | 40·1 | g |
| 9·8 | | 12·0 | 49·3 | g |
| 8·4 | 16 | 38·5 | 3·4 | g |
| 9·3 | | 47·0 | 40·6 | g |
| 6·8 | 17 | 56·5 | 28·6 | 8·0 GScg |
| 8·7 | 19 | 18·0 | 6·8 | 8·8 g |
| 9·0 | 20 | 18·5 | 0·9 | 9·0 g |
| 9·8 | 21 | 40·0 | 11·0 | g |
| 9·8 | 22 | 26·5 | 54·1 | g |
| 9·2 | 23 | 32·0 | 4·7 | g |
| 9·2 | 24 | 24·8 | 59·8 | G |
| 7·7 | | 28·5 | 52·6 | 7·0 GScg |
| 8·0 | 28 | 50·0 | 57·4 | 8·5 Gg |
| 9·8 | 30 | 10·0 | 37·3 | g |
| 8·2 | 31 | 53·0 | 21·2 | g |
| 9·0 | | 59·0 | 0·8 | 9·5 g |
| 9·2 | 33 | 10·7 | 7·8 | 9·5 g |
| 9·8 | | 50·0 | 52·3 | g |
| 9·6 | 35 | 7·0 | 26·4 | |
| 7·3 | 37 | 1·5 | 14·7 | 7·5 GSg |
| 10·0 | | 4·0 | 22·3 | |
| 10·0 | | 15·5 | 55·9 | |
| 7·0 | | 26·2 | 13·9 | 6·0 GScg |
| 10·0 | | 57·0 | 22·6 | g |
| 9·4 | 38 | 7·2 | 50·4 | g |

## 3141—3200.

| mag. | 20h.–21h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·6 | 38 | 11·5 | 5·0 | g |
| 10·0 | 40 | 1·0 | 34·8 | g |
| 9·8 | 42 | 9·5 | 32·0 | g |
| 10·0 | 43 | 29·0 | 54·2 | |
| 10·0 | 45 | 18·0 | 4·5 | g |
| 6·7 | 46 | 22·0 | 37·2 | 7·0 GScg |
| 8·6 | | 37·0 | 1·8 | 9·5 g |
| 9·4 | 47 | 41·5 | 22·6 | g |
| 10·0 | 48 | 58·0 | 35·8 | g |
| 8·4 | 51 | 34·5 | 39·2 | g |
| 10·0 | | 49·5 | 10·0 | |
| 10·0 | 52 | 49·0 | 48·6 | g |
| 9·4 | 54 | 6·0 | 54·0 | g |
| 10·0 | | 47·0 | 11·0 | g |
| 8·5 | 55 | 1·0 | 8·4 | 7·5 GSgg |
| 8·1 | 56 | 48·5 | 43·8 | 8·5 g |
| 9·8 | 59 | 51·0 | 55·7 | g |
| 10·0 | 1 | 19·5 | 46·3 | g |
| 10·0 | | 24·0 | 47·7 | g |
| 9·2 | 2 | 11·0 | 26·0 | 9·0 g |
| 9·8 | 7 | 20·5 | 7·2 | 9·0 Gg |
| 10·0 | 8 | 13·5 | 54·4 | |
| 8·8 | | 49·5 | 32·0 | g |
| 8·8 | 9 | 13·5 | 3·8 | 8·5 Gg |
| 9·8 | | 58·5 | 10·0 | 10·0 g |
| 10·0 | | 59·0 | 30·6 | g |
| 8·4 | 10 | 4·0 | 55·7 | g |
| 10·0 | | 13·5 | 48·8 | g |
| 8·8 | 11 | 4·0 | 10·0 | 8·5 g |
| 10·0 | 13 | 32·5 | 11·4 | |
| 10·0 | | 46·0 | 36·6 | g |
| 9·0 | 14 | 17·5 | 47·4 | 9·0 g |
| 9·2 | | 31·5 | 57·0 | 9·0 g |
| 10·0 | 18 | 41·0 | 17·8 | g |
| 9·5 | 19 | 18·0 | 33·8 | g |
| 9·0 | 21 | 52·5 | 59·9 | 9·0 g |
| 10·0 | 22 | 19·0 | 45·3 | |
| 10·0 | | 30·5 | 33·9 | |
| 9·6 | | 42·5 | 51·9 | |
| 8·2 | 23 | 46·5 | 24·2 | 8·5 Gg |
| 10·0 | 24 | 33·0 | 8·2 | |
| 10·0 | 26 | 21·0 | 22·3 | g |
| 8·9 | 27 | 7·5 | 1·7 | 9·5 g |
| 10·0 | | 51·5 | 8·0 | |
| 9·6 | 29 | 22·0 | 9·2 | 9·5 g |
| 9·5 | | 40·5 | 59·0 | |
| 8·6 | | 56·5 | 56·2 | 9·0 g |
| 8·9 | 32 | 16·5 | 45·6 | 9·5 g |
| 9·8 | | 41·5 | 30·9 | 10·0 g |
| 9·3 | 33 | 13·5 | 28·0 | 9·0 g |
| 9·3 | 34 | 41·0 | 5·9 | g |
| 9·5 | | 46·5 | 54·5 | 9·5 g |
| 7·9 | 35 | 1·5 | 56·1 | 8·5 g |
| 9·0 | | 52·0 | 15·3 | 8·0 g |
| 9·4 | 36 | 9·0 | 52·8 | g |
| 10·0 | | 52·0 | 9·0 | |
| 9·6 | 37 | 1·5 | 16·4 | 9·5 |
| 9·8 | 39 | 42·0 | 44·0 | g |
| 8·6 | 40 | 35·0 | 4·0 | 8·5 g |
| 9·6 | 41 | 22·5 | 30·0 | |

496

### 3201—3237.

| mag. | 21h.—22h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·4 | 42 | 28·5 | 4·1 | g |
| 10·0 | 43 | 8·5 | 10·0 | |
| 9·3 | 44 | 29·5 | 44·0 | g |
| 8·9 | | 52·5 | 36·0 | 9·0 g |
| 10·0 | 49 | 3·5 | 50·9 | g |
| 9·2 | | 20·5 | 49·2 | 9·0 g |
| 9·2 | | 48·5 | 24·6 | 8·5 Gg |
| 10·0 | 50 | 3·5 | 29·6 | |
| 9·6 | | 41·0 | 56·9 | |
| 8·6 | 51 | 48·5 | 36·1 | 9·5 Gg |
| 9·8 | 52 | 28·5 | 21·8 | g |
| 10·0 | 53 | 56·0 | 13·0 | g |
| 9·3 | 56 | 4·5 | 49·2 | 9·5 g |
| 7·4 | | 22·0 | 20·7 | 7·0 GSg |
| 10·0 | 57 | 23·0 | 19·5 | g |
| 9·2 | | 44·5 | 36·2 | g |
| 9·3 | 58 | 16·0 | 41·8 | g |
| 9·4 | | 20·0 | 53·3 | 9·5 g |
| 9·8 | 59 | 22·0 | 33·7 | g |
| 8·9 | | 55·0 | 39·5 | 9·5 g |
| 9·5 | 1 | 38·0 | 17·9 | g |
| 8·6 | 3 | 31·8 | 19·1 | 9·5 g |
| 9·8 | 5 | 38·6 | 24·2 | |
| 9·0 | | 43·6 | 12·9 | 9·5 g |
| 10·4 | 6 | 50·1 | 2·0 | |
| 10·2 | 7 | 30·6 | 53·9 | |
| 10·2 | 8 | 2·6 | 21·1 | |
| 10·4 | 9 | 12·1 | 4·6 | |
| 10·4 | 10 | 54·1 | 31·9 | |
| 9·4 | 11 | 1·8 | 54·7 | g |
| 10·4 | | 46·6 | 9·3 | |
| 9·6 | 12 | 26·6 | 49·6 | |
| 10·2 | 13 | 53·8 | 57·9 | |
| 8·7 | 14 | 39·6 | 34·6 | 8·5 Gg |
| 10·2 | | 42·1 | 0·6 | |
| 10·2 | 16 | 9·1 | 0·2 | |
| 8·5 | | 25·1 | 11·7 | 9·0 g |

### 3238—3274.

| mag. | 22h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·8 | 16 | 59·6 | 54·6 | |
| 9·0 | 18 | 52·6 | 49·7 | 9·0 g |
| 9·0 | 20 | 42·6 | 54·6 | 9·0 g |
| 8·5 | 21 | 58·6 | 19·1 | 9·5 g |
| 8·8 | 22 | 13·6 | 38·8 | 9·0 g |
| 7·3 | | 47·1 | 44·8 | 7·0 GSg |
| 9·6 | 23 | 58·6 | 4·7 | g |
| 10·0 | 25 | 30·6 | 57·2 | |
| 10·4 | | 41·6 | 47·7 | |
| 10·4 | 26 | 37·6 | 44·9 | |
| 8·2 | 28 | 41·1 | 55·8 | 7·8 Gg |
| 9·7 | 29 | 9·1 | 20·4 | |
| 10·0 | | 47·1 | 12·8 | ? |
| 9·4 | 30 | 19·1 | 32·0 | |
| 9·0 | 31 | 35·6 | 22·5 | 9·0 g |
| 9·4 | 32 | 0·8 | 12·1 | 9·0 g |
| 9·3 | | 18·8 | 38·7 | |
| 9·0 | | 48·8 | 57·1 | 8·5 g |
| 10·2 | | 50·8 | 18·5 | |
| 10·4 | | 56·8 | 53·9 | |
| 8·4 | 33 | 12·3 | 3·1 | 8·0 GSg |
| 10·2 | | 57·3 | 23·3 | |
| 10·4 | 34 | 19·3 | 40·8 | |
| 9·5 | 35 | 13·8 | 12·7 | |
| 8·8 | | 17·3 | 57·5 | 9·0 g |
| 10·0 | | 54·8 | 36·8 | |
| 10·4 | 36 | 57·8 | 37·1 | |
| 10·4 | 37 | 14·3 | 43·4 | |
| 9·0 | | 51·3 | 18·8 | g |
| 9·8 | 38 | 6·8 | 41·0 | |
| 10·0 | | 44·3 | 6·7 | |
| 10·4 | | 48·3 | 35·3 | |
| 8·4 | 40 | 8·8 | 27·6 | 8·5 Gg |
| 10·0 | | 55·8 | 11·4 | |
| 10·0 | | 57·8 | 34·3 | |
| 10·4 | 41 | 21·0 | 42·1 | |
| 8·5 | 42 | 2·3 | 38·0 | 8·0 g |

### 3275—3311.

| mag. | 22h.—23h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·0 | 43 | 12·8 | 40·3 | g |
| 10·2 | | 14·3 | 41·6 | |
| 10·0 | | 47·8 | 37·2 | |
| 9·8 | 44 | 30·8 | 49·8 | |
| 9·8 | | 30·8 | 37·8 | |
| 9·5 | | 34·8 | 46·8 | g |
| 9·8 | 45 | 26·3 | 17·6 | g |
| 8·9 | | 44·8 | 18·6 | g |
| 9·2 | 46 | 13·8 | 26·0 | g |
| 10·0 | | 21·8 | 22·0 | |
| 7·9 | | 25·8 | 46·2 | 8·0 GSg |
| 8·8 | | 28·3 | 5·0 | g |
| 10·4 | | 35·3 | 21·7 | |
| 10·4 | | 50·8 | 36·8 | |
| 7·8 | 47 | 55·1 | 26·9 | GSg |
| 10·4 | 50 | 57·3 | 4·4 | |
| 10·0 | 51 | 10·0 | 17·0 | |
| 9·6 | | 28·8 | 5·4 | g |
| 10·4 | | 45·8 | 29·2 | |
| 9·2 | 53 | 46·2 | 10·0 | |
| 9·7 | 55 | 1·9 | 33·1 | |
| 8·9 | | 15·8 | 43·2 | g |
| 10·4 | | 24·3 | 7·4 | |
| 10·4 | | 25·8 | 4·0 | |
| 9·0 | | 49·7 | 1·2 | g |
| 9·0 | 56 | 22·9 | 3·1 | g |
| 5·8 | | 35·1 | 29·6 | 6·0 GSgr |
| 9·7* | 57 | 46·0 | 38·9 | 10·0 |
| 9·2 | 58 | 38·0 | 56·2 | |
| 9·5 | 0 | 32·5 | 7·5 | |
| 9·4 | | 49·2 | 2·0 | g |
| 8·6 | 2 | 12·5 | 31·4 | g |
| 9·8 | | 29·5 | 9·0 | |
| 8·5 | | 50·0 | 42·5 | g |
| 9·9 | 4 | 42·0 | 18·0 | g |
| 9·2 | | 56·5 | 36·0 | g |
| 9·4 | 7 | 22·5 | 50·3 | |

### 3312—3349.

| mag. | 23h. m | s | −69° ′ | |
|---|---|---|---|---|
| 9·0 | 8 | 5·0 | 11·0 | g |
| 9·4 | 9 | 13·0 | 31·0 | g |
| 9·2 | | 53·5 | 25·8 | Gg |
| 9·8 | 11 | 0·5 | 9·4 | |
| 9·0 | | 52·0 | 21·7 | g |
| 8·9 | 13 | 3·0 | 57·2 | 9·0 g |
| 9·4 | 15 | 29·0 | 54·7 | |
| 9·0 | 16 | 45·5 | 26·5 | g |
| 9·6 | | 49·0 | 4·6 | g |
| 9·4 | 17 | 39·0 | 13·5 | 9·5 g |
| 9·5 | 20 | 6·5 | 34·5 | g |
| 9·5 | | 53·5 | 7·1 | |
| 9·0 | 23 | 29·0 | 46·3 | 9·0 Gg |
| 6·8 | | 31·0 | 45·7 | 7·2 GSg |
| 9·2 | 26 | 22·0 | 56·5 | |
| 9·2 | 30 | 6·5 | 57·9 | g |
| 9·9 | 31 | 16·0 | 0·8 | g |
| 8·1 | 32 | 26·0 | 53·1 | 9·0 g |
| 8·8 | 33 | 2·8 | 53·1 | 9·0 g |
| 9·9 | 36 | 4·8 | 7·3 | g |
| 9·0 | | 51·0 | 7·4 | g |
| 9·4 | 37 | 34·0 | 53·4 | ? |
| 9·5* | 38 | 34·0 | 18·8 | 9·0 Gg |
| 7·4 | 40 | 28·3 | 5·2 | GScg |
| 8·4 | 43 | 43·0 | 47·1 | 8·0 GSg |
| 8·7 | 46 | 36·3 | 2·5 | g |
| 9·4 | 49 | 29·0 | 22·5 | g |
| 9·4 | 50 | 11·0 | 28·1 | g |
| 9·4 | 52 | 34·5 | 38·0 | g |
| 9·4 | | 45·0 | 51·3 | g |
| 9·4 | 53 | 58·0 | 50·0 | g |
| 9·3 | 54 | 5·5 | 37·1 | |
| 8·4 | | 50·0 | 4·1 | 8·5 g |
| 8·3 | 55 | 35·5 | 58·0 | 9·0 g |
| 9·0 | 57 | 19·0 | 23·2 | 9·5 g |
| 9·1 | 58 | 23·0 | 32·2 | 9·0 g |
| 9·3 | 59 | 34·0 | 14·6 | g |
| 8·8 | | 37·0 | 30·3 | 9·0 g |

25 prec.

| h | m | a + s | δ + ′ |
|---|---|---|---|
| 21 | 40 | 128 | 6·8 |
| | 50 | 125 | 7·0 |
| 22 | 0 | 122 | 7·2 |
| | 10 | 118 | 7·4 |
| | 20 | 115 | 7·6 |
| | 30 | 111 | 7·7 |
| | 40 | 107 | 7·9 |
| | 50 | 104 | 8·0 |
| 23 | 0 | 100 | 8·1 |
| | 10 | 96 | 8·2 |
| | 20 | 92 | 8·2 |
| | 30 | 88 | 8·3 |
| | 40 | 85 | 8·3 |
| | 50 | 81 | 8·3 |
| 0 | 0 | 77 | 8·4 |



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# ZONE—70°

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | − 0·00 d | + 8·4 |
| | 10 | 73 | − 0·00 | 8·3 |
| | 20 | 69 | − 0·01 | 8·3 |
| | 30 | 65 | − 0·01 | 8·3 |
| | 40 | 61 | − 0·02 | 8·2 |
| | 50 | 57 | − 0·02 | 8·2 |
| 1 | 0 | 53 | − 0·02 | 8·1 |
| | 10 | 49 | − 0·03 | 8·0 |
| | 20 | 45 | − 0·03 | 7·9 |
| | 30 | 42 | − 0·03 | 7·7 |
| | 40 | 38 | − 0·04 | 7·6 |
| | 50 | 34 | − 0·04 | 7·4 |
| 2 | 0 | 31 | − 0·04 | 7·2 |
| | 10 | + 27 | − 0·05 | + 7·0 |

d = minutes of decl.

## 1—40.

| mag. | h ($0^h$) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 8·9 | 0 | 0 | 4·0 | 35·5 | 9·5 *g* |
| 9·3 | | 1 | 7·0 | 51·8 | *g* |
| 9·1 | | | 58·0 | 45·1 | 9·0 *g* |
| 9·3 | | 7 | 11·0 | 21·1 | 10·0 *g* |
| 9·3 | | | 24·0 | 56·9 | 10·0 *g* |
| 9·3 | | 9 | 33·0 | 26·8 | 9·0 *g* |
| 9·3 | | 10 | 37·0 | 39·5 | 10·0 G*g* |
| 9·3 | | 11 | 10·0 | 39·4 | 9·5 G*g* |
| 8·0 | | | 41·0 | 34·3 | 8·5 *g* |
| 9·3 | | | 42·0 | 11·0 | *g* |
| 9·4 | | 12 | 5·0 | 32·2 | *g* |
| 5·6 | | 14 | 50·0 | 19·1 | 6·0 GSc*g* |
| 9·4 | | 19 | 54·0 | 37·6 | 9·5 *g* |
| 9·6 | | 20 | 43·0 | 46·0 | *g* |
| 8·7 | | 21 | 2·7 | 0·2 | 7·0 GS*g* |
| 9·4 | | | 6·0 | 45·9 | *g* |
| 9·6 | | | 13·0 | 33·6 | *g* |
| 9·6 | | | 17·0 | 15·9 | *g* |
| 9·6 | | | 23·0 | 56·6 | *g* |
| 9·2 | | 22 | 22·0 | 54·8 | *g* |
| 9·4 | | | 25·0 | 14·0 | *g* |
| 9·4 | | | 47·0 | 22·0 | 9·5 *g* |
| 9·5 | | 23 | 48·0 | 3·1 | *g* |
| 9·3* | | 25 | 14·0 | 13·8 | 10·0 *g* |
| 9·4 | | 26 | 1·5 | 11·2 | 9·0 *g* |
| 9·4 | | 27 | 3·0 | 11·3 | 9·5 *g* |
| 9·4 | | 29 | 31·0 | 38·9 | *g* |
| 9·4 | | 31 | 13·0 | 57·0 | 9·0 *g* |
| 7·8 | | | 19·0 | 7·4 | 8·5 GS*g* |
| 9·5 | | | 32·0 | 35·6 | *g* |
| 9·3 | | 34 | 22·0 | 24·8 | *g* |
| 8·9 | | 37 | 44·0 | 42·0 | 10·0 *g* |
| 9·4 | | 38 | 13·0 | 58·9 | 9·0 *g* |
| 9·6 | | 42 | 3·5 | 12·8 | *g* |
| 9·6 | | 43 | 34·5 | 10·8 | *g* |
| 9·6 | | 45 | 6·5 | 48·6 | *g* |
| 7·6 | | 47 | 40·0 | 10·9 | 8·0 GS*g*r |
| 8·0 | | | 43·0 | 10·9 | 8·5 GS*g* |
| 9·2 | | 49 | 32·0 | 47·8 | 9·2 *g* |
| 6·6 | | 50 | 20·0 | 12·3 | 5·5 GSc*g*r |

## 41—80.

| mag. | h ($0^h$—$1^h$) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·2 | 0 | 51 | 43·0 | 37·4 | *g* |
| 8·2 | | 52 | 33·0 | 17·9 | 9·0 *g* |
| 9·6 | | 55 | 32·0 | 56·6 | 9·5 *g* |
| 7·9 | | | 44·0 | 51·0 | 7·8 G*g* |
| 9·6 | | 56 | 37·0 | 51·9 | *g* |
| 9·5 | 1 | 1 | 36·5 | 15·2 | *g* |
| 9·2 | | 4 | 15·3 | 57·8 | *g* |
| 10·2 | | | 18·2 | 34·6 | |
| 9·0 | | | 42·8 | 14·0 | 8·5 G*g* |
| 10·2 | | 5 | 45·7 | 15·8 | *g* |
| 9·2 | | 6 | 4·6 | 19·5 | 9·0 *g* |
| 10·3 | | | 50·7 | 37·2 | *g* |
| 9·7 | | 8 | 27·2 | 15·2 | *g* |
| 9·9 | | 11 | 39·2 | 22·4 | |
| 9·2 | | 12 | 28·7 | 53·9 | *g* |
| 9·8 | | | 43·7 | 25·2 | |
| 10·3 | | 13 | 7·8 | 14·0 | |
| 9·6 | | | 30·2 | 4·8 | *g* |
| 10·3 | | | 38·2 | 45·9 | |
| 10·3 | | | 39·7 | 45·3 | |
| 9·6 | | 15 | 56·2 | 12·8 | 9·5 *g* |
| 10·2 | | 17 | 35·2 | 17·9 | |
| 9·6 | | 18 | 9·2 | 50·0 | *g* |
| 7·4 | | | 12·2 | 22·4 | 7·5 GS*g* |
| 9·9 | | | 23·5 | 58·9 | *g* |
| 10·3 | | 20 | 1·4 | 0·2 | |
| 9·2 | | | 55·2 | 8·0 | *g* |
| 9·7 | | 21 | 10·7 | 51·4 | |
| 10·2 | | | 39·2 | 50·3 | *g* |
| 9·4 | | | 53·7 | 46·8 | 9·0 *g* |
| 10·3 | | 22 | 55·1 | 1·4 | |
| 10·3 | | | 57·1 | 18·5 | |
| 10·3 | | 23 | 42·6 | 17·7 | |
| 10·2 | | | 44·1 | 39·5 | |
| 10·3 | | 24 | 15·6 | 3·9 | |
| 8·2 | | | 58·1 | 46·5 | 8·5 *g* |
| 8·4 | | 28 | 6·1 | 38·1 | 8·5 *g* |
| 9·7 | | | 6·1 | 57·1 | |
| 9·4 | | 30 | 18·1 | 46·5 | 9·5 *g* |
| 9·9 | | 31 | 31·6 | 42·3 | |

## 81—120.

| mag. | h ($1^h$—$2^h$) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·6 | 1 | 32 | 48·6 | 57·9 | *g* |
| 9·7 | | 33 | 24·1 | 10·7 | *g* |
| 9·4 | | | 30·6 | 35·3 | *g* |
| 10·2 | | | 48·0 | 1·2 | *g* |
| 9·4 | | | 49·6 | 33·5 | *g* |
| 9·9 | | 35 | 23·1 | 21·1 | |
| 8·6 | | 37 | 18·6 | 37·1 | 8·5 S*g* |
| 9·9 | | | 51·3 | 20·9 | |
| 9·8 | | 39 | 7·3 | 23·3 | *g* |
| 9·6 | | | 33·3 | 1·3 | *g* |
| 9·2 | | | 55·8 | 12·1 | 9·0 *g* |
| 10·2 | | 42 | 49·3 | 40·2 | |
| 8·6 | | 44 | 32·3 | 30·3 | 7·8 G*g* |
| 8·8 | | 45 | 13·3 | 21·0 | 8·5 *g* |
| 9·0 | | | 20·3 | 41·4 | 9·0 *g* |
| 10·0 | | | 23·8 | 2·8 | *g* |
| 10·3 | | 48 | 55·7 | 18·7 | |
| 10·2 | | 50 | 22·6 | 34·4 | G |
| 10·3 | | | 53·3 | 55·1 | G*g* |
| 8·6 | | 51 | 18·1 | 7·9 | *g* |
| 8·8 | | 53 | 43·1 | 35·9 | 9·2 *g* |
| 10·8 | | | 56·3 | 19·2 | |
| 10·8 | | 54 | 15·8 | 31·6 | |
| 9·8 | | | 29·8 | 47·2 | |
| 10·4 | | | 53·1 | 41·3 | |
| 9·0 | | 55 | 55·3 | 2·4 | 9·0 *g* |
| 8·2 | | | 55·6 | 9·6 | 8·7 *g* |
| 10·2 | | | 56·3 | 30·5 | *g* |
| 10·8 | | 56 | 15·8 | 57·7 | |
| 8·8 | | | 48·3 | 39·5 | 8·8 *g* |
| 9·8 | | 57 | 11·4 | 25·0 | *g* |
| 9·2 | | | 42·4 | 49·8 | *g* |
| 10·8 | | | 44·0 | 0·4 | |
| 9·5 | | | 57·9 | 8·7 | 9·8 *g* |
| 10·8 | | 58 | 19·0 | 2·1 | *g* |
| 9·7 | | | 38·9 | 48·6 | |
| 9·6 | | | 44·4 | 17·1 | *g* |
| 10·2 | | | 59·4 | 26·8 | |
| 8·8 | | 59 | 17·9 | 16·8 | 9·5 *g* |
| 9·5 | 2 | 1 | 1·4 | 37·1 | 9·5 *g* |



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## 121—180.

| mag. | 2h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 10·8 | 2 | 2 | 8·4 | 38·5 | |
| 10·1 | | | 14·9 | 51·3 | |
| 10·6 | | 3 | 18·5 | 37·8 | |
| 9·2 | | | 29·5 | 18·9 | 9·0 g |
| 8·8 | | 4 | 1·0 | 37·0 | 9·0 g |
| 10·1 | | | 23·0 | 22·6 | g |
| 10·8 | | 5 | 39·5 | 28·3 | |
| 9·6 | | | 51·5 | 29·7 | |
| 9·5 | | 9 | 35·5 | 35·1 | g |
| 10·0 | | 10 | 14·0 | 44·5 | |
| 10·6 | | | 16·0 | 44·7 | |
| 8·9 | | 12 | 6·5 | 4·2 | g |
| 10·2 | | | 58·5 | 49·1 | |
| 10·8 | | 13 | 5·5 | 11·7 | |
| 9·4 | | | 29·0 | 2·7 | g |
| 7·8 | | | 35·2 | 0·9 | 7·5 GSg |
| 8·2 | | 14 | 21·0 | 53·6 | 8·7 Gg |
| 8·8 | | | 29·0 | 3·2 | 8·3 Gg |
| 10·2 | | 16 | 48·5 | 31·1 | |
| 8·4 | | | 51·0 | 27·6 | 8·5 g |
| 10·8 | | 17 | 35·0 | 46·3 | |
| 8·8 | | | 56·7 | 0·3 | 8·8 g |
| 10·8 | | 19 | 10·0 | 10·7 | |
| 8·9 | | | 18·0 | 19·7 | g |
| 10·8 | | | 22·0 | 12·7 | g |
| 10·8 | | | 54·5 | 16·3 | g |
| 8·9 | | 21 | 6·0 | 2·4 | 9·0 Gg |
| 10·8 | | 22 | 33·0 | 0·9 | |
| 8·9 | | | 46·5 | 42·2 | g |
| 9·2 | | | 57·0 | 36·0 | g |
| 7·6 | | 23 | 42·0 | 39·8 | GSg |
| 9·8 | | 24 | 15·4 | 2·8 | g |
| 9·5 | | | 52·7 | 57·8 | g |
| 9·2 | | 25 | 17·3 | 27·9 | 9·0 g |
| 8·0 | | | 53·8 | 5·1 | 7·5 GSg |
| 10·8 | | 26 | 38·8 | 9·3 | |
| 10·2 | | 27 | 4·3 | 56·2 | |
| 10·2 | | | 37·3 | 38·3 | |
| 9·8 | | | 39·3 | 11·5 | g |
| 9·8 | | 28 | 12·3 | 24·9 | |
| 10·8 | | 29 | 37·3 | 31·2 | |
| 10·6 | | 30 | 13·3 | 38·5 | |
| 8·2 | | | 38·8 | 9·3 | 8·5 g |
| 8·8 | | | 54·3 | 39·9 | 8·0 g |
| 8·7 | | 31 | 26·3 | 17·5 | 9·0 g |
| 9·5 | | 32 | 3·3 | 49·7 | |
| 10·1 | | | 21·3 | 5·3 | |
| 9·8 | | 33 | 10·8 | 55·7 | |
| 10·1 | | 34 | 20·7 | 59·2 | |
| 9·4 | | 36 | 23·2 | 39·4 | 9·0 g |
| 10·8 | | 38 | 1·3 | 52·7 | |
| 10·4 | | | 49·7 | 36·1 | |
| 8·5 | | | 58·9 | 27·2 | 8·5 g |
| 9·5 | | 39 | 19·4 | 34·9 | |
| 9·6 | | 40 | 19·4 | 15·2 | |
| 8·3 | | 42 | 14·6 | 5·9 | g |
| 9·4 | | 43 | 12·8 | 45·5 | g |
| 9·6 | | 45 | 3·8 | 4·3 | g |
| 10·2 | | | 36·2 | 23·1 | |
| 9·8 | | 47 | 47·2 | 48·8 | |

## 181—240.

| mag. | 2h.—3h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 7·7 | 2 | 48 | 0·2 | 44·1 | 9·0 g |
| 9·6 | | | 28·7 | 19·6 | 9·0 g |
| 9·1 | | | 29·2 | 41·0 | g |
| 10·2 | | | 40·6 | 28·0 | |
| 9·6 | | 49 | 34·1 | 45·2 | |
| 10·0 | | 50 | 33·6 | 4·5 | g |
| 9·8 | | 51 | 11·1 | 24·1 | |
| 10·2 | | | 48·1 | 27·9 | |
| 9·8 | | 52 | 59·6 | 39·5 | |
| 8·6 | | 53 | 1·1 | 33·3 | g |
| 10·2 | | | 16·6 | 6·2 | |
| 9·8 | | 54 | 47·6 | 7·5 | |
| 9·8 | | 55 | 2·6 | 21·1 | |
| 10·2 | | 56 | 9·6 | 42·9 | |
| 9·8 | | | 40·1 | 48·6 | |
| 9·6 | | 57 | 50·6 | 34·0 | g |
| 9·0 | | 58 | 26·1 | 11·4 | 9·0 Gg |
| 9·3 | | | 40·1 | 44·8 | g |
| 9·8 | | 59 | 2·1 | 46·0 | g |
| 9·8 | | | 35·1 | 35·9 | g |
| 8·3 | 3 | 0 | 50·6 | 10·4 | 8·0 GSg |
| 10·0 | | 2 | 23 6 | 57·0 | 9·3 Gg |
| 10·0 | | | 24·6 | 22·5 | |
| 8·6 | | | 39·6 | 57·8 | 8·5 Gg |
| 9·4 | | | 40·6 | 14·0 | g |
| 10·2 | | | 58·1 | 23·6 | |
| 9·8 | | 3 | 13·1 | 0·2 | 9·5 g |
| 10·2 | | 5 | 13·6 | 37·2 | |
| 8·8 | | 6 | 56·6 | 22·0 | 9·5 g |
| 10·2 | | 7 | 14·6 | 7·6 | |
| 9·3 | | | 25·6 | 35·0 | g |
| 9·6 | | | 58·6 | 56·5 | |
| 10·2 | | 9 | 40·6 | 16·8 | g |
| 8·5 | | 10 | 44·1 | 15·6 | 8·5 Gg |
| 9·6 | | 11 | 7·6 | 27·9 | g |
| 9·8 | | 14 | 0·4 | 31·8 | |
| 7·5 | | | 17·9 | 14·4 | 7·5 GSg |
| 10·2 | | | 48·4 | 45·7 | |
| 9·8 | | | 58·4 | 39·1 | |
| 9·0 | | 17 | 28·4 | 56·0 | 8·8 g |
| 9·5 | | | 46·9 | 25·1 | |
| 9·0 | | | 57·4 | 24·2 | 9·0 g |
| 10·2 | | 18 | 5·4 | 4·0 | g |
| 10·2 | | | 6·4 | 46·8 | |
| 10·2 | | | 28·5 | 8·0 | g |
| 10·2 | | 19 | 0·0 | 52·5 | g |
| 10·2 | | 20 | 51·9 | 3·7 | g |
| 9·8 | | 21 | 38·5 | 37·4 | |
| 9·4 | | 22 | 41·4 | 43·8 | |
| 6·7 | | 23 | 30·5 | 3·9 | 6·5 GScg |
| 9·2 | | 24 | 42·7 | 33·4 | g |
| 9·7 | | | 52·0 | 41·2 | |
| 9·2 | | 25 | 53·3 | 2·4 | 8·8 Gg |
| 9·6 | | 28 | 10·0 | 23·5 | |
| 9·4 | | | 27·0 | 10·1 | 9·2 Gg |
| 9·7 | | 30 | 1·0 | 49·5 | |
| 9·1 | | 31 | 2·0 | 53·7 | 8·5 g |
| 9·6 | | | 21·0 | 12·8 | g |
| 9·6 | | 32 | 42·0 | 29·9 | |
| 8·2 | | | 59·0 | 17·1 | g |

## 241—300.

| mag. | 3h.—4h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·3 | 3 | 33 | 16·0 | 30·0 | |
| 9·3 | | | 22·0 | 10·0 | g |
| 8·9 | | 34 | 54·0 | 10·3 | g |
| 9·2 | | 37 | 22·5 | 56·7 | g |
| 9·1 | | 39 | 34·0 | 7·1 | 9·0 g |
| 9·3 | | 40 | 17·0 | 21·1 | 9·5 g |
| 9·6 | | 41 | 14·0 | 35·8 | |
| 9·6 | | | 30·0 | 46·1 | |
| 9·4 | | | 37·0 | 14·1 | g |
| 8·9 | | 43 | 23·0 | 4·8 | 9·0 g |
| 8·4 | | | 32·0 | 16·8 | g |
| 8·5 | | 44 | 23·0 | 22·7 | 9·0 Gg |
| 9·4 | | | 32·0 | 28·0 | g |
| 7·6 | | | 50·0 | 24·6 | 7·5 GSg |
| 7·8 | | 45 | 3·0 | 24·4 | 7·5 GSg |
| 9·4 | | | 50·0 | 13·4 | |
| 7·5 | | 47 | 44·0 | 16·0 | 7·5 GScg |
| 9·4 | | 48 | 46·0 | 28·7 | |
| 8·1 | | | 50·0 | 44·1 | 7·5 GSg |
| 9·6 | | | 52·0 | 9·9 | g |
| 9·3 | | 49 | 3·0 | 15·2 | 9·0 Gg |
| 9·7 | | | 11·0 | 7·8 | g |
| 9·6 | | | 12·0 | 48·0 | |
| 9·6 | | | 42·0 | 31·0 | |
| 9·1 | | 50 | 21·0 | 19·0 | 8·5 Gg |
| 8·7 | | 53 | 4·4 | 1·0 | g |
| 8·8 | | | 31·0 | 32·2 | 9·5 g |
| 9·2 | | 55 | 1·0 | 4·5 | g |
| 9·4 | | 56 | 17·0 | 5·8 | |
| 9·9 | | | 21·0 | 50·5 | |
| 9·8 | | 57 | 7·0 | 55·9 | |
| 9·8 | 4 | 1 | 45·0 | 38·3 | |
| 9·6 | | 2 | 21·0 | 34·3 | 9·5 g |
| 8·3 | | | 51·5 | 36·8 | 8·5 g |
| 9·8 | | 5 | 27·0 | 53·0 | |
| 7·8 | | 6 | 23·5 | 12·2 | 7·0 GSg |
| 9·1 | | | 49·0 | 34·5 | g |
| 9·7 | | 7 | 9·5 | 0·0 | |
| 9·6 | | | 52·0 | 7·5 | g |
| 9·4 | | 8 | 27·5 | 33·0 | |
| 9·7 | | 9 | 7·0 | 45·5 | |
| 9·7 | | 11 | 19·0 | 2·5 | |
| 9·7 | | | 56·0 | 52·6 | |
| 9·2 | | 12 | 42·5 | 42·1 | g |
| 9·5 | | 13 | 21·5 | 57·0 | g |
| 9·6 | | | 53·0 | 53·0 | |
| 7·7 | | | 54·0 | 44·0 | 7·0 GSg |
| 9·4 | | 14 | 21·0 | 49·0 | 9·0 g |
| 9·2 | | | 42·0 | 54·0 | 10·0 g |
| 8·2 | | 17 | 13·0 | 1·9 | GSg |
| 9·7 | | | 25·3 | 1·5 | |
| 9·6 | | | 50·0 | 11·7 | g |
| 9·6 | | 19 | 10·0 | 19·9 | |
| 8·8 | | 21 | 6·0 | 44·5 | g |
| 9·7 | | 22 | 0·0 | 2·0 | |
| 9·0 | | | 13·0 | 9·7 | 9·0 g |
| 9·2 | | 23 | 2·0 | 57·0 | g |
| 9·7 | | 25 | 3·0 | 40·9 | |
| 9·7 | | | 22·0 | 42·6 | |
| 8·2 | | 26 | 22·0 | 16·2 | 8·0 GSg |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 2 | 0 | + 31 − 0·04 d | + 7·2 |
| | 10 | 27 − 0·05 | 7·0 |
| | 20 | 24 − 0·05 | 6·8 |
| | 30 | 21 − 0·05 | 6·6 |
| | 40 | 18 − 0·06 | 6·4 |
| | 50 | 15 − 0·06 | 6·2 |
| 3 | 0 | 12 − 0·06 | 5·9 |
| | 10 | 9 − 0·06 | 5·6 |
| | 20 | 7 − 0·07 | 5·4 |
| | 30 | 4 − 0·07 | 5·1 |
| | 40 | + 2 − 0·07 | 4·8 |
| | 50 | − 1 − 0·07 | 4·5 |
| 4 | 0 | 3 − 0·08 | 4·2 |
| | 10 | 5 − 0·08 | 3·9 |
| | 20 | 6 − 0·08 | 3·5 |
| | 30 | 8 − 0·08 | 3·2 |

d = minutes of decl.



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25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 4 | 20 | − 6 − 0·08 d | + 3·5 |
| | 30 | 8 − 0·08 | 3·2 |
| | 40 | 9 − 0·08 | 2·9 |
| | 50 | 11 − 0·08 | 2·5 |
| 5 | 0 | 12 − 0·08 | 2·2 |
| | 10 | 13 − 0·08 | 1·8 |
| | 20 | 14 − 0·09 | 1·5 |
| | 30 | 14 − 0·09 | 1·1 |
| | 40 | 15 − 0·09 | 0·7 |
| | 50 | 15 − 0·09 | + 0·4 |
| 6 | 0 | 15 − 0·09 | 0·0 |
| | 10 | − 15 − 0·09 | − 0·4 |

d = minutes of decl.

**301—360.** ($4^h$—$5^h$, −70°)

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·6 | 4 | 26 | 40·0 | 18·7 | |
| 9·6 | | | 43·0 | 10·0 | |
| 9·2 | | 27 | 32·0 | 39·3 | 9·0 g |
| 9·0 | | 28 | 4·0 | 1·8 | 9·0 Gg |
| 9·5 | | 29 | 31·0 | 27·5 | |
| 9·6 | | 30 | 18·0 | 9·9 | |
| 9·0 | | | 55·0 | 39·4 | g |
| 9·6 | | 31 | 4·0 | 31·8 | |
| 9·6 | | | 44·0 | 0·1 | g |
| 9·6 | | 34 | 3·0 | 6·8 | |
| 9·7 | | 36 | 6·0 | 16·9 | |
| 8·7 | | 38 | 11·0 | 18·9 | g |
| 9·2 | | 42 | 44·0 | 14·5 | g |
| 9·6 | | 45 | 24·0 | 35·8 | |
| 9·7 | | 46 | 12·0 | 53·7 | |
| 8·8 | | | 59·0 | 22·7 | |
| 9·6 | | 48 | 40·0 | 21·5 | |
| 8·6 | | 49 | 56·0 | 28·1 | 8·5 Gg |
| 9·7 | | 50 | 53·0 | 38·7 | |
| neb. | | 51 | 33·0 | 11·6 | |
| 8·9 | | | 36·8 | 2·3 | 8·0 GSg |
| 9·6 | | | 54·6 | 0·2 | |
| 9·6 | | 52 | 37·0 | 26·9 | |
| 9·1 | | 53 | 8·5 | 16·1 | Gg |
| 9·7 | | | 23·0 | 56·1 | |
| 9·4 | | | 41·5 | 36·0 | |
| 9·3 | | 55 | 16·5 | 34·7 | g |
| 9·2 | | | 26·0 | 13·9 | |
| 9·4 | | 56 | 31·0 | 9·3 | |
| 9·3 | | | 34·0 | 26·2 | |
| 9·2 | | | 34·5 | 29·1 | |
| 9·6 | | 57 | 14·0 | 32·1 | |
| 9·6 | | | 18·0 | 48·2 | |
| 9·7 | | | 31·0 | 26·9 | |
| 9·7 | | | 33·0 | 54·1 | |
| 9·4 | | | 43·6 | 1·9 | |
| 9·1 | | | 55·7 | 58·3 | 8·8 Gg |
| 9·7 | | 58 | 47·0 | 3·7 | |
| 9·0 | | 59 | 12·0 | 20·0 | 9·0 g |
| 9·6 | | | 31·0 | 43·0 | |
| 9·7 | 5 | 0 | 13·0 | 0·0 | |
| 9·6 | | | 25·0 | 3·3 | |
| 9·6 | | | 30·0 | 22·4 | |
| 9·6 | | | 39·0 | 2·8 | |
| 9·5 | | | 41·0 | 54·0 | |
| 9·5 | | | 47·0 | 17·3 | |
| 9·6 | | | 53·0 | 32·9 | |
| 9·6 | | 1 | 23·0 | 37·8 | g |
| 9·2 | | | 53·0 | 52·6 | 9·5 g |
| 8·3 | | | 57·0 | 48·0 | 8·5 GSg |
| 9·7 | | | 59·0 | 42·0 | |
| 9·6 | | 2 | 45·0 | 50·9 | |
| 9·2 | | | 48·0 | 13·5 | g |
| 9·7 | | 3 | 3·0 | 46·1 | |
| 9·6 | | 4 | 9·0 | 52·0 | |
| 9·6 | | | 28·0 | 36·0 | |
| 9·6 | | | 50·0 | 52·0 | |
| 9·6 | | | 55·0 | 21·9 | |
| 9·4 | | 5 | 29·0 | 50·8 | 9·5 g |
| 9·4 | | | 55·0 | 46·0 | g |

500

**361—420.** ($5^h$, −70°)

| mag. | h | m | s | ′ | | |
|---|---|---|---|---|---|---|
| 9·5 | 5 | 6 | 19·0 | 29·1 | | |
| 9·6 | | | 51·0 | 2·9 | | |
| 9·7 | | 7 | 6·0 | 41·7 | | |
| 9·3 | | | 23·0 | 50·6 | 9·5 Gg | |
| 9·7 | | | 29·0 | 11·9 | | |
| 9·4 | | | 31·0 | 45·6 | 10·0 Gg | |
| 9·6 | | | 33·0 | 38·9 | | |
| 9·5 | | | 53·0 | 15·3 | g | |
| 9·5 | | 9 | 11·0 | 52·4 | | |
| 9·6 | | 10 | 18·0 | 16·3 | | |
| 9·5 | | 11 | 7·0 | 41·9 | g | |
| 9·6 | | | 25·0 | 36·0 | g | |
| 9·4 | | 12 | 40·0 | 34·6 | | |
| 9·2 | | | 55·0 | 31·9 | g | |
| 9·4 | | 15 | 33·0 | 5·3 | g | |
| 9·7 | | | 36·0 | 5·4 | | |
| 8·7 | | | 55·0 | 43·1 | 9·5 g | |
| 9·4 | | 16 | 9·0 | 25·0 | | |
| 9·2 | | | 51·0 | 10·6 | g | |
| 9·4 | | | 55·0 | 37·9 | | |
| 8·5 | | 17 | 22·0 | 35·1 | 9·0 g | |
| 9·2 | | 18 | 31·0 | 23·2 | g | |
| 9·7 | | 20 | 44·0 | 4·2 | | |
| 8·8 | | 21 | 39·0 | 51·4 | 10·0 g | |
| 9·7 | | 22 | 59·0 | 6·0 | | |
| 9·0 | | 23 | 5·0 | 41·1 | g | |
| 9·6 | | | 47·0 | 21·9 | | |
| 9·6 | | 24 | 51·0 | 13·6 | | |
| 9·4 | | 25 | 23·0 | 7·5 | 9·5 g | |
| 9·6 | | 26 | 14·0 | 22·3 | | |
| 9·6 | | | 43·0 | 17·7 | | |
| 9·7 | | 27 | 45·0 | 49·4 | | |
| 8·8 | | | 53·0 | 9·9 | 8·5 Gg | |
| 9·1 | | 28 | 11·0 | 50·1 | g | |
| 9·6 | | | 27·0 | 51·1 | | |
| 9·1 | | 29 | 5·0 | 37·1 | g | |
| 9·7 | | | 26·0 | 1·5 | | |
| 8·7 | | 30 | 2·0 | 59·9 | 8·8 Gg | |
| 8·3 | | | 42·0 | 55·1 | 8·2 Gg | |
| 9·6 | | 31 | 0·0 | 21·0 | g | |
| 8·8 | | | 13·0 | 4·0 | Gg | |
| 9·5 | | | 47·0 | 16·9 | g | |
| 9·1 | | | 49·0 | 55·0 | 9·2 Gg | |
| 9·7 | | 32 | 9·0 | 4·0 | | |
| 9·7 | | | 28·0 | 29·1 | | |
| 9·4 | | 33 | 33·0 | 37·0 | | |
| 9·0 | | 34 | 13·0 | 46·1 | | |
| 9·7 | | 35 | 9·5 | 33·6 | | × |
| 9·6 | | | 12·0 | 30·9 | | × |
| 9·8 | | | 56·0 | 5·0 | | |
| 9·2 | | | 56·5 | 34·1 | g | |
| 9·1 | | 36 | 5·0 | 14·9 | 9·0 g | |
| 9·5 | | | 56·0 | 34·6 | g | |
| 10·2 | | 37 | 28·0 | 5·1 | | |
| 9·9 | | | 29·0 | 39·6 | | |
| 10·1 | | | 36·0 | 4·1 | | |
| 9·7 | | | 48·5 | 22·0 | | |
| 9·6 | | | 50·5 | 48·0 | | |
| neb.* | | 38 | 13·0 | 13·9 | | |
| 9·8 | | | 57·5 | 45·1 | 10·0 g | |

**421—480.** ($5^h$—$6^h$, −70°)

| mag. | h | m | s | ′ | | |
|---|---|---|---|---|---|---|
| 8·6 | 5 | 39 | 0·5 | 29·1 | 8·8 Gg | |
| 8·6 | | | 9·3 | 1·9 | 9·0 Gg | |
| 10·1 | | | 22·0 | 4·1 | | |
| 9·7 | | | 32·5 | 31·9 | | |
| 9·7 | | 40 | 0·5 | 48·3 | | |
| 9·6 | | | 23·5 | 39·0 | | |
| 10·1 | | | 39·5 | 58·0 | | |
| 10·1 | | | 42·0 | 0·9 | | |
| 10·2 | | | 48·0 | 8·3 | | ? |
| 10·1 | | 41 | 36·0 | 26·7 | | |
| 10·1 | | 42 | 27·0 | 4·6 | | |
| 9·4 | | | 35·0 | 24·6 | 10·0 | |
| 9·8 | | | 45·0 | 5·3 | g | |
| 9·9 | | | 52·0 | 54·1 | | |
| 10·1 | | | 52·0 | 4·0 | | |
| 10·0 | | 43 | 8·0 | 42·8 | | |
| 10·2 | | | 47·0 | 16·7 | | |
| 10·2 | | | 56·0 | 27·6 | | |
| 9·3 | | | 56·0 | 26·0 | 9·0 g | |
| 10·1 | | 44 | 5·0 | 3·2 | | |
| 10·1 | | | 21·5 | 57·3 | | |
| 9·6 | | | 44·0 | 30·2 | 9·5 g | |
| 9·2 | | | 53·0 | 7·0 | g | |
| 10·1 | | 45 | 4·3 | 1·0 | | |
| 10·2 | | | 32·0 | 29·9 | | |
| 9·5 | | | 33·0 | 28·1 | g | |
| 8·6 | | | 57·0 | 13·7 | 8·5 Gg | |
| 10·2 | | 48 | 8·0 | 13·5 | | |
| 9·9 | | 49 | 5·0 | 33·0 | | |
| 10·0 | | | 27·0 | 10·0 | | |
| 8·1 | | | 43·0 | 22·7 | 8·0 Gg | |
| 9·2 | | | 47·5 | 59·9 | 9·5 g | |
| 10·0 | | 50 | 4·0 | 14·9 | | |
| 10·2 | | | 7·0 | 6·0 | | |
| 10·2 | | | 20·0 | 4·5 | | |
| 10·1 | | 51 | 3·0 | 3·1 | | ? |
| 10·1 | | | 17·0 | 12·8 | | |
| 10·1 | | | 47·0 | 39·0 | | |
| 9·7 | | 52 | 1·0 | 37·5 | | |
| 9·5 | | | 25·0 | 49·0 | | |
| 10·1 | | | 44·0 | 18·6 | | |
| 8·1 | | | 53·0 | 30·2 | 9·0 g | |
| 9·9 | | | 54·0 | 41·5 | | |
| 9·7 | | 53 | 3·0 | 54·4 | | |
| 9·7 | | | 56·0 | 56·3 | | |
| 9·9 | | 54 | 23·2 | 59·6 | | |
| 9·0 | | | 38·0 | 51·0 | 9·2 g | |
| 10·0 | | 55 | 2·0 | 59·3 | | |
| 9·9 | | | 27·0 | 39·1 | | |
| 9·6 | | | 31·0 | 39·8 | | |
| 10·0 | | | 44·0 | 36·1 | | |
| 8·2 | | 56 | 21·0 | 31·7 | g | |
| 9·8 | | | 48·0 | 57·8 | g | |
| 10·2 | | 57 | 1·0 | 15·1 | | |
| 9·0 | | | 56·0 | 18·0 | 9·0 g | |
| 10·0 | | 58 | 14·0 | 17·8 | | |
| 9·5 | | 59 | 20·0 | 13·1 | 9·0 g | |
| 9·6 | 6 | 2 | 17·0 | 16·0 | | |
| 10·1 | | | 21·0 | 18·1 | | |
| 8·2 | | | 34·0 | 0·8 | 8·5 Gg | |

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## 481—540.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| | 6h. | | | | |
| 8·8 | 6 | 3 | 3·0 | 6·4 | g |
| 10·1 | | | 15·0 | 57·7 | |
| 9·5 | | | 36·0 | 40·0 | g |
| 10·2 | | 4 | 26·0 | 37·6 | |
| 10·0 | | 6 | 15·0 | 5·3 | |
| 8·8 | | | 54·0 | 26·7 | S |
| 9·5 | | | 57·0 | 5·2 | |
| 9·9 | | 7 | 45·0 | 37·8 | |
| 9·4 | | 8 | 19·0 | 30·6 | |
| 9·8 | | 10 | 1·5 | 57·7 | |
| 8·6 | | | 56·0 | 16·1 | 9·0 g |
| 9·0 | | 11 | 50·0 | 20·0 | 8·5 Gg |
| 9·9 | | 12 | 2·0 | 38·2 | |
| 10·2 | | | 14·0 | 7·4 | |
| 9·4 | | | 41·0 | 28·6 | |
| 9·9 | | 15 | 8·0 | 9·4 | |
| 9·6 | | | 12·0 | 31·0 | |
| 9·7 | | | 32·0 | 9·1 | |
| 9·9 | | | 51·0 | 13·4 | |
| 9·1 | | 16 | 1·0 | 7·0 | g |
| 9·0 | | | 17·0 | 32·8 | 9·0 g |
| 9·3 | | | 27·0 | 24·8 | 9·0 g |
| 9·9 | | 18 | 2·0 | 52·9 | 10·0 |
| 9·6 | | | 24·5 | 48·0 | 9·0 g |
| 9·8 | | | 30·0 | 44·0 | |
| 9·6 | | 19 | 10·0 | 44·7 | 9·5 g |
| 10·1 | | | 40·0 | 39·0 | |
| 10·0 | | | 41·0 | 4·4 | |
| 9·6 | | 22 | 6·0 | 29·1 | g |
| 10·0 | | 23 | 8·0 | 22·6 | |
| 9·4 | | | 30·5 | 23·1 | |
| 10·0 | | | 33·4 | 0·3 | |
| 10·1 | | 24 | 34·0 | 36·6 | |
| 7·9 | | | 43·5 | 52·5 | 8·2 GSg |
| 8·0 | | 25 | 20·0 | 6·9 | 8·0 GSg |
| 9·2 | | 26 | 40·0 | 55·3 | 9·0 Sg |
| 9·8 | | | 50·3 | 1·8 | |
| 9·7 | | 27 | 8·0 | 53·0 | |
| 9·8 | | | 30·0 | 17·0 | |
| 10·0 | | | 56·0 | 3·6 | |
| 10·1 | | 28 | 32·0 | 51·0 | |
| 9·6 | | 29 | 30·0 | 47·6 | |
| 9·9 | | | 31·0 | 49·8 | |
| 9·7 | | | 36·0 | 10·2 | g |
| 10·0 | | | 42·0 | 11·0 | |
| 9·9 | | 30 | 43·0 | 3·0 | |
| 10·1 | | 31 | 22·0 | 21·9 | |
| 9·2 | | | 25·0 | 23·1 | g |
| 9·6 | | | 25·0 | 31·8 | |
| 9·6 | | 32 | 13·0 | 47·0 | |
| 10·1 | | | 22·0 | 33·0 | |
| 9·8 | | | 29·0 | 38·5 | |
| 7·8 | | | 36·0 | 25·1 | GSg |
| 9·2 | | 34 | 5·0 | 12·6 | g |
| 9·9 | | | 22·0 | 37·2 | |
| 10·1 | | | 53·0 | 56·5 | |
| 8·9 | | 35 | 34·0 | 53·7 | g |
| 9·9 | | | 50·0 | 17·3 | |
| 9·6 | | 36 | 26·0 | 51·8 | |
| 9·0 | | | 37·0 | 34·7 | g |

## 541—600.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| | 6h.—7h. | | | | |
| 10·1 | 6 | 37 | 50·0 | 9·6 | |
| 7·8 | | 38 | 41·0 | 48·2 | 8·2 Gg |
| 7·7 | | 39 | 2·0 | 29·2 | 7·5 GSg |
| 8·6 | | | 26·0 | 49·6 | 8·8 g |
| 10·0 | | | 36·0 | 55·0 | |
| 10·0 | | 40 | 9·0 | 10·5 | |
| 10·0 | | | 11·0 | 35·7 | |
| 9·2 | | | 32·0 | 37·4 | 9·0 g |
| 9·4 | | 41 | 40·0 | 11·3 | g |
| 10·1 | | 42 | 12·0 | 39·5 | |
| 10·0 | | | 16·0 | 39·0 | |
| 7·2 | | | 26·0 | 31·6 | 7·5 GSg |
| 10·0 | | 43 | 40·5 | 28·0 | |
| 9·8 | | 44 | 5·5 | 31·8 | |
| 9·2 | | | 9·5 | 33·8 | 9·0 Gg |
| 8·4 | | | 33·5 | 13·3 | g |
| 10·1 | | 45 | 2·5 | 3·0 | |
| 10·0 | | | 58·0 | 1·6 | |
| 9·7 | | 46 | 8·5 | 50·0 | g |
| 7·7 | | | 10·5 | 17·8 | 6·5 GSg |
| 9·9 | | | 17·5 | 19·6 | |
| 8·8 | | | 53·5 | 40·0 | g |
| 9·9 | | 47 | 4·5 | 26·5 | |
| 8·3 | | | 6·5 | 23·0 | 8·0 Gg |
| 7·8 | | | 41·5 | 53·5 | g |
| 9·2 | | 48 | 18·5 | 19·5 | 8·5 g |
| 10·0 | | 51 | 20·5 | 31·0 | |
| 9·0 | | | 38·5 | 47·5 | g |
| 9·9 | | | 53·5 | 6·6 | |
| 10·1 | | 52 | 6·5 | 1·8 | |
| 10·0 | | | 17·5 | 40·9 | |
| 5·0 | | | 49·5 | 48·4 | 6·0 GScg |
| 10·0 | | 53 | 8·5 | 0·4 | |
| 8·2 | | | 50·5 | 21·0 | GSg |
| 10·1 | | 54 | 2·5 | 16·0 | |
| 10·0 | | | 3·5 | 44·1 | |
| 10·1 | | | 3·5 | 17·7 | |
| 9·0 | | | 49·5 | 6·4 | |
| 10·0 | | 55 | 28·5 | 2·6 | |
| 10·1 | | | 51·5 | 4·0 | |
| 6·8 | | 56 | 27·5 | 19·4 | 7·5 GSg |
| 10·0 | | | 27·5 | 1·2 | |
| 10·0 | | | 59·5 | 16·3 | g |
| 10·1 | | 57 | 2·5 | 38·6 | |
| 10·0 | | | 25·5 | 51·0 | |
| 10·0 | | 58 | 37·5 | 24·0 | |
| 9·2 | | | 44·5 | 35·8 | |
| 9·2 | | 59 | 13·5 | 39·5 | |
| 10·1 | | | 35·5 | 28·0 | |
| 8·5 | 7 | 2 | 55·5 | 22·8 | 8·0 Gg |
| 8·6 | | 3 | 43·3 | 51·2 | g |
| 10·3 | | 4 | 10·0 | 21·9 | |
| 7·9 | | | 19·0 | 21·0 | 8·0 GSg |
| 9·8 | | | 51·0 | 27·0 | |
| 10·4 | | 5 | 14·5 | 28·0 | |
| 10·2 | | 6 | 19·0 | 8·0 | |
| 10·2 | | | 51·5 | 44·0 | |
| 9·8 | | 7 | 31·5 | 51·0 | |
| 9·8 | | | 50·2 | 29·0 | |
| 5·2 | | 9 | 46·5 | 17·8 | 3·8 GSgctr |

## 601—660.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| | 7h. | | | | |
| 9·6 | 7 | 10 | 39·5 | 52·0 | |
| 9·8 | | | 49·5 | 21·1 | |
| 9·1 | | | 54·5 | 27·9 | |
| 9·9 | | 11 | 18·0 | 41·9 | |
| 9·2 | | | 25·5 | 8·2 | 9·0 g |
| 9·7 | | | 29·0 | 55·0 | |
| 9·6 | | | 48·5 | 22·1 | g |
| 9·9 | | | 49·5 | 38·9 | |
| 10·4 | | 12 | 18·5 | 11·0 | |
| 9·2 | | | 30·5 | 33·6 | |
| 10·0 | | | 53·5 | 37·9 | |
| 9·8 | | 13 | 24·5 | 13·1 | |
| 8·7 | | 14 | 32·5 | 18·8 | g |
| 10·4 | | 15 | 41·0 | 49·2 | |
| 10·4 | | 16 | 38·0 | 58·7 | |
| 10·2 | | | 39·5 | 22·0 | |
| 10·2 | | | 57·5 | 34·0 | |
| 9·8 | | 17 | 12·5 | 49·7 | |
| 10·4 | | | 21·5 | 32·6 | |
| 10·3 | | 18 | 12·0 | 27·0 | |
| 9·7 | | | 15·0 | 10·0 | |
| 10·3 | | | 15·0 | 22·9 | |
| 10·2 | | | 35·0 | 15·8 | |
| 10·4 | | | 38·5 | 52·5 | |
| 10·2 | | | 45·2 | 58·5 | |
| 9·9 | | 20 | 3·2 | 57·9 | |
| 10·2 | | 21 | 3·5 | 16·6 | |
| 9·5 | | | 32·5 | 4·4 | g |
| 10·3 | | | 41·0 | 54·0 | |
| 10·4 | | | 58·5 | 4·1 | |
| 10·4 | | 22 | 13·0 | 27·9 | |
| 9·2 | | | 24·5 | 3·9 | g |
| 10·2 | | | 26·2 | 1·3 | |
| 9·2 | | | 27·5 | 44·8 | 8·0 Gg |
| 9·2 | | | 29·0 | 1·2 | g |
| 9·6 | | | 46·0 | 48·9 | |
| 10·3 | | | 50·5 | 50·8 | |
| 7·9 | | 24 | 4·5 | 23·3 | 7·0 GSg |
| 10·4 | | | 15·5 | 15·8 | |
| 9·4 | | | 19·0 | 37·9 | |
| 10·4 | | | 27·5 | 20·0 | |
| 8·6 | | | 29·0 | 18·9 | 9·5 g |
| 10·0 | | | 40·0 | 16·0 | |
| 7·8 | | | 52·0 | 31·3 | 8·5 g |
| 9·6 | | | 56·5 | 43·9 | |
| 9·6 | | 25 | 10·0 | 34·0 | 9·5 |
| 10·4 | | | 50·5 | 47·9 | |
| 8·6 | | | 59·0 | 9·0 | 8·0 GSgg |
| 9·9 | | 27 | 9·5 | 34·2 | |
| 9·8 | | | 26·0 | 44·3 | |
| 10·4 | | 28 | 19·5 | 47·1 | |
| 8·4 | | | 46·5 | 29·6 | 8·2 g |
| 10·4 | | 29 | 36·0 | 7·1 | |
| 10·2 | | | 50·0 | 14·0 | |
| 8·9 | | 30 | 23·0 | 31·6 | |
| 9·4 | | | 29·0 | 4·5 | g |
| 10·3 | | | 41·5 | 3·9 | |
| 9·4 | | 31 | 42·0 | 35·0 | |
| 10·4 | | 33 | 14·5 | 33·0 | |
| 10·0 | | | 15·0 | 10·6 | |

25 prec.

| h | m | a s | s | δ ′ |
|---|---|---|---|---|
| 6 | 0 | − 15 | − 0·09 d | 0·0 |
| | 10 | 15 | − 0·09 | − 0·4 |
| | 20 | 15 | − 0·09 | 0·7 |
| | 30 | 14 | − 0·09 | 1·1 |
| | 40 | 14 | − 0·09 | 1·5 |
| | 50 | 13 | − 0·08 | 1·8 |
| 7 | 0 | 12 | − 0·08 | 2·2 |
| | 10 | 11 | − 0·08 | 2·5 |
| | 20 | 9 | − 0·08 | 2·9 |
| | 30 | 8 | − 0·08 | 3·2 |
| | 40 | − 6 | − 0·08 | − 3·5 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 7 | 30 | − 8 − 0·08 d | − 3·2 |
| | 40 | 6 − 0·08 | 3·5 |
| | 50 | 5 − 0·08 | 3·9 |
| 8 | 0 | 3 − 0·08 | 4·2 |
| | 10 | − 1 − 0·07 | 4·5 |
| | 20 | + 2 − 0·07 | 4·8 |
| | 30 | 4 − 0·07 | 5·1 |
| | 40 | 7 − 0·07 | 5·4 |
| | 50 | 9 − 0·06 | 5·6 |
| 9 | 0 | + 12 − 0·06 | − 5·9 |

d = minutes of decl.

**661—720.**

| mag. | h ($7^h$–$8^h$) | m | s | − 70° ′ | |
|---|---|---|---|---|---|
| 10·3 | 7 | 33 | 38·5 | 58·7 | |
| 9·6 | | 34 | 17·5 | 59·0 | 9·5 |
| 9·8 | | | 49·5 | 53·0 | |
| 8·0 | | 35 | 17·0 | 6·2 | 8·0 *g* |
| 9·6 | | | 51·5 | 27·8 | |
| 7·6 | | 36 | 24·5 | 14·4 | 7·5 GS*g* |
| 10·3 | | 37 | 0·0 | 50·7 | |
| 10·2 | | | 14·0 | 17·1 | |
| 8·4 | | 38 | 9·0 | 17·2 | *g* |
| 9·9 | | | 24·0 | 3·6 | *g* |
| 9·2 | | | 47·5 | 35·5 | |
| 9·4 | | 39 | 58·5 | 34·6 | |
| 8·0 | | 40 | 10·5 | 9·1 | 9·0 *g* |
| 9·9 | | | 31·5 | 58·9 | |
| 9·8 | | 41 | 0·5 | 28·0 | |
| 9·5 | | | 21·0 | 59·8 | |
| 10·0 | | | 55·0 | 11·9 | |
| 8·4 | | 42 | 0·5 | 54·7 | 9·2 *g* |
| 10·2 | | | 3·5 | 48·7 | 9·5 *g* |
| 9·1 | | | 17·5 | 29·6 | 9·5 *g* |
| 10·4 | | | 49·0 | 21·5 | |
| 10·4 | | 43 | 35·0 | 32·6 | |
| 9·7 | | 44 | 33·5 | 27·7 | |
| 10·4 | | | 55·0 | 34·4 | |
| 10·4 | | | 57·5 | 31·9 | |
| 9·8 | | 46 | 5·0 | 6·9 | |
| 10·0 | | | 35·0 | 35·9 | |
| 8·6 | | 49 | 9·0 | 37·9 | *g* |
| 9·8 | | | 54·3 | 42·2 | |
| 10·0 | | 50 | 36·0 | 13·9 | |
| 10·0 | | | 49·0 | 41·6 | |
| 9·8 | | 51 | 9·0 | 12·8 | |
| 8·8 | | | 9·5 | 10·5 | *g* |
| 8·3 | | | 23·2 | 27·2 | 8·5 GS*g* |
| 9·1 | | 52 | 15·0 | 46·0 | *g* |
| 10·0 | | 54 | 21·0 | 47·0 | |
| 9·4 | | 55 | 25·0 | 58·1 | 9·0 *g* |
| 10·0 | | | 35·0 | 55·6 | |
| 10·0 | | | 50·0 | 15·0 | |
| 10·0 | | 56 | 1·0 | 3·5 | |
| 9·8 | | | 27·0 | 33·0 | |
| 8·4 | | 57 | 16·0 | 22·6 | 8·5 *g* |
| 9·9 | | | 33·0 | 48·8 | |
| 10·0 | | 58 | 35·0 | 12·6 | |
| 9·2 | | 59 | 5·6 | 2·5 | |
| 10·0 | 8 | 0 | 3·0 | 39·5 | |
| 10·0 | | | 31·0 | 37·6 | |
| 9·8 | | | 47·0 | 10·0 | |
| 9·2 | | 1 | 6·0 | 29·4 | |
| 9·5 | | | 51·0 | 1·0 | |
| 10·0 | | | 55·0 | 26·6 | |
| 9·8 | | 2 | 13·0 | 14·0 | |
| 9·8 | | | 46·0 | 43·0 | |
| 9·8 | | | 47·0 | 47·0 | |
| 9·8 | | 3 | 14·0 | 24·0 | *g* |
| 10·0 | | | 36·0 | 39·1 | |
| 9·8 | | | 41·0 | 59·0 | |
| 9·6 | | 4 | 13·0 | 21·4 | |
| 10·0 | | | 14·0 | 38·8 | |
| 9·6 | | | 31·5 | 58·2 | |

**721—780.**

| mag. | h ($8^h$) | m | s | − 70° ′ | |
|---|---|---|---|---|---|
| 9·8 | 8 | 4 | 36·0 | 9·6 | |
| 9·3 | | | 59·0 | 10·0 | |
| 10·0 | | 5 | 47·0 | 51·3 | |
| 9·7 | | | 52·0 | 49·3 | *g* |
| 10·0 | | 6 | 29·0 | 41·0 | |
| 8·8 | | | 31·0 | 10·7 | *g* |
| 9·6 | | 7 | 59·0 | 52·2 | |
| 9·3 | | 8 | 25·0 | 30·4 | |
| 9·4 | | 9 | 47·0 | 0·2 | G |
| 9·8 | | 10 | 13·0 | 58·7 | |
| 10·0 | | | 27·0 | 50·9 | |
| 8·2 | | | 50·5 | 24·4 | 9·0 *g* |
| 10·0 | | | 50·5 | 33·6 | |
| 10·0 | | 11 | 16·5 | 21·9 | |
| 8·4 | | | 17·2 | 57·2 | 9·5 *g* |
| 10·0 | | | 26·0 | 48·0 | |
| 8·4 | | | 40·5 | 8·0 | 9·5 G*g* |
| 8·0 | | 12 | 38·5 | 53·0 | 8·0 G*g* |
| 9·1 | | | 47·5 | 49·8 | |
| 9·3 | | 13 | 39·8 | 3·0 | |
| 9·7 | | | 46·5 | 41·2 | |
| 10·0 | | | 55·5 | 36·2 | |
| 10·0 | | 14 | 26·5 | 14·5 | |
| 10·0 | | | 27·5 | 41·2 | |
| 10·0 | | | 34·5 | 59·7 | |
| 10·0 | | | 44·5 | 45·8 | |
| 9·0 | | 15 | 0·0 | 26·2 | 9·5 *g* |
| 10·0 | | | 23·5 | 32·3 | |
| 9·8 | | 16 | 3·5 | 50·0 | |
| 10·0 | | | 5·5 | 25·0 | |
| 8·4 | | | 16·5 | 0·8 | *g* |
| 9·7 | | | 40·5 | 53·0 | 9·0 |
| 9·7 | | 17 | 44·5 | 1·5 | |
| 9·0 | | 18 | 16·5 | 32·2 | |
| 10·0 | | | 36·5 | 10·0 | |
| 10·0 | | | 56·5 | 21·6 | |
| 10·0 | | 19 | 26·5 | 15·0 | |
| 9·3 | | | 46·5 | 17·2 | |
| 10·0 | | | 50·5 | 46·0 | |
| 9·5 | | 20 | 1·5 | 43·4 | |
| 9·2 | | | 16·5 | 46·8 | |
| 10·0 | | | 40·5 | 10·0 | |
| 10·0 | | 21 | 26·5 | 9·4 | |
| 10·0 | | | 30·5 | 54·8 | |
| 8·8 | | 22 | 4·5 | 2·1 | *g* |
| 9·0 | | | 42·5 | 42·3 | *g* |
| 9·3 | | | 44·5 | 59·4 | |
| 8·4 | | 23 | 6·5 | 37·8 | *g* |
| 9·5 | | | 27·5 | 37·6 | |
| 9·5 | | 24 | 16·5 | 47·1 | |
| 10·0 | | | 20·5 | 49·7 | |
| 10·0 | | 25 | 35·5 | 8·2 | |
| 9·7 | | | 42·5 | 44·1 | |
| 8·4 | | | 42·5 | 38·2 | *g* |
| 9·7 | | | 48·5 | 55·6 | |
| 9·4 | | 27 | 40·5 | 12·8 | |
| 10·0 | | | 41·5 | 0·0 | |
| 10·0 | | 28 | 55·5 | 1·6 | |
| 10·0 | | 29 | 31·5 | 5·6 | |
| 10·0 | | 30 | 3·4 | 39·6 | |

**781—840.**

| mag. | h ($8^h$) | m | s | − 70° ′ | |
|---|---|---|---|---|---|
| 9·0 | 8 | 30 | 6·5 | 40·0 | |
| 9·0 | | | 26·5 | 46·2 | |
| 9·5 | | | 33·5 | 5·0 | |
| 7·8 | | | 36·5 | 25·0 | 8·0 *g* |
| 9·9 | | 31 | 6·5 | 42·0 | |
| 10·0 | | | 10·5 | 37·0 | |
| 9·7 | | 32 | 6·5 | 1·6 | |
| 9·4 | | | 14·5 | 39·6 | |
| 10·0 | | | 34·0 | 0·1 | |
| 10·0 | | 33 | 50·5 | 19·8 | |
| 10·0 | | 34 | 44·5 | 21·0 | |
| 10·0 | | 35 | 0·5 | 17·8 | |
| 9·2 | | | 11·0 | 19·1 | |
| 9·5 | | | 34·5 | 48·7 | 9·5 |
| 9·7 | | | 56·0 | 12·1 | |
| 7·4 | | 36 | 1·5 | 14·4 | 7·0 GS*g* |
| 10·0 | | | 2·0 | 39·6 | |
| 9·8 | | | 3·5 | 9·9 | |
| 9·6 | | | 12·7 | 2·0 | G |
| 9·5 | | | 13·5 | 0·0 | G |
| 9·4 | | 37 | 15·0 | 9·8 | |
| 9·6 | | | 15·0 | 53·6 | |
| 9·8 | | | 25·5 | 6·9 | |
| 9·6 | | | 30·0 | 30·6 | |
| 9·8 | | | 35·0 | 54·7 | |
| 9·7 | | | 36·0 | 23·5 | |
| 10·1 | | 38 | 40·5 | 33·0 | |
| 10·1 | | 39 | 2·5 | 17·8 | |
| 8·5 | | 40 | 3·0 | 52·3 | 8·5 *g* |
| 9·7 | | | 18·0 | 22·5 | |
| 9·9 | | | 24·0 | 1·9 | |
| 10·0 | | | 48·5 | 8·0 | |
| 9·9 | | | 53·0 | 34·3 | |
| 10·1 | | 41 | 5·5 | 38·7 | |
| 10·1 | | | 55·5 | 11·3 | |
| 9·7 | | 42 | 6·5 | 39·3 | |
| 9·6 | | | 26·5 | 11·1 | |
| 9·0 | | 43 | 58·5 | 30·6 | 9·5 *g* |
| 9·6 | | 44 | 2·5 | 29·9 | *g* |
| 9·5 | | | 37·5 | 29·9 | 9·0 *g* |
| 10·1 | | | 42·5 | 26·6 | |
| 9·4 | | | 46·5 | 8·0 | |
| 10·1 | | 45 | 2·5 | 3·6 | |
| 10·0 | | | 19·5 | 19·8 | |
| 9·7 | | | 39·5 | 11·9 | |
| 10·1 | | 47 | 18·5 | 26·8 | |
| 7·9 | | | 41·5 | 51·0 | 8·5 GS*g* |
| 10·1 | | | 41·5 | 25·7 | |
| 10·1 | | 48 | 35·5 | 56·0 | |
| 10·1 | | | 40·5 | 2·4 | |
| 10·0 | | | 44·5 | 5·9 | |
| 9·4 | | 49 | 20·5 | 12·7 | |
| 9·2 | | 50 | 0·5 | 46·2 | |
| 9·4 | | | 35·5 | 38·9 | |
| 9·4 | | | 39·5 | 43·9 | 10·0 |
| 8·7 | | 51 | 5·5 | 48·7 | 9·5 |
| 9·5 | | | 21·5 | 57·4 | |
| 9·8 | | | 55·5 | 20·4 | |
| 9·7 | | 52 | 16·5 | 27·7 | |
| 9·9 | | | 55·5 | 54·7 | |

## 841—900.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 10·0 | 8 | 52 | 58·5 | 8·2 | |
| 9·7 | | 53 | 34·5 | 36·1 | |
| 8·0 | | 56 | 28·5 | 31·9 | GS*g* |
| 10·1 | | | 28·5 | 15·0 | |
| 8·4 | | | 53·5 | 39·0 | 8·0 *g* |
| 10·0 | | 57 | 2·5 | 13·2 | |
| 10·0 | | | 44·5 | 35·8 | |
| 9·2 | | 58 | 20·5 | 17·1 | 9·5 |
| 9·6 | | | 54·5 | 50·4 | |
| 9·0 | | 59 | 3·5 | 24·9 | 8·5 *g* |
| 10·1 | | | 7·5 | 26·0 | |
| 9·1 | | | 35·5 | 20·6 | 9·5 *g* |
| 10·0 | | | 40·5 | 39·5 | ? |
| 10·0 | | | 54·5 | 55·6 | |
| 9·8 | | | 56·5 | 8·9 | |
| 9·7 | 9 | 0 | 45·5 | 15·0 | 9·5 |
| 8·9 | | 1 | 29·5 | 51·8 | 9·5 *g* |
| 7·3 | | 2 | 22·5 | 6·5 | 7·0 GS*g* |
| 9·6 | | 3 | 3·5 | 49·2 | |
| 9·7 | | 4 | 4·5 | 32·2 | |
| 4·7 | | | 36·5 | 2·2 | GS*g*r |
| 9·7 | | 5 | 56·5 | 26·7 | |
| 8·5 | | 6 | 3·5 | 27·7 | *g* |
| 8·4 | | 8 | 17·5 | 36·0 | 9·0 *g* |
| 9·4 | | 9 | 47·5 | 23·7 | |
| 10·0 | | | 58·5 | 53·0 | |
| 10·0 | | | 58·5 | 7·8 | *g* |
| 9·9 | | 10 | 37·5 | 59·4 | |
| 10·1 | | | 57·5 | 22·0 | |
| 9·9 | | 12 | 1·5 | 31·1 | |
| 9·7 | | 13 | 3·5 | 28·0 | |
| 9·4 | | | 14·5 | 12·1 | |
| 9·5 | | | 22·5 | 13·0 | |
| 10·0 | | 14 | 54·5 | 20·0 | |
| 9·0 | | 16 | 5·5 | 9·4 | |
| 9·0 | | 17 | 8·5 | 38·0 | 9·0 *g* |
| 9·9 | | | 47·5 | 42·2 | |
| 7·7 | | 18 | 35·0 | 28·5 | 8·0 *g* |
| 9·0 | | 19 | 22·0 | 33·1 | 9·0 *g* |
| 9·6 | | | 23·5 | 58·3 | |
| 9·1 | | 20 | 18·0 | 48·1 | *g* |
| 9·6 | | | 30·0 | 31·8 | |
| 9·6 | | | 31·0 | 35·2 | |
| 9·5 | | | 36·0 | 39·9 | |
| 8·8 | | | 39·0 | 47·2 | *g* |
| 9·3 | | 21 | 27·0 | 39·0 | |
| 8·9 | | | 54·5 | 16·8 | |
| 9·2 | | | 55·0 | 52·0 | |
| 9·2 | | 22 | 59·0 | 41·3 | |
| 9·0 | | 23 | 15·5 | 33·0 | |
| 9·4 | | | 18·5 | 38·1 | |
| 9·3 | | | 38·5 | 56·0 | |
| 10·1* | | 24 | 2·0 | 54·0 | |
| 9·6 | | | 8·0 | 41·3 | |
| 9·4 | | | 23·0 | 11·1 | |
| 9·6 | | | 39·0 | 7·1 | |
| 9·3 | | | 43·0 | 48·5 | |
| 9·3 | | | 44·0 | 30·7 | |
| 9·2 | | 25 | 45·0 | 28·2 | |
| 9·6 | | | 52·0 | 10·4 | |

## 901—960.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·1 | 9 | 26 | 6·0 | 27·4 | |
| 9·3 | | | 11·0 | 47·3 | 10·0 |
| 9·6 | | | 34·0 | 26·2 | |
| 9·5 | | | 36·0 | 42·4 | |
| 8·9 | | | 43·0 | 11·2 | |
| 9·6 | | 27 | 16·0 | 11·3 | |
| 9·3 | | | 46·0 | 14·8 | |
| 9·2 | | 28 | 7·0 | 30·5 | |
| 9·0 | | | 50·5 | 43·0 | |
| 9·5 | | | 55·0 | 8·9 | |
| 9·2 | | 29 | 11·5 | 57·0 | |
| 9·6 | | | 55·0 | 40·1 | |
| 9·0 | | 30 | 25·0 | 48·2 | *g* |
| 8·8 | | | 46·0 | 51·3 | 9·0 *g* |
| 9·3 | | 31 | 6·0 | 50·2 | |
| 9·2 | | | 41·0 | 5·8 | |
| 9·6 | | | 44·0 | 41·2 | |
| 8·6 | | 32 | 37·0 | 22·3 | *g* |
| 9·6 | | 33 | 40·0 | 11·2 | |
| 9·1 | | | 54·0 | 41·1 | |
| 8·8 | | 34 | 51·0 | 37·9 | 9·0 *g* |
| 9·4 | | 35 | 20·0 | 9·1 | |
| 9·5 | | | 40·0 | 31·4 | |
| 9·5 | | 36 | 14·0 | 43·9 | |
| 9·4 | | | 15·0 | 28·2 | |
| 9·6 | | | 49·0 | 0·2 | |
| 9·3 | | 37 | 2·0 | 52·9 | |
| 9·6 | | | 45·0 | 26·2 | |
| 9·3 | | | 55·0 | 26·1 | |
| 9·4 | | | 58·0 | 27·6 | |
| 8·6 | | 39 | 8·0 | 4·8 | *g* |
| 9·6 | | | 19·0 | 31·2 | |
| 9·2 | | 40 | 1·0 | 38·2 | |
| 9·6 | | 41 | 25·0 | 54·8 | |
| 9·4 | | | 47·0 | 23·2 | |
| 9·1 | | | 49·0 | 52·9 | *g* |
| 9·2 | | | 55·0 | 15·2 | |
| 8·4 | | 42 | 48·0 | 9·9 | *g* |
| 9·6 | | 43 | 5·0 | 59·1 | |
| 9·2 | | | 16·0 | 6·8 | |
| 9·2 | | 44 | 57·5 | 2·3 | 9·0 *g* |
| 9·4 | | 45 | 2·0 | 8·5 | *g* |
| 9·4 | | | 28·0 | 36·2 | |
| 9·1 | | 46 | 13·0 | 20·2 | 8·5 *g* |
| 8·3 | | | 39·0 | 11·3 | 9·0 *g* |
| 9·2 | | 47 | 12·0 | 18·1 | |
| 9·5 | | | 29·0 | 34·2 | |
| 9·5 | | | 40·0 | 28·1 | |
| 8·2 | | 50 | 43·0 | 51·9 | 7·5 GS*g* |
| 8·4 | | 52 | 49·0 | 20·8 | 8·8 *g* |
| 9·2 | | | 55·0 | 18·1 | |
| 8·4 | | 53 | 32·0 | 31·2 | 8·2 *g* |
| 6·4 | | | 58·0 | 47·6 | 6·8 GS*g* |
| 9·1 | | 54 | 36·0 | 55·2 | |
| 9·6 | | 55 | 43·0 | 14·8 | |
| 9·1 | | 56 | 33·0 | 32·4 | |
| 7·6 | | 58 | 50·0 | 7·6 | 7·7 GS*g* |
| 9·6 | | 59 | 10·0 | 53·0 | |
| 9·6 | | | 42·0 | 28·2 | |
| 9·1 | 10 | 0 | 29·0 | 33·1 | |

## 961—1020.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·6 | 10 | 1 | 32·0 | 9·9 | |
| 8·9 | | | 52·0 | 20·6 | 9·2 *g* |
| 9·6 | | 2 | 4·0 | 40·3 | 9·0 *g* |
| 9·6 | | 4 | 4·0 | 8·2 | 9·5 *g* |
| 9·6 | | | 30·0 | 40·2 | |
| 7·2 | | | 31·0 | 52·0 | 7·0 GS*g* |
| 9·6 | | 5 | 1·0 | 7·5 | |
| 8·6 | | | 18·0 | 40·2 | 8·2 *g* |
| 9·7 | | | 21·0 | 8·2 | |
| 9·4 | | | 35·0 | 8·0 | |
| 9·8 | | 6 | 11·0 | 33·0 | |
| 9·9 | | | 47·0 | 42·2 | |
| 9·8 | | | 57·0 | 6·6 | |
| 9·8 | | 7 | 7·0 | 20·9 | |
| 9·8 | | | 7·0 | 12·9 | |
| 9·0 | | | 8·0 | 19·9 | |
| 9·8 | | | 9·0 | 19·2 | *g* |
| 9·7 | | | 11·0 | 13·2 | |
| 9·8 | | | 30·0 | 41·5 | |
| 9·4 | | | 31·0 | 27·2 | *g* |
| 9·9 | | | 33·0 | 28·7 | |
| 9·5 | | | 47·0 | 50·2 | |
| 9·4 | | | 49·0 | 27·2 | |
| 9·7 | | | 58·0 | 30·8 | |
| 9·8 | | 8 | 1·0 | 44·5 | |
| 9·8 | | | 23·0 | 53·1 | |
| 9·2 | | | 28·5 | 24·4 | |
| 9·4 | | | 28·5 | 3·0 | |
| 9·2 | | | 44·5 | 23·8 | *g* |
| 9·4 | | | 51·0 | 56·6 | |
| 9·7 | | 9 | 3·0 | 58·4 | |
| 9·9 | | | 40·0 | 50·9 | |
| 9·4 | | | 50·0 | 20·1 | |
| 9·9 | | 10 | 7·0 | 34·6 | |
| 9·6 | | | 16·0 | 5·0 | |
| 9·8 | | | 17·0 | 2·1 | |
| 9·9 | | | 19·0 | 34·1 | |
| 9·8 | | | 24·0 | 40·3 | |
| 9·7 | | | 33·0 | 23·2 | *g* |
| 7·9 | | | 36·5 | 26·2 | |
| 9·6 | | | 37·0 | 40·2 | |
| 9·8 | | | 52·0 | 1·0 | |
| 9·4 | | | 53·0 | 44·0 | |
| 8·7 | | | 56·0 | 7·2 | *g* |
| 8·6 | | 11 | 3·0 | 10·6 | *g* |
| 8·6 | | | 5·0 | 57·4 | *g* |
| 9·7 | | | 23·0 | 52·8 | |
| 9·7 | | | 37·0 | 9·2 | |
| 9·8 | | | 47·0 | 30·0 | |
| 9·2 | | | 53·0 | 50·0 | |
| 9·0 | | 12 | 0·0 | 48·1 | |
| 9·8 | | | 43·0 | 37·2 | |
| 9·7 | | | 47·0 | 45·0 | |
| 9·7 | | | 50·0 | 10·5 | |
| 9·8 | | 13 | 0·0 | 57·1 | |
| 9·8 | | | 22·0 | 56·7 | |
| 9·8 | | | 25·0 | 42·1 | |
| 9·7 | | | 34·0 | 2·1 | |
| 9·4 | | | 53·0 | 11·8 | |
| 9·8 | | 14 | 5·0 | 46·0 | |

25 prec.

| h | m | α (s) | δ (′) |
|---|---|---|---|
| 8 | 50 | + 9 − 0·06 d | − 5·6 |
| 9 | 0 | 12 − 0·06 | 5·9 |
| | 10 | 15 − 0·06 | 6·2 |
| | 20 | 18 − 0·06 | 6·4 |
| | 30 | 21 − 0·05 | 6·6 |
| | 40 | 24 − 0·05 | 6·8 |
| | 50 | 27 − 0·05 | 7·0 |
| 10 | 0 | 31 − 0·04 | 7·2 |
| | 10 | 34 − 0·04 | 7·4 |
| | 2 | + 38 − 0·04 | − 7·6 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 10 | 10 | + 34 − 0·04 d | −7·4 |
| | 20 | 38 − 0·04 | 7·6 |
| | 30 | 42 − 0·03 | 7·7 |
| | 40 | 45 − 0·03 | 7·9 |
| | 50 | + 49 − 0·03 | − 8·0 |

d = minutes of decl.

## 1021—1080.

| mag. | h (10h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9·8 | 10 | 14 | 10·0 | 45·2 | |
| 8·5 | | | 18·0 | 35·0 | 9·0 *g* |
| 9·2 | | | 21·0 | 31·8 | 9·0 *g* |
| 8·6 | | | 21·0 | 43·2 | 9·0 *g* |
| 9·9 | | | 31·0 | 3·3 | |
| 9·8 | | | 43·0 | 50·1 | |
| 9·4 | | | 54·0 | 12·0 | |
| 9·1 | | | 56·0 | 41·2 | *g* |
| 9·5 | | 15 | 1·5 | 59·9 | |
| 9·6 | | | 5·0 | 37·2 | |
| 9·8 | | | 18·0 | 35·5 | |
| 9·9 | | | 30·0 | 10·4 | |
| 9·8 | | | 46·0 | 2·2 | |
| 9·3 | | | 56·0 | 9·2 | 9·5 |
| 9·7 | | | 58·0 | 20·1 | |
| 8·8 | | 16 | 24·0 | 26·0 | *g* |
| 9·0 | | | 31·0 | 15·6 | |
| 8·9 | | | 54·0 | 55·8 | 9·0 |
| 9·6 | | 17 | 10·0 | 10·8 | |
| 9·6 | | | 11·0 | 57·4 | |
| 9·8 | | | 21·0 | 25·1 | |
| 9·7 | | | 33·0 | 1·5 | |
| 8·4 | | | 39·0 | 31·4 | 8·5 G*g* |
| 8·2 | | | 41·0 | 31·1 | 8·0 GS*g* |
| 9·8 | | | 51·0 | 6·1 | |
| 9·6 | | | 58·0 | 48·2 | |
| 8·6 | | | 59·0 | 32·0 | 8·5 G*g* |
| 9·9 | | 18 | 1·0 | 17·1 | |
| 9·8 | | | 27·0 | 11·9 | |
| 9·4 | | 19 | 7·0 | 29·1 | |
| 9·7 | | | 20·0 | 7·3 | |
| 9·9 | | | 21·0 | 28·4 | |
| 9·8 | | | 30·0 | 7·6 | |
| 9·8 | | | 31·0 | 6·2 | |
| 9·8 | | | 32·0 | 12·1 | |
| 9·9 | | | 36·0 | 49·9 | |
| 9·8 | | | 42·0 | 22·0 | |
| 9·6 | | | 43·0 | 14·4 | |
| 9·8 | | | 57·0 | 15·4 | |
| 9·8 | | 20 | 14·0 | 6·0 | |
| 9·2 | | | 21·0 | 30·1 | 9·5 *g* |
| 9·8 | | | 22·0 | 34·6 | |
| 9·8 | | | 24·0 | 57·9 | |
| 8·9 | | | 29·0 | 5·8 | 8·0 *g* |
| 9·5 | | | 38·5 | 58·9 | |
| 9·8 | | | 42·0 | 25·4 | |
| 9·5 | | | 43·0 | 4·9 | |
| 9·6 | | 21 | 0·5 | 57·6 | |
| 9·7 | | | 2·0 | 28·2 | |
| 9·6 | | | 9·0 | 43·9 | |
| 9·8 | | | 12·0 | 43·3 | |
| 9·5 | | | 22·0 | 40·1 | |
| 9·2 | | | 23·0 | 55·0 | 9·5 |
| 9·2 | | | 27·0 | 44·4 | *g* |
| 9·8 | | | 32·0 | 40·1 | |
| 8·4 | | | 33·5 | 58·7 | 7·8 G*g* |
| 9·8 | | | 43·0 | 38·2 | |
| 9·9 | | | 43·0 | 36·2 | |
| 9·9 | | | 48·0 | 42·5 | |
| 9·8 | | | 56·0 | 11·9 | |

## 1081—1140.

| mag. | h (10h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9·8 | 10 | 22 | 8·0 | 56·2 | |
| 9·4 | | | 33·0 | 14·6 | |
| 9·5 | | | 36·0 | 43·0 | |
| 9·4 | | | 51·0 | 5·9 | |
| 9·5 | | 23 | 19·0 | 53·2 | |
| 9·8 | | | 35·0 | 5·2 | |
| 9·2 | | | 39·0 | 11·8 | |
| 9·8 | | | 43·0 | 55·2 | |
| 9·8 | | | 49·0 | 54·1 | |
| 9·8 | | 24 | 1·0 | 49·2 | |
| 9·0 | | | 3·0 | 4·5 | 9·0 *g* |
| 9·8 | | | 26·0 | 42·7 | |
| 9·3 | | | 27·0 | 17·0 | |
| 9·8 | | | 35·0 | 4·2 | |
| 9·8 | | | 41·0 | 8·5 | |
| 9·2 | | | 51·0 | 25·2 | |
| 9·2 | | | 52·0 | 5·2 | 9·5 *g* |
| 9·7 | | 25 | 3·0 | 30·4 | |
| 9·7 | | | 3·0 | 56·3 | |
| 9·8 | | | 37·0 | 20·2 | |
| 8·6 | | | 50·0 | 39·8 | *g* |
| 9·4 | | | 55·0 | 10·8 | 9·5 |
| 9·8 | | 26 | 10·0 | 24·4 | |
| 9·7 | | | 16·0 | 13·9 | |
| 9·0 | | | 16·0 | 39·0 | 8·5 *g* |
| 8·6 | | | 31·0 | 37·6 | 9·5 *g* |
| 9·4 | | | 36·0 | 24·8 | |
| 8·4 | | | 49·0 | 14·8 | 7·5 GSc*g* |
| 9·9 | | | 53·0 | 19·1 | |
| 9·7 | | | 55·0 | 20·9 | |
| 8·8 | | | 56·0 | 55·2 | 9·0 *g* |
| 9·8 | | | 59·0 | 56·0 | |
| 9·6 | | 27 | 13·0 | 30·0 | |
| 9·0 | | | 28·0 | 37·5 | 9·0 *g* |
| 9·5 | | | 32·0 | 6·0 | |
| 9·8 | | | 39·3 | 3·0 | |
| 9·3 | | 28 | 0·0 | 34·3 | |
| 8·8 | | | 24·0 | 53·6 | *g* |
| 9·8 | | | 28·0 | 21·5 | |
| 9·8 | | | 34·0 | 39·4 | |
| 9·4 | | | 46·0 | 34·2 | |
| 9·8 | | | 53·0 | 3·8 | |
| 9·7 | | | 57·0 | 47·2 | |
| 9·4 | | | 58·0 | 45·2 | 9·0 *g* |
| 9·8 | | | 59·0 | 13·2 | |
| 9·6 | | 29 | 18·0 | 13·0 | |
| 9·2 | | | 41·0 | 40·1 | |
| 9·4 | | | 50·0 | 55·2 | |
| 9·9 | | 30 | 20·0 | 19·1 | |
| 9·9 | | | 21·0 | 1·6 | |
| 9·7 | | | 21·0 | 51·2 | |
| 9·2 | | | 25·0 | 55·9 | |
| 9·6 | | | 27·0 | 5·8 | |
| 9·4 | | | 33·0 | 43·2 | *g* |
| 9·8 | | | 46·0 | 55·2 | |
| 9·4 | | | 53·0 | 32·1 | *g* |
| 9·8 | | | 53·0 | 33·2 | |
| 9·0 | | | 55·0 | 31·1 | 9·0 |
| 9·9 | | 31 | 7·0 | 30·1 | |
| 9·8 | | | 11·0 | 51·6 | |

## 1141—1200.

| mag. | h (10h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9·5 | 10 | 31 | 32·0 | 33·9 | *g* |
| 8·6 | | 32 | 46·0 | 4·8 | 8·5 *g* |
| 9·8 | | | 57·0 | 51·2 | |
| 9·9 | | 33 | 30·0 | 31·2 | |
| 8·9 | | | 42·0 | 11·2 | 8·0 *g* |
| 9·9 | | | 57·0 | 53·2 | |
| 9·8 | | 34 | 12·0 | 42·6 | |
| 9·9 | | | 17·0 | 19·6 | |
| 9·4 | | | 20·0 | 30·2 | *g* |
| 9·9 | | | 33·0 | 31·2 | |
| 9·5 | | | 35·0 | 1·0 | |
| 9·6 | | 35 | 1·0 | 52·2 | |
| 9·8 | | | 1·0 | 19·9 | |
| 9·5 | | | 19·5 | 0·8 | |
| 9·9 | | | 30·0 | 10·8 | |
| 9·6 | | | 32·0 | 11·1 | |
| 9·8 | | | 33·0 | 6·7 | |
| 9·7 | | | 41·0 | 34·9 | |
| 9·9 | | | 54·0 | 49·2 | |
| 9·4 | | 36 | 27·0 | 15·1 | 9·5 |
| 9·6 | | | 29·0 | 41·8 | |
| 9·6 | | | 30·0 | 9·8 | |
| 9·8 | | | 31·0 | 44·7 | |
| 9·9 | | | 38·0 | 13·4 | |
| 9·5 | | | 39·0 | 54·6 | |
| 9·6 | | 37 | 1·0 | 47·2 | |
| 9·4 | | | 20·0 | 20·3 | |
| 9·2 | | | 42·0 | 59·2 | 8·5 *g* |
| 9·7 | | | 48·0 | 51·2 | |
| 9·6 | | | 56·0 | 22·3 | 9·0 |
| 9·8 | | | 57·0 | 59·9 | |
| 9·7 | | | 59·0 | 40·0 | |
| 9·8 | | 38 | 2·0 | 54·3 | |
| 9·7 | | | 4·0 | 16·3 | |
| 9·8 | | | 5·0 | 56·9 | |
| 9·7 | | | 12·0 | 36·3 | |
| 9·9 | | | 36·0 | 59·5 | |
| 9·6 | | 39 | 1·0 | 57·3 | |
| 9·9 | | | 19·0 | 58·9 | |
| 9·9 | | 40 | 2·0 | 4·6 | |
| 9·4 | | | 8·0 | 5·5 | |
| 9·8 | | | 19·0 | 14·2 | |
| 7·2 | | | 33·0 | 12·1 | 7·0 GS*g* |
| 9·4 | | | 40·0 | 11·6 | 9·5 *g* |
| 7·3 | | | 45·0 | 11·8 | 7·0 GS*g* |
| 9·8 | | | 52·0 | 46·0 | |
| 9·8 | | | 58·0 | 12·9 | |
| 9·0 | | 41 | 3·0 | 40·2 | |
| 9·4 | | | 3·0 | 20·2 | |
| 9·4 | | | 21·3 | 0·0 | |
| 9·4 | | | 24·0 | 26·2 | |
| 9·9 | | | 24·0 | 37·4 | |
| 9·7 | | | 33·0 | 4·7 | |
| 9·2 | | | 38·0 | 23·2 | *g* |
| 9·8 | | | 51·0 | 8·1 | |
| 9·6 | | | 56·0 | 36·2 | |
| 9·8 | | | 57·0 | 24·2 | |
| 9·7 | | 42 | 29·0 | 17·9 | |
| 9·9 | | | 32·0 | 23·1 | |
| 9·7 | | | 38·0 | 45·8 | |



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### 1201—1260.

| mag. | h (10h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.8 | 10 | 42 | 38.0 | 45.2 | |
| 9.7 | | | 46.0 | 39.2 | |
| 9.8 | | | 57.0 | 39.3 | |
| 9.7 | | 43 | 0.0 | 26.2 | |
| 9.8 | | | 12.0 | 59.3 | |
| 9.9 | | | 33.0 | 37.2 | |
| 9.4 | | | 51.0 | 18.8 | *g* |
| 9.4 | | | 56.0 | 50.6 | |
| 9.7 | | 44 | 12.0 | 22.2 | |
| 9.2 | | | 22.0 | 0.6 | 9.5 *g* |
| 9.9 | | | 26.0 | 22.7 | |
| 9.1 | | | 30.0 | 26.8 | *g* |
| 9.6 | | | 39.0 | 58.2 | |
| 9.9 | | | 51.0 | 53.2 | |
| 9.8 | | | 55.0 | 15.2 | |
| 9.6 | | 45 | 5.0 | 48.3 | |
| 9.9 | | | 9.0 | 17.9 | |
| 9.6 | | | 11.0 | 55.0 | |
| 9.8 | | | 14.5 | 58.6 | |
| 9.7 | | | 31.0 | 46.6 | |
| 9.5 | | | 33.0 | 42.2 | |
| 9.8 | | | 36.0 | 47.2 | |
| 7.8 | | | 52.5 | 59.6 | 7.5 G*g* |
| 9.8 | | 46 | 10.0 | 13.2 | |
| 9.8 | | | 13.0 | 31.2 | |
| 9.2 | | | 19.0 | 31.1 | 9.0 *g* |
| 9.6 | | | 27.0 | 19.2 | |
| 9.7 | | | 41.0 | 45.6 | |
| 9.8 | | | 53.0 | 28.1 | |
| 9.8 | | 47 | 3.0 | 12.7 | |
| 9.8 | | | 12.0 | 39.6 | |
| 9.4 | | | 15.0 | 59.3 | |
| 9.2 | | | 17.0 | 31.3 | |
| 9.8 | | | 18.0 | 16.0 | |
| 9.8 | | | 26.0 | 49.7 | |
| 9.7 | | | 46.0 | 50.2 | |
| 9.9 | | | 50.0 | 15.2 | |
| 9.9 | | | 52.0 | 33.6 | |
| 9.9 | | 48 | 4.0 | 17.2 | |
| 9.7 | | | 32.0 | 20.8 | |
| 9.6 | | | 50.0 | 25.4 | |
| 9.8 | | 49 | 16.0 | 3.4 | |
| 9.4 | | | 16.0 | 20.8 | |
| 9.5 | | | 16.0 | 44.6 | 9.0 *g* |
| 8.6 | | | 24.5 | 52.8 | 8.5 *g* |
| 6.4 | | | 35.5 | 3.3 | 6.5 GS*g* |
| 9.6 | | | 40.5 | 32.2 | |
| 9.8 | | | 51.0 | 23.3 | |
| 9.9 | | | 51.5 | 49.4 | |
| 9.8 | | 50 | 9.5 | 34.2 | |
| 8.8 | | | 16.5 | 4.6 | 9.2 *g* |
| 9.9 | | 51 | 28.0 | 6.6 | |
| 9.9 | | | 28.0 | 8.2 | |
| 9.4 | | | 38.5 | 47.2 | 9.5 *g* |
| 9.4 | | | 41.5 | 10.0 | |
| 9.9 | | 52 | 7.0 | 10.3 | |
| 9.9 | | | 16.0 | 45.2 | |
| 9.9 | | | 17.0 | 26.4 | |
| 9.8 | | | 43.0 | 27.2 | |
| 8.3 | | | 53.5 | 41.2 | 8.0 G*g* |

### 1261—1320.

| mag. | h (10h–11h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 8.3 | 10 | 52 | 54.5 | 41.3 | 8.5 G*g* |
| 9.1 | | 53 | 10.5 | 6.0 | 9.0 *g* |
| 9.9 | | | 12.0 | 56.2 | |
| 7.6 | | | 35.0 | 26.2 | 8.0 G*g* |
| 9.9 | | | 48.0 | 16.1 | |
| 9.4 | | | 55.5 | 32.9 | |
| 9.2 | | 54 | 31.5 | 7.2 | |
| 9.6 | | | 40.5 | 35.1 | |
| 9.6 | | 55 | 1.5 | 57.7 | |
| 9.5 | | | 7.0 | 58.3 | |
| 9.6 | | | 15.5 | 54.1 | |
| 9.4 | | 56 | 1.5 | 55.2 | |
| 9.2 | | | 2.5 | 27.4 | |
| 9.6 | | | 14.5 | 22.1 | |
| 9.1 | | | 19.5 | 41.1 | |
| 9.0 | | | 33.5 | 47.1 | 8.5 *g* |
| 9.3 | | | 35.5 | 5.1 | |
| 9.4 | | | 49.5 | 4.3 | |
| 9.6 | | 57 | 4.5 | 16.2 | |
| 8.0 | | | 40.5 | 50.4 | 8.2 S*g* |
| 8.9 | | | 47.5 | 49.6 | *g* |
| 9.0 | | | 52.5 | 13.1 | |
| 9.6 | | | 56.5 | 47.7 | |
| 8.3 | | 58 | 16.5 | 49.4 | 8.8 *g* |
| 9.4 | | | 22.5 | 33.0 | |
| 9.4 | | | 42.5 | 32.2 | |
| 9.6 | | | 43.5 | 18.2 | |
| 9.4 | | | 44.5 | 39.9 | |
| 9.0 | | | 46.5 | 19.3 | |
| 8.1 | | 59 | 9.5 | 57.1 | 8.0 GS*g* |
| 9.2 | | | 11.5 | 45.7 | 9.0 *g* |
| 7.9 | | | 34.5 | 19.5 | *g* |
| 9.4 | | | 36.5 | 42.1 | |
| 9.2 | | | 36.5 | 52.5 | |
| 9.0 | 11 | 0 | 10.5 | 10.8 | |
| 9.0 | | | 14.5 | 7.0 | 8.5 *g* |
| 8.2 | | 1 | 0.5 | 12.0 | 8.0 *g* |
| 7.9 | | | 15.5 | 24.5 | *g* |
| 9.6 | | | 2[illegible].5 | 25.1 | |
| 9.3 | | | 30.5 | 53.0 | 8.5 *g* |
| 9.6 | | | 32.5 | 28.1 | |
| 9.1 | | | 54.5 | 36.2 | |
| 9.6 | | 2 | 0.5 | 33.9 | |
| 8.0 | | | 17.5 | 9.2 | 7.5 GS*g* |
| 5.8 | | | 18.5 | 12.0 | 6.0 GS*g* |
| 9.2 | | | 35.5 | 53.3 | 9.5 *g* |
| 9.6 | | | 54.5 | 47.7 | |
| 9.6 | | | 55.5 | 6.5 | |
| 9.2 | | 3 | 23.5 | 32.3 | |
| 9.3 | | | 25.5 | 14.0 | |
| 9.6 | | | 29.5 | 22.9 | |
| 9.2 | | | 33.5 | 23.0 | |
| 9.6 | | | 38.0 | 30.1 | *g* |
| 9.2 | | | 43.0 | 24.0 | |
| 9.5 | | | 45.0 | 18.0 | |
| 9.6 | | | 46.0 | 20.4 | |
| 9.6 | | | 50.5 | 0.1 | |
| 9.6 | | 4 | 16.0 | 4.0 | |
| 9.5 | | | 23.0 | 38.3 | |
| 9.6 | | | 30.0 | 38.6 | |

### 1321—1380.

| mag. | h (11h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.2 | 11 | 4 | 36.0 | 53.2 | |
| 9.6 | | | 55.0 | 26.2 | |
| 9.6 | | | 55.0 | 7.2 | |
| 8.5 | | | 55.0 | 27.7 | 9.0 *g* |
| 9.6 | | 5 | 26.0 | 37.3 | |
| 9.4 | | | 41.0 | 9.9 | |
| 9.6 | | | 43.0 | 27.1 | |
| 9.0 | | | 44.0 | 14.3 | |
| 9.6 | | | 46.0 | 20.0 | |
| 9.6 | | | 51.0 | 49.0 | |
| 9.6 | | | 56.0 | 54.0 | |
| 9.6 | | 6 | 15.0 | 16.2 | |
| 9.6 | | | 32.8 | 0.1 | |
| 8.8 | | | 39.0 | 36.4 | 9.4 *g* |
| 9.2 | | | 46.0 | 46.6 | 9.5 *g* |
| 8.1 | | | 53.0 | 45.3 | 7.0 GS*g* |
| 9.2 | | | 55.0 | 25.9 | *g* |
| 7.5 | | 7 | 26.0 | 32.2 | 7.5 GS*g* |
| 9.6 | | | 31.0 | 45.2 | |
| 9.6 | | | 32.0 | 10.4 | |
| 9.6 | | | 42.0 | 36.2 | |
| 8.9 | | 8 | 27.0 | 51.0 | 9.0 *g* |
| 9.2 | | | 34.0 | 11.1 | |
| 9.6 | | | 55.0 | 12.1 | |
| 9.6 | | 9 | 9.0 | 9.0 | |
| 9.6 | | | 49.0 | 58.1 | |
| 8.8 | | | 51.0 | 27.9 | 9.5 *g* |
| 9.6 | | 10 | 22.0 | 7.6 | |
| 9.2 | | 11 | 10.0 | 0.9 | |
| 9.2 | | | 11.0 | 13.8 | |
| 9.6 | | | 20.0 | 1.3 | |
| 9.5 | | | 44.0 | 21.1 | |
| 9.6 | | 12 | 13.0 | 48.9 | |
| 9.6 | | | 40.0 | 27.1 | *g* |
| 9.6 | | | 41.0 | 56.6 | |
| 8.9 | | | 52.0 | 17.7 | 8.0 *g* |
| 9.6 | | 13 | 40.0 | 24.9 | 9.5 *g* |
| 9.6 | | | 50.5 | 47.4 | |
| 9.4 | | 14 | 13.5 | 20.5 | |
| 9.4 | | | 42.0 | 51.8 | |
| 9.2 | | | 46.5 | 33.8 | 9.0 *g* |
| 9.2 | | | 55.5 | 31.1 | |
| 9.2 | | 15 | 39.5 | 11.1 | |
| 9.6 | | | 42.5 | 12.1 | |
| 9.6 | | 16 | 13.5 | 3.8 | |
| 8.2 | | | 21.5 | 7.1 | 8.2 G*g* |
| 9.4 | | | 34.5 | 22.1 | |
| 9.4 | | | 40.5 | 37.2 | |
| 9.6 | | 17 | 15.5 | 10.6 | |
| 9.6 | | | 39.5 | 12.8 | |
| 9.6 | | | 53.5 | 42.5 | |
| 9.2 | | 18 | 50.5 | 7.0 | |
| 9.6 | | 19 | 10.5 | 21.2 | |
| 9.6 | | | 32.5 | 53.1 | |
| 9.4 | | 20 | 46.5 | 16.2 | |
| 9.6 | | | 50.5 | 6.8 | |
| 9.5 | | | 57.5 | 9.9 | |
| 9.1 | | 21 | 11.5 | 2.8 | 9.5 |
| 9.2 | | | 33.5 | 45.6 | |
| 9.2 | | 22 | 28.8 | 58.3 | |

25 prec.

| h | m | α (s) | | δ (′) |
|---|---|---|---|---|
| 10 | 40 | + 45 | − 0.03 d | − 7.9 |
| | 50 | 49 | − 0.03 | 8.0 |
| 11 | 0 | 53 | − 0.02 | 8.1 |
| | 10 | 57 | − 0.02 | 8.2 |
| | 20 | 61 | − 0.02 | 8.2 |
| | 30 | + 65 | − 0.01 | − 8.3 |

d = minutes of decl.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 11 | 20 | + 61 | − 0.02 d | − 8.2 |
| | 30 | 65 | − 0.01 | 8.3 |
| | 40 | 69 | − 0.01 | 8.3 |
| | 50 | 73 | 0.00 | 8.3 |
| 12 | 0 | 77 | 0.00 | 8.4 |
| | 10 | 81 | 0.00 | 8.3 |
| | 20 | 85 | + 0.01 | 8.3 |
| | 30 | 89 | + 0.01 | 8.3 |
| | 40 | 93 | + 0.02 | 8.2 |
| | 50 | 97 | + 0.02 | 8.2 |
| 13 | 0 | + 101 | + 0.02 | − 8.1 |

d = minutes of decl.

## 1381—1440.

| mag. | 11ʰ h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 7.9 | 11 | 23 | 9.5 | 25.8 | 7.7 GS*g* |
| 9.3 | | | 17.5 | 20.1 | |
| 9.6 | | 24 | 31.5 | 29.1 | |
| 9.6 | | 25 | 2.5 | 13.1 | 9.8 |
| 9.2 | | | 18.5 | 43.5 | |
| 9.4 | | | 23.5 | 23.0 | |
| 9.6 | | 26 | 3.5 | 41.1 | |
| 9.4 | | | 10.5 | 57.3 | |
| 9.6 | | | 15.5 | 4.7 | |
| 8.8 | | | 25.5 | 15.0 | 9.5 *g* |
| 9.6 | | 27 | 2.5 | 41.1 | |
| 8.9 | | | 38.5 | 13.4 | 9.5 *g* |
| 9.0 | | 28 | 17.5 | 43.2 | *g* |
| 9.4 | | 29 | 49.5 | 2.1 | |
| 9.4 | | 30 | 33.5 | 33.8 | |
| 9.6 | | | 37.5 | 57.3 | |
| 8.4 | | | 55.5 | 18.2 | 8.2 G*g* |
| 9.2 | | 31 | 2.5 | 26.5 | |
| 9.6 | | | 12.5 | 54.0 | |
| 9.3 | | | 29.5 | 5.1 | |
| 9.6 | | 32 | 2.5 | 22.0 | |
| 9.6 | | | 12.5 | 26.0 | |
| 8.9 | | | 45.5 | 47.6 | *g* |
| 7.9 | | 33 | 19.5 | 11.5 | 8.5 G*g* |
| 9.6 | | | 25.5 | 32.0 | |
| 9.6 | | | 41.0 | 52.0 | 9.0 *g* |
| 9.3 | | | 49.5 | 10.4 | |
| 8.6 | | 34 | 55.5 | 52.6 | 9.4 G*g* |
| 8.2 | | 35 | 13.5 | 57.9 | 8.6 *g* |
| 8.0 | | | 28.5 | 28.3 | 8.5 *g* |
| 9.1 | | | 35.5 | 38.9 | *g* |
| 8.8 | | | 51.5 | 12.2 | 9.0 *g* |
| 8.0 | | 36 | 3.0 | 48.8 | 8.2 G*g* |
| 9.6 | | | 19.5 | 26.9 | |
| 9.6 | | | 42.5 | 50.7 | *g* |
| 9.4 | | | 52.5 | 54.0 | |
| 9.6 | | | 56.5 | 41.9 | |
| 9.6 | | 37 | 43.0 | 49.1 | *g* |
| 9.6 | | 38 | 14.5 | 2.2 | |
| 9.6 | | | 36.5 | 49.2 | *g* |
| 9.5 | | | 45.5 | 59.1 | |
| 9.2 | | 39 | 38.0 | 18.4 | 9.0 |
| 8.2 | | | 43.0 | 54.6 | 8.5 G*g* |
| 8.3 | | | 44.5 | 32.9 | 8.5 G*g* |
| 9.4 | | 40 | 9.0 | 15.4 | |
| 9.4 | | | 20.5 | 12.6 | |
| 8.4 | | | 30.5 | 12.6 | 8.8 GS*g* |
| 9.2 | | | 37.5 | 12.9 | 8.2 GS*g* |
| 9.6 | | 42 | 1.5 | 59.8 | |
| 9.1 | | 43 | 15.5 | 8.7 | |
| 9.6 | | | 59.5 | 29.9 | |
| 9.5 | | 44 | 21.5 | 35.6 | |
| 9.6 | | | 25.5 | 1.2 | |
| 9.1 | | | 53.5 | 23.9 | |
| 8.8 | | 45 | 1.5 | 47.8 | 9.0 *g* |
| 9.1 | | | 2.5 | 6.9 | 9.0 *g* |
| 9.5 | | | 12.5 | 44.0 | *g* |
| 9.6 | | 47 | 13.5 | 22.9 | |
| 8.6 | | | 14.5 | 7.9 | 9.0 *g* |
| 8.7 | | | 50.5 | 35.9 | *g* |

## 1441—1500.

| mag. | 11ʰ—12ʰ h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9.6 | 11 | 47 | 55.5 | 36.5 | |
| 9.0 | | 48 | 9.5 | 45.4 | *g* |
| 8.8 | | | 48.5 | 10.9 | 8.2 *g* |
| 9.6 | | | 49.5 | 35.7 | |
| 8.5 | | 50 | 19.0 | 57.5 | 9.0 G*g* |
| 9.4 | | | 50.5 | 38.2 | *g* |
| 9.1 | | 51 | 34.5 | 40.1 | *g* |
| 7.2 | | 52 | 16.5 | 2.7 | 7.0 GS*g* |
| 9.6 | | 53 | 27.5 | 6.6 | |
| 8.9 | | | 52.5 | 20.4 | 8.2 *g* |
| 9.2 | | 54 | 12.5 | 13.1 | |
| 9.5 | | | 56.5 | 37.9 | *g* |
| 8.2 | | 55 | 3.5 | 31.9 | 8.8 *g* |
| 7.6 | | 56 | 6.5 | 47.6 | 7.0 GS*g* |
| 9.0 | | | 15.5 | 9.9 | 8.0 *g* |
| 9.6 | | | 40.5 | 14.0 | 9.5 |
| 8.5 | | 58 | 10.5 | 31.2 | 8.0 *g* |
| 9.1 | | | 30.5 | 42.8 | |
| 9.6 | | 59 | 14.5 | 57.9 | *g* |
| 9.4 | | | 20.5 | 24.8 | |
| 9.4 | 12 | 0 | 8.0 | 3.9 | |
| 9.2 | | | 31.0 | 6.7 | *g* |
| 9.3 | | 1 | 6.0 | 6.8 | |
| 9.0 | | 2 | 21.0 | 20.2 | 8.5 G*g* |
| 8.6 | | | 58.0 | 9.3 | 9.0 *g* |
| 9.3 | | 3 | 29.0 | 58.9 | |
| 9.6 | | | 47.0 | 8.4 | |
| 8.6 | | 4 | 58.0 | 28.9 | 8.0 *g* |
| 9.3 | | 5 | 48.0 | 34.9 | |
| 8.0 | | 6 | 23.0 | 5.2 | 8.8 *g* |
| 9.3 | | | 33.0 | 6.0 | 9.0 *g* |
| 8.0 | | 8 | 1.0 | 50.2 | 8.5 *g* |
| 9.6 | | 9 | 3.0 | 22.9 | 8.5 *g* |
| 9.3 | | | 16.0 | 55.0 | |
| 8.8 | | | 23.0 | 7.9 | 8.0 G*g* |
| 9.6 | | | 36.0 | 6.3 | 9.0 *g* |
| 8.2 | | 10 | 29.0 | 11.9 | 8.0 *g* |
| 9.6 | | 12 | 31.0 | 10.3 | 9.0 *g* |
| 9.5 | | 14 | 19.0 | 26.0 | 9.5 |
| 9.0 | | 17 | 13.0 | 25.7 | 10.0 *g* |
| 7.6 | | | 53.0 | 2.1 | 8.5 *g* |
| 9.2 | | 19 | 39.0 | 31.0 | 9.5 *g* |
| 9.4 | | 20 | 5.0 | 58.3 | 9.0 *g* |
| 9.2 | | | 19.5 | 44.0 | 9.5 *g* |
| 9.8 | | | 26.0 | 5.9 | |
| 9.8 | | | 45.0 | 34.0 | |
| 9.4 | | 21 | 28.0 | 0.9 | *g* |
| 9.4 | | | 38.0 | 19.1 | |
| 9.5 | | | 57.0 | 11.0 | |
| 9.6 | | 23 | 22.0 | 43.3 | |
| 9.4 | | 24 | 9.0 | 56.9 | |
| 9.6 | | 26 | 0.0 | 41.2 | |
| 9.3 | | | 21.0 | 58.5 | |
| 9.5 | | 27 | 9.0 | 25.6 | *g* |
| 9.6 | | | 12.0 | 32.9 | |
| 9.8 | | 28 | 55.0 | 27.0 | *g* |
| 9.0 | | 29 | 29.0 | 35.7 | *g* |
| 9.6 | | | 36.0 | 6.7 | |
| 9.6 | | | 39.0 | 5.4 | |
| 9.4 | | 30 | 56.0 | 8.3 | *g* |

## 1501—1560.

| mag. | 12ʰ h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9.8 | 12 | 31 | 22.0 | 31.0 | |
| 8.7 | | | 39.0 | 56.0 | 9.0 *g* |
| 7.9 | | 32 | 35.3 | 57.5 | 8.0 G*g* |
| 9.4 | | 33 | 10.0 | 20.0 | *g* |
| 9.6 | | 34 | 9.0 | 55.7 | *g* |
| 9.5 | | | 24.0 | 31.0 | |
| 9.4 | | | 42.0 | 13.2 | |
| 9.8 | | 35 | 10.0 | 9.0 | |
| 9.7 | | | 45.0 | 39.4 | |
| 9.6 | | | 55.0 | 44.4 | |
| 8.4 | | 36 | 2.0 | 21.1 | 8.0 G*g* |
| 9.8 | | | 31.0 | 11.8 | |
| 9.7 | | | 35.0 | 47.3 | |
| 9.8 | | 37 | 15.0 | 17.0 | |
| 9.4 | | | 29.0 | 12.2 | |
| 9.3 | | | 43.0 | 0.9 | |
| 9.4 | | | 43.0 | 32.0 | |
| 9.6 | | 38 | 5.0 | 56.2 | |
| 9.0 | | | 30.0 | 38.3 | |
| 9.6 | | | 52.0 | 19.7 | |
| 9.4 | | 39 | 2.0 | 11.8 | |
| 8.2 | | | 59.0 | 54.9 | 8.5 G*g* |
| 8.5 | | 40 | 33.0 | 23.6 | 9.5 *g* |
| 9.4 | | | 45.0 | 31.4 | *g* |
| 9.6 | | 41 | 25.0 | 14.0 | |
| 8.0 | | 42 | 29.0 | 56.5 | 8.5 G*g* |
| 9.2 | | | 59.0 | 50.7 | *g* |
| 9.4 | | 43 | 45.0 | 27.0 | |
| 8.4 | | 44 | 36.0 | 58.2 | 9.0 G*g* |
| 9.4 | | | 45.0 | 41.8 | 9.0 *g* |
| 9.8 | | | 50.0 | 48.1 | |
| 9.8 | | 45 | 0.0 | 17.0 | |
| 7.3 | | | 33.0 | 35.6 | 7.5 GS*g* |
| 9.7 | | | 55.0 | 11.4 | |
| 9.7 | | 46 | 3.0 | 38.2 | |
| 8.8 | | | 20.0 | 41.2 | 9.0 *g* |
| 9.8 | | 47 | 43.0 | 21.0 | 9.5 *g* |
| 9.8 | | | 54.0 | 35.9 | 9.5 |
| 9.3 | | 48 | 8.0 | 53.7 | |
| 9.7 | | 49 | 20.0 | 44.0 | |
| 9.2 | | 50 | 9.0 | 25.5 | |
| 9.2 | | 51 | 0.0 | 41.0 | 8.5 *g* |
| 8.2 | | | 20.0 | 9.5 | 9.0 GSc*g* |
| 9.6 | | | 33.0 | 0.7 | 9.0 *g* |
| 9.7 | | 52 | 32.0 | 34.0 | |
| 8.9 | | 53 | 13.0 | 10.4 | *g* |
| 9.8 | | | 32.0 | 41.9 | |
| 6.6 | | | 43.0 | 52.3 | 4.0 GS*g*trλ |
| 9.8 | | 54 | 2.0 | 44.3 | |
| 9.6 | | | 12.3 | 2.0 | |
| 9.6 | | | 22.0 | 5.0 | |
| 9.4 | | | 28.0 | 21.4 | |
| 6.1 | | | 37.0 | 48.0 | 6.5 GSc*g*r |
| 9.7 | | | 49.0 | 36.4 | |
| 9.2 | | | 53.0 | 19.9 | |
| 9.7 | | 55 | 0.0 | 2.3 | |
| 9.8 | | | 13.0 | 16.1 | |
| 9.5 | | | 15.0 | 39.3 | |
| 8.7 | | 56 | 31.0 | 25.3 | *g* |
| 9.4 | | | 58.0 | 14.2 | |



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## 1561—1620.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 12h.—13h. | | | −70° | |
| 9.5 | 12 | 57 | 20.0 | 50.1 | |
| 9.5 | | | 49.0 | 5.4 | |
| 9.0 | | 58 | 49.0 | 21.2 | *g* |
| 9.6 | 13 | 0 | 38.3 | 0.3 | |
| 9.2 | | | 48.0 | 40.0 | 8.5 *g* |
| 9.6 | | 2 | 9.0 | 5.9 | *g* |
| 8.0 | | | 14.0 | 8.5 | 8.5 G*g* |
| 9.5 | | | 19.0 | 28.1 | *g* |
| 9.6 | | | 33.0 | 31.3 | |
| 9.2 | | 3 | 2.0 | 46.0 | *g* |
| 9.6 | | | 3.0 | 30.9 | |
| 9.4 | | | 26.0 | 5.7 | *g* |
| 9.0 | | 5 | 1.0 | 51.8 | *g* |
| 9.1 | | | 3.0 | 22.0 | k*g* |
| 9.2 | | | 5.0 | 21.8 | 9.5 *g* |
| 9.9 | | | 54.0 | 9.9 | |
| 9.9 | | 6 | 23.0 | 56.5 | |
| 9.9 | | 7 | 3.0 | 35.6 | |
| 9.1 | | 8 | 6.5 | 18.9 | 9.5 *g* |
| 9.4 | | | 18.5 | 16.0 | 8.5 *g* |
| 9.7 | | | 30.0 | 31.1 | |
| 9.3 | | | 35.0 | 11.9 | 9.0 *g* |
| 9.5 | | | 49.5 | 34.0 | *g* |
| 9.9 | | 9 | 24.0 | 3.7 | |
| 9.9 | | | 44.0 | 24.0 | |
| 9.8 | | 10 | 12.0 | 34.0 | |
| 9.9 | | | 32.0 | 0.6 | |
| 9.9 | | | 50.0 | 40.1 | |
| 8.5 | | 11 | 3.5 | 11.7 | 7.5 GS*g* |
| 9.9 | | | 27.0 | 18.3 | |
| 9.7 | | | 39.0 | 30.1 | |
| 9.3 | | | 54.0 | 22.0 | *g* |
| 9.6 | | 12 | 36.0 | 0.2 | |
| 9.6 | | | 52.0 | 20.5 | *g* |
| 9.8 | | 13 | 25.0 | 21.0 | *g* |
| 9.9 | | 14 | 19.0 | 58.2 | |
| 9.9 | | | 36.0 | 7.1 | |
| 9.7 | | | 37.0 | 7.0 | |
| 9.7 | | | 55.0 | 47.0 | |
| 9.7 | | 15 | 4.0 | 55.7 | |
| 8.8 | | | 5.0 | 7.9 | 8.8 *g* |
| 9.5 | | | 10.0 | 21.3 | |
| 9.7 | | | 34.0 | 20.2 | *g* |
| 9.7 | | | 55.0 | 12.1 | |
| 9.8 | | | 58.5 | 59.3 | |
| 9.7 | | 16 | 33.0 | 27.8 | *g* |
| 9.8 | | | 34.0 | 15.9 | |
| 9.8 | | | 36.0 | 7.1 | |
| 9.5 | | | 37.0 | 9.1 | |
| 9.9 | | | 42.0 | 35.0 | |
| 9.9 | | | 44.0 | 19.1 | |
| 9.9 | | | 50.0 | 17.1 | |
| 9.3 | | 18 | 16.0 | 25.1 | *g* |
| 9.5 | | | 16.0 | 37.1 | |
| 9.9 | | | 48.0 | 8.4 | |
| 9.9 | | 19 | 8.0 | 15.0 | |
| 9.7 | | | 11.0 | 9.1 | |
| 9.9 | | | 17.0 | 48.7 | |
| 9.9 | | | 28.0 | 17.3 | |
| 9.9 | | | 33.0 | 13.1 | |

## 1621—1680.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 13h. | | | −70° | |
| 9.7 | 13 | 19 | 50.0 | 49.1 | 9.0 *g* |
| 9.9 | | 20 | 26.0 | 41.9 | *g* |
| 9.7 | | 21 | 9.0 | 9.1 | |
| 9.5 | | | 19.0 | 44.1 | *g* |
| 9.3 | | | 49.0 | 40.1 | *g* |
| 9.4 | | | 51.0 | 11.8 | 9.0 G*g*g |
| 9.7 | | 22 | 3.0 | 34.1 | |
| 9.9 | | | 23.0 | 18.1 | |
| 9.9 | | | 25.0 | 15.2 | |
| 9.5 | | | 34.0 | 20.1 | |
| 9.3 | | | 40.0 | 48.7 | |
| 9.3 | | | 53.0 | 55.1 | *g* |
| 9.3 | | | 59.0 | 38.1 | *g* |
| 9.4 | | 24 | 10.0 | 32.0 | *g* |
| 9.5 | | | 44.0 | 9.3 | |
| 9.7 | | 25 | 39.0 | 39.0 | *g* |
| 9.8 | | | 51.0 | 23.0 | |
| 9.9 | | 26 | 6.0 | 2.3 | |
| 9.3 | | | 26.0 | 36.1 | *g* |
| 9.7 | | | 53.0 | 55.1 | |
| 9.9 | | 27 | 55.0 | 3.1 | |
| 9.9 | | | 57.0 | 40.0 | |
| 9.9 | | 28 | 5.5 | 57.6 | |
| 9.8 | | | 9.0 | 36.7 | |
| 9.9 | | | 10.0 | 13.2 | |
| 9.9 | | | 52.0 | 13.1 | |
| 9.9 | | 29 | 15.5 | 58.4 | |
| 9.9 | | | 34.0 | 9.7 | |
| 9.9 | | | 42.0 | 10.1 | |
| 9.3 | | | 54.0 | 50.8 | |
| 9.5 | | 30 | 1.0 | 15.9 | |
| 9.9 | | | 17.0 | 30.7 | *g* |
| 8.4 | | | 28.0 | 9.1 | 7.0 GS*gr* |
| 9.9 | | 31 | 0.0 | 57.2 | |
| 9.7 | | | 42.0 | 15.1 | |
| 9.9 | | 32 | 21.0 | 42.1 | |
| 9.5 | | | 56.0 | 29.1 | 9.5 *g* |
| 9.9 | | 33 | 9.0 | 42.8 | |
| 8.8 | | | 11.0 | 5.7 | 9.5 *g* |
| 9.9 | | | 41.0 | 39.8 | |
| 9.9 | | 34 | 30.0 | 25.2 | |
| 9.7 | | | 35.0 | 4.0 | |
| 9.7 | | 35 | 6.0 | 56.1 | 9.0 *g* |
| 8.8 | | | 18.0 | 54.1 | 7.5 GS*g* |
| 9.9 | | 36 | 6.0 | 31.3 | |
| 9.6 | | | 17.0 | 7.8 | *g* |
| 9.3 | | | 45.0 | 29.8 | *g* |
| 9.9 | | | 56.0 | 41.1 | |
| 9.9 | | 37 | 16.0 | 14.1 | |
| 7.8 | | | 42.0 | 36.1 | 7.0 GS*g* |
| 9.9 | | 38 | 3.0 | 22.2 | |
| 9.9 | | | 36.3 | 1.0 | |
| 9.9 | | | 45.0 | 58.1 | |
| 8.7 | | 39 | 22.0 | 5.1 | 9.0 *g* |
| 9.1 | | | 24.0 | 25.4 | *g* |
| 9.4 | | | 44.0 | 29.8 | *g* |
| 9.0 | | | 46.5 | 0.7 | 9.0 *g* |
| 9.5 | | | 59.0 | 32.3 | |
| 9.9 | | 40 | 34.0 | 32.7 | |
| 9.3 | | 41 | 0.0 | 46.1 | *g* |

## 1681—1740.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 13h.—14h. | | | −70° | |
| 9.6 | 13 | 41 | 34.0 | 24.1 | *g* |
| 9.5 | | | 41.0 | 8.1 | 10.0 |
| 9.9 | | | 44.0 | 19.5 | |
| 8.5 | | 42 | 1.0 | 8.1 | 9.0 *g* |
| 9.0 | | | 37.0 | 33.2 | 9.5 *g* |
| 9.4 | | | 41.0 | 38.0 | |
| 9.7 | | 43 | 37.0 | 40.1 | |
| 9.9 | | | 44.0 | 26.6 | |
| 9.5 | | 44 | 25.0 | 45.8 | |
| 9.5 | | | 28.0 | 42.0 | *g* |
| 9.2 | | 45 | 44.0 | 16.5 | 10.0 *g* |
| 8.2 | | 46 | 18.0 | 11.3 | 8.5 *g* |
| 9.3 | | 48 | 14.8 | 6.2 | |
| 9.5 | | | 39.2 | 58.9 | |
| 9.9 | | | 40.0 | 4.2 | |
| 9.9 | | | 47.0 | 18.0 | |
| 9.9 | | 51 | 19.0 | 47.2 | |
| 9.9 | | | 53.0 | 18.1 | |
| 9.5 | | 52 | 22.0 | 53.2 | |
| 8.5 | | | 46.5 | 32.1 | 9.0 *g* |
| 9.8 | | | 58.0 | 1.9 | |
| 9.9 | | | 58.2 | 0.4 | |
| 9.9 | | 53 | 12.0 | 19.2 | |
| 8.8 | | 54 | 4.0 | 11.5 | *g* |
| 9.5 | | | 8.5 | 16.4 | |
| 9.9 | | | 13.0 | 4.7 | |
| 9.6 | | | 54.0 | 52.1 | *g* |
| 9.5 | | 56 | 0.5 | 13.6 | |
| 9.2 | | | 29.0 | 14.3 | |
| 9.2 | | 57 | 19.5 | 14.0 | *g* |
| 8.6 | | | 25.5 | 36.2 | 9.5 *g* |
| 9.4 | | | 28.5 | 4.7 | |
| 9.4 | | 58 | 0.5 | 34.2 | |
| 9.4 | | | 6.5 | 27.3 | |
| 9.4 | | | 16.5 | 25.1 | |
| 9.4 | | | 27.5 | 40.3 | |
| 9.4 | | 59 | 12.5 | 36.3 | 9.0 *g* |
| 9.4 | | | 47.5 | 31.2 | |
| 9.5 | 14 | 0 | 2.5 | 25.4 | |
| 9.1 | | | 34.5 | 40.2 | 8.5 *g* |
| 8.4 | | 1 | 54.5 | 45.3 | 8.5 *g* |
| 8.9 | | 2 | 16.5 | 13.7 | *g* |
| 8.6 | | 4 | 28.5 | 38.8 | 9.0 *g* |
| 9.5 | | | 33.5 | 53.6 | |
| 9.3 | | 5 | 0.5 | 28.0 | 9.5 *g* |
| 9.4 | | | 4.5 | 39.7 | |
| 9.5 | | | 7.5 | 24.5 | 9.5 *g* |
| 9.4 | | | 11.5 | 35.1 | |
| 9.4 | | | 24.5 | 38.2 | |
| 9.4 | | | 43.5 | 38.4 | |
| 9.4 | | 6 | 44.0 | 27.3 | |
| 9.1 | | | 50.0 | 15.5 | 8.5 *g* |
| 9.0 | | | 50.3 | 57.5 | |
| 9.4 | | 7 | 28.0 | 9.5 | |
| 9.1 | | 8 | 3.0 | 48.9 | 8.0 G*g* |
| 9.2 | | | 59.0 | 25.4 | |
| 9.2 | | 9 | 39.0 | 13.5 | |
| 9.4 | | 10 | 1.0 | 51.9 | *g* |
| 9.6 | | | 4.0 | 3.7 | |
| 9.2 | | | 5.0 | 55.0 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 12 | 50 | + 97 + 0.02 d | − 8.2 |
| 13 | 0 | 101 + 0.02 | 8.1 |
| | 10 | 104 + 0.03 | 8.0 |
| | 20 | 108 + 0.03 | 7.9 |
| | 30 | 112 + 0.03 | 7.7 |
| | 40 | 116 + 0.04 | 7.6 |
| | 50 | 119 + 0.04 | 7.4 |
| 14 | 0 | 123 + 0.04 | 7.2 |
| | 10 | 126 + 0.05 | 7.0 |
| | 20 | + 129 + 0.05 | − 6.8 |

d = minutes of decl.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 14 | 10 | + 126 | + 0·05 d | − 7·0 |
| | 20 | 129 | + 0·05 | 6·8 |
| | 30 | 133 | + 0·05 | 6·6 |
| | 40 | 136 | + 0·06 | 6·4 |
| | 50 | 139 | + 0·06 | 6·2 |
| 15 | 0 | + 142 | + 0·06 | − 5·9 |

d = minutes of decl.

## 1741—1800.

| mag. | 14h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·6 | 14 | 10 | 43·0 | 50·2 | g |
| 9·1 | | 11 | 18·0 | 0·1 | 9·0 g |
| 9·4 | | 13 | 19·0 | 56·6 | |
| 9·3 | | | 20·0 | 26·5 | 9·5 g |
| 9·4 | | | 36·0 | 15·1 | g |
| 9·2 | | 14 | 14·2 | 59·9 | 9·0 g |
| 9·4 | | | 24·0 | 38·6 | |
| 9·4 | | | 30·0 | 1·7 | |
| 9·6 | | | 32·0 | 41·8 | |
| 8·6 | | | 48·0 | 21·1 | 9·5 g |
| 9·4 | | | 48·0 | 7·3 | |
| 9·6 | | | 59·0 | 31·5 | |
| 9·4 | | 15 | 14·0 | 56·4 | g |
| 9·6 | | 16 | 8·0 | 18·2 | |
| 9·0 | | 17 | 6·0 | 34·2 | 10·0 g |
| 9·5 | | | 8·0 | 24·4 | |
| 9·2 | | | 17·0 | 43·2 | |
| 8·8 | | | 29·0 | 0·3 | g |
| 9·0 | | | 51·2 | 1·1 | g |
| 9·6 | | 18 | 15·0 | 10·2 | |
| 9·0 | | | 35·0 | 13·6 | |
| 9·5 | | | 59·0 | 48·2 | |
| 9·5 | | 19 | 23·0 | 7·2 | |
| 9·4 | | | 29·0 | 25·0 | |
| 9·2 | | | 56·0 | 47·6 | g |
| 9·4 | | 20 | 24·0 | 23·2 | |
| 9·4 | | | 29·0 | 4·4 | |
| 9·5 | | | 30·0 | 24·0 | |
| 9·2 | | | 34·0 | 50·2 | 9·5 g |
| 9·2 | | 21 | 2·0 | 55·8 | 8·5 g |
| 9·6 | | | 20·0 | 4·9 | |
| 9·4 | | | 34·0 | 33·6 | g |
| 8·5 | | | 58·0 | 3·7 | 9·0 g |
| 9·0 | | 22 | 31·0 | 54·6 | 9·0 g |
| 9·5 | | 23 | 56·0 | 44·7 | |
| 9·4 | | 24 | 6·0 | 6·0 | 9·0 g |
| 9·5 | | 25 | 19·0 | 11·2 | |
| 9·4 | | | 20·0 | 6·7 | |
| 9·2 | | | 25·0 | 31·9 | 8·5 Gg |
| 9·2 | | | 50·0 | 22·5 | g |
| 9·6 | | 26 | 20·0 | 29·9 | |
| 9·5 | | 29 | 30·0 | 24·5 | |
| 9·3 | | | 43·0 | 12·8 | |
| 9·0 | | 30 | 0·0 | 30·2 | 9·0 g |
| 9·4 | | 31 | 6·1 | 20·2 | |
| 8·8 | | 32 | 15·0 | 56·4 | 9·0 g |
| 8·8 | | 33 | 16·0 | 18·9 | g |
| 9·5 | | | 43·0 | 57·2 | |
| 8·2 | | 34 | 29·0 | 49·6 | 8·2 g |
| 9·4 | | | 48·0 | 23·2 | |
| 9·6 | | | 55·2 | 25·6 | |
| 9·6 | | 35 | 16·2 | 8·9 | |
| 9·8 | | | 18·2 | 9·7 | |
| 9·6 | | | 34·7 | 56·2 | |
| 9·6 | | | 51·7 | 28·4 | |
| 9·0 | | | 58·8 | 13·2 | |
| 9·1 | | 36 | 5·2 | 19·9 | g |
| 9·6 | | | 10·7 | 41·0 | |
| 9·8 | | | 18·2 | 13·9 | |
| 9·8 | | | 26·2 | 45·9 | |

## 1801—1860.

| mag. | 14h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·0 | 14 | 36 | 34·3 | 56·7 | |
| 9·8 | | | 40·2 | 49·7 | |
| 9·4 | | | 45·2 | 39·4 | 9·5 |
| 9·7 | | | 55·0 | 9·9 | |
| 9·7 | | | 59·2 | 43·7 | |
| 8·8 | | 37 | 9·3 | 58·0 | 9·0 g |
| 8·6 | | | 13·6 | 4·3 | GSg |
| 9·5 | | | 26·8 | 55·3 | |
| 9·7 | | | 31·7 | 47·0 | |
| 8·7 | | | 32·2 | 38·3 | 9·0 g |
| 8·8 | | | 33·3 | 48·8 | g |
| 9·8 | | | 48·7 | 41·8 | |
| 9·5 | | | 55·5 | 51·7 | |
| 9·5 | | 38 | 5·0 | 23·6 | |
| 9·2 | | | 15·7 | 46·2 | g |
| 9·0 | | | 20·0 | 23·5 | |
| 9·0 | | | 22·3 | 17·0 | g |
| 9·8 | | | 31·0 | 14·2 | |
| 9·6 | | | 40·5 | 19·1 | |
| 9·7 | | | 42·0 | 24·8 | |
| 9·3 | | | 48·5 | 11·5 | |
| 9·7 | | | 55·5 | 17·6 | |
| 8·7 | | 39 | 2·1 | 0·7 | 8·5 GSg |
| 8·9 | | | 4·3 | 1·0 | 9·0 Gg |
| 9·4 | | | 5·7 | 34·7 | |
| 9·5 | | | 22·5 | 31·9 | |
| 9·0 | | | 34·7 | 46·3 | g |
| 9·7 | | | 39·0 | 46·5 | |
| 9·2 | | | 44·7 | 19·5 | |
| 9·4 | | | 48·0 | 37·7 | |
| 9·2 | | | 48·0 | 48·6 | |
| 9·5 | | | 48·0 | 1·4 | |
| 9·5 | | 40 | 9·0 | 54·4 | |
| 9·8 | | | 10·0 | 54·1 | |
| 9·2 | | | 10·7 | 28·2 | 9·0 g |
| 8·8 | | | 16·7 | 34·8 | 9·0 g |
| 9·2 | | | 20·7 | 16·8 | 9·5 |
| 9·2 | | | 39·7 | 12·2 | 9·0 |
| 9·3 | | | 49·2 | 40·6 | |
| 9·5 | | 41 | 8·0 | 41·2 | |
| 9·6 | | | 29·0 | 20·2 | |
| 9·4 | | 42 | 23·5 | 21·7 | |
| 9·5 | | | 27·0 | 29·9 | |
| 9·6 | | | 36·5 | 49·9 | |
| 9·4 | | | 38·0 | 59·2 | |
| 9·5 | | | 40·5 | 57·2 | |
| 9·4 | | 43 | 2·5 | 19·6 | |
| 9·8 | | | 4·0 | 26·8 | |
| 9·8 | | | 8·0 | 18·4 | |
| 9·3 | | | 14·5 | 27·4 | g |
| 9·5 | | | 21·0 | 31·7 | |
| 9·4 | | | 25·5 | 36·7 | |
| 9·0 | | | 36·0 | 28·3 | g |
| 9·6 | | | 38·5 | 38·8 | |
| 9·4 | | 44 | 7·5 | 8·1 | |
| 8·6 | | | 8·8 | 0·5 | g |
| 9·2 | | | 15·1 | 34·6 | |
| 9·2 | | | 17·1 | 23·6 | |
| 8·4 | | | 24·1 | 50·7 | 8·5 g |
| 9·3 | | | 59·1 | 54·0 | |

## 1861—1920.

| mag. | 14h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·8 | 14 | 45 | 3·4 | 0·2 | |
| 9·2 | | | 23·1 | 3·2 | |
| 9·0 | | | 24·6 | 49·9 | 8·0 Gg |
| 9·6 | | | 28·6 | 56·9 | |
| 8·9 | | | 32·6 | 8·6 | g |
| 8·9 | | | 35·1 | 46·4 | g |
| 9·6 | | | 52·6 | 20·5 | |
| 8·8 | | | 53·6 | 53·0 | 8·0 Gg |
| 9·8 | | | 56·4 | 10·2 | |
| 9·7 | | | 57·1 | 49·3 | |
| 9·8 | | 46 | 14·4 | 13·3 | |
| 9·6 | | | 18·1 | 19·8 | |
| 9·6 | | | 26·1 | 20·2 | |
| 8·1 | | | 27·6 | 25·3 | g |
| 9·4 | | | 28·8 | 1·9 | |
| 9·7 | | | 33·6 | 26·8 | |
| 9·5 | | | 41·1 | 53·8 | |
| 9·8 | | | 42·6 | 43·6 | |
| 9·6 | | | 46·6 | 21·9 | g |
| 9·4 | | 47 | 5·6 | 18·2 | |
| 9·8 | | | 6·6 | 31·3 | |
| 9·6 | | | 25·1 | 29·3 | |
| 9·7 | | | 27·6 | 34·4 | |
| 9·2 | | | 29·1 | 42·7 | |
| 9·5 | | | 47·1 | 30·0 | |
| 8·9 | | | 49·1 | 55·8 | 8·8 g |
| 9·7 | | 48 | 15·6 | 42·2 | |
| 9·7 | | | 28·1 | 30·6 | |
| 9·7 | | | 39·6 | 15·1 | |
| 9·0 | | 49 | 14·6 | 25·0 | g |
| 6·7 | | | 18·3 | 59·3 | 7·0 GSg |
| 9·2 | | | 20·1 | 48·8 | |
| 9·0 | | | 36·6 | 24·2 | g |
| 9·7 | | | 42·6 | 41·2 | |
| 9·5 | | 50 | 11·6 | 10·3 | |
| 9·3 | | | 13·0 | 30·2 | |
| 9·1 | | | 20·5 | 32·7 | |
| 9·6 | | | 32·0 | 14·4 | |
| 9·4 | | | 40·5 | 33·2 | |
| 9·3 | | | 56·0 | 47·2 | |
| 9·4 | | 51 | 1·0 | 16·9 | |
| 9·6 | | | 17·0 | 14·8 | |
| 9·8 | | | 17·5 | 25·0 | |
| 7·6 | | | 19·0 | 17·3 | 8·0 GSg |
| 9·6 | | | 33·0 | 26·5 | |
| 9·6 | | | 34·0 | 14·4 | |
| 9·7 | | | 38·0 | 24·4 | |
| 9·6 | | | 52·0 | 47·6 | |
| 9·4 | | | 52·0 | 26·6 | |
| 9·4 | | | 54·5 | 27·4 | |
| 9·6 | | 52 | 26·5 | 25·2 | |
| 9·5 | | | 31·0 | 48·8 | |
| 8·4 | | | 49·0 | 20·0 | 8·0 Gg |
| 9·2 | | | 50·5 | 53·4 | |
| 9·5 | | 53 | 0·0 | 19·4 | |
| 9·8 | | | 6·0 | 16·8 | |
| 9·8 | | | 15·0 | 33·8 | |
| 9·6 | | | 31·5 | 3·7 | |
| 9·4 | | | 39·0 | 39·4 | |
| 7·4 | | 54 | 5·5 | 38·4 | 8·0 GSg |



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## 1921—1980.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·8 | 14 | 54 | 10·0 | 35·2 | |
| 9·8 | | | 10·5 | 32·4 | |
| 9·3 | | | 14·0 | 25·8 | ? |
| 9·6 | | | 49·0 | 18·6 | |
| 9·6 | | | 49·0 | 26·1 | |
| 9·7 | | | 58·5 | 10·9 | |
| 9·7 | | 55 | 12·5 | 11·8 | |
| 9·6 | | | 18·0 | 20·6 | |
| 9·4 | | | 24·0 | 7·0 | *g* |
| 9·2 | | | 34·0 | 11·0 | 9·0 *g* |
| 8·9 | | | 37·0 | 1·6 | 8·5 *g* |
| 9·4 | | | 41·0 | 35·6 | |
| 9·7 | | | 49·0 | 42·4 | |
| 9·8 | | | 57·0 | 2·6 | |
| 9·8 | | | 59·0 | 42·9 | |
| 9·2 | | 56 | 2·6 | 1·4 | *g* |
| 9·1 | | | 6·5 | 8·6 | |
| 9·4 | | | 7·5 | 12·0 | |
| 9·8 | | | 17·6 | 58·2 | |
| 7·3 | | | 48·0 | 13·4 | 8·0 GS*g* |
| 9·4 | | | 50·0 | 49·4 | |
| 9·7 | | 57 | 29·5 | 8·3 | |
| 9·7 | | | 34·5 | 26·6 | |
| 9·0 | | | 40·0 | 45·8 | 8·5 *g* |
| 9·6 | | | 45·0 | 19·9 | |
| 9·6 | | | 53·5 | 20·6 | |
| 9·6 | | | 56·0 | 48·5 | |
| 9·4 | | 58 | 7·0 | 15·9 | 9·5 |
| 9·8 | | | 20·0 | 13·5 | |
| 9·8 | | | 22·5 | 52·7 | |
| 9·8 | | | 30·5 | 53·9 | |
| 9·8 | | | 31·0 | 12·5 | |
| 9·0 | | | 31·5 | 49·3 | 8·5 *g* |
| 9·2 | | | 51·0 | 44·9 | |
| 9·6 | | | 52·5 | 8·7 | |
| 9·6 | | 59 | 0·5 | 13·9 | |
| 9·6 | | | 7·0 | 31·1 | *g* |
| 9·2 | | | 8·4 | 57·1 | |
| 9·2 | | | 9·5 | 42·2 | |
| 9·8 | | | 20·5 | 20·9 | |
| 9·4 | | | 21·0 | 51·8 | |
| 9·8 | | | 31·5 | 18·8 | |
| 9·6 | | | 41·0 | 12·3 | |
| 9·6 | | | 44·0 | 38·6 | |
| 9·5 | | | 59·5 | 12·7 | |
| 8·6 | 15 | 0 | 3·5 | 8·4 | 9·0 *g* |
| 9·4 | | | 23·0 | 58·7 | |
| 9·0 | | | 31·0 | 41·7 | 9·0 *g* |
| 9·5 | | | 31·0 | 39·5 | |
| 9·8 | | | 46·5 | 27·0 | |
| 9·3 | | | 57·0 | 17·4 | |
| 8·5 | | 1 | 14·0 | 46·4 | 9·0 *g* |
| 9·0 | | | 19·5 | 11·8 | 8·5 G*g* |
| 9·6 | | | 32·0 | 1·1 | |
| 9·8 | | | 46·0 | 14·0 | |
| 9·2 | | | 51·5 | 1·2 | |
| 8·1 | | 2 | 7·0 | 5·1 | 8·0 GS*g* |
| 9·4 | | | 11·0 | 34·5 | |
| 9·7 | | | 13·5 | 37·6 | |
| 9·6 | | | 28·0 | 52·0 | |

## 1981—2040.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·7 | 15 | 2 | 39·5 | 26·5 | |
| 9·6 | | | 45·0 | 31·8 | |
| 9·6 | | | 55·5 | 20·1 | |
| 9·2 | | 3 | 1·5 | 13·9 | 9·0 |
| 8·0 | | | 12·4 | 2·7 | 7·0 GS*g* |
| 9·4 | | | 42·5 | 35·9 | |
| 9·3 | | | 53·5 | 38·1 | *g* |
| 9·0 | | 4 | 8·7 | 1·2 | *g* |
| 9·7 | | | 16·0 | 32·1 | |
| 9·8 | | | 54·5 | 31·0 | |
| 9·6 | | 5 | 14·5 | 13·5 | |
| 9·8 | | | 38·5 | 35·4 | |
| 9·6 | | | 45·5 | 41·3 | |
| 9·5 | | 6 | 12·9 | 57·7 | |
| 9·8 | | | 13·0 | 40·1 | |
| 9·4 | | | 14·5 | 32·6 | |
| 9·6 | | | 23·4 | 0·5 | |
| 9·7 | | | 41·5 | 6·1 | |
| 9·6 | | | 44·0 | 24·5 | |
| 9·6 | | | 46·0 | 36·7 | |
| 9·7 | | | 48·0 | 25·5 | |
| 9·8 | | | 51·5 | 29·1 | |
| 9·4 | | 7 | 2·0 | 13·3 | |
| 9·2 | | | 5·0 | 14·7 | |
| 9·8 | | | 13·0 | 45·1 | |
| 9·6 | | | 15·0 | 36·3 | |
| 9·6 | | | 20·5 | 34·0 | |
| 9·6 | | | 30·5 | 33·5 | |
| 9·6 | | | 32·0 | 5·9 | |
| 9·6 | | | 34·5 | 34·5 | |
| 9·2 | | | 36·5 | 9·1 | |
| 9·5 | | | 42·0 | 50·1 | |
| 9·0 | | 8 | 11·0 | 42·7 | *g* |
| 9·4 | | | 16·0 | 31·4 | |
| 9·6 | | 9 | 9·5 | 45·3 | |
| 9·4 | | | 16·5 | 29·8 | |
| 9·0 | | | 23·5 | 41·1 | *g* |
| 9·8 | | | 32·9 | 49·9 | |
| 9·8 | | | 36·4 | 4·7 | |
| 9·2 | | | 42·4 | 28·3 | |
| 8·9 | | 10 | 46·4 | 6·3 | |
| 9·3 | | 11 | 24·9 | 32·1 | |
| 9·5 | | | 29·9 | 28·3 | |
| 9·7 | | | 42·9 | 28·1 | |
| 9·3 | | | 56·9 | 35·4 | 9·5 |
| 8·2 | | 12 | 13·9 | 52·2 | 7·5 GS*g* |
| 9·8 | | | 20·4 | 12·9 | |
| 9·4 | | | 42·4 | 44·2 | *g* |
| 9·8 | | | 43·4 | 58·9 | |
| 9·6 | | | 45·4 | 19·6 | |
| 9·8 | | 13 | 2·9 | 49·4 | |
| 9·8 | | | 27·4 | 8·1 | |
| 9·4 | | | 28·4 | 47·0 | |
| 9·5 | | | 28·4 | 43·6 | |
| 9·5 | | | 33·4 | 28·9 | |
| 9·8 | | | 38·4 | 4·8 | |
| 9·0 | | | 42·9 | 12·7 | *g* |
| 9·6 | | | 46·9 | 56·9 | |
| 9·7 | | | 46·9 | 13·0 | |
| 9·5 | | | 48·9 | 45·4 | |

## 2041—2100.

| mag. | h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·5 | 15 | 14 | 8·4 | 53·9 | |
| 9·6 | | | 13·4 | 53·1 | |
| 9·8 | | | 47·4 | 31·1 | |
| 9·0 | | | 57·3 | 59·2 | *g* |
| 9·4 | | | 59·9 | 5·6 | |
| 8·9 | | 15 | 0·3 | 58·4 | 8·5 *g* |
| 9·7 | | | 1·9 | 57·9 | |
| 9·7 | | | 2·4 | 42·5 | |
| 9·2 | | | 4·7 | 1·6 | *g* |
| 9·5 | | | 9·4 | 42·0 | |
| 9·6 | | | 13·4 | 7·1 | |
| 9·3 | | | 24·8 | 59·3 | |
| 9·0 | | | 42·4 | 17·2 | 9·0 *g* |
| 9·3 | | 16 | 9·9 | 2·5 | |
| 9·3 | | | 34·4 | 55·0 | |
| 8·4 | | | 43·8 | 58·8 | 8·5 *g* |
| 9·6 | | 17 | 4·4 | 37·0 | |
| 9·8 | | | 13·4 | 14·1 | |
| 9·3 | | | 26·4 | 25·6 | |
| 9·7 | | | 58·0 | 33·3 | |
| 9·4 | | 18 | 0·0 | 53·5 | |
| 9·6 | | | 3·5 | 4·3 | |
| 9·8 | | | 6·5 | 51·4 | |
| 9·7 | | | 8·0 | 25·8 | |
| 9·8 | | | 13·0 | 25·2 | |
| 9·3 | | | 27·0 | 43·4 | 9·2 *g* |
| 9·8 | | | 30·5 | 9·0 | |
| 9·6 | | | 33·0 | 47·1 | |
| 6·9 | | | 49·0 | 37·6 | 7·0 GS*g* |
| 9·3 | | 19 | 17·0 | 54·3 | |
| 9·3 | | | 19·3 | 4·7 | |
| 9·8 | | | 24·0 | 46·6 | |
| 9·7 | | | 42·5 | 17·5 | |
| 9·1 | | | 52·3 | 18·1 | |
| 9·1 | | | 59·5 | 15·0 | *g* |
| 9·8 | | 20 | 18·2 | 48·6 | |
| 9·7 | | | 18·5 | 6·0 | |
| 9·6 | | | 51·7 | 10·0 | |
| 9·6 | | | 59·2 | 3·6 | |
| 9·0 | | 21 | 39·6 | 27·2 | |
| 9·0 | | | 42·2 | 25·9 | |
| 9·6 | | | 47·2 | 13·6 | |
| 9·8 | | | 51·0 | 53·0 | |
| 9·5 | | 22 | 7·2 | 18·9 | |
| 9·6 | | | 49·2 | 0·2 | |
| 9·8 | | | 57·7 | 31·5 | |
| 9·6 | | 23 | 6·2 | 4·0 | |
| 9·5 | | | 11·7 | 21·9 | |
| 9·0 | | | 15·6 | 20·1 | |
| 8·6 | | | 17·6 | 47·5 | 8·0 *g* |
| 9·7 | | | 34·0 | 1·6 | |
| 9·8 | | | 44·2 | 34·8 | |
| 9·5 | | | 48·3 | 31·5 | |
| 9·5 | | 24 | 22·2 | 56·8 | |
| 9·6 | | | 43·2 | 50·6 | |
| 9·7 | | | 43·2 | 6·6 | |
| 9·3 | | 25 | 45·6 | 29·5 | |
| 9·5 | | | 46·6 | 10·0 | |
| 9·5 | | | 52·7 | 23·5 | |
| 9·8 | | | 55·7 | 20·9 | |

**25 prec.**

| h | m | α s s | δ |
|---|---|---|---|
| 14 | 50 | + 139 + 0·06 d | − 6·2 |
| 15 | 0 | 142 + 0·06 | 5·9 |
| | 10 | 144 + 0·06 | 5·6 |
| | 20 | 147 + 0·07 | 5·4 |
| | 30 | + 150 + 0·07 | − 5·1 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 15 | 20 | + 147 | + 0·07 d | − 5·4 |
| | 30 | 150 | + 0·07 | 5·1 |
| | 40 | 152 | + 0·07 | 4·8 |
| | 50 | 154 | + 0·07 | 4·5 |
| 16 | 0 | 156 | + 0·08 | 4·2 |
| | 10 | 158 | + 0·08 | 3·9 |
| | 20 | 160 | + 0·08 | 3·5 |
| | 30 | + 162 | + 0·08 | − 3·2 |

d = minutes of decl.

## 2101—2160.

| mag. | 15h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·7 | 15 | 26 | 2·2 | 56·1 | |
| 9·0 | | | 28·5 | 35·6 | g |
| 9·1 | | 27 | 39·5 | 5·6 | |
| 9·1 | | 28 | 19·5 | 50·0 | g |
| 9·6 | | | 29·5 | 22·3 | |
| 9·2 | | 29 | 8·5 | 13·2 | g |
| 9·2 | | | 17·5 | 52·0 | 9·0 g |
| 8·4 | | | 44·5 | 39·1 | 8·0 g |
| 9·1 | | 30 | 8·5 | 8·6 | 9·0 g |
| 9·4 | | 31 | 10·5 | 17·8 | |
| 9·6 | | | 20·5 | 8·1 | 8·5 |
| 9·3 | | 33 | 17·5 | 32·6 | 8·2 g |
| 9·6 | | | 36·5 | 55·4 | |
| 8·8 | | | 48·5 | 20·3 | 7·8 Gg |
| 8·8 | | | 49·5 | 18·0 | 8·2 g |
| 9·6 | | 34 | 2·5 | 55·7 | g |
| 9·2 | | | 15·5 | 24·9 | 9·5 |
| 9·4 | | | 41·5 | 44·3 | |
| 9·6 | | | 57·0 | 51·0 | g |
| 9·6 | | 35 | 49·0 | 9·0 | |
| 8·9 | | 36 | 5·0 | 29·6 | 9·0 g |
| 9·6 | | | 19·0 | 42·0 | |
| 9·5 | | | 39·0 | 6·2 | |
| 9·0 | | 37 | 18·0 | 6·6 | |
| 8·8 | | 38 | 5·0 | 59·9 | 9·0 g |
| 8·6 | | | 33·0 | 46·3 | g |
| 9·2 | | | 41·0 | 50·2 | |
| 8·0 | | 39 | 4·0 | 26·0 | g |
| 9·0 | | | 28·0 | 4·8 | g |
| 9·4 | | | 32·0 | 5·0 | g |
| 9·3 | | 41 | 6·0 | 24·6 | |
| 9·6 | | | 22·0 | 8·8 | |
| 9·0 | | | 36·0 | 49·0 | 9·5 g |
| 9·2 | | | 56·0 | 44·6 | 9·5 g |
| 9·0 | | 43 | 5·0 | 47·4 | 9·0 g |
| 8·6 | | | 12·0 | 25·2 | 8·5 g |
| 8·4 | | | 28·0 | 32·8 | 8·0 g |
| 8·4 | | | 51·0 | 36·2 | 8·5 g |
| 9·0 | | | 55·0 | 50·4 | 9·0 g |
| 9·1 | | 44 | 1·0 | 26·3 | g |
| 9·6 | | | 43·0 | 19·9 | |
| 8·4 | | 46 | 12·0 | 44·2 | 8·5 Sg |
| 8·6 | | | 18·0 | 44·7 | 8·0 GSg |
| 8·9 | | | 32·0 | 22·9 | g |
| 9·2 | | 48 | 5·0 | 27·6 | g |
| 8·9 | | 49 | 20·5 | 56·9 | 9·5 g |
| 9·6 | | | 52·0 | 38·0 | |
| 9·4 | | 50 | 9·0 | 6·0 | |
| 9·1 | | | 11·0 | 8·0 | |
| 9·6 | | | 46·0 | 38·4 | |
| 9·6 | | 51 | 40·0 | 38·4 | |
| 9·4 | | 52 | 2·0 | 19·0 | g |
| 9·6 | | | 7·0 | 30·0 | |
| 9·0 | | | 14·0 | 45·0 | g |
| 9·2 | | | 50·0 | 5·6 | |
| 9·0 | | 53 | 5·0 | 56·0 | 9·5 g |
| 9·2 | | | 32·0 | 12·2 | g |
| 9·5 | | | 59·0 | 27·0 | |
| 9·2 | | 54 | 6·0 | 25·4 | 9·5 g |
| 9·6 | | | 54·0 | 5·0 | |

## 2161—2220.

| mag. | 15h.–16h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·0 | 15 | 54 | 54·0 | 28·0 | 9·0 g |
| 9·3 | | 55 | 18·0 | 39·5 | |
| 8·2 | | | 54·0 | 43·0 | GSg |
| 9·2 | | 56 | 30·5 | 57·7 | 9·5 g |
| 9·4 | | 57 | 42·0 | 29·5 | |
| 9·6 | | | 53·0 | 23·5 | |
| 9·4 | | 58 | 11·0 | 48·6 | g |
| 9·0 | | | 23·0 | 1·3 | |
| 8·7 | | | 27·0 | 15·0 | 9·0 g |
| 9·4 | | | 35·0 | 48·3 | |
| 8·8 | | 59 | 10·0 | 56·0 | 9·5 g |
| 9·6 | | | 11·0 | 40·0 | |
| 9·1 | 16 | 0 | 56·0 | 23·6 | |
| 9·5 | | 1 | 13·0 | 10·6 | |
| 9·3 | | | 31·0 | 46·8 | |
| 8·5 | | 2 | 46·0 | 13·2 | 9·5 g |
| 9·6 | | | 46·0 | 47·0 | |
| 9·6 | | 3 | 5·0 | 46·8 | |
| 8·4 | | | 28·0 | 9·8 | 8·5 g |
| 9·0 | | | 40·0 | 26·6 | 9·0 g |
| 7·6 | | | 42·0 | 40·3 | GSogr |
| 8·7 | | | 48·0 | 20·0 | g |
| 9·6 | | | 48·0 | 59·5 | |
| 9·2 | | 4 | 10·0 | 4·0 | |
| 8·7 | | | 21·0 | 26·9 | 9·5 g |
| 8·8 | | | 42·0 | 23·8 | 9·0 g |
| 9·7 | | 5 | 28·0 | 12·0 | |
| 9·4 | | | 29·0 | 19·9 | |
| 10·1 | | | 40·0 | 6·8 | |
| 10·0 | | | 59·0 | 14·1 | |
| 9·4 | | 6 | 16·0 | 51·1 | g |
| 9·6 | | | 31·0 | 12·4 | |
| 10·1 | | | 38·0 | 34·1 | |
| 10·1 | | | 50·0 | 27·5 | |
| 10·0 | | 7 | 22·0 | 5·1 | |
| 9·2 | | | 41·0 | 58·0 | |
| 8·6 | | | 48·0 | 45·9 | g |
| 10·1 | | | 54·0 | 17·5 | |
| 9·8 | | 8 | 3·0 | 5·1 | |
| 10·0 | | | 10·0 | 52·0 | |
| 9·4 | | | 20·0 | 35·9 | |
| 10·0 | | | 24·0 | 18·1 | |
| 10·0 | | | 35·0 | 16·2 | |
| 9·2 | | 9 | 14·5 | 40·6 | g |
| 9·6 | | | 43·0 | 32·3 | |
| 9·6 | | | 45·0 | 32·2 | |
| 10·1 | | 10 | 2·0 | 9·7 | |
| 10·1 | | | 21·0 | 39·0 | |
| 10·0 | | | 21·0 | 23·8 | |
| 10·0 | | | 28·0 | 12·3 | |
| 10·1 | | | 47·0 | 28·9 | |
| 10·0 | | | 55·3 | 0·1 | |
| 10·1 | | 11 | 27·0 | 8·0 | |
| 9·0 | | | 31·0 | 39·5 | 9·5 g |
| 10·0 | | | 34·0 | 7·1 | |
| 9·7 | | | 34·0 | 17·0 | |
| 10·0 | | | 39·0 | 49·4 | |
| 9·6 | | | 43·0 | 45·4 | |
| 10·1 | | 12 | 5·0 | 39·1 | |
| 9·8 | | | 8·0 | 40·6 | |

## 2221—2280.

| mag. | 16h. h | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·4 | 16 | 12 | 17·3 | 0·1 | |
| 10·0 | | | 24·0 | 50·0 | |
| 10·0 | | | 31·0 | 3·8 | |
| 9·6 | | | 32·0 | 34·6 | 9·5 |
| 9·6 | | 13 | 9·0 | 46·6 | |
| 10·1 | | | 19·0 | 24·9 | |
| 10·1 | | | 50·0 | 49·9 | |
| 9·4 | | | 55·0 | 9·9 | |
| 9·4 | | 14 | 4·0 | 40·0 | |
| 9·6 | | 15 | 3·0 | 36·7 | |
| 10·0 | | | 20·0 | 11·1 | |
| 9·6 | | | 29·0 | 23·8 | |
| 8·0 | | | 30·0 | 50·1 | 7·5 GSg |
| 10·1 | | | 33·0 | 19·9 | |
| 8·8 | | | 34·0 | 12·9 | 9·5 g |
| 10·0 | | | 42·0 | 54·4 | |
| 9·6 | | | 42·0 | 32·0 | |
| 9·8 | | | 46·0 | 41·3 | |
| 9·8 | | 16 | 33·0 | 5·9 | g |
| 9·8 | | | 40·0 | 19·1 | |
| 9·6 | | | 49·0 | 47·3 | 9·5 |
| 10·1 | | 17 | 4·0 | 34·8 | |
| 9·6 | | | 5·0 | 49·2 | |
| 9·2 | | | 24·0 | 46·8 | 9·5g |
| 9·4 | | | 32·0 | 7·2 | |
| 9·6 | | | 57·0 | 41·8 | |
| 9·7 | | 18 | 17·0 | 18·2 | |
| 9·4 | | | 32·5 | 59·1 | |
| 10·1 | | | 45·0 | 35·2 | |
| 9·0 | | | 46·0 | 14·2 | |
| 8·6 | | 19 | 17·0 | 39·4 | 9·2 g |
| 10·1 | | | 22·0 | 10·2 | |
| 9·4 | | | 29·0 | 15·9 | |
| 10·0 | | | 32·0 | 51·2 | |
| 8·8 | | | 44·0 | 51·6 | 8·2 Gg |
| 7·2 | | 20 | 33·0 | 42·7 | 6·0 GSg |
| 10·0 | | | 56·0 | 33·0 | |
| 9·8 | | 21 | 13·0 | 51·1 | |
| 9·6 | | | 17·0 | 24·1 | |
| 9·8 | | | 41·0 | 54·4 | |
| 9·2 | | 22 | 1·0 | 27·3 | |
| 9·4 | | | 14·0 | 46·2 | |
| 10·1 | | | 27·0 | 30·0 | |
| 9·2 | | 23 | 21·0 | 40·1 | |
| 9·6 | | 24 | 13·0 | 37·1 | g |
| 10·1 | | | 28·0 | 9·5 | |
| 9·8 | | | 29·0 | 19·1 | |
| 9·6 | | | 36·0 | 10·0 | g |
| 10·0 | | 25 | 8·0 | 5·9 | g |
| 10·1 | | | 15·0 | 7·1 | |
| 9·4 | | | 17·0 | 6·1 | g |
| 10·1 | | | 18·3 | 2·8 | |
| 9·8 | | | 20·0 | 15·7 | |
| 9·0 | | | 20·0 | 11·1 | g |
| 9·8 | | 26 | 4·0 | 59·1 | |
| 10·0 | | | 42·0 | 23·9 | |
| 10·1 | | 27 | 13·0 | 31·5 | |
| 10·0 | | | 32·0 | 53·7 | |
| 9·2 | | | 34·5 | 59·4 | |
| 9·8 | | | 48·0 | 46·8 | |



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**2281—2340.**

| mag. | h (16h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.6 | 16 | 28 | 2.0 | 51.3 | |
| 10.1 | | | 25.0 | 18.8 | |
| 10.1 | | | 45.0 | 2.9 | |
| 7.0 | | | 57.0 | 19.7 | 8.0 GS*g* |
| 10.1 | | 29 | 16.0 | 20.4 | |
| 9.6 | | | 24.0 | 54.1 | |
| 10.1 | | | 31.0 | 41.0 | |
| 10.0 | | | 36.0 | 21.6 | |
| 10.1 | | 30 | 1.0 | 4.1 | |
| 9.8 | | | 3.0 | 40.6 | |
| 9.6 | | | 30.0 | 10.0 | |
| 9.7 | | | 40.0 | 15.1 | |
| 9.6 | | | 58.0 | 44.8 | |
| 10.0 | | | 59.0 | 29.9 | |
| 9.6 | | 31 | 1.0 | 34.1 | |
| 9.6 | | | 8.0 | 44.3 | *g* |
| 9.8 | | | 19.0 | 18.2 | |
| 9.6 | | | 21.0 | 32.7 | |
| 9.0 | | 32 | 27.0 | 38.2 | |
| 10.0 | | | 31.0 | 55.9 | |
| 9.0 | | | 33.0 | 27.0 | *g* |
| 9.8 | | 33 | 21.0 | 32.1 | |
| 9.6 | | | 48.0 | 43.3 | *g* |
| 9.4 | | | 53.0 | 44.1 | *g* |
| 9.4 | | 34 | 21.0 | 27.3 | |
| 9.6 | | | 38.0 | 30.4 | |
| 10.1 | | | 55.0 | 28.6 | |
| 10.1 | | 35 | 23.0 | 26.0 | |
| 10.1 | | 36 | 11.0 | 16.3 | |
| 9.2 | | | 29.8 | 56.3 | 9.5 *g* |
| 8.2 | | | 52.0 | 23.2 | 8.2 *g* |
| 10.0 | | 37 | 34.0 | 39.8 | |
| 10.0 | | 38 | 35.0 | 55.7 | |
| 9.0 | | | 41.0 | 53.1 | *g* |
| 10.0 | | | 52.0 | 25.5 | |
| 10.0 | | 39 | 0.0 | 44.5 | |
| 10.0 | | | 6.0 | 17.1 | |
| 9.4 | | | 22.0 | 7.1 | |
| 8.0 | | | 23.0 | 15.3 | 8.5 *g* |
| 9.2 | | | 27.5 | 59.1 | *g* |
| 10.1 | | | 29.0 | 55.5 | *g* |
| 7.7 | | | 41.0 | 22.8 | 8.0 *g* |
| 10.1 | | 41 | 4.0 | 49.1 | |
| 9.2 | | | 31.0 | 19.5 | *g* |
| 9.4 | | 42 | 47.0 | 9.4 | |
| 6.8 | | | 53.0 | 54.1 | 6.8 GS*g* |
| 10.1 | | 43 | 17.0 | 9.1 | |
| 10.0 | | | 40.0 | 54.1 | 9.2 *g* |
| 10.0 | | 44 | 1.0 | 34.0 | |
| 10.1 | | | 27.0 | 6.8 | |
| 10.0 | | | 50.0 | 6.1 | |
| 10.0 | | 46 | 17.0 | 40.6 | |
| 9.4 | | | 21.0 | 37.2 | |
| 9.4 | | | 46.0 | 12.2 | *g* |
| 9.4 | | 47 | 56.0 | 37.9 | |
| 9.8 | | 48 | 15.0 | 29.4 | |
| 10.1 | | | 45.0 | 39.5 | |
| 9.4 | | | 52.0 | 14.4 | |
| 9.8 | | 49 | 15.0 | 21.1 | |
| 9.6 | | | 33.0 | 3.1 | *g* |

**2341—2400.**

| mag. | h (16h–17h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 10.0 | 16 | 49 | 42.0 | 43.3 | |
| 8.3 | | | 47.0 | 6.5 | 8.8 *g* |
| 10.1 | | 50 | 7.0 | 25.3 | |
| 9.8 | | | 17.0 | 30.2 | |
| 10.1 | | | 29.0 | 48.7 | |
| 8.6 | | | 30.5 | 14.0 | 9.0 *g* |
| 9.6 | | | 41.0 | 28.8 | |
| 10.0 | | | 42.0 | 49.9 | |
| 8.8 | | 51 | 52.5 | 12.9 | 9.2 *g* |
| 10.1 | | 52 | 30.0 | 40.0 | |
| 9.0 | | 53 | 5.5 | 29.3 | *g* |
| 9.4 | | | 22.5 | 42.2 | *g* |
| 9.7 | | | 35.0 | 33.3 | *g* |
| 8.8 | | | 48.5 | 49.3 | *g* |
| 9.8 | | 54 | 59.5 | 15.3 | |
| 8.2 | | 55 | 52.5 | 10.5 | 7.7 G*g* |
| 8.0 | | | 59.0 | 15.1 | 8.0 *g* |
| 9.8 | | 56 | 9.0 | 37.5 | |
| 9.8 | | | 51.0 | 1.9 | |
| 9.0 | | 57 | 42.0 | 4.0 | |
| 7.4 | | 58 | 12.0 | 33.3 | 6.5 GS*g* |
| 9.7 | | | 13.0 | 42.8 | |
| 9.7 | | 59 | 13.0 | 12.8 | |
| 8.8 | | | 27.0 | 25.7 | 7.8 G*g* |
| 9.2 | | | 33.0 | 11.2 | |
| 9.1 | 17 | 0 | 42.0 | 33.5 | |
| 9.8 | | | 43.3 | 1.5 | |
| 9.0 | | 4 | 9.0 | 14.0 | *g* |
| 9.0 | | 6 | 14.0 | 7.9 | |
| 9.8 | | | 55.0 | 10.3 | |
| 8.2 | | 8 | 29.0 | 18.3 | 7.5 GS*g* |
| 9.0 | | 9 | 54.0 | 17.9 | |
| 8.8 | | 10 | 21.0 | 30.3 | 9.0 *g* |
| 9.2 | | 11 | 43.0 | 1.6 | |
| 9.4 | | 12 | 26.0 | 29.9 | |
| 9.8 | | | 41.0 | 52.3 | *g* |
| 9.8 | | | 50.0 | 20.3 | |
| 8.8 | | 13 | 18.0 | 29.3 | 9.0 *g* |
| 9.4 | | | 29.0 | 40.1 | *g* |
| 8.0 | | 14 | 40.0 | 31.1 | 7.0 GS*g* |
| 9.4 | | 15 | 18.0 | 33.7 | |
| 9.8 | | | 33.5 | 59.7 | *g* |
| 9.2 | | | 54.0 | 16.8 | |
| 9.8 | | 16 | 15.0 | 45.8 | |
| 8.8 | | 17 | 54.0 | 31.2 | *g* |
| 9.2 | | | 59.0 | 16.9 | *g* |
| 9.4 | | 19 | 26.0 | 49.9 | |
| 9.7 | | 20 | 34.0 | 29.1 | *g* |
| 9.1 | | | 52.0 | 43.9 | |
| 8.8 | | | 54.0 | 16.9 | *g* |
| 9.6 | | 21 | 37.0 | 24.2 | |
| 9.7 | | | 58.0 | 11.0 | |
| 9.8 | | 22 | 17.0 | 43.2 | 9.5 |
| 9.1 | | 23 | 41.0 | 15.8 | 9.5 *g* |
| 9.0 | | | 53.0 | 24.1 | 8.5 *g* |
| 9.8 | | 24 | 10.0 | 52.1 | |
| 7.2 | | | 48.0 | 36.5 | 8.0 GS*g* |
| 9.1 | | | 58.0 | 25.3 | |
| 8.8 | | 25 | 26.0 | 40.2 | 9.0 *g* |
| 9.8 | | 26 | 11.0 | 40.7 | *g* |

**2401—2460.**

| mag. | h (17h) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 8.5 | 17 | 26 | 37.0 | 13.9 | *g* |
| 9.2 | | | 45.0 | 55.5 | 9.5 *g* |
| 9.8 | | | 59.0 | 30.0 | |
| 9.8 | | | 59.0 | 11.1 | |
| 9.0 | | 27 | 33.0 | 34.9 | *g* |
| 9.8 | | 28 | 11.5 | 58.9 | |
| 8.8 | | | 43.0 | 47.9 | 9.5 |
| 8.8 | | 30 | 0.5 | 10.2 | 8.5 *g* |
| 9.1 | | 31 | 51.5 | 17.7 | 9.0 *g* |
| 9.8 | | 32 | 17.5 | 18.3 | 9.5 *g* |
| 8.2 | | | 17.5 | 16.3 | 8.0 *g* |
| 9.0 | | | 24.5 | 17.7 | *g* |
| 9.8 | | 33 | 19.5 | 58.6 | |
| 9.5 | | 34 | 13.9 | 44.1 | |
| 9.4 | | | 16.9 | 35.6 | |
| 9.2 | | | 17.5 | 43.9 | 9.5 *g* |
| 9.8 | | | 24.9 | 22.6 | |
| 9.8 | | | 26.9 | 32.9 | |
| 9.5 | | | 37.6 | 23.5 | |
| 9.8 | | 35 | 9.1 | 4.0 | |
| 8.5 | | 36 | 1.1 | 39.1 | 8.5 *g* |
| 9.8 | | | 11.1 | 59.6 | |
| 9.5 | | | 18.6 | 0.8 | |
| 9.2 | | 37 | 8.6 | 29.6 | |
| 9.6 | | | 27.1 | 37.1 | |
| 9.3 | | 38 | 3.1 | 12.2 | |
| 9.3 | | | 31.1 | 26.1 | *g* |
| 8.3 | | | 36.1 | 58.0 | *g* |
| 9.6 | | | 48.6 | 51.1 | |
| 9.8 | | 39 | 14.6 | 46.7 | |
| 9.6 | | | 29.6 | 33.4 | |
| 9.8 | | | 48.1 | 1.4 | |
| 9.8 | | | 59.1 | 24.6 | |
| 9.8 | | 40 | 29.1 | 49.4 | |
| 9.8 | | | 34.1 | 9.0 | |
| 8.5 | | | 47.6 | 25.7 | 8.0 *g* |
| 9.8 | | 41 | 22.6 | 55.2 | |
| 8.5 | | | 36.0 | 29.8 | 8.5 *g* |
| 9.6 | | | 40.0 | 29.5 | |
| 9.5 | | 42 | 8.5 | 19.7 | *g* |
| 9.3 | | | 13.5 | 59.1 | |
| 9.8 | | | 47.0 | 19.7 | |
| 9.8 | | | 54.5 | 6.3 | |
| 9.2 | | 43 | 5.0 | 47.6 | |
| 8.2 | | | 7.0 | 8.0 | 8.0 *g* |
| 8.8 | | | 25.3 | 1.7 | |
| 9.8 | | | 26.0 | 24.9 | |
| 9.4 | | | 32.5 | 24.4 | |
| 9.3 | | | 48.0 | 22.3 | *g* |
| 9.8 | | 44 | 43.5 | 4.1 | |
| 9.4 | | 45 | 1.0 | 23.9 | |
| 8.9 | | | 25.0 | 10.6 | 8.5 *g* |
| 9.4 | | | 53.5 | 28.9 | |
| 9.1 | | | 55.5 | 9.7 | |
| 9.4 | | | 56.0 | 48.4 | |
| 9.0 | | | 59.5 | 44.4 | |
| 9.8 | | 46 | 9.0 | 25.1 | |
| 8.2 | | | 18.0 | 17.9 | *g* |
| 8.3 | | | 18.5 | 34.4 | 9.0 *g* |
| 9.8 | | | 28.5 | 21.2 | |

**25 prec.**

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 16 | 20 | +160+0.08 d | −3.5 |
| | 30 | 162+0.08 | 3.2 |
| | 40 | 163+0.08 | 2.9 |
| | 50 | 164+0.08 | 2.5 |
| 17 | 0 | 165+0.08 | 2.2 |
| | 10 | 166+0.08 | 1.8 |
| | 20 | 167+0.09 | 1.5 |
| | 30 | 168+0.09 | 1.1 |
| | 40 | 168+0.09 | 0.7 |
| | 50 | +168+0.09 | −0.4 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 17 | 40 | +168 +0·09 d | −0·7 |
| | 50 | 168 +0·09 | −0·4 |
| 18 | 0 | 169 +0·09 | 0·0 |
| | 10 | 168 +0·09 | +0·4 |
| | 20 | 168 +0·09 | 0·7 |
| | 30 | 168 +0·09 | 1·1 |
| | 40 | 167 +0·09 | 1·5 |
| | 50 | 166 +0·08 | 1·8 |
| 19 | 0 | 165 +0·08 | 2·2 |
| | 10 | 164 +0·08 | 2·5 |
| | 20 | +163 +0·08 | +2·9 |

d = minutes of decl.

## 2461—2520.

| mag. | h (17h.–18h.) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·8 | 17 | 47 | 6·0 | 55·6 | |
| 9·8 | | | 25·4 | 36·7 | |
| 9·8 | | | 25·9 | 47·8 | |
| 9·5 | | | 32·4 | 5·8 | |
| 9·3 | | | 36·4 | 8·6 | |
| 8·9 | | | 45·3 | 1·7 | g |
| 9·0 | | | 48·9 | 30·6 | |
| 9·6 | | | 49·4 | 44·4 | |
| 8·6 | | | 59·4 | 40·4 | g |
| 8·5 | | 48 | 17·4 | 23·9 | g |
| 9·8 | | | 19·4 | 11·4 | |
| 9·8 | | | 23·0 | 36·2 | |
| 8·8 | | | 46·9 | 28·3 | g |
| 9·1 | | 49 | 27·9 | 34·3 | g |
| 9·8 | | | 41·0 | 55·7 | |
| 9·8 | | 50 | 35·9 | 6·8 | |
| 9·6 | | | 41·9 | 56·4 | |
| 9·8 | | | 52·4 | 54·5 | |
| 9·4 | | | 57·7 | 11·4 | |
| 9·6 | | 51 | 4·7 | 55·0 | |
| 9·8 | | | 8·7 | 7·0 | |
| 9·4 | | | 25·7 | 46·0 | |
| 8·2 | | | 28·2 | 13·5 | 8·5 g |
| 9·1 | | | 44·7 | 18·8 | g |
| 9·8 | | 52 | 18·7 | 2·6 | |
| 9·3 | | | 53·2 | 25·3 | |
| 9·5 | | | 56·2 | 35·9 | |
| 9·8 | | 53 | 23·2 | 6·8 | |
| 9·6 | | | 55·2 | 20·8 | |
| 9·8 | | 54 | 4·7 | 8·4 | |
| 9·6 | | | 26·2 | 8·6 | |
| 8·8 | | | 27·7 | 16·3 | g |
| 8·4 | | | 41·2 | 5·0 | g |
| 8·8 | | 55 | 49·2 | 40·8 | g |
| 9·8 | | 56 | 11·4 | 18·4 | |
| 8·8 | | | 13·4 | 17·5 | 8·5 g |
| 9·8 | | | 51·4 | 7·0 | |
| 9·0 | | 57 | 5·4 | 25·3 | |
| 9·8 | | | 9·9 | 34·0 | |
| 9·3 | | | 11·4 | 4·8 | |
| 9·8 | | | 38·4 | 29·0 | |
| 8·7 | | | 38·9 | 19·8 | 9·0 g |
| 8·8 | | 58 | 22·9 | 16·0 | 9·0 g |
| 9·0 | | | 55·9 | 58·0 | |
| 9·2 | | 59 | 34·9 | 18·1 | |
| 9·8 | | | 37·3 | 10·7 | |
| 6·7 | 18 | 0 | 0·4 | 46·3 | 6·5 GScgg |
| 9·6 | | | 28·9 | 49·3 | |
| 9·8 | | | 29·9 | 20·1 | |
| 9·8 | | | 30·9 | 54·2 | |
| 9·3 | | | 40·9 | 42·0 | |
| 9·6 | | | 46·9 | 42·6 | |
| 8·8 | | 1 | 12·4 | 41·6 | 9·5 g |
| 9·8 | | | 24·4 | 10·3 | |
| 9·6 | | | 31·4 | 42·0 | |
| 8·6 | | | 50·5 | 40·3 | 8·0 Ggg |
| 9·4 | | | 56·5 | 8·6 | |
| 8·6 | | 2 | 13·0 | 7·1 | 8·5 g |
| 9·8 | | | 45·5 | 0·0 | |
| 9·6 | | | 50·2 | 57·5 | |

## 2521—2580.

| mag. | h (18h.) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·5 | 18 | 3 | 11·0 | 35·6 | |
| 9·0 | | 4 | 16·5 | 46·0 | g |
| 9·6 | | | 40·0 | 4·0 | |
| 9·8 | | 5 | 0·0 | 6·6 | |
| 9·8 | | | 35·0 | 6·9 | |
| 9·0 | | | 43·0 | 9·0 | 8·5 g |
| 8·4 | | | 44·0 | 8·0 | 8·0 Gg |
| 9·6 | | 6 | 0·0 | 59·3 | |
| 9·8 | | | 3·5 | 41·8 | |
| 9·4 | | | 31·5 | 57·5 | |
| 9·3 | | 7 | 1·5 | 40·7 | |
| 9·8 | | | 6·0 | 24·5 | |
| 9·4 | | | 44·5 | 49·9 | |
| 9·6 | | 8 | 9·5 | 8·2 | |
| 9·8 | | 9 | 5·9 | 1·2 | |
| 9·0 | | | 26·0 | 24·1 | |
| 9·2 | | 10 | 0·2 | 39·1 | |
| 9·6 | | | 41·2 | 29·4 | |
| 9·6 | | | 50·4 | 0·9 | |
| 9·8 | | | 55·0 | 58·1 | |
| 9·8 | | | 57·7 | 47·8 | |
| 9·6 | | 11 | 13·2 | 5·3 | |
| 9·4 | | | 17·7 | 52·2 | g |
| 8·7 | | | 45·2 | 36·2 | 9·0 g |
| 9·4 | | | 48·7 | 46·1 | |
| 9·5 | | 12 | 37·7 | 5·8 | |
| 9·2 | | | 39·7 | 25·0 | |
| 9·4 | | 13 | 16·2 | 12·0 | |
| 8·8 | | | 22·2 | 37·0 | g |
| 9·2 | | 14 | 4·2 | 20·5 | 8·5 g |
| 9·8 | | 15 | 1·2 | 21·4 | |
| 9·6 | | 17 | 17·7 | 28·8 | |
| 9·1 | | | 49·7 | 13·2 | g |
| 8·8 | | 18 | 15·7 | 38·8 | g |
| 8·6 | | | 44·4 | 10·7 | g |
| 9·6 | | 19 | 26·2 | 59·1 | |
| 9·8 | | 20 | 49·2 | 46·8 | |
| 9·8 | | 21 | 3·7 | 29·4 | |
| 8·8 | | | 20·7 | 59·6 | 8·5 g |
| 9·3 | | | 29·2 | 17·6 | g |
| 8·5 | | | 37·9 | 1·6 | g |
| 9·8 | | | 54·7 | 29·2 | |
| 9·8 | | 22 | 38·7 | 8·6 | |
| 9·6 | | | 57·2 | 18·4 | |
| 8·6 | | 23 | 20·4 | 36·2 | 8·5 g |
| 9·8 | | 24 | 6·2 | 7·4 | |
| 8·4 | | | 25·7 | 58·4 | 9·0 g |
| 8·5 | | | 36·4 | 19·8 | 7·8 GSg |
| 9·8 | | | 45·7 | 24·4 | |
| 8·1 | | | 48·7 | 54·0 | 7·2 GSg |
| 9·8 | | | 55·2 | 41·0 | |
| 8·6 | | 25 | 45·3 | 59·9 | 8·7 g |
| 9·0 | | 27 | 17·5 | 27·6 | 9·8 Gg |
| 8·4 | | | 20·5 | 25·6 | 8·0 Gg |
| 9·3 | | 28 | 21·0 | 4·0 | g |
| 7·3 | | | 23·0 | 24·5 | 7·5 GSg |
| 9·6 | | | 33·0 | 38·0 | g |
| 9·5 | | | 49·0 | 47·4 | g |
| 9·5 | | 30 | 30·0 | 15·4 | g |
| 9·5 | | | 33·5 | 58·1 | |

## 2581—2640.

| mag. | h (18h.–19h.) | m | s | −70° ′ | |
|---|---|---|---|---|---|
| 9·6 | 18 | 31 | 49·0 | 57·0 | |
| 8·2 | | 33 | 22·0 | 6·4 | 8·0 Gg |
| 8·8 | | | 32·0 | 8·0 | 9·0 g |
| 9·5 | | 35 | 15·0 | 12·0 | 9·5 g |
| 9·6 | | 37 | 12·0 | 13·1 | g |
| 9·6 | | | 48·5 | 12·9 | g |
| 8·2 | | 39 | 1·5 | 3·0 | 8·8 g |
| 8·7 | | 42 | 2·0 | 38·0 | 8·5 g |
| 9·6 | | | 19·0 | 51·1 | |
| 9·6 | | | 42·0 | 17·7 | |
| 9·0 | | 43 | 30·0 | 0·2 | g |
| 9·0 | | 44 | 8·0 | 58·0 | 9·0 g |
| 6·7 | | 45 | 24·0 | 37·2 | 6·5 GScg |
| 8·4 | | 46 | 10·0 | 5·9 | 8·0 Gg |
| 8·4 | | | 58·0 | 43·2 | 8·5 g |
| 9·0 | | 48 | 20·0 | 13·4 | 9·5 g |
| 9·6 | | 51 | 23·0 | 39·3 | g |
| 9·0 | | | 41·0 | 14·4 | 8·5 g |
| 9·6 | | | 49·0 | 46·9 | |
| 9·6 | | | 53·0 | 30·0 | g |
| 7·7 | | 52 | 33·0 | 0·5 | 8·2 Gg |
| 8·4 | | 57 | 13·0 | 16·2 | g |
| 9·6 | 19 | 0 | 10·0 | 49·0 | g |
| 9·4 | | | 28·0 | 51·2 | g |
| 8·9 | | 2 | 29·0 | 32·1 | g |
| 9·0 | | 5 | 30·0 | 21·0 | 9·5 g |
| 9·0 | | | 48·0 | 54·8 | g |
| 8·4 | | 6 | 35·2 | 5·8 | 8·0 GSg |
| 10·4 | | | 44·8 | 25·3 | |
| 10·0 | | | 49·3 | 43·2 | |
| 9·6 | | | 53·3 | 9·5 | |
| 9·8 | | | 55·8 | 7·5 | |
| 8·6 | | | 59·6 | 5·5 | 8·5 GSg |
| 10·3 | | 7 | 34·3 | 52·3 | |
| 8·8 | | 8 | 15·8 | 42·0 | 8·5 g |
| 10·3 | | | 28·3 | 57·8 | |
| 10·4 | | | 54·8 | 12·7 | |
| 10·0 | | 9 | 11·8 | 13·9 | |
| 9·4 | | | 32·3 | 1·9 | |
| 9·8 | | | 32·8 | 48·4 | |
| 10·2 | | | 36·8 | 6·7 | |
| 10·3 | | | 45·8 | 1·7 | |
| 10·4 | | 10 | 7·3 | 3·0 | |
| 10·2 | | | 9·3 | 44·5 | |
| 10·3 | | | 17·8 | 5·5 | |
| 10·2 | | | 19·3 | 16·0 | |
| 7·9 | | | 35·3 | 20·0 | Gg |
| 10·2 | | 11 | 21·3 | 3·9 | |
| 8·6 | | 12 | 18·3 | 1·0 | g |
| 8·4 | | | 31·3 | 42·9 | 8·5 g |
| 8·8 | | | 42·3 | 32·9 | 8·0 g |
| 10·4 | | | 47·3 | 13·4 | |
| 9·7 | | | 54·8 | 23·8 | |
| 9·8 | | | 55·3 | 35·0 | |
| 9·9 | | 13 | 40·3 | 15·7 | |
| 9·0 | | 14 | 20·8 | 31·6 | g |
| 10·2 | | | 26·3 | 28·3 | |
| 10·0 | | | 59·3 | 22·4 | |
| 8·6 | | 15 | 24·3 | 33·4 | 8·8 g |
| 9·9 | | | 25·8 | 48·7 | |



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## 2641—2700.

| mag. | h (19h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.1 | 19 | 15 | 37.3 | 54.8 | 8.2 G*g* |
| 10.4 | | 16 | 22.8 | 8.6 | |
| 9.6 | | | 49.3 | 10.5 | *g* |
| 9.8 | | | 54.3 | 2.5 | *g* |
| 10.2 | | | 54.3 | 26.8 | |
| 8.8 | | 17 | 5.8 | 17.6 | 7.5 G*g* |
| 9.8 | | | 9.3 | 38.3 | |
| 10.4 | | | 11.8 | 5.6 | |
| 9.2 | | | 27.8 | 3.5 | 8.0 *g* |
| 10.0 | | | 44.3 | 19.5 | |
| 9.2 | | | 47.3 | 36.2 | |
| 10.4 | | 18 | 14.3 | 21.4 | |
| 8.6 | | | 39.1 | 56.7 | 8.5 *g* |
| 10.2 | | | 49.3 | 50.7 | |
| 9.1 | | 19 | 26.3 | 22.1 | |
| 8.6 | | | 45.8 | 33.8 | *g* |
| 10.0 | | 20 | 12.8 | 48.3 | |
| 9.8 | | | 16.3 | 45.6 | |
| 10.3 | | | 19.3 | 15.7 | |
| 7.9 | | | 49.3 | 46.1 | 8.0 *g* |
| 9.9 | | 21 | 16.3 | 24.5 | |
| 10.0 | | | 18.8 | 55.2 | |
| 10.0 | | | 27.8 | 26.4 | |
| 8.2 | | | 37.8 | 13.8 | 8.5 *g* |
| 9.7 | | 22 | 47.9 | 40.2 | |
| 9.2 | | 23 | 6.9 | 7.1 | |
| 9.0 | | | 26.4 | 4.9 | 9.0 *g* |
| 10.4 | | | 31.9 | 30.9 | |
| 10.4 | | 24 | 5.4 | 18.8 | |
| 10.0 | | | 22.4 | 9.0 | |
| 10.4 | | | 22.4 | 16.9 | |
| 9.5 | | | 46.4 | 24.2 | |
| 9.8 | | 25 | 36.9 | 4.8 | |
| 8.5 | | | 37.9 | 7.3 | 8.5 *g* |
| 9.0 | | | 55.9 | 39.4 | 9.0 *g* |
| 9.1 | | 26 | 0.3 | 2.5 | 9.0 *g* |
| 9.6 | | | 4.4 | 4.4 | |
| 9.4 | | | 47.9 | 15.7 | |
| 10.4 | | | 58.9 | 44.4 | |
| 9.7 | | 27 | 12.4 | 18.3 | |
| 10.2 | | | 34.9 | 51.4 | |
| 10.4 | | | 36.4 | 16.5 | |
| 10.4 | | | 59.4 | 46.7 | |
| 9.7 | | 28 | 16.4 | 9.8 | |
| 9.7 | | 29 | 0.9 | 42.7 | |
| 9.6 | | | 15.4 | 57.4 | 9.0 *g* |
| 9.5 | | | 57.7 | 29.9 | |
| 9.4 | | 30 | 9.2 | 13.3 | *g* |
| 10.0 | | 31 | 29.7 | 13.9 | |
| 10.3 | | | 30.8 | 30.7 | |
| 8.0 | | | 46.7 | 18.2 | 8.0 GS*g* |
| 9.6 | | | 50.7 | 41.9 | |
| 8.1 | | | 58.7 | 55.0 | 7.0 GS*g* |
| 9.9 | | 32 | 8.7 | 19.5 | |
| 9.8 | | | 15.7 | 19.9 | |
| 9.8 | | | 16.7 | 6.7 | |
| 10.0 | | | 38.7 | 35.1 | |
| 9.9 | | | 39.7 | 22.6 | |
| 9.5 | | | 48.2 | 4.3 | |
| 9.6 | | | 49.7 | 32.8 | *g* |

## 2701—2760.

| mag. | h (19h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.8 | 19 | 33 | 13.2 | 30.9 | |
| 8.8 | | | 19.2 | 56.2 | 8.7 *g* |
| 9.0 | | | 34.2 | 57.3 | 9.5 *g* |
| 10.4 | | | 35.2 | 17.9 | |
| 10.0 | | | 44.2 | 48.9 | |
| 10.0 | | 34 | 13.7 | 53.4 | |
| 10.0 | | | 52.8 | 23.1 | |
| 10.2 | | | 57.3 | 10.3 | |
| 10.0 | | 35 | 16.3 | 56.0 | |
| 9.2 | | | 21.3 | 53.0 | |
| 8.6 | | | 40.3 | 29.1 | 9.0 *g* |
| 9.7 | | | 55.3 | 47.0 | |
| 10.4 | | 37 | 3.8 | 20.6 | |
| 8.8 | | | 3.8 | 30.1 | 8.8 *g* |
| 9.7 | | 38 | 3.8 | 30.3 | |
| 9.2 | | | 6.8 | 2.1 | *g* |
| 10.4 | | | 12.8 | 4.7 | |
| 10.4 | | | 14.3 | 12.6 | |
| 8.6 | | | 30.3 | 58.5 | 9.2 *g* |
| 10.4 | | | 48.8 | 39.6 | |
| 9.6 | | 39 | 29.3 | 27.1 | |
| 10.4 | | | 51.3 | 13.0 | |
| 8.5 | | 40 | 23.3 | 15.8 | 8.0 *g* |
| 9.1 | | 41 | 32.7 | 30.3 | *g* |
| 9.9 | | | 51.3 | 43.8 | |
| 9.9 | | | 57.3 | 13.7 | |
| 10.2 | | 42 | 9.8 | 37.1 | |
| 8.5 | | | 19.3 | 31.3 | 7.5 G*g* |
| 10.0 | | | 26.3 | 31.9 | |
| 9.1 | | | 33.7 | 12.4 | *g* |
| 9.9 | | | 36.7 | 51.9 | |
| 10.0 | | 44 | 9.7 | 43.2 | |
| 9.0 | | | 9.7 | 49.0 | 9.0 |
| 10.0 | | | 36.7 | 51.0 | |
| 10.0 | | | 49.7 | 28.9 | |
| 9.6 | | 45 | 19.7 | 3.8 | |
| 9.8 | | | 47.7 | 19.2 | |
| 8.6 | | | 51.2 | 35.7 | 8.5 *g* |
| 9.1 | | | 56.7 | 2.6 | *g* |
| 8.6 | | | 59.7 | 24.6 | 9.0 *g* |
| 8.6 | | 46 | 17.2 | 51.6 | 9.0 *g* |
| 10.4 | | | 40.8 | 9.5 | |
| 9.2 | | | 45.2 | 8.9 | *g* |
| 10.0 | | | 53.2 | 43.0 | |
| 10.4 | | 47 | 0.7 | 45.2 | |
| 10.4 | | | 29.7 | 38.5 | |
| 9.6 | | | 33.2 | 12.4 | *g* |
| 10.0 | | | 48.7 | 13.2 | |
| 10.3 | | 48 | 18.4 | 31.7 | |
| 8.8 | | | 20.7 | 45.7 | *g* |
| 8.8 | | | 24.7 | 35.0 | *g* |
| 9.6 | | | 28.9 | 32.8 | |
| 9.7 | | | 47.4 | 1.9 | |
| 9.2 | | | 51.9 | 37.1 | |
| 9.1 | | 49 | 9.2 | 18.6 | |
| 10.2 | | | 16.4 | 42.1 | |
| 9.4 | | | 41.7 | 9.8 | |
| 10.4 | | 50 | 50.4 | 46.1 | |
| 9.2 | | 51 | 9.7 | 14.4 | *g* |
| 10.3 | | | 42.4 | 12.8 | |

## 2761—2820.

| mag. | h (19h.—20h.) | m | s | ′ (−70°) | |
|---|---|---|---|---|---|
| 9.4 | 19 | 52 | 14.4 | 5.4 | 9.0 *g* |
| 8.1 | | | 18.2 | 31.7 | 8.5 *g* |
| 10.0 | | | 46.4 | 14.2 | |
| 9.2 | | | 56.2 | 30.3 | *g* |
| 9.2 | | 53 | 14.5 | 41.8 | *g* |
| 10.0 | | | 28.9 | 43.2 | |
| 9.4 | | | 46.9 | 35.5 | *g* |
| 9.7 | | | 49.4 | 1.8 | |
| 9.9 | | 55 | 24.4 | 34.5 | |
| 9.2 | | | 30.2 | 15.4 | 9.0 *g* |
| 9.6 | | 57 | 38.0 | 26.1 | |
| 9.8 | | 58 | 31.0 | 56.8 | |
| 9.8 | | 59 | 50.0 | 27.1 | *g* |
| 9.8 | 20 | 0 | 45.0 | 57.4 | |
| 9.8 | | 1 | 59.0 | 55.0 | |
| 9.8 | | 2 | 38.0 | 22.0 | |
| 9.8 | | 4 | 46.0 | 31.3 | *g* |
| 8.8 | | 5 | 23.0 | 54.7 | 8.8 G*g* |
| 9.6 | | | 27.0 | 13.5 | *g* |
| 9.8 | | 7 | 3.5 | 17.0 | *g* |
| 9.8 | | | 45.0 | 15.9 | *g* |
| 9.5 | | 10 | 28.0 | 26.7 | *g* |
| 9.8 | | 11 | 21.0 | 8.5 | |
| 9.8 | | 12 | 5.0 | 35.6 | *g* |
| 9.8 | | 13 | 4.5 | 35.2 | *g* |
| 9.8 | | 15 | 37.0 | 26.0 | |
| 9.5 | | | 47.0 | 14.5 | |
| 8.9 | | 18 | 12.0 | 25.3 | *g* |
| 8.9 | | 20 | 35.0 | 57.9 | *g* |
| 9.8 | | 22 | 24.0 | 22.9 | *g* |
| 9.5 | | | 56.5 | 0.4 | *g* |
| 7.3 | | 23 | 25.7 | 1.9 | 6.5 GS*cgr* |
| 9.4 | | | 37.0 | 57.5 | *g* |
| 9.8 | | 24 | 35.0 | 32.0 | *g* |
| 8.4 | | 25 | 59.0 | 30.0 | 8.0 GS*g* |
| 9.8 | | 27 | 37.0 | 8.8 | *g* |
| 9.8 | | 28 | 12.0 | 23.0 | GS*g* |
| 8.8 | | | 26.0 | 11.8 | G*g* |
| 9.6 | | 29 | 28.0 | 40.0 | 9.0 *g* |
| 9.8 | | | 55.0 | 4.0 | |
| 9.8 | | 30 | 50.0 | 23.0 | S |
| 8.7 | | 31 | 2.0 | 45.9 | *g* |
| 9.0 | | | 16.5 | 59.2 | *g* |
| 8.2 | | | 52.0 | 17.8 | GS*g* |
| 10.0 | | 32 | 44.0 | 26.6 | |
| 9.6 | | 34 | 54.0 | 42.1 | |
| 10.0 | | 37 | 40.0 | 14.8 | *g* |
| 9.0 | | | 43.0 | 8.8 | *g* |
| 9.2 | | 40 | 49.0 | 33.1 | *g* |
| 10.0 | | 43 | 52.0 | 24.3 | |
| 9.8 | | 44 | 52.0 | 32.9 | *g* |
| 7.4 | | 46 | 29.5 | 53.9 | 7.2 GS*g* |
| 10.0 | | | 31.0 | 40.3 | *g* |
| 7.4 | | 48 | 2.7 | 3.0 | 6.5 GS*g* |
| 9.4 | | | 17.0 | 12.3 | 9.0 *g* |
| 8.5 | | | 34.0 | 5.9 | 8.5 *g* |
| 9.6 | | 49 | 17.0 | 2.9 | 9.5 *g* |
| 10.0 | | | 23.0 | 13.0 | |
| 8.7 | | 50 | 33.5 | 0.1 | 9.5 *g* |
| 10.0 | | 51 | 38.0 | 28.3 | *g* |

25 prec.

| h | m | α (s + s) | δ (′) |
|---|---|---|---|
| 19 | 10 | + 164 + 0.08 d | + 2.5 |
| | 20 | 163 + 0.08 | 2.9 |
| | 30 | 162 + 0.08 | 3.2 |
| | 40 | 160 + 0.08 | 3.5 |
| | 50 | 158 + 0.08 | 3.9 |
| 20 | 0 | 156 + 0.08 | 4.2 |
| | 10 | 154 + 0.07 | 4.5 |
| | 20 | 152 + 0.07 | 4.8 |
| | 30 | 150 + 0.07 | 5.1 |
| | 40 | 147 + 0.07 | 5.4 |
| | 50 | 144 + 0.06 | 5.6 |
| 21 | 0 | + 142 + 0.06 | + 5.9 |

d = minutes of decl.



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25 prec.

| h | m | a (s) | (s) | δ (′) |
|---|---|---|---|---|
| 20 | 50 | +144 | +0·06 d | +5·6 |
| | 0 | 142 | +0·06 | 5·9 |
| | 10 | 139 | +0·06 | 6·2 |
| | 20 | 136 | +0·06 | 6·4 |
| | 30 | 133 | +0·05 | 6·6 |
| | 40 | 129 | +0·05 | 6·8 |
| | 50 | 126 | +0·05 | 7·0 |
| 22 | 0 | 123 | +0·04 | 7·2 |
| | 10 | 119 | +0·04 | 7·4 |
| | 20 | 116 | +0·04 | 7·6 |
| | 30 | 112 | +0·03 | 7·7 |
| | 40 | 108 | +0·03 | 7·9 |
| | 50 | 104 | +0·03 | 8·0 |
| 23 | 0 | 101 | +0·02 | 8·1 |
| | 10 | + 97 | +0·02 | +8·2 |

d = minutes of decl.

## 2821—2880.

20h–21h, −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·6 | 20 | 51 | 41·0 | 44·8 | |
| 8·6 | | 52 | 1·0 | 55·0 | 8·5 g |
| 8·8 | | | 7·0 | 35·7 | g |
| 10·0 | | | 27·0 | 40·5 | |
| 8·8 | | | 30·0 | 41·9 | g |
| 9·6 | | 53 | 49·0 | 4·6 | |
| 9·6 | | | 57·0 | 5·5 | |
| 9·6 | | 54 | 3·5 | 1·8 | g |
| 8·9 | | | 7·0 | 23·7 | g |
| 8·5 | | 55 | 10·0 | 6·1 | 9·0 Gg |
| 10·0 | | 57 | 17·0 | 3·9 | |
| 10·0 | | 59 | 3·0 | 16·5 | |
| 10·0 | | | 51·0 | 35·1 | 9·0 g |
| 8·8 | 21 | 0 | 31·0 | 39·9 | 8·2 GSg |
| 6·7 | | 1 | 34·0 | 37·9 | 5·2 GScgr |
| 10·0 | | 2 | 1·0 | 19·1 | |
| 9·4 | | | 17·0 | 55·9 | 9·2 g |
| 9·6 | | 3 | 44·0 | 31·7 | |
| 8·8 | | 4 | 29·0 | 44·7 | g |
| 10·0 | | 7 | 10·0 | 12·9 | |
| 8·8 | | 8 | 3·0 | 35·9 | 9·5 g |
| 9·6 | | 12 | 19·0 | 27·9 | |
| 9·2 | | | 51·0 | 11·3 | 9·5 g |
| 8·5 | | | 55·0 | 15·9 | 7·0 GSg |
| 9·8 | | 13 | 28·0 | 19·0 | 9·5 |
| 10·0 | | 14 | 12·0 | 14·8 | |
| 8·5 | | 15 | 5·0 | 39·6 | g |
| 9·6 | | 16 | 33·0 | 0·0 | g |
| 8·9 | | | 51·0 | 17·6 | g |
| 6·7 | | 17 | 32·0 | 2·6 | GScg |
| 9·6 | | 19 | 9·0 | 20·0 | 9·5 g |
| 9·6 | | | 38·0 | 52·9 | 9·8 g |
| 9·4 | | 20 | 17·5 | 21·2 | 9·5 g |
| 10·0 | | | 27·0 | 6·9 | |
| 10·0 | | 21 | 10·0 | 30·7 | |
| 8·6 | | | 36·5 | 2·2 | 7·5 GSg |
| 8·7 | | 23 | 11·0 | 24·5 | 8·5 g |
| 9·3 | | 24 | 0·0 | 53·5 | g |
| 9·8 | | 25 | 13·0 | 33·5 | g |
| 9·1 | | | 38·5 | 53·1 | g |
| 6·8 | | 27 | 18·5 | 11·3 | 7·0 Gg |
| 10·0 | | 30 | 38·0 | 36·9 | |
| 9·3 | | | 44·0 | 56·1 | 9·5 g |
| 9·5 | | 31 | 38·0 | 52·9 | 8·8 g |
| 9·4 | | 35 | 8·0 | 3·5 | 9·0 g |
| 9·3 | | | 49·0 | 36·9 | 9·5 g |
| 10·0 | | 36 | 17·0 | 53·2 | |
| 10·0 | | | 46·0 | 48·9 | |
| 9·8 | | | 54·0 | 39·1 | |
| 10·0 | | 38 | 3·0 | 50·3 | |
| 9·6 | | 39 | 26·0 | 42·9 | g |
| 10·0 | | | 49·0 | 16·7 | |
| 7·2 | | 40 | 10·0 | 12·5 | 6·0 GScg |
| 9·1 | | | 11·0 | 0·9 | g |
| 9·5 | | | 15·0 | 52·1 | g |
| 9·8 | | | 53·0 | 22·5 | |
| 7·9 | | 41 | 1·0 | 55·9 | 8·0 g |
| 9·0 | | | 39·0 | 2·7 | 8·5 g |
| 10·0 | | 43 | 2·0 | 39·3 | |
| 10·0 | | | 13·0 | 40·1 | |

## 2881—2940.

21h–22h, −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·8 | 21 | 43 | 47·0 | 24·0 | |
| 9·8 | | 44 | 18·0 | 30·3 | |
| 10·0 | | | 26·0 | 30·8 | |
| 6·7 | | | 50·0 | 42·0 | 6·5 GScg |
| 7·0 | | | 58·0 | 39·2 | 6·0 GScg |
| 10·0 | | 46 | 16·0 | 31·8 | g |
| 8·8 | | 47 | 46·0 | 13·2 | 9·5 g |
| 10·0 | | 50 | 6·5 | 59·1 | |
| 9·2 | | | 57·0 | 2·7 | g |
| 9·8 | | 53 | 14·0 | 4·6 | |
| 10·0 | | 55 | 20·0 | 42·7 | |
| 10·0 | | | 30·0 | 17·4 | |
| 10·0 | | 56 | 6·0 | 5·1 | |
| 9·8 | | | 8·0 | 22·3 | g |
| 9·6 | | | 26·0 | 50·0 | |
| 9·4 | | | 40·0 | 33·1 | 9·5 Gg |
| 9·8 | | 57 | 3·0 | 26·3 | 9·0 g |
| 10·0 | | | 30·0 | 9·1 | 9·5 |
| 7·0 | | | 35·0 | 53·7 | 7·0 GScg |
| 10·0 | | 58 | 22·0 | 37·1 | |
| 8·6 | 22 | 0 | 44·0 | 9·3 | g |
| 9·5 | | 2 | 59·0 | 51·9 | g |
| 9·0 | | 3 | 1·0 | 18·0 | g |
| 9·8 | | | 29·0 | 17·1 | |
| 9·1 | | | 40·5 | 27·6 | g |
| 10·4 | | 5 | 24·8 | 43·0 | |
| 9·6 | | | 27·3 | 15·0 | |
| 10·0 | | 6 | 18·5 | 47·2 | |
| 9·7 | | | 20·8 | 10·4 | |
| 10·4 | | 7 | 8·8 | 19·4 | |
| 10·0 | | 8 | 5·0 | 37·0 | |
| 9·7 | | | 43·0 | 8·8 | g |
| 9·3 | | | 43·5 | 48·8 | g |
| 10·4 | | | 48·0 | 7·0 | |
| 10·4 | | 9 | 25·5 | 34·5 | |
| 10·4 | | | 28·8 | 10·8 | |
| 10·0 | | | 37·5 | 17·6 | |
| 10·4 | | 11 | 18·0 | 54·2 | |
| 10·4 | | | 49·8 | 42·3 | |
| 10·2 | | | 55·0 | 38·5 | |
| 9·6 | | 12 | 10·3 | 48·6 | g |
| 9·0 | | | 20·0 | 16·8 | g |
| 10·4 | | | 36·5 | 38·0 | |
| 9·5 | | 13 | 9·0 | 56·2 | g |
| 10·2 | | 14 | 53·5 | 56·4 | |
| 10·0 | | 15 | 1·0 | 53·4 | |
| 9·7 | | | 17·0 | 14·5 | |
| 10·0 | | 16 | 17·0 | 38·8 | |
| 10·0 | | | 19·5 | 47·4 | g |
| 8·1 | | 17 | 42·5 | 20·2 | g |
| 10·4 | | | 44·6 | 14·2 | |
| 8·2 | | 19 | 51·5 | 4·5 | 8·5 g |
| 10·4 | | 20 | 36·6 | 31·9 | |
| 9·8 | | | 38·5 | 22·7 | |
| 9·7 | | | 46·5 | 36·1 | |
| 10·0 | | | 54·5 | 30·8 | |
| 10·2 | | 21 | 19·0 | 29·5 | |
| 10·4 | | | 57·5 | 56·0 | |
| 10·0 | | 22 | 43·0 | 21·3 | |
| 10·0 | | | 59·0 | 22·6 | |

## 2941—3000.

22h–23h, −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 10·0 | 22 | 24 | 11·1 | 48·3 | |
| 9·8 | | 25 | 7·1 | 39·6 | |
| 10·0 | | 26 | 22·6 | 31·9 | |
| 10·4 | | 28 | 4·1 | 36·0 | |
| 9·4 | | 29 | 38·6 | 14·8 | g |
| 9·4 | | | 49·4 | 0·4 | 9·0 g |
| 9·8 | | | 56·1 | 32·2 | |
| 10·4 | | 30 | 1·2 | 53·9 | |
| 10·0 | | | 6·7 | 53·6 | |
| 9·8 | | 32 | 11·2 | 31·0 | |
| 9·2 | | | 37·7 | 24·3 | g |
| 9·6 | | | 41·7 | 24·8 | g |
| 8·8 | | 33 | 13·7 | 24·3 | g |
| 9·8 | | | 24·7 | 26·0 | g |
| 10·4 | | 34 | 30·7 | 42·6 | |
| 10·0 | | 35 | 3·7 | 15·5 | |
| 9·0 | | | 31·2 | 25·9 | 8·5 g |
| 9·6 | | 36 | 47·2 | 47·4 | g |
| 10·0 | | 37 | 39·2 | 30·0 | |
| 8·2 | | | 57·7 | 11·0 | 8·0 GSg |
| 6·9 | | 38 | 38·7 | 7·9 | 7·0 GScgr |
| 9·8 | | | 58·7 | 53·4 | g |
| 10·0 | | 39 | 58·7 | 10·7 | |
| 9·5 | | 40 | 23·1 | 27·0 | |
| 9·7 | | | 40·6 | 24·8 | |
| 8·9 | | | 55·6 | 48·7 | g |
| 8·8 | | 42 | 10·6 | 34·6 | g |
| 10·0 | | | 31·6 | 8·8 | |
| 9·6 | | | 49·1 | 23·2 | |
| 10·4 | | 43 | 56·6 | 37·4 | |
| 6·6 | | 45 | 55·1 | 44·3 | 6·0 GScg |
| 10·4 | | 46 | 37·1 | 32·8 | |
| 9·6 | | | 49·5 | 1·3 | |
| 10·4 | | 47 | 3·8 | 15·7 | |
| 8·1 | | | 30·5 | 18·4 | 8·8 g |
| 8·8 | | 48 | 4·0 | 7·2 | 9·0 g |
| 9·6 | | | 12·0 | 20·6 | |
| 10·4 | | | 28·0 | 29·3 | |
| 10·0 | | | 43·5 | 58·1 | |
| 9·2 | | | 53·0 | 26·7 | g |
| 8·5 | | 49 | 17·0 | 7·1 | 8·5 g |
| 8·5 | | | 20·0 | 10·1 | 8·0 g |
| 10·2 | | 51 | 6·0 | 46·5 | |
| 9·0 | | 53 | 44·2 | 21·1 | g |
| 10·2 | | | 58·5 | 56·5 | |
| 9·3 | | 54 | 5·8 | 13·8 | g |
| 9·2 | | | 8·2 | 27·1 | g |
| 10·4 | | | 45·8 | 38·9 | |
| 10·2 | | 55 | 38·5 | 50·3 | |
| 10·2 | | 56 | 19·5 | 49·6 | |
| 10·2 | | | 58·5 | 53·3 | |
| 8·6 | | 58 | 45·2 | 21·7 | 9·5 g |
| 8·4 | | 59 | 39·0 | 42·9 | 8·5 g |
| 9·8 | | | 45·0 | 24·1 | g |
| 9·4 | 23 | 3 | 45·0 | 45·6 | g |
| 8·1 | | 4 | 3·0 | 47·4 | g |
| 9·9 | | | 29·0 | 12·6 | |
| 9·9 | | | 31·0 | 30·1 | g |
| 7·2 | | 5 | 59·0 | 44·3 | 7·5 GSg |
| 8·0 | | 8 | 9·0 | 35·1 | g |



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### 3001—3013.

23h. −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 8·6 | 23 | 8 | 35·0 | 56·0 | 8·0 GS*g* |
| 9·2 | | 9 | 53·0 | 2·7 | G*g* |
| 9·5 | | 14 | 3·0 | 23·1 | *g* |
| 9·8 | | 16 | 27·0 | 2·7 | |
| 9·9 | | 22 | 45·0 | 26·7 | *g* |
| 9·9 | | 23 | 35·0 | 55·7 | *g* |
| 9·4 | | 24 | 9·0 | 2·0 | 9·5 *g* |
| 9·9 | | 25 | 9·0 | 35·7 | 9·5 *g* |
| 9·2 | | 26 | 9·0 | 20·1 | 9·5 *g* |
| 9·9 | | | 35·0 | 41·3 | *g* |
| 8·0 | | 27 | 21·0 | 45·4 | 8·5 *g* |
| 9·2 | | 28 | 41·0 | 21·3 | 9·0 *g* |
| 8·6 | | 29 | 58·5 | 43·8 | 8·0 *g* |

### 3014—3026.

23h. −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·8 | 23 | 33 | 17·0 | 38·8 | *g* |
| 8·1 | | 34 | 54·5 | 7·9 | 8·0 *g* |
| 9·3 | | 36 | 0·5 | 44·2 | 9·0 G*g* |
| 8·8 | | 38 | 41·0 | 22·7 | 9·5 G*g* |
| 9·4 | | 40 | 37·0 | 4·2 | *g* |
| 9·3 | | 41 | 32·0 | 33·7 | *g* |
| 9·0 | | | 41·5 | 14·1 | *g* |
| 8·8 | | 43 | 21·0 | 39·5 | 9·0 *g* |
| 9·0 | | | 46·0 | 31·6 | 9·5 *g* |
| 9·4 | | 46 | 18·0 | 45·4 | |
| 9·3 | | | 26·0 | 31·5 | *g* |
| 8·6 | | 48 | 14·0 | 25·9 | 8·5 *g* |
| 9·4 | | 49 | 43·0 | 56·8 | *g* |

### 3027—3038.

23h. −70°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·2 | 23 | 49 | 54·0 | 56·9 | *g* |
| 9·3 | | 51 | 35·0 | 37·5 | *g* |
| 9·4 | | | 48·0 | 1·6 | *g* |
| 9·4 | | 52 | 11·5 | 38·1 | *g* |
| 9·3 | | | 12·0 | 12·1 | 9·5 *g* |
| 8·8 | | | 30·0 | 21·0 | 8·5 *g* |
| 9·3 | | | 59·0 | 44·7 | 9·5 *g* |
| 8·8 | | 54 | 12·0 | 22·1 | 8·2 *g* |
| 9·4 | | | 48·0 | 53·0 | G*g* |
| 9·0 | | | 52·0 | 49·3 | 8·5 *g* |
| 9·4 | | | 53·0 | 53·2 | G*g* |
| 8·3 | | 58 | 37·0 | 54·2 | *g* |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 23 | 0 | + 101 | + 0·02 d | + 8·1 |
| | 10 | 97 | + 0·02 | 8·2 |
| | 20 | 93 | + 0·02 | 8·2 |
| | 30 | 89 | + 0·01 | 8·3 |
| | 40 | 85 | + 0·01 | 8·3 |
| | 50 | 81 | + 0·00 | 8·3 |
| 0 | 0 | + 77 | + 0·00 | + 8·4 |

d = minutes of decl.

# ZONE—71°

### 1—30.

0h. −71°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·0 | 0 | 0 | 30·0 | 17·0 | 8·0 *g* |
| 8·8 | | 4 | 8·0 | 31·9 | 9·5 *g* |
| 9·2 | | 10 | 6·0 | 56·9 | 9·0 *g* |
| 7·2 | | | 28·0 | 5·3 | 7·5 GSc*g* |
| 8·5 | | 13 | 36·0 | 21·2 | *g* |
| 9·3 | | 14 | 55·0 | 52·0 | 9·0 G*g* |
| 9·4 | | 15 | 17·0 | 18·0 | 9·5 *g* |
| 9·4 | | 16 | 13·0 | 13·4 | 9·5 *g* |
| 9·4 | | 17 | 56·0 | 47·1 | *g* |
| 9·4 | | 18 | 26·5 | 8·2 | 9·0 *g* |
| 9·6 | | | 45·0 | 43·4 | *g* |
| 9·6 | | 19 | 21·5 | 23·3 | *g* |
| 9·4 | | 20 | 5·0 | 55·0 | |
| 9·4 | | | 34·0 | 2·9 | *g* |
| 10·6† | | | 48·0 | 58·1 | |
| 9·3 | | 21 | 22·0 | 55·9 | 9·0 *g* |
| 9·6 | | | 54·5 | 2·7 | *g* |
| 9·6 | | 23 | 12·6 | 59·0 | |
| 9·4 | | 25 | 54·5 | 1·2 | *g* |
| 6·6 | | 28 | 4·0 | 57·3 | 6·5 GSc*g* |
| 9·0 | | 30 | 42·0 | 32·1 | 9·0 *g* |
| 9·4 | | 31 | 57·5 | 28·0 | *g* |
| 9·6 | | 34 | 24·0 | 28·4 | |
| 9·1 | | | 36·0 | 47·2 | *g* |
| 9·4 | | 36 | 11·0 | 54·1 | *g* |
| 8·4 | | 39 | 37·0 | 51·1 | GS*g* |
| 9·3 | | 41 | 23·0 | 54·7 | *g* |
| 7·0 | | 46 | 12·0 | 50·1 | 7·0 GS*gr* |
| 9·6 | | | 50·0 | 11·8 | *g* |
| 9·6 | | 47 | 40·0 | 18·1 | *g* |

### 31—60.

0h.–1h. −71°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9·6 | 0 | 49 | 5·0 | 10·6 | 10·0 *g* |
| 9·3 | | | 23·0 | 29·0 | |
| 9·4 | | 53 | 23·0 | 8·1 | 9·0 *g* |
| 8·6 | | | 32·0 | 32·5 | |
| 7·0 | | 58 | 58·0 | 31·2 | GS*gg* |
| 9·6 | | 0 | 17·0 | 12·6 | 8·5 *g* |
| 8·7 | 1 | 1 | 18·0 | 36·0 | GS*g* |
| 9·6 | | 2 | 26·0 | 7·0 | |
| 9·2 | | | 32·5 | 58·4 | *g* |
| 8·9 | | 4 | 28·7 | 20·0 | 8·0 G*g* |
| 10·3 | | | 36·5 | 34·1 | |
| 9·8 | | | 53·5 | 47·6 | |
| 8·8 | | | 56·0 | 8·4 | 8·8 G*g* |
| 8·8 | | 5 | 32·7 | 18·6 | 9·0 G*g* |
| 9·0 | | | 54·5 | 9·1 | 9·2 |
| 10·3 | | 6 | 8·0 | 29·0 | |
| 8·8 | | 7 | 20·0 | 0·8 | 9·2 *g* |
| 10·3 | | 8 | 40·5 | 38·6 | |
| 10·0 | | | 51·0 | 7·5 | |
| 8·2 | | 9 | 20·5 | 32·6 | 8·2 GS*g* |
| 9·9 | | | 50·0 | 31·9 | 9·0 G*g* |
| 9·4 | | 10 | 10·0 | 7·3 | 9·5 *g* |
| 10·0 | | | 11·5 | 45·5 | |
| 9·9 | | | 32·5 | 42·0 | 9·0 *g* |
| 10·3 | | 12 | 41·5 | 33·8 | |
| 10·0 | | 13 | 58·5 | 2·0 | |
| 9·8 | | 14 | 15·5 | 31·6 | |
| 8·2 | | 15 | 15·8 | 46·5 | 8·5 GS*g* |
| 10·3 | | 18 | 57·2 | 26·0 | |
| 9·9 | | 19 | 28·7 | 51·8 | |

### 61—90.

1h. −71°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 7·9 | 1 | 20 | 39·2 | 19·6 | 9·0 GS*g* |
| 8·8 | | 22 | 25·2 | 52·7 | 9·5 *g* |
| 9·5 | | | 47·7 | 30·7 | |
| 10·3 | | 24 | 11·7 | 22·8 | |
| 9·0 | | | 21·7 | 30·3 | *g* |
| 10·3 | | 25 | 56·7 | 42·7 | |
| 8·6 | | 27 | 41·2 | 15·4 | 9·5 *g* |
| 9·2 | | 28 | 21·2 | 34·5 | *g* |
| 7·7 | | 30 | 18·2 | 30·4 | 8·0 GS*g* |
| 9·9 | | 32 | 14·7 | 28·8 | |
| 10·0 | | | 54·2 | 12·0 | |
| 10·3 | | 35 | 29·7 | 47·2 | |
| 9·8 | | 36 | 13·7 | 23·4 | *g* |
| 9·8 | | 39 | 28·2 | 9·7 | *g* |
| 10·3 | | 40 | 56·2 | 19·9 | |
| 9·6 | | 41 | 48·7 | 11·2 | 9·0 *g* |
| 10·3 | | 42 | 28·2 | 31·1 | |
| 10·3 | | 43 | 37·7 | 3·7 | *g* |
| 9·4 | | 46 | 49·7 | 3·9 | 9·5 *g* |
| 9·8 | | 48 | 14·9 | 50·3 | *g* |
| 10·3 | | | 40·7 | 36·2 | *g* |
| 10·8 | | | 49·7 | 35·2 | |
| 10·8 | | 50 | 7·2 | 11·3 | |
| 10·2 | | 51 | 8·4 | 5·5 | |
| 10·8 | | 52 | 48·7 | 22·8 | |
| 10·8 | | 54 | 28·7 | 11·6 | |
| 10·2 | | | 43·4 | 41·4 | *g* |
| 8·9 | | | 57·2 | 44·1 | 9·0 *g* |
| 10·8 | | 55 | 21·4 | 23·8 | |
| 10·8 | | | 47·2 | 36·6 | |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 73 | 0·00 | 8·3 |
| | 20 | 68 | − 0·01 | 8·3 |
| | 30 | 64 | − 0·01 | 8·3 |
| | 40 | 60 | − 0·02 | 8·2 |
| | 50 | 56 | − 0·02 | 8·2 |
| 1 | 0 | 52 | − 0·03 | 8·1 |
| | 10 | 48 | − 0·03 | 8·0 |
| | 20 | 44 | − 0·03 | 7·9 |
| | 30 | 40 | − 0·04 | 7·7 |
| | 40 | 36 | − 0·04 | 7·6 |
| | 50 | 32 | − 0·05 | 7·4 |
| 2 | 0 | + 28 | − 0·05 | + 7·2 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 1 | 50 | + 32 − 0·05 d | + 7·4 |
| 2 | 0 | 28 − 0·05 | 7·2 |
| | 10 | 25 − 0·05 | 7·0 |
| | 20 | 21 − 0·06 | 6·8 |
| | 30 | 18 − 0·06 | 6·6 |
| | 40 | 14 − 0·06 | 6·4 |
| | 50 | 11 − 0·07 | 6·2 |
| 3 | 0 | 8 − 0·07 | 5·9 |
| | 10 | 5 − 0·07 | 5·6 |
| | 20 | + 2 − 0·08 | 5·4 |
| | 30 | 0 − 9·08 | 5·1 |
| | 40 | − 3 − 0·08 | 4·8 |
| | 50 | 5 − 0·08 | 4·5 |
| 4 | 0 | 7 − 0·09 | 4·2 |
| | 10 | 9 − 0·09 | 3·9 |
| | 20 | 11 − 0·09 | 3·5 |
| | 30 | 13 − 0·09 | 3·2 |
| | 40 | − 14 − 0·09 | + 2·9 |

d = minutes of decl.

## 91—150.

| mag. | h (1ʰ–2ʰ) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 10·4 | 1 | 55 | 57·7 | 3·4 | g |
| 10·8 | | 56 | 9·2 | 32·8 | |
| 9·6 | | 57 | 47·7 | 33·9 | g |
| 9·6 | | 58 | 11·0 | 18·8 | g |
| 10·8 | | | 48·0 | 10·9 | |
| 10·8 | | | 55·0 | 32·1 | g |
| 10·8 | | 59 | 59·5 | 20·9 | |
| 7·6 | 2 | 0 | 16·0 | 1·4 | 7·1 GScg |
| 9·2 | | | 30·5 | 27·8 | g |
| 10·8 | | 1 | 15·0 | 3·3 | |
| 10·2 | | | 48·0 | 8·2 | |
| 8·8 | | | 55·0 | 51·1 | Gg |
| 10·2 | | 2 | 4·0 | 35·6 | |
| 10·8 | | | 5·4 | 2·4 | |
| 10·8 | | | 20·5 | 16·6 | |
| 8·9 | | 3 | 32·5 | 13·5 | 8·5 Gg |
| 10·8 | | 5 | 35·0 | 2·7 | g |
| 10·8 | | 8 | 7·0 | 18·7 | |
| 9·8 | | | 35·0 | 34·7 | g |
| 7·5 | | 9 | 56·5 | 32·0 | 7·5 GSg |
| 10·8 | | 10 | 7·5 | 57·7 | |
| 10·6 | | | 50·5 | 55·9 | |
| 9·0 | | 11 | 32·7 | 22·4 | g |
| 10·8 | | 12 | 22·2 | 35·8 | |
| 10·6 | | | 31·2 | 42·9 | |
| 9·2 | | | 48·2 | 7·5 | g |
| 9·8 | | 13 | 50·7 | 29·8 | g |
| 10·4 | | 14 | 45·7 | 56·4 | |
| 10·8 | | 15 | 7·9 | 9·1 | |
| 9·2 | | | 20·4 | 47·7 | g |
| 8·9 | | | 46·4 | 38·7 | 10·0 g |
| 8·1 | | 17 | 7·9 | 15·1 | 9·5 g |
| 9·9 | | 19 | 35·4 | 40·9 | g |
| 9·5 | | | 45·4 | 19·9 | g |
| 10·8 | | 20 | 36·4 | 22·8 | |
| 9·8 | | 21 | 1·9 | 16·0 | g |
| 9·4 | | | 29·9 | 4·1 | g |
| 9·2 | | | 57·9 | 44·1 | g |
| 10·1 | | 22 | 37·9 | 46·2 | g |
| 10·4 | | | 50·9 | 40·4 | g |
| 8·8 | | 24 | 7·4 | 22·7 | g |
| 10·6 | | | 37·9 | 53·5 | |
| 10·6 | | 27 | 16·9 | 45·3 | |
| 9·6 | | 28 | 5·4 | 59·8 | g |
| 8·4 | | | 6·4 | 9·8 | 8·5 Gg |
| 10·8 | | | 13·9 | 35·8 | |
| 9·6 | | | 16·9 | 14·4 | 9·2 g |
| 8·2 | | | 36·4 | 28·1 | 9·0 g |
| 10·1 | | 29 | 14·9 | 7·7 | g |
| 10·8 | | | 47·9 | 55·5 | |
| 10·8 | | 30 | 36·4 | 57·1 | |
| 10·8 | | 31 | 16·9 | 13·9 | |
| 9·6 | | 32 | 1·4 | 31·1 | g |
| 8·4 | | | 32·4 | 18·8 | 8·0 Gg |
| 10·2 | | 33 | 0·2 | 53·4 | |
| 10·1 | | | 49·7 | 19·4 | g |
| 9·4 | | 34 | 48·7 | 20·9 | 9·0 g |
| 10·8 | | 35 | 9·5 | 30·7 | |
| 8·9 | | | 48·4 | 41·1 | 8·5 g |
| 10·4 | | 36 | 30·3 | 33·1 | |

## 151—210.

| mag. | h (2ʰ–3ʰ) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 10·4 | 2 | 36 | 34·1 | 48·9 | |
| 10·6 | | | 43·8 | 3·9 | g |
| 10·8 | | 37 | 26·1 | 41·8 | |
| 7·6 | | | 37·0 | 12·9 | 7·0 GScg |
| 9·8 | | 39 | 12·8 | 51·2 | |
| 7·8 | | 40 | 26·7 | 59·5 | 8·0 GSg |
| 9·8 | | 41 | 37·3 | 45·3 | |
| 10·2 | | | 38·9 | 26·8 | |
| 8·2 | | | 50·6 | 44·0 | GSg |
| 9·8 | | 42 | 25·2 | 39·8 | g |
| 10·0 | | | 55·2 | 45·3 | |
| 10·2 | | 43 | 37·7 | 20·3 | |
| 9·2 | | | 47·7 | 20·2 | g |
| 9·1 | | 44 | 25·7 | 26·1 | g |
| 6·8 | | | 39·7 | 45·5 | 6·8 GSg |
| 9·6 | | 48 | 59·2 | 29·5 | g |
| 9·8 | | 49 | 25·6 | 57·0 | |
| 9·8 | | 50 | 22·2 | 28·1 | g |
| 9·8 | | | 30·1 | 0·6 | |
| 10·0 | | 51 | 23·2 | 5·2 | |
| 9·3 | | 52 | 13·2 | 53·0 | |
| 9·5 | | | 51·2 | 52·9 | |
| 10·2 | | 53 | 2·2 | 33·8 | |
| 10·2 | | 54 | 6·7 | 51·9 | g |
| 8·9 | | | 39·2 | 3·4 | 8·8 Gg |
| 9·5 | | 56 | 19·2 | 1·9 | g |
| 9·8 | | | 54·7 | 45·6 | g |
| 9·2 | | 57 | 27·2 | 15·3 | g |
| 10·2 | | | 43·2 | 0·5 | |
| 10·0 | | 58 | 21·2 | 44·0 | |
| 9·6 | 3 | 0 | 48·7 | 13·8 | |
| 8·6 | | 1 | 3·7 | 41·9 | 8·8 g |
| 8·8 | | | 17·9 | 0·9 | 8·8 g |
| 9·8 | | 2 | 19·2 | 57·2 | g |
| 10·0 | | | 28·5 | 15·0 | g |
| 10·2 | | | 49·5 | 27·2 | g |
| 9·4 | | | 53·0 | 44·5 | g |
| 10·0 | | 6 | 7·5 | 3·9 | |
| 9·3 | | | 29·5 | 21·6 | g |
| 10·2 | | 8 | 1·5 | 3·2 | |
| 9·4 | | | 16·0 | 19·0 | g |
| 9·8 | | | 29·0 | 18·7 | g |
| 9·3 | | | 44·0 | 10·8 | g |
| 9·8 | | | 45·5 | 47·4 | g |
| 9·8 | | 11 | 9·0 | 15·1 | g |
| 9·3 | | | 42·5 | 13·4 | g |
| 10·0 | | 14 | 38·5 | 56·8 | |
| 9·8 | | 15 | 7·3 | 44·2 | g |
| 8·5 | | 16 | 36·8 | 46·3 | 9·5 g |
| 9·8 | | 18 | 11·3 | 34·6 | g |
| 9·4 | | | 46·3 | 55·9 | 9·5 g |
| 8·2 | | 19 | 37·3 | 53·5 | 7·8 Gg |
| 10·2 | | 21 | 26·0 | 56·9 | |
| 9·1 | | | 32·4 | 57·3 | 8·8 g |
| 9·8 | | | 57·4 | 14·5 | |
| 9·4 | | 22 | 50·0 | 13·8 | g |
| 9·6 | | 27 | 52·7 | 16·0 | g |
| 9·7 | | 28 | 26·0 | 10·0 | g |
| 9·1 | | | 31·6 | 52·8 | g |
| 9·6 | | 29 | 29·0 | 9·4 | g |

## 211—270.

| mag. | h (3ʰ–4ʰ) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9·4 | 3 | 30 | 43·0 | 8·8 | g |
| 9·1 | | 38 | 58·0 | 16·0 | g |
| 9·4 | | 39 | 9·0 | 5·5 | g |
| 8·3 | | 40 | 0·0 | 29·9 | 9·5 g |
| 9·4 | | 41 | 36·0 | 19·8 | g |
| 9·7 | | | 37·0 | 54·0 | |
| 8·8 | | 44 | 18·0 | 23·5 | 9·5 Gg |
| 9·8 | | | 20·0 | 23·4 | Gg |
| 9·4 | | | 21·0 | 8·3 | |
| 9·7 | | | 21·0 | 32·2 | |
| 8·5 | | 45 | 23·0 | 29·0 | g |
| 9·0 | | 48 | 2·0 | 18·0 | 9·5 g |
| 9·4 | | | 19·0 | 10·8 | Gg |
| 9·4 | | | 21·0 | 10·9 | 10·0 Gg |
| 9·0 | | | 22·0 | 58·1 | |
| 9·8 | | | 58·0 | 6·1 | |
| 9·2 | | 51 | 29·5 | 40·0 | g |
| 9·7 | | 55 | 0·5 | 12·2 | |
| 9·4 | | | 13·5 | 19·2 | |
| 9·2 | | 56 | 31·5 | 53·7 | g |
| 9·3 | | 59 | 53·5 | 57·1 | g |
| 9·7 | 4 | 0 | 19·5 | 30·9 | g |
| 9·3 | | | 40·5 | 17·5 | g |
| 6·7 | | 1 | 27·5 | 30·9 | 7·5 GSg |
| 9·6 | | 3 | 15·5 | 29·7 | 9·0 g |
| 9·4 | | | 20·5 | 29·1 | 10·0 g |
| 9·4 | | | 48·5 | 5·9 | |
| 9·2 | | 4 | 56·5 | 44·1 | 9·0 g |
| 9·6 | | | 56·5 | 12·9 | |
| 9·4 | | 5 | 18·0 | 53·9 | g |
| 9·8 | | | 29·0 | 28·9 | |
| 9·6 | | | 45·0 | 55·9 | |
| 9·7 | | 6 | 42·0 | 0·0 | |
| 9·6 | | | 47·5 | 36·0 | |
| 9·6 | | | 55·0 | 29·5 | |
| 9·7 | | 8 | 1·0 | 53·7 | |
| 9·7 | | | 10·0 | 50·6 | |
| 9·4 | | 9 | 27·0 | 33·8 | g |
| 8·4 | | | 38·5 | 58·0 | 9·0 GSg |
| 9·0 | | 11 | 21·5 | 39·7 | g |
| 8·6 | | 12 | 13·0 | 3·4 | 9·0 g |
| 9·3 | | | 20·0 | 26·9 | g |
| 9·4 | | 14 | 24·0 | 52·1 | |
| 9·6 | | | 48·0 | 37·8 | g |
| 9·7 | | | 58·0 | 6·9 | |
| 9·0 | | 15 | 20·0 | 4·0 | g |
| 8·8 | | 16 | 4·0 | 26·3 | g |
| 9·6 | | | 19·0 | 8·9 | |
| 9·4 | | 17 | 12·0 | 25·5 | g |
| 9·7 | | 18 | 59·5 | 57·9 | g |
| 9·4 | | 21 | 57·0 | 12·5 | g |
| 9·4 | | 22 | 32·0 | 34·2 | g |
| 9·6 | | | 36·5 | 57·3 | |
| 9·2 | | 26 | 50·0 | 33·9 | g |
| 9·1 | | 27 | 39·5 | 1·8 | 9·2 Gg |
| 9·4 | | 28 | 2·0 | 28·8 | g |
| 9·7 | | 29 | 34·0 | 43·9 | |
| 9·6 | | 30 | 12·0 | 2·7 | |
| 9·6 | | 31 | 42·0 | 59·0 | |
| 9·4 | | 32 | 2·0 | 57·4 | |



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## 271—330.

| mag. | h | m | s | −71° ′ | | |
|---|---|---|---|---|---|---|
| | $4^{h}$–$5^{h}$ | | | | | |
| 9·5 | 4 | 32 | 28·0 | 33·5 | *g* | |
| 9·4 | | | 34·0 | 29·6 | *g* | |
| 8·9 | | 34 | 7·0 | 9·1 | 8·9 *g* | |
| 9·6 | | 37 | 9·0 | 3·6 | *g* | |
| 8·4 | | 38 | 0·0 | 56·5 | 8·5 *g* | |
| 9·6 | | | 14·5 | 1·9 | *g* | |
| 9·4 | | 39 | 12·0 | 19·4 | *g* | |
| 7·9 | | 41 | 28·0 | 44·4 | 8·0 G*g* | |
| 9·0 | | | 44·0 | 5·6 | *g* | |
| 9·4 | | 43 | 48·0 | 50·0 | *g* | |
| 8·1 | | | 54·0 | 43·5 | 8·5 G*g* | |
| 5·9 | | 44 | 18·0 | 9·6 | 5·8 GS*g* | |
| 9·4 | | 46 | 34·0 | 13·2 | *g* | |
| 8·5 | | 48 | 1·0 | 19·5 | 8·5 G*g* | |
| 9·7 | | 49 | 41·0 | 17·0 | *g* | |
| 9·2 | | | 59·5 | 13·9 | *g* | |
| 9·7 | | 50 | 2·0 | 6·6 | *g* | |
| 9·6 | | | 25·5 | 36·2 | | |
| 9·6 | | 51 | 13·2 | 59·1 | | |
| 9·6 | | 52 | 26·5 | 44·6 | | |
| 9·6 | | | 34·5 | 44·2 | *g* | |
| 9·6 | | 53 | 8·5 | 52·1 | | |
| 9·3 | | | 36·0 | 44·0 | | |
| 9·7 | | | 56·5 | 17·2 | | |
| 9·0 | | 54 | 20·5 | 46·5 | 9·0 *g* | |
| 9·7 | | | 49·5 | 18·2 | | |
| 9·6 | | 56 | 18·8 | 1·6 | | |
| 9·6 | | | 26·5 | 58·6 | | |
| 9·5 | | | 35·5 | 57·0 | *g* | |
| 9·4 | | 57 | 12·0 | 29·8 | *g* | |
| 8·7 | | 58 | 14·5 | 6·8 | 7·2 GS*g* | |
| 9·6 | | | 31·5 | 48·2 | | |
| 9·6 | | 59 | 23·5 | 52·8 | | |
| 9·6 | 5 | 0 | 22·5 | 49·6 | | |
| 9·2 | | 1 | 0·5 | 2·4 | 9·5 *g* | |
| 9·6 | | 2 | 57·0 | 35·8 | | |
| 9·6 | | 3 | 31·0 | 46·0 | | |
| 9·5 | | | 45·0 | 30·6 | | |
| 7·9 | | 4 | 20·0 | 29·1 | 6·0 GS*g* | |
| 9·6 | | 5 | 5·0 | 35·0 | *g* | |
| 9·4 | | 7 | 6·0 | 29·5 | *g* | |
| 9·6 | | | 26·0 | 36·7 | | |
| 9·6 | | | 27·0 | 14·2 | *g* | |
| 9·7 | | | 29·0 | 22·7 | | |
| 8·8 | | 8 | 45·0 | 25·5 | 7·5 GS*g* | |
| 9·4 | | | 53·0 | 20·7 | | |
| 9·6 | | 9 | 3·0 | 17·2 | | |
| 9·4 | | | 6·0 | 49·1 | | |
| 9·2 | | 11 | 22·0 | 33·0 | | |
| 9·6 | | 12 | 44·0 | 18·8 | | |
| 9·6 | | 13 | 59·0 | 5·2 | | × |
| 9·3 | | 14 | 23·0 | 15·4 | *g* | |
| 9·1 | | | 35·0 | 12·0 | 8·8 G*g* | |
| 9·6 | | | 57·0 | 21·8 | | |
| 9·0 | | 16 | 5·0 | 38·2 | 8·5 *g* | |
| 9·6 | | | 34·0 | 11·4 | | |
| 9·6 | | | 49·0 | 50·4 | | |
| 9·6 | | 18 | 41·0 | 4·3 | | |
| 9·7 | | | 43·0 | 43·9 | | |
| 8·7 | | 19 | 15·0 | 39·4 | 7·5 GS*g* | |

## 331—390.

| mag. | h | m | s | −71° ′ | | |
|---|---|---|---|---|---|---|
| | $5^{h}$ | | | | | |
| 9·5 | 5 | 21 | 31·0 | 53·3 | *g* | |
| 9·5 | | | 45·0 | 36·1 | 9·5 *g* | |
| 9·0 | | | 49·0 | 5·0 | 9·0 G*g* | |
| 8·8 | | 22 | 20·0 | 39·0 | 8·5 *g* | |
| 8·4 | | 24 | 16·0 | 37·2 | 7·5 GS*g* | × |
| 9·7 | | | 49·0 | 49·8 | | |
| 9·6 | | 25 | 2·0 | 12·1 | | |
| 9·6 | | | 55·0 | 15·6 | | |
| 9·6 | | 27 | 17·0 | 23·9 | | |
| 9·1 | | | 35·0 | 4·2 | *g* | |
| 9·6 | | 28 | 29·0 | 31·0 | | |
| 9·6 | | | 36·0 | 22·3 | | |
| 9·7 | | | 47·0 | 5·2 | | |
| 8·9 | | 29 | 15·0 | 18·8 | 9·0 *g* | × |
| 8·9 | | | 53·0 | 11·5 | 9·0 *g* | |
| 8·5 | | 32 | 22·5 | 0·5 | 8·8 G*g* | |
| 9·6 | | | 28·0 | 30·5 | | |
| 9·6 | | | 29·0 | 9·2 | | × |
| 9·6 | | | 35·0 | 18·2 | | |
| 9·6 | | | 46·0 | 11·4 | | |
| 9·7 | | | 56·0 | 9·2 | | |
| 10·2 | | 33 | 11·5 | 53·0 | | |
| 9·3 | | 36 | 17·5 | 1·2 | *g* | |
| 8·6 | | | 51·5 | 49·2 | 8·5 *g* | |
| 8·5 | | | 58·0 | 12·7 | 8·0 GS*g* | |
| 8·6 | | 37 | 17·5 | 44·9 | 8·5 *g* | |
| 9·9 | | | 30·5 | 10·5 | | |
| 10·0 | | 38 | 25·0 | 21·4 | | |
| 10·1 | | 39 | 31·5 | 5·7 | | |
| 10·2 | | | 33·5 | 32·3 | | |
| 10·1 | | 40 | 1·5 | 45·2 | | |
| 9·3 | | | 13·5 | 42·9 | *g* | |
| 9·5 | | | 15·5 | 20·8 | 9·0 *g* | |
| 10·1 | | | 50·5 | 5·8 | | |
| 8·6 | | | 52·5 | 42·0 | *g* | |
| 9·6 | | 42 | 21·5 | 16·5 | | |
| 9·7 | | | 27·5 | 8·8 | *g* | |
| 10·2 | | 43 | 0·5 | 3·0 | | |
| 10·2 | | 44 | 5·5 | 32·7 | | |
| 9·8 | | | 29·0 | 44·2 | | |
| 10·2 | | | 49·0 | 12·6 | | |
| 10·2 | | | 57·0 | 15·0 | | |
| 9·7 | | 45 | 3·0 | 23·6 | *g* | |
| 9·3 | | | 35·0 | 6·5 | *g* | |
| 9·9 | | 46 | 7·0 | 36·8 | | ? |
| 9·6 | | 48 | 42·5 | 2·8 | *g* | |
| 8·9 | | | 45·0 | 38·4 | *g* | |
| 9·5 | | 49 | 1·0 | 33·6 | *g* | |
| 9·9 | | | 3·0 | 48·2 | | |
| 8·8 | | | 14·5 | 1·6 | 9·0 *g* | |
| 10·2 | | | 56·0 | 21·2 | | |
| 10·1 | | 50 | 1·0 | 48·0 | | |
| 10·2 | | | 7·0 | 19·2 | | |
| 10·2 | | | 30·0 | 8·8 | | |
| 9·9 | | 51 | 57·0 | 32·4 | | |
| 10·0 | | 52 | 9·0 | 23·0 | | |
| 9·0 | | | 11·0 | 22·9 | S*g* | |
| 9·2 | | | 41·0 | 53·9 | *g* | |
| 9·2 | | 53 | 4·0 | 59·7 | *g* | |
| 9·9 | | | 11·0 | 0·9 | | |

## 391—450.

| mag. | h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| | $5^{h}$–$6^{h}$ | | | | |
| 10·2 | 5 | 53 | 54·0 | 57·9 | *g* |
| 9·5 | | 54 | 34·0 | 32·0 | *g* |
| 10·2 | | 55 | 7·0 | 14·8 | |
| 9·6 | | 56 | 1·5 | 56·7 | |
| 10·1 | | | 21·0 | 30·0 | |
| 9·6 | | | 54·0 | 40·0 | |
| 10·0 | | 57 | 18·0 | 26·6 | |
| 10·2 | | | 23·0 | 20·9 | |
| 9·7 | | 58 | 1·0 | 55·0 | |
| 9·9 | | | 9·0 | 29·8 | *g* |
| 9·4 | | 59 | 7·0 | 26·8 | *g* |
| 9·9 | | | 31·0 | 11·0 | |
| 9·0 | | | 39·0 | 6·7 | |
| 8·8 | 6 | 0 | 11·0 | 19·7 | 9·0 S*g* |
| 9·9 | | | 18·0 | 0·0 | |
| 9·2 | | | 20·0 | 22·2 | *g* |
| 8·8 | | 1 | 5·0 | 11·6 | 9·0 *g* |
| 9·0 | | 2 | 23·0 | 32·8 | *g* |
| 9·8 | | 3 | 5·0 | 55·7 | *g* |
| 9·0 | | | 53·0 | 2·2 | 9·0 *g* |
| 10·1 | | | 55·0 | 8·1 | |
| 9·6 | | | 58·5 | 57·4 | *g* |
| 9·8 | | 4 | 22·0 | 39·7 | |
| 9·9 | | 10 | 7·0 | 21·4 | |
| 8·6 | | | 14·0 | 5·6 | 9·2 *g* |
| 10·0 | | | 49·5 | 59·0 | |
| 9·5 | | | 59·0 | 28·6 | 10·0 *g* |
| 10·1 | | 11 | 5·0 | 47·6 | |
| 9·3 | | | 27·0 | 42·6 | 9·5 *g* |
| 9·9 | | | 56·0 | 29·3 | |
| 9·7 | | 12 | 36·0 | 0·9 | |
| 8·9 | | 14 | 3·0 | 47·4 | *g* |
| 10·2 | | | 23·0 | 0·0 | |
| 9·9 | | 16 | 39·0 | 52·4 | |
| 8·8 | | | 53·0 | 36·5 | 8·0 GSc*g* |
| 7·4 | | 17 | 5·0 | 39·4 | 7·5 GSc*g* |
| 9·6 | | 20 | 36·8 | 59·3 | *g* |
| 10·1 | | 21 | 16·0 | 43·2 | |
| 10·1 | | | 32·0 | 25·5 | |
| 9·2 | | | 39·0 | 19·0 | 10·0 |
| 9·8 | | | 54·0 | 31·6 | |
| 9·0 | | 22 | 16·5 | 39·0 | *g* |
| 9·6 | | | 57·0 | 25·4 | *g* |
| 9·7 | | 23 | 35·5 | 41·8 | *g* |
| 9·9 | | | 41·5 | 9·2 | |
| 9·8 | | 24 | 5·5 | 24·9 | |
| 10·1 | | 25 | 16·0 | 5·1 | |
| 10·0 | | | 40·0 | 37·0 | |
| 9·2 | | 27 | 7·0 | 27·0 | *g* |
| 9·6 | | | 12·0 | 28·1 | *g* |
| 9·0 | | | 48·0 | 57·9 | *g* |
| 9·6 | | | 52·0 | 20·9 | |
| 10·0 | | 28 | 38·0 | 18·0 | |
| 10·0 | | | 51·0 | 29·5 | |
| 9·9 | | 29 | 7·0 | 23·0 | |
| 8·2 | | | 44·0 | 56·3 | 9·0 *g* |
| 9·4 | | | 53·0 | 45·4 | *g* |
| 9·8 | | 30 | 4·0 | 29·6 | |
| 8·2 | | 31 | 14·0 | 24·9 | 9·0 *g* |
| 9·8 | | | 56·0 | 26·0 | *g* |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 4 | 30 | − 13 − 0·09 d | + 3·2 |
| | 40 | 14 − 0·09 | 2·9 |
| | 50 | 16 − 0·09 | 2·5 |
| 5 | 0 | 17 − 0·09 | 2·2 |
| | 10 | 18 − 0·10 | 1·8 |
| | 20 | 19 − 0·10 | 1·5 |
| | 30 | 19 − 0·10 | 1·1 |
| | 40 | 20 − 0·10 | 0·7 |
| | 50 | 20 − 0·10 | + 0·4 |
| 6 | 0 | 20 − 0·10 | 0·0 |
| | 10 | 20 − 0·10 | − 0·4 |
| | 20 | 20 − 0·10 | 0·7 |
| | 30 | 19 − 0·10 | 1·1 |
| | 40 | − 19 − 0·10 | − 1·5 |

d = minutes of decl.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 6 | 30 | − 19 | − 0·10 d | − 1·1 |
| | 40 | 19 | − 0·10 | 1·5 |
| | 50 | 18 | − 0·10 | 1·8 |
| 7 | 0 | 17 | − 0·10 | 2·2 |
| | 10 | 16 | − 0·09 | 2·5 |
| | 20 | 14 | − 0·09 | 2·9 |
| | 30 | 13 | − 0·09 | 3·2 |
| | 40 | 11 | − 0·09 | 3·5 |
| | 50 | 9 | − 0·09 | 3·9 |
| 8 | 0 | − 7 | − 0·09 | − 4·2 |

d = minutes of decl.

## 451—510.

| mag. | 6h.–7h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 10·0 | 6 | 32 | 22·0 | 29·0 | |
| 9·2 | | | 22·0 | 10·0 | *g* |
| 10·1 | | | 58·0 | 34·9 | |
| 9·6 | | 33 | 0·0 | 59·0 | |
| 10·0 | | | 31·0 | 43·5 | |
| 9·8 | | | 45·0 | 44·9 | |
| 9·8 | | | 51·0 | 42·0 | |
| 10·0 | | 34 | 17·0 | 52·0 | |
| 9·9 | | | 21·0 | 6·0 | *g* |
| 8·6 | | 35 | 5·0 | 32·9 | *g* |
| 10·0 | | | 11·0 | 21·1 | |
| 10·1 | | | 15·0 | 46·0 | |
| 9·6 | | | 26·0 | 13·0 | |
| 10·1 | | | 34·0 | 8·0 | |
| 10·0 | | 36 | 25·0 | 25·2 | *g* |
| 10·0 | | | 43·0 | 48·0 | |
| 9·6 | | | 53·0 | 3·5 | |
| 9·2 | | 37 | 4·0 | 51·8 | *g* |
| 9·9 | | 38 | 9·0 | 55·0 | |
| 9·9 | | 39 | 37·0 | 34·0 | |
| 9·8 | | | 54·0 | 29·0 | |
| 10·2 | | 40 | 26·0 | 47·8 | |
| 9·4 | | | 40·0 | 14·0 | |
| 10·0 | | 42 | 37·0 | 22·5 | |
| 8·9 | | | 40·5 | 0·0 | 8·5 G*g* |
| 7·7 | | | 51·0 | 38·8 | 7·0 GS*g* |
| 9·9 | | 43 | 5·0 | 11·3 | *g* |
| 8·6 | | | 21·0 | 5·2 | 7·5 G*g* |
| 9·6 | | 44 | 2·0 | 54·0 | *g* |
| 8·6 | | | 4·0 | 45·6 | 7·5 G*g* |
| 9·7 | | | 37·0 | 42·2 | |
| 10·0 | | | 44·0 | 46·4 | |
| 9·9 | | | 53·0 | 18·0 | |
| 10·1 | | | 57·0 | 51·5 | |
| 9·4 | | | 59·0 | 20·2 | |
| 9·0 | | 45 | 43·0 | 50·7 | 9·0 *g* |
| 9·2 | | 47 | 18·0 | 14·8 | *g* |
| 9·2 | | | 24·0 | 49·1 | *g* |
| 10·1 | | | 37·0 | 29·0 | |
| 10·1 | | 48 | 21·0 | 38·3 | |
| 9·0 | | 49 | 9·5 | 58·0 | 9·5 *g* |
| 9·7 | | | 21·0 | 12·8 | |
| 10·0 | | 50 | 0·0 | 36·0 | |
| 10·1 | | | 3·0 | 18·1 | |
| 9·8 | | | 45·0 | 33·4 | *g* |
| 9·6 | | 52 | 40·0 | 57·0 | |
| 9·6 | | | 51·0 | 53·4 | |
| 10·1 | | 53 | 11·0 | 59·0 | |
| 10·1 | | 54 | 46·0 | 44·8 | |
| 9·6 | | 55 | 31·0 | 26·0 | 9·0 *g* |
| 10·0 | | 56 | 31·0 | 55·7 | |
| 10·0 | | | 48·0 | 10·4 | |
| 10·0 | | 57 | 26·7 | 2·0 | *g* |
| 9·6 | | | 33·0 | 16·3 | |
| 10·1 | | | 50·8 | 0·0 | |
| 7·8 | | 58 | 56·0 | 51·7 | 7·8 G*g* |
| 10·1 | | 59 | 10·0 | 40·4 | |
| 9·4 | | | 14·0 | 29·0 | |
| 10·0 | | | 19·0 | 53·0 | |
| 8·6 | 7 | 0 | 24·0 | 54·0 | *g* |

## 511—570.

| mag. | 7h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·0 | 7 | 0 | 43·0 | 4·7 | 9·3 *g* |
| 9·0 | | | 52·0 | 30·4 | *g* |
| 9·2 | | 1 | 52·0 | 6·6 | 9·5 *g* |
| 10·0 | | 2 | 16·3 | 1·6 | |
| 8·0 | | | 19·0 | 12·8 | 8·7 *g* |
| 10·1 | | 4 | 9·0 | 38·0 | |
| 10·1 | | | 45·0 | 11·0 | |
| 9·2 | | 5 | 9·0 | 29·3 | *g* |
| 8·4– | | | 25·0 | 48·4 | *g* |
| 10·0 | | | 41·5 | 16·5 | |
| 9·8 | | 6 | 8·5 | 27·0 | *g* |
| 10·2 | | | 18·5 | 40·5 | |
| 9·9 | | | 49·0 | 45·1 | |
| 8·1 | | 7 | 3·5 | 5·0 | GS*g* |
| 10·2 | | | 9·5 | 59·9 | |
| 10·3 | | | 15·5 | 6·3 | |
| 9·9 | | | 19·5 | 16·9 | |
| 10·2 | | 8 | 5·0 | 33·0 | |
| 9·8 | | | 9·5 | 14·7 | |
| 10·3 | | | 9·5 | 45·2 | |
| 10·3 | | | 34·0 | 20·1 | |
| 9·8 | | | 34·5 | 19·1 | |
| 10·4 | | 9 | 22·5 | 3·9 | |
| 9·8 | | | 29·5 | 5·7 | |
| 10·3 | | | 49·5 | 49·9 | |
| 10·3 | | 10 | 43·0 | 4·9 | |
| 10·0 | | 11 | 1·5 | 4·1 | |
| 10·4 | | | 12·0 | 21·9 | |
| 9·9 | | | 18·0 | 37·9 | |
| 10·4 | | | 26·0 | 29·9 | |
| 10·3 | | | 40·0 | 30·2 | |
| 10·3 | | | 56·0 | 9·3 | |
| 10·3 | | 12 | 18·0 | 3·9 | |
| 9·7 | | | 20·0 | 34·1 | *g* |
| 9·7 | | | 37·0 | 52·3 | 9·5 |
| 10·2 | | | 38·0 | 5·9 | |
| 9·0 | | 14 | 22·0 | 47·0 | *g* |
| 10·2 | | | 28·7 | 58·9 | |
| 10·3 | | | 52·0 | 26·9 | |
| 10·0 | | 15 | 2·0 | 16·3 | |
| 10·4 | | | 40·0 | 3·9 | |
| 10·4 | | | 47·0 | 51·9 | |
| 9·6 | | 16 | 9·0 | 30·5 | *g* |
| 9·7 | | | 42·0 | 49·4 | *g* |
| 10·4 | | | 58·0 | 59·5 | |
| 10·2 | | 17 | 54·0 | 34·7 | |
| 7·7 | | 18 | 29·0 | 31·2 | 7·0 GS*g* |
| 10·4 | | | 55·0 | 47·9 | |
| 9·4 | | | 56·0 | 6·1 | 9·0 *g* |
| 10·2 | | 19 | 50·0 | 3·8 | |
| 10·4 | | 20 | 13·0 | 17·9 | |
| 9·0 | | | 30·0 | 57·0 | 9·0 G*g* |
| 10·3 | | | 57·0 | 10·9 | |
| 9·8 | | 21 | 20·0 | 7·9 | |
| 9·0 | | 22 | 17·0 | 17·4 | 7·5 GS*g*g |
| 10·2 | | | 48·0 | 5·1 | |
| 9·4 | | 23 | 5·0 | 19·9 | |
| 9·4 | | | 8·0 | 21·6 | |
| 10·3 | | | 49·0 | 39·9 | |
| 8·0 | | 24 | 22·0 | 42·7 | *g* |

## 571—630.

| mag. | 7h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 10·4 | 7 | 24 | 28·0 | 15·5 | |
| 10·4 | | 25 | 30·0 | 16·2 | |
| 9·6 | | | 44·0 | 28·0 | |
| 6·8 | | | 54·0 | 13·1 | 7·0 GS*g* |
| 9·6 | | 26 | 46·0 | 18·5 | |
| 10·2 | | | 50·0 | 46·8 | |
| 10·3 | | 27 | 16·0 | 17·3 | |
| 9·7 | | | 25·0 | 8·5 | |
| 10·2 | | | 37·5 | 58·8 | |
| 9·0 | | | 44·5 | 58·8 | 8·5 *g* |
| 10·4 | | 28 | 30·0 | 33·5 | |
| 9·0 | | 29 | 10·0 | 4·5 | |
| 8·8 | | 30 | 28·0 | 44·1 | 9·0 *g* |
| 10·2 | | | 45·0 | 26·6 | |
| 10·3 | | | 50·0 | 27·9 | |
| 10·3 | | 31 | 5·0 | 39·9 | |
| 10·4 | | 33 | 2·0 | 51·8 | |
| 8·5 | | | 10·0 | 43·9 | *g* |
| 9·8 | | | 39·0 | 9·7 | |
| 9·1 | | | 49·0 | 0·9 | 9·2 *g* |
| 9·8 | | | 59·0 | 7·6 | |
| 10·4 | | 34 | 9·5 | 57·4 | |
| 10·2 | | | 52·0 | 7·9 | |
| 9·7 | | | 53·0 | 10·1 | |
| 8·8 | | 35 | 9·0 | 20·5 | |
| 9·6 | | 36 | 7·0 | 51·7 | |
| 10·3 | | | 35·0 | 19·7 | |
| 9·6 | | 37 | 25·0 | 31·9 | |
| 10·0 | | | 28·0 | 45·9 | |
| 9·9 | | | 39·0 | 25·5 | |
| 10·4 | | 38 | 35·0 | 8·9 | |
| 10·4 | | 39 | 5·0 | 52·7 | |
| 9·2 | | | 17·0 | 35·8 | |
| 10·0 | | | 20·0 | 21·2 | |
| 9·6 | | 40 | 5·0 | 22·9 | |
| 9·9 | | 41 | 28·0 | 33·9 | |
| 7·7 | | | 59·0 | 27·9 | 7·0 GS*g* |
| 9·7 | | 42 | 19·0 | 1·0 | |
| 10·4 | | | 55·0 | 5·7 | |
| 10·4 | | | 59·0 | 48·0 | |
| 10·4 | | 43 | 21·0 | 21·7 | |
| 8·2 | | | 55·0 | 14·3 | 7·8 GS*g* |
| 10·3 | | 44 | 0·5 | 0·1 | |
| 10·4 | | | 27·0 | 54·9 | |
| 9·0 | | | 39·0 | 18·3 | 9·5 |
| 9·2 | | 45 | 15·0 | 5·8 | |
| 10·0* | | 46 | 40·0 | 57·5 | |
| 7·6– | | 47 | 21·0 | 24·5 | 8·0 GS*g* |
| 10·0 | | 50 | 40·0 | 35·1 | |
| 9·5 | | | 46·0 | 38·4 | |
| 10·0 | | 51 | 2·0 | 13·2 | |
| 9·2 | | | 48·5 | 9·1 | |
| 10·0 | | | 56·0 | 6·1 | |
| 8·6 | | 52 | 27·0 | 41·1 | 8·5 *g* |
| 9·8 | | 53 | 2·0 | 42·7 | |
| 10·0 | | | 13·5 | 57·1 | |
| 10·0 | | | 52·0 | 17·7 | |
| 8·8 | | 54 | 6·0 | 18·1 | 9·0 *g* |
| 9·4 | | | 52·3 | 0·8 | |
| 9·8 | | 56 | 22·0 | 31·8 | |



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## 631—690.

| mag. | h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| | 7h.–8h. | | | | |
| 10·0 | 7 | 56 | 22·0 | 53·1 | |
| 10·0 | | | 50·0 | 13·0 | |
| 8·3 | | 57 | 10·0 | 39·1 | 8·0 g |
| 9·8 | | | 14·0 | 12·1 | |
| 9·8 | | | 26·0 | 12·0 | |
| 9·7 | | | 36·0 | 6·3 | |
| 9·8 | | | 41·5 | 44·6 | |
| 9·4 | | | 59·5 | 42·8 | |
| 10·0 | | 58 | 6·5 | 43·9 | |
| 9·0 | | | 17·5 | 39·2 | 8·5 g |
| 9·4 | | 59 | 6·5 | 10·4 | 8·5 g |
| 8·4 | 8 | 0 | 1·5 | 5·3 | 8·0 g |
| 8·3 | | 2 | 10·5 | 49·5 | 9·0 |
| 10·0 | | | 13·5 | 48·9 | |
| 9·1 | | | 41·0 | 41·9 | 9·0 G |
| 9·7 | | | 53·0 | 43·5 | G |
| 9·2 | | 3 | 11·0 | 20·7 | 9·5 G |
| 9·6 | | 4 | 22·0 | 36·9 | |
| 9·4 | | 6 | 2·0 | 39·0 | |
| 9·0 | | 7 | 3·0 | 27·0 | 9·0 g |
| 10·0 | | | 5·0 | 41·9 | |
| 10·0 | | | 23·0 | 14·4 | |
| 8·9 | | 8 | 15·0 | 47·0 | g |
| 9·4 | | | 22·0 | 21·0 | 8·5 g |
| 8·8 | | | 45·0 | 46·3 | g |
| 10·0 | | 9 | 17·0 | 9·5 | |
| 8·5 | | | 36·0 | 21·0 | 7·0 GSg |
| 9·1 | | | 41·0 | 57·7 | |
| 10·0 | | 10 | 26·0 | 3·9 | |
| 10·0 | | 11 | 1·0 | 9·1 | |
| 10·0 | | | 9·8 | 1·9 | |
| 9·8 | | | 25·0 | 43·1 | |
| 9·2 | | | 37·0 | 58·0 | |
| 10·0 | | 12 | 1·0 | 57·0 | |
| 10·0 | | 13 | 8·0 | 49·0 | |
| 9·6 | | | 53·0 | 38·9 | |
| 10·0 | | 14 | 16·0 | 10·2 | |
| 9·2 | | 15 | 59·0 | 26·9 | Gg |
| 9·9 | | 16 | 3·0 | 10·5 | |
| 9·6 | | 17 | 55·0 | 18·9 | |
| 8·8 | | 18 | 15·0 | 53·6 | g |
| 10·0 | | | 17·0 | 55·4 | |
| 10·0 | | | 59·0 | 37·0 | |
| 9·2 | | 19 | 11·0 | 3·8 | |
| 8·3 | | | 12·0 | 34·8 | g |
| 9·6 | | | 47·0 | 45·2 | |
| 5·8 | | 20 | 10·0 | 6·9 | 5·5 GScgg |
| 6·7 | | | 21·0 | 6·2 | 6·0 GSgg |
| 9·0 | | | 26·0 | 5·8 | 8·0 Ggg |
| 9·9 | | 21 | 29·0 | 41·9 | |
| 10·0 | | | 34·0 | 57·1 | |
| 8·0 | | | 40·0 | 33·9 | 8·0 g |
| 10·0 | | 22 | 1·5 | 33·9 | |
| 10·0 | | | 16·5 | 23·9 | |
| 9·2 | | | 34·5 | 48·1 | 8·5 |
| 10·0 | | | 44·5 | 57·0 | |
| 9·7 | | 23 | 10·5 | 42·1 | |
| 10·0 | | | 46·5 | 43·0 | |
| 9·1 | | | 51·5 | 35·9 | 9·0 |
| 10·0 | | | 54·5 | 38·2 | |

## 691—750.

| mag. | h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| | 8h. | | | | |
| 9·4 | 8 | 24 | 12·5 | 34·0 | |
| 9·4 | | 25 | 14·5 | 18·6 | 8·5 g |
| 10·0 | | | 38·5 | 36·8 | |
| 9·7 | | 26 | 0·5 | 46·0 | |
| 10·0 | | | 29·5 | 37·6 | |
| 9·6 | | | 57·5 | 50·8 | |
| 9·9 | | 27 | 13·5 | 47·9 | |
| 8·4 | | | 14·5 | 7·6 | 7·0 Gg |
| 10·0 | | | 46·5 | 20·9 | |
| 10·0 | | 28 | 34·5 | 41·9 | |
| 10·0 | | | 44·5 | 4·4 | |
| 7·4 | | 29 | 16·5 | 39·6 | 7·0 GSg |
| 9·7 | | | 35·5 | 15·9 | |
| 9·8 | | 30 | 49·5 | 43·9 | |
| 9·0 | | | 56·5 | 18·0 | 8·0 g |
| 9·7 | | 31 | 7·5 | 55·0 | |
| 9·2 | | | 20·5 | 20·0 | 9·0 |
| 10·0 | | | 33·5 | 44·2 | |
| 9·6 | | 32 | 10·5 | 9·9 | 9·0 |
| 9·2 | | | 52·5 | 7·9 | Gg |
| 8·0 | | | 56·5 | 22·1 | 8·0 g |
| 10·0 | | 34 | 36·5 | 19·4 | |
| 9·8 | | | 45·5 | 33·9 | |
| 10·0 | | 35 | 20·0 | 2·1 | |
| 10·1 | | | 22·0 | 0·1 | |
| 10·1 | | | 41·0 | 3·0 | |
| 10·0 | | | 50·0 | 5·0 | |
| 9·7 | | | 55·0 | 30·4 | |
| 8·8 | | 36 | 24·5 | 13·3 | 8·0 Gg |
| 10·0 | | | 26·0 | 56·0 | |
| 10·1 | | | 50·0 | 51·1 | |
| 9·4 | | 37 | 24·0 | 52·8 | |
| 9·9 | | 38 | 1·5 | 44·1 | |
| 8·4 | | 39 | 0·5 | 54·1 | g |
| 8·5 | | | 22·0 | 41·0 | g |
| 10·0 | | | 42·3 | 0·6 | |
| 9·9 | | | 54·5 | 44·5 | |
| 8·6 | | 40 | 15·0 | 50·8 | g |
| 8·3 | | | 15·5 | 25·9 | g |
| 10·0 | | | 16·5 | 40·3 | |
| 9·1 | | | 35·5 | 16·6 | |
| 9·8 | | 41 | 2·0 | 24·6 | |
| 9·5 | | | 27·0 | 53·7 | |
| 9·8 | | 42 | 43·0 | 58·0 | |
| 9·6 | | | 59·0 | 12·1 | |
| 10·1 | | 43 | 15·0 | 34·2 | |
| 10·1 | | | 41·0 | 47·1 | |
| 8·7 | | | 42·0 | 22·1 | 8·0 g |
| 10·1 | | | 43·0 | 12·2 | |
| 10·0 | | | 48·0 | 0·4 | 9·5 g |
| 8·9 | | | 53·0 | 25·8 | g |
| 9·2 | | | 54·0 | 17·9 | 9·0 g |
| 10·1 | | 44 | 39·0 | 27·2 | |
| 10·0 | | | 42·5 | 57·6 | |
| 10·1 | | | 48·0 | 10·6 | |
| 10·1 | | | 55·0 | 0·8 | |
| 9·6 | | 45 | 10·0 | 40·4 | |
| 9·4 | | | 28·0 | 19·2 | |
| 8·8 | | | 51·0 | 28·9 | 9·0 g |
| 8·6 | | 47 | 42·0 | 23·0 | 9·2 G |

## 751—810.

| mag. | h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| | 8h.–9h. | | | | |
| 10·1 | 8 | 48 | 33·0 | 4·2 | |
| 10·0 | | 49 | 2·0 | 19·1 | |
| 9·4 | | | 16·0 | 10·1 | |
| 10·1 | | | 18·0 | 32·8 | |
| 9·5 | | | 21·0 | 24·2 | |
| 9·6 | | | 55·0 | 0·0 | 9·5 |
| 10·1 | | 50 | 1·0 | 21·7 | |
| 8·9 | | | 45·0 | 4·9 | 9·5 |
| 10·1 | | 52 | 10·0 | 31·7 | |
| 9·4 | | | 41·0 | 34·9 | 9·5 g |
| 9·7 | | | 49·0 | 14·1 | |
| 9·4 | | | 52·0 | 29·5 | 9·0 g |
| 9·0 | | 53 | 22·0 | 2·1 | 9·0 |
| 9·3 | | | 39·0 | 9·5 | |
| 9·8 | | | 51·0 | 20·1 | |
| 9·7 | | | 53·0 | 49·2 | |
| 8·5 | | 54 | 47·0 | 48·0 | 8·8 g |
| 10·1 | | 55 | 0·0 | 51·0 | |
| 9·6 | | | 4·0 | 29·0 | 9·5 |
| 10·0 | | | 43·0 | 47·1 | |
| 9·7 | | | 51·0 | 47·4 | |
| 8·5 | | 56 | 22·0 | 45·8 | 9·5 g |
| 8·2 | | | 43·0 | 55·3 | 8·5 g |
| 10·0 | | | 54·0 | 6·1 | |
| 10·0 | | 58 | 9·0 | 38·1 | |
| 9·2 | | 59 | 3·0 | 43·6 | 10·0 |
| 9·0 | 9 | 0 | 3·0 | 39·7 | 8·8 g |
| 10·1 | | | 7·0 | 29·5 | |
| 7·9 | | | 33·5 | 57·3 | 8·0 g |
| 10·1 | | 1 | 8·0 | 39·5 | |
| 8·5 | | | 39·0 | 36·5 | g |
| 10·0 | | 2 | 24·0 | 6·1 | |
| 9·0 | | 3 | 28·0 | 53·2 | 9·0 g |
| 9·6 | | 4 | 59·0 | 53·6 | |
| 9·5 | | 5 | 0·0 | 8·1 | |
| 10·0 | | | 1·0 | 56·3 | |
| 9·1 | | | 17·0 | 15·1 | |
| 10·1 | | | 23·0 | 32·6 | |
| 9·6 | | | 52·0 | 14·0 | |
| 9·4 | | 6 | 24·0 | 32·3 | |
| 9·7 | | | 35·0 | 13·0 | |
| 9·9 | | 7 | 37·0 | 39·9 | |
| 9·9 | | 9 | 23·0 | 8·3 | |
| 8·3 | | | 30·0 | 27·9 | 7·8 g |
| 8·2 | | | 45·0 | 40·2 | 9·0 g |
| 10·0 | | | 48·0 | 27·2 | 9·5 |
| 9·1 | | 10 | 2·0 | 59·7 | |
| 10·1 | | | 18·0 | 0·2 | |
| 9·3 | | 11 | 17·0 | 39·1 | 9·0 g |
| 10·1 | | | 30·0 | 45·6 | |
| 9·1 | | | 48·0 | 37·9 | |
| 7·5 | | 12 | 45·0 | 6·0 | 8·0 g |
| 10·1 | | 13 | 0·0 | 21·9 | |
| 9·9 | | | 23·0 | 54·1 | |
| 8·5 | | 14 | 48·0 | 39·9 | 8·5 g |
| 8·1 | | | 54·0 | 39·1 | 8·5 g |
| 10·1 | | 15 | 9·0 | 15·5 | |
| 9·7 | | | 39·0 | 50·1 | |
| 10·1 | | 16 | 9·0 | 53·1 | |
| 10·0 | | | 35·0 | 35·0 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 7 | 50 | − 9 − 0·09 d | − 3·9 |
| 8 | 0 | 7 − 0·09 | 4·2 |
| | 10 | 5 − 0·08 | 4·5 |
| | 20 | − 3 − 0·08 | 4·8 |
| | 30 | 0 − 0·08 | 5·1 |
| | 40 | + 2 − 0·08 | 5·4 |
| | 50 | 5 − 0·07 | 5·6 |
| 9 | 0 | 8 − 0·07 | 5·9 |
| | 10 | 11 − 0·07 | 6·2 |
| | 20 | + 14 − 0·06 | − 6·4 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 9 | 10 | + 11 − 0.07 d | − 6.2 |
| | 20 | 14 − 0.06 | 6.4 |
| | 30 | 18 − 0.06 | 6.6 |
| | 40 | 21 − 0.06 | 6.8 |
| | 50 | 25 − 0.05 | 7.0 |
| 10 | 0 | 28 − 0.05 | 7.2 |
| | 10 | 32 − 0.05 | 7.4 |
| | 20 | + 36 − 0.04 | − 7.6 |

d = minutes of decl.

### 811—870.

| mag. | h (9h.) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.7 | 9 | 16 | 51.0 | 10.1 | |
| 10.1 | | | 59.0 | 4.6 | |
| 9.8 | | 17 | 15.0 | 29.6 | |
| 9.7 | | | 57.5 | 2.1 | |
| 10.1 | | 18 | 35.0 | 57.1 | |
| 10.1 | | | 37.0 | 30.6 | |
| 9.9 | | 19 | 11.0 | 21.1 | |
| 9.6 | | | 21.0 | 1.2 | |
| 8.9 | | | 59.5 | 53.7 | |
| 9.2 | | 20 | 44.0 | 37.8 | |
| 9.2 | | 21 | 27.5 | 8.6 | 9.0 *g* |
| 8.1 | | 22 | 17.0 | 16.3 | 8.0 *g* |
| 9.5 | | | 42.0 | 40.3 | |
| 9.2 | | | 57.5 | 43.2 | |
| 8.4 | | 23 | 22.0 | 13.0 | 9.0 *g* |
| 9.6 | | | 41.0 | 44.1 | |
| 9.6 | | 24 | 14.0 | 55.2 | |
| 9.6 | | 25 | 7.5 | 24.4 | |
| 9.0 | | | 19.0 | 35.2 | 9.8 *g* |
| 9.4 | | | 23.2 | 59.3 | |
| 9.6 | | | 33.0 | 26.1 | |
| 9.2 | | | 38.0 | 27.6 | 9.0 |
| 7.4 | | | 52.0 | 3.5 | 6.0 GSc*gr* |
| 9.2 | | | 58.0 | 38.5 | |
| 7.7 | | 26 | 36.0 | 14.2 | 6.8 GS*g* |
| 8.5 | | | 59.0 | 6.5 | 9.0 *g* |
| 7.6 | | 27 | 21.0 | 52.4 | 8.2 *g* |
| 9.5 | | 28 | 19.0 | 31.5 | |
| 9.0 | | | 25.0 | 53.3 | 9.0 *g* |
| 9.0 | | | 42.0 | 43.8 | 9.2 *g* |
| 9.1 | | 29 | 5.0 | 6.5 | |
| 9.4 | | | 9.0 | 16.4 | 9.5 |
| 8.6 | | | 26.5 | 1.8 | 9.0 *g* |
| 9.0 | | | 33.0 | 13.0 | 8.7 *g* |
| 9.6 | | | 53.0 | 4.0 | |
| 9.6 | | 30 | 27.0 | 40.4 | |
| 7.7 | | | 41.0 | 54.9 | 8.0 *g* |
| 9.4 | | | 55.7 | 31.5 | |
| 9.3 | | | 59.0 | 47.5 | |
| 8.1 | | 31 | 49.0 | 35.1 | 8.5 *g* |
| 9.3 | | 32 | 26.0 | 50.3 | |
| 9.3 | | | 59.0 | 50.4 | |
| 8.8 | | 33 | 33.0 | 2.1 | 9.2 *g* |
| 9.6 | | 34 | 27.0 | 55.9 | |
| 9.6 | | 35 | 3.0 | 30.1 | |
| 8.6 | | | 30.0 | 7.5 | 9.0 *g* |
| 8.6 | | | 34.0 | 52.5 | 9.5 |
| 9.4 | | | 34.0 | 0.5 | |
| 9.6 | | 36 | 31.0 | 29.6 | |
| 9.4 | | 37 | 35.0 | 10.9 | |
| 9.4 | | 38 | 13.0 | 8.3 | |
| 9.6 | | | 46.0 | 22.1 | |
| 9.4 | | | 55.0 | 14.2 | 9.0 *g* |
| 8.8 | | 40 | 7.0 | 37.0 | 9.3 *g* |
| 9.0 | | | 41.0 | 41.0 | 9.2 *g* |
| 7.1 | | 41 | 5.0 | 37.0 | 6.8 GSc*gr* |
| 9.2 | | 42 | 16.0 | 47.5 | |
| 9.6 | | 43 | 13.0 | 12.0 | |
| 9.4 | | | 31.0 | 40.1 | |
| 9.5 | | | 33.0 | 42.2 | |

### 871—930.

| mag. | h (9h.–10h.) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.6 | 9 | 43 | 34.0 | 45.9 | |
| 8.5 | | 44 | 13.0 | 12.5 | 7.8 G*g* |
| 9.4 | | | 19.0 | 37.9 | 9.0 |
| 9.1 | | | 31.0 | 49.9 | |
| 9.5 | | | 37.0 | 53.1 | |
| 9.0 | | 45 | 3.0 | 26.2 | 8.0 *g* |
| 9.0 | | 46 | 7.0 | 9.4 | |
| 9.0 | | 47 | 53.0 | 40.9 | |
| 8.3 | | 49 | 11.0 | 33.4 | 8.2 *g* |
| 9.2 | | | 25.0 | 16.8 | |
| 9.0 | | | 39.0 | 48.2 | |
| 6.9 | | 50 | 31.0 | 21.3 | 7.2 GS*g* |
| 9.1 | | 51 | 13.0 | 9.6 | |
| 9.1 | | | 29.5 | 3.0 | |
| 8.6 | | 53 | 12.5 | 57.7 | 9.5 *g* |
| 9.4 | | | 44.0 | 50.8 | |
| 9.5 | | 54 | 0.0 | 8.0 | |
| 9.6 | | | 3.0 | 29.3 | |
| 9.1 | | | 13.0 | 9.3 | 9.0 *g* |
| 9.2 | | | 15.0 | 52.4 | 9.5 *g* |
| 9.2 | | | 17.0 | 14.4 | 9.5 *g* |
| 9.6 | | | 33.0 | 55.7 | |
| 9.6 | | 55 | 13.0 | 17.6 | |
| 9.6 | | | 25.0 | 38.4 | |
| 7.4 | | 56 | 8.0 | 27.9 | 7.5 *g* |
| 9.0 | | | 25.0 | 5.4 | 8.3 *g* |
| 9.6 | | | 33.0 | 11.6 | |
| 9.4 | | | 37.0 | 52.1 | |
| 8.2 | | 58 | 9.0 | 57.4 | 8.0 *g* |
| 9.6 | | | 10.0 | 17.4 | *g* |
| 8.0 | | 59 | 3.0 | 43.1 | *g* |
| 9.1 | | | 9.0 | 27.3 | |
| 9.2 | 10 | 0 | 21.5 | 59.5 | |
| 9.1 | | 1 | 3.0 | 55.5 | |
| 7.7 | | 2 | 49.0 | 27.9 | 8.0 *g* |
| 9.6 | | | 50.0 | 58.9 | |
| 8.8 | | | 53.0 | 15.8 | 10.0 *g* |
| 8.8 | | 3 | 23.0 | 53.8 | *g* |
| 8.8 | | 4 | 7.0 | 9.8 | 8.2 *g* |
| 8.7 | | | 11.0 | 31.1 | *g* |
| 9.8 | | | 50.0 | 54.5 | |
| 9.9 | | | 59.0 | 1.3 | |
| 9.4 | | 5 | 7.0 | 7.4 | |
| 9.9 | | | 14.7 | 59.6 | |
| 8.7 | | | 22.5 | 37.0 | |
| 9.6 | | | 43.0 | 48.1 | *g* |
| 9.9 | | | 46.0 | 14.0 | |
| 9.8 | | 6 | 5.0 | 14.2 | |
| 9.7 | | | 19.0 | 53.6 | |
| 9.9 | | | 53.0 | 53.8 | |
| 9.9 | | 7 | 2.0 | 56.6 | |
| 9.9 | | | 9.0 | 54.4 | |
| 9.0 | | | 15.0 | 23.7 | 9.5 |
| 9.2 | | | 49.5 | 18.7 | 10.0 : |
| 9.9 | | | 59.0 | 53.4 | |
| 9.8 | | 8 | 11.0 | 44.3 | |
| 9.7 | | | 21.0 | 7.2 | |
| 9.8 | | | 35.0 | 47.7 | |
| 9.8 | | | 42.0 | 7.7 | |
| 9.0 | | | 42.5 | 50.6 | |

### 931—990.

| mag. | h (10h.) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.9 | 10 | 8 | 48.0 | 52.7 | |
| 9.8 | | 9 | 38.0 | 9.2 | |
| 9.8 | | | 42.0 | 4.3 | |
| 9.9 | | | 58.0 | 54.6 | |
| 9.9 | | 10 | 8.0 | 18.7 | |
| 9.8 | | | 26.0 | 23.8 | |
| 9.4 | | | 33.0 | 47.6 | *g* |
| 9.8 | | | 41.0 | 20.6 | |
| 9.4 | | | 42.0 | 21.6 | |
| 7.8 | | | 50.5 | 3.0 | 7.5 G*g* |
| 9.8 | | 11 | 17.0 | 56.9 | |
| 9.2 | | | 19.0 | 51.4 | *g* |
| 9.6 | | | 35.0 | 18.2 | |
| 9.4 | | | 54.0 | 0.6 | |
| 9.1 | | | 59.0 | 29.7 | |
| 9.7 | | 12 | 21.0 | 25.9 | |
| 9.9 | | | 30.0 | 12.7 | |
| 9.9 | | | 35.0 | 38.2 | |
| 9.9 | | | 49.0 | 13.2 | |
| 9.5 | | 13 | 6.0 | 26.6 | |
| 9.9 | | | 32.0 | 37.0 | |
| 9.9 | | | 41.0 | 11.6 | |
| 9.2 | | | 51.0 | 53.2 | |
| 9.3 | | 14 | 3.0 | 38.4 | 9.5 *g* |
| 9.4 | | | 3.0 | 18.3 | *g* |
| 9.6 | | | 24.5 | 1.7 | |
| 9.4 | | | 26.0 | 34.9 | |
| 9.6 | | | 34.0 | 50.6 | |
| 9.4 | | 15 | 3.0 | 26.2 | *g* |
| 9.4 | | | 5.0 | 25.9 | *g* |
| 9.9 | | | 25.0 | 20.2 | |
| 9.9 | | | 50.0 | 50.3 | |
| 9.8 | | | 51.0 | 8.2 | |
| 9.4 | | 16 | 8.0 | 23.7 | |
| 9.6 | | | 18.0 | 18.6 | |
| 9.9 | | | 22.5 | 1.6 | |
| 9.9 | | | 24.5 | 2.7 | |
| 9.2 | | | 28.0 | 13.8 | *g* |
| 9.9 | | | 52.0 | 54.8 | |
| 9.6 | | | 59.0 | 16.9 | |
| 9.5 | | 17 | 13.0 | 53.8 | |
| 9.8 | | | 16.0 | 40.8 | |
| 9.7 | | | 19.0 | 10.5 | |
| 9.9 | | | 35.0 | 27.2 | |
| 9.9 | | | 37.0 | 59.4 | |
| 8.4 | | | 40.0 | 30.0 | 7.5 *g* |
| 9.5 | | | 44.0 | 25.9 | |
| 9.9 | | | 46.0 | 14.5 | |
| 9.8 | | 18 | 1.0 | 57.3 | |
| 9.8 | | | 2.0 | 18.8 | |
| 9.4 | | | 4.0 | 25.9 | |
| 8.4 | | | 18.0 | 43.2 | *g* |
| 9.9 | | | 49.0 | 21.3 | |
| 9.7 | | | 52.0 | 26.7 | |
| 9.4 | | | 55.0 | 20.6 | |
| 8.4 | | | 55.0 | 38.0 | 9.5 *g* |
| 9.8 | | | 58.0 | 23.9 | |
| 9.4 | | 19 | 11.0 | 49.9 | |
| 9.8 | | | 14.0 | 42.1 | |
| 9.8 | | | 23.0 | 27.1 | |



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## 991—1050.

| mag. | h | m | s (10h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.8 | 10 | 19 | 35.0 | 25.4 | |
| 9.8 | | | 35.0 | 25.7 | |
| 9.9 | | | 38.0 | 11.8 | |
| 9.8 | | | 40.0 | 19.2 | |
| 9.0 | | | 45.0 | 18.2 | |
| 9.4 | | 20 | 3.0 | 51.6 | |
| 9.9 | | | 38.0 | 58.6 | |
| 9.7 | | | 38.5 | 0.8 | |
| 8.3 | | | 49.0 | 4.9 | 8.8 *g* |
| 9.9 | | | 55.0 | 3.6 | |
| 9.9 | | 21 | 4.0 | 50.8 | |
| 9.9 | | | 5.0 | 51.2 | |
| 9.4 | | | 15.0 | 27.5 | |
| 9.8 | | | 40.0 | 14.8 | |
| 9.9 | | | 43.5 | 59.7 | |
| 9.4 | | | 58.0 | 11.1 | |
| 9.2 | | 22 | 4.0 | 15.7 | *g* |
| 9.7 | | | 16.5 | 3.1 | |
| 9.4 | | | 23.0 | 26.4 | |
| 9.4 | | | 24.0 | 35.7 | |
| 9.3 | | | 25.0 | 9.7 | |
| 9.4 | | | 45.0 | 28.6 | |
| 9.6 | | | 50.0 | 1.1 | |
| 9.7 | | | 50.0 | 55.7 | |
| 8.3 | | 23 | 1.0 | 55.5 | 9.0 *g* |
| 9.6 | | | 5.0 | 24.7 | |
| 9.9 | | | 8.0 | 52.8 | |
| 9.9 | | | 9.0 | 49.3 | |
| 9.9 | | | 19.0 | 48.8 | |
| 9.8 | | | 51.0 | 41.2 | |
| 9.8 | | 24 | 7.0 | 11.4 | |
| 9.9 | | | 22.0 | 24.6 | |
| 9.1 | | | 44.0 | 3.5 | |
| 9.9 | | | 45.0 | 35.7 | |
| 9.8 | | 25 | 39.0 | 55.8 | |
| 9.8 | | | 44.0 | 32.8 | |
| 8.6 | | | 50.0 | 9.6 | 8.5 *g* |
| 9.5 | | | 54.5 | 58.7 | |
| 9.7 | | 26 | 9.0 | 36.0 | |
| 9.9 | | | 13.0 | 58.8 | |
| 8.6 | | | 40.0 | 59.3 | 8.0 *g* |
| 9.6 | | | 53.0 | 43.9 | |
| 9.6 | | 27 | 4.0 | 43.7 | |
| 5.8 | | | 10.0 | 20.8 | GS*g* |
| 9.8 | | | 16.0 | 42.9 | |
| 9.7 | | | 19.0 | 32.2 | |
| 9.9 | | | 26.0 | 50.0 | |
| 9.9 | | | 45.0 | 30.9 | |
| 9.2 | | | 58.0 | 12.6 | |
| 9.7 | | | 59.0 | 16.9 | |
| 9.7 | | 28 | 3.0 | 31.4 | |
| 9.8 | | | 5.0 | 19.7 | |
| 9.9 | | | 19.0 | 18.2 | |
| 9.8 | | | 42.0 | 52.2 | |
| 7.8 | | | 46.0 | 27.9 | G*g* |
| 9.1 | | | 59.0 | 5.7 | *g* |
| 9.4 | | 29 | 20.0 | 33.2 | *g* |
| 9.2 | | | 23.0 | 28.9 | *g* |
| 8.6 | | | 27.0 | 46.9 | 8.5 *g* |
| 9.0 | | | 29.0 | 47.7 | 9.5 *g* |

## 1051—1110.

| mag. | h | m | s (10h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.8 | 10 | 29 | 43.0 | 37.8 | |
| 9.9 | | 30 | 19.5 | 1.6 | |
| 9.7 | | | 24.0 | 25.4 | |
| 9.9 | | | 29.0 | 25.7 | |
| 9.8 | | | 53.0 | 2.8 | |
| 9.8 | | 31 | 2.0 | 55.7 | |
| 9.8 | | | 2.0 | 12.8 | |
| 9.9 | | | 5.0 | 48.9 | |
| 8.8 | | | 9.0 | 49.7 | 8.5 *g* |
| 9.0 | | | 34.0 | 4.9 | |
| 9.8 | | | 50.0 | 16.8 | |
| 9.7 | | | 55.5 | 57.9 | |
| 9.3 | | | 58.0 | 1.5 | |
| 9.8 | | 32 | 8.0 | 43.4 | |
| 9.9 | | | 18.0 | 12.8 | |
| 9.2 | | | 31.0 | 35.6 | *g* |
| 9.8 | | | 32.0 | 53.8 | |
| 9.8 | | | 35.0 | 37.2 | |
| 9.8 | | | 41.0 | 44.7 | |
| 9.8 | | | 48.0 | 11.6 | |
| 9.9 | | 33 | 4.0 | 23.7 | |
| 9.3 | | | 6.0 | 56.2 | *g* |
| 7.9 | | | 8.0 | 51.8 | *g* |
| 9.5 | | | 21.0 | 5.5 | |
| 8.3 | | | 38.5 | 2.7 | 7.5 G*g* |
| 9.2 | | | 41.0 | 41.8 | *g* |
| 9.8 | | | 44.0 | 7.6 | |
| 9.6 | | | 50.0 | 37.9 | |
| 9.6 | | 34 | 4.5 | 56.7 | |
| 9.4 | | | 5.0 | 22.9 | |
| 9.8 | | | 9.0 | 6.7 | |
| 9.6 | | | 28.5 | 58.0 | |
| 9.9 | | | 37.5 | 58.3 | |
| 9.2 | | | 57.0 | 28.7 | *g* |
| 9.8 | | | 58.0 | 7.4 | |
| 9.9 | | 35 | 2.0 | 50.4 | |
| 9.4 | | | 16.0 | 52.5 | |
| 9.7 | | | 23.0 | 39.0 | |
| 9.7 | | | 38.0 | 10.1 | |
| 9.8 | | | 41.0 | 54.0 | |
| 9.9 | | | 51.0 | 51.7 | |
| 9.9 | | 36 | 17.0 | 16.7 | |
| 9.9 | | | 41.0 | 55.2 | |
| 9.8 | | | 43.0 | 27.4 | |
| 9.8 | | | 47.0 | 6.4 | |
| 9.9 | | 37 | 4.0 | 7.9 | |
| 9.8 | | | 28.0 | 27.2 | |
| 8.4 | | 38 | 15.0 | 38.4 | 9.5 *g* |
| 9.8 | | | 20.0 | 20.1 | |
| 9.9 | | | 29.0 | 45.4 | |
| 9.8 | | | 32.0 | 37.4 | |
| 9.6 | | | 44.5 | 57.5 | |
| 9.6 | | | 51.0 | 38.5 | |
| 9.2 | | 39 | 0.0 | 49.6 | *g* |
| 9.2 | | | 16.0 | 10.5 | 8.8 *g* |
| 8.8 | | | 20.0 | 5.6 | 8.5 *g* |
| 9.7 | | | 25.0 | 4.8 | |
| 9.9 | | | 34.0 | 8.5 | |
| 7.9 | | | 35.0 | 32.4 | 8.0 *g* |
| 9.9 | | | 37.0 | 12.8 | |

## 1111—1170.

| mag. | h | m | s (10h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.8 | 10 | 39 | 42.0 | 43.8 | |
| 9.9 | | | 43.0 | 24.8 | |
| 9.7 | | 40 | 11.0 | 14.9 | |
| 8.8 | | | 35.0 | 24.4 | 7.5 *g* |
| 9.0 | | | 35.0 | 15.8 | 9.5 *g* |
| 9.7 | | | 35.0 | 14.3 | |
| 9.6 | | | 55.0 | 17.9 | |
| 7.6 | | | 58.0 | 47.1 | 7.0 GS*gg* |
| 9.9 | | 41 | 11.0 | 5.9 | |
| 9.7 | | | 23.0 | 4.8 | |
| 9.9 | | | 34.0 | 49.8 | |
| 9.9 | | | 35.0 | 40.4 | |
| 8.4 | | 42 | 40.0 | 30.3 | 8.5 *g* |
| 9.8 | | | 46.0 | 58.6 | |
| 9.2 | | | 55.0 | 44.6 | *g* |
| 9.2 | | 43 | 13.0 | 42.7 | *g* |
| 9.8 | | | 18.0 | 6.3 | |
| 9.8 | | | 34.0 | 19.5 | |
| 9.2 | | | 37.0 | 48.5 | *g* |
| 9.8 | | | 39.0 | 16.9 | |
| 9.4 | | 44 | 22.0 | 46.6 | 10.0 *g* |
| 9.4 | | | 28.0 | 45.7 | *g* |
| 9.2 | | | 31.5 | 3.1 | 9.0 |
| 9.4 | | | 39.0 | 31.8 | |
| 9.4 | | | 49.0 | 5.4 | |
| 9.6 | | 45 | 0.0 | 56.7 | |
| 9.6 | | | 5.0 | 12.1 | |
| 9.4 | | | 17.0 | 7.7 | |
| 9.8 | | | 29.0 | 31.6 | |
| 9.6 | | | 45.0 | 25.5 | |
| 8.5 | | 46 | 1.0 | 9.7 | 8.0 *g* |
| 9.2 | | | 15.0 | 18.8 | |
| 9.8 | | | 35.0 | 39.8 | |
| 9.4 | | | 40.0 | 12.8 | |
| 9.8 | | 47 | 2.0 | 10.0 | |
| 9.7 | | | 5.0 | 41.4 | |
| 9.6 | | | 19.0 | 9.8 | |
| 9.8 | | | 33.0 | 7.9 | |
| 9.8 | | | 41.0 | 8.6 | |
| 9.6 | | | 43.0 | 52.3 | |
| 9.9 | | | 54.0 | 3.9 | |
| 9.9 | | 48 | 17.0 | 46.8 | |
| 9.7 | | | 19.0 | 38.2 | |
| 9.9 | | | 21.0 | 37.8 | |
| 9.2 | | | 59.0 | 27.7 | *g* |
| 9.5 | | 49 | 0.0 | 32.5 | |
| 9.0 | | | 11.0 | 37.5 | *g* |
| 9.8 | | | 18.0 | 9.2 | |
| 9.5 | | | 24.5 | 53.9 | *g* |
| 8.8 | | | 37.5 | 42.2 | *g* |
| 9.8 | | | 41.0 | 18.3 | |
| 9.4 | | | 44.0 | 45.6 | |
| 7.7 | | 50 | 5.0 | 29.3 | 8.0 *g* |
| 9.9 | | | 9.0 | 7.6 | |
| 9.8 | | | 11.0 | 8.3 | |
| 9.9 | | | 16.0 | 30.9 | |
| 9.4 | | | 27.5 | 15.3 | |
| 9.0 | | | 45.5 | 3.2 | 9.2 |
| 9.8 | | | 50.0 | 58.8 | |
| 9.6 | | 51 | 1.5 | 22.6 | |

25 prec.

| h | m | α (s s) | | δ (′) |
|---|---|---|---|---|
| 10 | 10 | + 32 − 0.04 | d | − 7.4 |
| | 20 | 36 − 0.04 | | 7.6 |
| | 30 | 40 − 0.04 | | 7.7 |
| | 40 | 44 − 0.03 | | 7.9 |
| | 50 | 48 − 0.03 | | 8.0 |
| 11 | 0 | + 52 − 0.02 | | − 8.1 |

d = minutes of decl.

25 prec.

| h | m | a s | s | δ ′ |
|---|---|---|---|---|
| 10 | 50 | + 48 | − 0·03 d | − 8·0 |
| 11 | 0 | 52 | − 0·02 | 8·1 |
| | 10 | 56 | − 0·02 | 8·2 |
| | 20 | 60 | − 0·02 | 8·2 |
| | 30 | 64 | − 0·01 | 8·3 |
| | 40 | 68 | − 0·01 | 8·3 |
| | 50 | 73 | 0·00 | 8·3 |
| 2 | 0 | 77 | 0·00 | 8·4 |
| | 10 | 81 | 0·00 | 8·3 |
| | 20 | 85 | + 0·01 | 8·3 |
| | 30 | 89 | + 0·01 | 8·3 |
| | 40 | + 94 | + 0·02 | − 8·2 |

d = minutes of decl.

## 1171—1230.

| mag. | 10h.–11h. h m | s | −71° ′ | |
|---|---|---|---|---|
| 9·6 | 10 51 | 43·0 | 42·8 | |
| 9·8 | 52 | 30·0 | 26·2 | |
| 9·8 | | 33·0 | 8·5 | |
| 9·9 | | 51·0 | 45·6 | |
| 9·8 | 53 | 0·0 | 4·0 | |
| 9·2 | | 5·0 | 55·9 | g |
| 9·4 | | 39·5 | 55·9 | g |
| 9·9_ | | 51·8 | 59·8 | |
| 9·6 | 54 | 1·0 | 38·8 | |
| 9·6 | | 5·5 | 34·8 | |
| 9·6 | | 11·0 | 11·0 | |
| 9·6 | | 16·0 | 9·8 | |
| 9·4 | | 19·5 | 48·5 | |
| 9·2 | 55 | 16·0 | 39·8 | g |
| 9·6 | | 26·0 | 12·0 | |
| 9·6 | | 30·0 | 23·1 | |
| 9·2 | | 56·0 | 31·9 | g |
| 9·1 | 56 | 4·0 | 16·4 | 9·5 g |
| 9·6 | 57 | 27·0 | 29·0 | |
| 9·2 | | 45·0 | 52·6 | |
| 7·8 | | 49·0 | 4·6 | 8·0 g |
| 9·2 | 58 | 0·0 | 38·9 | |
| 7·4 | | 42·0 | 33·9 | Gg |
| 9·2 | | 52·0 | 24·9 | Sg |
| 9·5 | 59 | 6·0 | 49·1 | |
| 9·4 | | 25·0 | 6·8 | |
| 8·9 | | 55·0 | 13·0 | 8·0 g |
| 8·1 | 11 1 | 38·0 | 59·9 | 8·0 g |
| 9·6 | 2 | 31·0 | 29·0 | |
| 9·6 | 3 | 21·0 | 7·7 | |
| 9·0 | | 37·0 | 57·8 | g |
| 9·0 | 5 | 6·0 | 36·9 | g |
| 9·5 | | 10·5 | 57·8 | |
| 9·2 | | 15·5 | 58·1 | g |
| 9·6 | 6 | 16·0 | 48·1 | |
| 9·2 | | 23·0 | 33·1 | g |
| 9·5 | | 26·0 | 4·5 | |
| 9·5 | | 43·0 | 31·3 | |
| 9·6 | | 44·5 | 1·5 | |
| 9·6 | | 46·0 | 5·3 | |
| 9·2 | | 46·0 | 47·9 | g |
| 9·1 | 7 | 42·0 | 17·9 | g |
| 9·6 | | 52·0 | 36·0 | |
| 7·7 | | 54·0 | 4·2 | 7·8 Gg |
| 9·2 | 8 | 6·0 | 25·1 | g |
| 9·6 | | 20·0 | 24·0 | |
| 9·3 | | 25·0 | 58·9 | |
| 9·6 | | 48·0 | 46·1 | |
| 9·2 | 9 | 4·0 | 47·2 | |
| 9·2 | | 14·0 | 7·1 | 9·5 |
| 9·6 | 10 | 0·0 | 36·1 | |
| 9·5 | | 4·0 | 29·9 | |
| 9·0 | | 10·0 | 25·9 | g |
| 9·6 | | 47·0 | 20·0 | |
| 9·3 | | 57·0 | 7·7 | |
| 9·2 | 11 | 19·0 | 22·5 | g |
| 9·6 | | 22·0 | 18·4 | |
| 9·2 | | 46·0 | 33·6 | 9·0 g |
| 9·1 | 12 | 2·0 | 29·1 | 9·0 g |
| 9·0 | | 44·0 | 37·8 | 9·0 g |

## 1231—1290.

| mag. | 11h. h m | s | −71° ′ | |
|---|---|---|---|---|
| 9·2 | 11 12 | 45·0 | 48·7 | |
| 9·4 | | 47·0 | 48·0 | g |
| 9·4 | 13 | 30·0 | 13·2 | |
| 9·6 | 14 | 18·0 | 37·0 | g |
| 9·5 | | 24·0 | 29·9 | |
| 9·6 | | 25·0 | 36·1 | g |
| 9·1 | | 40·0 | 13·1 | g |
| 7·3 | 15 | 13·0 | 18·5 | 7·0 GSg |
| 9·2 | | 44·0 | 20·4 | |
| 9·5 | | 48·0 | 16·0 | |
| 9·6 | 16 | 4·0 | 20·7 | |
| 8·5 | | 33·0 | 6·1 | 8·5 g |
| 8·9 | | 41·0 | 43·5 | g |
| 9·0 | | 44·0 | 21·0 | g |
| 9·2 | 17 | 4·0 | 49·0 | g |
| 9·6 | | 33·5 | 59·7 | |
| 9·2 | 19 | 10·0 | 10·5 | |
| 6·9 | | 12·0 | 34·1 | 6·0 GSgr |
| 7·9 | | 56·0 | 7·4 | 8·1 Gg |
| 9·2 | 21 | 54·0 | 16·1 | g |
| 8·5 | 22 | 40·5 | 23·0 | 8·5 g |
| 9·6 | | 53·5 | 5·1 | |
| 7·2 | 23 | 11·5 | 47·1 | 6·5 GSgr |
| 9·6 | 24 | 45·5 | 7·1 | |
| 9·0 | | 55·5 | 38·7 | 9·0 g |
| 8·9 | 25 | 26·5 | 21·2 | 9·0 g |
| 9·6 | 26 | 27·5 | 54·0 | |
| 8·4 | | 29·5 | 14·3 | 8·0 g |
| 8·8 | | 40·5 | 47·6 | 9·0 g |
| 9·1 | | 51·5 | 17·7 | 7·5 g |
| 9·4 | | 53·5 | 59·0 | g |
| 8·7 | 27 | 37·5 | 22·3 | 9·0 g |
| 9·6 | | 42·5 | 26·3 | |
| 9·2 | 28 | 6·5 | 59·2 | |
| 9·6 | 29 | 56·5 | 22·1 | |
| 9·6 | 31 | 46·5 | 54·0 | |
| 9·6 | 33 | 0·5 | 6·9 | |
| 7·5_ | | 7·5 | 40·5 | 7·0 GSg |
| 9·5 | | 23·0 | 27·5 | |
| 9·5 | 34 | 9·0 | 49·9 | |
| 9·6* | 35 | 26·0 | 41·1 | |
| 9·5 | 36 | 12·5 | 28·1 | g |
| 9·1 | 37 | 7·0 | 30·4 | g |
| 7·3 | | 27·5 | 45·1 | 7·5 GSg |
| 9·5 | | 36·0 | 21·6 | g |
| 9·2 | | 43·0 | 19·3 | g |
| 9·5 | | 48·5 | 47·9 | |
| 9·6* | | 57·5 | 7·5 | 10·0 |
| 9·5 | 39 | 18·5 | 6·2 | |
| 9·5 | 40 | 32·5 | 37·9 | |
| 9·4 | 41 | 4·5 | 59·3 | |
| 9·4 | | 16·5 | 31·9 | |
| 8·6 | | 40·5 | 4·7 | 9·0 g |
| 9·5 | 42 | 10·5 | 14·9 | |
| 9·5 | | 44·5 | 55·0 | g |
| 9·5 | 43 | 13·5 | 36·7 | 8·5 g |
| 9·4 | 45 | 40·5 | 31·8 | |
| 9·4 | 46 | 10·5 | 52·4 | g |
| 9·0 | | 28·5 | 47·7 | g |
| 9·2 | | 31·5 | 54·9 | g |

## 1291—1350.

| mag. | 11h.–12h. h m | s | −71° ′ | |
|---|---|---|---|---|
| 9·0 | 11 46 | 37·5 | 34·3 | g |
| 9·5 | | 39·5 | 22·7 | g |
| 8·4 | 47 | 45·5 | 7·3 | 9·0 g |
| 9·4 | 48 | 26·5 | 53·5 | |
| 8·2 | 49 | 14·5 | 7·9 | 8·7 g |
| 9·2 | | 24·5 | 48·9 | |
| 8·3 | 51 | 47·5 | 5·1 | 8·5 g |
| 9·1 | | 52·5 | 42·0 | 9·0 g |
| 9·5 | 54 | 3·5 | 21·3 | g |
| 9·5 | | 22·5 | 18·7 | g |
| 8·7 | 57 | 0·5 | 38·7 | 9·0 g |
| 8·3 | | 7·5 | 29·9 | 8·5 g |
| 9·5 | | 10·5 | 46·9 | |
| 9·5 | | 31·5 | 6·9 | g |
| 8·8 | 58 | 23·5 | 50·4 | 9·2 g |
| 7·8 | | 24·5 | 45·7 | 8·0 g |
| 9·3 | | 45·5 | 50·1 | |
| 8·9 | 12 0 | 1·5 | 6·9 | g |
| 9·5 | | 17·5 | 30·9 | g |
| 9·2 | | 20·5 | 30·4 | |
| 9·3 | 1 | 31·5 | 6·9 | |
| 9·2 | | 50·5 | 57·1 | g |
| 9·4 | | 53·5 | 20·1 | |
| 9·5 | 2 | 31·0 | 58·7 | |
| 9·2 | 3 | 11·5 | 8·9 | |
| 8·5 | | 11·5 | 4·9 | 9·0 g |
| 8·8 | | 34·5 | 3·0 | 8·9 g |
| 8·8 | 4 | 41·0 | 34·5 | g |
| 9·2 | 6 | 52·5 | 0·1 | 8·8 g |
| 9·3 | 7 | 3·0 | 23·8 | g |
| 7·8 | | 29·0 | 26·5 | g |
| 9·0 | | 48·0 | 29·6 | g |
| 6·1 | 9 | 30·0 | 55·0 | GSg |
| 8·2 | 11 | 49·0 | 11·3 | 8·5 Gg |
| 8·8 | 12 | 18·0 | 13·3 | 8·5 g |
| 6·8 | 17 | 40·0 | 54·5 | 7·0 GSg |
| 8·6 | 20 | 15·5 | 45·8 | 9·0 g |
| 9·2 | | 25·5 | 38·9 | g |
| 9·5_ | 21 | 11·5 | 30·0 | |
| 9·6 | | 38·5 | 4·1 | |
| 8·4 | 23 | 8·5 | 19·9 | Gg |
| 9·2 | | 11·5 | 34·1 | g |
| 9·8 | | 42·5 | 2·6 | g |
| 9·8 | 24 | 31·5 | 36·0 | |
| 9·8 | | 54·5 | 36·9 | |
| 4·9 | 25 | 0·0 | 26·4 | 4·0 GSgth |
| 9·2 | | 12·5 | 5·0 | 9·5 |
| 8·3 | | 19·5 | 40·9 | 8·5 Gg |
| 9·5 | | 41·5 | 53·2 | |
| 9·8 | | 42·5 | 27·0 | |
| 9·6 | 26 | 3·5 | 39·0 | |
| 9·5 | | 21·5 | 58·5 | |
| 9·4 | | 22·3 | 1·0 | 9·5 |
| 9·0 | | 31·5 | 13·4 | g |
| 9·5 | | 31·5 | 43·5 | |
| 9·8 | | 38·5 | 57·9 | |
| 9·2 | 28 | 58·5 | 11·1 | |
| 9·8 | 29 | 42·5 | 6·5 | |
| 9·5 | | 46·0 | 0·9 | 8·5 g |
| 9·5 | 31 | 11·5 | 36·9 | g |

## 1351—1410.

| mag. | h (12h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·8 | 12 | 31 | 18·5 | 42·1 | |
| 9·0 | | | 28·5 | 35·4 | *g* |
| 9·0 | | | 48·5 | 42·8 | *g* |
| 9·6 | | | 57·2 | 59·1 | |
| 9·8 | | 32 | 19·8 | 50·1 | |
| 9·8 | | | 22·0 | 58·5 | |
| 9·4 | | | 28·5 | 19·8 | *g* |
| 8·7 | | | 32·5 | 27·2 | *g* |
| 9·6 | | | 38·5 | 21·4 | |
| 9·8 | | | 53·5 | 3·0 | |
| 9·0 | | | 56·5 | 32·1 | *g* |
| 9·5 | | | 59·5 | 6·7 | |
| 9·8 | | 33 | 21·0 | 58·7 | |
| 9·8 | | | 24·0 | 59·7 | |
| 9·2 | | | 41·5 | 24·4 | *g* |
| 9·4 | | 34 | 0·5 | 3·0 | |
| 9·4 | | | 49·5 | 30·1 | |
| 9·6 | | | 53·5 | 7·6 | |
| 9·8 | | 35 | 34·5 | 38·8 | |
| 8·4 | | | 42·5 | 45·6 | *g* |
| 9·6 | | 36 | 13·5 | 6·9 | |
| 9·8 | | | 16·5 | 13·3 | |
| 9·8 | | | 19·5 | 44·8 | |
| 9·8 | | | 20·5 | 41·9 | |
| 8·9 | | 37 | 23·5 | 41·1 | *g* |
| 8·8 | | | 34·2 | 1·7 | 7·8 G*g* |
| 9·8 | | | 39·5 | 2·0 | 9·8 G*g* |
| 9·6 | | | 39·5 | 27·1 | |
| 9·7 | | 38 | 18·5 | 41·1 | |
| 9·8 | | 39 | 0·5 | 34·2 | |
| 9·8 | | | 3·5 | 21·9 | |
| 9·8 | | | 24·5 | 25·1 | |
| 8·3 | | | 39·5 | 0·0 | 8·8 G*g* |
| 9·8 | | | 43·5 | 36·3 | 9·0 *g* |
| 8·7 | | | 57·5 | 46·6 | *g* |
| 9·5 | | 40 | 33·5 | 30·0 | *g* |
| 9·7 | | 41 | 14·5 | 45·2 | |
| 9·8 | | | 28·2 | 57·4 | |
| 7·7 | | | 29·5 | 3·1 | 8·0 G*g* |
| 9·3 | | | 40·5 | 58·6 | |
| 7·4 | | | 41·5 | 18·2 | 6·5 GSc*g* |
| 9·4 | | 42 | 35·0 | 5·4 | |
| 9·6 | | | 49·0 | 35·5 | *g* |
| 9·8 | | 43 | 46·0 | 10·2 | |
| 9·8 | | 44 | 1·0 | 35·5 | |
| 9·4 | | | 28·0 | 50·5 | |
| 9·4 | | 45 | 1·0 | 7·0 | |
| 9·6 | | | 53·0 | 47·3 | |
| 9·8 | | | 55·0 | 38·9 | |
| 9·2 | | 46 | 12·0 | 5·3 | |
| 9·4 | | | 33·0 | 29·5 | |
| 9·2 | | 47 | 19·0 | 42·2 | |
| 9·8 | | | 55·0 | 13·2 | *g* |
| 7·9 | | 48 | 13·0 | 30·4 | 6·5 GS*g* |
| 9·8 | | | 20·0 | 7·5 | |
| 9·8 | | 49 | 9·0 | 33·3 | *g* |
| 9·8 | | | 43·0 | 10·1 | |
| 9·2 | | | 48·0 | 26·7 | 8·5 *g* |
| 9·4 | | | 52·0 | 20·6 | 9·0 *g* |
| 9·4 | | | 56·0 | 43·0 | *g* |

## 1411—1470.

| mag. | h (12h.—13h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·5 | 12 | 49 | 59·0 | 31·3 | *g* |
| 9·6 | | 50 | 53·0 | 35·5 | |
| 8·9 | | 52 | 14·0 | 23·3 | 9·0 *g* |
| 8·8 | | | 18·5 | 57·2 | *g* |
| 8·0 | | | 19·0 | 45·2 | *g* |
| 9·0 | | | 42·0 | 57·3 | *g* |
| 8·2 | | 53 | 3·0 | 40·4 | 8·5 *g* |
| 9·8 | | | 4·0 | 45·2 | |
| 8·2 | | 54 | 9·0 | 45·4 | 8·5 *g* |
| 9·6 | | | 54·0 | 4·2 | |
| 9·6 | | 55 | 0·0 | 32·9 | |
| 8·4 | | | 29·5 | 50·3 | 8·5 G*g* |
| 9·8 | | | 43·5 | 30·5 | |
| 9·8 | | 56 | 30·0 | 50·9 | |
| 9·8 | | | 36·5 | 49·1 | |
| 9·5 | | | 55·5 | 42·1 | |
| 9·5 | | | 55·5 | 57·7 | 8·5 *g* |
| 9·8 | | 57 | 28·5 | 29·3 | *g* |
| 9·4 | | 58 | 35·5 | 57·2 | |
| 8·7 | 13 | 1 | 14·5 | 47·0 | 8·0 G*g* |
| 9·8 | | | 53·5 | 26·8 | |
| 9·8 | | | 54·5 | 51·6 | *g* |
| 9·2 | | 2 | 14·5 | 15·9 | 9·0 *g* |
| 8·0 | | | 22·5 | 8·9 | 8·0 G*g* |
| 9·7 | | | 51·5 | 16·2 | |
| 9·8 | | 3 | 33·5 | 50·6 | 9·0 *g* |
| 9·4 | | 4 | 3·5 | 24·3 | *g* |
| 7·7 | | | 16·5 | 52·6 | 8·0 G*g* |
| 8·5 | | 5 | 3·5 | 10·8 | 9·0 k*g* |
| 9·8 | | | 16·0 | 21·2 | |
| 9·5 | | 6 | 8·0 | 32·1 | |
| 9·4 | | | 21·0 | 20·6 | *g* |
| 9·7 | | | 53·0 | 28·9 | |
| 9·9 | | 7 | 1·0 | 3·6 | |
| 9·9 | | | 2·0 | 29·4 | |
| 9·7 | | | 2·5 | 24·7 | |
| 9·8* | | | 32·0 | 58·9 | *g* |
| 9·9 | | | 34·0 | 55·9 | |
| 9·9 | | | 34·0 | 9·9 | *g* |
| 9·9 | | | 43·0 | 48·9 | |
| 9·7 | | | 49·0 | 45·9 | *g* |
| 9·9 | | | 52·0 | 58·5 | |
| 9·7 | | 8 | 16·0 | 4·5 | |
| 9·8 | | 9 | 9·0 | 15·1 | *g* |
| 9·9 | | | 34·0 | 35·1 | |
| 9·9 | | | 37·0 | 35·3 | |
| 9·9 | | | 51·5 | 57·7 | |
| 8·5 | | 10 | 13·0 | 22·4 | 7·0 GS*g* |
| 9·8 | | | 34·5 | 44·3 | |
| 9·9 | | | 36·0 | 16·0 | |
| 9·6 | | 11 | 38·0 | 0·5 | |
| 9·9 | | 12 | 12·0 | 29·0 | |
| 9·9 | | | 16·0 | 12·8 | |
| 9·1 | | | 50·0 | 4·4 | 9·5 *g* |
| 9·9 | | 13 | 28·0 | 51·8 | |
| 9·9 | | | 31·0 | 10·9 | |
| 7·3 | | | 38·0 | 29·2 | 6·5 GS*g* |
| 9·9 | | 14 | 34·0 | 5·0 | |
| 9·4 | | 15 | 30·0 | 42·0 | *g* |
| 9·8 | | 16 | 21·0 | 5·1 | |

## 1471—1530.

| mag. | h (13h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·8 | 13 | 16 | 23·0 | 19·0 | |
| 9·1 | | 17 | 15·0 | 43·7 | 9·5 *g* |
| 9·1 | | 18 | 10·0 | 28·6 | *g* |
| 9·6 | | | 24·0 | 8·4 | 9·0 *g* |
| 9·8 | | 19 | 6·0 | 55·0 | |
| 9·7 | | | 15·0 | 42·0 | |
| 9·1 | | | 52·0 | 35·2 | 9·5 *g* |
| 9·9 | | 20 | 15·0 | 5·0 | |
| 9·9 | | | 25·0 | 32·2 | |
| 9·7 | | 22 | 29·0 | 39·5 | |
| 9·9 | | | 57·0 | 2·9 | |
| 9·9 | | 23 | 18·0 | 48·3 | |
| 9·3 | | | 22·0 | 3·5 | 9·5 *g* |
| 9·9 | | | 55·0 | 10·1 | |
| 9·5 | | 24 | 12·0 | 13·5 | *g* |
| 9·9 | | | 20·0 | 26·5 | |
| 9·9 | | | 39·0 | 41·8 | |
| 9·5 | | 26 | 3·0 | 56·0 | *g* |
| 9·5 | | | 7·0 | 48·2 | *g* |
| 9·9 | | | 25·0 | 54·3 | |
| 9·9 | | | 49·0 | 26·5 | 9·0 *g* |
| 9·3 | | 27 | 24·0 | 43·1 | 9·0 G*g* |
| 9·7 | | 28 | 19·0 | 24·0 | |
| 9·9 | | | 35·0 | 25·9 | |
| 8·6 | | 29 | 39·0 | 52·0 | 8·0 G*g* |
| 9·2 | | 30 | 58·0 | 9·1 | 8·8 *g* |
| 9·9 | | 31 | 18·0 | 43·8 | |
| 9·1 | | | 25·0 | 14·0 | 7·5 GS*g* |
| 9·1 | | | 45·0 | 10·5 | 9·0 *g* |
| 9·9 | | 32 | 22·0 | 19·0 | |
| 9·9 | | | 38·0 | 14·9 | |
| 9·1 | | 33 | 25·0 | 27·0 | 9·5 *g* |
| 9·4 | | | 42·0 | 54·0 | |
| 9·5 | | 35 | 18·0 | 45·5 | 9·0 *g* |
| 9·9 | | | 18·0 | 10·0 | |
| 9·8 | | | 33·0 | 45·5 | |
| 8·7 | | | 50·0 | 21·1 | 8·5 *g* |
| 9·6 | | 36 | 9·0 | 51·0 | |
| 9·8 | | | 21·0 | 8·0 | |
| 9·9 | | | 24·0 | 32·1 | |
| 9·9 | | 37 | 17·0 | 34·9 | |
| 9·8 | | | 17·0 | 58·5 | |
| 9·8 | | | 35·0 | 33·6 | |
| 9·9 | | 38 | 15·0 | 22·4 | |
| 9·9 | | | 44·0 | 35·0 | |
| 9·9 | | | 51·5 | 0·2 | |
| 9·9 | | 39 | 10·0 | 20·0 | |
| 9·9 | | | 15·5 | 58·9 | |
| 9·9 | | | 29·0 | 19·2 | |
| 9·5 | | 40 | 1·0 | 22·0 | |
| 9·9 | | | 24·0 | 36·7 | *g* |
| 9·8 | | 41 | 9·0 | 38·6 | |
| 9·8 | | | 33·0 | 32·7 | |
| 9·8 | | | 50·0 | 49·0 | |
| 9·9 | | | 51·0 | 59·1 | 9·5 *g* |
| 9·6 | | | 56·0 | 5·3 | |
| 9·2 | | 42 | 3·5 | 57·2 | 9·5 *g* |
| 9·3 | | | 22·0 | 40·7 | *g* |
| 9·8 | | | 49·0 | 5·1 | |
| 9·8 | | 43 | 3·0 | 29·8 | *g* |

25 prec.

| h | m | a (s s) | δ ′ |
|---|---|---|---|
| 12 | 30 | + 89 + 0·01 d | − 8·3 |
| | 40 | 94 + 0·02 | 8·2 |
| | 50 | 98 + 0·02 | 8·2 |
| 13 | 0 | 102 + 0·02 | 8·1 |
| | 10 | 106 + 0·03 | 8·0 |
| | 20 | 110 + 0·03 | 7·9 |
| | 30 | 114 + 0·04 | 7·7 |
| | 40 | 118 + 0·04 | 7·6 |
| | 50 | + 122 + 0·04 | − 7·4 |

d = minutes of decl.



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**25 prec.**

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 13 | 40 | +118 | +0.04 | d | −7.6 |
| | 50 | 122 | +0.04 | | 7.4 |
| 14 | 0 | 125 | +0.05 | | 7.2 |
| | 10 | 129 | +0.05 | | 7.0 |
| | 20 | 132 | +0.06 | | 6.8 |
| | 30 | 136 | +0.06 | | 6.6 |
| | 40 | 139 | +0.06 | | 6.4 |
| | 50 | 142 | +0.07 | | 6.2 |
| 15 | 0 | +145 | +0.07 | | −5.9 |

d = minutes of decl.

## 1531—1590.

| mag. | 13h.–14h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9.5 | 13 | 45 | 24.0 | 54.0 | |
| 9.7 | | | 29.0 | 35.1 | g |
| 9.9 | | | 35.0 | 25.9 | |
| 9.3 | | 46 | 28.0 | 19.9 | g |
| 8.9 | | 47 | 41.0 | 5.6 | 9.5 g |
| 9.5 | | | 43.0 | 16.6 | g |
| 8.9 | | | 52.0 | 42.5 | 9.5 g |
| 9.3 | | | 58.0 | 21.5 | g |
| 9.2 | | 48 | 9.0 | 12.8 | g |
| 9.7 | | 50 | 53.5 | 7.7 | 9.5 g |
| 9.9 | | 51 | 31.0 | 25.5 | |
| 9.9 | | | 38.0 | 23.3 | |
| 8.8 | | | 52.5 | 9.4 | 8.7 g |
| 9.4 | | 52 | 28.5 | 48.1 | 9.0 g |
| 9.2 | | | 51.0 | 4.4 | g |
| 9.4 | | | 52.5 | 15.7 | g |
| 8.4 | | 54 | 3.5 | 27.9 | 8.2 Gg |
| 9.1 | | 56 | 48.5 | 2.3 | g |
| 9.6 | | 57 | 7.5 | 37.4 | |
| 9.2 | | | 39.5 | 38.3 | |
| 9.6 | | | 51.5 | 45.4 | |
| 9.4 | | | 56.5 | 42.0 | |
| 9.6 | | 58 | 12.5 | 5.0 | |
| 9.2 | | | 14.5 | 56.2 | g |
| 9.6 | | | 16.5 | 59.3 | |
| 9.3 | | 59 | 5.5 | 48.9 | |
| 9.0 | | | 10.0 | 2.1 | 9.5 g |
| 9.0 | 14 | 0 | 3.5 | 37.3 | 7.8 Gg |
| 9.4 | | | 10.5 | 10.9 | |
| 9.4 | | | 14.5 | 9.0 | |
| 9.6 | | 1 | 37.5 | 18.1 | |
| 9.4 | | | 52.5 | 43.6 | |
| 9.2 | | 2 | 32.5 | 10.9 | g |
| 8.6 | | | 32.5 | 31.9 | 8.8 g |
| 9.3 | | 3 | 38.5 | 16.3 | |
| 9.4 | | 4 | 8.5 | 54.3 | 9.2 g |
| 9.6 | | | 26.5 | 56.3 | 9.0 g |
| 9.4 | | 5 | 44.5 | 48.7 | |
| 9.4 | | | 45.5 | 18.7 | |
| 9.2 | | 8 | 7.5 | 22.8 | 9.0 g |
| 9.2 | | | 23.5 | 21.9 | g |
| 8.3 | | | 23.5 | 9.7 | 8.5 g |
| 9.6 | | | 44.5 | 4.5 | |
| 9.4 | | 9 | 19.5 | 37.9 | |
| 9.5 | | | 30.5 | 48.9 | |
| 8.6 | | 10 | 14.5 | 44.2 | 7.5 Gg |
| 9.4 | | | 24.5 | 27.8 | |
| 8.8 | | | 48.5 | 48.4 | 8.8 Gg |
| 9.4 | | | 53.5 | 41.5 | |
| 9.6 | | 11 | 54.5 | 36.6 | g |
| 9.4 | | 12 | 8.5 | 20.6 | |
| 9.6 | | 13 | 25.5 | 25.6 | |
| 9.6 | | | 26.5 | 22.9 | |
| 9.5 | | 14 | 2.2 | 1.1 | |
| 9.2 | | | 9.5 | 9.9 | |
| 9.4 | | | 21.5 | 58.8 | 8.0 Gg |
| 9.0 | | | 37.5 | 37.3 | g |
| 8.8 | | 15 | 28.5 | 44.4 | 9.0 g |
| 9.5 | | | 57.5 | 29.1 | |
| 9.4 | | 16 | 5.5 | 48.8 | 8.5 Gg |

## 1591—1650.

| mag. | 14h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 8.8 | 14 | 17 | 36.2 | 1.7 | 7.9 Gg |
| 9.5 | | 20 | 37.5 | 49.5 | |
| 9.3 | | 21 | 19.5 | 30.4 | g |
| 9.2 | | | 20.5 | 57.1 | g |
| 9.2 | | | 41.5 | 12.0 | 9.0 g |
| 9.4 | | 22 | 5.2 | 2.3 | |
| 9.4 | | 25 | 6.5 | 4.7 | |
| 9.3 | | | 36.5 | 16.2 | |
| 9.4 | | 26 | 0.5 | 12.0 | g |
| 9.5 | | | 26.5 | 6.0 | |
| 9.4 | | 27 | 4.5 | 35.5 | |
| 9.2 | | 28 | 0.5 | 17.1 | g |
| 9.5 | | | 37.5 | 33.1 | |
| 9.6 | | | 45.5 | 6.1 | g |
| 9.5 | | | 50.5 | 54.2 | |
| 9.4 | | 29 | 17.5 | 25.1 | |
| 9.3 | | | 18.5 | 46.6 | 9.0 g |
| 9.4 | | 30 | 18.5 | 18.1 | 9.0 g |
| 9.6 | | | 42.0 | 0.0 | |
| 9.4 | | 31 | 48.5 | 56.2 | |
| 8.7 | | 32 | 31.5 | 40.1 | g |
| 9.0 | | 33 | 8.5 | 19.8 | |
| 8.4 | | | 42.5 | 33.1 | 8.5 Gg |
| 9.5 | | 35 | 18.4 | 42.6 | |
| 9.7 | | | 21.4 | 49.3 | |
| 8.2 | | | 55.2 | 32.5 | 8.5 g |
| 9.8 | | | 59.4 | 14.7 | |
| 9.8 | | | 59.4 | 51.4 | |
| 9.8 | | 36 | 5.9 | 33.3 | |
| 8.8 | | | 28.7 | 25.4 | 9.2 g |
| 9.5 | | | 34.4 | 46.7 | |
| 9.5 | | | 35.9 | 47.7 | |
| 9.6 | | | 38.9 | 4.7 | |
| 9.8 | | | 53.9 | 7.1 | |
| 9.6 | | 37 | 11.9 | 24.9 | |
| 9.6 | | | 12.9 | 2.0 | |
| 9.8 | | | 18.9 | 25.9 | |
| 9.2 | | | 28.9 | 7.8 | |
| 9.5 | | | 32.2 | 15.0 | |
| 9.4 | | | 37.1 | 49.3 | |
| 9.8 | | | 37.2 | 47.0 | |
| 9.8 | | | 39.2 | 46.8 | |
| 9.2 | | | 50.6 | 1.9 | |
| 9.4 | | 38 | 9.2 | 2.9 | |
| 9.0 | | | 24.9 | 50.6 | |
| 9.6 | | | 36.2 | 19.5 | |
| 9.8 | | | 48.2 | 49.4 | |
| 9.4 | | 39 | 1.2 | 36.8 | g |
| 9.8 | | | 10.2 | 50.5 | |
| 9.3 | | | 12.1 | 25.7 | |
| 9.8 | | | 18.7 | 9.1 | |
| 9.8 | | | 25.7 | 6.9 | |
| 9.6 | | | 31.2 | 14.4 | |
| 9.8 | | | 36.2 | 33.1 | |
| 9.6 | | | 59.2 | 12.2 | |
| 9.4 | | 40 | 10.4 | 10.1 | |
| 9.8 | | | 19.4 | 53.9 | |
| 9.8 | | | 23.9 | 12.1 | |
| 9.3 | | | 32.9 | 29.1 | |
| 9.7 | | | 36.9 | 36.8 | |

## 1651—1710.

| mag. | 14h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9.4 | 14 | 40 | 39.9 | 12.0 | |
| 9.2 | | | 42.2 | 57.4 | g |
| 9.1 | | | 46.4 | 30.9 | |
| 9.8 | | | 47.9 | 56.9 | |
| 9.3 | | | 57.4 | 6.7 | 9.0 g |
| 9.8 | | | 59.4 | 4.7 | |
| 9.8 | | 41 | 7.9 | 32.5 | |
| 9.5 | | | 14.5 | 58.5 | |
| 9.8 | | | 17.9 | 6.5 | |
| 9.8 | | | 19.4 | 49.1 | |
| 9.8 | | | 29.9 | 38.0 | |
| 9.6 | | | 31.4 | 10.9 | |
| 9.2 | | | 32.4 | 7.4 | g |
| 9.8 | | | 35.4 | 39.2 | |
| 9.4 | | 42 | 6.4 | 9.9 | 9.3 g |
| 9.6 | | | 12.4 | 9.1 | g |
| 9.6 | | | 29.9 | 21.0 | |
| 9.8 | | | 37.4 | 23.0 | |
| 9.4 | | | 51.9 | 5.9 | |
| 9.8 | | | 52.4 | 38.9 | |
| 9.8 | | 43 | 20.5 | 41.9 | |
| 8.8 | | | 43.0 | 18.6 | 9.5 g |
| 9.8 | | | 49.9 | 14.5 | |
| 9.8 | | | 49.9 | 13.3 | |
| 9.6 | | 44 | 7.0 | 20.6 | |
| 9.8 | | | 27.0 | 57.6 | |
| 9.8 | | | 27.0 | 33.8 | |
| 9.6 | | | 32.0 | 46.2 | |
| 9.0 | | | 47.5 | 29.6 | g |
| 9.8 | | 45 | 3.5 | 44.7 | |
| 9.8 | | | 21.5 | 50.0 | |
| 8.5 | | | 37.0 | 16.0 | 9.0 g |
| 9.6 | | | 42.5 | 1.5 | |
| 9.2 | | | 59.0 | 41.6 | |
| 9.5 | | 46 | 14.0 | 14.4 | g |
| 9.0 | | | 21.0 | 25.5 | g |
| 9.8 | | | 23.5 | 44.9 | |
| 9.2 | | | 33.0 | 17.2 | 9.0 g |
| 9.6 | | | 48.5 | 50.0 | 9.5 |
| 9.1 | | | 58.3 | 56.2 | g |
| 9.0 | | 47 | 20.5 | 34.0 | g |
| 9.5 | | | 21.5 | 43.8 | |
| 9.1 | | | 24.5 | 19.0 | |
| 9.8 | | | 53.5 | 6.5 | |
| 9.6 | | 48 | 15.5 | 47.8 | |
| 9.7 | | | 30.3 | 0.1 | |
| 9.5 | | | 59.0 | 24.0 | g |
| 9.6 | | 49 | 8.0 | 9.2 | |
| 9.6 | | | 11.0 | 19.9 | |
| 9.5 | | | 15.1 | 0.5 | |
| 9.6 | | | 20.0 | 24.6 | |
| 8.8 | | | 21.0 | 7.2 | 8.5 g |
| 9.7 | | | 37.5 | 49.7 | |
| 9.8 | | | 38.0 | 44.0 | |
| 9.6 | | | 40.0 | 46.8 | |
| 9.5 | | | 52.0 | 35.9 | |
| 8.7 | | | 54.0 | 34.8 | g |
| 9.6 | | | 55.0 | 50.4 | |
| 9.4 | | 50 | 5.5 | 21.5 | |
| 9.7 | | | 8.5 | 8.9 | |



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## 1711—1770.

| mag. | h | m | s (14h.–15h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 8.7 | 14 | 50 | 25.5 | 22.1 | g |
| 9.6 | | | 30.0 | 19.2 | |
| 9.3 | | | 31.0 | 51.6 | |
| 8.7 | | | 41.0 | 15.2 | g |
| 9.2 | | 51 | 50.0 | 24.0 | |
| 9.4 | | 52 | 4.5 | 11.9 | |
| 9.6 | | | 35.5 | 6.6 | |
| 8.0 | | | 45.0 | 41.6 | GSg |
| 9.7 | | 53 | 3.5 | 19.0 | |
| 9.8 | | | 12.5 | 43.5 | |
| 9.1 | | | 34.0 | 43.8 | |
| 6.9 | | | 56.0 | 40.6 | 7.0 GSg |
| 9.6 | | 54 | 17.0 | 16.0 | |
| 9.5 | | | 17.5 | 44.8 | |
| 9.2 | | | 21.0 | 20.8 | |
| 9.3 | | | 21.0 | 1.3 | 9.0 g |
| 9.8 | | | 27.5 | 28.1 | |
| 9.5 | | | 40.8 | 41.1 | |
| 8.2 | | | 46.8 | 24.9 | 6.5 GSg |
| 9.6 | | | 49.8 | 37.0 | |
| 9.6 | | | 51.8 | 4.9 | |
| 9.7 | | 55 | 52.8 | 37.6 | |
| 9.4 | | | 55.3 | 27.6 | |
| 9.4 | | 56 | 9.3 | 44.4 | |
| 9.6 | | | 12.3 | 55.5 | |
| 9.8 | | | 12.3 | 47.0 | |
| 9.8 | | | 15.8 | 20.6 | |
| 6.8 | | | 26.8 | 49.2 | 6.5 GSg |
| 9.6 | | | 44.8 | 16.3 | |
| 9.8 | | | 51.0 | 16.3 | |
| 9.8 | | | 54.8 | 12.8 | |
| 9.6 | | | 55.7 | 2.1 | |
| 9.7 | | | 56.0 | 34.5 | |
| 9.6 | | 57 | 3.3 | 4.0 | |
| 9.5 | | | 18.7 | 59.4 | |
| 9.6 | | | 19.3 | 33.1 | |
| 9.3 | | | 20.8 | 21.1 | |
| 9.8 | | | 43.3 | 12.2 | |
| 9.8 | | | 49.8 | 50.0 | |
| 8.2 | | 58 | 10.3 | 10.8 | 8.0 GSg |
| 9.8 | | | 16.3 | 36.1 | |
| 9.2 | | | 34.8 | 5.3 | |
| 9.2 | | | 42.8 | 12.0 | |
| 9.2 | | | 59.8 | 9.7 | g |
| 9.8 | | 59 | 29.8 | 29.7 | |
| 9.6 | | | 39.3 | 37.7 | |
| 9.3 | | | 41.8 | 37.2 | |
| 9.8 | 15 | 0 | 1.3 | 47.3 | |
| 9.3 | | | 1.8 | 38.9 | |
| 9.7 | | | 3.8 | 7.2 | |
| 9.7 | | | 11.8 | 1.3 | |
| 9.5 | | | 19.3 | 43.1 | |
| 9.8 | | | 29.3 | 9.1 | |
| 9.7 | | | 39.0 | 18.4 | |
| 9.8 | | | 51.3 | 20.9 | |
| 9.4 | | 1 | 3.8 | 7.3 | |
| 9.7 | | | 17.3 | 29.6 | |
| 9.8 | | | 39.2 | 55.9 | |
| 9.3 | | | 43.7 | 15.5 | |
| 9.5 | | 2 | 2.7 | 33.8 | |

## 1771—1830.

| mag. | h | m | s (15h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.5 | 15 | 2 | 9.4 | 58.9 | |
| 9.2 | | | 35.2 | 52.3 | |
| 8.9 | | | 52.4 | 55.6 | g |
| 9.8 | | 3 | 0.4 | 38.0 | |
| 9.8 | | | 14.9 | 59.8 | |
| 9.6 | | | 18.9 | 5.4 | |
| 9.6 | | | 27.4 | 36.4 | |
| 9.6 | | | 31.9 | 48.9 | |
| 9.5 | | | 34.4 | 55.6 | |
| 9.7 | | | 34.9 | 7.3 | |
| 9.8 | | | 49.4 | 3.5 | |
| 9.8 | | 4 | 1.9 | 59.4 | |
| 9.4 | | | 14.0 | 1.2 | g |
| 9.3 | | | 25.9 | 56.8 | g |
| 9.0 | | | 31.4 | 40.1 | g |
| 9.6 | | 5 | 17.9 | 37.7 | |
| 9.7 | | | 36.4 | 28.1 | |
| 9.8 | | | 59.9 | 46.8 | |
| 9.7 | | 6 | 18.4 | 5.0 | |
| 9.8 | | | 21.9 | 27.6 | |
| 9.2 | | | 35.4 | 13.2 | g |
| 8.4 | | | 51.4 | 19.6 | 7.0 GSg |
| 9.8 | | 7 | 2.4 | 3.0 | |
| 9.6 | | | 16.9 | 25.4 | |
| 9.8 | | | 40.9 | 34.6 | |
| 9.6 | | | 43.4 | 49.2 | |
| 9.8 | | | 48.4 | 49.7 | |
| 9.2 | | | 59.4 | 31.1 | g |
| 9.6 | | 8 | 2.4 | 50.8 | |
| 9.5 | | | 12.9 | 54.4 | |
| 9.8 | | | 14.4 | 4.9 | |
| 9.8 | | | 30.4 | 38.4 | |
| 9.7 | | | 36.9 | 29.4 | |
| 9.1 | | 9 | 6.4 | 29.0 | g |
| 9.7 | | | 39.9 | 9.9 | |
| 9.5 | | | 57.4 | 17.7 | |
| 9.6 | | 10 | 52.4 | 28.5 | |
| 9.6 | | 11 | 8.9 | 52.2 | |
| 9.6 | | | 42.1 | 2.9 | |
| 9.5 | | | 56.8 | 16.3 | |
| 9.7 | | | 57.3 | 11.7 | |
| 9.6 | | 12 | 1.8 | 10.2 | |
| 7.4 | | | 4.8 | 35.7 | 7.0 GSg |
| 9.1 | | | 19.5 | 58.9 | |
| 9.6 | | | 21.8 | 23.9 | |
| 9.8 | | | 34.3 | 49.9 | |
| 9.5 | | | 39.3 | 17.4 | |
| 9.1 | | | 41.8 | 4.7 | |
| 9.2 | | | 46.3 | 34.3 | g |
| 9.8 | | 13 | 3.3 | 7.5 | |
| 9.8 | | | 12.5 | 46.7 | |
| 9.6 | | | 30.3 | 7.1 | |
| 9.4 | | | 33.8 | 11.4 | |
| 9.6 | | | 44.3 | 52.9 | |
| 9.8 | | | 46.3 | 43.8 | |
| 9.8 | | | 46.3 | 43.0 | |
| 9.0 | | | 59.3 | 34.4 | 9.0 g |
| 9.2 | | 14 | 8.8 | 6.1 | |
| 9.6 | | | 16.5 | 10.6 | |
| 9.8 | | | 16.8 | 29.7 | |

## 1831—1890.

| mag. | h | m | s (15h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.6 | 15 | 14 | 19.5 | 45.2 | |
| 9.8 | | | 20.8 | 31.5 | |
| 9.7 | | | 22.8 | 55.1 | |
| 9.7 | | | 25.8 | 22.0 | |
| 9.6 | | | 26.8 | 2.5 | |
| 9.8 | | | 27.5 | 29.5 | |
| 9.4 | | | 53.3 | 4.3 | |
| 9.8 | | 15 | 18.5 | 4.4 | |
| 9.7 | | | 36.5 | 9.5 | |
| 9.7 | | | 39.3 | 26.6 | |
| 9.5 | | | 44.3 | 22.1 | |
| 9.6 | | | 57.7 | 58.8 | |
| 9.8 | | 16 | 2.3 | 55.4 | |
| 9.7 | | | 4.5 | 27.4 | |
| 8.9 | | | 6.3 | 49.4 | g |
| 9.3 | | | 26.8 | 43.8 | |
| 9.4 | | | 30.8 | 19.2 | |
| 9.6 | | | 34.3 | 11.3 | |
| 9.8 | | 17 | 7.5 | 11.3 | |
| 9.5 | | | 29.8 | 42.7 | |
| 9.3 | | | 32.3 | 57.8 | |
| 6.7 | | | 56.8 | 13.0 | 6.5 GSg |
| 9.2 | | 18 | 2.5 | 49.7 | |
| 9.3 | | | 3.5 | 0.1 | |
| 9.4 | | | 11.5 | 21.6 | |
| 9.8 | | | 18.5 | 12.0 | |
| 9.3 | | | 21.5 | 30.0 | |
| 9.8 | | | 31.5 | 13.6 | |
| 9.0 | | | 46.8 | 56.8 | |
| 9.7 | | | 58.5 | 15.9 | |
| 9.7 | | 19 | 3.5 | 26.7 | |
| 9.8 | | | 32.8 | 58.4 | |
| 9.8 | | | 38.0 | 26.2 | |
| 9.8 | | | 38.0 | 37.1 | |
| 9.7 | | 20 | 8.0 | 2.1 | |
| 9.6 | | | 9.3 | 0.2 | |
| 9.8 | | | 13.5 | 49.4 | |
| 9.6 | | | 28.5 | 6.6 | |
| 9.0 | | | 49.3 | 25.2 | g |
| 9.8 | | | 50.5 | 35.7 | |
| 9.5 | | 21 | 21.0 | 44.2 | |
| 9.8 | | | 32.0 | 17.8 | |
| 9.8 | | | 39.0 | 28.1 | |
| 9.8 | | | 41.5 | 35.3 | |
| 9.8 | | | 47.5 | 54.3 | |
| 9.5 | | | 52.0 | 38.5 | |
| 9.1 | | | 57.5 | 31.3 | g |
| 9.8 | | 22 | 0.0 | 22.3 | |
| 9.3 | | | 7.5 | 37.1 | g |
| 9.0 | | | 25.8 | 35.9 | g |
| 9.8 | | | 32.5 | 21.5 | |
| 9.4 | | | 38.5 | 12.0 | |
| 9.6 | | | 47.0 | 5.7 | |
| 9.8 | | 23 | 27.0 | 45.2 | |
| 9.0 | | | 34.7 | 33.4 | g |
| 9.6 | | | 43.5 | 53.1 | |
| 9.8 | | | 52.0 | 14.0 | |
| 9.8 | | 24 | 1.0 | 9.8 | |
| 9.0 | | | 5.7 | 29.4 | g |
| 8.9 | | | 31.5 | 46.9 | 8.0 Gg |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 14 | 40 | + 139 + 0.06 d | − 6.4 |
| | 50 | 142 + 0.07 | 6.2 |
| 15 | 0 | 145 + 0.07 | 5.9 |
| | 10 | 148 + 0.07 | 5.6 |
| | 20 | 151 + 0.07 | 5.4 |
| | 30 | + 154 + 0.08 | − 5.1 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 15 | 20 | +151 | +0·07 | d | −5·4 |
| | 30 | 154 | +0·08 | | 5·1 |
| | 40 | 156 | +0·08 | | 4·8 |
| | 50 | 159 | +0·08 | | 4·5 |
| 16 | 0 | 161 | +0·09 | | 4·2 |
| | 10 | 163 | +0·09 | | 3·9 |
| | 20 | 165 | +0·09 | | 3·5 |
| | 30 | 166 | +0·09 | | 3·2 |
| | 40 | +168 | +0·09 | | −2·9 |

d = minutes of decl.

## 1891—1950.

| mag. | 15h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·6 | 15 | 24 | 46·5 | 8·2 | |
| 9·8 | | 25 | 5·5 | 52·1 | |
| 9·6 | | | 12·0 | 42·6 | |
| 9·7 | | | 17·5 | 28·8 | |
| 9·6 | | | 31·0 | 12·4 | |
| 9·6 | | | 38·5 | 16·6 | |
| 9·8 | | | 45·5 | 34·1 | |
| 7·9 | | | 48·8 | 52·8 | 7·5 GS*g* |
| 9·2 | | 26 | 17·0 | 3·9 | |
| 9·4 | | 27 | 3·0 | 17·5 | *g* |
| 9·4 | | | 20·0 | 9·0 | 9·0 |
| 9·4 | | | 41·0 | 55·6 | *g* |
| 7·8 | | | 51·0 | 19·8 | 7·5 GS*gg* |
| 8·9 | | 28 | 11·0 | 0·9 | 8·2 *g* |
| 9·6 | | 29 | 1·0 | 0·5 | |
| 8·9 | | | 39·0 | 40·9 | |
| 9·5 | | | 51·0 | 45·4 | |
| 9·4 | | 30 | 21·5 | 56·8 | |
| 9·5 | | | 52·0 | 17·8 | |
| 9·6 | | 31 | 13·0 | 31·7 | *g* |
| 9·6 | | | 31·0 | 42·9 | |
| 8·5 | | 32 | 15·0 | 54·2 | 8·0 G*g* |
| 8·7 | | 33 | 19·0 | 41·2 | 9·0 *g* |
| 9·5 | | | 28·0 | 33·0 | |
| 9·2 | | | 29·0 | 54·6 | *g* |
| 8·4 | | | 31·0 | 41·9 | 8·0 *g* |
| 9·6 | | | 41·0 | 16·5 | |
| 9·6 | | 34 | 5·0 | 55·2 | |
| 9·1 | | | 21·0 | 50·1 | *g* |
| 9·0 | | 35 | 57·0 | 6·6 | 8·5 *g* |
| 9·0 | | 36 | 11·0 | 17·0 | *g* |
| 9·6 | | 37 | 23·0 | 32·1 | *g* |
| 8·4 | | 38 | 17·0 | 43·9 | 8·5*g* |
| 9·6 | | | 32·0 | 49·1 | |
| 9·5 | | 39 | 34·0 | 22·2 | |
| 9·6 | | | 40·0 | 25·9 | |
| 9·6 | | 40 | 21·0 | 32·7 | |
| 8·0 | | | 39·0 | 17·6 | *g* |
| 9·4 | | | 48·0 | 26·0 | |
| 9·5 | | 41 | 43·0 | 52·9 | |
| 9·5 | | 42 | 40·0 | 38·0 | |
| 9·4 | | | 40·0 | 44·2 | |
| 9·6 | | | 41·0 | 55·9 | |
| 9·0 | | | 59·0 | 34·9 | 9·0 *g* |
| 9·1 | | 44 | 19·0 | 11·4 | |
| 9·2 | | | 59·0 | 49·8 | |
| 9·6 | | 46 | 23·0 | 39·6 | |
| 9·0 | | 47 | 21·0 | 38·1 | *g* |
| 8·5 | | | 31·0 | 33·3 | *g* |
| 9·6 | | | 43·0 | 44·6 | |
| 9·5 | | 48 | 3·0 | 2·5 | *g* |
| 9·6 | | | 20·0 | 32·0 | *g* |
| 9·0 | | 49 | 15·0 | 24·9 | *g* |
| 9·0 | | | 51·0 | 23·0 | *g* |
| 9·4 | | | 59·0 | 39·0 | 9·5 *g* |
| 9·5 | | 50 | 1·0 | 24·2 | |
| 8·4 | | | 10·0 | 40·1 | 9·0 *g* |
| 8·5 | | | 10·0 | 48·5 | *g* |
| 9·4 | | 51 | 0·0 | 16·9 | |
| 9·1 | | | 0·0 | 32·7 | 9·0 *g* |

## 1951—2010.

| mag. | 15h.—16h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·4 | 15 | 52 | 42·0 | 12·9 | |
| 8·4 | | 53 | 1·0 | 32·1 | 8·5 *g* |
| 9·4 | | | 19·5 | 0·1 | 9·5 *g* |
| 9·6 | | 54 | 3·0 | 52·2 | |
| 7·6 | | | 13·0 | 35·8 | 7·0 GS*g* |
| 9·5 | | | 23·5 | 0·9 | |
| 9·0 | | | 30·0 | 38·3 | *g* |
| 9·5 | | 57 | 22·0 | 11·7 | *g* |
| 8·8 | | 58 | 30·5 | 1·6 | *g* |
| 8·0 | | 59 | 3·0 | 14·5 | *g* |
| 8·4 | 16 | 0 | 1·0 | 59·9 | 8·5 *g* |
| 9·6 | | | 11·0 | 25·1 | |
| 9·0 | | | 46·0 | 18·0 | 9·5 *g* |
| 9·3 | | 1 | 10·0 | 50·2 | *g* |
| 9·6 | | | 41·0 | 8·9 | |
| 9·3 | | 2 | 35·0 | 55·6 | |
| 8·9 | | 3 | 0·0 | 24·6 | 9·5 G*g* |
| 8·0 | | | 2·0 | 34·9 | 8·0 G*g* |
| 9·0 | | | 21·0 | 5·5 | *g* |
| 7·8 | | | 52·0 | 21·1 | 8·0 G*g* |
| 10·0 | | 4 | 33·0 | 57·0 | |
| 9·4 | | 5 | 28·0 | 27·0 | *g* |
| 9·6 | | | 34·0 | 19·0 | *g* |
| 10·1 | | | 41·0 | 54·0 | |
| 8·1 | | 6 | 8·0 | 8·1 | 8·5 *g* |
| 9·2 | | | 15·5 | 40·7 | *g* |
| 9·4 | | | 21·0 | 42·1 | |
| 10·1 | | | 22·0 | 26·2 | |
| 9·4 | | | 32·0 | 54·6 | |
| 10·0 | | | 53·0 | 31·0 | |
| 10·1 | | | 53·0 | 32·0 | |
| 10·1 | | | 57·0 | 52·6 | |
| 9·6 | | 7 | 3·0 | 3·1 | |
| 9·8 | | | 23·0 | 35·2 | |
| 7·1 | | | 41·0 | 33·8 | 7·0 GS*gr* |
| 10·0 | | 8 | 34·0 | 40·0 | |
| 10·0 | | | 53·0 | 51·2 | |
| 9·4 | | | 53·0 | 58·7 | |
| 8·6 | | 9 | 2·5 | 36·7 | 7·5, G*g* |
| 10·0 | | | 15·0 | 58·4 | |
| 9·0 | | | 30·0 | 2·6 | 8·2 *g* |
| 10·1 | | | 54·0 | 1·8 | |
| 9·6 | | 10 | 13·0 | 49·0 | |
| 9·6 | | | 17·5 | 59·1 | |
| 9·8 | | | 32·0 | 18·3 | |
| 10·0 | | | 40·0 | 12·7 | |
| 10·0 | | | 43·0 | 30·1 | |
| 9·0 | | | 52·0 | 30·7 | 9·0 *g* |
| 10·1 | | 11 | 35·0 | 19·0 | |
| 10·1 | | 12 | 4·0 | 46·5 | |
| 8·0 | | | 21·0 | 43·0 | 8·5 *g* |
| 10·0 | | | 33·0 | 45·0 | |
| 8·5 | | | 50·0 | 28·2 | 7·5 G*g* |
| 10·0 | | | 50·0 | 22·0 | |
| 9·7 | | 13 | 14·0 | 3·1 | |
| 10·0 | | | 17·0 | 16·6 | |
| 10·0 | | | 21·0 | 51·0 | |
| 9·8 | | | 46·5 | 1·0 | |
| 9·8 | | | 52·0 | 20·2 | *g* |
| 9·2 | | 14 | 56·0 | 34·8 | 9·5 *g* |

## 2011—2070.

| mag. | 16h. h | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·2 | 16 | 15 | 14·0 | 48·8 | |
| 10·1 | | | 28·0 | 24·1 | |
| 9·7 | | | 44·0 | 56·0 | *g* |
| 9·6 | | | 44·0 | 23·0 | |
| 10·0 | | 16 | 19·0 | 18·0 | |
| 10·0 | | | 25·0 | 14·6 | |
| 9·7 | | | 30·0 | 47·0 | |
| 10·1 | | | 38·0 | 12·0 | |
| 10·1 | | 17 | 34·0 | 19·0 | |
| 10·1 | | | 38·0 | 37·1 | |
| 10·1 | | 18 | 8·c | 11·6 | |
| 10·0 | | | 22·0 | 13·0 | |
| 8·4 | | | 34·0 | 39·8 | 8·5 *g* |
| 9·6 | | | 43·0 | 53·0 | |
| 9·6 | | | 52·0 | 39·0 | *g* |
| 10·0 | | 19 | 24·0 | 42·6 | *g* |
| 10·0 | | | 41·0 | 10·8 | |
| 9·4 | | | 56·0 | 16·1 | |
| 9·8 | | 20 | 1·0 | 11·7 | |
| 10·0 | | | 8·0 | 20·6 | |
| 10·0 | | | 27·0 | 27·0 | |
| 10·0 | | | 33·0 | 12·1 | |
| 10·1 | | | 36·0 | 27·6 | |
| 9·4 | | | 41·5 | 1·7 | *g* |
| 8·5 | | 21 | 14·5 | 56·6 | 9·0 G*g* |
| 9·4 | | | 18·0 | 22·8 | |
| 10·0 | | | 19·0 | 29·1 | |
| 6·8 | | | 39·0 | 37·3 | 6·8 GS*g* |
| 9·6 | | | 52·0 | 47·9 | *g* |
| 9·2 | | 22 | 3·5 | 2·2 | |
| 9·2 | | | 13·0 | 11·0 | *g* |
| 9·8 | | | 27·0 | 12·2 | |
| 9·8 | | | 53·0 | 24·0 | |
| 10·1 | | 23 | 0·0 | 51·6 | |
| 9·4 | | | 15·0 | 12·0 | *g* |
| 10·1 | | | 27·0 | 22·0 | |
| 9·6 | | | 44·0 | 16·8 | *g* |
| 10·0 | | 24 | 30·0 | 54·0 | |
| 10·1 | | 25 | 14·0 | 28·0 | |
| 10·1 | | | 30·0 | 23·0 | |
| 7·9 | | | 44·5 | 57·6 | 8·5 *g* |
| 9·2 | | | 53·5 | 2·0 | *g* |
| 9·2 | | | 57·0 | 12·8 | 9·5 *g* |
| 9·6 | | 26 | 48·0 | 5·5 | |
| 10·0 | | 27 | 30·0 | 56·0 | |
| 9·8 | | 28 | 9·0 | 18·2 | *g* |
| 10·1 | | | 53·0 | 16·2 | |
| 10·1 | | | 59·0 | 19·1 | |
| 10·1 | | 29 | 8·0 | 28·9 | |
| 9·2 | | | 16·0 | 35·6 | 9·5 *g* |
| 9·0 | | | 23·0 | 9·0 | *g* |
| 9·8 | | 30 | 4·0 | 4·2 | |
| 9·0 | | | 13·0 | 41·6 | 9·0 *g* |
| 10·0 | | 31 | 0·0 | 4·0 | |
| 7·8 | | | 8·0 | 35·8 | 7·8 GS*g* |
| 9·6 | | | 21·0 | 40·4 | |
| 9·4 | | | 32·0 | 18·9 | |
| 9·6 | | | 42·0 | 5·1 | |
| 9·8 | | 32 | 13·0 | 54·6 | |
| 9·0 | | | 28·0 | 4·2 | 9·0 *g* |

## 2071—2130.

| mag. | h | m | s (16h.—17h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 10.1 | 16 | 33 | 2.0 | 59.2 | |
| 9.4 | | | 5.0 | 52.7 | |
| 10.0 | | | 14.0 | 19.5 | |
| 9.8 | | | 33.0 | 11.0 | |
| 9.2 | | 35 | 0.0 | 20.8 | g |
| 9.8 | | | 33.0 | 10.6 | |
| 10.1 | | 36 | 23.0 | 35.1 | |
| 9.2 | | | 49.5 | 58.1 | g |
| 9.6 | | 37 | 46.0 | 22.4 | |
| 10.0 | | 38 | 3.0 | 16.9 | |
| 9.0 | | | 19.0 | 17.2 | g |
| 8.8 | | | 33.0 | 37.0 | 8.5 g |
| 9.4 | | | 38.0 | 21.0 | g |
| 9.2 | | 39 | 9.0 | 4.0 | g |
| 9.4 | | | 15.0 | 18.8 | g |
| 8.6 | | | 17.0 | 53.0 | 8.0 g |
| 9.6 | | | 41.0 | 4.6 | |
| 9.6 | | | 44.0 | 13.6 | |
| 9.2 | | 40 | 32.0 | 42.0 | g |
| 9.4 | | 41 | 41.0 | 0.3 | |
| 9.2 | | | 44.0 | 17.4 | g |
| 8.6 | | | 49.0 | 5.0 | 8.4 g |
| 9.6 | | 43 | 16.0 | 13.8 | 9.0 g |
| 9.4 | | | 22.5 | 59.4 | |
| 10.1 | | 44 | 19.0 | 39.0 | |
| 9.8 | | | 42.0 | 38.9 | |
| 9.6 | | 45 | 20.0 | 56.0 | |
| 9.6 | | | 33.0 | 6.0 | |
| 8.8 | | | 51.0 | 44.2 | 8.7 g |
| 10.1 | | | 54.0 | 41.2 | |
| 10.1 | | 46 | 1.0 | 17.0 | |
| 9.6 | | 47 | 15.0 | 24.7 | |
| 9.4 | | | 25.0 | 53.0 | 9.0 g |
| 10.1 | | | 36.0 | 18.9 | g |
| 9.2 | | 48 | 52.5 | 51.8 | g |
| 10.0 | | 49 | 27.0 | 37.8 | |
| 9.6 | | 51 | 5.0 | 47.3 | |
| 9.7 | | | 45.0 | 20.4 | |
| 10.1 | | | 49.0 | 5.6 | |
| 9.4 | | 53 | 42.0 | 26.4 | g |
| 9.4 | | 54 | 17.0 | 11.8 | |
| 9.8 | | | 39.5 | 23.1 | |
| 8.3 | | 55 | 9.5 | 30.3 | 8.2 Gg |
| 9.4 | | | 22.5 | 25.8 | g |
| 10.0 | | | 32.0 | 21.2 | |
| 8.4 | | 56 | 44.0 | 33.3 | 9.0 g |
| 9.8 | | | 52.0 | 33.1 | |
| 9.8 | | 57 | 26.5 | 57.0 | g |
| 9.1 | | 58 | 26.5 | 57.8 | g |
| 9.7 | | | 42.0 | 35.3 | |
| 9.8 | | 59 | 3.5 | 1.7 | |
| 9.8 | | | 38.0 | 49.8 | |
| 9.7 | 17 | 0 | 59.0 | 41.5 | |
| 8.1 | | 1 | 12.0 | 6.1 | 8.7 g |
| 9.6 | | | 35.0 | 37.1 | g |
| 9.1 | | 2 | 0.0 | 10.4 | g |
| 9.7 | | 3 | 17.0 | 15.6 | |
| 9.7 | | | 29.5 | 1.1 | g |
| 9.8 | | 4 | 6.0 | 34.5 | |
| 9.7 | | | 16.0 | 19.3 | |

## 2131—2190.

| mag. | h | m | s (17h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.8 | 17 | 4 | 47.0 | 54.3 | |
| 9.6 | | 5 | 25.0 | 53.9 | |
| 9.8 | | 6 | 34.0 | 11.9 | |
| 9.8 | | | 48.0 | 21.2 | |
| 9.8 | | 7 | 6.5 | 11.0 | g |
| 9.8 | | | 15.0 | 8.2 | |
| 9.0 | | 8 | 6.0 | 11.1 | g |
| 9.8 | | 9 | 41.0 | 29.4 | |
| 9.6 | | 11 | 21.0 | 6.1 | g |
| 9.8 | | | 31.0 | 56.2 | |
| 9.0 | | | 37.5 | 57.0 | g |
| 8.4 | | | 58.0 | 30.0 | g |
| 9.8 | | 12 | 11.0 | 17.3 | g |
| 9.7 | | | 16.0 | 22.1 | g |
| 8.4 | | | 21.0 | 48.2 | g |
| 9.0 | | | 56.0 | 10.0 | 9.0 g |
| 9.8 | | 13 | 0.5 | 59.6 | g |
| 8.5 | | | 34.0 | 32.2 | g |
| 9.0 | | | 42.0 | 4.1 | g |
| 9.0 | | 14. | 39.0 | 37.6 | g |
| 9.8 | | 15 | 32.0 | 0.2 | g |
| 9.4 | | | 53.0 | 0.4 | g |
| 8.4 | | 17 | 3.0 | 5.8 | g |
| 9.7 | | 18 | 57.0 | 49.9 | g |
| 9.7 | | 19 | 48.0 | 50.4 | g |
| 9.0 | | 20 | 17.0 | 40.1 | g |
| 9.2 | | 21 | 9.0 | 18.5 | g |
| 9.7 | | | 12.0 | 38.2 | g |
| 8.8 | | | 22.0 | 9.4 | |
| 9.1 | | | 33.0 | 17.0 | g |
| 8.8 | | 23 | 4.0 | 15.1 | g |
| 9.4 | | 24 | 5.0 | 56.3 | 9.5 g |
| 9.4 | | 25 | 46.0 | 11.7 | g |
| 9.8 | | 28 | 27.0 | 41.1 | |
| 8.8 | | 29 | 1.0 | 23.9 | 9.5 g |
| 9.6 | | | 22.0 | 53.1 | g |
| 9.7 | | 30 | 38.0 | 1.1 | |
| 8.2 | | 31 | 30.0 | 36.3 | 9.5 g |
| 9.8 | | 32 | 36.5 | 57.5 | |
| 9.8 | | | 44.0 | 3.1 | g |
| 8.5 | | 33 | 28.0 | 43.0 | g |
| 9.8 | | 34 | 28.2 | 31.7 | |
| 7.4 | | | 37.5 | 2.4 | 8.0 GSg |
| 9.8 | | | 41.0 | 32.3 | |
| 9.8 | | | 44.0 | 54.3 | |
| 9.8 | | 35 | 1.5 | 20.0 | |
| 9.8 | | | 23.0 | 29.5 | |
| 9.5 | | | 29.0 | 52.0 | |
| 8.4 | | | 30.2 | 15.5 | 8.5 g |
| 9.1 | | | 59.5 | 1.6 | |
| 9.6 | | 37 | 11.5 | 4.3 | |
| 8.5 | | | 15.5 | 38.5 | 9.5 g |
| 9.6 | | | 37.0 | 26.7 | |
| 9.8 | | | 40.5 | 40.9 | |
| 9.8 | | | 41.5 | 26.4 | |
| 9.0 | | | 47.7 | 7.8 | 9.0 g |
| 9.6 | | 38 | 0.5 | 43.5 | |
| 9.3 | | | 28.5 | 24.1 | |
| 9.3 | | | 46.5 | 53.2 | |
| 9.8 | | | 53.5 | 58.2 | |

## 2191—2250.

| mag. | h | m | s (17h.) | ′ (−71°) | |
|---|---|---|---|---|---|
| 9.8 | 17 | 39 | 24.5 | 45.8 | |
| 9.5 | | | 45.0 | 12.6 | |
| 9.2 | | | 51.0 | 8.4 | g |
| 9.3 | | | 54.0 | 22.6 | |
| 9.4 | | 40 | 13.5 | 44.9 | |
| 9.6 | | | 18.5 | 22.1 | |
| 9.8 | | | 22.0 | 31.8 | |
| 9.1 | | | 22.5 | 42.6 | |
| 9.6 | | | 34.5 | 16.0 | |
| 8.3 | | | 38.2 | 57.5 | g |
| 8.4 | | | 55.2 | 51.7 | g |
| 9.8 | | | 55.7 | 11.4 | |
| 9.4 | | 41 | 10.7 | 50.7 | |
| 9.6 | | | 16.7 | 35.1 | |
| 9.8 | | | 18.5 | 58.6 | |
| 9.3 | | | 23.7 | 0.2 | g |
| 8.7 | | | 48.7 | 32.6 | g |
| 9.6 | | 42 | 7.2 | 53.2 | |
| 9.8 | | | 12.2 | 34.6 | |
| 9.8 | | | 15.5 | 28.1 | |
| 8.6 | | | 16.7 | 47.7 | 9.0 g |
| 9.8 | | | 28.2 | 22.0 | |
| 9.5 | | | 37.2 | 28.2 | |
| 9.3 | | | 44.7 | 21.6 | |
| 8.2 | | | 47.2 | 3.7 | GSg |
| 8.6 | | | 55.2 | 12.8 | g |
| 8.9 | | | 56.2 | 12.5 | g |
| 9.8 | | 43 | 19.6 | 44.5 | |
| 9.6 | | | 29.6 | 56.7 | |
| 9.8 | | | 33.6 | 22.7 | |
| 9.6 | | | 59.6 | 39.5 | |
| 9.8 | | | 59.6 | 20.3 | |
| 9.0 | | 44 | 1.1 | 43.5 | g |
| 9.3 | | | 49.6 | 30.2 | |
| 9.2 | | | 57.1 | 40.3 | |
| 9.6 | | 45 | 10.1 | 55.7 | |
| 9.8 | | | 11.6 | 6.7 | |
| 9.3 | | | 16.1 | 7.9 | |
| 9.6 | | | 47.1 | 5.8 | |
| 9.8 | | 46 | 10.6 | 32.3 | |
| 9.8 | | | 48.1 | 2.7 | |
| 9.8 | | | 54.1 | 24.9 | |
| 9.8 | | 47 | 10.6 | 52.8 | |
| 8.5 | | | 13.1 | 18.7 | g |
| 9.8 | | | 16.9 | 59.9 | |
| 8.4 | | | 41.1 | 26.6 | g |
| 9.5 | | | 51.1 | 30.0 | |
| 9.2 | | | 49.6 | 0.5 | |
| 9.6 | | | 59.4 | 24.2 | |
| 9.4 | | 48 | 25.6 | 25.7 | |
| 9.6 | | | 59.1 | 40.3 | |
| 8.7 | | 49 | 17.8 | 1.3 | g |
| 8.6 | | | 35.1 | 2.9 | g |
| 9.0 | | | 44.6 | 43.6 | |
| 9.3 | | 50 | 0.6 | 24.0 | |
| 9.6 | | | 13.6 | 34.1 | |
| 9.2 | | | 27.6 | 14.5 | |
| 9.6 | | 51 | 3.1 | 14.8 | |
| 9.8 | | | 12.4 | 8.9 | |
| 8.6 | | | 38.1 | 8.1 | g |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 16 | 30 | + 166 + 0.09 d | − 3.2 |
| | 40 | 168 + 0.09 | 2.9 |
| | 50 | 170 + 0.09 | 2.5 |
| 17 | 0 | 171 + 0.10 | 2.2 |
| | 10 | 172 + 0.10 | 1.8 |
| | 20 | 172 + 0.10 | 1.5 |
| | 30 | 173 + 0.10 | 1.1 |
| | 40 | 174 + 0.10 | 0.7 |
| | 50 | 174 + 0.10 | 0.4 |
| 18 | 0 | + 174 + 0.10 | − 0.0 |

d = minutes of decl.

| 25 prec. | | α | δ |
|---|---|---|---|
| h | m | s s | ′ |
| 17 | 50 | +174 +0·10 d | −0·4 |
| 18 | 0 | 174+0·10 | 0·0 |
| | 10 | 174+0·10 | +0·4 |
| | 20 | 174+0·10 | 0·7 |
| | 30 | 173+0·10 | 1·1 |
| | 40 | 172+0·10 | 1·5 |
| | 50 | 172+0·09 | 1·8 |
| 19 | 0 | 171+0·09 | 2·2 |
| | 10 | 169+0·09 | 2·5 |
| | 20 | 168+0·09 | 2·9 |
| | 30 | +167+0·09 | +3·2 |

d = minutes of decl.

## 2251—2310.

| mag. | h (17h–18h) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9·1 | 17 | 52 | 50·6 | 42·4 | |
| 9·8 | | | 59·6 | 12·5 | |
| 9·6 | | 53 | 47·1 | 3·8 | |
| 9·6 | | | 55·6 | 35·3 | |
| 9·6 | | 54 | 3·1 | 50·8 | |
| 9·8 | | | 34·6 | 24·7 | |
| 7·9 | | 55 | 6·6 | 39·0 | 8·0 GS*g* |
| 9·2 | | | 10·6 | 25·0 | |
| 8·6 | | | 30·1 | 7·3 | *g* |
| 9·8 | | 56 | 27·6 | 30·3 | |
| 9·3 | | 57 | 2·1 | 34·0 | |
| 9·1 | | | 15·1 | 44·8 | |
| 8·9 | | | 25·6 | 2·7 | *g* |
| 9·0 | | | 26·6 | 24·3 | *g* |
| 9·6 | | | 47·6 | 11·9 | |
| 9·8 | | 58 | 9·1 | 31·5 | |
| 9·8 | | | 21·0 | 24·8 | |
| 8·8 | | | 21·6 | 35·3 | *g* |
| 9·1 | | | 39·6 | 58·1 | *g* |
| 9·8 | | | 48·6 | 34·2 | |
| 9·8 | | 59 | 12·1 | 49·4 | |
| 8·8 | | | 43·6 | 1·9 | |
| 9·8 | 18 | 0 | 3·1 | 33·9 | |
| 9·0 | | | 12·1 | 4·1 | |
| 9·8 | | | 22·6 | 9·7 | |
| 9·6 | | | 31·8 | 14·7 | |
| 9·8 | | | 47·3 | 19·1 | |
| 9·3 | | | 48·3 | 23·8 | |
| 9·8 | | | 48·8 | 7·3 | |
| 9·8 | | | 59·1 | 57·7 | |
| 9·6 | | 1 | 39·3 | 24·8 | |
| 9·1 | | 2 | 46·3 | 25·1 | *g* |
| 9·8 | | | 51·3 | 26·1 | |
| 9·0 | | 3 | 15·7 | 2·7 | *g* |
| 9·3 | | | 35·8 | 35·0 | |
| 9·8 | | 4 | 11·7 | 59·3 | |
| 8·8 | | | 18·8 | 22·9 | *g* |
| 9·3 | | 5 | 0·8 | 21·4 | *g* |
| 9·8 | | | 12·8 | 39·0 | |
| 9·5 | | | 25·3 | 22·6 | |
| 8·8 | | | 44·2 | 57·8 | 8·5 G*g* |
| 9·8 | | 6 | 21·2 | 15·4 | |
| 9·4 | | 7 | 25·3 | 16·7 | |
| 9·8 | | | 26·8 | 55·8 | |
| 9·1 | | 8 | 0·9 | 58·0 | |
| 9·3 | | | 43·7 | 35·5 | *g* |
| 8·8 | | 9 | 13·2 | 6·0 | 9·5 *g* |
| 9·6 | | 10 | 17·2 | 10·5 | |
| 8·2 | | 11 | 39·2 | 50·6 | 8·5 G*g* |
| 9·8 | | | 45·2 | 38·5 | |
| 8·5 | | 12 | 1·7 | 26·2 | 9·0 *g* |
| 9·8 | | | 6·7 | 44·0 | |
| 9·5 | | | 9·7 | 7·9 | |
| 9·6 | | | 26·2 | 13·0 | |
| 8·5 | | | 39·7 | 56·9 | 9·0G*g* |
| 9·2 | | | 57·7 | 10·9 | *g* |
| 9·6 | | | 59·7 | 1·2 | |
| 9·8 | | 13 | 30·7 | 18·5 | |
| 8·2 | | | 47·7 | 50·8 | G*g* |
| 9·8 | | 14 | 1·7 | 48·7 | |

## 2311—2370.

| mag. | h (18h–19h) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 8·8 | 18 | 14 | 18·2 | 15·9 | *g* |
| 9·6 | | | 20·7 | 29·0 | |
| 9·8 | | | 26·8 | 58·4 | |
| 8·2 | | 15 | 0·2 | 34·0 | 9·0 GS*g* |
| 8·7 | | | 26·2 | 8·3 | 8·5 |
| 9·3 | | | 32·8 | 57·8 | |
| 8·9 | | | 51·7 | 52·0 | |
| 9·8 | | 16 | 34·7 | 29·6 | |
| 9·6 | | | 43·7 | 39·5 | |
| 9·6 | | | 56·2 | 23·0 | |
| 9·4 | | 17 | 26·3 | 33·3 | |
| 9·8 | | | 41·8 | 25·1 | |
| 9·5 | | | 49·8 | 53·2 | |
| 9·8 | | | 49·8 | 52·4 | |
| 9·4 | | 18 | 11·8 | 14·4 | |
| 7·5 | | | 57·6 | 50·9 | 7·0 GSc*g* |
| 9·3 | | 19 | 11·3 | 57·0 | |
| 9·8 | | | 30·3 | 29·6 | |
| 8·8 | | | 33·9 | 27·2 | 9·5 *g* |
| 8·2 | | 20 | 27·2 | 24·3 | 8·0 GS*gg* |
| 9·3 | | | 37·3 | 33·0 | |
| 9·6 | | 21 | 4·8 | 34·4 | |
| 8·9 | | | 8·4 | 21·2 | 9·5 *g* |
| 9·8 | | | 52·3 | 42·2 | |
| 8·6 | | 22 | 32·2 | 25·8 | 9·5 *g* |
| 9·2 | | | 32·8 | 30·7 | |
| 9·8 | | | 42·5 | 41·1 | |
| 9·8 | | 23 | 9·0 | 22·0 | |
| 9·8 | | | 29·5 | 22·1 | |
| 8·8 | | | 49·7 | 23·9 | *g* |
| 9·2 | | 24 | 28·0 | 43·4 | |
| 9·8 | | | 40·0 | 3·7 | |
| 9·4 | | | 56·0 | 26·0 | |
| 9·8 | | | 56·0 | 31·7 | |
| 9·0 | | 25 | 14·0 | 43·5 | G |
| 9·3 | | | 20·0 | 28·1 | |
| 9·8 | | | 22·5 | 33·4 | |
| 9·1 | | | 30·0 | 20·5 | |
| 9·8 | | | 33·5 | 51·1 | |
| 9·0 | | | 51·0 | 17·6 | |
| 9·6 | | 26 | 1·9 | 57·8 | |
| 9·2 | | | 15·5 | 28·0 | 9·c G*g* |
| 6·0 | | 28 | 25·0 | 31·8 | 4·0 GSc*gt*λ |
| 8·9 | | | 37·0 | 23·8 | 8·0 G*g* |
| 9·0 | | 29 | 23·0 | 45·4 | |
| 9·5 | | 32 | 13·0 | 53·7 | 9·0 *g* |
| 9·6 | | 39 | 32·0 | 19·6 | *g* |
| 8·6 | | 41 | 11·0 | 12·8 | 8·0 G*g* |
| 8·7 | | 42 | 39·0 | 26·9 | 8·5 *g* |
| 7·8 | | 45 | 24·0 | 41·5 | 8·5 GS*g* |
| 9·6 | | 46 | 59·0 | 43·1 | |
| 9·6 | | 50 | 35·0 | 55·4 | |
| 9·5 | | 51 | 55·0 | 45·6 | 9·0 *g* |
| 9·5 | | 54 | 14·5 | 59·9 | |
| 9·5 | | 55 | 34·0 | 23·5 | 9·0 *g* |
| 7·8 | | | 39·0 | 44·2 | 7·0 GSc*g* |
| 8·6 | | 57 | 43·0 | 0·1 | 9·0 *g* |
| 8·6 | 19 | 1 | 28·0 | 20·6 | 9·0 *g* |
| 9·0 | | 2 | 59·5 | 22·3 | *g* |
| 9·6 | | 3 | 9·0 | 59·5 | *g* |

## 2371—2430.

| mag. | h (19h) | m | s | ′ (−71°) | |
|---|---|---|---|---|---|
| 9·6 | 19 | 4 | 0·0 | 43·9 | |
| 9·6 | | | 42·0 | 53·8 | *g* |
| 9·6 | | | 54·6 | 21·1 | |
| 10·4 | | 5 | 45·9 | 14·5 | |
| 10·3 | | | 55·7 | 21·8 | |
| 10·0 | | 6 | 39·1 | 54·0 | |
| 9·7 | | | 41·1 | 32·7 | |
| 10·3 | | 7 | 13·1 | 53·3 | |
| 10·4 | | | 28·6 | 38·0 | |
| 9·2 | | | 42·6 | 5·9 | *g* |
| 9·5 | | | 49·2 | 10·6 | |
| 9·6 | | 8 | 4·0 | 1·5 | |
| 9·5 | | | 44·2 | 45·3 | 9·5 *g* |
| 9·0 | | | 44·6 | 44·1 | 9·0 *g* |
| 9·6 | | | 44·7 | 56·5 | |
| 9·5 | | | 57·7 | 1·8 | |
| 9·9 | | 9 | 47·7 | 30·7 | |
| 10·3 | | 10 | 15·2 | 33·2 | |
| 9·7 | | | 59·2 | 8·4 | |
| 9·7 | | 11 | 12·2 | 34·4 | |
| 10·2 | | | 22·2 | 20·5 | |
| 10·2 | | | 25·2 | 23·6 | |
| 7·6 | | 12 | 3·2 | 42·1 | GSc*g* |
| 10·4 | | | 23·1 | 26·0 | |
| 8·0 | | | 28·7 | 42·2 | GS*g* |
| 9·5 | | | 36·2 | 56·8 | *g* |
| 9·7 | | | 53·7 | 42·3 | |
| 9·1 | | 13 | 13·7 | 3·4 | 9·0 *g* |
| 9·9 | | | 30·0 | 1·7 | |
| 9·8 | | | 35·7 | 17·6 | |
| 9·9 | | | 38·2 | 23·4 | |
| 9·9 | | | 38·2 | 53·1 | |
| 9·0 | | | 43·7 | 25·6 | *g* |
| 8·6 | | | 54·2 | 37·9 | *g* |
| 10·4 | | 14 | 0·2 | 55·5 | |
| 8·4 | | | 28·2 | 50·3 | 9·0 *g* |
| 10·0 | | | 57·8 | 9·4 | |
| 9·2 | | 15 | 56·8 | 34·6 | 9·0 *g* |
| 9·9 | | 16 | 4·3 | 39·7 | |
| 10·3 | | | 42·8 | 25·2 | |
| 10·0 | | | 50·3 | 50·7 | |
| 9·4 | | 18 | 0·8 | 11·3 | |
| 9·5 | | | 43·8 | 47·2 | |
| 10·4 | | | 43·8 | 48·7 | |
| 8·4 | | | 59·5 | 2·6 | 8·5 *g* |
| 10·4 | | 19 | 15·8 | 30·7 | |
| 9·7 | | | 16·8 | 11·3 | |
| 10·4 | | | 49·8 | 43·1 | |
| 10·3 | | | 49·8 | 57·6 | |
| 10·4 | | 20 | 10·8 | 23·6 | |
| 9·9 | | | 54·8 | 2·0 | |
| 9·9 | | 21 | 18·8 | 0·6 | |
| 9·4 | | | 23·7 | 15·6 | 9·5 |
| 9·7 | | | 37·2 | 6·7 | |
| 9·1 | | | 43·7 | 31·7 | *g* |
| 10·3 | | 22 | 0·2 | 20·2 | |
| 10·0 | | | 4·2 | 49·7 | |
| 10·4 | | | 49·2 | 45·0 | |
| 10·2 | | 23 | 0·2 | 41·8 | |
| 10·2 | | | 33·2 | 31·8 | |



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## 2431—2490.

| mag. | h (19h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·7 | 19 | 24 | 19·4 | 3·9 | |
| 9·9 | | | 23·9 | 44·7 | |
| 10·4 | | | 38·4 | 3·0 | |
| 9·6 | | 25 | 4·4 | 9·3 | |
| 9·4 | | | 16·9 | 20·7 | g |
| 10·0 | | 26 | 1·4 | 52·4 | |
| 10·4 | | | 25·2 | 38·8 | |
| 8·8 | | 27 | 7·9 | 44·9 | g |
| 9·9 | | | 42·4 | 47·0 | g |
| 9·5 | | 28 | 19·0 | 57·1 | g |
| 10·3 | | | 29·4 | 16·4 | |
| 9·8 | | | 34·9 | 9·7 | |
| 9·7 | | | 47·9 | 36·8 | |
| 9·8 | | | 49·4 | 24·5 | |
| 8·8 | | 29 | 0·4 | 23·6 | g |
| 10·3 | | | 20·9 | 23·0 | |
| 10·3 | | 30 | 9·4 | 46·0 | |
| 9·0 | | 31 | 4·4 | 31·9 | g |
| 9·4 | | | 23·4 | 28·1 | |
| 10·4 | | | 31·9 | 31·7 | |
| 9·7 | | 32 | 9·4 | 31·8 | |
| 10·2 | | | 40·9 | 21·4 | |
| 9·4 | | | 53·4 | 29·2 | |
| 10·4 | | 33 | 20·4 | 29·8 | |
| 9·0 | | | 27·9 | 26·6 | g |
| 10·4 | | | 29·4 | 28·9 | |
| 9·5 | | | 44·0 | 4·9 | g |
| 9·8 | | | 47·0 | 41·1 | |
| 10·2 | | 34 | 4·0 | 55·3 | |
| 10·2 | | | 10·0 | 17·9 | |
| 9·8 | | | 42·0 | 29·5 | |
| 10·4 | | | 50·0 | 19·4 | |
| 9·2 | | | 59·5 | 15·6 | |
| 9·4 | | 35 | 8·5 | 39·2 | |
| 9·9 | | | 9·0 | 5·0 | |
| 9·7 | | | 26·0 | 38·5 | |
| 10·4 | | | 29·5 | 13·3 | |
| 10·3 | | | 57·5 | 22·6 | |
| 9·8 | | 36 | 41·0 | 32·4 | |
| 10·2 | | | 47·0 | 3·9 | |
| 9·6 | | 37 | 6·5 | 48·2 | |
| 10·2 | | | 30·5 | 41·9 | |
| 10·0 | | | 33·5 | 3·0 | |
| 9·0 | | | 47·5 | 46·9 | g |
| 10·4 | | | 48·5 | 20·1 | |
| 9·4 | | 38 | 15·5 | 50·4 | |
| 9·1 | | | 36·5 | 35·0 | 9·0 g |
| 9·2 | | 39 | 14·0 | 3·4 | 9·0 g |
| 10·4 | | | 43·0 | 3·3 | |
| 7·6 | | | 56·5 | 43·1 | 8·0 GSg |
| 8·8 | | | 58·0 | 39·1 | 9·0 g |
| 9·0 | | 40 | 6·5 | 50·8 | Sg |
| 9·8 | | | 29·5 | 7·7 | |
| 9·0 | | 41 | 1·5 | 39·0 | 9·5 g |
| 10·2 | | | 7·0 | 58·0 | |
| 8·8 | | | 27·5 | 51·9 | Sg |
| 9·4 | | | 44·5 | 34·7 | |
| 10·2 | | 42 | 28·0 | 32·2 | |
| 9·4 | | | 31·5 | 54·5 | |
| 9·6 | | | 34·5 | 59·6 | |

## 2491—2550.

| mag. | h (19h.—20h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·4 | 19 | 42 | 43·5 | 23·9 | |
| 9·2 | | | 46·5 | 17·7 | |
| 10·0 | | | 55·0 | 55·1 | |
| 10·3 | | 43 | 36·5 | 38·1 | |
| 9·7 | | 44 | 3·0 | 4·4 | |
| 10·2 | | | 20·5 | 27·9 | |
| 10·3 | | | 37·5 | 58·4 | |
| 9·8 | | | 58·0 | 14·7 | |
| 9·7 | | 45 | 33·5 | 10·9 | |
| 9·6 | | | 40·5 | 15·6 | |
| 10·3 | | | 47·7 | 41·2 | |
| 9·6 | | | 57·2 | 50·6 | |
| 9·0 | | 46 | 0·2 | 32·8 | 9·0 g |
| 9·1 | | | 3·2 | 34·7 | 9·0 g |
| 8·5 | | | 6·2 | 29·7 | 9·0 g |
| 10·0 | | | 11·2 | 18·6 | |
| 9·7 | | | 30·7 | 15·0 | |
| 10·3 | | | 59·7 | 8·6 | |
| 10·3 | | 47 | 8·2 | 33·2 | |
| 9·1 | | | 45·2 | 31·5 | 9·5 g |
| 10·3 | | | 59·2 | 23·9 | |
| 10·0 | | 48 | 5·7 | 53·1 | |
| 10·0 | | | 5·7 | 33·0 | |
| 9·6 | | | 13·7 | 11·8 | |
| 9·4 | | | 21·2 | 48·9 | |
| 9·8 | | | 42·2 | 13·3 | |
| 9·4 | | 49 | 13·8 | 55·6 | |
| 10·4 | | 50 | 11·2 | 43·1 | |
| 10·4 | | | 24·7 | 21·5 | |
| 10·0 | | | 26·7 | 58·1 | |
| 10·2 | | | 35·2 | 19·5 | |
| 10·4 | | 51 | 23·7 | 13·4 | |
| 10·3 | | | 30·7 | 12·0 | |
| 9·7 | | | 45·2 | 30·8 | g |
| 10·4 | | | 54·2 | 41 0 | |
| 9·7 | | 52 | 8·9 | 57·6 | |
| 9·6 | | | 16·6 | 48·2 | |
| 9·6 | | | 40·6 | 51·0 | |
| 10·2 | | 53 | 12·0 | 16·2 | |
| 8·8 | | | 27·9 | 8·7 | 9·0 g |
| 9·6 | | | 34·2 | 28·9 | g |
| 9·6 | | | 37·2 | 9·5 | |
| 9·6 | | 54 | 0·2 | 10·1 | |
| 9·7 | | | 27·2 | 58·9 | |
| 8·3 | | | 32·6 | 10·0 | 8·0 Gg |
| 9·1 | | | 52·9 | 19·4 | g |
| 7·5 | | | 54·7 | 54·3 | 8·5 GSg |
| 10·0 | | 55 | 47·2 | 16·3 | |
| 10·2 | | | 47·2 | 8·7 | |
| 10·2 | | 56 | 5·0 | 24·6 | |
| 9·9 | | | 21·7 | 54·1 | |
| 9·6 | | | 34·2 | 34·8 | |
| 10·2 | | | 53·2 | 49·6 | |
| 9·0 | | 58 | 53·0 | 40·3 | g |
| 9·5 | 20 | 0 | 3·0 | 33·4 | |
| 9·2 | | | 37·0 | 43·5 | g |
| 9·0 | | 1 | 22·5 | 1·9 | 9·0 g |
| 9·0 | | 4 | 0·0 | 26·5 | 8·8 g |
| 9·6 | | | 34·0 | 25·6 | |
| 9·2 | | 7 | 1·0 | 36·7 | g |

## 2551—2610.

| mag. | h (20h.—21h.) | m | s | −71° ′ | |
|---|---|---|---|---|---|
| 9·2 | 20 | 7 | 11·0 | 35·5 | g |
| 8·7 | | 9 | 9·0 | 34·9 | g |
| 9·3 | | 10 | 49·0 | 28·2 | 9·5 g |
| 8·7 | | 12 | 41·0 | 55·9 | 9·5 g |
| 9·8 | | 14 | 18·0 | 7·9 | |
| 9·6 | | 16 | 20·0 | 51·0 | |
| 9·0 | | | 58·0 | 15·8 | 9·5 g |
| 8·8 | | 19 | 57·0 | 44·1 | 8·0 Gg |
| 8·8 | | 20 | 19·0 | 43·3 | 9·0 Gg |
| 7·4 | | 22 | 7·0 | 36·6 | 6·5 GSg |
| 7·5 | | 23 | 12·0 | 41·0 | 7·5 GSg |
| 8·6 | | | 29·0 | 29·2 | 9·0 Gg |
| 7·1 | | | 41·0 | 29·6 | 7·0 GScg |
| 9·2 | | 24 | 31·0 | 31·9 | |
| 9·0 | | | 45·0 | 43·6 | 8·0 Gg |
| 8·4 | | 26 | 3·0 | 31·4 | 7·5 GSg |
| 9·8 | | 28 | 8·0 | 33·9 | |
| 7·9 | | 29 | 20·0 | 21·9 | 8·0 GSg |
| 8·0 | | 31 | 48·0 | 40·6 | 8·0 Gg |
| 8·2 | | 32 | 42·0 | 9·6 | 8·5 Gg |
| 9·8 | | 34 | 36·0 | 58·0 | g |
| 9·0 | | 35 | 31·0 | 48·0 | g |
| 10·0 | | 36 | 28·0 | 47·5 | |
| 9·6 | | 38 | 13·0 | 35·2 | |
| 7·8 | | | 16·0 | 26·5 | 8·5 g |
| 10·0 | | 39 | 0·0 | 4·8 | |
| 9·0 | | 40 | 59·0 | 59·0 | g |
| 10·0 | | 41 | 7·0 | 30·0 | |
| 9·2 | | 42 | 46·0 | 43·7 | 9·0 g |
| 10·0 | | 45 | 43·0 | 22·6 | g |
| 9·8 | | 47 | 43·0 | 37·8 | |
| 10·0 | | 48 | 36·0 | 58·9 | |
| 9·8 | | 49 | 29·0 | 16·0 | 9·5 g |
| 9·6 | | 50 | 59·0 | 15·8 | 9·0 g |
| 9·8 | | 54 | 21·0 | 38·8 | |
| 10·0 | | | 53·0 | 1·6 | |
| 10·0 | | 55 | 13·0 | 3·5 | |
| 10·0 | | | 56·0 | 48·2 | g |
| 9·6 | | 56 | 2·0 | 43·0 | |
| 10·0 | | | 46·5 | 46·1 | g |
| 10·0 | | 59 | 58·0 | 52·8 | |
| 10·0 | 21 | 1 | 27·5 | 5·4 | |
| 9·8 | | 2 | 12·5 | 20·2 | g |
| 8·0 | | | 19·5 | 21·9 | 7·5 GSg |
| 10·0 | | 3 | 50·5 | 9·2 | |
| 8·5 | | 4 | 18·5 | 2·1 | 8·3 Gg |
| 10·0 | | | 29·5 | 59·5 | |
| 8·7 | | 5 | 30·5 | 52·4 | 8·8 g |
| 9·2 | | 6 | 19·5 | 31·5 | 8·5 g |
| 9·2 | | 8 | 22·5 | 47·9 | 9·0 g |
| 10·0 | | | 51·5 | 25·9 | |
| 8·7 | | 12 | 30·5 | 22·7 | g |
| 9·4 | | | 55·5 | 13·2 | |
| 9·2 | | 13 | 10·5 | 49·0 | g |
| 8·2 | | 14 | 19·5 | 15·1 | 8·0 g |
| 8·9 | | 17 | 2·5 | 40·1 | g |
| 10·0 | | | 12·0 | 40·6 | g |
| 9·8 | | | 26·5 | 37·2 | |
| 8·2 | | 18 | 59·5 | 53·1 | 9·0 g |
| 10·0 | | 19 | 0·5 | 39·3 | g |

25 prec.

| h | m | α (s s) | δ ′ |
|---|---|---|---|
| 19 | 20 | + 168 + 0·09 d | + 2·9 |
| | 30 | 167 + 0·09 | 3·2 |
| | 40 | 165 + 0·09 | 3·5 |
| | 50 | 163 + 0·09 | 3·9 |
| 20 | 0 | 161 + 0·08 | 4·2 |
| | 10 | 159 + 0·08 | 4·5 |
| | 20 | 156 + 0·08 | 4·8 |
| | 30 | 154 + 0·08 | 5·1 |
| | 40 | 151 + 0·07 | 5·4 |
| | 50 | 148 + 0·07 | 5·6 |
| 21 | 0 | 145 + 0·07 | 5·9 |
| | 10 | 142 + 0·07 | 6·2 |
| | 20 | + 139 + 0·06 | + 6·4 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 21 | 10 | + 142 | + 0·07 | d | + 6·2 |
| | 20 | 139 | + 0·06 | | 6·4 |
| | 30 | 136 | + 0·06 | | 6·6 |
| | 40 | 132 | + 0·06 | | 6·8 |
| | 50 | 129 | + 0·05 | | 7·0 |
| 22 | 0 | 125 | + 0·05 | | 7·2 |
| | 10 | 122 | + 0·04 | | 7·4 |
| | 20 | 118 | + 0·04 | | 7·6 |
| | 30 | 114 | + 0·04 | | 7·7 |
| | 40 | 110 | + 0·03 | | 7·9 |
| | 50 | 106 | + 0·03 | | 8·0 |
| 23 | 0 | 102 | + 0·02 | | 8·1 |
| | 10 | 98 | + 0·02 | | 8·2 |
| | 20 | 94 | + 0·02 | | 8·2 |
| | 30 | 89 | + 0·01 | | 8·3 |
| | 40 | 85 | + 0·01 | | 8·3 |
| | 50 | 81 | 0·00 | | 8·3 |
| 24 | 0 | + 77 | 0·00 | | + 8·4 |

▬ minutes of decl.

## 2611—2669.

| mag. | 21h.—22h. h | m | s | —71° ′ | |
|---|---|---|---|---|---|
| 8·7 ▬ | 21 | 19 | 4·0 | 53·6 | 8·0 *g* |
| 9·6 | | 20 | 3·0 | 37·0 | |
| 9·3 | | | 51·5 | 38·9 | *g* |
| 9·8 | | | 53·0 | 52·8 | |
| 9·6 | | 22 | 46·5 | 2·2 | |
| 9·8 | | 23 | 16·0 | 0·4 | |
| 9·2 | | 24 | 45·5 | 24·8 | 9·0 *g* |
| 9·3 | | 26 | 13·0 | 22·0 | *g* |
| 9·6 | | | 20·0 | 55·1 | |
| 9·6 | | | 31·0 | 55·7 | |
| 9·2 | | | 54·0 | 22·0 | *g* |
| 9·6 | | 28 | 38·0 | 27·0 | |
| 10·0 | | 29 | 38·0 | 3·6 | |
| 8·1 | | | 50·0 | 22·0 | 8·0 GS*g* |
| 9·6 | | | 56·0 | 37·0 | *g* |
| 10·0 | | 30 | 23·0 | 27·4 | |
| 9·8 | | 31 | 1·0 | 27·0 | |
| 9·3 | | | 6·0 | 7·9 | 9·0 *g* |
| 9·3 | | | 42·5 | 59·9 | |
| 9·1 | | 33 | 23·0 | 49·2 | *g* |
| 9·0 | | 34 | 22·0 | 24·2 | *g* |
| 6·3 | | | 22·0 | 34·6 | 6·0 GS*gr* |
| 7·9 | | 35 | 7·0 | 39·3 | 8·0 GS*g* |
| 8·8 | | 36 | 40·0 | 51·4 | 9·5 *g* |
| 8·6 | | | 53·0 | 45·2 | 9·5 *g* |
| 9·0 | | 37 | 31·0 | 47·0 | 9·5 *g* |
| 9·8 | | 39 | 10·0 | 10·1 | |
| 8·7 | | | 14·0 | 53·5 | 9·0 *g* |
| 9·2 | | | 59·0 | 55·7 | 9·0 *g* |
| 9·3 | | 40 | 33·0 | 42·2 | 9·0 *g* |
| 9·3 | | 41 | 12·0 | 43·3 | *g* |
| 8·6 | | | 30·0 | 7·9 | 8·0 G*gg* |
| 10·0 | | | 38·0 | 52·1 | |
| 9·2 | | 42 | 29·0 | 39·0 | *g* |
| 10·0 | | | 50·0 | 36·6 | |
| 10·0 | | 43 | 56·0 | 9·4 | |
| 10·0 | | 44 | 32·0 | 47·7 | |
| 8·8 | | 45 | 10·0 | 7·4 | 9·2 GS*gg* |
| 9·6 | | 46 | 8·0 | 6·1 | |
| 10·0 | | 48 | 34·0 | 50·1 | |
| 10·0 | | 49 | 0·0 | 41·1 | |
| 9·1 | | | 55·0 | 6·1 | 9·0 G*gg* |
| 9·8 | | 50 | 34·0 | 10·1 | 9·5 *g* |
| 9·2 | | 51 | 9·0 | 57·1 | |
| 9·4 | | | 13·0 | 30·3 | 9·5 *g* |
| 10·0 | | 53 | 58·0 | 38·9 | |
| 10·0 | | 55 | 47·0 | 48·9 | 9·5 *g* |
| 9·1 | | 56 | 0·0 | 31·1 | *g* |
| 8·5 | | | 4·0 | 41·8 | 8·5 G*g* |
| 9·5 | | 58 | 38·0 | 7·8 | 9·0 *g* |
| 7·5 | | 59 | 2·0 | 30·6 | 7·0 GSc*g* |
| 9·1 | 22 | 0 | 44·0 | 59·4 | |
| 9·3 | | | 50·0 | 28·7 | GS*g* |
| 10·0 | | 1 | 37·0 | 1·5 | *g* |
| 9·4 | | 2 | 0·0 | 33·3 | |
| 8·9 | | | 6·0 | 12·2 | *g* |
| 9·3 | | | 40·0 | 45·1 | |
| 9·6 | | 3 | 52·0 | 50·7 | |
| 9·2 | | 4 | 0·0 | 22·8 | *g* |

## 2670—2728.

| mag. | 22h. h | m | s | —71° ′ | |
|---|---|---|---|---|---|
| 8·2 | 22 | 4 | 58·0 | 6·5 | 9·0 *g* |
| 8·0 ▬ | | 5 | 9·0 | 16·1 | 7·0 GS*g* |
| 9·8 | | 6 | 11·0 | 7·8 | |
| 9·6 | | | 36·8 | 3·6 | |
| 10·4 | | 7 | 24·5 | 24·5 | |
| 10·4 | | | 26·8 | 12·1 | |
| 10·4 | | 8 | 18·8 | 28·7 | |
| 10·4 | | 9 | 39·0 | 50·7 | |
| 10·0 | | | 49·7 | 46·1 | |
| 10·4 | | 10 | 24·0 | 15·5 | |
| 9·0 | | 11 | 48·0 | 18·0 | 9·5 *g* |
| 10·2 | | | 54·0 | 49·7 | |
| 9·3 | | 12 | 22·0 | 30·1 | 9·5 |
| 10·2 | | | 29·0 | 36·2 | |
| 10·0 | | | 32·3 | 10·2 | |
| 10·4 | | 14 | 0·8 | 0·4 | |
| 5·9 | | 15 | 22·3 | 3·7 | 6·5 GSc*gr* |
| 10·0 | | 16 | 52·8 | 54·2 | |
| 10·0 | | 17 | 11·3 | 6·0 | |
| 10·0 | | | 52·8 | 23·6 | |
| 10·0 | | 18 | 48·5 | 58·3 | |
| 10·0 | | | 54·8 | 3·1 | *g* |
| 9·7 | | 19 | 58·3 | 25·7 | *g* |
| 9·7 | | 20 | 5·6 | 57·4 | |
| 9·4 | | | 20·3 | 38·4 | |
| 8·6 | | 21 | 0·3 | 54·9 | 9·5 *g* |
| 10·4 | | | 7·8 | 50·2 | |
| 9·4 | | | 8·3 | 5·8 | 9·5 *g* |
| 9·7 | | | 10·5 | 36·4 | |
| 8·4 | | | 21·8 | 52·5 | 9·0 *g* |
| 9·6 | | | 29·3 | 24·8 | *g* |
| 10·4 | | 22 | 43·8 | 9·1 | *g* |
| 9·6 | | | 46·3 | 34·5 | |
| 10·4 | | 23 | 12·8 | 58·8 | |
| 9·0 | | | 27·3 | 54·3 | |
| 10·4 | | 24 | 28·3 | 42·2 | |
| 8·1 | | 26 | 36·1 | 36·5 | 7·2 GSc*g* |
| 10·4 | | | 51·6 | 0·6 | |
| 9·3 | | 28 | 17·6 | 35·4 | |
| 9·0 | | 29 | 27·6 | 12·4 | *g* |
| 10·0 | | | 44·6 | 52·3 | |
| 9·0 | | | 48·6 | 54·5 | |
| 10·2 | | 30 | 6·6 | 2·2 | |
| 9·8 | | | 40·0 | 58·8 | |
| 9·6 | | 31 | 3·6 | 21·4 | |
| 9·6 | | | 39·1 | 17·9 | *g* |
| 10·4 | | 32 | 5·3 | 20·4 | |
| 10·4 | | | 21·1 | 18·4 | |
| 10·4 | | | 29·1 | 21·3 | |
| 9·3 | | 34 | 32·1 | 29·8 | 8·5 *g* |
| 10·0 | | | 56·1 | 10·8 | *g* |
| 9·8 | | 36 | 44·6 | 46·0 | |
| 9·6 | | | 59·1 | 19·3 | |
| 8·3 | | 39 | 27·0 | 35·5 | 7·5 GSc*gg* |
| 10·4 | | | 32·0 | 44·6 | |
| 9·4 | | | 45·5 | 55·4 | 9·0 *g* |
| 6·2 | | 40 | 19·1 | 0·5 | 6·5 GSc*g* |
| 8·9 | | | 39·5 | 51·4 | 8·5 *g* |
| 10·0 | | | 50·0 | 27·6 | |

## 2729—2787.

| mag. | 22h.—23h. h | m | s | —71° ′ | |
|---|---|---|---|---|---|
| 10·4 | 22 | 41 | 0·0 | 14·7 | |
| 9·7 | | | 18·5 | 11·5 | |
| 10·2 | | | 21·5 | 34·3 | |
| 9·6 | | 45 | 7·0 | 15·1 | *g* |
| 10·4 | | | 17·5 | 47·1 | |
| 9·4 | | | 34·0 | 5·0 | *g* |
| 8·4 | | 49 | 3·3 | 15·9 | *g* |
| 10·0 | | 51 | 2·0 | 46·8 | |
| 10·0 | | 52 | 10·0 | 16·2 | |
| 8·5 | | 53 | 35·3 | 17·8 | 8·5 *g* |
| 10·4 | | | 57·8 | 23·5 | |
| 9·7 | | 54 | 7·3 | 7·8 | |
| 10·0 | | | 20·2 | 13·0 | |
| 10·2 | | | 22·3 | 5·0 | |
| 10·4 | | | 25·3 | 24·5 | |
| 10·0 | | 55 | 15·2 | 45·3 | 10·0 |
| 10·0 | | | 54·3 | 20·3 | *g* |
| 9·6 ▬ | | 57 | 3·7 | 9·7 | *g* |
| 9·2 | | | 48·5 | 9·7 | 9·0 *g* |
| 9·2 | | 59 | 9·0 | 25·5 | *g* |
| 8·9 | 23 | 1 | 36·0 | 22·9 | 9·5 *g* |
| 9·6 | | | 51·0 | 4·9 | |
| 9·8 | | 2 | 27·0 | 31·1 | *g* |
| 9·9 | | 3 | 57·0 | 33·1 | *g* |
| 9·0 | | 4 | 29·0 | 32·4 | *g* |
| 8·4 | | 5 | 49·0 | 53·5 | *g* |
| 9·0 | | 6 | 9·0 | 1·1 | 8·5 G*g* |
| 8·2 | | 7 | 22·0 | 30·5 | 8·0 *g* |
| 8·5 | | 11 | 30·0 | 0·3 | 8·8 *g* |
| 8·9 | | | 31·0 | 41·1 | 9·0 *g* |
| 9·4 | | 15 | 0·5 | 58·7 | |
| 9·8 | | 16 | 29·0 | 26·7 | *g* |
| 8·1 | | 17 | 35·0 | 35·7 | 8·0 G*g* |
| 9·0 | | 18 | 59·0 | 7·5 | 9·0 *g* |
| 8·2 | | 19 | 31·0 | 4·3 | 8·8 *g* |
| 9·9 | | 21 | 9·5 | 1·7 | *g* |
| 7·6 | | 27 | 5·0 | 39·3 | 8·0 GS*g* |
| 9·0 | | 28 | 34·0 | 11·0 | 9·0 *g* |
| 7·9 | | 30 | 50·0 | 35·7 | 8·0 GS*g* |
| 9·7 | | 31 | 3·0 | 54·1 | |
| 8·0 | | 32 | 48·0 | 48·6 | G*g* |
| 7·9 | | 36 | 7·5 | 30·7 | GS*g* |
| 7·0 | | 37 | 14·5 | 11·1 | 6·5 GSc*g* |
| 9·2 | | 38 | 9·5 | 52·5 | 8·5 |
| 9·9 | | 39 | 12·0 | 22·9 | *g* |
| 7·7 ▬ | | | 27·0 | 45·9 | 7·5 GS*g* |
| 9·4 | | 43 | 6·0 | 3·3 | 9·5 *g* |
| 9·4 | | 44 | 11·0 | 49·2 | 9·0 *g* |
| 9·4 | | | 51·0 | 33·8 | 8·5 *g* |
| 9·2 | | 46 | 19·0 | 5·2 | *g* |
| 8·2 | | 47 | 3·0 | 22·4 | 8·0 *g* |
| 9·0 | | 49 | 39·0 | 33·8 | *g* |
| 9·3 | | | 44·5 | 59·5 | |
| 9·3 | | | 47·0 | 44·4 | |
| 9·3 | | 52 | 30·0 | 38·8 | *g* |
| 9·4 | | 55 | 10·5 | 1·1 | *g* |
| 9·2 | | 57 | 35·5 | 58·5 | |
| 8·2 | | 58 | 17·0 | 5·9 | *g* |
| 8·4 | | | 39·0 | 11·1 | *g* |



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# ZONE—72°

## 1—40.

| mag. | h | m | s (0ʰ) | −72° ′ | |
|---|---|---|---|---|---|
| 11·1† | 0 | 0 | 23·8 | 0·0 | |
| 9·2† | | 1 | 22·3 | 30·4 | *g* |
| 11·1† | | 2 | 18·3 | 15·6 | |
| 10·2† | | 3 | 47·3 | 17·6 | |
| 10·0† | | | 51·8 | 40·1 | *g* |
| 10·2† | | | 52·8 | 17·0 | |
| 10·2† | | 5 | 22·8 | 56·3 | 9·0 *g* |
| 8·6† | | | 32·3 | 58·2 | 8·5 *g* |
| 9·4† | | | 55·3 | 40·6 | |
| 11·0† | | 6 | 4·3 | 48·1 | |
| 9·2† | | 7 | 7·6 | 13·1 | 8·5 *g* |
| 10·2† | | | 42·3 | 8·1 | |
| 11·0† | | 8 | 12·8 | 21·7 | |
| 8·9† | | | 13·4 | 9·8 | 9·0 *g* |
| 11·1† | | | 16·3 | 49·2 | |
| 11·0† | | | 29·8 | 32·2 | |
| 9·8† | | | 46·3 | 0·4 | |
| 9·8† | | 9 | 17·3 | 52·6 | *g* |
| 9·2† | | | 43·6 | 26·1 | 9·5 *g* |
| 8·9† | | | 44·6 | 7·3 | 9·0 *g* |
| 10·2† | | 10 | 17·3 | 1·8 | |
| 11·1† | | | 58·3 | 19·9 | |
| 9·8† | | 11 | 30·3 | 36·6 | 10·0 *g* |
| 10·6† | | | 48·3 | 41·2 | |
| 9·4† | | 12 | 11·3 | 33·0 | 10·0 *g* |
| 10·2† | | | 24·3 | 0·4 | |
| 8·9† | | | 52·8 | 4·5 | *g* |
| 10·4† | | 13 | 15·8 | 10·6 | |
| 10·0† | | 14 | 12·8 | 49·1 | |
| 10·6† | | | 53·3 | 8·0 | |
| 8·8† | | | 58·8 | 40·4 | 8·5 GS |
| 10·6† | | 15 | 30·5 | 1·3 | |
| 11·1† | | 17 | 45·0 | 10·5 | |
| 8·4† | | 18 | 25·0 | 56·9 | 9·0 G*g* |
| neb.† | | | 32·0 | 46·4 | GS*g* |
| 11·0† | | | 39·0 | 48·3 | ? |
| 9·0† | | | 39·5 | 40·3 | G*g* |
| 10·6† | | | 44·0 | 49·5 | |
| 9·8† | | 19 | 29·0 | 49·4 | |
| 11·1† | | | 50·5 | 9·4 | |

## 41—80.

| mag. | h | m | s (0ʰ—1ʰ) | −72° ′ | |
|---|---|---|---|---|---|
| 8·1† | 0 | 22 | 9·5 | 34·4 | 8·5 G*g* |
| 9·8† | | | 27·5 | 49·3 | G |
| 10·6† | | 23 | 18·5 | 3·9 | |
| 9·8† | | 25 | 44·6 | 25·5 | |
| 9·2† | | 26 | 2·6 | 51·4 | 9·5 G |
| 10·0† | | | 13·1 | 54·3 | |
| 9·6† | | | 56·0 | 4·1 | 10·0 |
| 10·6† | | 28 | 1·6 | 42·9 | |
| 11·0† | | | 27·1 | 28·1 | |
| 10·0† | | | 53·6 | 16·3 | |
| 9·4† | | 30 | 31·6 | 13·8 | G*g* |
| 11·1† | | 31 | 58·6 | 21·3 | |
| 9·8† | | 32 | 35·3 | 32·1 | |
| 9·8† | | | 45·8 | 20·2 | *g* |
| 11·1† | | | 51·6 | 13·4 | |
| 9·4‡ | | 33 | 28·4 | 23·1 | *g* |
| 8·3‡ | | 34 | 0·3 | 58·2 | *g* |
| 9·5‡ | | | 43·0 | 18·4 | *g* |
| 9·2‡ | | 36 | 0·5 | 18·2 | *g* |
| 9·8‡ | | | 36·0 | 39·0 | |
| 9·7‡ | | 38 | 26·5 | 14·4 | |
| 9·2‡ | | 39 | 42·0 | 55·9 | *g* |
| 9·5‡ | | 41 | 5·0 | 37·0 | 9·5 *g* |
| 9·2‡ | | | 37·5 | 27·9 | 9·0 *g* |
| 9·2‡ | | | 51·0 | 54·0 | |
| 9·9‡ | | | 55·5 | 59·0 | |
| 9·1‡ | | 45 | 13·0 | 48·7 | 9·0 G*g* |
| 9·0‡ | | | 34·0 | 10·4 | 9·5 *g* |
| 9·9‡ | | 47 | 15·0 | 40·8 | |
| 9·3‡ | | | 26·0 | 27·0 | |
| 9·7‡ | | 49 | 14·0 | 49·1 | |
| 9·3‡ | | | 57·0 | 33·1 | |
| 9·7‡ | | 51 | 24·5 | 18·8 | *g* |
| neb.‡ | | 54 | 50·0 | 51·0 | G |
| 9·1‡ | | 56 | 56·5 | 12·8 | 9·5 *g* |
| 8·2‡ | | 57 | 20·0 | 13·2 | 8·0 GS*g* |
| 9·7‡ | | 58 | 45·0 | 50·7 | |
| 9·0‡ | | | 57·0 | 45·6 | 9·5 G*g* |
| 8·5‡ | 1 | 0 | 20·0 | 55·4 | 8·5 GS*g* |
| 9·7‡ | | | 43·0 | 48·1 | |

## 81—120.

| mag. | h | m | s (1ʰ) | −72° ′ | |
|---|---|---|---|---|---|
| 9·7‡ | 1 | 0 | 48·5 | 9·6 | |
| 9·5‡ | | | 52·0 | 33·1 | |
| 8·0‡ | | 1 | 1·0 | 24·3 | 7·5 GS*g* |
| 9·9‡ | | 3 | 49·0 | 40·0 | |
| 8·5 | | 4 | 43·0 | 30·2 | 8·5 G*g* |
| 9·9 | | 7 | 38·3 | 51·1 | *g* |
| 10·3 | | 9 | 5·5 | 16·2 | |
| 9·2 | | | 16·0 | 17·8 | 9·5 |
| 9·7 | | 10 | 16·5 | 22·5 | 9·5 |
| 10·0 | | 14 | 9·0 | 14·8 | |
| 9·8 | | | 16·5 | 38·2 | |
| 8·8 | | 16 | 11·5 | 27·5 | 9·0 G*g* |
| 9·0 | | | 15·5 | 29·8 | 9·5 G*g* |
| 9·0 | | 18 | 1·5 | 25·6 | 9·0 G*g* |
| 9·7 | | | 41·5 | 14·7 | *g* |
| 10·3 | | 19 | 36·5 | 12·5 | |
| 9·9 | | 20 | 28·5 | 39·7 | *g* |
| 7·3‡ | | | 42·5 | 58·7 | 8·0 GS*g* |
| 8·5 | | | 43·0 | 10·2 | 9·0 G*g* |
| 9·4 | | 21 | 52·7 | 42·3 | *g* |
| 7·8 | | 24 | 23·5 | 21·1 | 7·5 GS*g* |
| 8·6 | | 25 | 20·0 | 35·3 | 9·5 G*g* |
| 9·7 | | | 58·4 | 50·5 | *g* |
| 9·2 | | 28 | 49·8 | 4·1 | *g* |
| 10·2 | | 29 | 46·8 | 30·9 | |
| 9·8† | | 31 | 51·8 | 57·1 | |
| 10·2† | | 32 | 44·0 | 59·4 | |
| 9·7 | | 36 | 59·3 | 21·1 | *g* |
| 10·2† | | 39 | 18·9 | 56·6 | *g* |
| 9·9 | | | 26·3 | 18·9 | |
| 9·7 | | | 54·3 | 18·3 | *g* |
| 10·3 | | 40 | 39·3 | 40·3 | |
| 10·2 | | 41 | 11·9 | 17·4 | *g* |
| 9·5 | | | 11·9 | 5·7 | 9·5 *g* |
| 10·3 | | | 32·4 | 4·9 | |
| 9·5 | | 42 | 13·1 | 44·0 | *g* |
| 9·0 | | 43 | 19·4 | 16·1 | 9·0 *g* |
| 10·3 | | | 43·9 | 13·9 | |
| 10·8† | | 46 | 33·3 | 50·8 | |
| 8·6 | | 47 | 53·9 | 34·0 | *g* |

**25 prec.**

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 | d | + 8·4 |
| | 10 | 72 | 0·00 | | 8·3 |
| | 20 | 68 | − 0·01 | | 8·3 |
| | 30 | 63 | − 0·01 | | 8·3 |
| | 40 | 59 | − 0·02 | | 8·2 |
| | 50 | 55 | − 0·02 | | 8·2 |
| 1 | 0 | 50 | − 0·03 | | 8·1 |
| | 10 | 46 | − 0·03 | | 8·0 |
| | 20 | 42 | − 0·04 | | 7·9 |
| | 30 | 37 | − 0·04 | | 7·7 |
| | 40 | 33 | − 0·05 | | 7·6 |
| | 50 | + 29 | − 0·05 | | + 7·4 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | (s) | δ (′) |
|---|---|---|---|---|
| 1 | 40 | + 33 | − 0·05 d | + 7·6 |
| | 50 | 29 | − 0·05 | 7·4 |
| 2 | 0 | 25 | − 0·05 | 7·2 |
| | 10 | 22 | − 0·06 | 7·0 |
| | 20 | 18 | − 0·06 | 6·8 |
| | 30 | 14 | − 0·07 | 6·6 |
| | 40 | 11 | − 0·07 | 6·4 |
| | 50 | 7 | − 0·07 | 6·2 |
| 3 | 0 | 4 | − 0·08 | 5·9 |
| | 10 | + 1 | − 0·08 | 5·6 |
| | 20 | − 2 | − 0·08 | 5·4 |
| | 30 | 5 | − 0·09 | 5·1 |
| | 40 | 7 | − 0·09 | 4·8 |
| | 50 | 10 | − 0·09 | 4·5 |
| 4 | 0 | 12 | − 0·09 | 4·2 |
| | 10 | 14 | − 0·10 | 3·9 |
| | 20 | 16 | − 0·10 | 3·5 |
| | 30 | − 18 | − 0·10 | + 3·2 |

d = minutes of decl.

## 121—180.

| mag. | h | m | s (1h.–2h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 9·0 | 1 | 49 | 14·2 | 31·7 | 9·5 *g* |
| 10·3 | | | 18·7 | 26·0 | |
| 9·5▬ | | 50 | 3·3 | 15·9 | *g* |
| 10·8 | | | 23·9 | 2·2 | |
| 8·9† | | 51 | 26·5 | 51·9 | 9·0 *g* |
| 8·6 | | | 47·8 | 38·3 | 8·5 *g* |
| 9·6 | | 52 | 20·8 | 26·0 | |
| 10·4† | | | 40·3 | 56·1 | |
| 10·1 | | 53 | 16·1 | 6·2 | |
| 8·0 | | | 54·1 | 13·5 | *g* |
| 10·8 | | 54 | 19·3 | 0·2 | |
| 10·8 | | | 45·6 | 1·5 | |
| 9·2 | | 55 | 21·8 | 16·9 | *g* |
| 9·9 | | 56 | 8·7 | 34·2 | |
| 10·8 | | | 13·4 | 20·5 | |
| 10·2 | | | 15·0 | 35·8 | |
| 10·4 | | 58 | 24·9 | 20·9 | |
| 10·8 | | 59 | 17·4 | 12·8 | |
| 9·6† | | | 20·8 | 57·7 | *g* |
| 9·8† | 2 | 0 | 24·1 | 58·2 | *g* |
| 10·8 | | 2 | 39·0 | 32·5 | |
| 9·9 | | 3 | 19·0 | 25·5 | |
| 7·5 | | | 39·0 | 12·2 | 8·0 GS*g* |
| 10·0† | | 4 | 17·9 | 52·2 | |
| 10·9† | | | 43·5 | 52·2 | |
| 10·7† | | | 51·0 | 59·8 | |
| 10·2 | | 5 | 50·5 | 23·6 | |
| 10·0 | | 6 | 9·5 | 12·9 | |
| 9·8 | | 7 | 10·5 | 14·4 | 9·5 *g* |
| 10·8 | | | 22·0 | 40·1 | |
| 9·8 | | | 55·9 | 26·2 | |
| 10·4† | | | 57·3 | 59·8 | |
| 8·9 | | | 59·9 | 24·9 | |
| 10·8 | | 9 | 41·9 | 39·5 | |
| 10·2 | | | 58·4 | 4·2 | |
| 9·9 | | 10 | 18·4 | 36·7 | |
| 9·6 | | 11 | 24·4 | 9·9 | |
| 10·8 | | | 44·8 | 32·6 | |
| 9·4 | | 12 | 7·3 | 21·6 | |
| 8·9 | | | 19·3 | 7·2 | 9·5 *g* |
| 9·5 | | | 21·3 | 9·0 | |
| 9·8 | | 13 | 9·8 | 41·6 | |
| 9·0 | | | 23·3 | 6·1 | 9·0 *g* |
| 9·9 | | 15 | 23·8 | 34·5 | |
| 10·9† | | | 46·4 | 45·4 | |
| 8·1 | | 16 | 21·6 | 2·6 | 9·0 *g* |
| 10·9† | | | 25·8 | 59·5 | |
| 9·8 | | | 28·7 | 17·8 | |
| 10·6 | | | 55·2 | 18·0 | |
| 10·8† | | 17 | 21·9 | 48·7 | |
| 10·0† | | 18 | 50·4 | 55·4 | |
| 9·8 | | 19 | 25·2 | 12·2 | |
| 9·0† | | | 39·2 | 52·8 | 8·5 *g* |
| 10·2† | | | 57·7 | 53·0 | |
| 10·6 | | 20 | 0·2 | 21·5 | |
| 8·2 | | | 13·5 | 14·4 | *g* |
| 8·6 | | | 55·0 | 24·8 | *g* |
| 10·9† | | 21 | 37·5 | 58·2 | |
| 10·9† | | 22 | 1·0 | 59·2 | |
| 9·8† | | 23 | 15·1 | 47·6 | |

## 181—240.

| mag. | h | m | s (2h.–3h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 8·7 | 2 | 25 | 12·5 | 3·1 | 9·5 *g* |
| 9·5 | | | 42·5 | 31·8 | |
| 9·8 | | | 54·5 | 17·3 | |
| 9·9 | | 28 | 10·0 | 11·2 | |
| 10·8 | | | 15·5 | 40·2 | |
| 10·9† | | 29 | 14·4 | 43·8 | |
| 10·8 | | | 15·0 | 33·9 | |
| 10·2 | | | 43·5 | 17·9 | |
| 9·2† | | 31 | 19·2 | 43·8 | *g* |
| 8·0‡ | | 32 | 16·3 | 59·7 | 8·0 GS*g* |
| 7·2‡ | | | 47·3 | 53·8 | 7·0 GS*g* |
| 9·6 | | 33 | 39·2 | 17·2 | *g* |
| 10·8 | | 35 | 35·5 | 27·3 | |
| 10·2 | | | 56·1 | 5·5 | |
| 9·5‡ | | 36 | 20·0 | 59·5 | *g* |
| 9·4▬ | | 37 | 45·0 | 12·6 | |
| 10·2 | | 39 | 27·3 | 11·8 | |
| 9·6 | | 42 | 17·3 | 19·3 | |
| 9·8 | | | 53·7 | 28·6 | |
| 8·8 | | 45 | 0·8 | 22·2 | *g* |
| 10·2 | | | 19·3 | 22·2 | |
| 9·8 | | 46 | 6·0 | 22·5 | *g* |
| 8·8 | | | 16·0 | 10·1 | 9·0 *g* |
| 9·8 | | 49 | 49·0 | 10·4 | |
| 9·1 | | 50 | 36·0 | 43·4 | *g* |
| 9·6 | | 52 | 0·5 | 23·6 | |
| 9·8 | | | 2·7 | 22·1 | |
| 9·5 | | | 5·6 | 42·8 | *g* |
| 10·2 | | | 14·2 | 42·0 | |
| 10·2 | | | 51·2 | 33·4 | |
| 9·2‡ | | 53 | 26·5 | 56·8 | *g* |
| 10·0 | | 55 | 11·2 | 10·6 | |
| 9·6 | | | 32·4 | 49·5 | |
| 8·2 | | | 45·2 | 18·7 | 8·2 G*g* |
| 9·8 | | | 59·2 | 5·1 | |
| 9·6 | | 58 | 19·1 | 38·7 | |
| 9·6 | | | 56·1 | 17·8 | |
| 9·6 | | 59 | 48·3 | 34·8 | *g* |
| 5·6 | 3 | 2 | 0·5 | 23·5 | 6·0 GS*ggt* |
| 10·2 | | | 18·1 | 43·9 | |
| 8·2‡ | | | 49·5 | 57·0 | 8·2 *g* |
| 10·2 | | 4 | 30·1 | 5·5 | |
| 9·6 | | 5 | 8·3 | 34·9 | *g* |
| 8·2 | | | 18·5 | 29·0 | 8·0 GS*g* |
| 8·8 | | | 30·3 | 11·9 | *g* |
| 8·6 | | | 45·8 | 41·7 | 9·2 |
| 10·2 | | 6 | 3·3 | 40·7 | |
| 7·6 | | | 39·3 | 30·1 | 7·2 GS*g* |
| 9·5 | | | 56·3 | 46·8 | 8·8 |
| 8·6 | | 7 | 40·3 | 47·8 | 8·2 *g* |
| 9·2 | | 8 | 7·8 | 11·6 | 8·8 *g* |
| 9·1 | | 9 | 0·3 | 29·2 | 8·5 *g* |
| 10·0 | | 12 | 51·4 | 50·1 | |
| 9·3 | | 13 | 1·6 | 33·4 | 9·2 *g* |
| 8·0 | | | 15·3 | 42·0 | 8·8 *g* |
| 9·8 | | 14 | 52·3 | 42·1 | |
| 9·5‡ | | 18 | 44·0 | 49·9 | |
| 8·5▬ | | 20 | 20·3 | 25·6 | 8·2 *g* |
| 9·6‡ | | | 56·0 | 54·2 | *g* |
| 9·1 | | 23 | 5·6 | 7·4 | S*g* |

## 241—300.

| mag. | h | m | s (3h.–4h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 9·8 | 3 | 23 | 35·5 | 27·4 | |
| 9·2 | | 26 | 12·9 | 4·9 | |
| 9·7 | | | 31·5 | 3·1 | |
| 9·4† | | 29 | 2·7 | 57·7 | |
| 9·4 | | 30 | 43·5 | 5·0 | |
| 9·4† | | 31 | 27·5 | 44·8 | |
| 8·1† | | | 45·2 | 47·5 | 8·5 *g* |
| 9·7 | | 33 | 37·5 | 21·3 | |
| 9·9† | | 35 | 52·5 | 59·2 | |
| 9·5† | | 36 | 34·0 | 31·9 | |
| 9·3 | | | 56·5 | 28·4 | |
| 9·6 | | 37 | 21·0 | 7·8 | 9·5 *g* |
| 8·6 | | 38 | 34·0 | 9·8 | *g* |
| 9·8† | | 40 | 3·0 | 54·8 | |
| 8·6 | | 41 | 2·5 | 26·0 | 9·5 *g* |
| 9·8 | | | 51·0 | 4·0 | |
| 9·1 | | | 53·0 | 8·0 | *g* |
| 9·0 | | 44 | 14·0 | 9·6 | |
| 9·7 | | | 34·0 | 21·7 | |
| 9·0† | | | 46·7 | 59·9 | 8·5 *g* |
| 8·4 | | 45 | 31·0 | 5·3 | 9·0 *g* |
| 6·2 | | 46 | 3·0 | 2·7 | 7·0 GS*g* |
| 9·9† | | | 42·0 | 54·6 | |
| 8·9† | | 50 | 44·5 | 57·6 | *g* |
| 9·9† | | | 50·0 | 32·6 | |
| 9·6 | | 51 | 16·0 | 5·4 | |
| 9·7† | | | 23·5 | 32·2 | |
| 9·9 | | 52 | 47·0 | 9·4 | |
| 9·7 | | | 48·0 | 9·2 | |
| 8·8 | | | 53·0 | 23·6 | *g* |
| 9·5† | | 53 | 40·0 | 41·1 | *g* |
| 8·6† | | 56 | 39·0 | 42·0 | 10·0 *g* |
| 9·6 | | 57 | 53·5 | 29·0 | |
| 9·9 | | 58 | 32·0 | 13·8 | |
| 9·3 | | | 43·0 | 15·4 | *g* |
| 9·7 | | 59 | 9·5 | 26·0 | *g* |
| 9·7 | 4 | 0 | 56·0 | 32·9 | |
| 9·1 | | 5 | 54·5 | 12·9 | |
| 9·7▬ | | 6 | 21·5 | 4·6 | |
| 9·8† | | | 54·0 | 30·6 | |
| 9·7 | | 8 | 57·0 | 3·8 | |
| 9·4 | | 9 | 26·0 | 1·4 | 10·0 *g* |
| 9·3 | | | 39·5 | 15·6 | |
| 9·7 | | 11 | 13·0 | 9·4 | |
| 9·7 | | | 22·0 | 8·1 | |
| 9·6 | | | 33·0 | 16·0 | |
| 9·4 | | | 45·5 | 0·8 | 9·5 *g* |
| 9·4† | | 13 | 6·5 | 36·3 | *g* |
| 9·0† | | 14 | 6·0 | 42·7 | *g* |
| 9·6 | | | 22·0 | 10·8 | |
| 9·7 | | | 58·5 | 0·9 | |
| 9·4 | | 15 | 45·5 | 6·4 | *g* |
| 9·2† | | 16 | 29·0 | 45·3 | 9·0 G*g* |
| 9·3† | | | 33·5 | 32·9 | |
| 8·4 | | 18 | 12·0 | 18·0 | 8·0 GS*g* |
| 9·0 | | | 58·0 | 16·5 | 9·0 *g* |
| 9·3 | | 21 | 41·0 | 17·6 | 9·5 *g* |
| 9·0 | | 23 | 32·0 | 2·4 | 9·0 *g* |
| 9·4† | | | 47·0 | 39·3 | 10·0 *g* |
| 9·9† | | | 48·0 | 38·3 | |

## 301—360.

| mag. | $4^{h}$—$5^{h}$ h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·3 | 4 | 24 | 11·0 | 26·3 | |
| 9·4 | | 26 | 13·0 | 21·9 | |
| 9·7 | | 27 | 9·0 | 22·0 | |
| 8·0† | | 28 | 48·5 | 54·3 | 8·0 GS*g* |
| 9·7† | | 29 | 2·0 | 40·6 | 10·0 *g* |
| 9·4 | | | 8·0 | 16·0 | 9·0 *g* |
| 9·7† | | 30 | 49·5 | 41·4 | *g* |
| 8·2 | | 31 | 42·0 | 32·4 | 8·2 G*g* |
| 9·7‡ | | | 52·0 | 42·9 | |
| 9·1‡ | | 32 | 40·5 | 38·9 | 8·5 G*g* |
| 7·4‡ | | 36 | 35·0 | 59·2 | 7·0 GS*g* |
| 9·1 | | 37 | 37·0 | 11·6 | *g* |
| 9·4 | | 39 | 3·0 | 0·0 | *g* |
| 8·8‡ | | | 13·5 | 43·1 | 8·0 *g* |
| 9·5 | | | 23·0 | 22·9 | |
| 9·1‡ | | 40 | 9·0 | 36·7 | *g* |
| 9·6 | | 42 | 19·0 | 3·8 | |
| 9·3‡ | | 45 | 20·0 | 51·2 | |
| 9·0– | | | 42·0 | 21·6 | 8·5 G |
| 9·3‡ | | 47 | 7·0 | 32·9 | |
| 9·2‡ | | | 25·0 | 43·1 | *g* |
| 9·6 | | | 59·7 | 29·2 | |
| 9·5‡ | | 49 | 0·6 | 35·0 | |
| 9·0‡ | | | 21·5 | 39·8 | *g* |
| 9·6 | | 50 | 24·5 | 8·2 | |
| 9·0‡ | | 51 | 57·0 | 40·0 | *g* |
| 9·6 | | 52 | 1·5 | 16·7 | |
| 9·6 | | | 4·5 | 16·5 | |
| 9·0‡ | | | 52·0 | 37·6 | *g* |
| 9·5‡ | | 53 | 11·0 | 34·0 | |
| 9·0‡ | | 55 | 3·0 | 38·9 | 9·5 *g* |
| 7·1‡ | | | 11·0 | 36·8 | 7·0 GS*gg* |
| 9·2‡ | | | 41·0 | 36·0 | 9·5 |
| 7·7‡ | | | 43·0 | 57·7 | 7·5 GS*g* |
| 9·5 | | | 58·5 | 9·7 | *g* |
| 9·6 | | 56 | 52·5 | 31·0 | |
| 9·6 | | 57 | 1·0 | 19·0 | |
| 9·6 | | | 6·0 | 7·4 | |
| 9·4 | | 58 | 19·5 | 43·3 | |
| 9·2 | 5 | 0 | 50·5 | 18·2 | 9·0 *g* |
| 8·8‡ | | 2 | 43·5 | 38·0 | 8·5 *g* |
| 9·7‡ | | 3 | 53·0 | 54·0 | |
| 9·1 | | 4 | 15·0 | 0·9 | 8·5 *g* |
| 8·6‡ | | 7 | 8·5 | 35·0 | *g* |
| 9·1‡ | | | 11·0 | 40·0 | *g* |
| 9·7 | | | 17·5 | 12·6 | |
| 9·1 | | | 34·5 | 15·9 | *g* |
| 9·5 | | 8 | 25·0 | 20·0 | |
| 9·7 | | 9 | 0·5 | 30·8 | |
| 9·2 | | 10 | 38·0 | 24·5 | 9·0 |
| 9·0 | | 11 | 41·5 | 29·0 | 8·5 *g* |
| 8·9 | | 12 | 15·5 | 13·3 | 8·5 GS*g* |
| 9·7 | | | 59·0 | 22·8 | |
| 9·6 | | 13 | 56·0 | 23·7 | |
| 9·5‡ | | 14 | 48·5 | 34·5 | |
| 9·6 | | 16 | 5·0 | 10·4 | 9·0 *g* |
| 9·7 | | 17 | 32·5 | 7·0 | |
| 8·7‡ | | | 44·0 | 31·7 | 8·5 *g* |
| 9·0 | | | 56·9 | 13·2 | 8·5 *g* |
| 9·7 | | 18 | 29·5 | 43·9 | |

## 361—420.

| mag. | $5^{h}$ h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·7 | 5 | 18 | 30·5 | 14·7 | |
| 9·7 | | | 44·5 | 1·5 | |
| 8·9‡ | | 19 | 44·0 | 49·5 | 8·0 *g* |
| 9·1 | | | 51·5 | 3·0 | *g* |
| 9·2 | | 20 | 56·5 | 6·0 | *g* |
| 9·7 | | 21 | 5·5 | 1·1 | |
| 9·6‡ | | | 6·0 | 48·9 | 9·0 *g* |
| 9·7 | | 22 | 46·5 | 10·6 | |
| 9·2 | | 23 | 12·5 | 12·5 | 8·5 *g* |
| 9·6 | | | 50·5 | 20·5 | |
| 9·6 | | 24 | 17·5 | 3·0 | |
| 8·2 | | 25 | 0·3 | 27·0 | 8·0 GS*g* |
| 9·3 | | | 41·5 | 12·9 | |
| 9·7 | | 27 | 6·5 | 32·4 | |
| 9·4† | | 28 | 30·0 | 34·4 | *g* |
| 9·8† | | 30 | 4·5 | 42·9 | |
| 9·4† | | | 46·0 | 50·0 | *g* |
| 9·6† | | | 48·5 | 30·6 | |
| 8·9† | | 31 | 8·5 | 50·4 | 9·0 *g* |
| 9·6 | | | 10·7 | 1·4 | |
| 9·6† | | | 50·5 | 45·6 | |
| 8·6† | | 32 | 6·5 | 54·2 | 8·0 GS*g* |
| 9·5† | | 33 | 57·5 | 30·5 | |
| 9·4† | | 34 | 0·0 | 55·1 | |
| 9·4 | | | 46·8 | 23·9 | |
| 8·3† | | | 53·0 | 54·8 | 8·5 GS*g* |
| 9·7 | | 35 | 7·3 | 3·8 | |
| 9·7– | | | 8·8 | 4·5 | |
| 10·1 | | | 13·0 | 17·4 | |
| 10·2 | | | 21·0 | 13·7 | |
| 9·1 | | 36 | 3·2 | 19·3 | *g* |
| 10·0 | | | 59·5 | 3·7 | |
| 9·2† | | 37 | 46·5 | 34·9 | |
| 9·6† | | 38 | 10·5 | 58·6 | 9·2 G*g* |
| 9·1† | | | 13·5 | 58·8 | 8·0 G*g* |
| 9·4† | | | 46·5 | 51·6 | *g* |
| 10·0 | | | 48·0 | 28·8 | |
| 10·1 | | 39 | 18·0 | 27·0 | |
| 10·1 | | | 38·0 | 31·9 | |
| 10·0 | | 41 | 37·0 | 15·1 | |
| 9·9 | | 42 | 8·3 | 0·8 | |
| 10·1 | | | 16·0 | 25·9 | |
| 9·1† | | | 19·5 | 31·8 | 9·0 G*g* |
| 10·1 | | | 52·0 | 6·6 | |
| 8·7 | | 43 | 14·3 | 19·7 | 9·0 G*g* |
| 9·6† | | | 47·5 | 59·5 | |
| 10·0 | | 44 | 44·0 | 11·9 | *g* |
| × 9·4 | | | 48·0 | 11·5 | *g* |
| 10·1 | | 45 | 11·5 | 0·9 | |
| 9·3† | | 46 | 12·5 | 37·2 | *g* |
| 9·4† | | | 21·5 | 58·0 | |
| 9·8† | | | 31·5 | 35·9 | |
| 9·8 | | | 49·0 | 8·8 | |
| 8·3† | | 47 | 15·5 | 42·1 | 8·5 G*g* |
| 10·1 | | | 52·5 | 1·9 | |
| 9·9 | | 48 | 55·5 | 2·8 | |
| 9·9 | | 49 | 12·0 | 23·0 | |
| 7·6† | | 50 | 20·7 | 44·2 | 7·0 GS*g* |
| 9·9 | | | 28·5 | 0·6 | *g* |
| 9·4 | | 52 | 11·3 | 26·9 | *g* |

## 421—480.

| mag. | $5^{h}$—$6^{h}$ h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6† | 5 | 53 | 17·5 | 48·2 | |
| 9·3† | | 54 | 7·2 | 42·5 | |
| 10·1 | | | 36·3 | 26·8 | |
| 8·6 | | | 42·8 | 21·7 | *g* |
| 9·9† | | | 43·5 | 46·6 | |
| 10·2 | | 55 | 0·0 | 21·5 | |
| 9·9 | | | 16·0 | 21·9 | *g* |
| × 10·2 | | | 37·0 | 31·4 | |
| 9·9 | | | 56·0 | 3·0 | |
| 10·0 | | 56 | 0·0 | 5·9 | |
| 9·6 | | | 6·0 | 15·9 | *g* |
| 10·1 | | | 24·0 | 17·5 | |
| 9·0 | | 57 | 19·3 | 22·3 | *g* |
| 9·7 | | | 24·0 | 19·8 | |
| 10·0 | | | 26·0 | 17·0 | |
| 9·5† | | | 32·5 | 42·2 | |
| 8·2† | | | 41·5 | 49·4 | 8·5 *g* |
| 9·4 | | 58 | 7·0 | 24·9 | *g* |
| 9·8† | 6 | 0 | 26·5 | 32·1 | |
| 9·9† | | | 42·5 | 31·0 | |
| 9·8† | | 2 | 36·0 | 55·2 | |
| 10·1 | | | 40·0 | 29·9 | |
| 8·6 | | 4 | 0·0 | 8·3 | *g* |
| 9·7 | | | 18·0 | 15·4 | |
| 9·9 | | | 43·0 | 20·9 | |
| 9·3† | | 6 | 6·0 | 45·0 | *g* |
| 9·5 | | | 50·0 | 17·5 | |
| 9·6 | | 7 | 51·0 | 8·7 | |
| 10·1 | | 8 | 3·0 | 16·5 | |
| 9·8† | | | 26·5 | 37·4 | |
| 8·9 | | | 54·5 | 28·5 | 9·5 *g* |
| 9·9† | | | 56·0 | 41·8 | |
| : 10·0 | | 11 | 21·0 | 13·6 | |
| 9·5† | | | 31·0 | 44·6 | *g* |
| 9·4† | | 12 | 40·0 | 52·1 | *g* |
| 9·9† | | | 46·0 | 32·5 | |
| 7·5† | | 13 | 24·5 | 58·7 | 8·5 GS*g* |
| 9·2 | | | 29·0 | 7·7 | *g* |
| 8·7† | | 14 | 55·5 | 46·0 | 9·5 *g* |
| 9·7 | | 15 | 3·5 | 26·1 | 10·0 *g* |
| 9·5 | | 16 | 40·0 | 1·9 | *g* |
| 10·0 | | 17 | 9·0 | 13·9 | |
| 9·0– | | | 21·5 | 26·7 | 9·5 G*gg* |
| 9·6† | | 19 | 26·5 | 36·4 | S |
| 9·9† | | | 27·5 | 59·8 | |
| 10·0 | | | 55·0 | 14·9 | |
| 9·6† | | | 57·0 | 38·4 | *g* |
| 10·1 | | 20 | 10·0 | 16·0 | |
| 8·0 | | | 25·0 | 4·4 | 8·5 GS*g* |
| 10·0 | | 21 | 27·0 | 30·6 | |
| 9·7 | | | 30·0 | 24·0 | |
| 9·6† | | 22 | 30·0 | 41·2 | *g* |
| 10·0 | | 23 | 11·0 | 33·8 | |
| 9·8 | | | 17·0 | 4·4 | |
| 10·0 | | | 29·0 | 24·9 | |
| 10·0 | | 24 | 3·0 | 31·7 | |
| 9·9† | | | 49·0 | 31·3 | |
| 9·0 | | 25 | 31·5 | 17·6 | 9·5 *g* |
| 10·0 | | | 44·5 | 33·1 | |
| 9·2 | | 26 | 6·5 | 5·9 | *g* |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 4 | 20 | — 16 — 0·10 d | + 3·5 |
| | 30 | 18 — 0·10 | 3·2 |
| | 40 | 20 — 0·10 | 2·9 |
| | 50 | 21 — 0·10 | 2·5 |
| 5 | 0 | 23 — 0·11 | 2·2 |
| | 10 | 24 — 0·11 | 1·8 |
| | 20 | 25 — 0·11 | 1·5 |
| | 30 | 25 — 0·11 | 1·1 |
| | 40 | 26 — 0·11 | 0·7 |
| | 50 | 26 — 0·11 | + 0·4 |
| 6 | 0 | 26 — 0·11 | 0·0 |
| | 10 | 26 — 0·11 | — 0·4 |
| | 20 | 26 — 0·11 | 0·7 |
| | 30 | — 25 — 0·11 | — 1·1 |

d = minutes of decl.



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25 prec.

| h | m | a s | s | δ ′ |
|---|---|---|---|---|
| 6 | 20 | − 26 | − 0·11 d | − 0·7 |
| | 30 | 25 | − 0·11 | 1·1 |
| | 40 | 25 | − 0·11 | 1·5 |
| | 50 | 24 | − 0·11 | 1·8 |
| 7 | 0 | 23 | − 0·11 | 2·2 |
| | 10 | 21 | − 0·10 | 2·5 |
| | 20 | 20 | − 0·10 | 2·9 |
| | 30 | 18 | − 0·10 | 3·2 |
| | 40 | 16 | − 0·10 | 3·5 |
| | 50 | 14 | − 0·10 | 3·9 |
| 8 | 0 | 12 | − 0·09 | 4·2 |
| | 10 | − 10 | − 0·09 | − 4·5 |

d = minutes of decl.

## 481—540.

| mag. | 6h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·3† | 6 | 26 | 25·0 | 56·5 | *g* |
| 9·4‡ | | 27 | 45·0 | 58·9 | |
| 10·0 | | 28 | 5·5 | 13·8 | |
| 10·1 | | | 23·7 | 1·4 | |
| 9·8‡ | | 29 | 35·0 | 36·5 | |
| 9·6 | | | 51·0 | 0·4 | |
| 9·2‡ | | 30 | 11·0 | 54·4 | |
| 9·8‡ | | | 40·5 | 35·1 | |
| 10·1 | | 32 | 14·0 | 28·9 | |
| 9·8‡ | | | 15·0 | 51·4 | |
| 9·0 | | | 40·0 | 5·3 | 9·5 *g* |
| 9·3‡ | | 33 | 5·0 | 44·4 | *g* |
| 9·8‡ | | | 20·0 | 35·5 | |
| 9·8‡ | | | 29·0 | 43·2 | |
| 10·1 | | | 38·0 | 34·3 | |
| 9·3‡ | | | 40·5 | 41·0 | *g* |
| 10·0 | | | 41·0 | 1·2 | |
| 10·0 | | | 51·0 | 5·7 | |
| 9·4‡ | | 34 | 3·5 | 35·8 | *g* |
| 9·8‡ | | | 13·0 | 50·0 | |
| 10·1 | | | 32·0 | 3·9 | |
| 8·7 | | | 44·0 | 4·7 | 9·5 *g* |
| 9·8 | | 35 | 19·5 | 28·3 | |
| 9·2 | | | 24·0 | 25·3 | *g* |
| 9·4 | | | 45·0 | 13·0 | 10·0 *g* |
| 9·8 | | | 50·0 | 10·3 | |
| 10·1 | | 36 | 5·0 | 10·7 | |
| 8·3 | | | 15·5 | 9·8 | 8·5 *g* |
| 9·4‡ | | 37 | 9·0 | 37·6 | *g* |
| 9·8‡ | | | 27·0 | 53·5 | |
| 9·3‡ | | | 32·0 | 48·3 | |
| 9·2 | | 38 | 24·0 | 4·3 | |
| 9·1‡ | | | 35·0 | 40·4 | 9·5 *g* |
| 9·7 | | 39 | 24·0 | 3·0 | *g* |
| 9·6‡ | | | 24·0 | 32·2 | |
| 9·5‡ | | 40 | 11·0 | 38·6 | |
| 10·0 | | | 16·0 | 22·1 | |
| 9·1‡ | | 41 | 57·0 | 52·9 | *g* |
| 9·4‡ | | 43 | 45·0 | 39·1 | |
| 8·8‡ | | 44 | 31·0 | 53·5 | 9·0 *g* |
| 9·9 | | | 56·5 | 28·8 | |
| 7·3‡ | | 46 | 9·5 | 58·9 | 6·5 GS*g* |
| 9·4‡ | | | 20·5 | 31·4 | G*g* |
| 9·5‡ | | | 21·0 | 39·5 | G |
| 9·8‡ | | | 41·5 | 32·0 | |
| 9·8‡ | | | 48·0 | 52·9 | |
| 10·0 | | 48 | 29·0 | 21·5 | |
| 9·7 | | 49 | 2·0 | 4·0 | |
| 9·2 | | | 7·5 | 26·0 | *g* |
| 9·5‡ | | | 57·5 | 35·8 | |
| 9·4‡ | | | 59·0 | 45·2 | |
| 9·5‡ | | 50 | 33·0 | 55·2 | |
| 9·4 | | | 40·0 | 4·2 | 9·5 *g* |
| 8·9 | | | 53·0 | 18·7 | *g* |
| 9·2‡ | | 51 | 9·5 | 33·6 | *g* |
| 10·0 | | | 22·0 | 15·8 | |
| 9·8‡ | | | 32·0 | 43·2 | |
| 10·1 | | 52 | 9·0 | 23·1 | |
| 9·2 | | 54 | 22·0 | 2·0 | *g* |
| 9·6‡ | | | 40·0 | 37·3 | |

## 541—600.

| mag. | 6h.—7h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6‡ | 6 | 56 | 6·5 | 30·4 | |
| 9·4‡ | | | 9·0 | 54·4 | *g* |
| 10·1 | | | 38·0 | 0·8 | |
| 9·0 | | 58 | 40·0 | 28·3 | *g* |
| 9·8 | | 59 | 18·0 | 7·6 | |
| 9·0 | 7 | 0 | 41·0 | 21·4 | 9·5 *g* |
| 9·0‡ | | | 53·0 | 51·1 | 9·0 *g* |
| 10·0 | | 1 | 37·0 | 12·3 | |
| 9·0 | | | 56·5 | 28·8 | |
| 10·0 | | 2 | 38·0 | 15·0 | |
| 7·7 | | 3 | 3·0 | 22·4 | 8·5 *g* |
| 8·9‡ | | | 23·0 | 34·7 | *g* |
| 8·6‡ | | | 25·0 | 52·9 | 7·5 G*g* |
| 10·0 | | 4 | 13·0 | 26·3 | |
| 10·0 | | | 52·0 | 23·2 | |
| 10·4 | | | 57·0 | 22·8 | |
| 10·2 | | | 59·5 | 7·3 | |
| 10·4 | | 5 | 6·5 | 1·9 | |
| 8·9‡ | | | 41·0 | 34·3 | |
| 10·3 | | | 43·0 | 1·7 | |
| 10·4 | | 6 | 43·5 | 15·6 | |
| 10·4 | | | 49·5 | 16·7 | |
| 8·5‡ | | 7 | 36·0 | 47·6 | *g* |
| 9·4 | | | 52·3 | 24·3 | *g* |
| 9·8‡ | | 8 | 18·0 | 34·3 | |
| 10·3 | | | 19·0 | 1·4 | |
| 10·3 | | | 22·0 | 11·9 | |
| 10·0 | | 9 | 13·5 | 8·8 | *g* |
| 9·1 | | | 19·0 | 0·6 | 9·5 *g* |
| 10·0 | | | 40·5 | 2·8 | 9·5 *g* |
| 9·5‡ | | | 51·0 | 55·0 | |
| 9·8 | | 10 | 29·5 | 17·5 | |
| 8·6 | | | 37·0 | 6·2 | 9·5 *g* |
| 9·6 | | | 49·5 | 4·0 | *g* |
| 9·4‡ | | 11 | 49·0 | 36·2 | |
| 8·0 | | 12 | 22·2 | 7·8 | 8·5 GS*g* |
| 8·5‡ | | 13 | 23·8 | 32·3 | 8·5 GS*g* |
| 10·4 | | | 49·5 | 34·6 | |
| 10·4 | | | 51·5 | 31·8 | |
| 10·3 | | 17 | 4·5 | 27·2 | |
| 10·4 | | | 16·0 | 4·4 | |
| 8·0‡ | | | 42·3 | 30·7 | 8·5 GS*g* |
| 10·4 | | | 59·5 | 24·6 | |
| 9·0‡ | | 19 | 41·0 | 53·1 | *g* |
| 9·4‡ | | 20 | 27·0 | 44·9 | 9·0 *g* |
| 9·4‡ | | 21 | 58·0 | 58·3 | |
| 9·4 | | 22 | 30·5 | 21·0 | |
| 9·5 | | 23 | 27·0 | 28·8 | *g* |
| 10·4 | | 24 | 3·0 | 34·4 | |
| 10·0 | | 25 | 9·0 | 20·3 | |
| 9·1‡ | | | 12·5 | 46·4 | *g* |
| 9·7 | | | 23·0 | 3·9 | G*g* |
| 10·2 | | 26 | 5·0 | 0·9 | |
| 8·9 | | | 11·0 | 3·5 | 9·0 G*g* |
| 10·4 | | 27 | 13·0 | 23·6 | |
| 9·2‡ | | 28 | 41·0 | 38·0 | *g* |
| 10·4 | | | 53·0 | 30·0 | |
| 10·0 | | 29 | 3·0 | 16·8 | |
| 10·3 | | | 3·0 | 11·8 | |
| 8·8‡ | | | 15·0 | 50·0 | 7·5 G*g* |

## 601—660.

| mag. | 7h.—8h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·8‡ | 7 | 29 | 26·0 | 45·2 | |
| 9·6‡ | | | 46·5 | 42·1 | 9·0 *g* |
| 9·8† | | | 58·8 | 57·3 | |
| 9·9† | | 30 | 42·0 | 52·3 | |
| 9·7† | | | 49·0 | 37·9 | |
| 9·7† | | 31 | 7·0 | 38·9 | 9·5 *g* |
| 9·8 | | | 24·5 | 24·8 | |
| 9·1† | | 32 | 9·0 | 40·7 | *g* |
| 9·6† | | 33 | 2·5 | 36·1 | |
| 10·3 | | 34 | 16·0 | 29·9 | |
| 8·4 | | | 42·5 | 18·6 | 9·0 *g* |
| 9·5† | | | 59·0 | 47·0 | *g* |
| 9·9† | | 35 | 4·0 | 53·2 | |
| 9·4† | | | 12·0 | 46·4 | *g* |
| 10·0 | | 38 | 1·0 | 15·8 | |
| 9·8 | | 39 | 28·5 | 26·1 | |
| 9·8† | | 40 | 11·0 | 54·0 | |
| 10·4 | | | 14·0 | 7·6 | |
| 9·1† | | | 18·0 | 52·8 | 8·5 *g* |
| 9·7† | | | 48·0 | 44·1 | |
| 10·4 | | 41 | 15·0 | 18·7 | |
| 8·8 | | | 25·0 | 17·3 | 8·0 *g* |
| 9·5 | | 42 | 0·5 | 27·9 | |
| 9·4† | | | 59·0 | 49·9 | |
| 10·4 | | | 59·0 | 30·8 | |
| 9·4† | | 43 | 9·0 | 30·2 | |
| 6·0 | | | 19·5 | 18·2 | *4·5* GS*ggr* |
| 9·4† | | 44 | 3·0 | 39·7 | |
| 9·8 | | | 13·0 | 13·7 | |
| 10·0 | | | 23·0 | 13·1 | |
| 9·2 | | | 26·5 | 22·9 | 9·0 |
| 9·9† | | | 41·0 | 26·5 | |
| 9·1 | | 45 | 9·0 | 10·1 | |
| 10·4 | | | 49·5 | 10·6 | |
| 9·9† | | 46 | 27·0 | 33·6 | |
| 10·0 | | | 30·0 | 13·0 | |
| 9·5 | | 47 | 0·5 | 0·9 | |
| 10·0 | | | 30·0 | 15·1 | |
| 9·6 | | 48 | 2·0 | 9·9 | |
| 9·3† | | | 14·0 | 48·4 | |
| 9·9† | | 49 | 20·0 | 35·0 | |
| 9·6 | | | 48·0 | 4·8 | |
| 10·0 | | | 54·0 | 13·9 | |
| 9·2 | | 51 | 0·0 | 2·2 | 8·5 *g* |
| 9·7 | | | 58·0 | 6·0 | |
| 10·0 | | 53 | 2·0 | 4·0 | |
| 9·5† | | 54 | 46·0 | 47·4 | G |
| 9·6 | | 55 | 2·0 | 10·2 | |
| 9·8 | | | 56·0 | 24·2 | |
| 9·0† | | 56 | 53·0 | 46·1 | G*g* |
| 9·9 | | 58 | 16·5 | 27·8 | |
| 10·0 | 8 | 0 | 12·0 | 5·0 | |
| 9·8† | | | 40·0 | 56·7 | 9·0 G*g* |
| 6·4† | | | 49·0 | 53·7 | 6·5 GS*g* |
| 9·5† | | 1 | 8·0 | 55·5 | 8·5 *g* |
| 9·7 | | 2 | 48·5 | 7·7 | G |
| 10·0 | | | 57·5 | 26·4 | |
| 9·9† | | 4 | 17·0 | 43·6 | |
| 9·4 | | | 46·5 | 5·8 | |
| 10·0 | | 5 | 51·0 | 15·6 | |



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**661—720.**

| mag. | h (8h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·5† | 8 | 8 | 17·0 | 47·1 | |
| 10·0 | | | 56·0 | 29·1 | |
| 9·8 | | 9 | 1·5 | 24·2 | |
| 8·9 | | 10 | 17·0 | 16·3 | 9·5 *g* |
| 9·8† | | 11 | 35·0 | 51·6 | |
| 9·8† | | 12 | 45·0 | 52·4 | |
| 9·8 | | | 48·0 | 5·1 | |
| 9·6 | | 13 | 26·0 | 1·5 | |
| 8·1† | | | 36·0 | 48·1 | 8·5 *g* |
| 9·7† | | 14 | 4·0 | 39·6 | |
| 9·8 | | | 46·0 | 14·0 | 9·5 |
| 9·4 | | 15 | 0·0 | 6·5 | |
| 9·3† | | | 11·0 | 42·4 | |
| 9·8 | | | 13·0 | 24·7 | |
| 10·0 | | | 17·0 | 23·1 | |
| 9·2 | | | 34·0 | 2·0 | |
| 10·0 | | | 41·0 | 35·1 | |
| 10·0 | | 16 | 8·0 | 32·4 | |
| 9·5† | | 17 | 2·0 | 57·6 | |
| 8·7† | | | 17·0 | 45·5 | 9·0 *g* |
| 9·1† | | | 35·0 | 37·6 | 9·5 *g* |
| 9·1 | | 18 | 21·0 | 25·2 | 9·0 |
| 8·8 | | 19 | 40·5 | 23·7 | 9·0 *g* |
| 9·8† | | | 42·0 | 56·3 | |
| 9·4 | | | 58·0 | 25·9 | 9·0 |
| 9·0† | | | 59·0 | 44·1 | *g* |
| 9·6 | | 20 | 46·0 | 4·7 | |
| 9·3† | | | 52·5 | 57·3 | *g* |
| 10·0 | | 21 | 9·0 | 4·1 | |
| 9·2 | | | 57·0 | 15·0 | |
| 10·0 | | 22 | 14·0 | 19·2 | |
| 10·0 | | | 44·0 | 9·4 | |
| 7·7† | | | 57·0 | 33·2 | 8·0 *g* |
| 5·1† | | 23 | 9·0 | 59·9 | GSc*gt* |
| 9·6 | | | 15·0 | 14·4 | |
| 8·9 | | | 21·0 | 24·2 | 8·5 |
| 8·1† | | | 45·0 | 44·1 | 8·5 *g* |
| 10·0 | | 24 | 5·0 | 10·2 | |
| 10·0 | | 25 | 29·0 | 20·2 | |
| 10·0 | | 26 | 8·0 | 1·4 | |
| 9·8 | | | 11·0 | 21·0 | |
| 10·0 | | | 23·0 | 10·6 | |
| 10·0 | | 27 | 17·0 | 19·1 | |
| 9·7 | | | 26·0 | 30·2 | |
| 9·5† | | 28 | 19·5 | 36·9 | |
| 9·7‡ | | | 50·0 | 37·9 | |
| 9·2‡ | | 29 | 22·0 | 44·0 | 8·5 *g* |
| 9·3 | | | 35·0 | 13·2 | |
| 8·9‡ | | 31 | 0·5 | 59·8 | |
| 9·6‡ | | | 37·0 | 34·9 | |
| 9·5‡ | | 32 | 0·0 | 54·6 | |
| 10·0 | | | 19·5 | 12·7 | |
| 7·3‡ | | 33 | 32·0 | 55·8 | 6·5 GSc*g* |
| 10·0 | | 34 | 8·0 | 9·4 | |
| 9·7‡ | | | 45·0 | 51·2 | |
| 10·0 | | 35 | 36·5 | 11·6 | |
| 10·0 | | 36 | 34·0 | 4·9 | |
| 10·0 | | | 34·5 | 11·8 | |
| 9·2‡ | | | 35·0 | 56·4 | 9·2 *g* |
| 10·0 | | 37 | 0·5 | 16·4 | |

**721—780.**

| mag. | h (8h.—9h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6‡ | 8 | 37 | 15·0 | 41·9 | |
| 9·4‡ | | | 36·0 | 48·7 | |
| 9·0‡ | | | 54·5 | 58·3 | 9·0 *g* |
| 10·0 | | 38 | 18·0 | 3·5 | |
| 9·4 | | | 50·5 | 2·3 | 8·5 |
| 9·9 | | 39 | 1·0 | 21·9 | |
| 10·1 | | | 54·5 | 3·7 | |
| 10·1 | | 40 | 33·5 | 12·9 | |
| 10·1 | | | 58·5 | 3·9 | |
| 7·5 | | 41 | 40·5 | 8·4 | 7·5 GS*g* |
| 9·4‡ | | 42 | 14·0 | 44·8 | 7·5 *g* |
| 9·6 | | | 33·0 | 20·8 | |
| 10·1 | | | 49·0 | 29·1 | |
| 9·6‡ | | | 50·0 | 51·7 | |
| 9·5 | | 43 | 17·0 | 27·5 | |
| 10·0 | | 44 | 0·0 | 18·9 | |
| 9·5 | | | 35·0 | 18·6 | |
| 9·7 | | | 41·0 | 25·2 | |
| 9·0 | | | 43·0 | 16·2 | *g* |
| 9·8 | | 46 | 13·0 | 15·0 | |
| 8·6 | | | 19·0 | 29·7 | 9·0 *g* |
| 10·0 | | | 22·5 | 2·6 | |
| 9·5‡ | | 47 | 0·5 | 52·1 | |
| 8·8 | | | 2·0 | 9·6 | 8·5 |
| 9·5 | | 48 | 17·0 | 1·6 | |
| 9·7‡ | | 49 | 3·5 | 32·9 | |
| 6·6 | | | 53·0 | 5·0 | 6·5 GS*g* |
| 10·1 | | 50 | 44·0 | 10·1 | |
| 9·6 | | 51 | 36·0 | 6·8 | 9·0 |
| 9·7‡ | | | 51·5 | 49·8 | |
| 8·8 | | 53 | 12·5 | 0·9 | |
| 10·0 | | | 19·0 | 0·2 | |
| 10·0 | | 54 | 14·0 | 3·4 | |
| 10·0 | | | 20·0 | 13·2 | |
| 9·4‡ | | | 25·5 | 35·3 | *g* |
| 10·1 | | | 28·0 | 26·9 | |
| 8·8 | | 55 | 14·0 | 15·8 | 9·5 *g* |
| 9·5‡ | | | 28·5 | 41·5 | |
| 10·1 | | 56 | 22·0 | 22·0 | |
| 10·0 | | | 45·0 | 6·8 | |
| 9·7‡ | | | 53·5 | 30·9 | |
| 9·7‡ | | 57 | 5·5 | 53·2 | |
| 10·0 | | | 33·0 | 29·9 | |
| 9·7‡ | | | 48·5 | 36·4 | |
| 10·0 | | | 49·0 | 33·0 | 9·5 |
| 9·7‡ | | 58 | 12·5 | 55·2 | |
| 8·8‡ | | 59 | 4·5 | 43·7 | *g* |
| 9·6‡ | | | 21·5 | 47·0 | |
| 10·0 | 9 | 0 | 9·0 | 9·0 | |
| 9·1 | | | 19·0 | 2·8 | 9·2 |
| 9·9 | | | 39·0 | 28·0 | |
| 9·7 | | | 45·0 | 13·0 | |
| 10·0 | | 1 | 11·0 | 27·0 | |
| 9·2‡ | | 2 | 4·5 | 46·5 | 9·5 |
| 8·3‡ | | | 54·5 | 47·9 | 9·0 *g* |
| 9·2 | | 3 | 25·0 | 7·9 | 9·2 G |
| 10·1 | | 4 | 10·0 | 27·8 | |
| 9·4‡ | | | 10·5 | 37·4 | |
| 5·6 | | | 47·5 | 6·0 | 5·0 GSc*gt*λ |
| 9·6‡ | | 5 | 5·5 | 46·0 | |

**781—840.**

| mag. | h (9h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6‡ | 9 | 5 | 53·5 | 51·3 | |
| 9·2‡ | | 7 | 34·5 | 43·8 | |
| 8·9‡ | | 8 | 29·5 | 41·6 | |
| 10·0 | | 9 | 42·5 | 32·4 | |
| 8·3 | | | 44·5 | 11·7 | 9·0 *g* |
| 9·2‡ | | 10 | 43·5 | 54·7 | *g* |
| 10·0 | | | 59·5 | 5·5 | |
| 10·0 | | 11 | 11·7 | 2·6 | |
| 10·1 | | | 41·5 | 13·7 | |
| 9·7 | | | 57·5 | 10·3 | |
| 9·6‡ | | 12 | 2·0 | 31·6 | |
| 8·5 | | | 4·0 | 16·7 | 8·2 *g* |
| 8·8 | | | 17·5 | 9·3 | 10·0 |
| 9·7‡ | | | 34·0 | 58·1 | |
| 10·0 | | 15 | 15·5 | 23·8 | |
| 9·3 | | | 51·5 | 21·1 | |
| 9·2‡ | | 16 | 19·5 | 48·0 | |
| 10·0 | | | 39·5 | 20·1 | |
| 7·8‡ | | | 54·5 | 30·4 | 8·5 *g* |
| 9·7‡ | | 17 | 31·8 | 59·1 | |
| 9·0 | | | 45·0 | 6·1 | |
| 7·4‡ | | 18 | 34·5 | 47·4 | 8·0 GS*g* |
| 9·9 | | | 50·5 | 5·6 | |
| 9·5‡ | | | 54·5 | 37·0 | |
| 10·1 | | 19 | 4·5 | 19·5 | |
| 10·1 | | 20 | 27·0 | 20·1 | |
| 10·0 | | | 34·0 | 23·9 | |
| 9·6‡ | | 21 | 48·5 | 54·0 | 10·0 |
| 9·6‡ | | 22 | 26·8 | 33·5 | |
| 9·7 | | | 29·5 | 7·7 | |
| 9·6‡ | | | 46·5 | 40·1 | |
| 9·2 | | | 48·5 | 28·4 | |
| 9·6 | | 23 | 24·5 | 19·4 | |
| 9·3‡ | | | 36·0 | 30·0 | 9·0 *g* |
| 9·2 | | | 50·0 | 6·6 | |
| 9·7‡ | | 24 | 5·5 | 53·1 | |
| 9·1‡ | | | 16·0 | 32·9 | |
| 9·7‡ | | | 21·5 | 56·1 | |
| 9·6 | | | 41·0 | 18·0 | |
| 9·5 | | | 55·8 | 2·3 | |
| 9·3 | | 26 | 21·0 | 26·1 | |
| 9·3 | | | 42·0 | 13·6 | |
| 7·8‡ | | | 45·8 | 57·1 | 9·0 GS*g* |
| 9·6‡ | | | 54·5 | 58·2 | |
| 9·5 | | 27 | 29·0 | 24·4 | |
| 8·7 | | | 47·0 | 24·5 | 9·5 *g* |
| 9·6 | | 28 | 12·0 | 24·0 | |
| 9·8† | | | 23·5 | 49·7 | |
| 9·6 | | 29 | 45·0 | 24·5 | |
| 9·5 | | | 49·0 | 24·0 | |
| 8·9† | | 30 | 5·5 | 32·0 | *g* |
| 9·8† | | | 6·5 | 50·9 | |
| 9·2 | | | 23·0 | 4·6 | |
| 9·3† | | | 37·0 | 53·7 | |
| 7·5† | | | 39·0 | 31·5 | 6·0 GS*g* |
| 8·8 | | | 43·0 | 4·5 | 9·5 *g* |
| 9·2 | | | 58·0 | 30·0 | |
| 7·9 | | 31 | 41·5 | 7·1 | 8·0 *g* |
| 9·6 | | 32 | 8·0 | 27·1 | |
| 9·6 | | | 36·0 | 20·5 | |

**25 prec.**

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 8 | 0 | − 12 | − 0·09 d | − 4·2 |
| | 10 | 10 | − 0·09 | 4·5 |
| | 20 | 7 | − 0·09 | 4·8 |
| | 30 | 5 | − 0·09 | 5·1 |
| | 40 | − 2 | − 0·08 | 5·4 |
| | 50 | + 1 | − 0·08 | 5·6 |
| 9 | 0 | 4 | − 0·08 | 5·9 |
| | 10 | 7 | − 0·07 | 6·2 |
| | 20 | 11 | − 0·07 | 6·4 |
| | 30 | 14 | − 0·07 | 6·6 |
| | 40 | + 18 | − 0·06 | − 6·8 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 9 | 30 | + 14 | − 0·07 d | − 6·6 |
| | 40 | 18 | − 0·06 | 6·8 |
| | 50 | 22 | − 0·06 | 7·0 |
| 10 | 0 | 25 | − 0·05 | 7·2 |
| | 10 | 29 | − 0·05 | 7·4 |
| | 20 | 33 | − 0·05 | 7·6 |
| | 30 | 37 | − 0·04 | 7·7 |
| | 40 | + 42 | − 0·04 | − 7·9 |

d = minutes of decl.

## 841—900.

| mag. | 9h.–10h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·4† | 9 | 32 | 47·0 | 55·4 | 9·5 *g* |
| 9·8† | | | 57·0 | 33·7 | |
| 9·9† | | 33 | 2·5 | 43·8 | |
| 8·8† | | | 6·0 | 56·8 | 8·7 *g* |
| 9·6† | | | 6·5 | 50·2 | |
| 9·9† | | | 22·2 | 59·3 | |
| 9·6 | | 35 | 43·0 | 6·8 | |
| 8·6 | | 37 | 25·0 | 7·0 | 9·5 *g* |
| 8·7 | | | 32·0 | 8·0 | 9·2 *g* |
| 9·9† | | | 35·5 | 51·2 | |
| 9·6 | | | 49·0 | 7·8 | |
| 9·3† | | 38 | 2·5 | 44·6 | |
| 9·8† | | 39 | 32·8 | 57·9 | |
| 9·6† | | | 33·5 | 49·8 | |
| 9·6† | | 40 | 1·5 | 48·8 | |
| 9·9† | | | 3·5 | 44·3 | |
| 8·1† | | | 37·5 | 59·7 | 8·7 *g* |
| 9·1 | | 41 | 1·5 | 1·6 | |
| 9·6† | | 42 | 15·5 | 50·8 | |
| 8·8† | | | 37·5 | 43·7 | 9·2 *g* |
| 9·9† | | | 47·5 | 29·0 | |
| 9·8 | | 43 | 17·3 | 54·6 | |
| 8·9† | | | 19·5 | 31·7 | 9·0 *g* |
| 9·2 | | | 31·0 | 12·6 | |
| 9·1† | | | 36·5 | 39·8 | |
| 9·2† | | 44 | 34·7 | 33·7 | |
| 9·6 | | | 52·0 | 15·7 | |
| 9·3† | | 45 | 20·5 | 59·9 | 9·5 *g* |
| 9·9† | | 47 | 58·5 | 36·0 | |
| 9·2† | | 48 | 15·5 | 39·1 | |
| 9·8† | | | 17·5 | 25·6 | |
| 8·9† | | | 19·5 | 44·8 | |
| 8·7† | | | 55·5 | 38·1 | |
| 9·4† | | 49 | 48·5 | 47·9 | |
| 9·8† | | 50 | 17·5 | 41·0 | |
| 9·5† | | | 40·5 | 28·0 | ? |
| 9·4† | | | 52·5 | 53·0 | *g* |
| 9·2 | | 51 | 0·0 | 13·9 | |
| 9·8† | | 52 | 34·5 | 50·7 | |
| 9·6 | | | 48·0 | 16·0 | *g* |
| 9·5 | | 54 | 3·0 | 5·7 | |
| 9·3 | | | 51·0 | 19·3 | |
| 9·9† | | 55 | 53·5 | 27·1 | ? |
| 8·8 | | 56 | 11·0 | 17·8 | |
| 8·8† | | | 20·7 | 35·0 | *g* |
| 9·9† | | | 38·5 | 59·3 | |
| 8·4 | | 57 | 11·0 | 11·4 | 8·0 GS*g* |
| 9·9† | | | 30·5 | 27·6 | |
| 9·2 | | 58 | 57·0 | 4·1 | 9·0 |
| 9·3† | | 59 | 7·7 | 34·1 | *g* |
| 9·4† | 10 | 0 | 9·5 | 51·8 | |
| 9·6– | | | 21·7 | 27·8 | |
| 9·3† | | | 34·5 | 43·9 | |
| 9·8† | | 1 | 43·5 | 31·3 | |
| 9·9 | | 3 | 42·5 | 11·8 | |
| 9·2 | | | 42·5 | 22·9 | *g* |
| 9·9† | | 4 | 21·5 | 45·0 | |
| 9·8† | | | 22·5 | 58·7 | |
| 9·4 | | | 53·5 | 3·1 | |
| 9·9 | | 5 | 5·5 | 3·1 | |

## 901—960.

| mag. | 10h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·9 | 10 | 5 | 22·5 | 7·1 | |
| 9·9† | | 6 | 1·5 | 54·9 | |
| 9·5 | | | 53·5 | 11·1 | |
| 9·3† | | 7 | 0·5 | 47·4 | *g* |
| 9·9 | | | 2·5 | 2·0 | |
| 9·7 | | | 3·5 | 0·9 | |
| 9·9 | | | 9·5 | 1·7 | |
| 9·5† | | | 44·5 | 35·9 | |
| 9·5† | | 8 | 17·5 | 45·4 | |
| 9·9† | | | 35·5 | 50·7 | |
| 9·6† | | 9 | 1·5 | 36·1 | |
| 9·3† | | | 6·5 | 41·9 | |
| 9·9† | | 10 | 35·2 | 31·3 | |
| 9·8 | | 11 | 4·5 | 4·3 | |
| 9·8† | | | 14·5 | 43·8 | |
| 8·5† | | | 17·5 | 42·8 | 9·0 *g* |
| 9·6 | | | 19·5 | 22·7 | |
| 8·6 | | | 32·0 | 3·5 | 8·5 *g* |
| 9·3 | | | 44·5 | 17·3 | 9·0 *g* |
| 9·3† | | 12 | 11·5 | 40·4 | *g* |
| 9·8 | | | 17·5 | 10·8 | |
| 9·8 | | 13 | 8·5 | 24·0 | |
| 9·9 | | | 28·5 | 16·4 | |
| 9·6† | | | 42·5 | 34·3 | |
| 9·9† | | 14 | 4·5 | 56·1 | |
| 9·2 | | | 43·5 | 14·5 | |
| 9·8 | | | 44·5 | 24·1 | |
| 9·3† | | | 46·5 | 51·8 | |
| 9·8 | | | 58·5 | 15·1 | |
| 9·6† | | 15 | 9·5 | 39·2 | |
| 9·4† | | | 20·5 | 54·3 | |
| 9·9 | | 16 | 25·0 | 30·0 | |
| 9·9 | | | 52·5 | 8·0 | |
| 9·9 | | 17 | 17·5 | 7·2 | |
| 9·3† | | | 35·5 | 38·8 | |
| 9·8† | | | 41·5 | 52·8 | |
| 9·8† | | | 48·5 | 33·0 | |
| 9·8 | | | 49·5 | 12·2 | |
| 9·8 | | 18 | 45·5 | 7·5 | |
| 9·9 | | | 50·0 | 25·0 | |
| 9·9 | | 19 | 14·5 | 2·7 | |
| 9·9 | | | 56·5 | 26·6 | |
| 9·4 | | | 59·5 | 24·2 | *g* |
| 9·7 | | 20 | 8·0 | 25·0 | |
| 9·9 | | | 16·5 | 26·0 | |
| 9·9 | | | 50·5 | 26·1 | |
| 9·9† | | | 59·5 | 39·7 | |
| 9·9† | | 21 | 20·5 | 59·1 | |
| 9·5† | | | 29·5 | 56·6 | |
| 9·5 | | | 32·5 | 13·2 | |
| 9·6 | | | 56·5 | 11·9 | |
| 9·0† | | 22 | 30·5 | 50·5 | *g* |
| 9·8† | | | 32·5 | 39·4 | |
| 9·9† | | | 43·5 | 44·1 | |
| 9·7 | | 23 | 13·0 | 4·5 | |
| 9·9 | | | 21·5 | 0·2 | |
| 9·9 | | | 44·0 | 3·0 | |
| 9·4 | | 24 | 0·0 | 5·0 | |
| 8·1† | | | 2·8 | 31·8 | 7·0 GS*g* |
| 9·8 | | | 6·0 | 16·1 | |

## 961—1020.

| mag. | 10h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 8·5† | 10 | 24 | 11·5 | 37·3 | 9·5 *g* |
| 9·7 | | | 38·0 | 7·0 | |
| 9·9† | | | 41·5 | 35·9 | ? |
| 9·8 | | | 55·0 | 13·1 | |
| 9·4 | | 25 | 7·0 | 13·7 | |
| 9·9 | | | 15·0 | 1·1 | |
| 9·9 | | | 17·0 | 10·1 | |
| 9·9 | | | 20·0 | 1·1 | |
| 9·8† | | | 23·5 | 40·9 | |
| 9·8 | | | 33·0 | 28·3 | |
| 9·0 | | | 35·5 | 0·9 | 8·5 *g* |
| 9·7 | | 26 | 0·0 | 5·1 | |
| 9·9 | | | 18·0 | 13·1 | |
| 9·4 | | | 25·0 | 18·6 | |
| 9·9 | | 27 | 2·0 | 21·9 | |
| 9·6† | | | 8·0 | 37·4 | |
| 9·8 | | | 22·0 | 17·5 | |
| 9·8† | | | 27·5 | 52·9 | |
| 9·8 | | | 28·0 | 8·3 | |
| 9·1† | | 28 | 1·0 | 42·8 | 9·5 *g* |
| 7·7† | | | 6·0 | 34·7 | 5·5 GS*g* |
| 9·9 | | 29 | 9·0 | 24·1 | |
| 9·9 | | | 19·0 | 12·1 | |
| 9·9 | | 30 | 38·0 | 17·3 | |
| 9·9 | | | 56·0 | 15·1 | |
| 9·8 | | 31 | 17·0 | 5·3 | |
| 9·8 | | | 27·0 | 0·9 | |
| 9·8 | | | 27·0 | 0·3 | |
| 9·7 | | | 40·0 | 10·5 | |
| 9·7 | | | 45·0 | 1·8 | |
| 9·6 | | 32 | 21·0 | 20·0 | |
| 9·6 | | | 27·0 | 22·2 | |
| 9·4 | | | 32·0 | 24·6 | |
| 9·4† | | | 42·5 | 54·5 | |
| 9·6 | | 33 | 49·0 | 19·3 | |
| 9·9 | | 34 | 7·0 | 16·0 | |
| 9·1† | | | 36·5 | 55·8 | *g* |
| 9·2† | | | 40·5 | 55·9 | *g* |
| 9·3‡ | | 35 | 5·0 | 45·0 | |
| 9·9‡ | | | 10·5 | 58·4 | |
| 9·9 | | | 30·0 | 29·4 | |
| 9·8 | | | 58·0 | 15·7 | |
| 9·4‡ | | 36 | 2·5 | 35·5 | |
| 7·7‡ | | | 3·5 | 54·7 | 9·0 *g* |
| 9·8 | | | 8·0 | 14·3 | |
| 8·1‡ | | | 33·5 | 32·2 | 9·0 *g* |
| 9·4 | | 37 | 28·0 | 9·3 | |
| 8·6‡ | | | 50·5 | 37·8 | 8·0 *g* |
| 9·1‡ | | | 53·5 | 44·2 | *g* |
| 9·6‡ | | | 55·5 | 36·8 | |
| 9·8 | | | 57·5 | 2·0 | |
| 9·6 | | 38 | 8·0 | 13·4 | |
| 9·5‡ | | | 33·5 | 35·3 | |
| 9·1‡ | | | 44·5 | 52·2 | |
| 9·7 | | | 50·0 | 5·1 | |
| 9·5 | | 39 | 9·3 | 30·0 | |
| 9·4 | | | 25·0 | 20·0 | |
| 9·4‡ | | | 44·5 | 41·4 | |
| 9·9‡ | | | 44·5 | 59·3 | |
| 9·7 | | | 46·0 | 22·6 | |



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## 1021—1080.

| mag. | h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| | 10h. | | | | |
| 9.4‡ | 10 | 39 | 46.5 | 56.4 | |
| 9.6 | | 40 | 22.0 | 11.0 | |
| 9.6 | | | 28.0 | 19.5 | |
| 8.9 | | | 29.0 | 3.8 | *g* |
| 9.7‡ | | 41 | 2.5 | 56.8 | |
| 9.8 | | | 45.0 | 32.6 | |
| 8.2 | | 42 | 19.0 | 24.4 | 8.5 *g* |
| 9.7 | | | 34.0 | 25.7 | |
| 9.8 | | 43 | 12.0 | 6.3 | |
| 9.9 | | | 18.0 | 35.3 | |
| 9.9 | | | 27.0 | 20.2 | |
| 9.9‡ | | | 32.5 | 36.3 | |
| 9.8‡ | | | 45.5 | 54.3 | |
| 9.8 | | | 52.0 | 22.5 | |
| 9.7 | | 44 | 5.0 | 11.7 | |
| 9.0‡ | | | 57.5 | 43.8 | *g* |
| 9.9 | | 45 | 14.0 | 7.3 | |
| 9.3‡ | | | 26.5 | 42.4 | |
| 9.4‡ | | | 38.5 | 56.8 | |
| 9.8 | | | 47.0 | 35.3 | |
| 9.8 | | 46 | 8.0 | 18.9 | |
| 9.5 | | | 34.0 | 6.1 | |
| 9.8 | | | 37.0 | 6.7 | |
| 9.6 | | | 52.0 | 16.8 | |
| 9.6‡ | | 47 | 13.5 | 46.8 | |
| 9.7 | | | 44.0 | 20.5 | |
| 9.7 | | | 53.0 | 28.4 | |
| 9.8 | | | 58.0 | 6.4 | |
| 9.8 | | 48 | 5.0 | 25.7 | |
| 9.8‡ | | | 9.5 | 48.3 | |
| 9.9 | | | 16.0 | 26.8 | |
| 8.5 | | | 16.7 | 28.8 | 8.5 *g* |
| 9.7‡ | | | 20.5 | 32.4 | |
| 9.9 | | | 32.0 | 22.4 | |
| 9.7 | | | 32.0 | 22.0 | |
| 9.9 | | | 42.0 | 18.4 | |
| 8.6‡ | | | 44.3 | 31.3 | 9.5 *g* |
| 9.8 | | | 45.0 | 18.0 | |
| 9.3‡ | | | 54.5 | 32.2 | |
| 8.9 | | 49 | 7.0 | 4.1 | *g* |
| 9.3‡ | | 50 | 12.5 | 39.1 | *g* |
| 9.8‡ | | | 13.0 | 59.2 | |
| 9.6‡ | | | 15.5 | 34.0 | |
| 9.4‡ | | | 26.5 | 49.0 | |
| 9.8 | | | 38.0 | 5.3 | |
| 9.4 | | 51 | 3.0 | 26.3 | |
| 9.8 | | | 4.0 | 9.2 | |
| 9.3 | | | 7.0 | 13.3 | |
| 9.1‡ | | | 26.0 | 38.8 | *g* |
| 9.4‡ | | | 32.0 | 48.6 | *g* |
| 9.9‡ | | 52 | 17.0 | 32.6 | |
| 9.7 – | | | 25.0 | 16.4 | |
| 9.3‡ | | | 27.5 | 59.1 | |
| 9.9‡ | | | 59.0 | 58.3 | |
| 9.4‡ | | 53 | 58.0 | 53.2 | |
| 9.6 | | 54 | 6.0 | 25.4 | *g* |
| 9.4 | | | 14.2 | 28.1 | |
| 8.2‡ | | | 28.0 | 44.1 | *g* |
| 9.1 | | | 37.5 | 3.2 | |
| 9.8‡ | | | 40.0 | 54.2 | |

## 1081—1140.

| mag. | h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| | 10h.–11h. | | | | |
| 9.7‡ | 10 | 55 | 35.0 | 56.8 | |
| 9.5‡ | | 56 | 10.0 | 39.4 | |
| 9.1 | | | 11.5 | 21.7 | *g* |
| 9.5‡ | | | 19.0 | 44.7 | *g* |
| 9.7‡ | | | 22.0 | 52.7 | |
| 9.1 | | | 26.0 | 12.9 | |
| 9.6 | | | 29.5 | 15.2 | |
| 8.7 | | | 34.0 | 18.8 | *g* |
| 7.6‡ | | 58 | 1.0 | 48.9 | 8.0 *g* |
| 8.8‡ | | | 23.0 | 47.2 | 9.5 *g* |
| 9.0 | | | 23.0 | 23.4 | *g* |
| 9.6 | | | 43.0 | 25.4 | |
| 9.3‡ | | 59 | 9.0 | 46.7 | |
| 9.4 | | | 26.0 | 11.0 | |
| 9.2 | | | 43.0 | 18.8 | |
| 9.4‡ | 11 | 0 | 57.0 | 33.9 | |
| 9.6‡ | | 1 | 12.0 | 48.7 | |
| 9.5 | | | 45.0 | 5.9 | |
| 8.5 | | | 54.0 | 9.7 | 9.0 *g* |
| 9.4 | | | 55.5 | 28.8 | |
| 9.4 | | 2 | 34.5 | 27.8 | |
| 9.6‡ | | 3 | 7.0 | 45.4 | |
| 9.5 | | 5 | 4.0 | 3.1 | |
| 9.3‡ | | 6 | 11.5 | 58.9 | *g* |
| 9.9‡ | | 7 | 28.0 | 51.5 | |
| 9.4‡ | | 8 | 1.0 | 38.5 | |
| 9.4 | | | 36.0 | 24.0 | |
| 9.5‡ | | 9 | 1.5 | 31.1 | |
| 9.2 | | | 20.0 | 24.6 | *g* |
| 9.2 | | 10 | 8.0 | 17.4 | |
| 9.4‡ | | | 12.5 | 31.1 | *g* |
| 9.8‡ | | | 26.0 | 46.5 | |
| 9.7‡ | | | 48.0 | 54.3 | |
| 9.6‡ | | | 49.5 | 57.9 | |
| 9.9‡ | | 11 | 25.0 | 52.2 | |
| 9.8‡ | | 12 | 15.0 | 26.7 | |
| 9.6 | | 13 | 34.0 | 16.9 | |
| 9.6 | | 14 | 24.0 | 4.3 | |
| 9.2‡ | | | 29.0 | 38.6 | |
| 9.2 | | | 38.5 | 28.1 | G*g* |
| 9.2 | | | 39.0 | 1.6 | |
| 9.9‡ | | | 48.5 | 57.0 | |
| 9.7‡ | | 15 | 4.0 | 44.1 | |
| 7.3 | | | 6.0 | 16.3 | 7.0 GS*g* |
| 9.0 | | 16 | 37.0 | 9.6 | *g* |
| 8.2‡ | | 17 | 8.0 | 50.1 | 8.5 *g* |
| 9.4 | | | 17.5 | 24.8 | |
| 9.1‡ | | 18 | 16.0 | 35.7 | 9.0 *g* |
| 8.8 | | 20 | 9.5 | 10.6 | 8.5 G*g* |
| 7.0‡ | | | 20.0 | 57.0 | 7.0 GSc*g* |
| 9.4‡ | | | 20.5 | 33.4 | |
| 9.7‡ | | 21 | 19.0 | 48.7 | |
| 9.2 | | | 32.0 | 7.5 | |
| 9.6 | | 23 | 12.0 | 20.7 | |
| 8.2‡ | | 24 | 51.0 | 41.2 | 8.0 *g* |
| 9.4‡ | | 25 | 39.0 | 48.3 | |
| 9.4‡ | | | 51.0 | 46.8 | 9.0 *g* |
| 9.5‡ | | 26 | 17.5 | 56.7 | |
| 9.1 | | | 45.5 | 6.4 | *g* |
| 9.8‡ | | 29 | 47.0 | 56.2 | |

## 1141—1200.

| mag. | h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| | 11h. | | | | |
| 9.6 | 11 | 29 | 51.0 | 16.7 | |
| 9.1 | | 30 | 21.5 | 6.6 | 9.0 *g* |
| 8.4 | | | 27.0 | 9.2 | 7.0 GS*g* |
| 8.9 – | | 31 | 10.5 | 12.5 | |
| 7.7† | | | 16.0 | 39.6 | 8.0 *g* |
| 9.6† | | | 46.0 | 30.9 | |
| 9.3† | | 34 | 15.0 | 39.1 | |
| 9.6† | | 35 | 23.0 | 31.5 | |
| 9.3† | | 36 | 54.0 | 39.7 | |
| 9.0 | | 37 | 13.0 | 3.9 | *g* |
| 9.1† | | | 16.0 | 48.9 | |
| 9.2† | | | 17.0 | 43.5 | *g* |
| 9.1 | | | 28.5 | 27.8 | |
| 9.3 | | 38 | 23.0 | 11.1 | |
| 9.6† | | | 27.0 | 44.5 | |
| 8.4† | | | 40.0 | 36.6 | *g* |
| 8.3 | | 39 | 12.0 | 27.3 | 7.5 GS*g* |
| 7.3† | | 40 | 26.0 | 54.6 | 8.0 *g* |
| 9.5† | | | 34.5 | 58.7 | |
| 9.5† | | | 49.0 | 31.0 | |
| 9.6† | | | 56.0 | 34.0 | |
| 8.2† | | 42 | 31.0 | 47.1 | 8.5 *g* |
| 9.6† | | 43 | 24.0 | 47.3 | |
| 9.2† | | | 49.0 | 36.4 | |
| 7.7† | | 44 | 45.0 | 50.2 | 8.2 GS*g* |
| 9.6 | | | 52.0 | 5.7 | |
| 9.3† | | 45 | 14.0 | 51.3 | 9.5 |
| 9.2 | | | 16.0 | 21.9 | |
| 9.6† | | | 50.5 | 59.3 | |
| 9.6† | | 46 | 27.0 | 26.2 | |
| 9.0 | | | 28.0 | 5.4 | *g* |
| 9.6 | | 47 | 23.0 | 13.9 | |
| 8.5† | | | 45.0 | 43.9 | 9.0 *g* |
| 9.6† | | 48 | 6.0 | 34.9 | |
| 9.4 | | | 7.0 | 6.3 | |
| 9.4 | | | 57.0 | 5.8 | |
| 9.2† | | 49 | 20.0 | 48.8 | |
| 9.3† | | | 51.0 | 29.0 | |
| 9.3† | | 50 | 17.5 | 34.7 | |
| 9.3 | | | 18.0 | 20.9 | |
| 9.2 | | | 22.0 | 15.9 | |
| 9.6† | | 51 | 59.0 | 26.0 | |
| 9.6† | | 52 | 19.0 | 55.2 | |
| 9.2† | | | 47.0 | 44.0 | |
| 9.5† | | 53 | 26.0 | 31.6 | |
| 9.6† | | | 32.5 | 59.6 | |
| 9.6† | | | 48.0 | 50.2 | |
| 9.6† | | 54 | 0.0 | 54.2 | |
| 9.3† | | | 20.0 | 26.2 | |
| 9.5† | | | 45.0 | 33.9 | |
| 9.3† | | | 52.0 | 44.7 | |
| 9.2 | | 55 | 9.0 | 2.7 | *g* |
| 9.5† | | | 24.0 | 35.1 | *g* |
| 6.7† | | | 31.0 | 36.1 | 7.0 GS*g* |
| 9.0† | | | 42.0 | 47.6 | 8.5 *g* |
| 9.3† | | 56 | 53.0 | 57.9 | |
| 8.2† | | 57 | 54.0 | 54.7 | 8.0 G*g* |
| 9.4 | | 58 | 1.0 | 16.9 | |
| 9.6† | | | 15.0 | 58.0 | |
| 9.6† | | | 21.5 | 57.4 | |

25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 10 | 30 | + 37 | − 0.04 | d | − 7.7 |
| | 40 | 42 | − 0.04 | | 7.9 |
| | 50 | 46 | − 0.03 | | 8.0 |
| 11 | 0 | 50 | − 0.03 | | 8.1 |
| | 10 | 55 | − 0.02 | | 8.2 |
| | 20 | 59 | − 0.02 | | 8.2 |
| | 30 | 63 | − 0.01 | | 8.3 |
| | 40 | 68 | − 0.01 | | 8.3 |
| | 50 | 72 | 0.00 | | 8.3 |
| 12 | 0 | + 77 | 0.00 | | − 8.4 |

**d = minutes of decl.**





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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 11 | 50 | + 72 | 0.00 d | − 8.3 |
| 12 | 0 | 77 | 0.00 | 8.4 |
| | 10 | 81 | 0.00 | 8.3 |
| | 20 | 86 | + 0.01 | 8.3 |
| | 30 | 90 | + 0.01 | 8.3 |
| | 40 | 95 | + 0.02 | 8.2 |
| | 50 | 99 | + 0.02 | 8.2 |
| 13 | 0 | 103 | + 0.03 | 8.1 |
| | 10 | 108 | + 0.03 | 8.0 |
| | 20 | + 112 | + 0.04 | − 7.9 |

d = minutes of decl.

## 1201—1260.

| mag. | 11h.—12h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9.3 | 11 | 58 | 25.0 | 10.5 | |
| 9.6† | | | 35.0 | 41.1 | |
| 9.4 | | 59 | 12.0 | 19.9 | |
| 7.8† | | | 41.0 | 51.6 | 7.0 GS*g* |
| 7.8 | 12 | 0 | 18.0 | 22.5 | 8.2 *g* |
| 9.3† | | | 35.0 | 49.1 | |
| 9.5† | | | 46.0 | 56.3 | 9.0 |
| 9.3† | | 1 | 26.5 | 32.9 | |
| 9.6† | | 2 | 35.0 | 39.1 | |
| 9.5† | | | 49.0 | 33.1 | |
| 9.6† | | 3 | 14.0 | 26.1 | |
| 9.6† | | | 31.0 | 37.9 | |
| 9.5† | | | 53.0 | 41.4 | |
| 9.5† | | 4 | 14.0 | 45.7 | |
| 9.3 | | | 43.0 | 9.5 | |
| 9.2 | | 5 | 9.0 | 6.6 | |
| 9.3† | | | 13.0 | 24.6 | |
| 9.2† | | | 42.5 | 32.4 | *g* |
| 9.2† | | | 43.5 | 31.6 | *g* |
| 9.6† | | | 50.0 | 54.5 | |
| 9.4 | | | 51.5 | 2.0 | |
| 9.5† | | 6 | 9.5 | 57.5 | |
| 9.0† | | | 23.5 | 56.9 | 9.0 |
| 9.0† | | | 44.0 | 53.4 | 9.0 |
| 9.4 | | | 53.0 | 26.6 | |
| 9.6† | | | 54.0 | 55.2 | |
| 9.5† | | | 55.0 | 36.2 | |
| 9.6† | | 7 | 13.0 | 29.2 | |
| 9.5 | | 8 | 6.0 | 4.7 | |
| 9.6† | | | 13.0 | 45.5 | |
| 9.4 | | | 16.0 | 14.4 | |
| 8.1 | | | 23.5 | 21.9 | 8.0 G*g* |
| 7.8† | | 10 | 10.0 | 50.2 | 8.5 *g* |
| 9.5† | | | 22.0 | 47.6 | 9.0 |
| 9.6† | | 11 | 17.0 | 53.5 | |
| 9.5† | | 12 | 17.0 | 49.7 | |
| 9.4 | | | 32.0 | 6.8 | |
| 8.1† | | 13 | 42.0 | 42.3 | 9.0 *g* |
| 8.4 | | 14 | 1.0 | 7.1 | 9.0 *g* |
| 6.8† | | 15 | 8.0 | 48.6 | 7.0 GS*g* |
| 9.6† | | | 45.0 | 37.2 | |
| 93 | | 16 | 52.0 | 25.9 | *g* |
| 9.3 | | 17 | 17.0 | 13.0 | |
| 9.5 | | 18 | 50.0 | 15.1 | *g* |
| 9.2 | | | 52.0 | 10.2 | |
| 9.6† | | | 59.0 | 39.2 | |
| 9.6† | | 20 | 9.0 | 57.0 | |
| 9.3 | | | 11.0 | 19.2 | |
| 9.6† | | | 14.5 | 58.2 | |
| 9.2▬ | | | 45.0 | 22.7 | |
| 9.3† | | 21 | 2.0 | 31.6 | |
| 9.4 | | | 21.0 | 19.8 | *g* |
| 9.4 | | | 47.5 | 20.7 | 9.0 *g* |
| 9.3† | | 22 | 7.0 | 41.4 | |
| 9.4 | | | 12.0 | 19.4 | 8.5 *g* |
| 8.0 | | | 52.5 | 17.6 | 8.0 GS*g* |
| 9.8 | | 23 | 10.0 | 9.1 | |
| 8.3 | | | 15.5 | 23.8 | 7.0 GS*g* |
| 9.8 | | | 24.0 | 20.8 | *g* |
| 9.6† | | | 44.0 | 51.1 | |

## 1261—1320.

| mag. | 12h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 7.9 | 12 | 24 | 38.5 | 18.6 | 6.0 GS*g* |
| 9.6† | | | 41.0 | 57.5 | |
| 9.8 | | | 48.0 | 22.8 | |
| 9.6† | | 25 | 0.0 | 52.9 | |
| 9.6† | | | 1.0 | 29.0 | |
| 7.8† | | | 5.5 | 58.0 | 8.5 GS*g* |
| 9.6† | | | 13.0 | 59.4 | |
| 9.4 | | | 29.5 | 15.2 | |
| 9.5 | | 26 | 8.0 | 6.5 | |
| 9.8 | | | 18.5 | 29.8 | |
| 7.8† | | | 25.0 | 48.5 | *g* |
| 9.6† | | | 26.5 | 57.9 | |
| 9.8 | | | 34.0 | 22.8 | |
| 9.0† | | 27 | 22.0 | 48.2 | *g* |
| 7.8 | | | 41.0 | 1.7 | 8.0 G*g* |
| 9.8 | | | 48.5 | 5.6 | |
| 9.3† | | | 50.5 | 47.5 | *g* |
| 9.7 | | 28 | 2.5 | 5.8 | |
| 9.5† | | | 26.0 | 31.9 | |
| 9.6† | | | 32.0 | 35.6 | |
| 9.1† | | | 43.0 | 46.7 | *g* |
| 9.8 | | | 51.5 | 21.5 | |
| 9.8 | | 29 | 9.5 | 21.0 | |
| 8.5† | | 30 | 6.5 | 40.4 | *g* |
| 9.6† | | | 21.0 | 39.1 | |
| 9.8 | | | 51.5 | 17.0 | |
| 9.4 | | 31 | 2.5 | 18.9 | *g* |
| 9.8 | | | 12.0 | 26.8 | |
| 9.8 | | | 29.5 | 2.2 | |
| 9.4‡ | | | 39.5 | 50.4 | |
| 9.4‡ | | | 50.0 | 43.2 | *g* |
| 8.2 | | 35 | 14.5 | 6.2 | *g* |
| 9.6‡ | | | 41.5 | 46.3 | |
| 9.8 | | | 45.5 | 26.2 | *g* |
| 9.6‡ | | 36 | 17.5 | 43.8 | |
| 8.2 | | | 22.5 | 6.9 | *g* |
| 9.6‡ | | | 23.5 | 55.5 | |
| 9.8 | | 37 | 10.5 | 12.8 | |
| 9.1‡ | | | 13.5 | 53.1 | |
| 9.5 | | 38 | 24.5 | 4.7 | |
| 9.8 | | | 39.0 | 26.4 | |
| 9.6 | | | 47.5 | 8.6 | *g* |
| 8.5‡ | | | 49.0 | 58.2 | 9.0 *g* |
| 9.8 | | 39 | 5.5 | 10.1 | *g* |
| 9.4‡ | | | 19.5 | 42.2 | |
| 8.9‡ | | | 40.5 | 37.1 | |
| 9.8 | | | 57.0 | 25.2 | |
| 9.0 | | 40 | 17.8 | 2.0 | *g* |
| 9.0 | | | 19.5 | 7.1 | |
| 9.6‡ | | | 28.5 | 52.5 | |
| 9.6‡ | | | 34.2 | 58.3 | |
| 9.8 | | | 34.5 | 4.8 | |
| 9.8 | | | 56.0 | 18.6 | |
| 9.3 | | 41 | 5.0 | 9.6 | |
| 9.6‡ | | | 6.5 | 42.2 | *g* |
| 8.6‡ | | | 55.5 | 43.4 | *g* |
| 9.6‡ | | 42 | 14.5 | 40.2 | *g* |
| 9.6‡ | | 43 | 50.5 | 45.0 | |
| 9.3‡ | | 46 | 10.5 | 54.1 | |
| 8.3 | | 47 | 27.0 | 21.1 | 8.0 GS*g* |

## 1321—1380.

| mag. | 12h.—13h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9.6‡ | 12 | 48 | 35.5 | 45.2 | |
| 9.6 | | | 38.0 | 8.8 | |
| 8.5‡ | | 49 | 0.5 | 53.3 | 8.5 *g* |
| 9.0 | | | 58.0 | 6.2 | |
| 9.8 | | 50 | 28.0 | 0.8 | |
| 9.3 | | | 34.0 | 15.2 | *g* |
| 9.6‡ | | | 44.0 | 52.3 | |
| 9.8 | | 51 | 9.0 | 6.9 | |
| 9.4‡ | | | 26.5 | 39.2 | |
| 9.6 | | | 57.0 | 15.9 | |
| 9.3‡ | | 53 | 54.5 | 44.0 | |
| 9.8 | | 54 | 8.0 | 18.8 | |
| 9.6‡ | | | 8.5 | 47.8 | |
| 8.2‡ | | | 9.5 | 50.1 | *g* |
| 8.9 | | | 39.0 | 23.8 | |
| 9.6‡ | | 55 | 5.8 | 30.0 | |
| 9.6‡ | | 56 | 7.5 | 51.8 | |
| 8.8‡ | | | 16.5 | 38.5 | *g* |
| 9.4 | | | 53.7 | 25.4 | |
| 9.2‡ | | | 56.5 | 43.4 | |
| 9.0 | | 57 | 14.0 | 7.8 | 9.0 *g* |
| 9.0‡ | | | 41.5 | 43.5 | |
| 8.0 | | | 44.0 | 7.7 | 8.0 *g* |
| 7.1‡ | | 58 | 40.5 | 54.9 | 8.0 GS*g* |
| 8.9 | | 59 | 24.0 | 24.1 | 9.0 *g* |
| 9.8 | | | 34.0 | 20.0 | |
| 9.8 | | | 39.0 | 5.8 | |
| 9.8 | | | 44.0 | 6.4 | |
| 8.9 | | | 48.0 | 9.1 | 7.5 G*g* |
| 9.5 | 13 | 0 | 50.0 | 10.6 | |
| 9.8 | | 1 | 14.0 | 0.8 | |
| 9.2‡ | | | 54.5 | 41.1 | |
| 9.8 | | | 59.0 | 22.8 | |
| 9.8 | | 2 | 31.0 | 0.2 | |
| 9.5 | | | 39.0 | 0.0 | |
| 9.6‡ | | | 59.5 | 42.0 | |
| 8.6‡ | | 3 | 17.2 | 57.0 | 8.5 *g* |
| 9.2 | | | 18.5 | 9.8 | *g* |
| 9.6‡ | | | 26.5 | 26.6 | |
| 9.6 | | 4 | 24.7 | 25.7 | |
| 9.6‡ | | 5 | 6.5 | 44.9 | |
| 9.2▬ | | | 16.7 | 23.8 | *g* |
| 8.1‡ | | | 23.8 | 59.3 | 9.0 |
| 8.0‡ | | | 34.5 | 48.9 | 8.5 *g* |
| 9.6‡ | | | 49.0 | 57.7 | |
| 8.9‡ | | 6 | 17.5 | 38.0 | |
| 9.9 | | 7 | 43.0 | 6.9 | |
| 9.7 | | | 47.0 | 5.9 | |
| 9.9 | | 8 | 5.0 | 7.8 | |
| 9.9 | | | 6.0 | 14.7 | |
| 9.3‡ | | | 16.0 | 32.8 | *g* |
| 6.8‡ | | | 44.5 | 40.9 | 7.5 GS*g* |
| 9.0 | | | 48.0 | 17.4 | 9.0 *g* |
| 9.9 | | 10 | 6.0 | 22.9 | |
| 9.9 | | | 11.0 | 22.8 | |
| 9.5 | | | 13.9 | 30.1 | *g* |
| 9.4‡ | | | 58.5 | 57.4 | |
| 9.9 | | 11 | 8.5 | 25.5 | |
| 9.4‡ | | | 35.8 | 31.6 | |
| 7.9‡ | | | 43.5 | 37.1 | 8.5 *g* |



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## 1381—1440.

| mag. | 13h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·9 | 13 | 12 | 45·0 | 11·6 | |
| 8·9‡ | | 13 | 3·5 | 47·9 | |
| 9·4‡ | | | 27·0 | 57·3 | |
| 9·9 | | | 49·0 | 12·0 | |
| 9·9 | | 14 | 17·0 | 21·8 | |
| 9·6‡ | | | 41·5 | 30·9 | |
| 9·4 | | | 44·0 | 9·8 | g |
| 9·9 | | 15 | 0·0 | 3·8 | |
| 9·6 | | | 9·0 | 25·7 | g |
| 9·8 | | | 34·0 | 24·2 | |
| 9·3 | | | 39·0 | 4·4 | |
| 9·9 | | | 59·0 | 14·8 | |
| 9·5 | | 16 | 0·0 | 27·6 | g |
| 9·9 | | | 39·0 | 10·8 | |
| 9·3‡ | | | 50·5 | 41·0 | |
| 9·9 | | 17 | 38·0 | 1·8 | |
| 9·5 | | | 50·5 | 1·7 | |
| 9·6‡ | | | 50·5 | 50·3 | |
| 9·7 | | | 59·0 | 4·8 | |
| 9·6‡ | | 18 | 0·5 | 48·9 | |
| 9·9 | | | 10·0 | 7·4 | |
| 9·3 | | | 33·0 | 23·5 | 9·0 g |
| 9·8 | | | 53·0 | 21·8 | |
| 9·4‡ | | 19 | 33·5 | 42·6 | |
| 9·7 | | 21 | 19·0 | 22·3 | |
| 9·9 | | | 51·0 | 12·1 | |
| 9·9 | | 22 | 13·0 | 20·8 | |
| 9·6‡ | | 23 | 49·5 | 50·0 | |
| 9·9 | | | 54·0 | 17·8 | |
| 9·2‡ | | 24 | 18·5 | 53·9 | |
| 9·9 | | | 33·0 | 13·4 | |
| 9·6‡ | | 25 | 14·0 | 57·0 | |
| 6·5‡ | | 26 | 3·5 | 41·1 | 7·0 GSg |
| 9·9 | | | 18·0 | 9·8 | |
| 9·9 | | | 45·0 | 2·6 | |
| 9·4‡ | | 27 | 8·5 | 36·0 | |
| 9·9 | | | 52·0 | 0·2 | |
| 9·7 | | | 55·0 | 6·9 | |
| 9·0 | | | 57·0 | 10·1 | 8·5 g |
| 8·9† | | 28 | 11·0 | 47·7 | |
| 9·6† | | | 16·5 | 38·1 | |
| 9·2 | | | 44·0 | 15·9 | 9·0 g |
| 9·4† | | 29 | 10·0 | 47·8 | |
| 9·9 | | | 36·0 | 20·9 | |
| 9·3† | | | 37·5 | 41·6 | |
| 9·4† | | 30 | 20·0 | 55·1 | |
| 9·4† | | | 23·5 | 55·8 | |
| 8·7† | | | 31·5 | 54·9 | |
| 9·7 | | 31 | 0·0 | 22·3 | g |
| 9·3 | | | 0·5 | 27·5 | g |
| 9·1 | | | 13·0 | 4·4 | g |
| 9·6† | | | 33·0 | 37·6 | |
| 9·6† | | | 39·0 | 41·5 | |
| 9·3† | | | 43·0 | 36·1 | |
| 9·9 | | | 54·0 | 25·8 | |
| 9·6† | | 32 | 44·0 | 44·1 | |
| 9·5 | | 33 | 24·0 | 12·4 | |
| 8·4 | | | 31·3 | 21·4 | 8·2 g |
| 9·8 | | | 44·0 | 27·2 | 9·5 g |
| 9·6† | | 34 | 43·0 | 43·9 | |

## 1441—1500.

| mag. | 13h.—14h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6† | 13 | 34 | 51·0 | 45·3 | |
| 9·1† | | | 53·0 | 44·8 | |
| 9·7 | | 35 | 18·0 | 11·8 | |
| 9·9 | | | 37·0 | 28·2 | |
| 9·8 | | | 40·0 | 0·3 | |
| 9·6† | | | 42·0 | 57·9 | |
| 9·4† | | 37 | 15·0 | 29·3 | |
| 9·3† | | | 55·0 | 56·0 | 9·5 |
| 9·4† | | 38 | 54·0 | 42·0 | |
| 9·7 | | 39 | 20·0 | 12·7 | |
| 9·8 | | | 24·0 | 21·2 | |
| 6·8† | | 41 | 0·5 | 31·1 | 7·0 GSg |
| 9·6† | | | 42·0 | 58·9 | |
| 9·7 | | 42 | 8·5 | 28·9 | 9·2 g |
| 7·0† | | | 36·0 | 38·8 | 7·0 GSg |
| 9·6† | | | 46·0 | 50·1 | |
| 9·9 | | 44 | 32·0 | 20·3 | |
| 9·7 | | | 43·5 | 26·4 | |
| 9·1 | | | 47·0 | 6·9 | 9·0 g |
| 9·8 | | | 55·0 | 16·3 | |
| 9·6† | | 45 | 3·0 | 34·3 | |
| 9·2† | | 46 | 21·0 | 41·3 | |
| 9·1† | | | 52·0 | 39·9 | g |
| 9·4† | | | 56·0 | 52·6 | |
| 9·7 | | 47 | 59·0 | 17·9 | |
| 9·9 | | 49 | 2·0 | 13·8 | |
| 9·4† | | | 5·0 | 35·0 | |
| 8·5† | | | 9·0 | 58·2 | 9·5 |
| 9·2† | | | 55·0 | 51·7 | 9·5 g |
| 9·4 | | | 57·0 | 18·9 | |
| 9·3 | | 50 | 16·5 | 1·9 | 9·0 g |
| 9·3 | | 51 | 3·5 | 18·0 | g |
| 9·8 | | | 13·5 | 5·3 | |
| 9·5 | | | 13·5 | 11·6 | |
| 9·6† | | | 34·0 | 44·7 | |
| 9·6† | | | 36·0 | 45·3 | |
| 9·7 | | | 43·5 | 12·2 | 8·8 g |
| 9·2† | | | 51·0 | 43·6 | g |
| 9·3† | | 52 | 0·0 | 42·1 | |
| 9·6† | | | 28·0 | 46·9 | |
| 9·6† | | | 30·0 | 52·0 | |
| 9·6† | | | 40·0 | 39·8 | |
| 9·3† | | | 58·5 | 30·6 | |
| 9·2† | | 53 | 20·0 | 30·8 | |
| 9·9 | | 54 | 12·0 | 14·0 | |
| 9·7 | | 55 | 8·5 | 22·9 | g |
| 9·9– | | | 12·0 | 22·3 | g |
| 8·5† | | | 37·0 | 37·1 | 9·5 |
| 8·9† | | 56 | 37·5 | 30·3 | |
| 9·6† | | | 43·0 | 56·6 | |
| 9·1† | | 57 | 32·0 | 48·5 | g |
| 9·2† | | 58 | 55·5 | 32·7 | g |
| 9·0† | | 59 | 32·0 | 30·5 | g |
| 9·2 | | | 38·0 | 8·2 | |
| 8·8 | 14 | 0 | 15·2 | 1·4 | g |
| 9·2† | | | 28·0 | 45·5 | |
| 9·3 | | | 44·0 | 5·1 | 8·0 Gg |
| 9·6† | | | 56·0 | 41·1 | |
| 9·4† | | 1 | 57·0 | 50·0 | 9·0 g |
| 9·6† | | 2 | 4·0 | 44·0 | |

## 1501—1560.

| mag. | 14h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6† | 14 | 2 | 29·0 | 25·3 | |
| 8·4† | | 3 | 18·0 | 54·8 | 8·5 g |
| 8·6† | | | 37·5 | 37·1 | g |
| 9·2 | | | 40·0 | 0·3 | 9·5 |
| 9·0 | | 4 | 35·0 | 11·2 | |
| 8·8 | | | 44·0 | 24·5 | 8·5 g |
| 9·4† | | | 47·0 | 30·3 | |
| 8·8 | | 5 | 9·0 | 1·8 | g |
| 9·3 | | | 43·0 | 16·3 | 9·0 g |
| 9·6† | | 8 | 11·0 | 53·2 | |
| 8·7† | | | 38·0 | 50·1 | g |
| 9·6 | | 9 | 17·7 | 1·3 | g |
| 9·4† | | | 32·0 | 47·1 | |
| 9·6† | | 10 | 5·0 | 40·7 | |
| 9·2† | | | 14·0 | 44·1 | 8·5 g |
| 8·4† | | | 24·0 | 47·0 | 8·5 g |
| 8·4† | | | 46·5 | 33·4 | 8·0 |
| 9·6† | | | 51·0 | 38·4 | |
| 7·5† | | 11 | 2·7 | 58·9 | 7·5 GSg |
| 9·4† | | | 54·0 | 29·4 | |
| 9·4† | | 12 | 12·7 | 57·6 | |
| 9·2 | | | 16·0 | 13·9 | 9·0 g |
| 9·4† | | | 53·0 | 49·4 | |
| 9·3† | | 13 | 4·0 | 54·0 | |
| 9·2† | | | 25·0 | 37·0 | |
| 8·3 | | | 56·7 | 3·0 | 7·5 Gg |
| 8·6† | | 14 | 42·0 | 47·9 | 9·0 g |
| 9·4† | | | 50·7 | 58·6 | |
| 8·8† | | 16 | 28·5 | 37·0 | 8·5 g |
| 9·1† | | 18 | 5·0 | 52·6 | |
| 9·6† | | 19 | 6·0 | 21·5 | g |
| 9·2 | | 20 | 1·0 | 12·1 | g |
| 8·8† | | | 9·5 | 31·2 | |
| 9·0 | | | 21·0 | 21·8 | g |
| 9·1 | | | 48·0 | 14·9 | g |
| 9·4 | | 21 | 19·0 | 14·9 | |
| 9·6† | | | 54·0 | 54·3 | |
| 9·4† | | | 58·0 | 26·7 | |
| 9·1 | | 22 | 9·7 | 0·4 | g |
| 9·4 | | | 32·5 | 25·4 | g |
| 9·2 | | | 40·0 | 25·6 | g |
| 8·8† | | 23 | 4·5 | 58·7 | |
| 9·0 | | | 36·5 | 29·8 | g |
| 9·4† | | 26 | 25·4 | 55·4 | |
| 10·0‡ | | | 53·3 | 57·6 | |
| 10·0‡ | | 27 | 4·3 | 39·2 | |
| 9·6‡ | | | 22·3 | 32·3 | |
| 8·8‡ | | | 38·3 | 40·8 | g |
| 9·5‡ | | | 55·4 | 33·9 | |
| 9·8‡ | | 28 | 45·8 | 25·5 | |
| 9·1 | | | 47·0 | 7·9 | g |
| 8·8‡ | | | 47·2 | 27·3 | g |
| 10·0‡ | | | 55·8 | 53·2 | |
| 10·0‡ | | 29 | 21·3 | 53·8 | |
| 10·0‡ | | | 35·3 | 39·1 | |
| 9·3– | | | 40·0 | 19·8 | g |
| 10·0‡ | | 30 | 8·3 | 37·2 | |
| 9·5‡ | | | 47·3 | 23·1 | g |
| 9·4‡ | | 31 | 26·8 | 35·9 | g |
| 10·0‡ | | 32 | 10·8 | 42·2 | |

25 prec.

| h | m | α s | δ ′ |
|---|---|---|---|
| 13 | 10 | + 108 + 0·03 d | − 8·0 |
| | 20 | 112 + 0·04 | 7·9 |
| | 30 | 116 + 0·04 | 7·7 |
| | 40 | 120 + 0·05 | 7·6 |
| | 50 | 124 + 0·05 | 7·4 |
| 14 | 0 | 128 + 0·05 | 7·2 |
| | 10 | 132 + 0·06 | 7·0 |
| | 20 | 136 + 0·06 | 6·8 |
| | 30 | 139 + 0·07 | 6·6 |
| | 40 | + 143 + 0·07 | − 6·4 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 14 | 30 | +139 | +0·07 d | −6·6 |
| | 40 | 143 | +0·07 | 6·4 |
| | 50 | 146 | +0·07 | 6·2 |
| 15 | 0 | 150 | +0·08 | 5·9 |
| | 10 | +153 | +0·08 | −5·6 |

d = minutes of decl.

## 1561—1620.

| mag. | h (14ʰ) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 10·0‡ | 14 | 32 | 27·6 | 58·2 | |
| 8·8‡ | | | 45·3 | 50·3 | *g* |
| 9·0‡ | | | 55·9 | 28·6 | *g* |
| 9·8‡ | | 33 | 53·8 | 44·1 | |
| 10·0‡ | | | 54·8 | 56·6 | |
| 9·8‡ | | 34 | 13·8 | 24·8 | |
| 10·0‡ | | | 19·3 | 50·7 | |
| 9·9‡ | | | 32·2 | 58·6 | |
| 9·9‡ | | | 34·8 | 37·2 | |
| 10·0‡ | | | 42·3 | 33·7 | |
| 9·3‡ | | | 45·8 | 57·1 | |
| 9·8‡ | | | 48·9 | 57·0 | |
| 10·0‡ | | | 54·8 | 33·8 | |
| 9·6‡ | | 35 | 8·3 | 32·6 | |
| 8·7‡ | | | 28·7 | 39·9 | *g* |
| 9·8 | | | 33·3 | 17·3 | |
| 9·9‡ | | | 38·3 | 44·4 | |
| 9·6 | | | 50·3 | 3·3 | *g* |
| 9·5 | | | 55·2 | 24·8 | |
| 9·6 | | | 55·6 | 14·6 | |
| 8·9 | | 36 | 5·8 | 13·9 | *g* |
| 10·0‡ | | | 7·8 | 42·2 | |
| 9·3 | | | 11·1 | 25·3 | *g* |
| 9·4‡ | | | 32·7 | 33·6 | 9·5 *g* |
| 10·0‡ | | | 34·8 | 58·8 | |
| 9·4‡ | | | 53·0 | 53·6 | *g* |
| 9·5‡ | | 37 | 13·5 | 47·0 | |
| 9·8 | | | 51·3 | 5·4 | |
| 9·8 | | 38 | 11·6 | 18·4 | |
| 9·4‡ | | | 28·5 | 41·4 | |
| 9·6 | | | 34·1 | 29·0 | |
| 9·9‡ | | | 54·0 | 41·4 | |
| 9·5‡ | | 39 | 12·5 | 35·5 | |
| 9·2‡ | | | 14·8 | 56·5 | *g* |
| 9·5‡ | | | 29·7 | 52·6 | |
| 10·0‡ | | | 31·8 | 44·8 | |
| 9·4‡ | | | 50·0 | 34·9 | |
| 9·4 | | | 50·3 | 24·3 | |
| 9·4‡ | | | 53·1 | 35·1 | |
| 9·9‡ | | 40 | 15·7 | 50·0 | |
| 9·5 | | | 26·1 | 22·2 | |
| 9·4‡ | | | 30·0 | 36·8 | |
| 9·6 | | | 45·2 | 30·0 | |
| 7·1‡ | | | 46·8 | 40·1 | 6·0 GSc*g* |
| 9·2 | | | 47·6 | 19·6 | |
| 9·0 | | 41 | 40·1 | 7·9 | *g* |
| 9·6 | | | 40·6 | 11·0 | |
| 10·0‡ | | 42 | 1·2 | 56·0 | |
| 9·0 | | | 10·1 | 15·5 | *g* |
| 9·8 | | | 13·6 | 16·2 | |
| 9·7 | | | 24·1 | 18·2 | |
| 9·6‡ | | | 28·3 | 30·7 | |
| 8·5 | | | 40·8 | 0·3 | *g* |
| 9·9‡ | | 43 | 6·0 | 47·9 | |
| 9·6 | | | 8·1 | 21·9 | |
| 7·8‡ | | | 18·8 | 39·1 | GS*g* |
| 9·2‡ | | | 34·3 | 42·5 | *g* |
| 9·2 | | | 36·1 | 22·6 | |
| 8·9‡ | | | 51·3 | 32·4 | *g* |
| 9·2 | | 44 | 2·6 | 15·6 | |

## 1621—1680.

| mag. | h (14ʰ) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·5 | 14 | 44 | 29·1 | 23·9 | |
| 9·9‡ | | | 30·5 | 46·4 | |
| 9·6‡ | | | 52·5 | 53·6 | |
| 10·0‡ | | | 56·0 | 41·4 | |
| 10·0‡ | | 45 | 4·8 | 49·9 | |
| 9·3 | | | 12·1 | 22·7 | |
| 9·4‡ | | | 48·8 | 32·4 | |
| 8·9‡ | | 46 | 3·8 | 29·5 | *g* |
| 9·7 | | | 4·1 | 4·7 | |
| 9·7‡ | | | 18·0 | 50·0 | |
| 8·8‡ | | | 32·3 | 39·3 | *g* |
| 10·0‡ | | | 41·7 | 58·3 | |
| 9·0 | | 47 | 4·3 | 1·7 | 9·0 *g* |
| 9·6 | | | 14·6 | 6·9 | |
| 9·8 | | | 43·6 | 9·3 | |
| 10·0‡ | | | 46·3 | 59·3 | |
| 8·1‡ | | | 47·0 | 45·8 | 9·0 *g* |
| 9·5‡ | | | 47·3 | 39·1 | |
| 9·5 | | | 56·1 | 5·1 | *g* |
| 9·7 | | | 57·1 | 8·9 | |
| 9·6 | | 48 | 8·8 | 0·8 | |
| 9·8‡ | | | 22·0 | 31·0 | |
| 9·5‡ | | | 26·5 | 49·5 | |
| 8·1 | | | 39·1 | 12·9 | *g* |
| 8·4‡ | | | 40·3 | 49·7 | *g* |
| 9·2 | | | 58·1 | 14·9 | *g* |
| 9·5 | | | 59·6 | 4·1 | |
| 9·6‡ | | 49 | 8·0 | 36·5 | |
| 9·7 | | | 28·1 | 2·5 | |
| 9·7 | | | 44·8 | 1·2 | |
| 9·5 | | 50 | 1·6 | 15·1 | |
| 9·8 | | | 3·6 | 16·8 | |
| 9·8 | | | 18·6 | 35·2 | |
| 10·0‡ | | | 34·0 | 40·4 | |
| 9·0 | | | 58·1 | 15·5 | |
| 9·6 | | 51 | 11·1 | 23·3 | |
| 9·5‡ | | | 16·5 | 32·1 | |
| 8·7‡ | | | 20·5 | 32·5 | *g* |
| 9·5 | | | 25·0 | 3·8 | |
| 10·0‡ | | | 33·3 | 36·1 | |
| 10·0‡ | | | 33·8 | 51·0 | |
| 9·3 | | 52 | 4·5 | 6·8 | |
| 8·8‡ | | | 22·1 | 40·6 | 9·0 *g* |
| 9·4‡ | | | 25·9 | 43·2 | *g* |
| 9·4‡ | | | 45·1 | 56·5 | |
| 9·3 | | | 50·0 | 20·8 | |
| 9·4 | | 53 | 8·5 | 20·8 | |
| 9·3 | | | 27·0 | 23·7 | |
| 9·3 | | | 29·0 | 6·7 | |
| 9·4‡ | | | 32·3 | 50·9 | |
| 10·0‡ | | | 42·2 | 52·7 | |
| 9·4 | | | 43·5 | 25·5 | |
| 10·0‡ | | | 43·9 | 53·9 | |
| 10·0‡ | | | 50·7 | 54·6 | |
| 9·5‡ | | | 53·6 | 59·2 | |
| 10·0‡ | | | 58·3 | 50·4 | |
| 8·9‡ | | 54 | 3·8 | 34·4 | 9·0 *g* |
| 9·8‡ | | | 17·7 | 45·5 | |
| 9·3 | | | 35·5 | 8·8 | |
| 9·2 | | | 36·9 | 3·0 | *g* |

## 1681—1740.

| mag. | h (14ʰ–15ʰ) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 10·0‡ | 14 | 54 | 39·3 | 34·4 | |
| 9·7 | | | 45·5 | 26·8 | |
| 8·8‡ | | | 57·7 | 45·4 | *g* |
| 10·0‡ | | 55 | 5·3 | 39·8 | |
| 9·5‡ | | | 17·1 | 51·4 | |
| 9·6‡ | | | 20·7 | 55·6 | |
| 9·6‡ | | | 22·7 | 46·1 | |
| 9·6 | | | 36·0 | 2·8 | |
| 9·8‡ | | | 41·9 | 55·6 | |
| 9·3 | | 56 | 4·6 | 26·2 | *g* |
| 9·2 | | | 6·5 | 25·5 | *g* |
| 9·5 | | | 36·0 | 4·8 | |
| 9·4 | | | 37·4 | 27·2 | |
| 9·5‡ | | | 42·8 | 50·6 | |
| 9·9‡ | | | 57·4 | 37·3 | |
| 9·9‡ | | 57 | 9·9 | 50·0 | |
| 9·1 | | | 18·0 | 18·9 | *g* |
| 10·0‡ | | | 24·7 | 58·4 | |
| 9·6 | | | 28·1 | 26·6 | |
| 9·8 | | | 32·6 | 29·5 | |
| 9·9‡ | | | 46·8 | 53·0 | |
| 9·7 | | 58 | 5·5 | 14·9 | |
| 8·5‡ | | | 12·2 | 39·4 | 9·0 *g* |
| 8·0‡ | | | 24·4 | 56·8 | 8·0 *g* |
| 9·2‡ | | | 25·9 | 50·0 | |
| 9·7‡ | | | 29·1 | 42·6 | |
| 8·2‡ | | | 37·3 | 40·1 | 8·5 *g* |
| 8·8‡ | | | 42·7 | 32·6 | 9·0 *g* |
| 9·5 | | 59 | 3·1 | 20·8 | |
| 9·3 | | | 11·6 | 8·1 | |
| 9·6‡ | | | 14·5 | 54·7 | |
| 9·9‡ | | | 21·5 | 49·1 | |
| 9·6 | | | 42·6 | 25·2 | |
| 6·4 | | | 44·6 | 17·4 | 6·5 GS*g* |
| 9·8‡ | | | 45·8 | 48·6 | |
| 9·8‡ | | | 51·5 | 53·8 | |
| 8·5 | | | 54·6 | 23·9 | 8·5 *g* |
| 9·5 | 15 | 0 | 20·6 | 11·0 | |
| 8·6 | | | 40·6 | 23·7 | 8·5 G*g* |
| 10·0‡ | | 1 | 20·8 | 42·7 | |
| 8·8‡ | | | 21·0 | 57·4 | |
| 9·6 | | | 23·7 | 28·9 | |
| 9·6 | | | 36·9 | 27·2 | |
| 10·0‡ | | 2 | 30·7 | 55·6 | |
| 9·8‡ | | | 35·0 | 42·4 | |
| 9·7 | | 3 | 26·5 | 0·3 | |
| 10·0‡ | | | 52·8 | 52·4 | |
| 9·8 | | | 54·6 | 21·0 | |
| 9·4‡ | | 4 | 6·0 | 37·7 | |
| 10·0‡ | | | 17·8 | 45·7 | |
| 10·0‡ | | | 25·8 | 50·5 | |
| 10·0‡ | | | 30·0 | 58·6 | |
| 9·8 | | | 38·1 | 28·7 | |
| 9·7 | | | 47·8 | 1·7 | |
| 10·0‡ | | | 50·8 | 54·4 | |
| 9·0 | | 5 | 18·6 | 5·2 | *g* |
| 9·0 | | | 26·1 | 12·8 | 8·0 G*g* |
| 9·2 | | | 36·1 | 14·2 | |
| 9·4 | | 6 | 1·6 | 15·2 | |
| 10·0‡ | | | 13·0 | 58·2 | |



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### 1741—1800.

| mag. | h | m s (15h.) | −72° ′ | |
|---|---|---|---|---|
| 9·2‡ | 15 | 6 19·3 | 33·2 | |
| 9·4‡ | | 40·2 | 50·6 | |
| 9·8‡ | | 44·2 | 42·3 | |
| 10·0‡ | | 50·2 | 43·1 | |
| 9·8 | | 53·4 | 8·6 | |
| 10·0‡ | | 7 2·8 | 41·2 | |
| 10·0‡ | | 10·3 | 46·2 | |
| 9·8‡ | | 14·7 | 50·2 | |
| 9·6 | | 33·3 | 29·7 | |
| 9·6‡ | | 35·0 | 35·6 | |
| 10·0‡ | | 57·8 | 58·8 | |
| 9·4 | | 8 12·7 | 12·4 | g |
| 9·0 | | 19·7 | 17·4 | g |
| 9·5‡ | | 33·3 | 57·8 | g |
| 10·0‡ | | 44·3 | 51·8 | |
| 9·0‡ | | 49·0 | 48·0 | 9·5 g |
| 9·8 | | 55·7 | 26·5 | |
| 9·7 | | 57·7 | 7·0 | |
| 9·8 | | 9 24·0 | 28·9 | |
| 9·6‡ | | 33·0 | 36·7 | |
| 9·4 | | 49·2 | 28·6 | |
| 9·5‡ | | 58·5 | 33·7 | |
| 9·8 | | 10 16·8 | 0·4 | |
| 9·8‡ | | 24·8 | 36·5 | |
| 9·8 | | 42·7 | 34·4 | |
| 9·0 | | 43·8 | 1·4 | g |
| 10·0‡ | | 51·3 | 53·1 | |
| 9·8 | | 54·7 | 16·1 | |
| 9·4‡ | | 11 21·8 | 42·6 | |
| 9·2‡ | | 30·5 | 39·7 | |
| 9·5 | | 48·7 | 6·4 | |
| 9·8‡ | | 57·8 | 56·9 | |
| 9·4‡ | | 12 8·8 | 49·8 | |
| 9·2‡ | | 9·3 | 54·8 | |
| 9·4‡ | | 42·5 | 47·8 | |
| 10·0‡ | | 51·7 | 58·6 | |
| 9·8 | | 52·2 | 45·1 | |
| 10·0‡ | | 54·8 | 46·3 | |
| 9·8‡ | | 58·5 | 38·6 | |
| 10·0‡ | | 13 13·5 | 35·3 | |
| 10·0‡ | | 24·8 | 45·0 | |
| 9·0 | | 28·2 | 6·5 | |
| 10·0‡ | | 32·5 | 49·3 | |
| 9·5‡ | | 42·8 | 59·6 | |
| 9·8‡ | | 47·5 | 42·0 | |
| 8·8‡ | | 14 0·0 | 45·9 | g |
| 9·8 | | 8·7 | 7·6 | |
| 9·8 | | 9·7 | 44·5 | |
| 9·4 | | 15·2 | 10·6 | |
| 8·4 | | 27·2 | 23·0 | 8·5 g |
| 9·4 | | 59·7 | 17·9 | |
| 10·0‡ | | 15 16·3 | 33·0 | |
| 9·8 | | 40·1 | 7·0 | |
| 8·8‡ | | 48·7 | 43·8 | g |
| 9·4 | | 55·6 | 6·8 | |
| 9·0 | | 16 10·1 | 4·2 | |
| 10·0‡ | | 24·6 | 57·5 | |
| 9·6‡ | | 26·7 | 57·3 | |
| 9·7 | | 39·6 | 12·4 | |
| 9·4‡ | | 17 14·9 | 47·5 | g |

### 1801—1860.

| mag. | h | m s (15h.) | −72° ′ | |
|---|---|---|---|---|
| 9·8‡ | 15 | 17 16·2 | 54·0 | |
| 6·0‡ | | 55·3 | 57·2 | 6·0 GScg |
| 9·8 | | 18 0·1 | 2·5 | |
| 10·0‡ | | 26·0 | 49·8 | |
| 8·9‡ | | 29·0 | 54·8 | 9·5 |
| 9·9‡ | | 45·5 | 54·5 | |
| 9·1 | | 52·8 | 4·7 | g |
| 9·7‡ | | 19 11·8 | 36·3 | |
| 9·6 | | 19·6 | 24·3 | |
| 8·4 | | 26·8 | 10·0 | g |
| 10·0‡ | | 42·8 | 24·7 | |
| 9·6 | | 20 13·6 | 3·7 | |
| 9·7 | | 17·6 | 6·7 | |
| 9·8‡ | | 50·3 | 59·4 | |
| 8·7‡ | | 56·5 | 51·1 | g |
| 8·2 | | 58·1 | 20·8 | g |
| 9·3‡ | | 21 26·0 | 44·3 | |
| 10·0‡ | | 22 32·1 | 58·6 | |
| 9·5 | | 32·6 | 20·5 | |
| 7·6 | | 46·1 | 24·8 | 7·5 GSg |
| 9·4 | | 47·6 | 12·4 | |
| 9·7 | | 23 25·1 | 13·8 | |
| 9·5‡ | | 30·2 | 53·8 | |
| 9·4‡ | | 30·8 | 33·6 | |
| 10·0‡ | | 24 3·3 | 32·9 | |
| 9·8 | | 6·1 | 4·5 | G |
| 8·9 | | 11·6 | 14·5 | |
| 9·0 | | 33·2 | 22·0 | |
| 8·8‡ | | 36·3 | 42·7 | g |
| 9·2– | | 43·6 | 16·1 | |
| 10·0‡ | | 46·7 | 59·0 | |
| 9·5‡ | | 25 0·1 | 57·1 | |
| 9·0‡ | | 0·3 | 45·4 | |
| 8·4‡ | | 16·8 | 45·6 | g |
| 10·0‡ | | 23·3 | 57·3 | |
| 10·0‡ | | 31·3 | 43·9 | |
| 10·0‡ | | 39·3 | 51·9 | |
| 9·2 | | 45·5 | 26·9 | 8·0 Gg |
| 10·0‡ | | 26 1·3 | 55·4 | |
| 9·5‡ | | 5·3 | 54·9 | |
| 9·6 | | 21·8 | 26·0 | g |
| 9·5 | | 44·5 | 2·8 | |
| 8·7 | | 27 1·5 | 21·5 | g |
| 9·7‡ | | 8·3 | 51·7 | |
| 8·9‡ | | 51·3 | 31·2 | 8·0 g |
| 9·8‡ | | 28 7·3 | 49·0 | |
| 9·4 | | 22·0 | 21·9 | |
| 8·9 | | 25·5 | 2·4 | g |
| 9·3‡ | | 30·1 | 46·7 | |
| 8·9‡ | | 31·2 | 34·3 | 8·5 g |
| 9·4 | | 29 2·0 | 7·8 | |
| 9·5 | | 12·0 | 20·1 | |
| 9·7‡ | | 26·3 | 55·9 | |
| 9·6 | | 50·0 | 7·4 | |
| 10·0‡ | | 30 3·3 | 56·2 | |
| 8·8‡ | | 23·6 | 59·8 | 8·5 g |
| 9·5‡ | | 33·8 | 46·9 | |
| 9·5 | | 38·0 | 3·8 | |
| 8·8‡ | | 31 6·4 | 44·7 | g |
| 9·7‡ | | 32 5·6 | 31·1 | |

### 1861—1920.

| mag. | h | m s (15h.–16h.) | −72° ′ | |
|---|---|---|---|---|
| 9·4‡ | 15 | 32 7·6 | 41·5 | |
| 9·4‡ | | 22·8 | 55·9 | |
| 10·0‡ | | 27·3 | 26·9 | |
| 8·8‡ | | 34·4 | 40·5 | |
| 9·4‡ | | 43·8 | 36·5 | |
| 10·0‡ | | 33 8·8 | 37·1 | |
| 10·0‡ | | 21·3 | 30·3 | |
| 8·3 | | 35·5 | 2·8 | 8·5 g |
| 9·6 | | 53·0 | 17·0 | |
| 9·4 | | 34 2·0 | 17·0 | |
| 8·6† | | 26·8 | 30·8 | g |
| 9·0† | | 35 37·9 | 34·5 | g |
| 8·2 | | 52·5 | 20·5 | 8·5 g |
| 9·3† | | 36 50·0 | 26·5 | |
| 9·5 | | 37 51·0 | 0·1 | |
| 9·4 | | 38 26·0 | 6·0 | |
| 9·5 | | 36·0 | 22·5 | |
| 9·4 | | 38·0 | 5·3 | |
| 8·1† | | 41·5 | 57·1 | 8·5 g |
| 9·6 | | 39 1·5 | 26·2 | |
| 9·5 | | 11·0 | 7·0 | |
| 8·8† | | 38·0 | 57·2 | 9·0 g |
| 9·0 | | 40 49·5 | 0·2 | |
| 8·0 | | 58·5 | 14·9 | GSg |
| 8·8 | | 42 34·5 | 25·5 | 9·0 g |
| 9·2† | | 43 3·0 | 44·3 | |
| 9·3† | | 59·0 | 51·0 | |
| 7·8† | | 44 22·0 | 46·6 | 8·5 GSg |
| 9·2† | | 34·0 | 52·3 | g |
| 9·0 | | 45 29·5 | 2·5 | g |
| 9·5† | | 43·0 | 42·0 | g |
| 9·0† | | 51·0 | 48·6 | g |
| 9·5 | | 46 10·0 | 31·3 | |
| 8·2 | | 58·0 | 5·9 | GSg |
| 9·0† | | 47 37·0 | 41·6 | |
| 9·0 | | 48 54·5 | 24·3 | g |
| 9·5† | | 50 5·5 | 44·9 | g |
| 9·4† | | 45·0 | 49·1 | |
| 8·9 | | 48·0 | 13·5 | g |
| 8·2 | | 51 22·5 | 30·2 | 8·5 g |
| 9·5 | | 53·0 | 21·2 | g |
| 7·6 | | 52 2·5 | 3·2 | 6·0 GSg |
| 8·5 | | 42·0 | 22·0 | g |
| 8·3 | | 55 26·0 | 6·5 | g |
| 9·1† | | 45·0 | 46·8 | g |
| 8·7† | | 51·0 | 41·1 | GSg |
| 9·2 | | 56 18·0 | 14·0 | g |
| 9·3† | | 19·5 | 32·9 | g |
| 9·6 | | 33·0 | 18·7 | g |
| 9·6 | | 47·0 | 16·7 | |
| 9·4† | | 57 22·0 | 53·4 | |
| 9·1† | | 58 17·0 | 42·7 | |
| 9·0 | | 59 30·0 | 23·5 | g |
| 9·4† | | 59·0 | 53·6 | |
| 9·6 | 16 | 0 18·0 | 16·1 | |
| 9·4† | | 29·0 | 42·9 | |
| 9·6 | | 34·0 | 19·1 | |
| 9·4† | | 37·0 | 57·7 | |
| 9·4– | | 3 54·0 | 23·0 | |
| 6·7† | | 58·0 | 43·5 | 7·0 GSg |

25 prec

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 15 | 0 | +150+0·08 d | +5·9 |
| | 10 | 153+0·08 | 5·6 |
| | 20 | 156+0·08 | 5·4 |
| | 30 | 158+0·09 | 5·1 |
| | 40 | 161+0·09 | 4·8 |
| | 50 | 164+0·09 | 4·5 |
| 16 | 0 | 166+0·09 | 4·2 |
| | 10 | +168+0·10 | 3·9 |

d = minutes of decl.

| | 25 prec. | | |
|---|---|---|---|
| h m | α s s | | δ ′ |
| 16 0 | + 166 + 0·09 d | | − 4·2 |
| 10 | 168 + 0·10 | | 3·9 |
| 20 | 170 + 0·10 | | 3·5 |
| 30 | 172 + 0·10 | | 3·2 |
| 40 | 173 + 0·10 | | 2·9 |
| 50 | 175 + 0·10 | | 2·5 |
| 17 0 | 176 + 0·11 | | 2·2 |
| 10 | 177 + 0·11 | | 1·8 |
| 20 | 178 + 0·11 | | 1·5 |
| 30 | 179 + 0·11 | | 1·1 |
| 40 | + 179 + 0·11 | | − 0·7 |

d = minutes of decl.

## 1921—1980.

| mag. | h | m | s (16h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 8·6† | 16 | 4 | 12·0 | 38·2 | 8·2 g |
| 9·3† | | | 42·0 | 43·2 | |
| 10·1 | | | 56·0 | 11·9 | |
| 9·4 | | 5 | 40·0 | 5·2 | |
| 10·1 | | | 55·0 | 30·2 | |
| 9·7 | | 6 | 19·5 | 22·8 | g |
| 9·7 | | | 41·0 | 13·1 | |
| 9·0 | | | 56·0 | 20·4 | g |
| 10·0 | | 7 | 58·0 | 22·6 | |
| 10·1 | | 8 | 1·0 | 21·1 | |
| 9·2† | | | 11·0 | 43·8 | |
| 9·4† | | | 40·0 | 58·1 | |
| 9·8 | | 9 | 22·0 | 7·6 | |
| 9·4 | | | 43·0 | 14·3 | |
| 8·7† | | | 43·0 | 49·6 | g |
| 10·1 | | 10 | 19·0 | 29·8 | |
| 8·6 | | | 25·5 | 17·0 | 8·2 g |
| 9·2† | | | 36·0 | 46·5 | |
| 9·4 | | | 57·5 | 27·7 | |
| 10·0 | | 11 | 13·0 | 30·3 | |
| 9·4† | | | 41·0 | 41·9 | |
| 9·8 | | 12 | 8·0 | 11·3 | |
| 10·0 | | | 15·0 | 10·3 | |
| 9·2 | | | 41·0 | 16·1 | Gg |
| 10·0 | | | 51·0 | 7·4 | |
| 7·5† | | 13 | 10·0 | 47·6 | 8·5 GSg |
| 8·5† | | | 24·0 | 43·8 | 7·8 GSg |
| 10·1 | | | 43·0 | 27·2 | |
| 9·4† | | 14 | 1·0 | 52·4 | |
| 9·2 | | 15 | 21·0 | 6·0 | g |
| 9·4 | | | 33·0 | 13·1 | g |
| 9·3† | | | 43·0 | 36·5 | |
| 9·8 | | 16 | 12·0 | 11·1 | |
| 9·7 | | | 21·0 | 31·8 | |
| 9·0 | | 18 | 8·5 | 7·3 | 9·0 g |
| 8·8† | | 19 | 36·0 | 53·2 | g |
| 10·0 | | | 44·0 | 9·0 | |
| 8·6† | | | 50·0 | 38·3 | 8·5 g |
| 9·8 | | 20 | 35·0 | 14·0 | |
| 10·1 | | 21 | 40·0 | 20·2 | |
| 9·5† | | 22 | 29·0 | 33·4 | |
| 10·0 | | | 55·0 | 13·3 | |
| 9·5† | | 23 | 22·0 | 38·7 | |
| 10·0 | | | 34·0 | 29·1 | |
| 9·0† | | 24 | 2·5 | 33·5 | g |
| 9·5† | | 25 | 1·0 | 46·1 | |
| 9·2 | | | 42·0 | 11·5 | |
| 9·4† | | | 51·5 | 57·6 | |
| 9·4 | | | 55·0 | 10·1 | |
| 10·0 | | 26 | 8·0 | 0·7 | g |
| 7·5 | | | 20·5 | 2·7 | 6·8 GSg |
| 10·1 | | 27 | 23·5 | 0·1 | |
| 9·3† | | | 29·0 | 53·4 | |
| 9·2 | | 28 | 4·0 | 12·8 | 9·5 g |
| 9·8 | | | 15·0 | 20·3 | |
| 9·3‡ | | | 25·0 | 38·4 | |
| 9·8 | | | 25·0 | 17·2 | |
| 9·1‡ | | 29 | 2·0 | 58·9 | g |
| 8·6 | | | 53·0 | 12·3 | 9·0 g |
| 10·0 | | 30 | 58·0 | 16·8 | g |

## 1981—2040.

| mag. | h | m | s (16h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 8·8 | 16 | 32 | 19·0 | 4·3 | g |
| 10·0 | | | 31·0 | 8·0 | |
| 9·3‡ | | | 53·0 | 38·9 | |
| 10·0 | | | 55·0 | 0·1 | |
| 9·2 | | 33 | 38·5 | 11·5 | g |
| 9·0‡ | | | 48·0 | 36·0 | g |
| 9·4 | | 34 | 9·0 | 4·5 | |
| 9·3‡ | | | 24·0 | 34·0 | |
| 9·6 | | | 48·0 | 4·2 | |
| 9·2‡ | | | 53·0 | 52·8 | |
| 9·1‡ | | 35 | 46·0 | 31·4 | |
| 9·1‡ | | 36 | 13·0 | 40·5 | g |
| 10·1 | | | 45·0 | 19·0 | |
| 9·0 | | 37 | 15·0 | 4·0 | 9·5 g |
| 9·8 | | | 40·0 | 18·7 | g |
| 9·6 | | 38 | 0·0 | 3·5 | 9·5 g |
| 8·7‡ | | | 17·0 | 58·4 | g |
| 9·2 | | | 20·5 | 25·4 | g |
| 8·6‡ | | 39 | 27·0 | 53·7 | 8·2 Gg |
| 8·5‡ | | 40 | 7·0 | 53·9 | 8·8 Gg |
| 9·2‡ | | | 8·0 | 48·6 | |
| 8·5‡ | | | 40·0 | 36·8 | 8·5 g |
| 9·0‡ | | 41 | 0·0 | 58·9 | |
| 10·1 | | 42 | 15·0 | 27·1 | |
| 9·4 | | | 42·0 | 20·8 | g |
| 9·2 | | | 57·5 | 24·4 | g |
| 9·4‡ | | 44 | 25·0 | 51·7 | |
| 9·0‡ | | | 49·5 | 32·1 | |
| 8·8 | | | 52·0 | 19·9 | g |
| 9·4‡ | | 45 | 26·0 | 30·8 | |
| 9·4‡ | | 46 | 30·0 | 46·0 | |
| 10·0 | | | 36·0 | 11·1 | |
| 9·7 | | 47 | 16·0 | 15·8 | |
| 8·1 | | | 33·5 | 24·8 | 7·5 GSg |
| 9·6 | | | 44·0 | 18·8 | |
| 9·2 | | 48 | 24·0 | 3·0 | g |
| 10·1 | | 49 | 4·0 | 6·4 | |
| 9·0 | | | 4·0 | 4·0 | 9·5 g |
| 9·6 | | | 40·0 | 6·8 | |
| 8·6 | | | 46·0 | 11·8 | 9·5 g |
| 10·0 | | 50 | 2·0 | 19·4 | |
| 9·2‡ | | | 23·0 | 34·0 | |
| 9·2‡ | | | 43·0 | 55·2 | 9·5 g |
| 9·4‡ | | | 56·0 | 54·2 | |
| 8·4 | | 52 | 26·5 | 23·5 | g |
| 10·1 | | | 40·0 | 17·4 | |
| 9·6 | | | 58·0 | 14·1 | |
| 10·1 | | | 58·0 | 15·1 | |
| 9·7 | | 54 | 47·5 | 7·0 | |
| 10·0 | | 55 | 26·0 | 9·6 | |
| 9·8 | | | 45·0 | 25·8 | |
| 8·0‡ | | | 55·0 | 40·9 | 8·2 GSg |
| 9·2 | | 56 | 5·5 | 6·9 | g |
| 9·4‡ | | | 13·0 | 49·9 | |
| 8·9‡ | | | 51·0 | 41·9 | |
| 9·2‡ | | 57 | 14·0 | 25·8 | |
| 8·4 | | | 23·0 | 6·5 | 8·0 g |
| 9·2 | | | 26·0 | 10·7 | |
| 8·1 | | | 41·5 | 29·9 | 9·0 g |
| 9·7 | | | 58·0 | 16·8 | |

## 2041—2100.

| mag. | h | m | s (16h.—17h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 8·4‡ | 16 | 58 | 14·5 | 32·5 | 8·7 g |
| 9·7 | | | 16·0 | 6·9 | 9·5 g |
| 9·1‡ | | | 36·0 | 31·0 | |
| 9·4‡ | | | 51·0 | 42·9 | |
| 8·8 | | 59 | 33·0 | 17·9 | 8·5 g |
| 9·3‡ | 17 | 1 | 6·0 | 54·9 | g |
| 8·6 | | | 16·5 | 23·9 | 7·8 GSg |
| 9·4‡ | | | 28·0 | 41·7 | |
| 9·8 | | 2 | 4·0 | 2·1 | |
| 8·8‡ | | 3 | 20·0 | 31·9 | 9·0 g |
| 9·8 | | 4 | 22·0 | 20·0 | |
| 9·3‡ | | | 43·0 | 36·6 | |
| 9·2 | | | 43·5 | 24·1 | |
| 8·9‡ | | 5 | 9·0 | 49·5 | g |
| 9·8 | | 8 | 15·5 | 20·7 | g |
| 9·4‡ | | 9 | 56·0 | 51·9 | |
| 9·2‡ | | | 57·0 | 56·7 | 9·5 g |
| 9·4‡ | | 12 | 28·0 | 21·7 | g |
| 9·1 | | 13 | 9·0 | 6·1 | |
| 8·5 | | | 43·7 | 28·7 | g |
| 8·5 | | 15 | 46·0 | 14·1 | g |
| 9·8 | | | 51·0 | 8·9 | g |
| 9·8 | | 16 | 2·5 | 24·9 | |
| 8·4‡ | | | 26·5 | 50·0 | 8·5 g |
| 9·1‡ | | | 55·5 | 51·6 | 9·0 g |
| 8·7‡ | | 17 | 19·8 | 34·5 | g |
| 8·5 | | 18 | 27·0 | 4·5 | 9·0 g |
| 9·3‡ | | 20 | 20·5 | 52·9 | g |
| 9·0 | | | 26·0 | 14·5 | g |
| 9·2‡ | | | 34·5 | 45·8 | |
| 7·8 | | 21 | 5·0 | 12·8 | g |
| 9·0 | | | 34·0 | 16·6 | |
| 9·3‡ | | 22 | 2·5 | 48·7 | |
| 8·8‡ | | | 52·5 | 38·2 | g |
| 8·5‡ | | | 57·5 | 57·9 | 9·0 g |
| 9·8 | | 23 | 20·0 | 32·1 | |
| 9·4‡ | | | 43·5 | 25·5 | |
| 9·0‡ | | | 51·5 | 44·5 | |
| 7·8 | | | 52·0 | 2·7 | 8·5 g |
| 9·4‡ | | 24 | 3·0 | 21·7 | g |
| 9·8 | | | 45·5 | 3·2 | |
| 8·9‡ | | 25 | 53·0 | 36·8 | |
| 8·9‡ | | 26 | 14·5 | 33·0 | |
| 9·4 | | | 23·0 | 21·5 | |
| 8·6‡ | | 28 | 30·0 | 59·5 | 9·0 g |
| 6·7 | | 29 | 18·0 | 9·2 | 7·0 GScg |
| 8·8‡ | | | 42·5 | 43·2 | 8·0 g |
| 9·8 | | | 58·0 | 27·0 | |
| 9·1 | | 30 | 14·0 | 5·5 | |
| 8·9‡ | | 31 | 0·0 | 45·4 | 8·0 g |
| 9·4 | | | 17·0 | 7·9 | g |
| 9·3‡ | | 32 | 4·0 | 51·5 | |
| 9·8 | | | 8·3 | 26·6 | |
| 9·1‡ | | 33 | 11·7 | 30·7 | g |
| 9·4 | | | 53·9 | 19·5 | |
| 9·3 | | 34 | 2·4 | 23·6 | |
| 9·4 | | | 13·9 | 17·3 | |
| 9·6 | | 35 | 18·4 | 56·9 | |
| 9·8 | | | 20·6 | 22·6 | |
| 9·3 | | | 26·4 | 56·0 | |



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## 2101—2160.

| mag. | h | m | s (17h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 9·8 | 17 | 35 | 29·6 | 47·2 | |
| 8·7 | | | 33·3 | 6·4 | g |
| 8·8 | | | 33·4 | 31·2 | g |
| 9·3 | | | 56·9 | 14·4 | |
| 9·3 | | 36 | 36·9 | 10·6 | |
| 8·8 | | | 38·4 | 37·2 | g |
| 9·8 | | | 57·4 | 37·6 | |
| 8·6 | | | 58·9 | 43·9 | g |
| 9·8 | | 37 | 9·4 | 26·5 | |
| 9·2 | | | 58·9 | 4·3 | |
| 9·8 | | 38 | 13·9 | 26·0 | |
| 9·0 | | | 14·9 | 30·0 | |
| 9·5 | | | 15·9 | 47·0 | |
| 9·6 | | | 33·9 | 49·2 | |
| 8·8 | | | 39·5 | 14·3 | 9·0 g |
| 9·6 | | 39 | 16·4 | 29·0 | |
| 9·8 | | | 19·9 | 8·4 | |
| 9·8 | | | 21·9 | 8·1 | |
| 9·2 | | | 44·3 | 34·7 | |
| 9·8 | | | 55·8 | 35·3 | |
| 9·4 | | 40 | 28·3 | 54·1 | |
| 8·7 | | | 36·4 | 38·9 | g |
| 9·8 | | | 44·8 | 24·3 | |
| 9·8 | | 41 | 15·3 | 25·1 | |
| 8·2 | | | 15·8 | 16·5 | 8·5 GSg |
| 9·0 | | | 16·4 | 32·7 | |
| 9·3 | | | 21·8 | 6·9 | |
| 9·6 | | | 39·8 | 5·5 | |
| 9·6 | | | 54·3 | 48·4 | |
| 9·2 | | 42 | 0·8 | 33·5 | |
| 9·1 | | | 15·3 | 13·8 | 10·0 |
| 9·4 | | | 23·8 | 41·1 | |
| 9·8 | | | 24·7 | 0·3 | |
| 8·8 | | | 30·8 | 16·1 | 9·5 g |
| 9·5 | | | 39·0 | 37·5 | |
| 9·8 | | | 40·5 | 23·0 | |
| 9·8 | | | 49·5 | 29·9 | |
| 9·6 | | | 59·5 | 34·9 | |
| 8·2 | | 44 | 26·0 | 9·2 | 8·5 g |
| 9·8 | | | 26·5 | 18·8 | |
| 9·8 | | | 43·0 | 40·8 | |
| 9·1 | | | 47·0 | 29·2 | |
| 9·8 | | 45 | 8·0 | 43·8 | |
| 9·8 | | | 23·0 | 35·2 | |
| 9·2 | | | 46·0 | 10·8 | |
| 9·3 | | | 49·0 | 23·3 | |
| 9·2 | | | 50·0 | 3·8 | |
| 9·8 | | | 58·5 | 54·3 | |
| 9·8 | | 46 | 25·0 | 36·7 | |
| 9·3 | | | 44·5 | 26·9 | |
| 9·5 | | 47 | 22·7 | 5·7 | |
| 9·5 | | | 22·7 | 50·2 | |
| 9·4 | | | 29·7 | 15·6 | |
| 9·6 | | | 54·2 | 16·8 | |
| 9·6 | | | 58·2 | 13·6 | |
| 8·8 | | 48 | 4·2 | 5·8 | g |
| 9·5 | | | 27·2 | 36·7 | |
| 9·4 | | | 32·2 | 45·0 | |
| 9·0 | | | 36·7 | 27·6 | |
| 9·6 | | | 46·2 | 34·3 | |

## 2161—2220.

| mag. | h | m | s (17h.—18h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 9·2 | 17 | 48 | 47·2 | 58·6 | g |
| 9·6 | | | 47·2 | 42·6 | |
| 9·8 | | | 53·2 | 27·7 | |
| 9·4 | | 49 | 4·2 | 18·2 | g |
| 9·8 | | | 12·2 | 3·0 | |
| 7·8 | | | 20·6 | 56·6 | 7·5 GSgg |
| 9·6 | | | 35·2 | 49·7 | |
| 8·5 | | | 39·3 | 21·3 | 9·0 g |
| 9·6 | | | 40·2 | 42·9 | |
| 8·7 | | | 54·3 | 36·3 | |
| 9·8 | | 50 | 27·7 | 31·4 | |
| 9·4 | | 51 | 33·2 | 7·3 | |
| 9·3 | | 52 | 2·7 | 25·4 | |
| 9·8 | | | 4·3 | 19·5 | |
| 9·6 | | | 13·8 | 19·4 | |
| 8·8 | | 53 | 14·8 | 20·8 | g |
| 9·5 | | | 37·3 | 57·2 | |
| 9·8 | | 54 | 6·3 | 23·2 | |
| 9·5 | | | 10·8 | 10·4 | |
| 8·9 | | | 26·4 | 41·5 | g |
| 8·8 | | | 30·1 | 24·9 | |
| 9·6 | | | 40·8 | 32·8 | |
| 9·8 | | 55 | 16·8 | 41·4 | |
| 8·7 | | | 23·8 | 2·8 | |
| 9·8 | | | 25·8 | 0·8 | |
| 9·8 | | | 26·3 | 11·2 | |
| 9·6 | | | 31·8 | 12·6 | |
| 9·8 | | | 37·3 | 42·8 | |
| 9·6 | | | 56·8 | 22·5 | |
| 8·6 | | 56 | 0·4 | 36·6 | 8·0 g |
| 9·8 | | | 16·3 | 11·1 | |
| 9·1 | | | 22·8 | 21·8 | |
| 9·8 | | | 32·3 | 1·0 | |
| 8·2 | | | 39·4 | 58·4 | 8·5 Gg |
| 9·8 | | | 44·8 | 48·5 | |
| 9·0 | | | 48·6 | 47·2 | Gg |
| 9·3 | | | 55·8 | 47·7 | |
| 9·3 | | 57 | 20·8 | 53·0 | |
| 9·8 | | | 23·3 | 2·5 | |
| 9·8 | | | 37·8 | 49·0 | |
| 9·8 | | | 47·3 | 16·7 | |
| 9·4 | | 58 | 1·8 | 44·0 | G |
| 9·3 | | 59 | 2·9 | 54·2 | |
| 9·2 | | | 21·1 | 46·4 | Gg |
| 8·5 | 18 | 0 | 2·3 | 17·0 | g |
| 8·8 | | | 15·4 | 24·2 | g |
| 9·8 | | | 36·8 | 15·0 | |
| 8·9 | | | 40·3 | 54·3 | Gg |
| 9·0 | | | 43·9 | 40·4 | Gg |
| 9·4 | | | 54·8 | 15·4 | g |
| 9·8 | | 1 | 20·8 | 32·6 | |
| 9·2 | | 2 | 15·8 | 0·6 | |
| 9·8 | | | 28·8 | 36·1 | |
| 8·7 | | | 51·2 | 49·6 | g |
| 9·8 | | | 59·9 | 1·4 | |
| 9·3 | | 3 | 6·5 | 41·0 | |
| 9·0 | | | 8·0 | 35·4 | g |
| 9·8 | | | 21·0 | 51·9 | |
| 9·8 | | | 54·0 | 55·1 | |
| 9·3 | | | 57·0 | 19·0 | |

## 2221—2280.

| mag. | h | m | s (18h.) | ′ (−72°) | |
|---|---|---|---|---|---|
| 9·6 | 18 | 4 | 1·5 | 17·2 | |
| 9·8 | | | 16·5 | 15·6 | |
| 9·8 | | | 40·5 | 5·1 | |
| 9·1 | | | 49·5 | 39·1 | g |
| 9·6 | | 5 | 19·5 | 8·3 | |
| 9·6 | | | 27·5 | 1·1 | |
| 9·8 | | | 29·0 | 46·8 | |
| 9·2 | | | 30·5 | 10·0 | |
| 8·8 | | | 56·0 | 59·1 | g |
| 9·4 | | | 56·5 | 52·9 | |
| 9·8 | | 6 | 10·5 | 44·7 | |
| 9·2 | | | 17·5 | 16·2 | |
| 9·5 | | | 57·5 | 24·0 | |
| 9·8 | | 7 | 8·5 | 33·1 | |
| 9·8 | | | 9·0 | 58·5 | |
| 9·8 | | | 19·5 | 44·2 | |
| 9·6 | | | 39·0 | 8·1 | |
| 9·8 | | | 50·5 | 10·0 | |
| 9·6 | | 8 | 34·0 | 11·3 | |
| 9·8 | | | 58·5 | 29·4 | |
| 9·6 | | 9 | 18·5 | 43·9 | |
| 9·6 | | | 38·5 | 14·8 | |
| 9·6 | | | 49·5 | 17·8 | |
| 9·3 | | 10 | 35·5 | 52·8 | |
| 9·3 | | | 41·0 | 21·0 | |
| 9·6 | | 11 | 10·5 | 27·1 | |
| 9·8 | | | 29·5 | 56·7 | |
| 9·3 | | 12 | 25·5 | 45·1 | |
| 9·0 | | | 51·2 | 55·0 | 9·0 g |
| 9·5 | | | 55·0 | 37·2 | |
| 9·4 | | 13 | 9·5 | 15·6 | |
| 9·0 | | | 19·5 | 46·6 | |
| 9·3 | | | 22·5 | 6·4 | |
| 9·8 | | 14 | 43·9 | 20·0 | |
| 8·7 | | 15 | 33·9 | 30·3 | g |
| 9·8 | | | 42·4 | 6·5 | |
| 9·5 | | 16 | 3·9 | 4·2 | |
| 8·2 | | 17 | 12·4 | 45·8 | 8·5 g |
| 9·8 | | | 27·9 | 7·7 | |
| 9·8 | | 18 | 21·4 | 47·1 | |
| 9·8 | | | 45·9 | 52·7 | |
| 8·3 | | | 49·5 | 46·7 | 9·5 g |
| 9·8 | | 19 | 2·4 | 47·5 | |
| 9·8 | | | 14·9 | 53·0 | |
| 9·2 | | | 45·2 | 48·1 | |
| 9·8 | | 20 | 14·4 | 45·7 | |
| 9·8 | | | 44·9 | 32·8 | |
| 9·3 | | | 48·7 | 37·4 | |
| 8·9 | | | 56·0 | 8·2 | |
| 9·8 | | | 59·9 | 54·4 | |
| 7·9 | | 21 | 21·5 | 52·7 | 8·0 GSg |
| 9·8 | | | 31·4 | 37·6 | |
| 9·2 | | | 32·9 | 6·1 | |
| 9·8 | | 22 | 4·4 | 45·2 | |
| 9·3 | | | 35·9 | 11·0 | |
| 8·6 | | | 56·2 | 26·0 | |
| 8·7 | | | 59·2 | 4·1 | 9·0 Gg |
| 9·8 | | 23 | 47·9 | 48·5 | |
| 9·2 | | | 57·6 | 50·3 | |
| 9·8 | | 24 | 20·4 | 29·1 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 17 | 30 | + 179 + 0·11 d | − 1·1 |
| | 40 | 179 + 0·11 | 0·7 |
| | 50 | 180 + 0·11 | − 0·4 |
| 18 | 0 | 180 + 0·11 | 0·0 |
| | 10 | 180 + 0·11 | + 0·4 |
| | 20 | 179 + 0·11 | 0·7 |
| | 30 | + 179 + 0·11 | + 1·1 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | s | δ (′) |
|---|---|---|---|---|
| 18 | 20 | +179 | +0·11 d | +0·7 |
| | 30 | 179 | +0·11 | 1·1 |
| | 40 | 178 | +0·11 | 1·5 |
| | 50 | 177 | +0·11 | 1·8 |
| 19 | 0 | 176 | +0·10 | 2·2 |
| | 10 | 175 | +0·10 | 2·5 |
| | 20 | 173 | +0·10 | 2·9 |
| | 30 | 172 | +0·10 | 3·2 |
| | 40 | +170 | +0·10 | +3·5 |

d = minutes of decl.

## 2281—2340.

| mag. | h (18h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·8 | 18 | 24 | 22·9 | 30·3 | |
| 9·2 | | | 41·5 | 33·8 | |
| 9·1 | | | 51·9 | 28·4 | |
| 9·8 | | | 54·9 | 18·9 | |
| 9·8 | | 25 | 13·9 | 32·1 | |
| 9·8 | | | 14·9 | 53·8 | |
| 10·2‡ | | | 34·2 | 34·6 | g |
| 8·2▬ | | | 59·0 | 10·4 | 9·0 Gg |
| 10·2‡ | | 26 | 0·5 | 36·0 | |
| 8·5 | | | 21·0 | 19·6 | 9·0 g |
| 9·6 | | | 34·0 | 3·1 | |
| 10·2‡ | | | 50·5 | 33·7 | |
| 9·6 | | 27 | 15·0 | 9·0 | g |
| 9·1‡ | | | 34·7 | 35·4 | g |
| 10·0‡ | | 28 | 18·5 | 30·5 | |
| 9·6‡ | | | 58·5 | 55·1 | |
| 9·6‡ | | 29 | 54·2 | 37·1 | 9·0 g |
| 8·8‡ | | | 58·5 | 34·2 | 8·5 Gg |
| 9·6‡ | | 30 | 50·2 | 59·9 | |
| 7·5‡ | | | 58·3 | 55·7 | 7·5 GSg |
| 10·2‡ | | 31 | 28·5 | 40·0 | |
| 8·9 | | 32 | 27·0 | 16·7 | 8·5 g |
| 9·1‡ | | 33 | 33·0 | 29·1 | 9·0 g |
| 9·4‡ | | | 38·7 | 46·4 | |
| 8·6‡ | | 34 | 50·8 | 47·9 | 9·0 g |
| 9·6‡ | | 36 | 1·5 | 30·9 | |
| 9·0 | | | 21·0 | 19·1 | g |
| 9·8‡ | | | 30·5 | 42·7 | |
| 8·9 | | 37 | 10·0 | 20·0 | 9·0 g |
| 9·9‡ | | | 40·5 | 38·3 | |
| 9·6‡ | | 38 | 43·5 | 41·4 | |
| 9·6‡ | | 39 | 41·5 | 39·6 | g |
| 9·8‡ | | 40 | 21·0 | 41·8 | |
| 9·7‡ | | | 42·5 | 31·4 | |
| 8·9‡ | | 41 | 23·0 | 59·7 | 9·0 g |
| 9·6‡ | | | 40·0 | 44·2 | |
| 9·6‡ | | 42 | 37·5 | 39·8 | |
| 10·0‡ | | | 49·0 | 53·6 | |
| 9·7‡ | | 43 | 35·0 | 40·0 | |
| 9·6 | | 44 | 36·0 | 4·0 | g |
| 10·2‡ | | | 54·0 | 33·4 | |
| 8·9‡ | | | 58·5 | 51·6 | g |
| 6·8 | | 45 | 12·0 | 5·5 | 7·0 GScg |
| 9·2‡ | | | 13·0 | 52·6 | g |
| 9·1‡ | | 46 | 19·0 | 48·0 | 9·0 g |
| 8·4 | | 48 | 0·0 | 1·9 | g |
| 8·4‡ | | | 36·5 | 33·4 | g |
| 10·2‡ | | 50 | 4·0 | 36·1 | |
| 9·6‡ | | | 4·5 | 37·9 | g |
| 8·8 | | | 19·0 | 15·1 | 9·0 g |
| 10·2‡ | | | 26·5 | 32·8 | |
| 9·0 | | | 41·0 | 5·7 | 9·5 g |
| 9·1‡ | | 51 | 2·0 | 47·3 | 9·0 g |
| 9·1‡ | | | 20·0 | 46·6 | 9·0 g |
| 9·2‡ | | 53 | 42·5 | 32·2 | |
| 10·0‡ | | 54 | 24·0 | 38·7 | |
| 9·9‡ | | | 37·0 | 56·1 | |
| 8·4 | | 55 | 55·0 | 21·1 | 9·0 g |
| 10·2‡ | | 56 | 26·5 | 56·3 | |
| 9·8‡ | | | 40·0 | 48·1 | |

## 2341—2400.

| mag. | h (18h.–19h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·4▬ | 18 | 57 | 2·5 | 1·1 | |
| 10·2‡ | | | 12·0 | 43·7 | |
| 9·6‡ | | 58 | 13·5 | 55·1 | g |
| 10·2‡ | | | 14·2 | 58·7 | |
| 9·6‡ | | | 59·5 | 40·3 | |
| 10·2‡ | 19 | 0 | 33·5 | 34·4 | |
| 8·8‡ | | | 8·5 | 47·2 | g |
| 9·6‡ | | 1 | 9·0 | 53·6 | g |
| 9·6‡ | | | 57·0 | 44·5 | g |
| 9·4‡ | | 3 | 2·2 | 33·4 | g |
| 8·2‡ | | 4 | 0·5 | 49·3 | 9·0 g |
| 7·9‡ | | | 14·0 | 51·9 | 8·0 g |
| 10·0‡ | | 5 | 36·0 | 56·5 | |
| 7·9‡ | | | 57·1 | 50·7 | 8·0 g |
| 9·8‡ | | 6 | 5·5 | 45·9 | |
| 9·4‡ | | | 53·0 | 52·5 | |
| 10·4 | | 7 | 5·3 | 6·4 | |
| 9·2‡ | | | 14·5 | 32·5 | |
| 10·0‡ | | | 27·1 | 42·7 | |
| 9·4‡ | | 8 | 24·4 | 41·4 | |
| 9·6‡ | | | 29·0 | 56·2 | |
| 10·3 | | | 38·8 | 20·5 | |
| 9·3‡ | | | 47·5 | 38·3 | g |
| 10·4 | | | 49·8 | 26·6 | |
| 10·0 | | 9 | 55·3 | 5·6 | |
| 9·9 | | | 56·8 | 19·9 | |
| 9·0 | | | 59·6 | 2·8 | 9·0 g |
| 9·4‡ | | 10 | 12·4 | 32·7 | g |
| 10·2‡ | | | 24·6 | 49·5 | |
| 10·2 | | | 33·8 | 15·6 | |
| 10·2‡ | | | 40·0 | 55·7 | |
| 9·6 | | 11 | 6·3 | 10·1 | |
| 9·2 | | | 9·3 | 17·2 | 9·0 g |
| 10·4 | | | 29·8 | 16·3 | |
| 10·4 | | 12 | 14·3 | 22·5 | |
| 9·1 | | | 34·3 | 24·1 | g |
| 8·3 | | | 34·7 | 0·6 | g |
| 9·0‡ | | 13 | 20·6 | 39·3 | g |
| 9·6‡ | | 14 | 3·1 | 57·5 | |
| 9·1 | | 15 | 17·5 | 14·6 | g |
| 9·6 | | | 22·5 | 28·5 | |
| 8·8 | | | 24·5 | 13·1 | 9·0 g |
| 9·0‡ | | | 25·0 | 54·9 | g |
| 10·3 | | | 44·5 | 23·6 | |
| 9·9 | | 16 | 3·0 | 20·2 | |
| 10·2 | | 17 | 9·0 | 45·8 | |
| 10·3 | | | 19·5 | 4·7 | |
| 10·2 | | | 26·0 | 42·3 | |
| 8·0 | | 18 | 1·5 | 9·0 | 9·0 g |
| 10·0 | | | 11·5 | 0·1 | |
| 8·0 | | | 45·5 | 21·2 | 8·5 g |
| 10·0 | | | 49·0 | 26·9 | |
| 8·6‡ | | 19 | 48·1 | 36·0 | 9·0 g |
| 9·1 | | 20 | 46·5 | 0·9 | 9·0 g |
| 10·0‡ | | 21 | 6·2 | 37·2 | |
| 9·8 | | | 12·0 | 11·0 | |
| 9·7‡ | | | 33·8 | 52·4 | |
| 10·4 | | | 49·5 | 9·3 | |
| 10·4 | | | 52·5 | 36·6 | |
| 9·5 | | 22 | 42·8 | 28·5 | |

## 2401—2460.

| mag. | h (19h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 10·4 | 19 | 24 | 17·0 | 37·7 | |
| 10·3 | | | 20·0 | 23·3 | |
| 10·0 | | | 40·9 | 0·8 | |
| 8·2 | | 25 | 3·0 | 4·0 | 9·0 g |
| 10·0 | | | 13·0 | 8·4 | |
| 9·4 | | | 17·0 | 22·9 | |
| 9·2 | | | 21·1 | 28·1 | |
| 9·2‡ | | | 40·4 | 35·8 | 9·0 g |
| 9·2 | | | 53·5 | 17·6 | g |
| 10·0‡ | | 26 | 55·4 | 58·1 | |
| 9·0‡ | | 27 | 3·4 | 43·2 | g |
| 10·4 | | | 28·0 | 41·7 | |
| 9·0 | | | 44·4 | 1·7 | g |
| 9·1 | | 28 | 1·5 | 27·3 | 9·5 g |
| 8·8 | | | 13·0 | 29·6 | 9·0 g |
| 10·4 | | | 22·8 | 4·7 | |
| 10·4 | | | 30·3 | 30·9 | |
| 10·4 | | | 37·8 | 3·5 | |
| 9·0 | | | 53·8 | 9·4 | g |
| 8·7‡ | | 29 | 7·8 | 32·4 | 9·0 g |
| 10·0 | | | 13·8 | 24·0 | |
| 10·4 | | | 34·8 | 14·7 | |
| 9·6‡ | | | 35·9 | 47·9 | g |
| 10·2 | | | 38·8 | 24·3 | |
| 10·3 | | | 41·6 | 2·3 | |
| 10·3 | | | 50·8 | 36·1 | |
| 10·3 | | | 52·8 | 45·1 | |
| 9·4 | | 30 | 44·1 | 1·6 | |
| 9·0‡ | | | 47·3 | 36·5 | g |
| 10·0 | | | 54·3 | 11·0 | |
| 10·2 | | 31 | 21·8 | 59·0 | |
| 10·4 | | | 40·8 | 7·6 | |
| 9·7† | | | 47·4 | 59·0 | |
| 8·8 | | | 51·3 | 15·9 | 9·0 g |
| 9·3† | | 32 | 35·0 | 47·0 | |
| 8·5† | | 33 | 2·9 | 42·4 | g |
| 10·2 | | | 18·3 | 27·7 | |
| 9·0† | | | 22·1 | 46·6 | |
| 9·8† | | | 24·9 | 44·0 | |
| 9·7† | | 34 | 21·8 | 52·2 | |
| 10·4 | | | 25·3 | 25·2 | |
| 10·0 | | | 35·8 | 14·5 | |
| 9·6 | | | 41·0 | 29·1 | |
| 10·3 | | | 44·8 | 11·8 | |
| 6·0† | | | 58·1 | 48·2 | 6·0 GSg |
| 10·3 | | 35 | 3·8 | 56·4 | |
| 9·2 | | | 24·8 | 6·1 | Gg |
| 9·0 | | | 41·8 | 10·9 | g |
| 9·2† | | 36 | 1·4 | 52·5 | |
| 9·6† | | | 2·4 | 47·4 | |
| 9·8† | | | 5·9 | 56·4 | |
| 8·8 | | | 38·8 | 4·6 | S |
| 9·4 | | 37 | 10·3 | 21·0 | |
| 10·3 | | 38 | 15·3 | 32·9 | |
| 9·5 | | | 27·3 | 20·1 | |
| 10·3 | | | 49·8 | 32·1 | |
| 8·0† | | | 54·8 | 47·0 | Gg |
| 10·3 | | | 57·8 | 15·9 | |
| 10·0 | | 39 | 0·3 | 20·3 | |
| 8·8† | | | 43·3 | 54·7 | g |



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## 2461—2520.

| mag. | h (19h.—20h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9.2† | 19 | 39 | 57.8 | 49.6 | g |
| 9.7† | | 40 | 17.8 | 38.9 | |
| 10.4 | | | 24.5 | 6.4 | |
| 10.4 | | | 56.5 | 8.7 | |
| 10.2 | | 41 | 10.0 | 19.1 | |
| 10.3 | | | 23.0 | 2.5 | |
| 8.4† | | 42 | 1.2 | 40.5 | 9.0 g |
| 10.0 | | | 22.0 | 14.9 | |
| 9.9 | | | 27.0 | 6.2 | |
| 8.2 | | 43 | 0.5 | 26.1 | 8.0 GSg |
| 9.7† | | | 36.2 | 35.3 | |
| 9.6† | | | 36.9 | 32.1 | |
| 9.2† | | 45 | 50.8 | 50.0 | |
| 10.4 | | | 59.0 | 37.0 | |
| 9.6 | | 46 | 13.0 | 17.9 | |
| 9.5† | | 47 | 15.2 | 45.3 | |
| 10.4 | | | 19.5 | 40.7 | |
| 10.4 | | | 22.5 | 55.9 | |
| 9.7 | | | 25.5 | 25.8 | |
| 9.8† | | 48 | 26.4 | 53.7 | |
| 10.3 | | | 50.0 | 5.0 | |
| 9.0 | | 49 | 45.3 | 12.5 | g |
| 9.3† | | 50 | 3.2 | 40.8 | |
| 9.5 | | | 26.5 | 18.4 | |
| 9.4 | | | 52.2 | 0.3 | |
| 9.2† | | 52 | 0.1 | 49.2 | |
| 9.1 | | | 49.0 | 27.8 | g |
| 10.4 | | | 57.5 | 46.6 | |
| 9.2 | | 53 | 31.0 | 31.1 | g |
| 8.4† | | 54 | 4.2 | 32.5 | 9.0 g |
| 9.4† | | | 10.1 | 54.6 | |
| 10.0▬ | | | 18.0 | 10.8 | |
| 9.0 | | | 51.0 | 1.3 | 9.0 g |
| 9.8† | | 55 | 7.7 | 57.3 | |
| 9.7† | | 56 | 9.7 | 34.4 | |
| 8.6 | | | 54.5 | 0.0 | 8.5 GSg |
| 9.5† | | 57 | 11.7 | 43.3 | |
| 9.6 | | | 21.5 | 9.4 | |
| 9.0 | | | 39.5 | 1.7 | 9.0 g |
| 9.3† | | 58 | 2.3 | 58.9 | |
| 8.7† | | 59 | 26.6 | 55.8 | |
| 9.7† | 20 | 0 | 13.1 | 59.1 | |
| 9.3† | | 2 | 16.1 | 52.9 | |
| 9.2† | | | 33.8 | 34.9 | |
| 8.3† | | 3 | 9.1 | 33.4 | 8.5 g |
| 9.2 | | | 24.5 | 2.0 | |
| 9.5 | | 4 | 33.0 | 29.1 | ? |
| 9.8† | | 6 | 4.6 | 39.3 | |
| 9.6† | | | 37.1 | 49.6 | |
| 9.8† | | 7 | 12.5 | 57.1 | |
| 8.6† | | 8 | 33.0 | 37.5 | g |
| 9.3† | | | 50.0 | 37.9 | g |
| 9.0 | | 9 | 30.0 | 25.3 | 9.0 g |
| 8.7† | | 10 | 51.0 | 35.3 | g |
| 8.2 | | 11 | 18.0 | 3.1 | 8.0 GSg |
| 8.4† | | 12 | 2.0 | 58.9 | 9.0 g |
| 9.4 | | | 27.0 | 5.9 | g |
| 9.0† | | | 33.5 | 53.8 | |
| 8.9† | | 13 | 4.0 | 52.2 | |
| 9.3† | | 14 | 24.0 | 52.7 | |

## 2521—2580.

| mag. | h (20h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9.8† | 20 | 15 | 35.5 | 29.2 | |
| 9.3 | | 16 | 16.0 | 3.8 | g |
| 9.3† | | | 34.3 | 47.6 | |
| 9.0 | | | 36.5 | 2.6 | g |
| 9.4† | | 17 | 55.8 | 52.9 | |
| 7.2 | | 18 | 54.5 | 16.5 | 7.5 GSg |
| 9.2 | | | 56.2 | 29.2 | g |
| 9.5 | | | 57.5 | 0.9 | g |
| 9.4† | | 20 | 31.3 | 54.1 | |
| 9.3† | | | 32.2 | 58.7 | |
| 8.9† | | | 33.8 | 47.3 | g |
| 9.8† | | 21 | 22.3 | 52.0 | |
| 9.2† | | 22 | 57.8 | 41.4 | |
| 9.8 | | 23 | 13.5 | 21.9 | |
| 9.8† | | | 15.3 | 47.1 | |
| 9.4† | | | 48.3 | 54.1 | |
| 8.5† | | 24 | 56.3 | 51.1 | g |
| 8.6 | | | 58.5 | 3.9 | g |
| 9.8† | | 26 | 52.9 | 44.9 | |
| 10.3‡ | | 27 | 7.5 | 19.8 | |
| 10.3‡ | | 28 | 8.0 | 12.8 | g |
| 10.3‡ | | 29 | 0.0 | 59.0 | |
| 10.3‡ | | | 37.1 | 34.3 | |
| 7.2‡ | | | 48.2 | 22.0 | 7.5 GSg |
| 10.3‡ | | | 49.5 | 17.5 | g |
| 9.0 | | 30 | 2.5 | 9.5 | 9.0 g |
| 10.3‡ | | | 5.2 | 44.4 | |
| 9.4‡ | | 31 | 47.0 | 53.1 | g |
| 9.4‡ | | 32 | 9.5 | 25.5 | |
| 8.6‡ | | | 29.6 | 48.7 | g |
| 8.2‡ | | 33 | 25.0 | 23.8 | Ggg |
| 9.6▬ | | | 31.5 | 9.5 | g |
| 10.3‡ | | 34 | 28.0 | 18.6 | |
| 7.4‡ | | 35 | 42.5 | 39.8 | GSg |
| 6.7‡ | | | 47.6 | 59.2 | 7.5 GSg |
| 9.4‡ | | | 56.0 | 17.2 | |
| 10.2‡ | | 36 | 51.0 | 39.8 | |
| 10.3‡ | | 38 | 29.0 | 44.8 | |
| 9.9‡ | | | 46.5 | 57.5 | g |
| 10.3‡ | | 39 | 0.1 | 20.5 | |
| 9.7‡ | | | 21.6 | 48.6 | |
| 9.4‡ | | 40 | 10.6 | 50.6 | |
| 10.3‡ | | | 21.1 | 43.4 | |
| 9.5‡ | | | 34.6 | 18.1 | |
| 10.3‡ | | 41 | 35.7 | 31.9 | |
| 9.4‡ | | | 38.2 | 56.9 | g |
| 9.4‡ | | 42 | 33.1 | 36.6 | g |
| 8.9 | | 43 | 59.5 | 0.2 | |
| 9.6‡ | | 44 | 12.8 | 34.9 | g |
| 9.4‡ | | | 48.6 | 37.1 | g |
| 9.0‡ | | | 53.1 | 45.7 | g |
| 10.3‡ | | 46 | 18.6 | 36.8 | |
| 10.3‡ | | 48 | 10.1 | 22.5 | |
| 9.8‡ | | | 44.6 | 38.9 | g |
| 10.0 | | | 55.5 | 12.9 | g |
| 8.4‡ | | 49 | 25.1 | 18.9 | g |
| 10.3‡ | | 50 | 11.3 | 28.8 | |
| 10.3‡ | | 52 | 41.8 | 41.0 | |
| 9.4‡ | | 53 | 45.3 | 45.3 | g |
| 10.3‡ | | 55 | 18.3 | 41.9 | |

## 2581—2640.

| mag. | h (20h.—21h.) | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9.0 | 20 | 56 | 11.5 | 0.0 | |
| 9.0 | | 57 | 45.5 | 6.6 | g |
| 10.2‡ | | 58 | 8.8 | 42.3 | |
| 10.0‡ | | | 20.3 | 31.6 | |
| 10.3‡ | | | 25.8 | 35.9 | |
| 10.3‡ | | 59 | 22.8 | 23.5 | |
| 10.3‡ | | | 30.3 | 32.7 | |
| 10.3‡ | 21 | 1 | 52.3 | 17.3 | |
| 8.9 | | 2 | 41.0 | 4.1 | g |
| 9.4‡ | | 4 | 17.3 | 45.3 | 8.2 Gg |
| 10.3‡ | | 5 | 14.8 | 53.9 | |
| 8.6‡ | | 6 | 6.3 | 39.8 | 8.5 g |
| 9.5‡ | | 8 | 1.3 | 49.4 | |
| 10.0‡ | | | 30.8 | 38.3 | |
| 8.1 | | 10 | 18.0 | 5.9 | 7.5 GSg |
| 10.3‡ | | 11 | 57.3 | 50.5 | |
| 10.3‡ | | 12 | 19.3 | 48.3 | |
| 7.0‡ | | 13 | 20.4 | 19.9 | 6.5 GSg |
| 10.3‡ | | | 21.3 | 41.6 | |
| 10.3‡ | | | 21.8 | 56.0 | g |
| 10.2‡ | | 14 | 40.8 | 16.9 | |
| 10.3‡ | | | 51.3 | 51.2 | |
| 8.2‡ | | 15 | 8.8 | 25.6 | 8.5 g |
| 10.0 | | | 16.0 | 4.7 | |
| 9.6‡ | | | 38.8 | 19.7 | |
| 9.0▬ | | 17 | 14.0 | 4.8 | g |
| 10.3‡ | | | 25.8 | 22.9 | |
| 10.0‡ | | | 49.3 | 57.5 | g |
| 9.8‡ | | 18 | 27.4 | 32.3 | |
| 9.8‡ | | 19 | 47.8 | 55.5 | |
| 8.3‡ | | 20 | 13.8 | 43.5 | 8.8 g |
| 10.3‡ | | 21 | 34.3 | 30.0 | |
| 10.3‡ | | | 42.8 | 47.1 | |
| 10.3‡ | | | 47.8 | 23.5 | |
| 10.3‡ | | 22 | 26.8 | 43.7 | |
| 10.2‡ | | | 43.4 | 15.8 | G |
| 9.2‡ | | 23 | 3.8 | 43.3 | 9.5 g |
| 10.3‡ | | 24 | 44.2 | 18.2 | |
| 10.2‡ | | 26 | 44.4 | 17.1 | g |
| 10.2‡ | | | 52.6 | 16.1 | |
| 10.3‡ | | 28 | 12.2 | 45.9 | |
| 9.7‡ | | | 40.4 | 19.5 | |
| 8.4‡ | | | 49.6 | 3.8 | GSg |
| 8.6‡ | | | 51.8 | 43.7 | g |
| 10.2‡ | | | 53.6 | 26.1 | |
| 10.3‡ | | | 55.7 | 7.8 | |
| 10.3‡ | | 29 | 4.2 | 31.5 | |
| 10.3‡ | | | 23.2 | 7.5 | |
| 10.3‡ | | | 34.6 | 10.0 | |
| 9.5‡ | | | 52.4 | 40.4 | g |
| 10.3‡ | | 30 | 57.2 | 41.0 | |
| 10.3‡ | | 31 | 19.2 | 16.9 | |
| 9.4† | | 33 | 44.0 | 50.8 | |
| 9.6† | | 34 | 24.5 | 32.0 | |
| 9.6 | | 35 | 6.0 | 24.6 | |
| 9.8 | | 36 | 16.0 | 19.0 | |
| 10.0 | | | 21.0 | 28.0 | g |
| 10.0 | | | 34.0 | 33.1 | |
| 9.0† | | | 45.0 | 32.0 | 10.0 g |
| 9.6† | | 37 | 38.0 | 40.1 | 9.5 |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 19 | 30 | + 172 + 0.10 d | + 3.2 |
| | 40 | 170 + 0.10 | 3.5 |
| | 50 | 168 + 0.10 | 3.9 |
| 20 | 0 | 166 + 0.09 | 4.2 |
| | 10 | 164 + 0.09 | 4.5 |
| | 20 | 161 + 0.09 | 4.8 |
| | 30 | 158 + 0.09 | 5.1 |
| | 40 | 156 + 0.08 | 5.4 |
| | 50 | 153 + 0.08 | 5.6 |
| 21 | 0 | 150 + 0.08 | 5.9 |
| | 10 | 146 + 0.07 | 6.2 |
| | 20 | 143 + 0.07 | 6.4 |
| | 30 | 139 + 0.07 | 6.6 |
| | 40 | + 136 + 0.06 | + 6.8 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | (s) | δ (′) |
|---|---|---|---|---|
| 21 | 30 | + 139 | + 0·07 d | + 6·6 |
| | 40 | 136 | + 0·06 | 6·8 |
| | 50 | 132 | + 0·06 | 7·0 |
| 22 | 0 | 128 | + 0·05 | 7·2 |
| | 10 | 124 | + 0·05 | 7·4 |
| | 20 | 120 | + 0·05 | 7·6 |
| | 30 | 116 | + 0·04 | 7·7 |
| | 40 | 112 | + 0·04 | 7·9 |
| | 50 | 108 | + 0·03 | 8·0 |
| 23 | 0 | 103 | + 0·03 | 8·1 |
| | 10 | 99 | + 0·02 | 8·2 |
| | 20 | 95 | + 0·02 | 8·2 |
| | 30 | 90 | + 0·01 | 8·3 |
| | 40 | 86 | + 0·01 | 8·3 |
| | 50 | 81 | ·0·00 | 8·3 |
| 0 | 0 | + 77 | 0·00 | + 8·4 |

d = minutes of decl.

## 2641—2695.

| mag. | 21h.—22h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·6 | 21 | 38 | 14·0 | 22·0 | *g* |
| 9·6† | | 39 | 22·0 | 40·7 | *g* |
| 8·2† | | | 51·0 | 43·1 | 8·0 GS*g* |
| 10·0 | | | 56·0 | 5·0 | |
| 9·6† | | 40 | 16·0 | 41·3 | |
| 10·0 | | | 47·0 | 24·5 | |
| 9·4† | | 42 | 1·7 | 57·5 | |
| 7·9† | | | 39·0 | 52·4 | *g* |
| 9·3† | | 43 | 16·0 | 39·4 | |
| 9·8 | | 44 | 26·0 | 2·0 | |
| 8·9† | | 46 | 35·0 | 34·2 | 9·0 *g* |
| 9·3 | | 48 | 13·5 | 20·5 | *g* |
| 9·1 | | | 27·5 | 22·3 | *g* |
| 9·8 | | 49 | 13·0 | 26·3 | *g* |
| 9·6† | | 50 | 25·0 | 45·1 | |
| 9·8 | | 52 | 2·0 | 10·3 | *g* |
| 9·1 | | | 5·0 | 7·9 | 9·0 *g* |
| 10·0 | | 53 | 0·0 | 8·0 | |
| 9·6 | | 56 | 3·0 | 14·1 | |
| 9·6† | | | 3·0 | 55·5 | *g* |
| 10·0 | | | 46·0 | 29·4 | |
| 9·0 | | | 55·0 | 13·9 | 9·0 *g* |
| 8·4† | 22 | 0 | 1·0 | 53·1 | *g* |
| 9·6† | | | 16·0 | 48·2 | *g* |
| 7·5† | | | 17·0 | 35·1 | 8·5 *g* |
| 9·8 | | 2 | 16·5 | 9·7 | |
| 9·6 | | 3 | 8·5 | 7·2 | 9·0 *g* |
| 9·6– | | | 23·0 | 13·6 | *g* |
| 10·2 | | | 48·9 | 41·2 | |
| 10·4 | | 4 | 28·9 | 48·0 | |
| 10·4 | | | 29·4 | 29·4 | |
| 10·4 | | | 53·4 | 8·5 | |
| 10·4 | | 6 | 1·9 | 26·5 | |
| 9·4 | | 7 | 3·2 | 7·2 | *g* |
| 9·0 | | | 28·7 | 35·4 | *g* |
| 10·0 | | | 42·4 | 36·4 | *g* |
| 9·5 | | | 42·6 | 57·2 | 10·0 *g* |
| 10·0 | | | 45·9 | 33·7 | |
| 9·6 | | 9 | 3·9 | 54·1 | 10·0 *g* |
| 8·7 | | | 17·2 | 1·8 | 9·0 *g* |
| 9·3 | | | 18·7 | 58·4 | 10·0 *g* |
| 9·8 | | | 40·9 | 12·4 | |
| 9·3 | | | 42·9 | 53·9 | 9·5 *g* |
| 9·5 | | 10 | 7·7 | 30·4 | |
| 10·4 | | 12 | 8·9 | 13·6 | |
| 8·9 | | | 48·4 | 6·2 | *g* |
| 10·4 | | | 56·9 | 36·9 | |
| 10·0 | | 13 | 18·9 | 25·9 | |
| 9·4 | | | 30·9 | 22·9 | 9·0 *g*· |
| 6·0 | | | 52·7 | 51·9 | 5·5 GSc*g* |
| 9·4 | | 14 | 22·7 | 27·9 | *g* |
| 10·4 | | 15 | 26·9 | 51·9 | |
| 9·6 | | 18 | 24·9 | 9·4 | |
| 10·4 | | 19 | 41·4 | 24·9 | |
| 10·2 | | | 45·9 | 45·9 | |

## 2696—2749.

| mag. | 22h.—23h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 10·4 | 22 | 20 | 17·9 | 14·6 | |
| 9·8 | | 21 | 44·5 | 24·5 | |
| 10·2 | | 24 | 16·5 | 29·3 | |
| 10·4 | | | 21·0 | 38·2 | |
| 9·5 | | 26 | 15·0 | 16·1 | |
| 8·8 | | 27 | 15·5 | 15·6 | 8·5 G*g* |
| 10·4 | | | 16·0 | 8·8 | |
| 9·5 | | | 18·5 | 54·4 | |
| 9·8 | | 28 | 2·0 | 13·7 | |
| 9·6 | | | 23·5 | 59·4 | 9·5 *g* |
| 10·0 | | | 58·5 | 47·5 | |
| 9·2 | | 29 | 48·5 | 53·0 | *g* |
| 10·4 | | | 53·0 | 5·0 | |
| 10·4 | | 30 | 12·0 | 23·0 | |
| 9·8 | | 31 | 32·7 | 42·9 | |
| 9·0 | | 32 | 32·5 | 10·7 | 7·5 G*g* |
| 9·7 | | | 32·5 | 31·7 | |
| 10·4 | | 33 | 22·0 | 21·2 | |
| 9·0 | | | 26·5 | 47·3 | *g* |
| 10·2 | | | 43·0 | 43·0 | |
| 8·6 | | 34 | 15·0 | 15·4 | 8·0 *g* |
| 10·4 | | | 42·0 | 26·5 | |
| 10·4 | | | 52·0 | 3·3 | |
| 10·4 | | 37 | 54·5 | 1·8 | |
| 9·0 | | 38 | 32·0 | 18·3 | *g* |
| 10·0 | | 39 | 47·4 | 46·3 | |
| 10·4 | | | 56·9 | 16·1 | |
| 8·0 | | 42 | 5·4 | 5·2 | 8·0 G*g*g |
| 10·0 | | | 17·4 | 54·8 | *g* |
| 9·3 | | 43 | 0·9 | 20·7 | *g* |
| 8·4 | | | 5·7 | 32·8 | 8·5 *g* |
| 10·4 | | 44 | 9·9 | 16·2 | |
| 10·0 | | | 53·9 | 23·2 | |
| 10·0 | | 45 | 18·9 | 18·0 | |
| 9·0 | | | 24·7 | 50·9 | 8·5 *g* |
| 10·2 | | 46 | 24·0 | 2·9 | |
| 9·8 | | | 30·4 | 27·7 | |
| 9·0 | | 47 | 0·7 | 37·9 | *g* |
| 9·8 | | | 56·9 | 27·7 | |
| 9·5 | | 48 | 53·8 | 0·3 | |
| 8·0 | | 49 | 2·9 | 23·1 | 8·0 *g* |
| 9·3 | | 50 | 11·7 | 13·4 | *g* |
| 10·0 | | | 17·4 | 58·5 | |
| 8·2 | | | 26·3 | 30·2 | 7·5 G*g* |
| 10·4 | | | 29·5 | 32·5 | |
| 9·8 | | | 43·0 | 49·4 | |
| 10·0 | | 52 | 2·5 | 24·3 | |
| 8·9 | | 53 | 33·5 | 41·2 | 8·5 *g* |
| 10·4 | | | 59·5 | 27·8 | |
| 10·2 | | 54 | 9·0 | 23·4 | |
| 10·4– | | | 50·0 | 6·2 | |
| 8·8 | | 55 | 52·5 | 3·2 | 9·5 : |
| 9·9 | | 56 | 12·0 | 25·8 | *g* |
| 9·2 | 23 | 0 | 26·0 | 27·1 | *g* |

## 2750—2803.

| mag. | 23h. h | m | s | −72° ′ | |
|---|---|---|---|---|---|
| 9·4‡ | 23 | 1 | 42·0 | 53·4 | |
| 9·8 | | 5 | 50·0 | 23·9 | *g* |
| 9·0 | | 6 | 9·0 | 2·0 | *g* |
| 9·5‡ | | 7 | 14·0 | 45·7 | *g* |
| 9·5‡ | | 8 | 16·0 | 49·1 | *g* |
| 9·5‡ | | 10 | 20·0 | 44·9 | *g* |
| 8·6 | | 13 | 39·0 | 15·5 | 8·0 G*g* |
| 9·5‡ | | 15 | 8·0 | 49·9 | |
| 9·5 | | 16 | 3·0 | 34·1 | *g* |
| 7·2‡ | | | 22·5 | 51·0 | 7·5 GS*g* |
| 8·4 | | | 58·0 | 18·8 | 8·5 *g* |
| 9·2 | | 18 | 35·0 | 26·9 | *g* |
| 9·0 | | 22 | 9·2 | 21·0 | 9·0 *g* |
| 10·0† | | 23 | 30·4 | 54·3 | *g* |
| 11·1† | | 26 | 12·9 | 12·0 | |
| 10·2† | | | 13·4 | 29·8 | |
| 8·6† | | | 20·9 | 47·2 | 9·5 *g* |
| 11·0† | | 27 | 10·9 | 40·0 | |
| 9·8† | | 31 | 59·0 | 24·8 | |
| 10·6† | | 32 | 27·9 | 9·5 | |
| 11·1† | | | 28·4 | 27·8 | |
| 10·0† | | | 32·9 | 53·9 | |
| 11·0† | | 33 | 18·9 | 56·9 | |
| 9·4† | | 34 | 1·5 | 40·9 | *g* |
| 11·1† | | | 19·9 | 55·0 | |
| 11·1† | | 35 | 55·6 | 24·9 | |
| 9·8† | | 36 | 3·4 | 47·7 | *g* |
| 10·4† | | | 9·8 | 30·9 | |
| 9·8† | | 37 | 16·3 | 17·0 | *g* |
| 11·0† | | | 54·3 | 42·4 | |
| 11·1† | | 38 | 23·8 | 36·0 | |
| 9·8† | | 39 | 27·8 | 40·3 | G*g* |
| 10·4† | | | 32·8 | 40·3 | G*g* |
| 7·6† | | 40 | 21·9 | 0·1 | 7·0 GS*g* |
| 9·2† | | | 55·6 | 2·4 | 9·0 *g* |
| 11·0† | | 41 | 15·3 | 58·3 | |
| 9·8† | | | 50·0 | 0·6 | |
| 10·2† | | 43 | 53·8 | 23·0 | |
| 8·9† | | 46 | 46·3 | 52·8 | 9·5 G*g* |
| 9·8† | | 49 | 35·8 | 41·5 | |
| 9·8† | | 50 | 2·3 | 29·9 | *g* |
| 9·8† | | 51 | 13·6 | 28·3 | *g* |
| 10·4† | | 52 | 21·8 | 23·8 | |
| 9·2† | | 53 | 16·8 | 12·0 | *g* |
| 9·4† | | 54 | 1·8 | 53·9 | 9·5 *g* |
| 10·4† | | | 42·3 | 9·3 | |
| 11·1† | | | 47·3 | 42·8 | |
| 9·8† | | 56 | 37·3 | 40·2 | |
| 9·8† | | 58 | 12·8 | 35·3 | *g* |
| 8·9† | | | 14·4 | 23·4 | *g* |
| 5·2† | | | 19·7 | 7·8 | GSc*g* |
| 9·8† | | 59 | 10·6 | 27·3 | |
| 11·0† | | | 26·6 | 58·4 | |
| 9·8† | | | 28·6 | 27·5 | |



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# ZONE—73°.

## 1—40.

| mag. | h (0h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.8 | 0 | 2 | 56.9 | 9.3 | |
| 9.8 | | 4 | 14.7 | 49.7 | 9.2 *g* |
| 11.1 | | | 26.7 | 58.5 | |
| 6.9 | | | 30.7 | 55.4 | 7.0 GSc*g* |
| 9.8 | | 5 | 17.2 | 18.0 | *g* |
| 9.8 | | | 35.2 | 50.1 | *g* |
| 11.1 | | | 38.7 | 9.4 | |
| 11.1 | | 6 | 7.2 | 49.4 | |
| 10.2 | | | 50.2 | 47.2 | |
| 10.2 | | 7 | 11.7 | 4.1 | |
| 11.1 | | 8 | 13.7 | 28.4 | |
| 10.6 | | | 27.7 | 25.9 | |
| 11.1 | | 10 | 6.2 | 4.6 | |
| 10.8 | | 11 | 34.7 | 7.1 | |
| 9.8 | | 14 | 0.2 | 38.3 | |
| 9.2 | | | 8.7 | 29.9 | 9.5 *g* |
| 10.2 | | 15 | 42.7 | 41.5 | |
| 10.4 | | | 56.7 | 54.6 | |
| 8.6 | | 16 | 59.7 | 43.5 | 9.0 *g* |
| 10.6 | | 17 | 41.2 | 19.6 | |
| 9.8 | | 18 | 23.2 | 0.7 | 10.0 |
| 10.8 | | | 59.2 | 29.0 | |
| 10.2 | | 19 | 3.2 | 17.5 | |
| 9.0 | | | 30.2 | 18.6 | 9.0 G*g* |
| 10.6 | | | 58.2 | 27.2 | |
| 10.2 | | 20 | 20.2 | 11.5 | |
| 11.1 | | 21 | 41.8 | 2.6 | |
| 11.0 | | | 51.3 | 22.1 | |
| 10.2 | | 22 | 33.8 | 23.5 | |
| 11.1 | | 23 | 2.3 | 24.6 | |
| 10.8 | | | 34.8 | 12.5 | |
| 10.6 | | 24 | 7.8 | 22.1 | |
| 9.8 | | 25 | 8.4 | 46.5 | 9.5 G |
| 11.1 | | 26 | 49.8 | 52.3 | |
| 11.1 | | 27 | 58.6 | 33.3 | |
| 11.0 | | 29 | 18.1 | 51.0 | |
| 11.0 | | | 27.6 | 14.0 | |
| 10.2 | | | 41.0 | 31.9 | 9.5 *g* |
| 8.4 | | 30 | 44.3 | 54.7 | 8.0 G*g* |
| 9.8 | | 31 | 6.6 | 32.1 | 8.5 G*g* |

## 41—80.

| mag. | h (0h.—1h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.5 | 0 | 33 | 13.7 | 52.9 | |
| 6.9 | | | 46.0 | 49.5 | 7.0 GSc*g* |
| 9.4 | | 36 | 38.5 | 48.0 | 10.0 |
| 9.2 | | 39 | 15.5 | 3.0 | *g* |
| 9.7 | | 40 | 19.0 | 55.0 | *g* |
| 9.3 | | 41 | 48.0 | 16.8 | 8.5 G*g* |
| 9.2 | | 42 | 28.0 | 30.5 | 9.5 |
| 9.6 | | 43 | 16.0 | 33.0 | |
| 9.4 | | 46 | 10.5 | 0.2 | *g* |
| 9.4 | | | 58.0 | 21.5 | 9.5 G*g* |
| 9.8 | | 47 | 5.0 | 42.1 | |
| 9.9 | | 48 | 30.0 | 47.8 | |
| 9.8 | | | 42.0 | 18.8 | |
| 9.9 | | | 45.5 | 47.4 | *g* |
| 9.0 | | 51 | 57.0 | 48.0 | 9.2 *g* |
| neb. | | 52 | 2.0 | 8.5 | GS |
| 9.5 | | | 30.0 | 40.0 | |
| 8.2 | | | 36.0 | 44.7 | 8.5 GS*g* |
| 8.5 | | 56 | 48.0 | 22.0 | 8.0 GS*g* |
| 9.7 | | 59 | 10.0 | 2.2 | 9.5 *g* |
| 9.6 | 1 | 0 | 18.0 | 4.3 | |
| 9.3 | | | 32.0 | 52.0 | *g* |
| 8.0 | | 1 | 22.0 | 13.0 | 8.5 GS*g* |
| 9.5 | | 3 | 26.0 | 8.1 | |
| 9.1 | | 4 | 22.0 | 40.9 | 9.0 G*g* |
| 9.9 | | 5 | 17.0 | 12.1 | |
| 6.8 | | 6 | 19.0 | 37.4 | 7.0 GSc*g*r |
| 9.8 | | | 35.0 | 25.0 | |
| 9.0 | | 7 | 26.0 | 40.9 | 9.0G*g* |
| 9.9 | | 11 | 1.0 | 25.1 | |
| 9.8 | | | 27.0 | 55.2 | *g* |
| 8.9 | | 14 | 32.0 | 56.3 | 10.0 *g* |
| 9.1 | | 15 | 0.0 | 22.7 | G*g* |
| 7.2 | | 16 | 55.0 | 24.2 | 7.5 GS*g* |
| 8.6 | | 18 | 1.0 | 41.2 | 9.0 GS*g* |
| 9.0 | | | 9.0 | 37.9 | 9.5 *g* |
| 9.7 | | 20 | 12.0 | 5.1 | *g* |
| 9.9 | | 22 | 6.0 | 6.9 | |
| 9.9 | | | 10.0 | 24.0 | *g* |
| 8.5 | | 23 | 29.5 | 24.0 | 9.0 G*g* |

## 81—120.

| mag. | h (1h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.2 | 1 | 24 | 53.9 | 55.0 | 9.0 *g* |
| 10.9 | | 26 | 18.2 | 22.0 | |
| 10.2 | | | 26.7 | 37.2 | |
| 9.2 | | | 31.7 | 39.3 | |
| 8.8 | | 27 | 24.7 | 49.1 | 8.5 G*g* |
| 10.7 | | | 42.7 | 40.4 | |
| 10.2 | | 28 | 21.2 | 24.6 | |
| 10.9 | | | 39.2 | 26.5 | |
| 10.4 | | | 40.2 | 48.9 | |
| 10.8 | | 29 | 7.7 | 6.3 | |
| 10.9 | | 32 | 48.4 | 34.6 | |
| 8.9 | | 33 | 0.5 | 22.6 | 9.0 *g* |
| 9.2 | | | 13.5 | 28.3 | 9.0 *g* |
| 10.9 | | 35 | 50.9 | 20.3 | |
| 9.8 | | | 57.9 | 19.6 | |
| 9.4 | | 36 | 30.4 | 47.8 | 9.5 *g* |
| 10.9 | | 37 | 43.2 | 59.8 | |
| 10.2 | | | 57.9 | 30.2 | |
| 10.8 | | 39 | 13.9 | 5.6 | |
| 9.2 | | 40 | 42.9 | 45.9 | *g* |
| 10.9 | | | 43.4 | 11.6 | |
| 10.9 | | | 49.9 | 9.9 | |
| 10.0 | | 43 | 1.4 | 28.5 | *g* |
| 10.9 | | | 50.9 | 26.7 | *g* |
| 8.9 | | 45 | 46.9 | 14.4 | 9.0 *g* |
| 10.7 | | 46 | 11.9 | 32.8 | |
| 7.5 | | 47 | 2.4 | 2.0 | 8.5 GS*g* |
| 10.9 | | | 29.4 | 4.0 | |
| 10.2 | | 48 | 18.2 | 59.4 | |
| 10.7 | | | 23.9 | 35.4 | |
| 10.4 | | | 28.4 | 27.4 | |
| 10.9 | | | 40.9 | 34.3 | |
| 10.9 | | 49 | 13.9 | 14.8 | |
| 10.2 | | 50 | 27.4 | 10.3 | |
| 9.8 | | | 33.4 | 47.6 | |
| 10.2 | | | 51.4 | 8.2 | |
| 9.8 | | 51 | 59.9 | 47.1 | *g* |
| 10.4 | | 52 | 27.9 | 51.1 | |
| 10.9 | | | 33.4 | 27.5 | |
| 9.0 | | | 48.9 | 6.0 | 9.0 *g* |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0.00 d | + 8.4 |
| | 10 | 72 | − 0.01 | 8.3 |
| | 20 | 67 | − 0.01 | 8.3 |
| | 30 | 63 | − 0.02 | 8.3 |
| | 40 | 58 | − 0.02 | 8.2 |
| | 50 | 53 | − 0.03 | 8.2 |
| 1 | 0 | 49 | − 0.03 | 8.1 |
| | 10 | 44 | − 0.04 | 8.0 |
| | 20 | 39 | − 0.04 | 7.9 |
| | 30 | 35 | − 0.05 | 7.7 |
| | 40 | 31 | − 0.05 | 7.6 |
| | 50 | 26 | − 00.6 | 7.4 |
| 2 | 0 | + 22 | − 00.6 | + 7.2 |

d = minutes of decl.



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25 prec.

| h | m | | a (s s) | δ (′) |
|---|---|---|---|---|
| 1 | 50 | + | 26 − 0·06 d | + 7·4 |
| 2 | 0 | | 22 − 0·06 | 7·2 |
| | 10 | | 18 − 0·07 | 7·0 |
| | 20 | | 14 − 0·07 | 6·8 |
| | 30 | | 10 − 0·07 | 6·6 |
| | 40 | | 7 − 0·08 | 6·4 |
| | 50 | + | 3 − 0·08 | 6·2 |
| 3 | 0 | − | 1 − 0·09 | 5·9 |
| | 10 | | 4 − 0·09 | 5·6 |
| | 20 | | 7 − 0·09 | 5·4 |
| | 30 | | 10 − 0·10 | 5·1 |
| | 40 | | 13 − 0·10 | 4·8 |
| | 50 | | 15 − 0·10 | 4·5 |
| 4 | 0 | | 18 − 0·10 | 4·2 |
| | 10 | | 20 − 0·11 | 3·9 |
| | 20 | | 22 − 0·11 | 3·5 |
| | 30 | | 24 − 0·11 | 3·2 |
| | 40 | | 26 − 0·11 | 2·9 |
| | 50 | | 27 − 0·12 | 2·5 |
| 5 | 0 | | 29 − 0·12 | 2·2 |
| | 10 | | 30 − 0·12 | 1·8 |
| | 20 | | 31 − 0·12 | 1·5 |
| | 30 | | 32 − 0·12 | 1·1 |

d = minutes of decl.

## 121—180.

| mag. | h (1h.–2h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·4 | 1 | 53 | 40·7 | 58·4 | 9·5 g |
| 10·2 | | 54 | 26·4 | 17·5 | |
| 8·6 | | | 50·9 | 52·5 | 9·0 g |
| 8·8 | | 56 | 16·4 | 14·0 | 9·0 g |
| 10·4 | | | 31·9 | 23·6 | |
| 10·6 | | 57 | 3·4 | 20·3 | |
| 10·7 | | | 5·9 | 13·5 | |
| 9·8 | | | 7·9 | 45·7 | |
| 10·9 | | | 10·4 | 28·5 | |
| 10·4 | | 58 | 27·9 | 14·9 | |
| 10·2 | | | 55·4 | 5·5 | |
| 10·2 | | 59 | 57·2 | 57·0 | |
| 10·2 | 2 | 0 | 9·4 | 28·5 | |
| 10·9 | | 1 | 55·4 | 27·7 | |
| 10·4 | | 2 | 22·4 | 12·8 | |
| 10·9 | | | 39·4 | 24·8 | |
| 9·8 | | 3 | 3·9 | 43·5 | |
| 9·2 | | | 56·4 | 21·0 | g |
| 9·4 | | 4 | 4·4 | 11·0 | g |
| 10·2 | | | 47·2 | 54·1 | |
| 10·9 | | 6 | 24·2 | 35·0 | |
| 10·9 | | | 31·7 | 15·1 | |
| 10·9 | | 7 | 42·7 | 7·2 | |
| 10·9 | | 8 | 19·2 | 38·9 | |
| 8·8 | | | 23·7 | 5·0 | 9·0 Gg |
| 10·6 | | 9 | 56·2 | 59·7 | |
| 10·8 | | 10 | 13·2 | 48·1 | |
| 10·9 | | | 21·2 | 33·1 | |
| 8·3 | | | 25·2 | 15·9 | Gg |
| 10·7 | | 11 | 47·7 | 13·0 | |
| 10·9 | | 13 | 11·2 | 10·0 | |
| 10·6 | | 16 | 17·7 | 4·8 | |
| 10·9 | | 17 | 10·7 | 25·1 | |
| 10·2 | | | 16·7 | 24·9 | |
| 10·9 | | | 32·7 | 28·0 | |
| 10·4 | | 18 | 10·9 | 37·9 | |
| 9·2 | | | 54·4 | 24·1 | 9·5 g |
| 10·0 | | 19 | 4·6 | 2·5 | |
| 9·4 | | | 9·4 | 30·6 | 9·0 g |
| 10·9 | | | 19·4 | 31·2 | |
| 8·8 | | | 41·4 | 52·9 | 8·0 Gg |
| 10·0 | | 20 | 6·4 | 46·3 | g |
| 8·9 | | | 17·4 | 54·7 | 8·5 g |
| 10·0 | | | 45·9 | 45·6 | |
| 9·8 | | 21 | 15·4 | 17·8 | g |
| 9·8 | | | 46·9 | 16·8 | |
| 9·2 | | 22 | 35·9 | 7·9 | g |
| 9·2 | | | 39·4 | 45·0 | g |
| 10·9 | | 23 | 25·4 | 49·6 | |
| 10·9 | | | 59·4 | 46·6 | |
| 9·8 | | 26 | 14·9 | 19·8 | g |
| 10·4 | | | 53·9 | 5·8 | g |
| 8·7 | | 27 | 59·5 | 5·3 | 9·0 g |
| 9·4 | | 28 | 12·7 | 38·2 | |
| 8·6 | | | 58·7 | 48·7 | 9·5 Gg |
| 10·2 | | 29 | 43·2 | 23·8 | |
| 10·9 | | 30 | 40·7 | 39·9 | |
| 9·0 | | 32 | 8·4 | 14·5 | 9·0 g |
| 9·5 | | | 11·6 | 41·7 | g |
| 7·9 | | | 35·7 | 13·1 | 8·5 g |

## 181—240.

| mag. | h (2h.–3h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 10·4 – | 2 | 34 | 54·7 | 44·1 | |
| 9·3 | | 35 | 41·5 | 1·8 | |
| 8·3 | | 36 | 23·0 | 13·1 | g |
| 9·4 | | 37 | 33·7 | 59·5 | |
| 8·0 | | | 43·0 | 24·1 | 8·5 g |
| 9·7 | | 39 | 17·0 | 55·2 | g |
| 9·3 | | 40 | 34·7 | 58·3 | g |
| 9·3 | | 41 | 57·0 | 20·1 | 9·5 g |
| 9·2 | | 44 | 18·0 | 18·4 | g |
| 9·4 | | | 44·0 | 47·8 | |
| 8·2 | | 46 | 24·0 | 27·0 | 9·0 g |
| 8·6 | | 48 | 15·0 | 0·7 | g |
| 8·6 | | 49 | 9·0 | 17·0 | 8·5 g |
| 9·4 | | 53 | 23·0 | 15·0 | g |
| 7·8 | | 54 | 28·0 | 57·4 | 8·5 Gg |
| 9·7 | | 56 | 36·0 | 59·7 | g |
| 8·3 | | 57 | 49·5 | 2·7 | 8·8 g |
| 9·5 | | 59 | 21·0 | 38·9 | |
| 9·1 | 3 | 3 | 26·0 | 39·1 | 9·0 g |
| 9·3 | | 5 | 11·0 | 52·8 | g |
| 7·8 | | | 51·5 | 57·1 | 8·0 GSg |
| 9·3 | | 6 | 22·0 | 5·9 | 9·0 g |
| 9·7 | | 7 | 40·0 | 27·1 | g |
| 8·6 | | 12 | 11·0 | 54·2 | 9·5 g |
| 9·7 | | | 51·0 | 26·9 | g |
| 9·4 | | 13 | 42·0 | 0·0 | g |
| 9·1 | | 18 | 58·0 | 17·3 | g |
| 8·7 | | 19 | 10·0 | 30·9 | g |
| 9·2 | | | 13·0 | 0·2 | g |
| 9·6 | | 20 | 41·0 | 6·2 | |
| 9·4 | | | 46·0 | 44·3 | 9·5 g |
| 9·7 | | 24 | 5·0 | 41·1 | 9·5 g |
| 8·0 | | | 40·0 | 47·1 | 8·5 g |
| 9·3 | | 25 | 16·0 | 55·7 | 9·0 g |
| 9·7 | | 26 | 30·0 | 21·9 | g |
| 8·4 | | 27 | 13·0 | 50·9 | 9·0 g |
| 9·7 | | | 43·0 | 21·2 | g |
| 8·1 – | | | 47·0 | 33·9 | g |
| 9·8 | | 28 | 24·0 | 16·6 | |
| 8·5 | | | 40·5 | 52·4 | 8·5 g |
| 8·3 | | 29 | 24·2 | 58·7 | 8·5 g |
| 9·8 | | | 42·5 | 9·9 | |
| 9·4 | | 30 | 11·5 | 16·2 | |
| 9·1 | | 31 | 8·5 | 29·2 | 9·5 g |
| 8·8 | | | 11·5 | 24·1 | 9·0 g |
| 9·8 | | 32 | 45·5 | 34·0 | |
| 9·4 | | 33 | 59·5 | 34·9 | |
| 9·9 | | 34 | 1·5 | 9·7 | |
| 9·7 | | | 9·5 | 5·4 | |
| 9·9 | | | 37 5 | 52·6 | |
| 8·3 | | 35 | 9·5 | 15·5 | 8·5 g |
| 9·4 | | 36 | 40·5 | 28·7 | |
| 8·9 | | 37 | 12·0 | 36·1 | g |
| 8·8 | | | 39·5 | 48·1 | 8·5 g |
| 9·8 | | 42 | 7·5 | 22·7 | |
| 8·7 | | | 21·5 | 18·4 | 9·5 g |
| 9·0 | | 43 | 54·5 | 43·0 | 9·5 g |
| 9·4 | | 45 | 26·5 | 32·2 | |
| 9·8 | | 50 | 41·0 | 58·0 | |
| 9·7 | | | 53·5 | 41·9 | g |

## 241—300.

| mag. | h (3h.–5h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·8 | 3 | 51 | 53·0 | 41·9 | g |
| 9·9 | | 54 | 50·5 | 49·3 | |
| 9·4 | | 55 | 2·5 | 15·9 | g |
| 9·5 | | | 6·5 | 3·9 | |
| 8·8 | | | 36·5 | 57·3 | 9·5 g |
| 8·6 | | 57 | 47·5 | 54·8 | 9·0 g |
| 8·7 | 4 | 0 | 26·5 | 43·9 | 8·5 Sg |
| 9·4 | | 4 | 13·5 | 30·5 | |
| 8·5 | | 7 | 33·5 | 36·6 | 9·0 g |
| 9·6 | | | 54·5 | 35·9 | 10·0 g |
| 7·5 | | 14 | 49·5 | 8·0 | 7·5 GSg |
| 9·5 | | 15 | 32·5 | 20·8 | g |
| 9·8 | | | 48·5 | 28·7 | |
| 9·5 | | | 59·5 | 46·1 | 9·5 g |
| 9·8 | | 16 | 10·5 | 32·1 | |
| 9·2 | | | 38·5 | 57·0 | 9·0 g |
| 9·4 | | | 54·5 | 15·7 | g |
| 9·9 | | 20 | 33·0 | 43·5 | g |
| 9·7 | | 23 | 38·5 | 15·2 | g |
| 9·3 | | 27 | 17·5 | 23·5 | g |
| 8·9 | | | 34·0 | 36·2 | 9·0 g |
| 9·3 – | | 32 | 20·5 | 40·5 | |
| 9·6 | | 33 | 47·0 | 29·9 | |
| 9·6 | | 34 | 23·0 | 0·4 | g |
| 9·4 | | | 36·0 | 47·7 | |
| 9·3 | | | 58·0 | 20·8 | g |
| 9·2 | | 35 | 46·0 | 55·2 | g |
| 9·6 | | 36 | 25·0 | 16·6 | |
| 8·0 | | | 31·0 | 27·6 | 7·0 GSg |
| 9·7 | | 39 | 44·0 | 45·3 | g |
| 8·5 | | 44 | 10·0 | 45·6 | 8·5 g |
| 9·7 | | | 50·0 | 21·3 | |
| 9·2 | | 45 | 49·0 | 31·9 | g |
| 9·3 | | | 53·0 | 13·7 | g |
| 8·9 | | 47 | 20·5 | 2·4 | g |
| 9·3 | | 49 | 18·0 | 13·7 | |
| 9·3 | | | 25·0 | 54·3 | g |
| 9·5 | | | 37·0 | 12·7 | |
| 9·3 | | 51 | 28·0 | 10·2 | g |
| 8·4 | | 54 | 23·0 | 11·9 | g |
| 9·0 | | | 31·0 | 49·5 | g |
| 9·2 | | | 45·0 | 54·9 | g |
| 9·1 | | 56 | 43·0 | 43·6 | g |
| 8·5 | | 58 | 17·0 | 57·1 | 8·5 g |
| 9·2 | 5 | 2 | 3·0 | 15·4 | 9·0 |
| 6·4 | | 8 | 40·0 | 12·0 | 6·5 GSg |
| 9·3 | | | 47·0 | 2·2 | g |
| 8·4 | | | 49·0 | 45·4 | 8·5 g |
| 9·5 | | | 50·0 | 39·6 | g |
| 9·3 | | 14 | 34·0 | 43·2 | g |
| 9·0 | | 15 | 33·0 | 30·4 | g |
| 9·6 | | | 44·0 | 47·5 | |
| 9·5 | | 16 | 50·0 | 52·3 | g |
| 7·0 | | 18 | 20·0 | 43·2 | 7·0 GSg |
| 9·3 | | | 59·0 | 46·2 | 9·5 g |
| 8·2 | | 25 | 39·0 | 54·7 | 7·5 GSg |
| 9·5 | | 27 | 54·0 | 28·3 | g |
| 9·7 | | | 59·0 | 58·0 | g |
| 9·6* | | 28 | 30·5 | 0·9 | |
| 9·1 | | | 32·0 | 13·9 | g |

### 301—360.

| mag. | h | m | s | $-73°$ ′ | |
|---|---|---|---|---|---|
| 8·8 | 5 | 29 | 17·5 | 2·9 | 7·5 G*g* |
| 8·3 | | | 38·0 | 45·8 | GS*g* |
| 9·9 | | 32 | 20·0 | 1·3 | |
| 9·4 | | | 49·5 | 33·4 | *g* |
| 9·9 | | | 57·0 | 51·1 | |
| 9·9 | | 33 | 13·0 | 3·4 | |
| 9·5 | | | 20·5 | 31·4 | 8·5 *g* |
| 9·2 | | 34 | 41·5 | 42·8 | *g* |
| 9·9 | | 35 | 7·0 | 49·2 | |
| 9·6 | | | 21·0 | 9·7 | |
| 9·6 | | 36 | 45·0 | 45·0 | |
| 9·9 | | 37 | 3·0 | 12·4 | |
| 9·5 | | | 18·0 | 55·4 | |
| 9·7 | | | 50·0 | 15·1 | *g* |
| 9·6 | | | 51·0 | 17·7 | |
| 8·0 | | | 51·0 | 49·0 | 6·0 GS*g* |
| 9·4 | | 38 | 51·0 | 18·3 | |
| 9·3 | | | 52·0 | 24·4 | *g* |
| 9·0 | | | 52·0 | 29·7 | *g* |
| 9·6 | | 39 | 4·0 | 41·3 | |
| 8·9 | | | 12·0 | 3·0 | 7·8 G*g* |
| 9·9 | | | 29·0 | 4·7 | |
| 7·1 | | 40 | 3·0 | 45·7 | 7·0 GS*g* |
| 9·3 | | | 21·0 | 11·1 | *g* |
| 9·4 | | 42 | 0·0 | 39·2 | |
| 9·9 | | 43 | 32·0 | 23·1 | |
| 9·9 | | 44 | 30·0 | 20·7 | |
| 9·1 | | | 49·0 | 28·4 | 10·0 *g* |
| 9·4 | | 45 | 35·0 | 18·5 | |
| 8·9 | | 46 | 44·0 | 35·1 | 9·0 *g* |
| 9·2 | | 47 | 1·5 | 59·8 | *g* |
| 9·5 | | | 52·0 | 10·4 | |
| 9·5 | | 48 | 28·0 | 38·2 | *g* |
| 9·9 | | 49 | 2·0 | 56·4 | |
| 9·4 | | | 15·0 | 26·2 | |
| 9·6 | | | 40·0 | 56·0 | *g* |
| 9·4 | | 50 | 26·0 | 30·6 | *g* |
| 9·4 | | | 27·0 | 30·5 | *g* |
| 9·9 | | 51 | 4·0 | 55·0 | |
| 9·0 | | 52 | 14·0 | 38·6 | *g* |
| 9·5 | | | 50·0 | 5·0 | |
| 9·5 | | 57 | 44·0 | 17·8 | |
| 9·0 | | | 55·0 | 45·6 | *g* |
| 8·5 | | 58 | 1·0 | 9·5 | 9·0 *g* |
| 8·9 | | | 33·0 | 38·5 | 9·0 *g* |
| 9·6 | | 59 | 13·0 | 39·0 | |
| 9·5 | | | 13·0 | 30·3 | |
| 9·4 | | | 49·0 | 20·8 | |
| 8·9 | 6 | 0 | 15·0 | 35·9 | 9·5 *g* |
| 9·3 | | | 41·0 | 46·0 | *g* |
| 9·9 | | | 55·0 | 21·8 | |
| 9·4 | | | 57·0 | 34·0 | *g* |
| 9·8 | | 1 | 15·0 | 26·0 | |
| 9·3 | | 8 | 52·0 | 40·8 | 10·0 *g* |
| 9·4 | | 9 | 15·5 | 0·0 | |
| 9·1 | | 12 | 13·0 | 33·8 | *g* |
| 9·5 | | | 19·0 | 57·2 | |
| 9·6 | | 14 | 16·0 | 33·7 | *g* |
| 9·8 | | 16 | 38·0 | 11·8 | |
| 6·3 | | 17 | 43·0 | 34·7 | 7·0 GSc*g* |

### 361—420.

| mag. | h | m | s | $-73°$ ′ | |
|---|---|---|---|---|---|
| 9·4 | 6 | 18 | 9·0 | 24·1 | 9·0 *g* |
| 9·4 | | | 16·0 | 21·9 | *g* |
| 9·5 | | | 23·0 | 47·1 | |
| 9·5 | | | 33·0 | 12·0 | |
| 9·4 | | | 41·0 | 9·8 | 9·5 *g* |
| 9·5 | | 19 | 7·0 | 25·8 | *g* |
| 9·4 | | | 59·0 | 22·1 | |
| 9·6 | | 20 | 17·0 | 4·0 | |
| 9·8 | | | 25·0 | 9·0 | *g* |
| 9·5 | | | 29·0 | 55·7 | |
| 9·5 | | | 53·0 | 39·9 | |
| 9·0 | | 21 | 43·0 | 17·9 | 8·0 *g* |
| 9·1 | | | 59·0 | 44·1 | |
| 9·3 | | 22 | 18·5 | 1·6 | 9·0 *g* |
| 9·5 | | 23 | 23·0 | 53·0 | *g* |
| 9·2 | | 25 | 29·0 | 16·2 | 10·0 *g* |
| 9·4 | | 27 | 19·0 | 2·9 | *g* |
| 9·4 | | | 25·0 | 29·2 | *g* |
| 9·4 | | 28 | 48·5 | 47·2 | 10·0 *g* |
| 9·6 | | 29 | 7·5 | 25·3 | *g* |
| 9·8 | | | 36·0 | 54·2 | |
| 8·9 | | | 57·5 | 8·5 | 10·0 *g* |
| 9·2 | | 30 | 4·5 | 22·1 | *g* |
| 9·8 | | | 6·0 | 23·9 | |
| 9·6 | | 31 | 30·0 | 24·9 | |
| 9·6 | | | 41·0 | 14·3 | |
| 9·3 | | 32 | 10·0 | 29·7 | *g* |
| 9·8 | | 34 | 56·0 | 56·1 | |
| 8·1 | | 36 | 2·0 | 38·8 | 9·0 GS*g* |
| 9·4 | | | 42·0 | 3·8 | |
| 9·8 | | 37 | 42·0 | 23·9 | |
| 9·1 | | 38 | 37·0 | 28·1 | *g* |
| 9·4 | | 39 | 2·0 | 6·6 | *g* |
| 9·4 | | | 46·0 | 46·3 | *g* |
| 9·6 | | 40 | 6·0 | 45·8 | |
| 9·5 | | | 16·0 | 14·9 | |
| 9·4 | | | 29·0 | 5·4 | *g* |
| 9·5 | | | 44·0 | 30·6 | |
| 9·6 | | 41 | 20·0 | 26·2 | |
| 9·6 | | | 23·0 | 34·8 | |
| 9·4 | | 44 | 6·0 | 50·8 | |
| 9·5 | | | 8·0 | 34·2 | |
| 9·6 | | 47 | 20·0 | 59·7 | |
| 9·8 | | 48 | 1·0 | 18·6 | |
| 9·1 | | | 33·0 | 7·4 | *g* |
| 9·5 | | 50 | 4·0 | 30·0 | |
| 9·8 | | | 47·0 | 16·1 | |
| 9·6 | | 51 | 17·0 | 6·6 | |
| 8·1 | | | 35·0 | 9·2 | 8·5 GS*g* |
| 9·2 | | | 42·5 | 57·4 | *g* |
| 9·6 | | 52 | 30·0 | 12·3 | |
| 9·6 | | | 30·0 | 24·2 | *g* |
| 9·0 | | 56 | 42·0 | 35·7 | *g* |
| 9·8 | | 57 | 2·0 | 34·2 | |
| 9·8 | | | 16·0 | 39·8 | |
| 9·6 | | 58 | 33·0 | 19·6 | |
| 9·8 | | 59 | 31·0 | 23·2 | |
| 9·8 | | | 57·0 | 39·6 | |
| 9·3 | 7 | 0 | 2·0 | 31·9 | *g* |
| 9·8 | | | 13·0 | 14·1 | |

### 421—480.

| mag. | h | m | s | $-73°$ ′ | |
|---|---|---|---|---|---|
| 9·8 | 7 | 0 | 18·0 | 38·7 | |
| 9·4 | | 2 | 58·0 | 30·5 | |
| 8·6 | | 3 | 50·0 | 22·0 | 7·5 G*g* |
| 8·3 | | | 56·0 | 49·9 | 8·5 *g* |
| 9·6 | | 4 | 9·0 | 10·0 | |
| 9·6 | | | 29·0 | 33·4 | |
| 9·2 | | | 38·0 | 4·1 | *g* |
| 9·8 | | 7 | 47·5 | 57·2 | |
| 9·6 | | 9 | 59·0 | 10·6 | *g* |
| 9·8 | | 11 | 2·0 | 52·0 | |
| 9·8 | | | 8·0 | 49·1 | |
| 9·4 | | 12 | 2·0 | 42·1 | |
| 9·4 | | | 29·0 | 21·5 | |
| 9·4 | | 13 | 46·0 | 43·4 | |
| 8·9 | | | 52·0 | 56·9 | 9·5 *g* |
| 9·3 | | 15 | 12·0 | 30·1 | *g* |
| 8·5 | | | 54·0 | 54·7 | 8·5 G*g* |
| 9·6 | | 16 | 9·0 | 49·9 | 9·5 |
| 8·5 | | | 16·0 | 55·8 | 9·0 G*g* |
| 9·3 | | 18 | 43·0 | 50·9 | |
| 8·9 | | 21 | 56·0 | 40·8 | *g* |
| 9·0 | | 22 | 32·0 | 53·8 | 8·5 *g* |
| 9·8 | | 23 | 8·5 | 0·0 | |
| 9·1 | | 24 | 42·0 | 25·5 | |
| 8·4 | | 25 | 27·0 | 40·7 | 9·0 *g* |
| 9·3 | | | 39·0 | 52·1 | 9·5 *g* |
| 9·6 | | 26 | 58·0 | 16·1 | |
| 9·8 | | 27 | 23·5 | 0·4 | |
| 9·8 | | | 39·5 | 6·9 | |
| 9·4 | | | 42·5 | 28·7 | *g* |
| 9·5 | | 30 | 15·0 | 42·7 | |
| 9·5 | | 31 | 39·5 | 6·9 | 10·0 G*g* |
| 9·8* | | | 54·5 | 6·6 | 9·0 |
| 9·9 | | 34 | 7·2 | 1·4 | |
| 9·6 | | 35 | 50·5 | 16·9 | |
| 9·6 | | 36 | 51·5 | 3·3 | |
| 6·2 | | 37 | 53·5 | 59·6 | 6·5 GS*g* |
| 9·3 | | 39 | 29·0 | 25·5 | 9·0 *g* |
| 9·9 | | | 45·0 | 10·5 | |
| 9·9 | | 41 | 24·0 | 33·3 | |
| 9·9 | | | 37·0 | 25·4 | |
| 9·4 | | 42 | 14·0 | 40·3 | |
| 9·9 | | | 30·0 | 4·2 | |
| 9·8 | | 45 | 9·0 | 15·1 | |
| 9·9 | | | 52·0 | 4·0 | ? |
| 7·8 | | 46 | 6·5 | 57·0 | 8·5 G*g* |
| 9·5 | | | 26·0 | 44·2 | |
| 9·9 | | 47 | 6·0 | 42·9 | |
| 8·8 | | | 8·0 | 32·0 | 9·0 *g* |
| 9·5 | | | 26·0 | 6·3 | |
| 7·7 | | 49 | 3·0 | 46·5 | 8·0 GS*g* |
| 9·9 | | 52 | 22·0 | 8·4 | G |
| 9·0 | | 54 | 41·0 | 53·1 | 9·5 *g* |
| 9·5 | | 56 | 43·0 | 54·4 | |
| 9·5 | | | 43·0 | 44·3 | |
| 8·7 | | 57 | 20·0 | 48·0 | 9·0 *g* |
| 9·8 | | 58 | 37·0 | 16·3 | |
| 8·7 | | 59 | 34·0 | 7·8 | G*g* |
| 9·4 | 8 | 3 | 16·0 | 51·3 | 8·5 *g* |
| 9·7 | | | 25·0 | 27·7 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 5 | 20 | − 31 − 0·12 d | − 1·5 |
| | 30 | 32 − 0·12 | 1·1 |
| | 40 | 32 − 0·12 | 0·7 |
| | 50 | 32 − 0·12 | + 0·4 |
| 6 | 0 | 33 − 0·12 | 0·0 |
| | 10 | 32 − 0·12 | − 0·4 |
| | 20 | 32 − 0·12 | 0·7 |
| | 30 | 32 − 0·12 | 1·1 |
| | 40 | 31 − 0·12 | 1·5 |
| | 50 | 30 − 0·12 | 1·8 |
| 7 | 0 | 29 − 0·12 | 2·2 |
| | 10 | 27 − 0·12 | 2·5 |
| | 20 | 26 − 0·11 | 2·9 |
| | 30 | 24 − 0·11 | 3·2 |
| | 40 | 22 − 0·11 | 3·5 |
| | 50 | 20 − 0·11 | 3·9 |
| 8 | 0 | 18 − 0·10 | 4·2 |
| | 10 | − 15 − 0·10 | − 4·5 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 8 | 0 | − 18 − 0·10 d | − 4·2 |
| | 10 | 15 − 0·10 | 4·5 |
| | 20 | 13 − 0·10 | 4·8 |
| | 30 | 10 − 0·10 | 5·1 |
| | 40 | 7 − 0·09 | 5·4 |
| | 50 | 4 − 0·09 | 5·6 |
| 9 | 0 | − 1 − 0·09 | 5·9 |
| | 10 | + 3 − 0·08 | 6·2 |
| | 20 | 7 − 0·08 | 6·4 |
| | 30 | 10 − 0·07 | 6·6 |
| | 40 | 14 − 0·07 | 6·8 |
| | 50 | 18 − 0·06 | 7·0 |
| 10 | 0 | + 22 + 0·06 | − 7·2 |

d = minutes of decl.

## 481—540.

| mag. | h (8h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·9 | 8 | 4 | 53·0 | 46·1 | 9·0 |
| 9·1 | | 8 | 51·5 | 57·6 | g |
| 9·5 | | 9 | 9·0 | 48·7 | g |
| 8·3 | | | 28·0 | 6·7 | 9·0 g |
| 8·9 | | 10 | 36·0 | 45·1 | |
| 9·9 | | 11 | 47·0 | 26·9 | |
| 9·8 | | 14 | 18·0 | 55·9 | |
| 6·7 | | 16 | 10·0 | 25·2 | 7·0 GSg |
| 9·6 | | | 55·5 | 0·2 | |
| 8·3 | | 17 | 17·0 | 50·3 | 8·5 g |
| 9·2 | | 18 | 48·0 | 25·8 | 9·5 g |
| 9·9 | | 19 | 10·0 | 34·7 | |
| 9·8 | | 20 | 16·0 | 6·5 | |
| 9·0 | | | 47·0 | 10·6 | |
| 9·0 | | 21 | 41·0 | 2·9 | |
| 9·9 | | | 41·0 | 28·8 | |
| 9·8 | | 23 | 52·0 | 5·3 | |
| 9·2 | | 24 | 3·0 | 39·1 | |
| 9·0 | | | 49·0 | 29·0 | g |
| 7·5 | | 25 | 4·0 | 45·3 | 8·0 GSg |
| 9·9 | | 26 | 44·0 | 26·8 | g |
| 9·5 | | 27 | 11·0 | 5·0 | |
| 9·9 | | | 32·0 | 14·6 | |
| 9·2 | | 28 | 44·0 | 8·2 | |
| 9·5 | | 29 | 21·5 | 33·0 | |
| 9·9 | | | 28·5 | 26·8 | |
| 9·7 | | 30 | 30·0 | 23·1 | |
| 9·0 | | | 37·5 | 57·0 | 8·5 g |
| 9·6 | | | 38·0 | 50·9 | |
| 9·7 | | 31 | 10·0 | 39·2 | |
| 9·2 | | | 26·0 | 3·0 | |
| 9·7 | | 32 | 3·5 | 59·3 | |
| 9·2 | | | 56·0 | 9·3 | |
| 9·6 | | 33 | 1·0 | 4·3 | |
| 9·4 | | 34 | 39·5 | 50·9 | |
| 9·7 | | 37 | 0·0 | 24·2 | |
| 9·2 | | | 41·0 | 24·1 | |
| 9·7 | | | 45·0 | 25·7 | |
| 9·1 | | | 59·0 | 49·8 | g |
| 9·4 | | 38 | 32·0 | 6·2 | |
| 9·4 | | | 38·0 | 33·6 | |
| 9·7 | | 39 | 2·0 | 59·9 | |
| 7·8 | | | 36·0 | 38·0 | 7·0 GSg |
| 9·6 | | | 39·0 | 41·5 | |
| 6·9 | | 42 | 14·0 | 9·7 | 7·2 GSg |
| 9·7 | | | 23·0 | 42·0 | |
| 9·7 | | 44 | 2·0 | 40·9 | |
| 7·6 | | | 58·0 | 50·8 | 8·0 GSgg |
| 9·4 | | 45 | 26·0 | 14·9 | 9·0 g |
| 9·6 | | 46 | 0·0 | 5·9 | |
| 9·7 | | 48 | 13·0 | 29·6 | |
| 9·7 | | | 39·0 | 28·9 | |
| 9·7 | | 49 | 32·5 | 59·2 | |
| 9·7 | | | 34·0 | 40·0 | |
| 9·2 | | | 40·0 | 37·9 | |
| 9·1 | | | 48·0 | 15·4 | |
| 9·7 | | 50 | 21·0 | 23·1 | |
| 9·7 | | | 31·0 | 48·1 | |
| 9·4 | | | 43·0 | 24·3 | |
| 9·7 | | | 52·0 | 52·5 | |

## 541—600.

| mag. | h (8h.—9h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·7 | 8 | 51 | 4·0 | 43·5 | |
| 8·4 | | | 40·0 | 36·7 | 8·5 Sg |
| 8·6 | | | 53·0 | 28·9 | 9·5 |
| 9·7 | | 52 | 39·0 | 31·3 | |
| 9·7 | | 55 | 1·0 | 52·8 | |
| 9·7 | | | 4·0 | 43·8 | |
| 7·9 | | | 11·0 | 33·6 | 8·2 GSg |
| 8·1 | | 57 | 21·0 | 26·0 | 7·4 GSg |
| 9·2 | | 58 | 53·0 | 40·4 | |
| 6·8 | 9 | 0 | 38·0 | 54·6 | 7·2 GSg |
| 8·3 | | | 39·0 | 20·0 | 8·5 g |
| 9·7 | | | 55·0 | 33·0 | |
| 9·7 | | 1 | 37·0 | 38·0 | |
| 9·6 | | 2 | 0·0 | 4·6 | |
| 7·7 | | | 24·0 | 41·5 | 8·5 g |
| 9·7 | | | 32·0 | 5·0 | |
| 9·7 | | | 53·7 | 1·3 | |
| 8·7 | | 3 | 3·0 | 10·2 | |
| 8·9 | | | 9·0 | 35·0 | 9·0 g |
| 9·5 | | | 44·0 | 50·0 | |
| 8·6 | | 4 | 4·0 | 36·5 | 8·5 g |
| 9·2 | | | 35·0 | 34·9 | |
| 9·7 | | | 54·0 | 6·6 | |
| 9·7 | | 5 | 13·0 | 7·0 | |
| 9·3 | | 6 | 36·0 | 53·0 | |
| 9·4 | | 7 | 54·0 | 29·0 | |
| 9·0 | | 8 | 37·0 | 13·2 | |
| 9·5 | | | 38·0 | 34·1 | |
| 9·7 | | | 49·0 | 15·9 | |
| 9·6 | | | 52·0 | 57·8 | |
| 9·4 | | 10 | 13·0 | 48·1 | |
| 9·0 | | 11 | 40·0 | 12·4 | 8·5 g |
| 9·4 | | 12 | 5·0 | 56·1 | |
| 9·7 | | | 29·0 | 6·4 | |
| 8·8 | | | 49·0 | 28·7 | 9·5 g |
| 9·3 | | | 57·0 | 26·1 | |
| 9·2 | | 13 | 41·0 | 14·6 | |
| 9·4 | | 14 | 16·0 | 38·3 | 9·5 |
| 9·7 | | | 22·0 | 14·7 | |
| 9·6 | | 16 | 21·0 | 46·2 | |
| 9·5 | | | 41·0 | 16·9 | |
| 9·2 | | | 43·0 | 44·9 | |
| 9·3 | | 17 | 12·0 | 25·9 | |
| 8·8 | | | 29·0 | 18·3 | 9·0 g |
| 9·7 | | 18 | 16·0 | 20·7 | |
| 8·9 | | | 36·0 | 19·1 | 9·5 |
| 9·6 | | | 48·0 | 20·0 | |
| 8·5 | | | 49·0 | 18·9 | 9·5 g |
| 8·9 | | 19 | 13·0 | 22·7 | 9·5 |
| 9·6 | | | 22·0 | 15·6 | |
| 9·7 | | | 46·0 | 30·8 | |
| 7·1 | | | 53·0 | 4·3 | 8·0 GSg |
| 9·5 | | 20 | 28·0 | 42·0 | |
| 8·1 | | 21 | 36·7 | 0·2 | 8·5 g |
| 9·7 | | | 55·0 | 28·4 | |
| 9·1 | | 22 | 11·0 | 22·7 | 9·0 g |
| 9·1 | | 23 | 8·0 | 30·7 | |
| 9·3 | | | 36·0 | 50·6 | 9·5 |
| 9·7 | | | 56·0 | 26·7 | |
| 9·5 | | 24 | 33·0 | 53·0 | 9·0 g |

## 601—660.

| mag. | h (9h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·3 | 9 | 25 | 54·0 | 12·1 | 9·0 g |
| 9·5 | | 26 | 13·0 | 40·7 | |
| 9·6 | | 27 | 38·0 | 51·8 | |
| 9·0 | | | 54·5 | 35·0 | |
| 9·6 | | 28 | 11·0 | 39·7 | |
| 8·9 | | | 15·0 | 0·8 | |
| 9·9 | | 29 | 2·0 | 24·5 | |
| 7·8 | | | 10·5 | 6·0 | GSg |
| 8·2 | | 30 | 26·0 | 36·0 | g |
| 9·6 | | | 35·0 | 9·0 | |
| 7·6 | | | 42·5 | 11·6 | GSg |
| 8·2 | | | 50·0 | 36·0 | g |
| 9·8 | | | 57·0 | 37·7 | |
| 9·9 | | 31 | 27·0 | 54·7 | |
| 9·9 | | | 46·0 | 22·6 | |
| 9·9 | | 32 | 24·0 | 43·0 | |
| 9·6 | | | 45·0 | 1·2 | ? |
| 9·4 | | 34 | 3·0 | 6·6 | |
| 9·8 | | | 3·0 | 41·7 | |
| 9·1 | | | 8·0 | 25·1 | |
| 9·4 | | | 25·0 | 36·2 | |
| 9·4 | | 35 | 34·0 | 46·6 | |
| 9·6 | | 36 | 0·0 | 52·5 | |
| 9·8 | | | 13·0 | 50·2 | |
| 9·8 | | 37 | 2·0 | 56·4 | |
| 9·3 | | | 22·0 | 16·8 | |
| 9·6 | | | 23·0 | 7·2 | |
| 9·4 | | | 27·0 | 4·2 | |
| 9·9 | | 38 | 6·0 | 16·1 | |
| 9·6 | | | 58·0 | 57·3 | |
| 9·5 | | 39 | 32·0 | 17·8 | |
| 9·3 | | | 42·0 | 14·3 | |
| 9·9 | | 41 | 5·0 | 6·6 | |
| 9·8 | | | 10·0 | 48·1 | |
| 9·9 | | | 22·0 | 31·9 | g |
| 9·9 | | | 23·0 | 44·9 | |
| 9·9 | | | 45·0 | 30·6 | |
| 9·9 | | 42 | 11·0 | 18·1 | |
| 8·8 | | | 51·0 | 57·6 | 9·5 Gg |
| 9·9 | | | 57·0 | 39·2 | |
| 9·9 | | 43 | 2·0 | 21·9 | |
| 9·6 | | | 17·0 | 14·1 | |
| 8·0 | | | 25·0 | 19·2 | 8·2 g |
| 8·7 | | 44 | 6·5 | 59·2 | 8·8 Gg |
| 7·4 | | | 55·0 | 32·0 | 8·2 GSg |
| 9·3 | | 45 | 9·0 | 43·4 | |
| 9·2 | | | 28·0 | 29·5 | 9·5 |
| 9·8 | | | 30·0 | 23·8 | |
| 9·4 | | | 35·0 | 51·8 | |
| 9·6 | | 46 | 25·0 | 57·6 | |
| 9·9 | | | 27·0 | 20·0 | |
| 9·9 | | | 38·0 | 23·1 | |
| 9·6 | | | 47·0 | 12·9 | |
| 9·9 | | 47 | 5·0 | 10·2 | |
| 9·6 | | | 30·3 | 0·1 | |
| 8·7 | | | 43·0 | 18·7 | 9·0 g |
| 9·8 | | 48 | 37·0 | 0·2 | |
| 7·8 | | | 57·0 | 37·0 | 8·2 g |
| 9·6 | | 49 | 7·0 | 40·9 | |
| 9·8 | | 50 | 3·0 | 2·0 | ? |



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## 661—720.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·3 | 9 | 50 | 7·0 | 53·7 | |
| 9·6 | | | 33·0 | 16·6 | |
| 8·8 | | 51 | 6·0 | 29·4 | 8·8 *g* |
| 9·8 | | | 35·0 | 17·9 | |
| 8·8 | | 53 | 0·0 | 16·8 | *g* |
| 9·9 | | | 38·0 | 22·4 | |
| 9·0 | | | 57·0 | 1·6 | 9·5 *g* |
| 9·8 | | 55 | 15·0 | 33·9 | *g* |
| 9·9 | | | 15·0 | 45·0 | |
| 9·4 | | | 50·0 | 4·2 | |
| 9·8 | | 58 | 56·0 | 45·9 | |
| 9·9 | | 59 | 18·0 | 43·9 | |
| 9·4 | | | 50·0 | 21·8 | |
| 8·8 | 10 | 0 | 15·0 | 26·3 | |
| 9·3 | | | 51·0 | 0·8 | |
| 9·3 | | 1 | 1·0 | 29·1 | |
| 9·5 | | | 42·0 | 19·3 | |
| 9·9 | | 2 | 48·0 | 44·7 | |
| 9·5 | | 3 | 12·0 | 4·3 | |
| 9·4 | | | 13·0 | 46·8 | |
| 8·7 | | 4 | 21·0 | 30·2 | |
| 9·2 | | | 36·0 | 21·3 | *g* |
| 9·9 | | | 47·0 | 43·0 | |
| 9·8 | | 5 | 5·0 | 16·1 | |
| 9·8 | | | 17·0 | 16·8 | |
| 9·8 | | | 20·0 | 23·7 | |
| 9·9 | | | 32·5 | 57·9 | |
| 9·8 | | 6 | 18·0 | 21·5 | |
| 9·6 | | | 39·0 | 16·4 | |
| 9·9 | | | 45·0 | 38·1 | |
| 9·8 | | | 52·0 | 4·1 | |
| 9·8 | | 7 | 21·0 | 17·6 | |
| 9·4 | | | 59·0 | 58·5 | *g* |
| 9·8 | | 8 | 30·0 | 9·9 | |
| 9·4 | | | 41·0 | 0·1 | |
| 8·6 | | 9 | 41·0 | 50·7 | 9·0 *g* |
| 9·9 | | 11 | 5·0 | 2·0 | |
| 9·6 | | | 24·0 | 32·4 | |
| 9·5 | | | 45·0 | 16·9 | |
| 9·6 | | | 50·0 | 27·7 | |
| 9·3 | | 12 | 2·0 | 45·4 | 9·5 *g* |
| 9·8 | | | 7·0 | 49·7 | |
| 9·9 | | | 8·0 | 3·1 | |
| 9·6 | | | 20·0 | 27·3 | |
| 9·6 | | | 38·0 | 6·9 | |
| 9·8 | | | 47·0 | 6·5 | |
| 9·5 | | | 51·0 | 53·7 | |
| 9·8 | | 13 | 3·0 | 25·5 | |
| 9·5 | | | 5·0 | 42·9 | |
| 9·9 | | | 15·0 | 44·8 | |
| 9·8 | | 14 | 5·0 | 14·6 | |
| 8·8 | | | 44·0 | 47·8 | 9·5 *g* |
| 9·4 | | 15 | 21·0 | 49·2 | *g* |
| 9·1 | | | 33·0 | 16·1 | 8·5 *g* |
| 9·8 | | | 55·0 | 41·7 | |
| 8·8 | | 16 | 39·0 | 24·6 | *g* |
| 9·3 | | 17 | 25·0 | 56·1 | |
| 9·9 | | | 41·0 | 23·1 | |
| 9·3 | | | 51·0 | 21·0 | *g* |
| 9·9 | | 18 | 32·0 | 40·9 | |

Column heading: $9^h$—$10^h$.

## 721—780.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·5 | 10 | 18 | 46·0 | 20·5 | |
| 9·8 | | | 55·0 | 8·8 | |
| 9·9 | | 19 | 22·0 | 18·5 | |
| 9·9 | | 20 | 18·0 | 12·0 | |
| 9·0 | | | 37·0 | 5·0 | |
| 9·6 | | | 38·0 | 29·6 | |
| 9·8 | | | 47·0 | 22·7 | |
| 9·9 | | 21 | 6·0 | 31·0 | |
| 9·4 | | | 14·0 | 11·7 | |
| 9·9 | | | 27·0 | 28·3 | |
| 9·5 | | | 45·0 | 47·1 | |
| 9·8 | | | 50·0 | 6·4 | |
| 5·1 | | | 52·5 | 23·7 | 4·5 GS*g*gtrλ |
| 9·9 | | | 54·0 | 56·3 | |
| 6·7 | | 22 | 12·0 | 20·2 | 6·5 GS*g*g |
| 9·6 | | | 43·0 | 30·1 | |
| 9·6 | | | 49·0 | 42·7 | |
| 9·5 | | | 58·0 | 30·4 | |
| 9·3 | | 23 | 0·0 | 43·2 | *g* |
| 9·5 | | 24 | 30·0 | 14·0 | |
| 9·8 | | | 50·0 | 25·5 | |
| 9·9 | | 25 | 34·0 | 3·7 | |
| 9·6 | | 26 | 10·0 | 27·6 | |
| 9·8 | | 27 | 12·0 | 17·1 | |
| 9·9 | | | 15·5 | 50·9 | *g* |
| 9·6 | | | 29·5 | 54·2 | *g* |
| 9·6 | | 29 | 37·0 | 4·5 | |
| 9·0 | | | 45·5 | 25·7 | |
| 9·9 | | 30 | 24·0 | 16·7 | |
| 9·8 | | | 34·0 | 33·4 | |
| 9·6 | | | 44·0 | 21·1 | |
| 9·7 | | 32 | 13·5 | 43·2 | |
| 9·3 | | | 37·5 | 46·2 | *g* |
| 9·8 | | | 41·0 | 29·3 | |
| 9·3 | | | 45·5 | 57·3 | 9·0 *g* |
| 9·4 | | 34 | 27·5 | 12·0 | |
| 9·8 | | 35 | 41·0 | 58·7 | |
| 7·5 | | 36 | 19·0 | 50·7 | 6·5 GSc*g* |
| 9·2 | | 37 | 38·5 | 57·4 | |
| 8·2 | | | 51·0 | 21·9 | 9·5 *g* |
| 9·7 | | 38 | 11·0 | 34·4 | |
| 9·8 | | 40 | 23·0 | 15·2 | |
| 9·2 | | | 25·0 | 30·1 | |
| 9·8 | | 42 | 3·0 | 23·0 | |
| 9·3 | | | 37·0 | 7·6 | |
| 9·8 | | | 45·0 | 56·2 | |
| 9·4 | | 43 | 17·0 | 10·6 | |
| 9·0 | | | 43·0 | 46·8 | *g* |
| 9·7 | | | 53·0 | 24·6 | |
| 9·8 | | 44 | 25·0 | 42·3 | |
| 9·6 | | 45 | 19·0 | 30·9 | |
| 9·7 | | | 51·0 | 10·4 | |
| 9·7 | | 46 | 17·0 | 8·4 | |
| 9·6 | | | 39·0 | 33·4 | |
| 9·4 | | | 45·0 | 54·8 | *g* |
| 8·9 | | 48 | 2·0 | 56·3 | *g* |
| 8·5 | | | 11·0 | 47·0 | 9·5 *g* |
| 8·4 | | | 53·0 | 4·2 | 9·0 *g* |
| 9·7 | | | 55·0 | 35·6 | |
| 9·7 | | 49 | 7·0 | 39·5 | |

Column heading: $10^h$.

## 781—840.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·4 | 10 | 50 | 24·0 | 16·8 | |
| 9·7 | | 51 | 36·5 | 0·0 | |
| 9·9 | | 52 | 41·0 | 31·4 | |
| 9·4 | | | 47·0 | 14·2 | |
| 9·1 | | | 55·0 | 56·7 | *g* |
| 9·9 | | 53 | 1·0 | 41·4 | |
| 9·9 | | | 19·0 | 21·2 | |
| 9·5 | | 54 | 6·0 | 58·2 | |
| 9·5 | | 56 | 38·0 | 14·2 | |
| 9·9 | | 57 | 7·0 | 11·0 | |
| 9·5 | | 58 | 1·0 | 10·8 | |
| 9·5 | | | 6·0 | 23·8 | |
| 9·6 | | | 32·0 | 18·0 | |
| 8·9 | | | 44·0 | 28·5 | *g* |
| 9·9 | | 59 | 12·0 | 27·2 | |
| 7·7 | 11 | 0 | 6·0 | 34·3 | 8·5 *g* |
| 9·5 | | | 18·5 | 58·1 | *g* |
| 9·5 | | | 47·0 | 34·2 | *g* |
| 9·3 | | | 47·0 | 23·4 | *g* |
| 9·9 | | | 49·0 | 31·1 | |
| 9·7 | | 1 | 1·0 | 40·6 | |
| 9·9 | | | 6·0 | 39·2 | |
| 9·6 | | 2 | 27·0 | 52·2 | |
| 9·6 | | | 54·0 | 9·2 | |
| 9·6 | | 4 | 6·0 | 21·0 | |
| 8·5 | | | 13·0 | 18·0 | 9·0 *g* |
| 9·6 | | 5 | 1·0 | 41·9 | |
| 9·6 | | 6 | 25·0 | 19·0 | |
| 9·9 | | | 29·0 | 26·4 | |
| 7·9 | | 7 | 2·0 | 47·0 | 8·0 *g* |
| 9·9 | | | 10·0 | 5·8 | |
| 9·8 | | | 12·0 | 31·0 | |
| 9·7 | | | 20·0 | 54·8 | |
| 8·9 | | | 28·0 | 44·0 | *g* |
| 9·9 | | | 42·0 | 57·0 | |
| 9·9 | | 8 | 3·0 | 46·2 | |
| 7·9 | | | 4·0 | 31·8 | 8·0 *g* |
| 9·5 | | | 8·0 | 3·8 | |
| 9·0 | | | 30·0 | 20·8 | |
| 9·6 | | | 55·0 | 56·0 | |
| 9·9 | | 9 | 42·0 | 28·9 | |
| 9·9 | | | 43·0 | 11·4 | |
| 9·7 | | | 50·0 | 40·4 | |
| 9·3 | | 10 | 33·7 | 1·6 | |
| 9·5 | | 11 | 6·0 | 58·4 | |
| 9·9 | | 12 | 18·0 | 32·0 | |
| 9·4 | | | 28·0 | 40·0 | |
| 7·7 | | 13 | 42·0 | 29·2 | 8·5 G*g* |
| 7·5 | | 14 | 6·0 | 30·2 | 7·8 GS*g* |
| 9·9 | | | 16·0 | 59·8 | |
| 9·5 | | | 54·0 | 13·6 | |
| 8·7 | | | 55·0 | 19·2 | *g* |
| 9·8 | | 16 | 22·5 | 59·6 | |
| 8·4 | | | 25·0 | 47·0 | 8·5 *g* |
| 9·2 | | | 31·0 | 4·6 | 8·5 *g* |
| 9·7 | | | 45·0 | 8·4 | |
| 9·6 | | 17 | 8·0 | 45·1 | |
| 9·8 | | | 14·5 | 59·7 | |
| 9·6 | | | 44·0 | 34·0 | |
| 9·7 | | | 47·5 | 59·8 | |

Column heading: $10^h$—$11^h$.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 9 | 50 | + 18 − 0·06 d | − 7·0 |
| 10 | 0 | 22 − 0·06 | 7·2 |
| | 10 | 26 − 0·06 | 7·4 |
| | 20 | 31 − 0·05 | 7·6 |
| | 30 | 35 − 0·05 | 7·7 |
| | 40 | 39 − 0·04 | 7·9 |
| | 50 | 44 − 0·04 | 8·0 |
| 11 | 0 | 49 − 0·03 | 8·1 |
| | 10 | 53 − 0·03 | 8·2 |
| | 20 | + 58 − 0·02 | − 8·2 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | s | δ (′) |
|---|---|---|---|---|
| 11 | 10 | + 53 | − 0·03 d | − 8·2 |
| | 20 | 58 | − 0·02 | 8·2 |
| | 30 | 63 | − 0·02 | 8·3 |
| | 40 | 67 | − 0·01 | 8·3 |
| | 50 | 72 | − 0·01 | 8·3 |
| 12 | 0 | 77 | 0·00 | 8·4 |
| | 10 | 82 | + 0·01 | 8·3 |
| | 20 | 86 | + 0·01 | 8·3 |
| | 30 | 91 | + 0·02 | 8·3 |
| | 40 | + 96 | + 0·02 | − 8·2 |

d = minutes of decl.

## 841—900.

| mag. | h (11h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·7 | 11 | 18 | 4·0 | 22·8 | |
| 9·4 | | | 10·0 | 44·1 | g |
| 9·3 | | | 15·0 | 35·4 | g |
| 9·0 | | | 47·5 | 1·6 | |
| 9·5 | | 19 | 33·0 | 25·6 | |
| 9·5 | | | 36·0 | 59·6 | |
| 9·0 | | | 45·0 | 54·7 | g |
| 9·8 | | 20 | 12·0 | 28·4 | |
| 9·8 | | | 15·0 | 31·8 | |
| 9·9 | | | 32·0 | 5·1 | |
| 8·7 | | | 45·0 | 18·0 | 8·5 g |
| 8·6 | | 21 | 6·0 | 8·0 | 8·8 g |
| 9·5 | | | 44·0 | 9·0 | |
| 8·9 | | | 54·0 | 7·8 | |
| 8·5 | | 22 | 36·0 | 32·2 | 8·7 G |
| 9·4 | | | 46·0 | 30·0 | |
| 9·6 | | | 55·5 | 2·1 | |
| 9·6 | | 24 | 10·0 | 16·8 | |
| 9·5 | | | 22·0 | 50·0 | 8·5 Gg |
| 9·6 | | 25 | 29·0 | 55·1 | 9·0 Gg |
| 9·8 | | | 46·0 | 37·4 | |
| 9·9 | | 26 | 3·0 | 0·9 | 10·0 |
| 9·7 | | | 6·0 | 36·9 | |
| 7·2 | | | 39·5 | 12·8 | 7·0 GSg |
| 9·8 | | 27 | 5·5 | 2·4 | |
| 9·6 | | 28 | 8·0 | 11·9 | |
| 9·2 | | | 59·5 | 47·5 | g |
| 9·8 | | 29 | 3·5 | 6·4 | |
| 9·5 | | | 20·5 | 38·8 | |
| 9·4 | | 30 | 15·5 | 26·1 | |
| 9·9 | | | 46·0 | 33·1 | |
| 9·6 | | 31 | 2·0 | 0·0 | |
| 9·6 | | | 17·5 | 17·5 | |
| 8·6 | | | 40·5 | 20·7 | 9·0 |
| 8·5 | | 33 | 54·0 | 7·2 | 9·2 g |
| 9·6 | | 35 | 14·0 | 47·0 | |
| 9·5 | | | 58·0 | 5·6 | |
| 9·6 | | 36 | 9·0 | 9·1 | |
| 9·6 | | | 32·0 | 10·5 | |
| 9·6 | | | 47·0 | 55·6 | |
| 9·1 | | | 59·0 | 10·1 | 9·5 |
| 9·6 | | 37 | 19·0 | 22·8 | |
| 9·6 | | 38 | 12·0 | 13·0 | |
| 9·1 | | 39 | 6·0 | 5·1 | 9·5 |
| 8·5 | | | 9·0 | 15·0 | 8·0 Gg |
| 8·8 | | | 19·0 | 22·1 | 9·0 |
| 9·6 | | | 21·0 | 0·9 | |
| 9·3 | | | 43·0 | 33·0 | 9·0 g |
| 9·5 | | | 46·0 | 12·7 | |
| 9·6 | | 40 | 56·0 | 9·0 | |
| 9·6 | | 41 | 3·0 | 1·8 | |
| 9·6 | | | 9·0 | 19·1 | |
| 9·6 | | | 33·0 | 0·9 | |
| 9·5 | | 42 | 36·0 | 12·8 | |
| 9·2 | | | 50·0 | 56·5 | |
| 9·6 | | 44 | 24·0 | 57·9 | |
| 9·3 | | | 35·0 | 7·1 | |
| 9·6 | | | 41·0 | 58·8 | |
| 9·3 | | | 41·0 | 49·9 | |
| 9·5 | | 45 | 8·0 | 5·5 | |

## 901—960.

| mag. | h (11h.—12h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·5 | 11 | 45 | 55·0 | 48·1 | |
| 9·3 | | 47 | 20·0 | 16·9 | 8·5 |
| 8·6 | | | 24·0 | 50·6 | 9·0 g |
| 9·6 | | 48 | 10·0 | 10·9 | |
| 8·7 | | | 43·0 | 31·9 | 9·0 |
| 9·2 | | 49 | 54·0 | 6·0 | |
| 9·2 | | | 59·0 | 43·6 | |
| 9·6 | | 50 | 8·5 | 1·0 | |
| 9·1 | | 52 | 5·0 | 21·4 | |
| 9·3 | | | 35·0 | 54·8 | 9·5 g |
| 9·6 | | | 40·0 | 20·9 | |
| 9·2 | | | 40·0 | 5·9 | |
| 8·2 | | | 50·0 | 18·7 | 8·0 Gg |
| 9·6 | | 53 | 29·0 | 20·7 | |
| 9·6 | | | 52·0 | 34·8 | |
| 9·6 | | 54 | 15·0 | 43·9 | |
| 9·6 | | | 19·0 | 34·0 | |
| 9·2 | | | 57·0 | 22·1 | |
| 9·2 | | 55 | 9·0 | 41·9 | |
| 9·2 | | | 22·0 | 25·3 | 9·0 |
| 9·6 | | 56 | 10·0 | 53·9 | g |
| 8·7 | | | 14·3 | 56·8 | 9·0 g |
| 9·6 | | | 17·0 | 17·3 | |
| 7·6 | | 57 | 19·0 | 31·0 | 7·0 GSg |
| 9·6 | | | 24·0 | 11·2 | |
| 9·2 | | 58 | 10·0 | 59·0 | g |
| 9·5 | | | 18·5 | 1·7 | |
| 9·5 | | | 24·0 | 55·0 | |
| 9·6 | | | 42·0 | 56·5 | |
| 9·6 | | | 48·0 | 23·5 | |
| 9·6 | | | 59·0 | 20·6 | |
| 9·6 | | 59 | 20·0 | 1·1 | |
| 9·6 | | | 44·0 | 13·0 | |
| 9·6 | | | 54·0 | 0·8 | |
| 8·3 | 12 | 0 | 23·0 | 37·5 | 9·0 g |
| 9·1 | | | 56·0 | 4·5 | |
| 9·1 | | 1 | 5·0 | 40·2 | |
| 9·6 | | | 12·0 | 53·9 | |
| 9·6 | | | 15·0 | 44·9 | |
| 9·6 | | | 51·0 | 39·8 | |
| 9·6 | | 2 | 16·0 | 5·5 | |
| 9·6 | | 3 | 6·0 | 34·1 | |
| 9·6 | | | 22·0 | 39·6 | |
| 9·5 | | | 24·0 | 10·8 | |
| 9·5 | | 4 | 11·0 | 41·2 | |
| 9·1 | | 5 | 24·0 | 23·0 | |
| 9·5 | | | 28·0 | 29·7 | |
| 9·6 | | | 32·0 | 53·3 | |
| 9·6 | | | 50·0 | 41·0 | |
| 9·3 | | | 55·0 | 13·9 | |
| 9·2 | | 6 | 32·0 | 22·1 | |
| 9·6 | | | 34·0 | 25·0 | |
| 9·5 | | | 39·0 | 13·0 | 8·5 g |
| 9·3 | | | 40·5 | 2·2 | |
| 9·1 | | | 43·0 | 21·9 | |
| 8·5 | | | 57·0 | 15·9 | 8·5 g |
| 9·6 | | 7 | 25·0 | 28·0 | |
| 9·6 | | | 26·0 | 22·0 | |
| 9·3 | | | 29·0 | 11·5 | |
| 9·6 | | | 50·0 | 34·5 | |

## 961—1020.

| mag. | h (12h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·6 | 12 | 8 | 6·0 | 39·4 | |
| 9·6 | | | 19·0 | 44·9 | |
| 9·6 | | | 45·0 | 54·0 | |
| 9·2 | | | 49·0 | 49·1 | |
| 9·6 | | 9 | 22·0 | 3·1 | |
| 9·5 | | | 26·0 | 48·0 | |
| 9·5 | | | 36·0 | 41·5 | |
| 7·4 | | 10 | 2·0 | 27·0 | 8·0 GSg |
| 9·6 | | | 51·0 | 27·0 | |
| 9·6 | | 11 | 16·0 | 12·5 | |
| 9·6 | | | 29·0 | 15·0 | |
| 9·6 | | | 51·0 | 18·4 | |
| 9·3 | | 13 | 40·0 | 34·1 | |
| 9·6 | | 14 | 8·0 | 40·4 | |
| 9·6 | | | 16·0 | 45·1 | |
| 9·3 | | 15 | 38·0 | 10·3 | |
| 9·5 | | | 49·0 | 17·0 | 9·5 |
| 9·6 | | 16 | 6·0 | 45·2 | |
| 9·6 | | | 7·0 | 55·9 | |
| 9·2 | | 17 | 7·0 | 8·0 | 9·5 |
| 9·6 | | | 13·0 | 0·2 | |
| 9·3 | | | 36·0 | 56·2 | 9·5 g |
| 9·6 | | 18 | 5·0 | 51·2 | |
| 9·6 | | | 24·0 | 45·1 | |
| 9·2 | | | 31·0 | 42·6 | |
| 8·9 | | | 33·0 | 29·5 | 9·5 |
| 9·6 | | | 58·0 | 55·9 | |
| 9·6 | | 19 | 59·0 | 30·1 | |
| 9·6 | | 20 | 47·0 | 30·1 | |
| 9·6 | | 21 | 11·0 | 4·1 | |
| 9·6 | | | 35·0 | 21·1 | |
| 9·5 | | 22 | 17·0 | 5·3 | 9·5 |
| 9·3 | | | 25·0 | 30·7 | |
| 9·3 | | 24 | 34·0 | 56·9 | g |
| 9·6 | | | 35·0 | 18·2 | |
| 9·6 | | | 52·0 | 6·1 | |
| 9·2 | | 25 | 4·5 | 58·1 | g |
| 9·3 | | | 18·0 | 47·8 | |
| 9·6 | | | 40·0 | 14·8 | |
| 9·5 | | 26 | 13·0 | 16·0 | |
| 9·6 | | | 38·0 | 53·8 | |
| 9·6 | | | 49·0 | 24·3 | |
| 9·5 | | 28 | 2·0 | 44·7 | g |
| 9·6 | | | 28·0 | 29·9 | |
| 9·5 | | | 49·0 | 52·7 | g |
| 9·3 | | | 52·5 | 26·2 | |
| 9·5 | | | 57·5 | 6·2 | |
| 9·6 | | 29 | 19·0 | 53·8 | |
| 9·6 | | | 41·5 | 12·5 | |
| 9·2 | | | 45·0 | 20·3 | |
| 9·6 | | 30 | 0·0 | 15·0 | |
| 9·3 | | | 0·7 | 57·2 | |
| 9·6 | | | 13·0 | 24·0 | |
| 9·6 | | | 52·0 | 5·1 | |
| 8·9 | | 31 | 12·5 | 53·1 | 9·5 g |
| 8·2 | | | 33·0 | 59·6 | 8·5 g |
| 9·6 | | | 36·5 | 14·2 | |
| 8·3 | | | 57·0 | 34·2 | g |
| 9·6 | | 33 | 1·5 | 30·9 | |
| 8·6 | | | 25·0 | 37·7 | 9·5 g |



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### 1021—1080.

| mag. | h (12h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 8·3 | 12 | 33 | 54·5 | 32·1 | 9·0 g |
| 9·6 | | 34 | 8·0 | 55·0 | |
| 9·6 | | | 22·0 | 37·1 | |
| 9·2 | | | 55·0 | 53·9 | |
| 8·8 | | 35 | 48·0 | 54·9 | g |
| 9·6 | | | 48·0 | 48·3 | |
| 9·6 | | 36 | 6·0 | 21·6 | |
| 8·8 | | | 30·0 | 49·1 | g |
| 9·4 | | | 40·0 | 29·3 | |
| 9·6 | | | 58·0 | 49·0 | |
| 9·0 | | | 19·8 | 0·6 | |
| 7·5 | | 37 | 20·0 | 6·7 | 8·5 Gg |
| 8·3 | | | 26·0 | 15·6 | g |
| 9·3 | | | 34·0 | 33·5 | |
| 9·6 | | | 35·0 | 9·1 | |
| 9·3 | | | 49·0 | 6·2 | |
| 8·5 | | 39 | 31·0 | 7·6 | 8·0 Gg |
| 9·6 | | | 42·0 | 7·1 | |
| 9·1 | | 40 | 12·0 | 25·9 | |
| 9·6 | | | 12·0 | 38·1 | |
| 9·6 | | | 37·0 | 29·1 | |
| 9·6 | | | 50·0 | 51·2 | |
| 9·6 | | | 59·0 | 30·4 | |
| 9·6 | | 42 | 45·0 | 40·1 | |
| 9·4 | | | 56·0 | 21·4 | |
| 9·1 | | 43 | 1·0 | 11·0 | 9·0 |
| 9·1 | | | 2·0 | 46·5 | g |
| 9·6 | | | 3·0 | 24·0 | |
| 9·6 | | | 9·0 | 36·3 | |
| 7·5 | | | 41·0 | 14·2 | 8·5 g |
| 8·9 | | | 44·0 | 26·1 | 9·0 |
| 9·6 | | | 49·0 | 31·1 | |
| 9·4 | | | 52·0 | 19·6 | |
| 9·0 | | 44 | 4·0 | 30·1 | |
| 9·1 | | | 44·0 | 38·7 | g |
| 8·9 | | 45 | 4·0 | 38·9 | g |
| 9·6 | | 46 | 2·0 | 37·4 | |
| 9·6 | | | 10·0 | 34·1 | |
| 9·3 | | | 51·0 | 37·1 | g |
| 7·2 | | | 58·0 | 17·2 | 8·0 GSg |
| 9·4 | | 47 | 35·0 | 9·7 | |
| 9·0 | | | 51·0 | 49·0 | g |
| 9·4 | | 48 | 43·0 | 0·8 | |
| 9·1 | | 49 | 20·0 | 11·9 | 8·5 g |
| 9·3 | | | 24·0 | 6·0 | |
| 9·6 | | | 31·0 | 58·0 | |
| 9·6 | | | 54·0 | 3·1 | |
| 8·1 | | 50 | 12·0 | 36·5 | g |
| 9·3 | | | 20·0 | 33·2 | |
| 8·9 | | | 36·0 | 34·1 | g |
| 9·3 | | | 41·0 | 55·0 | 9·0 g |
| 9·6 | | | 46·0 | 55·4 | |
| 9·4 | | 51 | 33·0 | 52·0 | |
| 9·1 | | 52 | 50·0 | 45·5 | g |
| 9·4 | | 53 | 11·0 | 59·1 | |
| 9·3 | | | 31·0 | 1·1 | |
| 9·6 | | 54 | 6·0 | 24·8 | |
| 9·6 | | | 21·0 | 51·1 | |
| 9·2 | | | 34·0 | 16·1 | |
| 9·6 | | | 44·0 | 53·8 | |

### 1081—1140.

| mag. | h (12h.—13h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·4 | 12 | 55 | 24·0 | 31·1 | |
| 9·4 | | 56 | 10·0 | 19·1 | |
| 9·6 | | 57 | 11·0 | 21·1 | |
| 9·6 | | | 37·0 | 55·1 | |
| 9·6 | | | 43·0 | 18·4 | |
| 9·6 | | 58 | 8·0 | 50·6 | |
| 9·6 | | | 13·3 | 2·5 | |
| 9·6 | | | 24·0 | 6·1 | |
| 9·6 | | | 41·5 | 58·7 | |
| 9·4 | | | 42·5 | 59·6 | |
| 9·3 | | 59 | 14·0 | 9·5 | |
| 9·6 | 13 | 0 | 8·0 | 3·6 | |
| 9·6 | | | 39·0 | 5·3 | |
| 9·4 | | 1 | 7·0 | 9·0 | |
| 9·3 | | | 19·0 | 8·0 | |
| 9·6 | | | 29·0 | 24·5 | |
| 9·1 | | 2 | 3·0 | 50·3 | g |
| 9·6 | | | 47·0 | 5·1 | |
| 9·6 | | | 57·0 | 47·0 | g |
| 9·6 | | 3 | 0·0 | 28·1 | |
| 9·6 | | | 10·0 | 17·0 | |
| 9·6 | | | 11·0 | 39·3 | |
| 9·6 | | | 50·0 | 58·0 | |
| 9·6 | | | 57·0 | 4·1 | |
| 7·7 | | 4 | 24·0 | 21·2 | g |
| 9·6 | | | 57·0 | 59·0 | |
| 9·4 | | 5 | 0·0 | 44·1 | |
| 8·3 | | | 6·0 | 13·1 | 8·0 kg |
| 9·4 | | | 16·3 | 0·0 | |
| 9·6 | | | 23·0 | 48·1 | |
| 8·5 | | | 30·0 | 24·4 | 8·0 g |
| 8·6 | | | 33·7 | 57·7 | g |
| 9·6 | | | 34·0 | 35·1 | |
| 9·6 | | | 48·5 | 17·5 | |
| 9·6 | | | 57·5 | 38·8 | |
| 9·4 | | 6 | 6·5 | 22·8 | |
| 8·9 | | | 25·5 | 36·0 | Gkg |
| 9·4 | | | 36·5 | 9·5 | |
| 9·6 | | | 57·5 | 22·7 | |
| 9·6 | | 7 | 7·5 | 58·1 | |
| 9·6 | | | 23·5 | 16·5 | |
| 9·6 | | | 44·5 | 10·0 | |
| 9·4 | | 8 | 9·5 | 41·1 | |
| 9·6 | | | 20·5 | 32·2 | |
| 9·3 | | | 31·5 | 59·5 | g |
| 9·6 | | | 53·5 | 4·1 | |
| 9·4 | | 9 | 26·5 | 21·1 | |
| 8·9 | | 10 | 0·5 | 9·5 | g |
| 9·3 | | | 15·5 | 7·2 | |
| 9·6 | | 11 | 2·5 | 6·6 | |
| 9·4 | | | 2·5 | 24·2 | |
| 9·7 | | | 22·0 | 58·1 | g |
| 9·6 | | | 30·5 | 15·1 | |
| 9·7§ | | | 37·5 | 46·9 | 8·5 g |
| 9·6 | | 12 | 6·5 | 7·4 | |
| 9·3 | | 13 | 22·5 | 40·8 | |
| 9·6 | | | 49·5 | 16·1 | |
| 7·7 | | | 59·5 | 8·1 | 9·0 g |
| 9·6 | | 14 | 3·5 | 41·8 | |
| 9·6 | | | 23·5 | 4·3 | |

### 1141—1200.

| mag. | h (13h.) | m | s | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·4 | 13 | 16 | 22·5 | 40·3 | 9·0 g |
| 9·6 | | | 51·5 | 45·0 | g |
| 7·6 | | 17 | 0·5 | 32·1 | 8·5 g |
| 9·4 | | 18 | 23·5 | 54·2 | |
| 9·6 | | | 23·5 | 35·1 | |
| 9·3 | | | 26·5 | 47·7 | g |
| 9·6 | | | 49·5 | 37·0 | |
| 9·3 | | | 52·5 | 9·3 | |
| 9·4 | | 19 | 3·5 | 36·1 | |
| 9·3 | | 20 | 34·5 | 19·5 | |
| 9·4 | | | 40·5 | 43·3 | |
| 9·3 | | | 43·5 | 47·0 | |
| 8·6 | | | 47·5 | 7·9 | 9·5 g |
| 9·2 | | 21 | 30·5 | 26·5 | |
| 9·2 | | | 31·5 | 4·6 | |
| 9·6 | | | 53·5 | 7·8 | |
| 8·8 | | 22 | 12·5 | 10·6 | 8·0 Gg |
| 8·3 | | | 20·5 | 57·9 | 9·0 g |
| 9·4 | | 23 | 3·5 | 18·1 | |
| 9·4 | | | 16·5 | 28·1 | |
| 9·4 | | | 47·5 | 19·2 | |
| 8·3 | | 24 | 1·5 | 55·1 | 8·0 g |
| 8·8 | | 25 | 1·5 | 57·2 | 9·5 g |
| 8·8 | | | 9·7 | 59·8 | 9·5 g |
| 9·4 | | | 17·5 | 23·1 | |
| 9·4 | | | 34·5 | 22·0 | |
| 9·6 | | | 39·5 | 20·8 | |
| 9·4 | | 26 | 3·5 | 40·0 | g |
| 9·6 | | | 4·2 | 59·9 | |
| 9·3 | | | 35·0 | 29·4 | |
| 9·6 | | 28 | 13·0 | 17·7 | |
| 9·6 | | | 16·0 | 33·3 | |
| 9·6 | | | 43·5 | 18·0 | |
| 9·6 | | 29 | 21·0 | 28·3 | |
| 9·6 | | | 35·5 | 33·3 | |
| 9·3 | | | 42·5 | 6·4 | |
| 8·4 | | | 58·0 | 26·4 | 9·5 g |
| 9·4 | | 30 | 44·0 | 17·7 | |
| 9·6 | | 31 | 3·0 | 23·2 | |
| 9·3 | | 32 | 59·0 | 42·0 | g |
| 9·6 | | 33 | 1·0 | 2·7 | |
| 9·6 | | | 17·0 | 2·3 | |
| 9·6 | | | 55·5 | 57·8 | g |
| 7·1 | | 34 | 3·5 | 0·4 | 7·5 GSg |
| 9·4 | | | 24·0 | 29·6 | |
| 9·1 | | 35 | 26·5 | 0·8 | |
| 9·2 | | | 35·0 | 20·5 | |
| 8·6 | | | 48·0 | 16·9 | 9·0 |
| 9·3 | | 36 | 26·0 | 50·6 | |
| 9·6 | | | 43·0 | 17·1 | |
| 9·6 | | 37 | 10·0 | 55·1 | |
| 9·1 | | | 24·0 | 35·2 | g |
| 9·6 | | | 34·0 | 32·8 | |
| 9·0 | | | 43·0 | 30·7 | |
| 9·2 | | | 50·0 | 19·5 | |
| 9·6 | | 38 | 25·0 | 36·1 | |
| 9·6 | | 39 | 9·0 | 38·8 | |
| 9·6 | | | 14·0 | 18·8 | |
| 9·0 | | | 33·0 | 34·3 | 8·5 g |
| 9·3 | | 41 | 23·0 | 50·8 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 12 | 30 | + 91 + 0·02 d | − 8·3 |
| | 40 | 96 + 0·02 | 8·2 |
| | 50 | 100 + 0·03 | 8·2 |
| 13 | 0 | 105 + 0·03 | 8·1 |
| | 10 | 110 + 0·04 | 8·0 |
| | 20 | 114 + 0·04 | 7·9 |
| | 30 | 119 + 0·05 | 7·7 |
| | 40 | 123 + 0·05 | 7·6 |
| | 50 | + 127 + 0·06 | − 7·4 |

d = minutes of decl.

§ Only a tolerably faint image on checkplate. Certainly missing on measuring plate (which is somewhat poorer).

25 prec.

| h | m | α (s) | α (s) | δ (′) |
|---|---|---|---|---|
| 13 | 40 | + 123 | + 0.05 d | − 7.6 |
| | 50 | 127 | + 0.06 | 7.4 |
| 14 | 0 | 131 | + 0.06 | 7.2 |
| | 10 | 136 | + 0.06 | 7.0 |
| | 20 | 140 | + 0.07 | 6.8 |
| | 30 | 143 | + 0.07 | 6.6 |
| | 40 | 147 | + 0.08 | 6.4 |
| | 50 | + 151 | + 0.08 | − 6.2 |

d = minutes of decl.

## 1201—1260.

| mag. | 13h.–14h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.6 | 13 | 42 | 10.5 | 0.1 | |
| 9.4 | | | 32.0 | 39.9 | g |
| 9.6 | | | 44.0 | 47.7 | g |
| 8.5 | | 43 | 18.0 | 22.9 | 9.0 g |
| 9.6 | | | 32.0 | 32.6 | |
| 9.2 | | | 46.0 | 18.8 | |
| 9.4 | | | 59.0 | 42.0 | |
| 9.6 | | 44 | 3.0 | 25.3 | |
| 9.6 | | | 42.0 | 43.2 | |
| 8.4 | | 45 | 2.0 | 4.0 | 9.2 g |
| 9.6 | | | 12.0 | 14.0 | |
| 9.6 | | | 15.0 | 32.9 | |
| 9.6 | | | 44.0 | 47.8 | |
| 8.4 | | | 48.0 | 58.1 | 9.2 g |
| 8.8 | | | 53.0 | 53.3 | 9.5 g |
| 9.4 | | 46 | 3.0 | 53.9 | |
| 9.6 | | | 6.0 | 12.0 | |
| 9.6 | | | 6.3 | 1.4 | |
| 9.0 | | | 8.5 | 12.2 | |
| 9.6 | | 47 | 24.5 | 49.9 | |
| 7.3 | | | 30.5 | 1.7 | 8.5 g |
| 9.6 | | | 31.5 | 9.2 | |
| 9.6 | | | 41.5 | 11.6 | |
| 9.6 | | | 49.5 | 6.8 | |
| 9.6 | | | 59.5 | 20.7 | |
| 9.6 | | 48 | 45.5 | 22.2 | |
| 9.0 | | 49 | 27.5 | 5.3 | |
| 9.6 | | 51 | 37.5 | 47.5 | |
| 9.6 | | | 40.5 | 46.2 | |
| 9.6 | | 52 | 31.5 | 27.4 | |
| 9.6 | | 53 | 5.5 | 26.6 | |
| 9.4 | | | 26.5 | 23.0 | |
| 9.6 | | 54 | 51.5 | 18.3 | |
| 9.3 | | | 52.5 | 17.2 | |
| 9.7 | | 55 | 3.5 | 48.4 | |
| 9.3 | | | 31.5 | 13.8 | 9.5 |
| 7.9 | | | 52.5 | 53.3 | 8.5 g |
| 9.4 | | | 55.5 | 13.3 | 9.5 |
| 9.6 | | 56 | 14.5 | 30.2 | |
| 9.4 | | 57 | 9.5 | 25.5 | |
| 9.3 | | 58 | 40.5 | 50.8 | 9.0 g |
| 9.6 | | 59 | 29.5 | 3.3 | |
| 8.5 | | | 52.5 | 32.3 | g |
| 9.1 | | | 54.5 | 48.9 | g |
| 9.6 | 14 | 1 | 17.5 | 38.9 | |
| 9.0 | | 2 | 12.5 | 21.2 | |
| 9.4 | | | 29.5 | 42.3 | |
| 7.9 | | | 44.5 | 7.2 | 9.0 g |
| 9.4 | | | 54.5 | 21.7 | |
| 9.4 | | | 59.5 | 37.1 | |
| 9.6 | | 3 | 24.5 | 7.9 | |
| 9.3 | | | 40.5 | 15.2 | |
| 9.6 | | | 44.5 | 2.1 | |
| 9.6 | | | 56.5 | 40.4 | |
| 9.6 | | 4 | 4.5 | 3.1 | |
| 9.6 | | | 37.5 | 39.8 | |
| 9.6 | | | 39.5 | 8.2 | g |
| 9.6 | | 5 | 21.5 | 51.1 | |
| 9.6 | | | 37.5 | 28.0 | |
| 8.7 | | | 42.5 | 6.1 | |

## 1261—1320.

| mag. | 14h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.6 | 14 | 6 | 21.3 | 1.7 | |
| 9.4 | | | 24.5 | 26.1 | |
| 9.4 | | | 45.5 | 47.8 | |
| 9.3 | | 7 | 23.5 | 5.0 | |
| 8.8 | | | 31.5 | 55.6 | 7.5 g |
| 9.2 | | 8 | 7.5 | 20.8 | |
| 6.6 | | | 18.5 | 23.2 | 7.0 GSg |
| 9.3 | | 9 | 54.5 | 21.2 | 9.0 g |
| 9.0 | | 10 | 4.5 | 39.1 | g |
| 9.6 | | | 12.5 | 7.8 | |
| 9.6 | | 11 | 22.5 | 26.4 | |
| 9.3 | | | 42.5 | 35.9 | 8.0 Gg |
| 9.4 | | | 56.5 | 46.4 | |
| 9.6 | | | 58.5 | 44.6 | |
| 8.8 | | 12 | 14.5 | 30.1 | 8.0 g |
| 9.2 | | | 34.5 | 13.2 | |
| 9.6 | | 13 | 43.5 | 26.5 | |
| 9.6 | | 14 | 41.5 | 5.7 | |
| 7.9 | | 15 | 1.5 | 50.9 | 8.5 g |
| 8.5 | | | 41.5 | 15.3 | 9.0 G |
| 9.6 | | 16 | 24.5 | 21.7 | |
| 9.3 | | | 33.5 | 7.3 | |
| 9.3 | | | 39.5 | 0.3 | |
| 9.6 | | 17 | 0.5 | 12.8 | |
| 9.4 | | | 11.0 | 44.9 | |
| 9.2 | | | 27.0 | 24.7 | |
| 8.9 | | | 43.0 | 57.2 | g |
| 9.0 | | | 54.0 | 34.1 | g |
| 9.6 | | 18 | 14.0 | 50.9 | 9.0 g |
| 9.6 | | | 20.0 | 3.4 | |
| 8.8 | | | 22.0 | 35.0 | g |
| 9.3 | | | 34.0 | 4.4 | |
| 9.6 | | 19 | 13.0 | 37.4 | g |
| 9.0 | | | 23.0 | 4.0 | g |
| 8.5 | | | 26.0 | 49.9 | 8.0 Gg |
| 9.6 | | 20 | 18.5 | 57.0 | |
| 9.6 | | | 40.0 | 12.9 | |
| 8.9 | | 21 | 50.0 | 13.9 | 8.0 Gg |
| 9.6 | | 22 | 13.0 | 44.0 | |
| 9.6 | | | 17.0 | 41.4 | |
| 8.4 | | | 57.0 | 44.8 | 9.0 g |
| 8.1 | | 23 | 25.0 | 8.4 | 7.5 GSg |
| 9.6 | | | 39.0 | 32.9 | |
| 9.6 | | | 55.0 | 38.1 | |
| 9.2 | | 24 | 42.0 | 18.5 | |
| 9.3 | | 25 | 0.0 | 59.7 | |
| 9.6 | | | 0.0 | 15.9 | 9.0 |
| 9.4 | | | 10.0 | 17.6 | 9.0 |
| 9.2 | | | 14.2 | 54.8 | g |
| 9.2 | | | 25.0 | 31.8 | |
| 10.0 | | | 48.0 | 21.0 | |
| 9.5 | | 26 | 31.7 | 27.5 | |
| 8.9 | | | 51.2 | 24.1 | 9.0 |
| 9.2 | | 27 | 9.0 | 10.0 | |
| 9.3 | | | 18.5 | 27.0 | |
| 9.7 | | | 20.7 | 48.7 | |
| 10.0 | | | 50.0 | 9.6 | |
| 10.0 | | | 57.5 | 19.7 | |
| 8.2 | | 28 | 11.5 | 6.5 | g |
| 10.0 | | | 31.0 | 49.8 | |

## 1321—1380.

| mag. | 14h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.7 | 14 | 28 | 36.0 | 13.3 | |
| 8.2 | | | 44.2 | 16.9 | 8.5 Gg |
| 9.2 | | 29 | 2.8 | 16.1 | |
| 10.0 | | | 11.5 | 28.1 | |
| 9.2 | | | 16.2 | 15.4 | g |
| 9.4 | | | 18.5 | 27.2 | |
| 9.9 | | | 39.0 | 33.9 | |
| 9.4 | | | 54.7 | 31.3 | g |
| 8.4 | | 30 | 7.0 | 46.2 | 8.0 g |
| 10.0 | | | 10.0 | 7.7 | |
| 9.7 | | | 10.5 | 48.1 | |
| 10.0 | | | 18.0 | 28.3 | |
| 8.8 | | | 21.0 | 30.2 | 8.5 g |
| 8.4 | | | 31.0 | 34.7 | 8.5 Gg |
| 9.2 | | | 37.0 | 17.2 | |
| 9.8 | | 31 | 11.0 | 19.9 | |
| 9.7 | | | 21.5 | 21.3 | |
| 9.3 | | | 33.5 | 37.2 | 9.0 g |
| 10.0 | | | 36.5 | 53.3 | |
| 7.8 | | | 50.3 | 25.8 | 7.8 g |
| 9.0 | | | 59.0 | 20.6 | |
| 9.8 | | 32 | 0.0 | 40.6 | |
| 9.4 | | | 2.5 | 12.6 | |
| 9.9 | | | 3.0 | 52.2 | |
| 10.0 | | | 46.0 | 12.4 | |
| 8.4 | | | 46.2 | 30.8 | 9.0 g |
| 8.9 | | | 48.7 | 4.4 | |
| 9.0 | | | 54.5 | 30.0 | g |
| 9.4 | | 33 | 25.2 | 43.0 | |
| 9.8 | | 34 | 31.7 | 47.9 | |
| 9.6 | | | 42.8 | 57.9 | |
| 10.0 | | 35 | 10.5 | 26.1 | |
| 9.8 | | | 44.0 | 19.9 | |
| 9.5 | | | 50.0 | 52.1 | |
| 9.9 | | | 59.0 | 17.5 | |
| 9.8 | | 36 | 4.0 | 47.4 | |
| 10.0 | | | 28.5 | 5.7 | |
| 9.5 | | | 41.0 | 7.3 | |
| 9.8 | | | 50.7 | 58.5 | |
| 8.6 | | | 54.0 | 23.7 | 9.0 |
| 9.8 | | | 53.5 | 39.3 | |
| 9.6 | | 37 | 1.5 | 12.3 | |
| 10.0 | | | 43.2 | 25.7 | |
| 9.8 | | 38 | 0.7 | 25.1 | |
| 10.0 | | | 22.7 | 17.3 | |
| 10.0 | | | 31.2 | 27.4 | |
| 9.5 | | 39 | 0.2 | 13.4 | |
| 9.4 | | | 8.7 | 12.3 | |
| 9.8 | | | 17.2 | 37.0 | |
| 9.8 | | | 20.7 | 33.5 | |
| 9.8 | | | 22.7 | 25.4 | |
| 9.5 | | | 23.2 | 9.4 | |
| 9.6 | | | 24.7 | 17.2 | |
| 10.0 | | | 27.7 | 29.2 | |
| 9.4 | | | 49.7 | 26.0 | |
| 8.6 | | 40 | 0.7 | 41.8 | g |
| 10.0 | | | 10.7 | 4.9 | |
| 10.0 | | | 35.6 | 21.0 | |
| 10.0 | | | 38.7 | 21.5 | |
| 9.3 | | | 42.2 | 12.6 | |



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## 1381—1440.

| mag. | h | m | s (14h.) | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·9 | 14 | 41 | 3·7 | 36·0 | |
| 9·4 | | | 19·2 | 30·5 | |
| 9·5 | | | 19·4 | 34·3 | |
| 10·0 | | | 19·4 | 52·4 | |
| 9·5 | | | 20·2 | 25·1 | |
| 9·5 | | | 57·4 | 8·9 | |
| 9·6 | | 42 | 46·4 | 29·5 | *g* |
| 10·0 | | | 54·4 | 3·0 | |
| 8·6 | | | 59·9 | 54·5 | 8·5 *g* |
| 8·6 | | 43 | 1·9 | 14·3 | 8·0 *g* |
| 9·4 | | | 25·9 | 40·5 | |
| 9·6 | | | 27·4 | 35·7 | |
| 9·5 | | | 32·9 | 0·7 | *g* |
| 9·9 | | | 35·9 | 8·2 | |
| 10·0 | | | 44·9 | 33·7 | |
| 8·4 | | 44 | 3·4 | 23·4 | *g* |
| 9·5 | | | 12·4 | 22·4 | |
| 9·4 | | | 20·9 | 24·0 | |
| 9·2 | | | 26·1 | 58·9 | *g* |
| 9·9 | | | 49·9 | 52·7 | |
| 10·0 | | | 52·9 | 44·7 | |
| 9·7 | | 45 | 4·4 | 34·6 | |
| 9·7 | | | 20·9 | 49·8 | |
| 9·6 | | | 32·4 | 35·9 | |
| 9·9 | | 46 | 3·4 | 49·5 | |
| 9·9 | | | 6·4 | 30·9 | |
| 9·3 | | | 40·9 | 39·8 | *g* |
| 8·4 | | | 57·9 | 16·9 | 8·5 G*g* |
| 8·2 | | 47 | 19·9 | 1·9 | 8·0 *g* |
| 7·9 | | | 25·4 | 44·2 | *g* |
| 9·6 | | | 40·1 | 20·5 | |
| 8·0 | | | 40·9 | 9·9 | 8·5 G*g* |
| 9·0 | | | 43·1 | 59·4 | *g* |
| 9·4 | | | 57·1 | 23·3 | |
| 9·4 | | 48 | 0·1 | 15·2 | |
| 8·2 | | | 2·1 | 17·4 | 8·5 *g* |
| 9·5 | | | 11·6 | 42·8 | |
| 9·4 | | | 13·1 | 22·6 | |
| 10·0 | | | 16·1 | 31·4 | |
| 9·4 | | | 19·6 | 19·7 | |
| 9·9 | | | 20·6 | 21·1 | |
| 9·9 | | | 33·1 | 25·5 | |
| 10·0 | | | 36·1 | 40·6 | |
| 9·9 | | | 58·6 | 45·5 | |
| 10·0 | | 49 | 0·1 | 44·9 | |
| 9·7 | | | 8·6 | 56·5 | |
| 10·0 | | | 21·6 | 25·4 | |
| 9·5 | | | 43·1 | 36·7 | |
| 9·4 | | 50 | 4·1 | 54·7 | |
| 10·0 | | | 8·1 | 8·9 | |
| 10·0 | | | 10·6 | 0·6 | |
| 9·5 | | | 11·1 | 28·1 | |
| 9·4 | | | 17·1 | 19·6 | |
| 9·5 | | | 34·1 | 11·7 | |
| 9·6 | | | 43·1 | 56·0 | |
| 9·9 | | | 47·6 | 45·2 | |
| 9·9 | | | 48·6 | 25·2 | |
| 9·6 | | | 53·1 | 55·3 | |
| 8·8 | | | 59·1 | 33·4 | *g* |
| 9·9 | | 51 | 17·6 | 24·6 | |

## 1441—1500.

| mag. | h | m | s (14h.—15h.) | ′ (−73°) | |
|---|---|---|---|---|---|
| 9·7 | 14 | 51 | 32·6 | 5·7 | |
| 10·0 | | | 44·1 | 37·7 | |
| 9·5 | | 52 | 1·6 | 41·3 | |
| 9·5 | | | 4·6 | 35·4 | |
| 8·8 | | | 6·6 | 22·4 | 9·0 G*g* |
| 10·0 | | | 10·1 | 33·3 | |
| 10·0 | | | 16·1 | 7·6 | |
| 8·5 | | | 21·1 | 23·5 | 9·0 *g* |
| 9·5 | | | 27·6 | 48·7 | |
| 9·4 | | | 29·1 | 36·0 | |
| 9·8 | | | 56·6 | 47·3 | |
| 9·4 | | 53 | 6·6 | 9·6 | *g* |
| 9·7 | | | 26·1 | 56·2 | |
| 8·6 | | | 36·1 | 43·5 | *g* |
| 9·4 | | | 37·1 | 21·1 | |
| 9·8 | | | 39·6 | 40·7 | |
| 10·0 | | | 46·6 | 32·3 | |
| 8·9 | | 54 | 4·6 | 45·6 | |
| 9·9 | | | 22·9 | 1·9 | |
| 10·0 | | | 27·4 | 54·3 | |
| 8·8 | | | 43·9 | 20·0 | |
| 9·9 | | | 44·9 | 55·2 | |
| 9·4 | | 55 | 10·9 | 20·0 | |
| 10·0 | | | 13·9 | 50·7 | |
| 10·0 | | | 30·4 | 27·0 | |
| 10·0 | | 56 | 10·6 | 56·8 | |
| 9·8 | | | 15·9 | 6·9 | |
| 9·4 | | | 17·9 | 24·3 | |
| 9·4 | | | 27·9 | 44·6 | |
| 10·0 | | | 30·4 | 20·7 | |
| 9·6 | | | 43·4 | 54·8 | |
| 9·6 | | | 52·4 | 44·7 | |
| 8·9 | | 57 | 7·9 | 56·6 | 9·0 *g* |
| 9·4 | | | 16·4 | 36·8 | |
| 8·8 | | | 16·9 | 55·3 | 9·0 *g* |
| 8·9 | | | 18·9 | 33·8 | |
| 9·4 | | | 30·4 | 57·7 | |
| 8·6 | | | 50·9 | 22·8 | 8·5 G*g* |
| 10·0 | | | 56·4 | 16·7 | |
| 10·0 | | 58 | 39·9 | 45·9 | |
| 9·9 | | | 58·9 | 37·3 | |
| 9·9 | | 59 | 12·4 | 4·6 | |
| 10·0 | | | 20·0 | 52·7 | |
| 9·2 | | | 38·0 | 51·7 | *g* |
| 10·0 | | | 50·4 | 48·7 | |
| 10·0 | 15 | 0 | 8·0 | 43·7 | |
| 9·7 | | | 12·5 | 27·8 | |
| 10·0 | | 1 | 2·0 | 32·3 | |
| 10·0 | | | 55·0 | 42·8 | |
| 9·4 | | 2 | 55·0 | 22·1 | |
| 9·8 | | | 59·0 | 24·0 | |
| 9·9 | | 3 | 0·5 | 2·3 | |
| 10·0 | | | 2·0 | 55·8 | |
| 9·9 | | | 12·5 | 52·5 | |
| 9·4 | | | 19·5 | 39·8 | |
| 9·6 | | | 21·0 | 43·6 | |
| 9·2 | | | 26·0 | 5·5 | |
| 9·4 | | | 49·5 | 49·3 | *g* |
| 8·4 | | | 50·0 | 12·5 | 8·2 *g* |
| 10·0 | | | 50·0 | 15·7 | |

## 1501—1560.

| mag. | h | m | s (15h.) | ′ (−73°) | |
|---|---|---|---|---|---|
| 10·0 | 15 | 3 | 53·0 | 38·9 | ? |
| 9·4 | | 4 | 12·5 | 1·8 | |
| 9·2 | | | 12·7 | 36·8 | *g* |
| 8·9 | | | 20·7 | 14·8 | 9·0 *g* |
| 9·4 | | | 26·7 | 14·6 | |
| 10·0 | | | 43·7 | 13·9 | |
| 9·4 | | | 49·2 | 38·7 | |
| 8·2 | | | 58·7 | 41·2 | 8·0 *g* |
| 9·7 | | 5 | 31·2 | 19·4 | |
| 10·0 | | | 32·7 | 3·2 | |
| 10·0 | | | 33·7 | 3·7 | |
| 10·0 | | | 52·2 | 31·9 | |
| 9·6 | | | 54·7 | 9·0 | *g* |
| 10·0 | | 6 | 38·5 | 59·4 | |
| 9·7 | | | 39·2 | 10·1 | |
| 8·9 | | | 52·2 | 32·8 | *g* |
| 10·0 | | 7 | 1·7 | 2·4 | |
| 10·0 | | | 7·7 | 2·6 | |
| 10·0 | | | 11·7 | 36·4 | |
| 10·0 | | | 14·7 | 47·1 | |
| 9·9 | | | 20·2 | 34·6 | |
| 9·4 | | | 28·2 | 29·1 | |
| 10·0 | | | 40·7 | 23·9 | |
| 9·9 | | | 42·7 | 4·7 | |
| 10·0 | | 8 | 23·5 | 56·8 | |
| 9·8 | | | 25·0 | 30·8 | |
| 6·6 | | | 41·5 | 56·5 | 7·0 GS*g* |
| 9·8 | | | 42·0 | 29·9 | |
| 10·0 | | | 49·0 | 31·2 | |
| 8·9 | | | 51·5 | 8·9 | *g* |
| 9·2 | | | 55·0 | 56·3 | *g* |
| 10·0 | | | 58·0 | 54·4 | |
| 9·2 | | 9 | 2·5 | 7·3 | |
| 9·4 | | | 3·0 | 16·9 | |
| 8·8 | | | 21·0 | 17·8 | 9·0 |
| 9·9 | | | 34·5 | 55·9 | |
| 9·8 | | | 40·5 | 33·5 | |
| 9·5 | | | 46·0 | 46·5 | |
| 9·6 | | | 48·5 | 33·4 | |
| 8·4 | | | 54·0 | 38·0 | 8·5 *g* |
| 9·5 | | 10 | 0·5 | 52·0 | |
| 9·8 | | | 4·0 | 2·2 | |
| 8·2 | | | 7·0 | 43·8 | 8·0 *g* |
| 9·6 | | | 23·5 | 42·3 | |
| 9·4 | | 11 | 20·0 | 24·7 | |
| 10·0 | | | 32·5 | 41·7 | |
| 9·9 | | | 38·5 | 33·5 | |
| 8·8 | | | 44·5 | 36·5 | 9·5 *g* |
| 9·4 | | | 56·0 | 42·0 | |
| 9·8 | | 12 | 6·0 | 42·7 | |
| 9·5 | | | 12·2 | 41·1 | |
| 9·4 | | 13 | 0·7 | 3·4 | *g* |
| 10·0 | | | 8·7 | 16·0 | |
| 9·7 | | | 16·7 | 51·9 | |
| 10·0 | | | 33·7 | 47·0 | |
| 9·9 | | | 34·2 | 5·1 | |
| 10·0 | | | 45·2 | 57·0 | |
| 9·5 | | | 46·7 | 4·8 | |
| 8·4 | | | 47·7 | 23·8 | 9·0 |
| 10·0 | | | 55·2 | 25·9 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 14 | 40 | + 1·47 + 0·08 d | − 6·4 |
| | 50 | 1·51 + 0·08 | 6·2 |
| 15 | 0 | 1·54 + 0·09 | 5·9 |
| | 10 | 1·57 + 0·09 | 5·6 |
| | 20 | + 1·61 + 0·09 | − 5·4 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 15 | 10 | + 157 | + 0·09 d | − 5·6 |
| | 20 | 161 | + 0·09 | 5·4 |
| | 30 | 164 | + 0·10 | 5·1 |
| | 40 | 166 | + 0·10 | 4·8 |
| | 50 | 169 | + 0·10 | 4·5 |
| 16 | 0 | 172 | + 0·10 | 4·2 |
| | 10 | 174 | + 0·11 | 3·9 |
| | 20 | 176 | + 0·11 | 3·5 |
| | 30 | + 178 | + 0·11 | − 3·2 |

d = minutes of decl.

1561—1620.

| mag. | h (15h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·9 | 15 | 13 | 58·2 | 25·5 | |
| 10·0 | | 14 | 8·7 | 26·8 | |
| 10·0 | | | 13·7 | 36·2 | |
| 9·7 | | | 23·6 | 1·7 | |
| 9·2 | | | 29·2 | 43·5 | |
| 9·2 | | | 55·7 | 12·7 | |
| 10·0 | | 15 | 10·7 | 51·9 | |
| 9·7 | | | 21·2 | 35·5 | |
| 10·0 | | | 22·4 | 52·7 | |
| 9·0 | | | 33·2 | 1·1 | g |
| 9·8 | | | 41·7 | 43·0 | |
| 8·7 | | | 43·2 | 41·6 | 8·0 g |
| 10·0 | | | 44·7 | 26·0 | |
| 9·7 | | 16 | 6·7 | 42·5 | |
| 9·5 | | | 40·7 | 32·4 | |
| 10·0 | | | 42·7 | 55·5 | |
| 9·5 | | | 46·2 | 7·0 | |
| 8·7 | | | 48·7 | 34·1 | 8·0 Gg |
| 9·5 | | | 53·2 | 16·9 | |
| 9·6 | | | 58·7 | 5·9 | |
| 10·0 | | 17 | 4·2 | 9·7 | |
| 9·6 | | | 4·7 | 45·7 | |
| 9·4 | | | 7·7 | 41·0 | 9·0 g |
| 9·0 | | | 8·7 | 20·9 | |
| 8·9 | | | 17·7 | 38·2 | g |
| 8·9 | | | 36·7 | 38·9 | g |
| 9·8 | | | 43·7 | 17·9 | |
| 10·0 | | 18 | 11·7 | 2·7 | |
| 9·4 | | | 44·7 | 22·0 | |
| 9·0 | | 19 | 8·2 | 54·6 | 8·5 Sg |
| 9·9 | | | 13·7 | 43·0 | |
| 9·8 | | | 22·7 | 13·8 | |
| 8·4 | | | 34·2 | 6·8 | 7·5 g |
| 9·3 | | | 42·7 | 31·8 | |
| 9·8 | | | 45·2 | 42·0 | |
| 8·7 | | 20 | 6·5 | 41·3 | 8·0 g |
| 10·0 | | | 20·0 | 12·0 | |
| 8·8 | | | 45·5 | 43·0 | 9·5 |
| 9·8 | | 21 | 1·5 | 28·5 | |
| 10·0 | | | 18·0 | 35·3 | |
| 9·8 | | | 25·0 | 6·7 | |
| 9·8 | | | 43·0 | 58·4 | |
| 10·0 | | 22 | 4·0 | 22·0 | |
| 9·8 | | | 5·5 | 58·0 | |
| 10·0 | | | 14·5 | 41·3 | |
| 9·5 | | | 15·0 | 37·3 | |
| 8·4 | | | 24·5 | 55·8 | 7·7 GSg |
| 9·9 | | | 26·5 | 24·9 | |
| 10·0 | | 23 | 1·0 | 47·7 | |
| 9·6 | | | 13·5 | 18·6 | |
| 10·0 | | | 24·5 | 22·0 | |
| 10·0 | | | 33·5 | 40·3 | |
| 9·2 | | | 45·5 | 7·5 | |
| 9·4 | | | 49·0 | 2·6 | |
| 9·5 | | 24 | 15·6 | 1·6 | |
| 9·8 | | | 19·0 | 15·5 | |
| 9·5 | | | 27·0 | 14·9 | |
| 10·0 | | | 33·0 | 22·7 | |
| 9·8 | | | 45·1 | 0·0 | |
| 10·0 | | | 45·5 | 17·9 | |

1621—1680.

| mag. | h (15h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 10·0 | 15 | 25 | 11·5 | 23·1 | |
| 9·4 | | | 52·6 | 2·0 | |
| 9·8 | | 26 | 0·1 | 41·3 | |
| 9·4 | | | 11·6 | 37·0 | |
| 6·0 | | | 32·8 | 1·9 | 6·0 GSgr |
| 8·2 | | | 36·1 | 3·3 | 8·2 Gg |
| 8·9 | | 27 | 1·3 | 13·9 | |
| 9·5 | | | 13·1 | 29·3 | |
| 9·8 | | | 15·1 | 43·6 | |
| 9·8 | | | 36·6 | 39·0 | |
| 10·0 | | | 42·1 | 21·8 | |
| 10·0 | | | 44·8 | 58·7 | |
| 9·9 | | | 56·1 | 3·8 | |
| 10·0 | | 28 | 0·6 | 2·3 | |
| 9·0 | | | 40·3 | 14·6 | 8·5 |
| 10·0 | | 29 | 11·1 | 2·1 | |
| 9·0 | | | 27·6 | 31·3 | |
| 8·8 | | | 30·8 | 39·1 | |
| 9·4 | | | 31·1 | 7·6 | |
| 9·5 | | 30 | 6·1 | 52·9 | |
| 9·8 | | | 51·0 | 5·0 | |
| 9·4 | | 31 | 0·0 | 39·8 | |
| 9·8 | | | 15·5 | 43·6 | |
| 9·9 | | | 24·0 | 18·1 | |
| 9·4 | | 32 | 0·0 | 34·7 | g |
| 9·6 | | | 7·0 | 3·8 | |
| 10·0 | | | 21·5 | 45·9 | |
| 9·4 | | | 35·0 | 0·5 | |
| 7·5 | | | 51·2 | 38·6 | 8·0 g |
| 10·0 | | 33 | 4·0 | 10·8 | |
| 9·6 | | | 30·5 | 44·9 | |
| 10·0 | | | 50·5 | 54·1 | |
| 10·0 | | | 51·0 | 59·0 | |
| 9·8 | | | 58·0 | 7·4 | |
| 10·0 | | 34 | 5·0 | 2·7 | |
| 9·0 | | | 15·5 | 57·1 | g |
| 10·0 | | | 21·5 | 30·5 | |
| 8·8 | | | 54·7 | 52·4 | g |
| 10·0 | | 35 | 40·0 | 34·1 | |
| 10·0 | | | 51·0 | 7·8 | |
| 9·8 | | | 59·5 | 22·1 | |
| 9·6 | | 36 | 0·0 | 30·9 | |
| 9·0 | | | 12·7 | 36·2 | 8·5 g |
| 9·4 | | | 22·7 | 35·0 | |
| 9·8 | | | 28·0 | 0·5 | |
| 10·0 | | | 29·5 | 58·3 | |
| 9·8 | | | 50·5 | 52·2 | |
| 9·8 | | | 51·0 | 7·2 | |
| 9·0 | | | 51·5 | 57·1 | g |
| 9·2 | | 38 | 18·0 | 12·8 | g |
| 9·1 | | | 53·0 | 31·3 | |
| 9·1 | | 39 | 27·0 | 47·7 | |
| 8·8 | | | 42·0 | 11·8 | |
| 8·6 | | 40 | 6·0 | 4·1 | 8·5 g |
| 9·2 | | 44 | 43·0 | 2·8 | |
| 9·3 | | | 45·0 | 19·8 | |
| 9·3 | | 45 | 52·0 | 3·9 | |
| 9·3 | | 46 | 3·0 | 7·8 | |
| 8·8 | | | 17·0 | 14·4 | 8·5 g |
| 9·3 | | | 20·0 | 42·0 | g |

1681—1740.

| mag. | h (15h.—16h.) | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·5 | 15 | 46 | 38·5 | 14·9 | 9·5 g |
| 9·3 | | 47 | 30·0 | 21·5 | |
| 7·2 | | | 56·0 | 9·1 | 7·0 GSg |
| 7·6 | | 48 | 35·0 | 13·6 | 9·0 g |
| 9·0 | | 49 | 2·0 | 46·3 | g |
| 9·2 | | 50 | 46·0 | 32·4 | |
| 9·3 | | 51 | 18·0 | 4·0 | g |
| 9·1 | | | 18·0 | 33·7 | g |
| 9·3 | | 53 | 20·0 | 58·0 | |
| 9·0 | | | 33·5 | 57·9 | 9·5 g |
| 8·2 | | | 41·0 | 49·5 | 9·0 g |
| 9·0 | | 54 | 3·0 | 28·2 | g |
| 9·3 | | | 17·0 | 3·8 | |
| 9·1 | | | 58·0 | 51·7 | g |
| 8·6 | | 55 | 18·0 | 50·7 | g |
| 9·0 | | | 42·0 | 37·9 | g |
| 9·3 | | | 59·0 | 49·6 | |
| 9·2 | | 56 | 19·0 | 2·8 | |
| 9·2 | | | 42·0 | 25·1 | |
| 9·3 | | | 56·0 | 56·1 | g |
| 9·2 | | 57 | 1·0 | 9·4 | |
| 9·3 | | | 7·0 | 0·8 | |
| 9·4 | | | 25·5 | 59·8 | |
| 9·1 | | | 30·0 | 44·3 | |
| 9·0 | | 58 | 47·0 | 26·2 | 9·5 |
| 9·3 | | 59 | 11·0 | 34·9 | |
| 8·8 | 16 | 0 | 20·0 | 13·3 | g |
| 9·2 | | | 52·0 | 56·5 | |
| 9·5 | | | 53·0 | 8·0 | g |
| 9·0 | | 1 | 52·0 | 49·4 | g |
| 9·3 | | 2 | 6·0 | 34·2 | |
| 9·3 | | 3 | 12·0 | 24·5 | |
| 8·2 | | 5 | 7·5 | 59·5 | 7·5 GSg |
| 9·2 | | | 56·5 | 2·1 | 9·0 g |
| 9·3 | | 7 | 9·0 | 43·1 | |
| 9·2 | | | 52·0 | 42·9 | |
| 9·2 | | 8 | 14·0 | 54·2 | 9·5 g |
| 9·0 | | | 26·0 | 13·0 | g |
| 9·3 | | 9 | 4·0 | 47·1 | |
| 9·4 | | | 30·0 | 7·5 | |
| 9·0 | | | 48·0 | 51·8 | 8·5 g |
| 9·3 | | 10 | 19·0 | 7·6 | |
| 9·5 | | | 22·0 | 19·3 | 9·5 g |
| 9·0 | | | 40·0 | 13·5 | 9·0 g |
| 9·4 | | 12 | 4·0 | 45·0 | |
| 8·8 | | 13 | 35·0 | 42·2 | g |
| 9·2 | | 14 | 0·0 | 27·2 | |
| 9·2 | | | 41·0 | 14·6 | |
| 9·0 | | 15 | 9·0 | 46·9 | 9·0 g |
| 8·8 | | | 38·0 | 9·8 | 9·5 g |
| 8·7 | | 16 | 47·0 | 44·4 | 8·5 g |
| 9·4 | | | 55·0 | 17·4 | 9·0 g |
| 9·3 | | 19 | 53·0 | 17·6 | |
| 8·6 | | 21 | 3·0 | 12·9 | 9·0 g |
| 9·1 | | | 21·0 | 19·0 | |
| 9·2 | | 22 | 11·0 | 17·1 | 9·5 g |
| 9·3 | | | 52·0 | 28·2 | |
| 9·3 | | 24 | 4·0 | 48·2 | |
| 9·4 | | | 18·0 | 58·4 | |
| 9·3 | | | 29·0 | 17·1 | |



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## 1741—1800.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·3 | 16 | 24 | 59·0 | 41·7 | |
| 9·4 | | 25 | 45·0 | 31·6 | |
| 9·2 | | 26 | 23·0 | 0·1 | g |
| 8·2 | | | 45·5 | 10·6 | g |
| 9·4 | | 28 | 11·0 | 10·4 | |
| 9·4 | | | 25·0 | 35·1 | |
| 9·4 | | | 36·0 | 6·5 | |
| 9·0 | | 29 | 20·0 | 11·9 | |
| 9·4 | | 30 | 1·0 | 26·1 | |
| 9·3* | | | 45·0 | 3·6 | |
| 9·4 | | | 47·0 | 14·9 | |
| 9·3 | | 32 | 1·5 | 21·6 | |
| 9·2 | | | 15·0 | 40·0 | |
| 9·4 | | 34 | 41·0 | 36·9 | g |
| 9·4 | | | 59·0 | 20·3 | |
| 9·4 | | 35 | 1·0 | 5·9 | |
| 9·1 | | | 33·5 | 20·0 | |
| 9·3 | | 36 | 13·0 | 27·4 | |
| 6·7 | | | 24·5 | 29·8 | 7·0 GSg |
| 9·4 | | | 34·0 | 30·5 | 9·5 g |
| 9·4 | | | 35·0 | 17·6 | |
| 9·2 | | 37 | 25·5 | 59·4 | g |
| 9·4 | | | 38·0 | 0·9 | |
| 9·2 | | 38 | 1·0 | 42·8 | |
| 9·1 | | | 9·0 | 22·2 | |
| 9·4 | | | 29·0 | 46·0 | |
| 9·5 | | | 37·0 | 58·0 | |
| 9·2 | | | 51·0 | 21·9 | |
| 9·4 | | 39 | 22·0 | 21·4 | |
| 9·4 | | | 31·5 | 1·8 | |
| 9·2 | | 40 | 56·0 | 29·9 | |
| 9·4 | | 41 | 15·0 | 26·8 | |
| 9·4 | | | 21·5 | 59·9 | |
| 9·1 | | 43 | 1·0 | 22·8 | g |
| 6·9 | | 44 | 39·0 | 13·1 | 7·0 GSg |
| 9·2 | | 45 | 43·0 | 18·9 | 9·5 g |
| 9·2 | | | 59·0 | 26·0 | g |
| 9·4 | | 46 | 46·0 | 31·0 | g |
| 8·9 | | 47 | 50·0 | 26·0 | g |
| 8·9 | | 48 | 9·0 | 47·9 | g |
| 8·8 | | | 45·0 | 7·5 | g |
| 8·9 | | 49 | 45·0 | 34·9 | g |
| 9·3 | | | 58·0 | 50·8 | |
| 9·1 | | 50 | 27·0 | 8·0 | |
| 9·3 | | 51 | 1·0 | 5·9 | |
| 9·3 | | | 51·0 | 42·8 | g |
| 9·3 | | | 57·0 | 22·8 | |
| 9·0 | | 52 | 9·0 | 53·5 | g |
| 9·4 | | | 14·0 | 19·5 | |
| 9·2 | | | 25·5 | 32·8 | |
| 9·3 | | 53 | 13·5 | 57·1 | |
| 8·9 | | 54 | 19·0 | 47·8 | g |
| 8·6 | | | 51·0 | 24·6 | 9·0 g |
| 9·3 | | 55 | 10·0 | 15·4 | g |
| 9·3 | | | 11·0 | 13·0 | g |
| 9·3 | | | 13·0 | 49·2 | g |
| 9·0 | | | 17·0 | 30·5 | 8·8 g |
| 8·2 | | 56 | 13·0 | 42·6 | 8·5 g |
| 9·0 | | | 17·0 | 3·9 | g |
| 8·6 | | | 59·0 | 44·3 | g |

## 1801—1860.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·3 | 16 | 57 | 5·0 | 25·9 | |
| 8·8 | | | 19·0 | 21·8 | g |
| 9·4 | | | 45·0 | 29·4 | |
| 9·3 | | 58 | 29·0 | 14·9 | |
| 9·4 | | | 57·0 | 1·2 | |
| 8·8 | 17 | 0 | 36·0 | 29·9 | 9·2 g |
| 9·3 | | 1 | 22·0 | 48·0 | |
| 9·2 | | | 26·0 | 4·4 | |
| 9·0 | | | 46·0 | 23·1 | |
| 9·4 | | | 47·0 | 39·2 | |
| 9·4 | | 2 | 39·0 | 24·9 | |
| 9·4 | | | 44·0 | 3·9 | |
| 7·9 | | | 49·0 | 45·3 | 9·0 g |
| 8·9 | | | 57·0 | 0·7 | g |
| 9·1 | | 3 | 17·0 | 16·0 | g |
| 8·7 | | | 26·0 | 22·1 | 8·5 g |
| 9·2 | | 4 | 35·0 | 57·9 | g |
| 8·9 | | | 58·0 | 36·3 | |
| 9·5 | | 5 | 4·0 | 20·8 | |
| 9·3 | | | 5·0 | 20·2 | |
| 9·1 | | 7 | 28·0 | 5·3 | g |
| 9·1 | | 8 | 0·0 | 40·9 | |
| 8·2 | | 9 | 28·0 | 12·9 | 9·0 g |
| 9·4 | | | 42·0 | 14·1 | |
| 9·2 | | | 56·0 | 31·1 | g |
| 8·5 | | 10 | 2·0 | 11·6 | 9·5 g |
| 8·4 | | | 49·5 | 1·6 | 9·0 g |
| 9·1 | | 11 | 33·0 | 34·5 | g |
| 9·3 | | 12 | 28·0 | 14·1 | |
| 9·3 | | | 46·0 | 28·6 | g |
| 9·2 | | | 52·0 | 6·2 | |
| 9·4 | | | 53·0 | 4·8 | |
| 9·4 | | 13 | 56·0 | 2·5 | |
| 8·4 | | 14 | 12·0 | 1·9 | 8·5 g |
| 9·3 | | | 16·0 | 31·0 | g |
| 9·1 | | | 33·0 | 4·9 | 10·0 |
| 9·4 | | 15 | 10·0 | 22·7 | |
| 9·0 | | | 46·0 | 3·0 | 9·0 g |
| 9·3 | | 16 | 29·0 | 27·3 | 9·5 g |
| 9·4 | | 17 | 31·0 | 8·1 | |
| 9·4 | | 18 | 41·0 | 53·2 | |
| 9·2 | | | 47·0 | 20·8 | g |
| 9·2 | | 20 | 57·0 | 51·0 | |
| 9·0 | | 21 | 1·0 | 39·0 | 9·0 g |
| 9·1 | | | 53·0 | 33·5 | 9·5 g |
| 8·9 | | 22 | 17·0 | 16·9 | g |
| 9·4 | | 23 | 5·0 | 56·9 | |
| 9·0 | | | 13·0 | 7·4 | g |
| 8·2 | | 24 | 21·0 | 37·6 | 9·0 g |
| 9·2 | | 25 | 29·0 | 15·1 | |
| 9·3 | | 26 | 21·0 | 26·8 | |
| 7·1 | | | 46·5 | 18·8 | 8·0 GSg |
| 9·4 | | | 57·0 | 7·9 | |
| 9·2 | | 27 | 17·0 | 57·3 | g |
| 9·4 | | | 45·0 | 34·9 | |
| 9·1 | | | 51·0 | 31·9 | 9·5 g |
| 9·4 | | 28 | 50·0 | 5·2 | g |
| 9·1 | | | 57·0 | 5·1 | g |
| 9·4 | | 29 | 7·0 | 54·7 | g |
| 8·8 | | 30 | 34·5 | 4·7 | g |

## 1861—1920.

| mag. | h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·1 | 17 | 31 | 39·0 | 54·6 | 8·5 g |
| 9·5 | | 32 | 24·0 | 4·0 | |
| 8·4 | | 33 | 38·0 | 4·2 | 9·0 g |
| 9·0 | | 39 | 10·0 | 26·0 | 8·0 g |
| 8·8 | | | 58·0 | 44·1 | 8·8 g |
| 9·4 | | 40 | 6·0 | 14·1 | |
| 9·4 | | 41 | 2·4 | 0·9 | g |
| 8·3 | | 43 | 11·0 | 37·2 | g |
| 8·5 | | | 46·0 | 37·8 | 9·0 g |
| 9·3 | | 44 | 51·0 | 32·1 | 8·5 g |
| 9·4 | | 45 | 1·0 | 24·2 | |
| 8·4 | | | 18·0 | 39·5 | 9·0 g |
| 9·2 | | 46 | 1·0 | 54·0 | |
| 9·4 | | | 13·0 | 51·3 | |
| 9·8† | | | 20·0 | 1·2 | |
| 9·0 | | 47 | 11·0 | 38·4 | 9·0 g |
| 9·4 | | 48 | 26·0 | 39·6 | g |
| 9·2 | | | 50·0 | 2·1 | g |
| 9·4 | | 49 | 3·0 | 10·9 | |
| 9·3† | | | 37·7 | 0·1 | |
| 7·5 | | | 58·0 | 59·9 | 8·0 GSg |
| 9·4 | | 51 | 48·0 | 4·3 | G |
| 8·8 | | | 55·0 | 5·9 | 9·0 Ggg |
| 9·4 | | 52 | 16·0 | 3·0 | Gg |
| 9·2 | | 54 | 0·0 | 30·9 | g |
| 9·1 | | | 20·0 | 47·9 | g |
| 9·4 | | 55 | 40·0 | 12·9 | g |
| 6·7 | | 56 | 41·0 | 40·6 | 6·0 GSg |
| 9·4 | 18 | 2 | 20·0 | 28·2 | g |
| 9·4 | | | 47·0 | 23·8 | |
| 9·1 | | | 51·0 | 7·2 | g |
| 9·8† | | | 54·5 | 0·2 | |
| 8·9 | | 3 | 23·0 | 6·3 | 9·5 g |
| 9·4 | | 4 | 35·0 | 51·2 | g |
| 9·0 | | 5 | 14·0 | 43·7 | g |
| 8·7 | | | 45·0 | 14·8 | g |
| 9·4 | | 6 | 7·0 | 17·6 | |
| 9·1 | | 7 | 1·0 | 27·4 | g |
| 9·4 | | | 6·0 | 10·3 | g |
| 8·3 | | | 36·0 | 3·9 | 8·0 g |
| 9·1 | | 8 | 37·0 | 22·8 | |
| 9·3 | | | 55·0 | 36·0 | |
| 8·1 | | 9 | 13·0 | 35·7 | 8·5 g |
| 8·7 | | 10 | 38·0 | 8·4 | 8·5 g |
| 9·4 | | 11 | 19·0 | 39·9 | |
| 8·7 | | 12 | 48·0 | 35·7 | 8·5 g |
| 9·4† | | 13 | 17·0 | 1·6 | |
| 8·8 | | 14 | 28·0 | 50·7 | 9·5 g |
| 8·7 | | | 49·0 | 23·0 | g |
| 8·7 | | 17 | 9·0 | 12·0 | 9·0 g |
| 9·5 | | 21 | 49·0 | 14·0 | g |
| 9·4 | | 23 | 3·0 | 0·2 | g |
| 9·0 | | 24 | 8·0 | 2·6 | g |
| 9·4 | | 25 | 4·0 | 7·9 | |
| 9·4 | | | 14·5 | 3·6 | |
| 10·2 | | | 56·0 | 5·3 | |
| 10·0 | | 26 | 58·5 | 48·3 | |
| 9·6 | | 27 | 18·0 | 24·3 | |
| 9·7 | | | 25·0 | 18·7 | |
| 10·2 | | | 25·0 | 31·1 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 16 | 20 | +176 + 0·11 d | −3·5 |
| | 30 | 178 + 0·11 | 3·2 |
| | 40 | 180 + 0·11 | 2·9 |
| | 50 | 181 + 0·12 | 2·5 |
| 17 | 0 | 182 + 0·12 | 2·2 |
| | 10 | 184 + 0·12 | 1·8 |
| | 20 | 184 + 0·12 | 1·5 |
| | 30 | 185 + 0·12 | 1·1 |
| | 40 | 186 + 0·12 | 0·7 |
| | 50 | 186 + 0·12 | −0·4 |
| 18 | 0 | 186 + 0·12 | 0·0 |
| | 10 | 186 + 0·12 | +0·4 |
| | 20 | 186 + 0·12 | 0·7 |
| | 30 | +185 + 0·12 | +1·1 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 18 | 20 | +186 | +0·12 | d | +0·7 |
| | 30 | 185 | +0·12 | | 1·1 |
| | 40 | 184 | +0·12 | | 1·5 |
| | 50 | 184 | +0·12 | | 1·8 |
| 19 | 0 | 182 | +0·12 | | 2·2 |
| | 10 | 181 | +0·12 | | 2·5 |
| | 20 | 180 | +0·11 | | 2·9 |
| | 30 | 178 | +0·11 | | 3·2 |
| | 40 | 176 | +0·11 | | 3·5 |
| | 50 | 174 | +0·11 | | 3·9 |
| 20 | 0 | +172 | +0·10 | | +4·2 |

d=minutes of decl.

## 1921—1980.

| mag. | 18h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 10·2 | 18 | 28 | 2·0 | 49·6 | |
| 9·9 | | | 17·0 | 19·0 | |
| 9·8 | | | 28·0 | 6·1 | |
| 10·2 | | 29 | 32·8 | 58·5 | |
| 10·2 | | | 35·5 | 31·1 | |
| 10·2 | | 30 | 20·5 | 7·5 | |
| 9·7 | | 31 | 2·5 | 37·5 | |
| 9·9 | | | 17·5 | 17·9 | |
| 10·0 | | | 25·0 | 14·5 | |
| 9·6 | | 32 | 21·5 | 52·0 | |
| 10·2 | | | 29·5 | 9·1 | |
| 9·7 | | | 54·5 | 40·9 | |
| 10·2 | | 33 | 3·5 | 52·6 | |
| 9·6 | | | 33·2 | 28·6 | g |
| 9·8 | | | 36·5 | 46·7 | |
| 9·4 | | | 40·3 | 44·7 | |
| 9·0 | | | 52·3 | 4·9 | 8·5 Gg |
| 10·2 | | | 57·5 | 37·3 | |
| 6·5 | | 34 | 18·5 | 7·3 | 6·2 GSog |
| 9·0 | | 35 | 11·5 | 1·9 | 8·5 Gg |
| 9·6 | | | 24·0 | 32·7 | g |
| 9·6 | | | 28·0 | 10·8 | |
| 9·2 | | | 58·0 | 21·2 | 9·0 |
| 9·6 | | 36 | 22·0 | 16·8 | 9·0 g |
| 7·8 | | | 26·0 | 44·4 | 8·0 g |
| 9·7 | | | 37·0 | 5·0 | |
| 8·6 | | | 37·0 | 12·4 | 8·5 Gg |
| 10·0 | | | 52·0 | 39·9 | |
| 10·2 | | 37 | 1·0 | 23·6 | |
| 6·8 | | | 29·5 | 45·9 | 7·0 GSg |
| 9·4 | | 38 | 4·5 | 29·1 | |
| 9·4 | | | 55·1 | 59·1 | g |
| 9·8 | | 39 | 49·0 | 2·3 | |
| 9·8 | | 40 | 42·5 | 59·5 | |
| 10·2 | | 41 | 13·0 | 44·9 | |
| 10·0 | | | 21·0 | 37·0 | |
| 9·7 | | | 32·0 | 46·9 | |
| 9·6 | | | 39·5 | 40·9 | 9·5 g |
| 9·8 | | | 40·0 | 33·1 | |
| 9·6 | | 42 | 4·0 | 1·3 | |
| 9·7 | | | 5·0 | 31·1 | |
| 10·0 | | | 25·0 | 47·8 | |
| 10·2 | | 43 | 26·5 | 0·5 | |
| 10·2 | | | 42·0 | 55·9 | |
| 9·8 | | 44 | 57·5 | 36·3 | |
| 10·0 | | | 57·5 | 4·9 | |
| 10·2 | | 45 | 1·0 | 36·9 | |
| 10·2 | | | 1·5 | 24·1 | |
| 9·8 | | 46 | 22·5 | 49·9 | |
| 10·0 | | 47 | 8·5 | 28·8 | |
| 10·2 | | 48 | 5·0 | 24·9 | |
| 9·6 | | | 29·0 | 16·7 | |
| 8·8 | | | 37·6 | 29·0 | 9·0 g |
| 9·6 | | | 51·6 | 34·0 | g |
| 9·6 | | 49 | 15·1 | 47·8 | g |
| 9·9 | | | 19·1 | 56·9 | g |
| 8·0 | | | 29·4 | 57·2 | 8·5 g |
| 9·8 | | | 49·1 | 1·8 | |
| 10·2 | | 50 | 34·6 | 51·1 | |
| 9·6 | | | 38·6 | 28·1 | g |

## 1981—2040.

| mag. | 18h.–19h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·6 | 18 | 50 | 38·6 | 52·3 | |
| 8·6 | | 52 | 46·1 | 29·5 | 9·0 g |
| 10·0 | | | 57·6 | 54·1 | |
| 9·7 | | 53 | 1·6 | 18·3 | |
| 9·8 | | 54 | 7·6 | 46·6 | |
| 9·6 | | | 36·1 | 54·7 | |
| 9·6 | | | 47·6 | 50·7 | |
| 10·2 | | 55 | 24·1 | 1·1 | |
| 10·2 | | 56 | 18·1 | 33·3 | |
| 10·2 | | 57 | 3·1 | 48·4 | |
| 9·3 | | | 3·6 | 45·3 | g |
| 9·0 | | | 54·5 | 30·6 | 8·5 g |
| 10·2 | | | 57·6 | 50·5 | |
| 10·2 | | 58 | 17·1 | 50·2 | |
| 8·6 | | 59 | 17·1 | 2·1 | 9·0 g |
| 9·6 | 19 | 0 | 11·1 | 53·4 | |
| 10·0 | | | 17·1 | 5·2 | |
| 9·6 | | | 33·1 | 26·2 | |
| 10·0 | | | 34·6 | 47·6 | |
| 10·0 | | 1 | 21·1 | 44·7 | |
| 9·7 | | | 25·6 | 27·1 | |
| 8·9 | | 2 | 57·6 | 23·1 | g |
| 10·0 | | 3 | 3·0 | 52·4 | |
| 10·0 | | | 5·0 | 46·6 | |
| 9·0 | | | 20·6 | 18·8 | g |
| 9·7 | | | 24·7 | 59·4 | |
| 9·6 | | 4 | 10·1 | 5·6 | |
| 9·9 | | | 51·6 | 3·2 | |
| 9·6 | | | 59·1 | 39·6 | , |
| 9·9 | | 6 | 19·6 | 22·2 | |
| 9·7 | | 7 | 2·6 | 48·7 | g |
| 9·8 | | | 33·6 | 37·8 | |
| 9·4 | | 9 | 49·1 | 56·1 | g |
| 9·6 | | 10 | 15·1 | 25·3 | |
| 10·2 | | | 57·1 | 27·4 | |
| 7·5 | | 13 | 7·1 | 19·6 | 8·0 GSgg |
| 9·9 | | | 34·6 | 2·2 | |
| 9·4 | | | 59·1 | 0·7 | 9·0 gg |
| 10·2 | | 14 | 49·1 | 16·8 | |
| 10·2 | | 15 | 0·3 | 3·2 | |
| 9·4 | | | 13·8 | 32·2 | g |
| 9·6 | | 16 | 1·8 | 23·3 | g |
| 9·4 | | | 11·3 | 51·8 | g |
| 10·2 | | | 33·3 | 26·2 | |
| 10·2 | | 17 | 1·3 | 24·2 | g |
| 10·2 | | | 19·3 | 25·6 | |
| 8·2 | | | 33·3 | 45·0 | 8·0 GSg |
| 10·2 | | | 49·8 | 55·2 | |
| 8·9 | | | 52·3 | 46·8 | 9·0 g |
| 10·2 | | 18 | 26·3 | 57·0 | |
| 10·2 | | | 54·3 | 6·4 | |
| 9·4 | | 19 | 2·3 | 7·8 | g |
| 9·8 | | | 39·3 | 39·2 | |
| 10·2 | | | 40·8 | 18·3 | |
| 9·0 | | | 52·3 | 3·2 | g |
| 9·6 | | 20 | 3·3 | 52·9 | |
| 9·8 | | | 6·8 | 44·8 | |
| 10·0 | | | 25·8 | 20·7 | |
| 8·6 | | 21 | 11·8 | 46·6 | g |
| 10·2 | | | 39·3 | 58·0 | |

## 2041—2100.

| mag. | 19h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·7 | 19 | 23 | 10·8 | 47·2 | |
| 9·8 | | | 14·3 | 56·4 | |
| 10·0 | | | 53·8 | 3·6 | 9·5 g |
| 10·2 | | 24 | 40·8 | 39·8 | |
| 10·2 | | | 50·8 | 58·8 | |
| 10·0 | | | 57·8 | 23·0 | |
| 9·7 | | 25 | 54·0 | 48·2 | |
| 10·2 | | 26 | 13·6 | 27·1 | |
| 9·7 | | | 40·6 | 16·6 | |
| 9·9 | | 27 | 1·6 | 21·5 | g |
| 9·8 | | | 33·8 | 3·7 | |
| 8·5 | | 28 | 5·2 | 3·4 | g |
| 8·5 | | | 10·8 | 31·3 | 9·0 g |
| 9·6 | | | 58·2 | 43·3 | |
| 9·7 | | 29 | 28·2 | 38·1 | |
| 9·6 | | | 49·7 | 34·7 | |
| 9·8 | | | 53·8 | 6·0 | |
| 9·3 | | 32 | 6·3 | 50·9 | |
| 9·3 | | | 25·8 | 36·4 | |
| 9·3 | | 33 | 13·6 | 8·7 | |
| 7·6 | | 34 | 23·6 | 49·3 | 7·5 GSg |
| 9·8 | | | 26·1 | 15·4 | |
| 9·3 | | | 58·6 | 30·7 | g |
| 9·0 | | 35 | 1·6 | 55·7 | g |
| 9·7 | | | 11·4 | 23·7 | |
| 8·6 | | | 55·8 | 10·6 | 8·0 GSg |
| 7·4 | | 36 | 40·1 | 5·9 | 8·0 GSg |
| 9·5 | | | 45·6 | 35·6 | |
| 9·4 | | 37 | 52·6 | 7·1 | |
| 9·4 | | 38 | 52·6 | 26·6 | |
| 9·3 | | 39 | 30·1 | 30·6 | |
| 9·6 | | 40 | 35·6 | 31·7 | |
| 9·5 | | | 46·6 | 10·1 | |
| 9·5 | | | 57·6 | 1·2 | |
| 9·3 | | | 59·6 | 2·9 | |
| 8·7 | | 41 | 16·6 | 51·8 | 9·0 g |
| 9·7 | | | 37·6 | 53·1 | |
| 9·8 | | | 41·1 | 54·8 | |
| 9·7 | | | 47·6 | 39·0 | |
| 9·8 | | 42 | 32·6 | 11·4 | |
| 8·9 | | 43 | 26·1 | 29·1 | |
| 9·8 | | 44 | 9·6 | 31·9 | |
| 9·4 | | 45 | 0·1 | 37·2 | |
| 9·7 | | | 7·6 | 33·4 | |
| 9·7 | | 46 | 5·6 | 39·7 | |
| 4·7 | | | 6·1 | 13·9 | 4·0 GSogλ |
| 9·8 | | 47 | 1·6 | 33·5 | |
| 9·5 | | 48 | 12·0 | 45·2 | |
| 9·6 | | | 15·0 | 53·1 | |
| 9·6 | | | 26·0 | 57·6 | |
| 9·0 | | | 37·5 | 49·9 | |
| 9·2 | | | 40·5 | 7·4 | g |
| 9·4 | | | 59·5 | 58·0 | |
| 9·3 | | 49 | 28·0 | 19·6 | |
| 9·8 | | 50 | 1·5 | 59·0 | |
| 9·8 | | | 12·0 | 10·9 | |
| 9·7 | | 51 | 49·7 | 0·6 | |
| 9·4 | | 52 | 36·5 | 44·6 | |
| 9·3 | | | 48·0 | 9·6 | |
| 8·9 | | | 57·5 | 30·6 | g |



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## 2101—2160.

| mag. | 19ʰ—20ʰ h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.8 | 19 | 53 | 44.0 | 25.8 | |
| 9.4 | | 54 | 47.5 | 30.8 | |
| 9.8 | | | 46.5 | 38.0 | |
| 9.4 | | 55 | 9.5 | 29.0 | g |
| 8.6 | | | 33.0 | 7.0 | g |
| 9.8 | | | 55.5 | 50.7 | |
| 9.2 | | 58 | 10.5 | 45.5 | |
| 9.8 | | | 30.5 | 1.9 | |
| 9.3 | | | 40.0 | 4.9 | |
| 8.8 | | | 49.5 | 6.2 | 9.0 g |
| 9.7 | | | 58.5 | 34.1 | |
| 9.8 | | 59 | 23.5 | 33.9 | |
| 8.4 | | | 44.0 | 14.1 | 9.0 g |
| 9.7 | 20 | 0 | 6.5 | 38.1 | |
| 9.0 | | | 25.0 | 53.7 | g |
| 8.8 | | | 33.5 | 14.4 | g |
| 9.3 | | 2 | 22.5 | 50.9 | g |
| 9.8 | | 3 | 25.5 | 27.8 | |
| 9.5 | | | 45.0 | 37.1 | |
| 8.7 | | 4 | 0.5 | 55.1 | g |
| 7.6 | | | 17.5 | 21.3 | 7.0 GSg |
| 7.6 | | | 27.5 | 11.2 | 7.2 GSg |
| 9.4 | | 5 | 21.5 | 23.5 | |
| 9.0 | | | 27.5 | 36.5 | 9.0 g |
| 9.0 | | | 46.5 | 49.9 | 9.0 g |
| 9.2 | | | 47.5 | 16.7 | |
| 8.6 | | 6 | 12.0 | 17.9 | g |
| 9.8 | | | 25.5 | 36.3 | |
| 9.8 | | | 54.0 | 11.9 | |
| 9.8 | | 7 | 4.5 | 36.9 | |
| 9.2 | | | 11.5 | 52.3 | 9.0 g |
| 9.6 | | | 59.5 | 29.7 | |
| 9.3 | | 8 | 15.5 | 21.9 | |
| 9.4 | | | 52.0 | 34.0 | |
| 8.0 | | 9 | 25.5 | 2.5 | 8.5 g |
| 8.5 | | | 40.7 | 27.0 | 9.0 g |
| 9.3 | | 10 | 15.2 | 33.4 | |
| 9.8 | | | 19.2 | 15.0 | |
| 9.8 | | 11 | 47.2 | 15.2 | |
| 8.8 | | 13 | 55.7 | 7.8 | g |
| 9.2 | | 14 | 7.2 | 43.0 | |
| 9.8 | | | 44.2 | 48.1 | |
| 9.3 | | | 57.7 | 42.6 | |
| 9.3 | | 16 | 8.2 | 29.2 | g |
| 9.5 | | 17 | 34.7 | 23.0 | |
| 8.3 | | | 54.2 | 28.9 | 9.0 g |
| 9.2 | | 18 | 7.2 | 55.3 | |
| 8.3 | | | 21.2 | 22.9 | 8.5 g |
| 8.2 | | | 32.7 | 14.9 | 8.5 g |
| 9.8 | | | 41.2 | 59.7 | |
| 9.8 | | | 49.2 | 31.8 | |
| 9.8 | | 20 | 44.7 | 3.0 | |
| 9.6 | | 21 | 9.8 | 2.2 | |
| 9.2 | | | 45.9 | 17.2 | g |
| 9.3 | | | 53.9 | 38.0 | |
| 9.8 | | 22 | 2.4 | 20.5 | |
| 9.7 | | | 58.4 | 6.9 | |
| 9.8 | | 23 | 16.4 | 38.9 | |
| 9.8 | | | 44.9 | 17.2 | |
| 9.8 | | | 55.4 | 7.9 | |

## 2161—2220.

| mag. | 20ʰ—21ʰ h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.6 | 20 | 24 | 42.9 | 58.8 | |
| 9.3 | | 25 | 8.4 | 56.3 | |
| 9.8 | | | 24.9 | 20.1 | |
| 10.3* | | | 25.7 | 55.8 | |
| 9.8 | | 26 | 0.1 | 12.7 | |
| 9.8 | | 28 | 51.9 | 54.7 | |
| 9.8 | | 30 | 36.0 | 26.4 | |
| 9.8 | | 31 | 7.5 | 20.6 | g |
| 9.0 | | | 48.8 | 54.6 | |
| 9.8 | | 32 | 2.1 | 16.8 | g |
| 9.6 | | | 24.4 | 50.0 | |
| 9.8 | | 33 | 36.6 | 41.3 | |
| 9.0 | | | 44.5 | 9.1 | g |
| 9.2 | | 36 | 32.4 | 29.4 | |
| 9.3 | | 37 | 4.2 | 26.2 | g |
| 9.5 | | | 40.4 | 55.5 | |
| 10.0 | | 39 | 31.1 | 36.4 | |
| 10.3 | | | 51.1 | 25.3 | |
| 8.8 | | 41 | 30.2 | 32.0 | 9.0 g |
| 9.5 | | | 46.2 | 53.0 | g |
| 10.3 | | 42 | 12.2 | 4.2 | |
| 9.8 | | 43 | 8.2 | 22.1 | g |
| 10.2 | | 45 | 10.7 | 6.0 | |
| 10.3 | | 46 | 49.2 | 47.7 | |
| 10.3 | | | 56.1 | 59.6 | |
| 9.6 | | 48 | 47.9 | 35.4 | g |
| 9.9 | | 50 | 16.9 | 45.6 | g |
| 8.8 | | | 19.9 | 31.8 | 8.5 g |
| 10.3 | | | 49.9 | 3.2 | |
| 10.0 | | 53 | 8.9 | 46.1 | |
| 7.8 | | 55 | 49.9 | 53.6 | 7.5 GSgg |
| 6.6 | | 56 | 14.9 | 39.5 | 6.0 GScg |
| 9.7 | | | 24.5 | 49.5 | |
| 9.2 | | 57 | 42.0 | 21.2 | 8.5 g |
| 6.9 | | 58 | 42.5 | 2.6 | 6.5 GScg |
| 10.3 | | 59 | 4.0 | 58.6 | |
| 10.3 | | | 6.0 | 23.4 | |
| 9.7 | | | 26.5 | 23.8 | g |
| 8.4 | | | 54.8 | 28.6 | 8.5 g |
| 9.6 | 21 | 0 | 7.0 | 16.4 | |
| 9.0 | | 1 | 13.9 | 48.0 | 8.5 g |
| 10.3 | | 2 | 9.9 | 43.0 | |
| 10.3 | | 4 | 39.4 | 24.6 | |
| 10.3 | | | 50.9 | 58.0 | |
| 7.8 | | 5 | 48.9 | 32.6 | 7.8 Gg |
| 8.6 | | 6 | 36.4 | 49.0 | GSg |
| 10.0 | | 8 | 29.4 | 55.1 | |
| 9.5 | | 9 | 21.4 | 53.6 | g |
| 9.2 | | | 27.4 | 19.6 | g |
| 10.3 | | 10 | 5.9 | 25.6 | |
| 10.3 | | | 42.4 | 49.1 | |
| 10.3 | | 11 | 31.9 | 7.0 | |
| 10.3 | | | 42.4 | 52.4 | |
| 10.0 | | | 59.9 | 48.9 | |
| 7.4 | | 13 | 10.4 | 7.6 | 7.5 GSgg |
| 9.9 | | | 12.9 | 28.4 | g |
| 9.2 | | 15 | 22.9 | 44.2 | g |
| 9.6 | | 17 | 1.9 | 37.0 | 9.0 g |
| 8.8 | | | 15.4 | 32.6 | 9.0 g |
| 9.5 | | | 33.4 | 54.2 | |

## 2221—2280.

| mag. | 21ʰ—23ʰ h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9.2 | 21 | 18 | 5.6 | 1.5 | 9.0 Gg |
| 9.5 | | 20 | 1.9 | 12.8 | |
| 9.2 | | 22 | 59.4 | 42.7 | g |
| 10.3 | | 23 | 50.9 | 12.1 | |
| 10.3 | | 26 | 28.9 | 42.8 | |
| 10.3 | | | 37.9 | 50.0 | |
| 10.2 | | 28 | 10.9 | 55.6 | |
| 9.9 | | | 21.5 | 44.6 | |
| 9.6 | | | 23.0 | 0.7 | g |
| 9.8 | | | 38.7 | 56.2 | |
| 9.0 | | | 50.3 | 1.5 | g |
| 9.9 | | | 58.8 | 13.0 | |
| 10.3 | | 29 | 6.3 | 56.9 | |
| 9.4 | | | 35.2 | 6.5 | 8.5 g |
| 10.3 | | 34 | 54.3 | 7.9 | |
| 10.3 | | 35 | 35.3 | 6.8 | |
| 7.5 | | 36 | 16.4 | 15.3 | 8.0 GSg |
| 9.3 | | 38 | 22.5 | 6.2 | g |
| 9.6 | | 39 | 35.0 | 4.9 | g |
| 8.2 | | 40 | 7.5 | 45.0 | g |
| 9.6 | | | 37.5 | 35.4 | g |
| 8.1 | | | 48.5 | 23.2 | g |
| 9.4 | | 41 | 13.0 | 10.0 | g |
| 9.1 | | | 32.0 | 42.7 | |
| 8.5 | | | 56.5 | 35.4 | g |
| 9.6 | | 51 | 54.5 | 9.2 | g |
| 9.0 | | 52 | 54.5 | 20.5 | 8.5 Gg |
| 9.4 | | 56 | 0.5 | 59.0 | g |
| 9.3 | 22 | 2 | 6.5 | 39.7 | 9.5 g |
| 9.6 | | 13 | 2.0 | 16.3 | g |
| 9.6 | | | 9.5 | 53.9 | g |
| 8.1 | | | 19.5 | 25.9 | 8.5 GSg |
| 7.9 | | | 21.5 | 25.9 | 8.5 GSg |
| 9.6 | | 14 | 10.5 | 28.0 | 9.0 Gg |
| 9.6 | | | 43.5 | 31.9 | 9.5 g |
| 9.6 | | 15 | 52.0 | 15.8 | g |
| 8.7 | | | 56.4 | 2.9 | g |
| 8.9 | | 16 | 16.0 | 44.3 | g |
| 8.7 | | 18 | 42.0 | 6.5 | 8.5 Ggg |
| 7.6 | | 25 | 22.0 | 11.9 | 7.5 GSg |
| 7.3 | | 26 | 28.0 | 21.3 | 7.0 GSg |
| 9.3 | | | 55.0 | 28.5 | |
| 9.5 | | 27 | 0.0 | 18.9 | g |
| 9.5 | | | 55.0 | 28.9 | |
| 9.6* | | 30 | 9.0 | 11.6 | g |
| 9.3 | | 32 | 30.5 | 47.4 | g |
| 8.2 | | | 46.5 | 53.0 | 8.0 Gg |
| 9.3 | | 34 | 10.5 | 2.5 | g |
| 9.6 | | 40 | 29.0 | 16.8 | g |
| 9.5 | | | 39.0 | 23.5 | g |
| 9.0 | | 41 | 39.5 | 58.1 | g |
| 9.5 | | | 54.0 | 23.1 | g |
| 9.6 | | 44 | 24.0 | 41.1 | |
| 8.9 | | 45 | 58.0 | 44.1 | 9.0 g |
| 8.3 | | 47 | 35.0 | 9.1 | 8.5 g |
| 9.6 | | 50 | 40.0 | 53.1 | g |
| 9.6 | | 51 | 30.0 | 29.1 | g |
| 8.2 | | 57 | 34.0 | 38.6 | 9.0 g |
| 8.1 | 23 | 2 | 56.0 | 12.1 | 8.5 g |
| 9.0 | | 3 | 43.0 | 6.1 | 8.5 g |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 19 | 50 | + 174 + 0.11 d | + 3.9 |
| 20 | 0 | 172 + 0.10 | 4.2 |
| | 10 | 169 + 0.10 | 4.5 |
| | 20 | 166 + 0.10 | 4.8 |
| | 30 | 164 + 0.10 | 5.1 |
| | 40 | 161 + 0.09 | 5.4 |
| | 50 | 157 + 0.09 | 5.6 |
| 21 | 0 | 154 + 0.09 | 5.9 |
| | 10 | 151 + 0.08 | 6.2 |
| | 20 | 147 + 0.08 | 6.4 |
| | 30 | 143 + 0.07 | 6.6 |
| | 40 | 140 + 0.07 | 6.8 |
| | 50 | 136 + 0.06 | 7.0 |
| 22 | 0 | 131 + 0.06 | 7.2 |
| | 10 | 127 + 0.06 | 7.4 |
| | 20 | 123 + 0.05 | 7.6 |
| | 30 | 119 + 0.05 | 7.7 |
| | 40 | 114 + 0.04 | 7.9 |
| | 50 | 110 + 0.04 | 8.0 |
| 23 | 0 | 105 + 0.03 | 8.1 |
| | 10 | + 100 + 0.03 | + 8.2 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 23 | 0 | + 105 | + 0·03 d | + 8·1 |
| | 10 | 100 | + 0·03 | 8·2 |
| | 20 | 96 | + 0·02 | 8·2 |
| | 30 | 91 | + 0·02 | 8·3 |
| | 40 | 86 | + 0·01 | 8·3 |
| | 50 | 82 | + 0·01 | 8·3 |
| 24 | 0 | + 77 | 0·00 | + 8·4 |

d = minutes of decl.

## 2281—2303.

| mag. | 23h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 9·1 | 23 | 5 | 41·0 | 49·8 | 8·5 *g* |
| 9·3 | | 6 | 4·5 | 59·6 | 9·0 *g* |
| 9·6 | | 9 | 25·0 | 20·3 | *g* |
| 8·9 | | 11 | 39·0 | 4·7 | 9·5 *g* |
| 9·7 | | 15 | 50·0 | 9·0 | *g* |
| 8·2 | | 17 | 6·0 | 57·7 | 7·5 G*g* |
| 8·1 | | 19 | 15·5 | 34·0 | *g* |
| 8·5 | | 20 | 35·5 | 58·0 | *g* |
| 9·3 | | 21 | 34·0 | 21·0 | 9·0 *g* |
| 10·2 | | 23 | 29·6 | 58·0 | |
| 10·6 | | 27 | 21·6 | 0·6 | |
| 9·4 | | | 30·5 | 51·8 | *g* |
| 10·2 | | | 55·4 | 21·5 | |
| 9·2 | | 28 | 21·2 | 38·4 | *g* |
| 9·8 | | 29 | 9·9 | 48·7 | |
| 9·2 | | 30 | 55·2 | 18·9 | *g* |
| 10·6 | | 31 | 22·9 | 19·9 | |
| 9·8 | | | 45·9 | 6·1 | |
| 7·4 | | 32 | 11·9 | 23·4 | 7·5 GS*g* |
| 11·1 | | | 55·9 | 6·6 | |
| 9·8 | | 34 | 11·0 | 8·0 | |
| 9·8 | | | 47·9 | 21·4 | |
| 10·2 | | | 57·9 | 28·6 | |

## 2304—2326.

| mag. | 23h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 11·1 | 23 | 35 | 24·2 | 27·2 | |
| 10·2 | | 36 | 19·4 | 24·5 | |
| 10·8 | | | 38·9 | 26·8 | |
| 11·1 | | | 40·4 | 13·0 | |
| 9·8 | | 37 | 24·9 | 51·1 | *g* |
| 10·6 | | 38 | 6·4 | 8·0 | |
| 11·1 | | 39 | 13·4 | 33·7 | |
| 9·8 | | | 40·9 | 26·1 | |
| 11·0 | | | 58·6 | 59·9 | |
| 7·7 | | | 59·4 | 47·5 | 7·8 GS*g* |
| 11·0 | | 40 | 11·4 | 6·1 | |
| 11·0 | | | 36·4 | 36·6 | |
| 11·0 | | | 51·4 | 3·2 | |
| 11·1 | | 41 | 27·4 | 38·0 | |
| 10·8 | | 42 | 40·4 | 7·9 | |
| 10·2 | | | 56·4 | 36·9 | |
| 8·4 | | 43 | 23·9 | 23·3 | 9·0 *g* |
| 11·1 | | | 48·9 | 32·8 | |
| 9·4 | | 44 | 50·4 | 53·1 | 9·0 *g* |
| 10·6 | | 45 | 41·4 | 3·8 | |
| 7·4 | | | 58·4 | 5·8 | 8·0 GS*g* |
| 9·8 | | 47 | 42·4 | 32·3 | |
| 8·6 | | | 50·4 | 49·4 | 8·5 G*g* |

## 2327—2349.

| mag. | 23h. h | m | s | −73° ′ | |
|---|---|---|---|---|---|
| 10·6 | 23 | 48 | 7·9 | 46·8 | |
| 10·6 | | 49 | 7·3 | 0·6 | |
| 11·1 | | | 33·6 | 58·3 | |
| 11·1 | | 50 | 7·9 | 28·9 | |
| 10·8 | | | 34·9 | 48·3 | |
| 10·0 | | | 45·9 | 18·2 | |
| 10·6 | | 51 | 12·9 | 43·9 | |
| 8·9 | | | 48·4 | 53·1 | 9·0 *g* |
| 10·6 | | 52 | 17·4 | 20·4 | |
| 9·8 | | 53 | 11·9 | 2·2 | 9·5 *g* |
| 9·8 | | | 14·9 | 36·4 | |
| 10·0 | | 54 | 12·9 | 10·2 | 9·5 |
| 8·4 | | | 14·8 | 1·0 | 8·5 *g* |
| 11·1 | | | 55·9 | 36·1 | |
| 8·9 | | 55 | 2·4 | 18·1 | 8·5 *g* |
| 9·0 | | | 48·4 | 19·4 | 9·5 |
| 10·0 | | 57 | 1·9 | 56·6 | |
| 10·6 | | | 4·5 | 2·7 | |
| 9·0 | | | 54·5 | 43·8 | 9·5 *g* |
| 7·6 | | 58 | 9·9 | 35·6 | 7·5 GSc*g* |
| 9·2 | | | 10·4 | 21·4 | 9·0 *g* |
| 9·4 | | | 24·9 | 50·5 | *g* |
| 9·6 | | | 41·4 | 35·7 | 10·0 |

# ZONE —74°

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 72 | − 0·01 | 8·3 |
| | 20 | 67 | − 0·01 | 8·3 |
| | 30 | 62 | − 0·02 | 8·3 |
| | 40 | + 57 | − 0·02 | + 8·2 |

d = minutes of decl.

## 1—20.

| mag. | 0h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 10·2 | 0 | 0 | 4·8 | 15·8 | |
| 10·8 | | | 58·8 | 21·2 | |
| 9·2 | | 1 | 0·3 | 37·9 | 8·5 *g* |
| 11·1 | | | 49·2 | 1·7 | |
| 11·1 | | | 49·8 | 7·2 | |
| 11·1 | | 2 | 15·3 | 4·4 | |
| 8·2 | | | 29·8 | 56·0 | 8·0 GS*g* |
| 11·0 | | | 39·1 | 59·6 | |
| 9·8 | | 3 | 36·8 | 55·6 | |
| 9·2 | | 4 | 20·8 | 20·5 | *g* |
| 9·2 | | | 39·8 | 12·1 | 9·5 *g* |
| 11·1 | | 5 | 7·3 | 34·6 | |
| 9·8 | | | 45·3 | 27·4 | |
| 10·0 | | 6 | 30·8 | 46·8 | 9·5 |
| 9·4 | | | 51·8 | 43·9 | 9·2 |
| 9·8 | | 7 | 55·3 | 11·5 | |
| 10·2 | | 9 | 37·3 | 6·9 | |
| 9·2 | | 10 | 10·8 | 42·3 | |
| 10·6 | | 11 | 21·8 | 0·3 | |
| 8·6 | | | 27·3 | 39·3 | 8·0 *g* |

## 21—40.

| mag. | 0h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 11·1 | 0 | 11 | 45·8 | 53·6 | |
| 8·6 | | | 52·8 | 22·3 | 8·5 *g* |
| 11·1 | | 12 | 32·5 | 18·5 | |
| 9·8 | | | 56·0 | 10·4 | *g* |
| 10·2 | | 13 | 14·0 | 48·4 | |
| 10·0 | | | 36·0 | 10·9 | |
| 10·6 | | | 47·5 | 1·6 | |
| 11·1 | | 14 | 59·5 | 43·9 | |
| 9·4 | | 15 | 5·5 | 40·3 | 9·0 *g* |
| 11·1 | | 16 | 20·5 | 31·3 | |
| 11·1 | | 17 | 26·5 | 59·7 | |
| 11·1 | | 18 | 11·0 | 1·8 | |
| 9·4 | | | 30·5 | 12·5 | 10·0 *g* |
| 11·1 | | | 33·5 | 54·0 | |
| 9·2 | | 19 | 16·0 | 55·7 | *g* |
| 10·2 | | | 55·0 | 59·6 | |
| 9·0 | | 20 | 37·5 | 19·4 | *g* |
| 9·8 | | 21 | 47·0 | 5·5 | |
| 10·6 | | 23 | 10·5 | 9·4 | |
| 9·2 | | 24 | 14·0 | 28·3 | 9·5 *g* |

## 41—60.

| mag. | 0h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 11·0 | 0 | 24 | 40·4 | 0·4 | |
| 9·4 | | 25 | 56·0 | 51·5 | 9·2 *g* |
| 10·6 | | 26 | 17·0 | 29·2 | |
| 11·0 | | | 40·0 | 40·9 | |
| 10·6 | | 28 | 8·5 | 5·4 | |
| 10·0 | | | 13·7 | 22·5 | |
| 10·6 | | 29 | 57·0 | 41·7 | |
| 9·2 | | 30 | 46·4 | 34·0 | 8·5 G*g* |
| 11·1 | | 32 | 0·4 | 59·3 | |
| 10·6 | | | 14·4 | 30·8 | |
| 10·0 | | 33 | 17·4 | 48·4 | |
| 10·2 | | | 24·2 | 40·1 | 10·0 *g* |
| 7·5 | | | 29·4 | 38·8 | 7·5 GS*g* |
| 9·8 | | | 35·4 | 40·9 | 9·0 G |
| 8·3 | | 35 | 11·9 | 26·9 | 8·5 GS*g* |
| 9·2 | | 36 | 54·5 | 51·9 | 9·0 G*g* |
| 11·1 | | | 59·4 | 20·1 | |
| 9·4 | | 37 | 11·5 | 22·0 | 9·0 G*g* |
| 9·4 | | 38 | 54·5 | 25·1 | 8·5 G*g* |
| 8·0 | | 39 | 30·9 | 56·9 | 8·0 GS*g* |



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## 61—120.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 8·7 | 0 | 39 | 37·5 | 31·0 | 9·0 G*g* |
| 9·5 | | | 51·5 | 11·1 | |
| 9·2 | | 41 | 5·5 | 30·0 | 9·5 G*g* |
| 9·6 | | | 30·5 | 9·9 | *g* |
| 9·8 | | 43 | 35·5 | 42·5 | |
| 9·5 | | 44 | 27·5 | 14·6 | |
| 9·7 | | | 35·5 | 2·8 | |
| 9·0 | | | 56·5 | 9·7 | 8·5 GS*g* |
| 9·8 | | 46 | 9·5 | 9·7 | |
| 9·9 | | | 15·5 | 9·2 | |
| 9·9 | | | 51·5 | 43·0 | |
| 8·3 | | 49 | 29·5 | 33·0 | 8·0 GS*g* |
| 9·4 | | 50 | 45·0 | 23·6 | |
| 7·4 | | | 50·7 | 59·1 | 7·0 GS*g* |
| 9·4 | | 51 | 1·0 | 52·1 | |
| 9·6 | | | 20·0 | 15·1 | |
| 8·6 | | 52 | 6·0 | 30·1 | 8·5 G*g* |
| 8·7 | | | 42·0 | 23·8 | 9·0 *g* |
| 8·7 | | 55 | 24·0 | 25·4 | 9·0 *g* |
| 9·2 | | | 34·0 | 43·3 | |
| 9·4 | | 56 | 44·0 | 32·6 | |
| 9·9 | | 58 | 33·0 | 39·8 | |
| 9·0 | 1 | 0 | 8·0 | 8·1 | *g* |
| 8·6 | | 3 | 52·0 | 35·5 | *g* |
| 9·9 | | | 52·5 | 4·7 | *g* |
| 9·8 | | 4 | 5·0 | 34·3 | |
| 9·5 | | 6 | 34·0 | 17·2 | 9·5 *g* |
| 7·3 | | 8 | 43·0 | 34·3 | 7·5 GS*g* |
| 8·5 | | 9 | 56·0 | 56·3 | 8·8 G*g* |
| 9·3 | | 10 | 2·0 | 0·1 | |
| 9·2 | | 11 | 38·0 | 26·0 | |
| 8·7 | | 14 | 49·0 | 48·9 | 9·0 G*g* |
| 9·8 | | 15 | 23·0 | 5·2 | |
| 8·7 | | 18 | 26·0 | 19·1 | 9·5 *g* |
| 9·5 | | | 34·0 | 16·5 | 9·5 *g* |
| 8·9 | | 19 | 57·0 | 14·1 | 10·0 *g* |
| 10·0 | | 23 | 0·0 | 53·3 | |
| 10·9 | | | 29·0 | 5·0 | |
| 10·2 | | | 34·5 | 33·8 | |
| 10·2 | | 24 | 8·0 | 41·9 | |
| 10·8 | | | 32·5 | 27·6 | |
| 10·2 | | 26 | 5·5 | 29·5 | *g* |
| 9·2 | | 28 | 29·3 | 53·3 | 9·5 *g* |
| 9·4 | | | 32·6 | 57·9 | |
| 10·2 | | | 33·5 | 45·0 | |
| 10·9 | | | 39·5 | 8·9 | |
| 9·5 | | 29 | 40·0 | 56·7 | 9·5 *g* |
| 10·9 | | 30 | 10·5 | 38·4 | |
| 9·4 | | | 49·5 | 29·8 | *g* |
| 8·9 | | | 53·0 | 20·9 | *g* |
| 10·2 | | 31 | 29·0 | 30·8 | |
| 9·8 | | | 47·5 | 16·1 | |
| 10·4 | | | 47·5 | 38·8 | |
| 10·7 | | 32 | 25·0 | 50·1 | |
| 10·2 | | 36 | 6·5 | 17·6 | |
| 9·5 | | | 57·5 | 20·7 | *g* |
| 9·8 | | 37 | 8·5 | 30·5 | *g* |
| 10·9 | | | 59·1 | 24·3 | |
| 9·4 | | 38 | 44·2 | 1·9 | 10·0 *g* |
| 10·4 | | 39 | 28·0 | 28·4 | |

## 121—180.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·6 | 1 | 40 | 41·0 | 18·2 | |
| 10·2 | | 41 | 24·0 | 16·1 | |
| 10·8 | | | 41·5 | 35·6 | |
| 10·0 | | 42 | 35·0 | 36·8 | *g* |
| 10·2 | | 43 | 6·5 | 46·7 | |
| 7·8 | | | 9·0 | 10·6 | 8·5 GS*g* |
| 10·9 | | | 17·5 | 27·3 | |
| 10·4 | | 44 | 8·5 | 3·2 | |
| 10·8 | | | 22·0 | 58·8 | |
| 10·0 | | | 44·0 | 12·3 | |
| 10·2 | | | 58·0 | 2·7 | |
| 9·2 | | 46 | 0·5 | 42·2 | |
| 10·9 | | 47 | 19·5 | 37·8 | |
| 10·2 | | 48 | 20·5 | 20·9 | |
| 8·2 | | | 28·5 | 23·4 | 9·0 GS*g* |
| 10·0 | | | 35·0 | 4·6 | |
| 10·4 | | | 56·5 | 34·2 | |
| 10·9 | | 49 | 47·0 | 34·5 | |
| 10·4 | | | 53·0 | 10·9 | |
| 10·9 | | 50 | 2·0 | 20·9 | |
| 10·6 | | | 54·0 | 11·8 | |
| 10·7 | | 51 | 9·9 | 57·4 | |
| 10·9 | | | 24·5 | 31·8 | |
| 10·9 | | 52 | 56·5 | 34·8 | |
| 10·9 | | 53 | 0·5 | 57·7 | |
| 9·2 | | | 12·5 | 1·4 | 9·5 *g* |
| 10·2 | | | 26·5 | 37·0 | |
| 10·9 | | | 53·5 | 49·0 | |
| 9·4 | | | 56·5 | 27·0 | *g* |
| 8·7 | | 56 | 29·5 | 42·9 | 8·5 G*g* |
| 10·9 | | 57 | 38·0 | 51·7 | |
| 9·5 | | 58 | 2·0 | 48·9 | *g* |
| 9·2 | | | 58·0 | 56·3 | *g* |
| 9·0 | | 59 | 36·5 | 21·3 | 9·5 *g* |
| 9·4 | 2 | 0 | 9·5 | 29·8 | *g* |
| 9·2 | | | 24·0 | 6·0 | 8·5 *g* |
| 10·9 | | 1 | 10·0 | 45·0 | |
| 9·0 | | | 20·0 | 54·8 | *g* |
| 9·4 | | 2 | 6·0 | 47·3 | 9·5 *g* |
| 10·9 | | | 28·5 | 11·6 | |
| 10·0 | | | 29·5 | 2·8 | *g* |
| 10·2 | | | 50·0 | 49·0 | |
| 9·8 | | 3 | 16·2 | 1·4 | *g* |
| 10·0 | | 4 | 27·0 | 52·4 | |
| 10·0 | | 5 | 11·0 | 59·2 | *g* |
| 9·2 | | | 58·4 | 0·2 | 9·0 *g* |
| 10·9 | | 6 | 14·0 | 47·2 | |
| 9·4 | | | 32·5 | 7·5 | |
| 10·0 | | | 49·5 | 43·8 | |
| 10·4 | | 7 | 1·0 | 37·5 | |
| 10·4 | | | 3·5 | 46·8 | |
| 10·7 | | 8 | 22·5 | 41·7 | |
| 10·4 | | | 23·5 | 19·7 | |
| 10·6 | | | 55·0 | 20·7 | |
| 10·8 | | 9 | 2·5 | 16·6 | |
| 8·8 | | | 37·0 | 39·3 | 9·0 *g* |
| 10·9 | | 10 | 22·8 | 47·0 | |
| 10·4 | | | 40·0 | 53·7 | |
| 10·6 | | | 49·0 | 19·4 | |
| 8·0 | | | 52·0 | 40·3 | 8·5 GS*g* |

## 181—240.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·2 | 2 | 11 | 40·5 | 23·2 | |
| 10·9 | | 12 | 14·4 | 58·1 | |
| 10·8 | | | 30·5 | 50·5 | |
| 10·9 | | | 42·0 | 52·0 | |
| 10·9 | | 14 | 22·0 | 10·7 | |
| 8·9 | | 15 | 7·0 | 25·3 | *g* |
| 10·9 | | | 56·5 | 38·5 | |
| 10·9 | | 17 | 20·8 | 26·9 | |
| 10·8 | | 18 | 34·0 | 40·1 | |
| 8·9 | | 19 | 48·5 | 5·6 | *g* |
| 9·0 | | | 54·0 | 18·9 | *g* |
| 10·4 | | 20 | 14·5 | 34·2 | |
| 9·4 | | 21 | 18·0 | 6·0 | *g* |
| 7·7 | | 22 | 8·2 | 12·7 | 6·5 GSc*g*λ |
| 9·9 | | | 32·0 | 39·5 | |
| 10·1 | | | 38·8 | 44·3 | |
| 9·4 | | | 46·8 | 52·3 | *g* |
| 10·7 | | 23 | 10·3 | 8·9 | |
| 10·9 | | | 36·3 | 42·3 | |
| 8·9 | | | 41·3 | 44·1 | *g* |
| 10·6 | | | 42·3 | 9·5 | |
| 9·4 | | | 54·9 | 51·9 | *g* |
| 10·9 | | 24 | 44·8 | 58·9 | |
| 10·9 | | 25 | 36·3 | 46·7 | |
| 10·2 | | | 51·8 | 51·9 | |
| 9·4 | | 26 | 39·4 | 37·9 | 9·5 *g* |
| 10·2 | | | 57·8 | 29·3 | |
| 10·9 | | 29 | 5·3 | 3·1 | |
| 10·9 | | | 52·8 | 31·7 | |
| 10·9 | | 30 | 30·3 | 28·5 | |
| 9·8 | | | 50·9 | 2·9 | |
| 10·9 | | 31 | 30·9 | 59·8 | |
| 10·6 | | 32 | 33·5 | 44·7 | |
| 10·9 | | | 54·5 | 9·5 | |
| 7·2 | | 33 | 52·0 | 34·1 | 7·5 GSc*g* |
| 10·2 | | 34 | 11·0 | 12·8 | |
| 10·7 | | | 20·0 | 42·9 | |
| 10·2 | | | 21·0 | 27·7 | |
| 10·9 | | 35 | 16·5 | 19·0 | |
| 10·7 | | | 21·0 | 21·2 | |
| 9·8 | | 36 | 24·0 | 39·2 | *g* |
| 8·3 | | | 34·5 | 55·3 | 9·0 *g* |
| 10·2 | | | 53·0 | 29·5 | |
| 9·2 | | 37 | 40·7 | 19·8 | *g* |
| 9·3 | | 39 | 30·5 | 33·2 | *g* |
| 8·7 | | 40 | 57·5 | 51·2 | 8·0 GS*g* |
| 9·3 | | 41 | 49·0 | 15·0 | *g* |
| 9·5 | | 43 | 33·0 | 1·0 | |
| 9·3 | | 44 | 41·0 | 29·1 | |
| 9·4 | | 46 | 1·0 | 12·0 | *g* |
| 8·7 | | 48 | 31·0 | 30·5 | 9·5 *g* |
| 8·2 | | | 54·0 | 21·3 | 7·2 GSc*g* |
| 9·1 | | 49 | 35·0 | 5·1 | 8·5 *g* |
| 8·3 | | 52 | 0·0 | 55·0 | 8·6 G*g* |
| 9·7 | | | 4·0 | 14·4 | *g* |
| 9·2 | | 58 | 5·0 | 9·1 | *g* |
| 9·6 | | | 10·0 | 38·0 | |
| 8·4 | | 59 | 17·0 | 16·8 | 9·0 *g* |
| 7·9 | 3 | 5 | 51·0 | 48·1 | 7·5 GS*g* |
| 8·5 | | 7 | 15·5 | 0·0 | *g* |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 0 | 30 | + 62 − 0·02 d | + 8·3 |
| | 40 | 57 − 0·02 | 8·2 |
| | 50 | 52 − 0·03 | 8·2 |
| 1 | 0 | 47 − 0·04 | 8·1 |
| | 10 | 42 − 0·04 | 8·0 |
| | 20 | 37 − 0·05 | 7·9 |
| | 30 | 32 − 0·05 | 7·7 |
| | 40 | 28 − 0·06 | 7·6 |
| | 50 | 23 − 0·06 | 7·4 |
| 2 | 0 | 19 − 0·07 | 7·2 |
| | 10 | 14 − 0·07 | 7·0 |
| | 20 | 10 − 0·08 | 6·8 |
| | 30 | 6 − 0·08 | 6·6 |
| | 40 | + 2 − 0·09 | 6·4 |
| | 50 | − 2 − 0·09 | 6·2 |
| 3 | 0 | 6 − 0·10 | 5·9 |
| | 10 | − 9 − 0·10 | + 5·6 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 3 | 0 | − 6 − 0·10 d | + 5·9 |
| | 10 | 9 − 0·10 | 5·6 |
| | 20 | 13 − 0·10 | 5·4 |
| | 30 | 16 − 0·11 | 5·1 |
| | 40 | 19 − 0·11 | 4·8 |
| | 50 | 22 − 0·12 | 4·5 |
| 4 | 0 | 24 − 0·12 | 4·2 |
| | 10 | 27 − 0·12 | 3·9 |
| | 20 | 29 − 0·12 | 3·5 |
| | 30 | 31 − 0·13 | 3·2 |
| | 40 | 33 − 0·13 | 2·9 |
| | 50 | 34 − 0·13 | 2·5 |
| 5 | 0 | 36 − 0·13 | 2·2 |
| | 10 | 37 − 0·13 | 1·8 |
| | 20 | 38 − 0·13 | 1·5 |
| | 30 | 39 − 0·14 | 1·1 |
| | 40 | 39 − 0·14 | 0·7 |
| | 50 | 40 − 0·14 | + 0·4 |
| 6 | 0 | 40 − 0·14 | 0·0 |
| | 10 | 40 − 0·14 | − 0·4 |
| | 20 | 39 − 0·14 | 0·7 |
| | 30 | 39 − 0·14 | 1·1 |
| | 40 | 38 − 0·13 | 1·5 |
| | 50 | 37 − 0·13 | 1·8 |
| 7 | 0 | − 36 − 0·13 | − 2·2 |

d = minutes of decl.

## 241—300.

| mag. | 3h.–4h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·0 | 3 | 8 | 36·5 | 59·0 | g |
| 7·1 | | 11 | 20·0 | 46·4 | 7·0 GSg |
| 8·7 | | | 43·0 | 32·4 | 8·8 Gg |
| 9·1 | | 12 | 29·0 | 55·8 | g |
| 7·5 | | | 51·0 | 28·9 | 7·8 GSg |
| 9·7 | | 14 | 24·5 | 37·2 | g |
| 9·7 | | | 39·0 | 32·7 | g |
| 7·4 | | 16 | 58·0 | 0·3 | 7·8 GSg |
| 9·5 | | 17 | 39·0 | 35·7 | |
| 7·2 | | 20 | 6·0 | 25·8 | 7·5 GSg |
| 9·5– | | 22 | 34·0 | 44·0 | g |
| 9·4 | | 28 | 15·0 | 13·3 | |
| 9·7 | | 29 | 46·0 | 15·8 | |
| 9·9 | | 32 | 9·0 | 17·3 | |
| 9·7 | | | 27·0 | 49·3 | g |
| 9·4 | | | 59·5 | 25·8 | g |
| 8·9 | | 33 | 5·5 | 44·5 | g |
| 9·7 | | | 35·0 | 4·2 | |
| 9·5 | | | 47·0 | 8·3 | |
| 9·9 | | | 53·0 | 20·9 | |
| 9·5 | | 34 | 22·0 | 51·3 | g |
| 8·7 | | 35 | 17·0 | 26·7 | 9·0 g |
| 9·9 | | | 23·0 | 28·8 | |
| 9·5 | | | 59·0 | 1·3 | |
| 9·5 | | 36 | 22·0 | 36·6 | |
| 9·4 | | 37 | 13·0 | 32·6 | |
| 9·9 | | | 24·0 | 32·2 | |
| 8·5 | | | 46·0 | 22·9 | 8·0 Gg |
| 9·5 | | 38 | 13·0 | 48·0 | |
| 8·3 | | 42 | 52·0 | 19·3 | 8·5 Gg |
| 7·5 | | 45 | 11·0 | 23·7 | 8·0 GSg |
| 9·9 | | 47 | 35·0 | 49·9 | |
| 9·2 | | | 51·0 | 24·3 | g |
| 9·4 | | 48 | 1·0 | 27·0 | |
| 8·0 | | | 43·0 | 53·2 | 8·0 GSg |
| 6·1 | | 49 | 11·0 | 37·3 | 4·0 GScgtrλ |
| 9·4 | | 53 | 9·0 | 58·1 | g |
| 8·8 | | 55 | 22·0 | 18·5 | 9·0 g |
| 9·4 | | 57 | 4·0 | 5·6 | g |
| 8·5 | | | 36·0 | 18·4 | 9·5 g |
| 9·7 | 4 | 0 | 17·0 | 18·4 | |
| 9·8 | | 2 | 29·0 | 47·5 | g |
| 9·4 | | 10 | 38·0 | 17·0 | g |
| 9·9 | | 11 | 36·0 | 2·7 | |
| 9·5 | | 12 | 26·0 | 4·7 | 9·5 g |
| 9·5 | | 19 | 0·0 | 19·8 | |
| 9·5 | | | 14·0 | 35·2 | g |
| 9·8 | | 22 | 42·0 | 36·6 | g |
| 9·2 | | 24 | 1·0 | 50·8 | g |
| 9·0 | | 27 | 31·5 | 47·3 | 9·2 g |
| 8·9– | | 29 | 7·5 | 58·7 | 9·0 g |
| 9·2 | | 31 | 33·5 | 35·4 | g |
| 9·3 | | 32 | 21·5 | 59·1 | |
| 9·3 | | 36 | 28·0 | 28·8 | g |
| 9·7 | | | 48·5 | 12·1 | g |
| 9·4 | | 37 | 32·0 | 15·5 | g |
| 9·2 | | 38 | 32·0 | 37·0 | 8·5 Sg |
| 8·9 | | 39 | 53·0 | 5·2 | 8·0 g |
| 9·6 | | 44 | 40·0 | 27·1 | |
| 9·5 | | 46 | 29·0 | 21·3 | |

## 301—360.

| mag. | 4h.–5h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·3 | 4 | 46 | 36·0 | 53·0 | g |
| 9·2 | | 47 | 47·0 | 32·4 | 9·0 g |
| 9·7 | | 48 | 14·0 | 15·4 | |
| 9·7 | | | 31·0 | 29·8 | |
| 9·2 | | 49 | 34·0 | 7·9 | 9·5 g |
| 9·6 | | 50 | 34·0 | 30·9 | |
| 9·1 | | | 38·0 | 49·6 | 8·5 g |
| 9·7 | | 51 | 34·0 | 19·0 | g |
| 9·5 | | 58 | 51·0 | 24·5 | |
| 9·1 | 5 | 0 | 25·0 | 46·1 | g |
| 9·3 | | | 52·0 | 33·6 | g |
| 7·1 | | 4 | 25·0 | 30·8 | 7·0 GSg |
| 9·5 | | 5 | 1·0 | 45·6 | g |
| 9·0 | | 6 | 6·0 | 52·2 | 9·0 g |
| 9·4 | | | 41·0 | 33·4 | |
| 9·4 | | 7 | 51·0 | 56·6 | |
| 9·7 | | 10 | 41·0 | 8·8 | g |
| 8·6 | | 12 | 24·0 | 59·9 | 9·0 g |
| 9·6 | | 13 | 28·0 | 17·5 | g |
| 8·6 | | 16 | 11·0 | 16·1 | g |
| 9·5 | | | 48·0 | 17·7 | g |
| 8·5 | | 21 | 32·0 | 11·0 | g |
| 8·6 | | | 56·0 | 49·1 | 8·0 GSg |
| 9·3 | | 23 | 28·0 | 13·5 | |
| 9·2 | | 24 | 39·0 | 36·7 | g |
| 9·5 | | 25 | 54·0 | 38·5 | |
| 9·7 | | 27 | 45·0 | 37·6 | |
| 8·4 | | | 54·5 | 44·1 | GSg |
| 9·5 | | | 55·0 | 36·0 | g |
| 9·3– | | 29 | 18·5 | 42·2 | g |
| 9·4 | | | 42·0 | 35·5 | |
| 9·8 | | 30 | 3·0 | 28·9 | |
| 9·4 | | | 54·5 | 51·0 | g |
| 9·9 | | 32 | 0·0 | 30·7 | |
| 9·4 | | 33 | 29·0 | 45·0 | g |
| 9·5 | | 36 | 14·0 | 46·0 | |
| 9·3 | | | 19·0 | 13·9 | g |
| 9·6 | | 37 | 4·0 | 31·4 | |
| 9·0 | | 39 | 10·0 | 19·0 | 9·2 g |
| 9·9 | | | 26·0 | 55·2 | |
| 8·8 | | 40 | 27·0 | 46·9 | 8·5 g |
| 9·9 | | | 53·0 | 5·4 | |
| 9·8 | | 41 | 36·0 | 36·0 | |
| 9·6 | | 44 | 17·0 | 4·3 | g |
| 9·6 | | 45 | 7·0 | 58·9 | |
| 9·5 | | | 8·0 | 1·8 | g |
| 9·6 | | | 52·0 | 37·0 | g |
| 8·8 | | | 56·0 | 32·0 | 9·5 g |
| 8·7 | | 46 | 32·0 | 54·5 | 9·3 g |
| 9·3 | | | 52·0 | 56·6 | 9·3 g |
| 9·8 | | 47 | 52·0 | 1·0 | g |
| 9·4 | | | 58·0 | 56·0 | |
| 9·6 | | 48 | 45·0 | 13·3 | g |
| 8·9 | | 49 | 29·0 | 5·2 | g |
| 9·8 | | 50 | 15·0 | 54·4 | |
| 9·5 | | | 51·0 | 33·0 | |
| 9·0 | | | 58·0 | 48·2 | g |
| 9·8 | | 52 | 5·0 | 56·6 | |
| 9·4 | | | 22·0 | 53·0 | g |
| 9·9 | | | 29·0 | 9·2 | |

## 361—420.

| mag. | 5h.–6h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·9 | 5 | 53 | 44·0 | 3·0 | |
| 8·7 | | 55 | 51·0 | 45·3 | 9·5 g |
| 9·4 | | 58 | 13·0 | 5·0 | g |
| 9·4 | | | 17·5 | 1·0 | g |
| 9·8 | 6 | 0 | 2·0 | 14·4 | |
| 9·8 | | 4 | 18·5 | 2·3 | |
| 9·4 | | 5 | 0·0 | 26·4 | |
| 8·9 | | | 5·0 | 7·2 | 8·5 Sg |
| 9·9 | | 8 | 35·0 | 21·2 | |
| 9·6 | | 9 | 11·0 | 34·3 | |
| 9·5 | | 12 | 9·0 | 21·6 | g |
| 9·4 | | | 34·0 | 49·1 | g |
| 9·9 | | 13 | 2·0 | 45·4 | |
| 5·9 | | | 58·0 | 42·7 | 6·0 GScg |
| 9·6 | | 14 | 54·0 | 11·9 | g |
| 8·9 | | 15 | 38·0 | 28·2 | g |
| 9·3 | | 17 | 10·0 | 14·9 | g |
| 9·9 | | | 34·0 | 13·3 | g |
| 9·9 | | 20 | 2·0 | 23·4 | |
| 9·8 | | | 17·0 | 24·8 | |
| 9·6 | | 22 | 10·0 | 34·5 | |
| 9·5 | | 25 | 20·0 | 13·4 | g |
| 9·9 | | | 29·0 | 19·8 | g |
| 9·6 | | | 55·0 | 27·9 | |
| 9·1– | | | 56·0 | 6·4 | g |
| ? 9·6 | | 29 | 2·0 | 25·7 | g |
| 9·6 | | | 8·0 | 10·0 | g |
| 9·2 | | | 23·5 | 9·6 | 9·0 g |
| 9·5 | | 34 | 37·0 | 15·2 | |
| 9·6 | | 35 | 36·0 | 34·3 | |
| 9·6 | | 36 | 11·0 | 11·5 | |
| 9·3 | | | 13·0 | 49·1 | g |
| 9·4 | | 37 | 21·0 | 35·5 | g |
| ? 9·5 | | | 42·0 | 29·4 | g |
| 9·8 | | | 50·0 | 18·9 | |
| 9·6 | | 39 | 4·0 | 33·4 | |
| 9·8 | | | 36·0 | 58·4 | |
| 9·5 | | 40 | 20·0 | 48·8 | |
| 9·8 | | | 22·0 | 16·4 | |
| 9·2 | | | 45·0 | 41·0 | g |
| 8·8 | | | 50·0 | 11·3 | g |
| 9·8 | | 41 | 4·0 | 10·1 | |
| 9·5 | | | 17·0 | 17·3 | g |
| 9·6 | | 42 | 21·0 | 18·3 | g |
| 9·4 | | 43 | 41·0 | 26·0 | g |
| 8·8 | | 45 | 1·0 | 32·8 | g |
| 9·5 | | | 11·0 | 39·0 | |
| 9·4 | | | 41·0 | 18·6 | g |
| 9·8 | | 47 | 58·0 | 7·4 | |
| 9·8 | | | 59·0 | 34·5 | |
| 9·0 | | 48 | 1·0 | 16·8 | 9·5 g |
| 9·4 | | 49 | 9·0 | 5·7 | g |
| 9·6 | | 50 | 12·0 | 25·2 | g |
| 9·2 | | | 57·0 | 23·0 | g |
| 9·6 | | 51 | 1·0 | 3·2 | |
| 9·1 | | | 17·0 | 29·7 | g |
| 9·6 | | 52 | 10·0 | 4·9 | |
| 9·8 | | | 27·0 | 38·2 | |
| 9·1 | | 53 | 4·0 | 24·2 | 9·5 g |
| 9·4 | | 56 | 16·0 | 54·8 | |



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## 421—480.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 7·9 | 6 | 56 | 45·0 | 33·9 | 8·0 GS*g* |
| 9·5 | | 57 | 58·0 | 6·9 | *g* |
| 9·6 | | | 58·0 | 6·7 | *g* |
| 8·9 | 7 | 0 | 17·0 | 19·6 | 9·2 *g* |
| 9·4 | | 1 | 34·0 | 34·2 | |
| 9·8 | | 2 | 23·0 | 27·0 | |
| 9·3 | | 6 | 40·0 | 17·4 | 8·5 *g* |
| 9·5 | | 9 | 29·0 | 11·1 | |
| 9·6 | | 11 | 51·0 | 22·1 | |
| 9·5 | | 15 | 11·0 | 23·8 | *g* |
| 9·4 | | | 50·0 | 47·9 | |
| 8·9 | | 22 | 36·5 | 59·9 | 9·0 *g* |
| 9·8 | | 24 | 12·0 | 7·4 | |
| 9·6 | | 27 | 54·0 | 52·7 | |
| 9·8 | | 29 | 25·0 | 50·4 | |
| 9·4 | | | 41·5 | 16·2 | |
| 9·7 | | | 54·0 | 5·4 | |
| 9·2 | | 30 | 55·0 | 49·5 | 9·5 *g* |
| 9·8 | | 31 | 7·0 | 27·0 | |
| 9·4 | | | 20·5 | 29·0 | *g* |
| 9·5 | | | 47·5 | 28·8 | |
| 9·6 | | 32 | 3·0 | 17·7 | *g* |
| 9·9 | | | 18·0 | 7·7 | |
| 9·8 | | | 30·0 | 46·6 | |
| 9·8 | | | 32·0 | 46·3 | |
| 9·1 | | 33 | 53·5 | 39·4 | 8·5 *g* |
| 7·7 | | 34 | 2·0 | 1·1 | 7·0 GS*g* |
| 7·5 | | | 4·5 | 25·0 | 7·0 GS*g* |
| 9·8 | | 36 | 18·0 | 24·9 | |
| 9·5 | | | 42·0 | 3·4 | |
| 9·5 | | 37 | 12·0 | 18·0 | |
| 9·3 | | | 23·0 | 47·4 | 9·0 *g* |
| 9·5 | | 38 | 15·0 | 33·3 | |
| 9·6 | | | 22·0 | 55·9 | |
| 9·5 | | | 30·0 | 7·1 | |
| 9·7 | | | 31·0 | 55·5 | |
| 9·5 | | | 40·0 | 49·5 | 8·5 *g* |
| 9·8 | | 40 | 24·0 | 41·5 | |
| 9·9 | | | 55·0 | 9·3 | |
| 9·3 | | 42 | 22·0 | 51·9 | |
| 9·0 | | | 33·0 | 34·5 | *g* |
| 9·4 | | 43 | 5·0 | 27·4 | |
| 9·9 | | | 16·0 | 4·0 | |
| 9·9 | | 44 | 15·0 | 18·9 | G |
| 9·9 | | | 15·0 | 10·0 | |
| 9·9 | | | 36·0 | 17·6 | G |
| 9·0 | | | 55·0 | 38·6 | 8·5 G*g* |
| 9·8 | | 48 | 15·0 | 14·1 | |
| 9·2 | | 49 | 37·0 | 17·9 | *g* |
| 9·8 | | 51 | 30·0 | 45·2 | |
| 9·9 | | 52 | 5·0 | 32·0 | |
| 8·8 | | | 8·0 | 18·7 | 9·0 *g* |
| 9·5 | | 53 | 43·0 | 34·3 | |
| 9·9 | | 54 | 7·0 | 24·7 | |
| 9·9 | | | 24·0 | 14·1 | |
| 9·9 | | | 47·0 | 11·6 | |
| 9·8 | | 56 | 53·0 | 32·9 | |
| 8·7 | | 57 | 19·0 | 47·5 | 9·5 *g* |
| 9·5 | | 58 | 20·5 | 0·1 | |
| 9·6 | | 59 | 13·0 | 11·9 | |

## 481—540.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·9 | 7 | 59 | 54·0 | 58·8 | |
| 9·7 | 8 | 4 | 37·0 | 25·9 | *g* |
| 9·4 | | | 51·0 | 25·2 | 10·0 *g* |
| 9·5 | | 6 | 56·0 | 9·1 | |
| 9·9 | | 7 | 13·0 | 2·9 | |
| 9·1 | | | 25·5 | 3·0 | *g* |
| 9·9 | | 8 | 54·0 | 7·5 | |
| 9·9 | | 9 | 16·0 | 6·1 | |
| 9·1 | | 10 | 30·0 | 9·0 | 8·5 *g* |
| 9·8 | | 12 | 15·5 | 41·3 | |
| 9·0 | | | 37·5 | 7·1 | 9·0 *g* |
| 9·5 | | | 48·5 | 58·3 | 9·0 |
| 7·9 | | 13 | 43·5 | 37·0 | 8·0 *g* |
| 9·9 | | 16 | 54·5 | 50·9 | *g* |
| 9·3 | | 17 | 38·5 | 3·8 | 8·5 *g* |
| 9·9 | | 18 | 54·5 | 4·2 | |
| 9·3 | | 19 | 3·5 | 46·7 | 9·0 *g* |
| 9·3 | | 20 | 24·5 | 20·2 | *g* |
| 9·7 | | | 32·5 | 42·0 | *g* |
| 7·4 | | | 44·5 | 36·9 | GS*g* |
| 9·9 | | 22 | 40·5 | 10·7 | |
| 9·4 | | | 54·5 | 20·0 | *g* |
| 9·3 | | 23 | 21·5 | 18·2 | *g* |
| 9·4 | | | 54·5 | 36·0 | |
| 9·1 | | 24 | 35·5 | 41·0 | |
| 9·0 | | 25 | 49·5 | 11·0 | *g* |
| 9·9 | | 26 | 4·5 | 0·9 | |
| 9·7 | | | 5·5 | 27·9 | *g* |
| 8·0 | | | 45·0 | 30·0 | 7·0 GS*g* |
| 8·5 | | | 58·0 | 25·0 | 8·0 S*g* |
| 9·3 | | 28 | 34·0 | 25·8 | *g* |
| 9·7 | | | 39·0 | 58·1 | |
| 7·1 | | 29 | 32·0 | 56·6 | 7·0 GS*g* |
| 9·7 | | | 51·0 | 48·7 | |
| 9·0 | | 30 | 13·0 | 32·0 | 8·8 *g* |
| 9·7 | | | 35·5 | 0·4 | |
| 9·7 | | | 39·0 | 0·2 | |
| 9·7 | | 32 | 33·0 | 23·0 | *g* |
| 9·6 | | | 41·0 | 13·7 | |
| 8·0 | | 33 | 18·5 | 25·5 | 7·0 GS*g* |
| 9·5 | | 34 | 4·0 | 17·1 | |
| 9·7 | | | 45·5 | 58·5 | |
| 9·6 | | 35 | 8·0 | 5·7 | |
| 9·7 | | 36 | 45·0 | 47·2 | |
| 9·7 | | | 46·0 | 55·7 | |
| 9·7 | | 37 | 11·0 | 47·2 | |
| 9·5 | | | 24·0 | 40·5 | *g* |
| 9·2 | | | 30·0 | 55·1 | 9·2 *g* |
| 9·7 | | | 53·0 | 7·9 | |
| 7·2 | | 39 | 12·0 | 7·7 | 7·0 GS*g* |
| 8·0 | | | 22·0 | 37·4 | 8·0 GS*g* |
| 8·8 | | | 36·0 | 28·1 | 9·0 *g* |
| 9·3 | | | 56·0 | 39·3 | 9·2 *g* |
| 9·7 | | 40 | 33·5 | 58·8 | |
| 9·5 | | 43 | 11·0 | 49·6 | *g* |
| 7·4 | | | 14·0 | 9·3 | 7·7 GS*g* |
| 9·7 | | 45 | 53·0 | 16·4 | |
| 8·1 | | | 53·0 | 19·7 | 7·0 GS*g* |
| 9·7 | | 47 | 13·0 | 18·9 | *g* |
| 9·7 | | | 14·0 | 0·7 | 9·5 |

## 541—600.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·2 | 8 | 47 | 32·5 | 0·1 | 8·5 *g* |
| 8·5 | | 48 | 31·5 | 58·7 | 9·2 G*g* |
| 9·2 | | 49 | 45·5 | 24·0 | |
| 9·3 | | | 54·5 | 9·1 | |
| 8·0 | | 50 | 10·5 | 35·3 | 8·5 *g* |
| 8·9 | | 52 | 34·5 | 28·5 | *g* |
| 9·1 | | 53 | 43·5 | 18·2 | *g* |
| 9·7 | | | 51·5 | 31·0 | |
| 9·7 | | | 59·5 | 13·7 | |
| 8·4 | | 54 | 57·5 | 24·2 | 7·8 GS*g* |
| 9·7 | | 55 | 3·5 | 47·7 | |
| 9·1 | | | 30·5 | 51·9 | 9·5 |
| 9·0 | | 57 | 44·5 | 23·5 | 9·2 *g* |
| 9·6 | | | 59·5 | 34·0 | *g* |
| 9·7 | | 59 | 25·0 | 0·6 | |
| 9·7 | 9 | 1 | 14·5 | 13·1 | |
| 9·0 | | 3 | 17·5 | 27·4 | *g* |
| 9·6 | | 4 | 5·5 | 59·0 | |
| 9·1 | | | 27·5 | 39·2 | *g* |
| 9·4 | | 5 | 47·5 | 5·4 | |
| 9·4 | | | 59·5 | 13·2 | 8·8 G*g* |
| 9·5 | | 6 | 53·5 | 52·1 | |
| 7·3 | | 7 | 0·5 | 14·8 | 8·0 GS*g* |
| 9·7 | | | 13·5 | 24·9 | |
| 9·3 | | | 18·5 | 27·7 | |
| 9·1 | | 9 | 40·5 | 10·3 | |
| 9·4 | | 10 | 23·5 | 48·5 | 9·0 *g* |
| 9·7 | | 11 | 8·5 | 59·4 | |
| 9·0 | | | 26·5 | 41·0 | 8·5 *g* |
| 7·7 | | 12 | 2·5 | 5·8 | *g* |
| 9·6 | | | 18·5 | 1·3 | |
| 9·0 | | | 35·5 | 20·4 | 8·5 *g* |
| 8·7 | | 14 | 23·5 | 19·4 | 8·2 *g* |
| 8·6 | | | 55·5 | 35·7 | 9·0 *g* |
| 8·4 | | 15 | 2·5 | 46·1 | 9·0 *g* |
| 9·4 | | | 23·5 | 2·6 | |
| 9·7 | | 16 | 20·0 | 0·3 | |
| 9·7 | | | 55·5 | 0·9 | |
| 5·5 | | 17 | 34·5 | 22·0 | 5·8 GSc*g* |
| 5·9 | | | 35·5 | 12·3 | 6·5 GSc*gr* |
| 9·7 | | 18 | 33·5 | 32·8 | |
| 9·7 | | 19 | 31·5 | 7·8 | |
| 8·3 | | 21 | 8·5 | 45·9 | 9·0 *g* |
| 8·8 | | | 11·5 | 43·8 | 9·5 *g* |
| 9·0 | | | 36·5 | 49·1 | 10·0 *g* |
| 9·5 | | 23 | 28·5 | 46·1 | |
| 9·2 | | | 32·5 | 8·6 | |
| 9·6 | | | 48·5 | 23·0 | |
| 9·6 | | 24 | 32·5 | 50·2 | |
| 9·6 | | | 58·5 | 52·1 | |
| 9·7 | | | 58·5 | 11·8 | |
| 8·9 | | 26 | 2·5 | 28·7 | *g* |
| 9·8 | | 27 | 13·0 | 27·1 | |
| 9·8 | | | 48·0 | 12·4 | |
| 9·3 | | 28 | 4·5 | 48·6 | |
| 8·5 | | 29 | 21·5 | 35·5 | *g* |
| 9·6 | | | 31·0 | 36·9 | |
| 9·9 | | 30 | 7·0 | 57·3 | |
| 9·8 | | | 22·0 | 42·6 | |
| 9·9 | | | 30·0 | 25·8 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 6 | 50 | − 37 − 0·13 d | − 1·8 |
| 7 | 0 | 36 − 0·13 | 2·2 |
| | 10 | 34 − 0·13 | 2·5 |
| | 20 | 33 − 0·13 | 2·9 |
| | 30 | 31 − 0·13 | 3·2 |
| | 40 | 29 − 0·12 | 3·5 |
| | 50 | 27 − 0·12 | 3·9 |
| 8 | 0 | 24 − 0·12 | 4·2 |
| | 10 | 22 − 0·12 | 4·5 |
| | 20 | 19 − 0·11 | 4·8 |
| | 30 | 16 − 0·11 | 5·1 |
| | 40 | 13 − 0·11 | 5·4 |
| | 50 | 9 − 0·10 | 5·6 |
| 9 | 0 | 6 − 0·10 | 5·9 |
| | 10 | − 2 − 0·09 | 6·2 |
| | 20 | + 2 − 0·09 | 6·4 |
| | 30 | 6 − 0·08 | 6·6 |
| | 40 | + 10 − 0·08 | − 6·8 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 9 | 30 | + 6 − 0·08 d | − 6·6 |
| | 40 | 10 − 0·08 | 6·8 |
| | 50 | 14 − 0·07 | 7·0 |
| 10 | 0 | 19 − 0·07 | 7·2 |
| | 10 | 23 − 0·06 | 7·4 |
| | 20 | 28 − 0·06 | 7·6 |
| | 30 | 32 − 0·05 | 7·7 |
| | 40 | 37 − 0·04 | 7·9 |
| | 50 | 42 − 0·04 | 8·0 |
| 11 | 0 | 47 − 0·04 | 8·1 |
| | 10 | + 52 − 0·03 | − 8·2 |

d = minutes of decl.

## 601—660.

| mag. | h (9h.–10h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·8 | 9 | 30 | 30·0 | 9·8 | |
| 8·3 | | | 36·0 | 13·0 | *g* |
| 9·3 | | | 38·5 | 44·2 | *g* |
| 9·9 | | | 58·0 | 36·2 | |
| 9·9 | | 31 | 6·0 | 37·5 | |
| 9·9 | | | 40·0 | 37·4 | |
| 9·9 | | | 48·0 | 14·7 | ? |
| 9·8 | | | 48·0 | 50·7 | |
| 9·6 | | 32 | 27·0 | 17·0 | |
| 9·9 | | 33 | 17·0 | 45·3 | |
| 9·8 | | | 54·0 | 42·5 | |
| 9·9 | | 34 | 2·0 | 43·9 | |
| 9·9 | | 35 | 4·0 | 26·9 | |
| 9·9 | | | 4·0 | 15·8 | |
| 9·9 | | | 4·0 | 27·0 | |
| 9·9 | | | 26·0 | 14·4 | |
| 9·2 | | | 28·0 | 22·5 | |
| 9·8 | | | 39·0 | 27·9 | |
| 9·5 | | | 41·0 | 43·9 | *g* |
| 9·8 | | | 54·0 | 25·0 | |
| 9·8 | | 36 | 1·0 | 11·3 | |
| 8·9 | | | 12·0 | 13·5 | 9·2 *g* |
| 9·3 | | | 13·0 | 53·3 | |
| 9·4 | | | 50·0 | 47·0 | |
| 8·7 | | 37 | 5·0 | 14·0 | 9·8 *g* |
| 9·6 | | 38 | 1·0 | 45·2 | |
| 9·8 | | 39 | 14·0 | 45·8 | |
| 9·9 | | | 42·0 | 52·3 | |
| 9·4 | | 41 | 28·0 | 9·0 | |
| 9·4 | | | 47·0 | 43·5 | |
| 9·0 | | 43 | 14·0 | 8·4 | |
| 9·5 | | | 23·0 | 32·8 | |
| 9·3 | | | 34·0 | 13·4 | |
| 8·0 | | | 58·0 | 16·2 | 9·0 *g* |
| 9·8 | | 44 | 21·0 | 39·3 | |
| 9·3 | | | 28·0 | 57·1 | |
| 9·9 | | | 49·0 | 8·5 | |
| 9·8 | | | 58·0 | 45·2 | |
| 8·9 | | 45 | 23·0 | 28·2 | *g* |
| 9·6 | | 47 | 1·0 | 25·6 | *g* |
| 9·5 | | | 30·0 | 57·0 | |
| 9·3 | | 48 | 0·0 | 15·1 | |
| 9·3 | | | 22·0 | 48·9 | |
| 9·8 | | | 36·0 | 44·4 | |
| 9·6 | | 50 | 25·0 | 14·1 | |
| 9·8 | | | 34·0 | 35·0 | |
| 9·8 | | 51 | 5·0 | 48·1 | |
| 9·6 | | | 14·0 | 18·2 | |
| 7·8 | | 52 | 56·0 | 47·2 | 8·5 *g* |
| 9·2 | | 54 | 42·0 | 18·2 | |
| 9·5 | | 57 | 20·0 | 13·1 | |
| 9·8 | | 58 | 43·0 | 23·1 | |
| 9·3 | | 59 | 59·0 | 10·4 | |
| 9·5 | 10 | 1 | 0·0 | 25·8 | |
| 9·5 | | | 15·0 | 34·6 | 9·5 *g* |
| 9·8 | | | 33·0 | 42·2 | |
| 9·2 | | 2 | 22·0 | 8·7 | |
| 9·9 | | | 50·0 | 45·8 | |
| 9·9 | | 3 | 28·0 | 26·2 | *g* |
| 9·8 | | 4 | 1·0 | 28·0 | |

## 661—720.

| mag. | h (10h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·9 | 10 | 4 | 8·0 | 57·1 | |
| 9·9 | | | 45·0 | 44·0 | |
| 9·3 | | 5 | 2·0 | 0·8 | *g* |
| 9·6 | | | 29·0 | 58·1 | |
| 8·4 | | | 32·0 | 13·3 | 8·5 S*g* |
| 9·8 | | | 43·0 | 39·6 | |
| 8·7 | | | 58·0 | 13·1 | 9·5 *g* |
| 9·6 | | 6 | 9·0 | 52·7 | |
| 9·9 | | 7 | 3·0 | 22·8 | : |
| 9·8 | | | 15·0 | 40·7 | |
| 9·8 | | | 43·0 | 35·1 | |
| 9·8 | | | 56·0 | 56·1 | *g* |
| 9·9 | | 8 | 0·0 | 8·7 | |
| 9·9 | | | 19·5 | 58·6 | |
| 9·2 | | | 57·0 | 15·5 | 9·5 |
| 9·9 | | 9 | 13·0 | 9·1 | |
| 9·5 | | | 21·0 | 16·9 | |
| 8·8 | | | 22·0 | 54·5 | *g* |
| 9·4 | | | 32·0 | 32·3 | |
| 9·9 | | | 45·0 | 33·1 | |
| 9·9 | | 10 | 3·0 | 41·1 | |
| 9·1 | | | 55·0 | 13·7 | 9·0 *g* |
| 9·9 | | 12 | 30·0 | 48·8 | |
| 9·8 | | 13 | 52·0 | 22·9 | |
| 9·8 | | 14 | 8·0 | 27·3 | |
| 9·8 | | 16 | 5·0 | 9·3 | 10·0 |
| 9·9 | | | 14·0 | 51·0 | |
| 9·9 | | | 47·0 | 57·0 | |
| 9·9 | | 17 | 8·0 | 24·0 | |
| 9·4 | | | 41·0 | 58·2 | 9·5 |
| 9·8 | | | 55·0 | 21·8 | |
| 9·9 | | 18 | 28·0 | 21·8 | |
| 9·9 | | | 56·0 | 24·1 | |
| 9·9 | | 19 | 8·0 | 58·0 | ? |
| 9·3 | | | 20·0 | 52·2 | *g* |
| 8·9 | | | 51·0 | 23·9 | 9·5 *g* |
| 9·8 | | | 58·0 | 24·1 | |
| 9·8 | | 20 | 31·0 | 41·3 | |
| 8·9 | | | 45·0 | 23·5 | *g* |
| 9·1 | | | 53·0 | 56·0 | |
| 9·9 | | 23 | 46·0 | 6·2 | |
| 7·9 | | 24 | 23·0 | 30·7 | *g* |
| 9·4 | | | 37·0 | 15·8 | |
| 9·4 | | | 55·0 | 4·3 | |
| 9·8 | | 26 | 16·0 | 38·0 | |
| 9·6 | | | 26·0 | 55·7 | |
| 9·8 | | | 46·0 | 51·1 | |
| 9·6 | | 27 | 47·0 | 8·5 | |
| 9·8 | | | 56·0 | 23·0 | |
| 9·6 | | 29 | 8·5 | 37·8 | *g* |
| 9·3 | | | 14·0 | 35·5 | *g* |
| 9·8 | | 31 | 27·0 | 37·6 | |
| 9·1 | | | 50·5 | 12·4 | 9·5 *g* |
| 8·1 | | 32 | 40·0 | 25·2 | 9·5 *g* |
| 9·6 | | 33 | 4·0 | 25·6 | |
| 9·0 | | | 9·5 | 22·0 | 10·0 *g* |
| 9·3 | | | 40·5 | 14·1 | |
| 9·9 | | 34 | 33·0 | 59·4 | |
| 9·9 | | | 49·0 | 1·8 | |
| 9·6 | | 35 | 16·0 | 56·4 | |

## 721—780.

| mag. | h (10h.–11h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 6·9 | 10 | 36 | 14·0 | 30·4 | 7·0 GS*g* |
| 9·1 | | | 18·0 | 38·3 | |
| 8·9 | | | 50·5 | 58·9 | *g* |
| 9·2 | | 38 | 39·0 | 35·2 | |
| 9·6 | | | 47·0 | 10·7 | |
| 9·4 | | | 52·0 | 17·9 | |
| 7·0 | | 39 | 44·0 | 48·5 | GS*g* |
| 9·6 | | 40 | 8·0 | 52·9 | |
| 9·7 | | | 21·0 | 21·0 | |
| 9·6 | | | 28·0 | 33·8 | |
| 8·1 | | 42 | 24·0 | 9·7 | *g* |
| 7·6 | | | 27·0 | 20·8 | GS*g* |
| 9·6 | | | 28·0 | 10·7 | |
| 9·9 | | 43 | 9·0 | 10·8 | |
| 9·5 | | | 44·0 | 49·5 | |
| 8·6 | | 45 | 44·0 | 9·5 | 9·5 *g* |
| 9·0 | | | 46·0 | 41·8 | *g* |
| 9·6 | | 46 | 15·0 | 33·9 | |
| 9·5 | | | 23·0 | 46·8 | |
| 8·3 | | | 50·0 | 41·7 | 9·0 *g* |
| 9·8 | | | 52·0 | 57·2 | |
| 9·7 | | 47 | 26·0 | 47·9 | |
| 9·8 | | | 55·0 | 44·1 | |
| 9·8 | | 48 | 7·0 | 44·0 | |
| 9·6 | | | 47·0 | 38·9 | |
| 9·3 | | | 52·0 | 57·6 | *g* |
| 9·9 | | | 55·0 | 30·9 | |
| 8·4 | | 50 | 4·0 | 43·1 | *g* |
| 9·6 | | | 5·0 | 42·6 | |
| 9·8 | | 51 | 40·0 | 53·1 | |
| 7·7 | | | 54·0 | 31·3 | 8·5 G*g* |
| 9·7 | | 53 | 6·0 | 0·6 | |
| 9·6 | | | 9·0 | 44·6 | |
| 9·6 | | | 27·0 | 26·0 | |
| 7·6 | | | 43·0 | 25·8 | 6·5 GS*g* |
| 9·4 | | | 57·0 | 6·0 | *g* |
| 8·5 | | 54 | 32·0 | 55·9 | 9·0 *g* |
| 8·9 | | | 47·0 | 4·9 | *g* |
| 9·4 | | 55 | 35·0 | 36·8 | |
| 9·7 | | | 44·0 | 4·9 | |
| 9·6 | | 56 | 1·0 | 9·2 | |
| 9·8 | | 57 | 22·0 | 27·5 | |
| 7·2 | | | 53·0 | 59·7 | 8·0 GS*g* |
| 9·6 | | 58 | 24·0 | 44·8 | |
| 9·5 | | | 46·0 | 30·0 | |
| 7·7 | | 59 | 6·0 | 55·4 | 8·2 GS*g* |
| 9·7 | | | 23·0 | 44·4 | |
| 9·8 | | | 34·0 | 30·7 | |
| 8·4 | | | 35·5 | 0·5 | *g* |
| 9·8 | | | 58·0 | 31·9 | |
| 6·7 | 11 | 0 | 57·0 | 28·8 | 7·0 GS*g* |
| 9·7 | | 1 | 11·0 | 27·5 | |
| 9·5 | | | 38·0 | 17·6 | |
| 9·6 | | | 40·0 | 14·9 | |
| 9·9 | | 2 | 1·0 | 19·7 | |
| 9·4 | | | 10·0 | 31·0 | |
| 9·4 | | | 31·0 | 47·6 | |
| 9·1 | | 3 | 7·0 | 3·1 | |
| 9·6 | | | 23·0 | 47·9 | |
| 9·8 | | | 47·0 | 21·9 | |



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### 781—840.

| mag. | h (11h) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9.6 | 11 | 4 | 8.0 | 47.8 | |
| 9.5 | | | 11.0 | 49.8 | |
| 9.6 | | 6 | 21.0 | 1.1 | ? |
| 9.3 | | | 53.0 | 21.8 | |
| 9.6 | | 7 | 21.0 | 34.5 | |
| 9.9 | | | 59.0 | 0.1 | |
| 9.4 | | 8 | 27.0 | 10.8 | |
| 9.5 | | 9 | 32.0 | 25.9 | |
| 8.0 | | 12 | 17.0 | 32.3 | 8.5 *g* |
| 9.5 | | | 47.5 | 58.0 | 9.5 |
| 9.6 | | | 51.0 | 41.5 | |
| 9.9 | | 13 | 28.0 | 15.8 | |
| 9.8 | | | 29.0 | 53.9 | |
| 9.9 | | | 42.0 | 59.9 | |
| 9.7 | | | 52.0 | 26.0 | |
| 9.8 | | | 53.0 | 17.1 | |
| 9.6 | | | 53.0 | 30.0 | |
| 8.2 | | 14 | 19.0 | 43.9 | 8.5 *g* |
| 9.9 | | | 26.0 | 27.9 | |
| 9.6 | | | 43.0 | 47.9 | 9.0 G |
| 6.3 | | 15 | 6.0 | 27.4 | 6.7 GS*gr* |
| 9.3 | | | 28.5 | 57.8 | |
| 8.9 | | 16 | 56.0 | 45.6 | 9.5 *g* |
| 9.2 | | 17 | 36.0 | 26.0 | |
| 9.6 | | | 43.0 | 10.1 | |
| 9.8 | | 20 | 7.0 | 6.0 | |
| 9.8 | | | 23.0 | 27.3 | |
| 9.5 | | | 23.0 | 39.4 | |
| 9.8 | | 21 | 8.0 | 29.0 | |
| 9.5 | | | 19.0 | 28.1 | |
| 9.8 | | 22 | 51.0 | 28.9 | |
| 9.9 | | 23 | 6.0 | 9.3 | |
| 9.4 | | | 18.0 | 18.3 | |
| 9.8 | | | 21.0 | 34.6 | |
| 9.9 | | | 25.0 | 35.3 | |
| 9.9 | | 24 | 6.0 | 47.1 | |
| 9.3 | | | 19.0 | 56.1 | |
| 9.9 | | | 37.0 | 17.5 | |
| 9.7 | | | 50.0 | 45.5 | |
| 9.7 | | 25 | 15.0 | 28.5 | |
| 9.9 | | | 23.0 | 5.9 | |
| 9.6 | | 26 | 4.0 | 30.9 | |
| 9.4 | | 27 | 4.0 | 9.6 | |
| 9.7 | | | 34.5 | 56.4 | |
| 9.7 | | 28 | 1.0 | 48.0 | |
| 9.6 | | | 20.0 | 7.2 | |
| 9.5 | | | 31.0 | 50.8 | 9.5 *g* |
| 9.0 | | 29 | 59.5 | 41.0 | 9.0 *g* |
| 9.5 | | 30 | 5.0 | 33.5 | |
| 9.5 | | | 55.5 | 42.4 | |
| 9.3 | | 32 | 5.0 | 50.0 | |
| 9.3 | | 33 | 36.5 | 7.9 | 9.0 |
| 9.6 | | 34 | 24.0 | 30.9 | |
| 9.6 | | | 45.0 | 3.3 | |
| 9.6 | | | 45.0 | 9.9 | 9.5 |
| 9.5 | | 35 | 14.0 | 51.0 | |
| 8.6 | | | 30.0 | 20.5 | 9.0 *g* |
| 8.7 | | 36 | 26.0 | 25.5 | 8.3 G*g* |
| 7.1 | | | 44.5 | 32.0 | 7.0 GS*gr* |
| 9.6 | | 37 | 39.0 | 1.8 | |

### 841—900.

| mag. | h (11h.–12h.) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9.5 | 11 | 37 | 45.0 | 37.8 | |
| 9.6 | | 38 | 55.0 | 17.1 | |
| 8.1 | | 39 | 42.0 | 10.7 | 8.2 G*g* |
| 9.6 | | 40 | 11.0 | 14.5 | |
| 9.3 | | | 34.0 | 7.5 | |
| 8.5 | | | 55.0 | 24.8 | 8.5 *g* |
| 9.3 | | 41 | 15.0 | 20.7 | 9.0 *g* |
| 9.6 | | | 48.0 | 6.1 | |
| 9.6 | | 42 | 3.0 | 17.4 | |
| 9.5 | | | 15.5 | 1.0 | |
| 9.0 | | | 50.0 | 10.1 | |
| 9.5 | | | 51.0 | 2.2 | |
| 9.5 | | 44 | 21.0 | 14.2 | |
| 9.0 | | | 22.5 | 56.7 | 9.0 *g* |
| 9.6 | | | 34.5 | 27.1 | |
| 9.6 | | 45 | 21.5 | 53.4 | |
| 9.0 | | 46 | 33.5 | 39.6 | |
| 9.5 | | 47 | 31.5 | 34.3 | |
| 9.3 | | 49 | 6.5 | 18.9 | |
| 9.6 | | | 20.5 | 1.6 | |
| 9.6 | | 50 | 25.5 | 24.4 | |
| 9.6 | | | 37.5 | 0.9 | |
| 9.0 | | 51 | 39.5 | 40.9 | 8.5 *g* |
| 9.6 | | | 58.5 | 1.1 | |
| 9.6 | | 53 | 19.5 | 54.5 | |
| 9.6 | | 55 | 29.5 | 22.8 | |
| 8.8 | | 56 | 14.5 | 5.0 | 8.5 *g* |
| 9.6 | | | 25.5 | 33.1 | |
| 9.6 | | | 32.5 | 5.8 | |
| 8.8 | | | 47.5 | 14.7 | 9.0 *g* |
| 9.6 | | 57 | 3.5 | 58.9 | |
| 9.3 | | | 45.5 | 53.1 | |
| 9.6 | | | 59.5 | 38.9 | |
| 9.6 | | 58 | 29.5 | 10.7 | |
| 8.5 | | | 33.5 | 59.5 | 7.5 G*g* |
| 9.6 | | 59 | 25.5 | 43.9 | |
| 9.1 | | | 54.5 | 34.1 | |
| 9.6 | 12 | 0 | 3.5 | 49.9 | |
| 9.6 | | | 24.5 | 56.7 | |
| 6.9 | | 1 | 15.5 | 40.2 | 6.0 GS*cgr*λ |
| 9.6 | | 2 | 29.5 | 15.7 | |
| 9.5 | | 4 | 7.5 | 8.1 | |
| 9.6 | | | 41.5 | 54.0 | 9.5 |
| 8.7 | | 5 | 11.5 | 3.8 | 8.5 *g* |
| 8.6 | | | 21.5 | 14.5 | 8.5 *g* |
| 9.6 | | 6 | 21.5 | 19.4 | |
| 8.0 | | | 33.5 | 32.3 | 8.5 |
| 9.6 | | | 40.5 | 38.3 | |
| 9.5 | | | 54.5 | 57.7 | |
| 9.2 | | | 54.5 | 37.0 | |
| 9.3 | | 7 | 1.5 | 10.2 | *g* |
| 9.3 | | | 36.5 | 29.2 | |
| 9.3 | | | 48.5 | 10.5 | *g* |
| 9.3 | | 8 | 32.5 | 2.5 | *g* |
| 9.6 | | 9 | 32.5 | 2.7 | |
| 9.5 | | | 47.5 | 18.9 | |
| 9.5 | | 10 | 24.5 | 57.7 | |
| 9.5 | | | 35.0 | 42.1 | |
| 9.3 | | 11 | 2.0 | 56.3 | |
| 9.6 | | 12 | 13.0 | 29.9 | |

### 901—960.

| mag. | h (12h.) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9.6 | 12 | 13 | 27.0 | 57.9 | |
| 9.6 | | | 52.0 | 1.9 | |
| 9.6 | | 14 | 2.5 | 1.5 | |
| 9.6 | | | 41.0 | 10.4 | |
| 8.4 | | | 41.0 | 12.4 | 9.0 *g* |
| 9.6 | | 15 | 48.2 | 59.0 | |
| 9.2 | | 16 | 5.0 | 32.0 | *g* |
| 9.6 | | | 14.5 | 58.3 | |
| 9.6 | | | 22.5 | 57.9 | |
| 9.3 | | 17 | 4.0 | 32.0 | |
| 9.1 | | | 30.0 | 8.6 | *g* |
| 9.6 | | | 33.0 | 21.4 | |
| 9.5 | | | 45.0 | 16.7 | |
| 9.6 | | 18 | 27.0 | 31.2 | |
| 9.6 | | 20 | 7.0 | 14.4 | |
| 9.6 | | | 9.0 | 37.0 | |
| 7.7 | | | 9.0 | 46.8 | 8.0 GS*g* |
| 9.6 | | 21 | 26.0 | 5.2 | |
| 8.8 | | | 33.0 | 55.6 | 8.0 G*g* |
| 9.6 | | | 58.0 | 37.6 | |
| 9.5 | | 22 | 48.0 | 19.9 | |
| 7.2 | | 23 | 17.0 | 42.5 | 7.2 GS*g* |
| 9.6 | | | 36.0 | 9.2 | |
| 9.6 | | | 56.0 | 37.2 | |
| 9.0 | | 24 | 54.0 | 21.8 | *g* |
| 9.2 | | 25 | 5.0 | 29.9 | *g* |
| 7.5 | | | 8.0 | 44.6 | GS*g* |
| 9.6 | | | 9.0 | 15.2 | |
| 9.6 | | | 37.0 | 45.1 | |
| 9.6 | | | 38.0 | 12.5 | |
| 9.6 | | | 45.0 | 34.4 | |
| 9.0 | | | 47.0 | 41.8 | *g* |
| 8.6 | | 26 | 11.0 | 37.9 | 9.0 *g* |
| 9.6 | | 27 | 0.0 | 56.0 | |
| 9.0 | | | 46.0 | 42.3 | |
| 9.6 | | 28 | 0.0 | 46.9 | |
| 9.6 | | | 16.0 | 39.9 | |
| 9.6 | | | 16.0 | 39.7 | |
| 9.5 | | | 23.5 | 6.0 | |
| 9.6 | | | 31.0 | 45.2 | |
| 9.6 | | | 31.0 | 45.0 | |
| 9.6 | | | 33.0 | 16.9 | |
| 9.6 | | | 36.0 | 18.2 | |
| 9.6 | | 29 | 3.0 | 24.0 | *g* |
| 9.6 | | | 24.0 | 11.2 | |
| 9.5 | | | 29.0 | 20.1 | *g* |
| 9.6 | | | 44.0 | 9.1 | |
| 9.2 | | 30 | 2.0 | 45.0 | |
| 9.6 | | | 15.0 | 4.5 | |
| 9.1 | | | 17.5 | 15.9 | |
| 9.3 | | | 41.3 | 0.6 | *g* |
| 9.6 | | | 42.0 | 59.2 | |
| 9.3 | | 31 | 12.0 | 5.2 | *g* |
| 9.3 | | | 12.5 | 49.0 | |
| 6.6 | | | 15.5 | 40.9 | 6.5 GS*g* |
| 9.6 | | | 25.0 | 21.2 | |
| 9.6 | | | 52.5 | 8.6 | |
| 9.6 | | 33 | 3.0 | 8.4 | |
| 9.6 | | | 34.0 | 34.9 | |
| 9.3 | | | 38.0 | 10.8 | 8.5 *g* |

25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 11 | 0 | + 47 − 0.04 d | − 8.1 |
| | 10 | 52 − 0.03 | 8.2 |
| | 20 | 57 − 0.02 | 8.2 |
| | 30 | 62 − 0.02 | 8.3 |
| | 40 | 67 − 0.01 | 8.3 |
| | 50 | 72 − 0.01 | 8.3 |
| 12 | 0 | 77 0.00 | 8.4 |
| | 10 | 82 + 0.01 | 8.3 |
| | 20 | 87 + 0.01 | 8.3 |
| | 30 | 92 + 0.02 | 8.3 |
| | 40 | + 97 + 0.02 | − 8.2 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 12 | 30 | + 92 | + 0·02 d | − 8·3 |
| | 40 | 97 | + 0·02 | 8·2 |
| | 50 | 102 | + 0·03 | 8·2 |
| 13 | 0 | 107 | + 0·04 | 8·1 |
| | 10 | 112 | + 0·04 | 8·0 |
| | 20 | 117 | + 0·05 | 7·9 |
| | 30 | 121 | + 0·05 | 7·7 |
| | 40 | 126 | + 0·06 | 7·6 |
| | 50 | 131 | + 0·06 | 7·4 |
| 14 | 0 | + 135 | + 0·07 | − 7·2 |

d = minutes of decl.

## 961—1020.

| mag. | 12h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·6 | 12 | 35 | 51·0 | 27·5 | |
| 9·4 | | 36 | 15·0 | 25·8 | |
| 9·3 | | | 41·0 | 57·2 | |
| 8·6 | | | 43·0 | 22·1 | 9·0 *g* |
| 9·6 | | | 51·0 | 37·3 | |
| 9·6 | | 37 | 31·0 | 21·3 | |
| 9·7 | | | 32·0 | 30·2 | *g* |
| 9·6 | | | 33·0 | 55·4 | |
| 7·7 | | | 39·0 | 29·9 | *g* |
| 9·6 | | 38 | 3·0 | 4·7 | |
| 9·6 | | | 17·0 | 27·5 | |
| 8·8 | | | 18·0 | 3·9 | *g* |
| 9·4 | | | 29·0 | 54·7 | |
| 9·3 | | | 51·0 | 46·0 | *g* |
| 9·4 | | 39 | 8·0 | 39·6 | |
| 9·6 | | | 25·0 | 3·5 | |
| 8·3 | | 40 | 27·0 | 38·4 | *g* |
| 9·6 | | | 31·0 | 49·1 | |
| 9·1 | | | 35·0 | 36·7 | |
| 9·6 | | | 43·0 | 19·4 | |
| 9·4 | | | 50·0 | 10·7 | |
| 9·0 | | | 54·0 | 19·8 | *g* |
| 8·5 | | 41 | 49·0 | 24·7 | *g* |
| 8·8 | | 42 | 7·0 | 31·6 | |
| 9·6 | | | 10·0 | 31·2 | |
| 9·6 | | | 55·0 | 28·2 | ? |
| 8·3 | | 43 | 57·0 | 4·4 | *g* |
| 9·6 | | 44 | 17·0 | 23·0 | |
| 9·6 | | 45 | 8·0 | 20·7 | |
| 9·0 | | | 8·0 | 12·9 | *g* |
| 9·6 | | | 16·0 | 49·6 | |
| 9·6 | | 46 | 14·0 | 37·9 | |
| 9·3 | | | 33·0 | 51·7 | |
| 9·2 | | | 50·5 | 1·1 | 8·5 *g* |
| 9·0 | | 47 | 1·0 | 48·8 | |
| 9·6 | | | 9·0 | 28·0 | |
| 9·6 | | 48 | 8·0 | 42·8 | *g* |
| 9·6 | | | 20·0 | 2·9 | *g* |
| 9·4 | | | 29·0 | 57·8 | 9·0 *g* |
| 9·6 | | | 31·0 | 52·6 | |
| 9·6 | | 49 | 5·0 | 44·0 | |
| 9·4 | | | 7·0 | 38·7 | *g* |
| 9·6 | | | 28·0 | 21·0 | |
| 9·6 | | | 38·0 | 21·4 | |
| 9·6 | | 50 | 7·0 | 53·0 | |
| 9·6 | | | 16·0 | 11·1 | ? |
| 9·4 | | | 33·0 | 28·8 | |
| 9·6 | | | 34·0 | 24·3 | |
| 9·6 | | 53 | 10·0 | 10·4 | |
| 9·6 | | | 45·0 | 15·1 | |
| 9·6 | | 55 | 11·0 | 30·2 | |
| 9·6 | | 56 | 5·5 | 58·0 | |
| 8·8 | | | 29·0 | 36·7 | *g* |
| 8·8 | | | 30·0 | 20·6 | *g* |
| 8·6 | | | 40·0 | 13·1 | *g* |
| 9·4 | | 57 | 28·0 | 50·8 | |
| 9·0 | | | 36·0 | 3·8 | *g* |
| 9·3 | | 58 | 12·0 | 16·2 | *g* |
| 9·3 | | | 20·0 | 18·7 | *g* |
| 8·8 | | | 43·0 | 55·3 | *g* |

## 1021—1080.

| mag. | 12h.—13h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·0 | 12 | 59 | 6·0 | 32·7 | |
| 9·6 | | | 29·0 | 7·6 | |
| 9·4 | | | 31·0 | 6·2 | |
| 9·6 | | | 45·0 | 4·0 | *g* |
| 9·2 | 13 | 1 | 29·0 | 50·7 | |
| 9·0 | | | 41·0 | 1·9 | *g* |
| 8·9 | | 2 | 37·0 | 43·6 | *g* |
| 9·6 | | | 40·0 | 19·2 | |
| 9·1 | | 3 | 36·0 | 38·8 | |
| 9·3 | | | 43·0 | 19·8 | |
| 9·4 | | 4 | 13·0 | 25·7 | *g* |
| 8·5 | | | 56·0 | 30·3 | *g* |
| 9·6 | | 5 | 17·0 | 26·7 | |
| 9·4 | | | 18·0 | 50·4 | |
| 9·6 | | | 45·0 | 21·8 | |
| 9·4 | | 6 | 8·0 | 7·8 | *g* |
| 9·4 | | | 11·0 | 41·2 | |
| 9·3 | | 7 | 37·0 | 42·8 | |
| 9·6 | | | 55·0 | 50·5 | |
| 8·9 | | 8 | 23·0 | 21·9 | *g* |
| 9·6 | | | 50·0 | 0·9 | *g* |
| 9·6 | | | 51·0 | 34·2 | |
| 9·4 | | 9 | 10·0 | 43·5 | |
| 8·6 | | | 33·0 | 10·6 | *g* |
| 9·6 | | 10 | 7·0 | 8·7 | |
| 9·6 | | | 29·0 | 37·0 | |
| 9·4 | | | 47·0 | 56·4 | |
| 9·2 | | 11 | 58·5 | 12·7 | G*g* |
| 9·6 | | 12 | 25·5 | 43·0 | |
| 9·3 | | | 25·5 | 33·9 | *g* |
| 9·6 | | | 30·5 | 16·5 | *g* |
| 9·4 | | | 34·5 | 15·7 | |
| 9·6 | | 13 | 42·5 | 43·9 | |
| 9·4 | | 14 | 3·5 | 26·9 | |
| 9·4 | | | 10·5 | 13·2 | |
| 9·3 | | | 44·5 | 42·7 | |
| 6·7 | | 15 | 20·5 | 13·8 | 6·0 GS*gr* |
| 9·4 | | 17 | 24·5 | 24·3 | |
| 6·1 | | | 24·5 | 2·5 | 7·0 GS*g* |
| 9·6 | | | 42·5 | 15·5 | |
| 9·6 | | | 51·5 | 20·5 | |
| 9·6 | | 18 | 11·5 | 19·8 | |
| 8·9 | | 19 | 40·5 | 15·2 | 9·0 *g* |
| 9·6 | | 20 | 25·0 | 58·6 | *g* |
| 9·3 | | 21 | 20·5 | 9·1 | *g* |
| 9·4 | | 22 | 30·5 | 37·6 | |
| 8·5 | | | 52·5 | 31·6 | 9·0 *g* |
| 8·6 | | 23 | 12·5 | 28·8 | 9·5 *g* |
| 9·3 | | 24 | 32·5 | 54·4 | 10·0 *g* |
| 9·3 | | 25 | 0·5 | 8·9 | *g* |
| 9·6 | | | 49·0 | 44·4 | |
| 8·9 | | 26 | 3·0 | 33·5 | |
| 8·9 | | | 31·0 | 54·3 | 9·0 *g* |
| 9·6 | | 28 | 21·5 | 25·3 | |
| 8·5 | | | 35·0 | 21·9 | 9·0 *g* |
| 9·4 | | 29 | 26·0 | 21·1 | |
| 8·8 | | | 30·5 | 48·9 | *g* |
| 9·3 | | | 56·5 | 20·7 | 9·0 *g* |
| 9·1 | | 30 | 35·0 | 39·8 | |
| 9·0 | | | 38·0 | 8·4 | *g* |

## 1081—1140.

| mag. | 13h. h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 7·4 | 13 | 31 | 4·5 | 28·7 | 7·0 GS*g* |
| 9·6 | | | 27·0 | 43·1 | |
| 8·8 | | | 33·0 | 8·5 | 8·0 G*g* |
| 9·4 | | 32 | 5·5 | 6·4 | *g* |
| 9·6 | | 33 | 12·0 | 18·2 | |
| 9·1 | | | 36·0 | 50·0 | |
| 9·6 | | | 43·0 | 56·2 | |
| 9·3 | | 34 | 0·0 | 53·5 | |
| 9·6 | | | 13·0 | 41·8 | |
| 9·6 | | | 33·0 | 51·6 | |
| 9·6 | | | 40·0 | 46·2 | |
| 9·1 | | 36 | 11·0 | 31·9 | 9·0 *g* |
| 9·1 | | | 12·0 | 30·1 | |
| 9·3 | | | 20·0 | 7·1 | *g* |
| 9·1 | | | 33·0 | 8·2 | *g* |
| 8·9 | | | 52·0 | 24·1 | *g* |
| 9·3 | | 37 | 24·0 | 14·1 | |
| 9·6 | | 38 | 4·0 | 36·6 | |
| 9·4 | | | 16·0 | 39·7 | |
| 9·6 | | | 29·0 | 27·2 | |
| 9·6 | | | 29·5 | 58·4 | 9·5 *g* |
| 9·6 | | | 50·0 | 15·9 | |
| 9·3 | | | 51·0 | 17·0 | 9·0 *g* |
| 9·2 | | 39 | 55·5 | 57·5 | 9·0 *g* |
| 9·3 | | 40 | 2·0 | 59·1 | |
| 9·6 | | | 23·0 | 40·6 | |
| 8·0 | | | 56·0 | 49·9 | *g* |
| 9·6 | | 41 | 25·0 | 24·7 | *g* |
| 8·4 | | | 26·0 | 38·1 | 9·0 *g* |
| 9·3 | | 42 | 1·0 | 16·6 | |
| 9·4 | | | 3·0 | 6·9 | *g* |
| 8·5 | | | 7·0 | 28·7 | 9·0 G*g* |
| 9·3 | | | 8·5 | 58·9 | |
| 9·6 | | 43 | 24·0 | 3·1 | |
| 9·6 | | 44 | 20·0 | 50·5 | |
| 9·4 | | | 20·0 | 16·1 | *g* |
| 9·0 | | | 57·0 | 14·1 | 9·5 *g* |
| 9·6 | | 45 | 35·0 | 18·8 | |
| 9·4 | | | 47·0 | 53·4 | 9·5 *g* |
| 9·4 | | | 55·0 | 42·6 | |
| 9·6 | | 46 | 20·0 | 8·0 | |
| 9·6 | | 47 | 0·0 | 14·7 | |
| 9·4 | | | 25·0 | 39·2 | |
| 9·0 | | 48 | 51·0 | 36·3 | |
| 9·4 | | 50 | 29·0 | 41·8 | |
| 9·4 | | 51 | 0·0 | 42·7 | |
| 9·6 | | | 10·0 | 45·1 | |
| 9·6 | | | 41·0 | 31·9 | |
| 9·2 | | 52 | 3·0 | 52·7 | *g* |
| 9·6 | | | 53·0 | 54·3 | |
| 9·6 | | 53 | 7·0 | 29·1 | |
| 9·4 | | | 19·0 | 41·0 | |
| 9·3 | | | 43·0 | 29·5 | |
| 9·6 | | 54 | 13·0 | 45·1 | |
| 9·4 | | | 43·0 | 8·1 | *g* |
| 9·6 | | 55 | 10·0 | 52·3 | |
| 9·6 | | | 51·0 | 52·0 | |
| 9·3 | | 56 | 6·0 | 44·6 | |
| 8·8 | | | 10·0 | 5·2 | *g* |
| 9·4 | | | 16·0 | 6·9 | |



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## 1141—1200.

| mag. | h (13h–14h) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9.2 | 13 | 57 | 0.0 | 19.1 | g |
| 6.7 | | | 3.0 | 15.2 | 6.5 GSg |
| 9.6 | | | 19.0 | 21.4 | |
| 8.6 | | | 44.0 | 6.8 | 9.0 g |
| 9.6 | | 58 | 50.0 | 33.4 | |
| 9.3 | | 59 | 19.3 | 1.9 | g |
| 9.4 | 14 | 0 | 11.0 | 46.8 | |
| 9.0 | | 1 | 21.0 | 36.8 | 9.5 g |
| 9.3 | | | 43.0 | 59.1 | |
| 9.6 | | | 53.0 | 31.3 | g |
| 9.6 | | | 54.0 | 32.4 | |
| 9.4 | | 2 | 18.0 | 6.9 | |
| 9.4 | | | 30.0 | 53.0 | |
| 9.4 | | | 35.3 | 1.3 | g |
| 9.4 | | 3 | 11.0 | 40.8 | g |
| 9.4 | | | 40.0 | 29.1 | g |
| 9.3 | | | 53.0 | 40.0 | |
| 9.4 | | 4 | 12.0 | 18.1 | |
| 9.6 | | | 52.0 | 50.8 | |
| 9.6 | | 7 | 6.0 | 12.9 | |
| 7.6 | | | 23.0 | 35.8 | 7.8 g |
| 9.6 | | | 55.0 | 17.1 | |
| 9.1 | | 8 | 14.0 | 45.3 | 9.0 g |
| 9.6 | | | 38.0 | 52.4 | |
| 8.8 | | | 47.0 | 32.1 | 9.0 g |
| 9.6 | | | 50.0 | 13.7 | |
| 9.1 | | 11 | 3.0 | 4.2 | g |
| 9.0 | | 12 | 35.0 | 27.7 | Sg |
| 9.6 | | | 56.0 | 52.5 | g |
| 9.2 | | 14 | 10.0 | 6.9 | |
| 9.6 | | | 17.0 | 26.2 | g |
| 9.6 | | | 48.0 | 7.0 | |
| 9.2 | | | 58.0 | 6.0 | |
| 9.0 | | 15 | 0.0 | 9.3 | g |
| 9.4 | | | 36.0 | 51.0 | |
| 9.6 | | | 51.0 | 58.8 | |
| 9.6 | | 16 | 8.0 | 20.7 | |
| 9.4 | | | 20.0 | 31.0 | |
| 9.6 | | 17 | 15.0 | 55.1 | |
| 9.6 | | | 15.0 | 52.2 | |
| 9.4 | | | 24.0 | 43.5 | g |
| 9.1 | | 18 | 21.0 | 11.7 | |
| 8.7 | | 20 | 31.0 | 9.3 | 9.0 g |
| 9.6 | | | 34.0 | 45.8 | g |
| 9.6 | | 22 | 16.0 | 38.4 | |
| 9.6 | | | 21.0 | 38.1 | |
| 9.6 | | | 54.0 | 32.2 | |
| 9.6 | | 23 | 3.0 | 33.7 | |
| 8.7 | | | 10.0 | 34.4 | 9.0 g |
| 9.6 | | | 50.0 | 39.9 | |
| 8.6 | | | 59.0 | 13.0 | g |
| 9.6 | | 24 | 6.0 | 21.1 | |
| 9.4 | | | 8.0 | 7.0 | |
| 9.3 | | | 33.0 | 4.9 | |
| 9.7 | | | 33.0 | 26.0 | g |
| 9.4 | | | 34.0 | 41.0 | |
| 9.6 | | | 49.5 | 54.0 | |
| 9.1 | | | 51.1 | 41.6 | 9.5 g |
| 9.8 | | 25 | 17.2 | 6.7 | |
| 9.4 | | | 19.9 | 20.5 | |

## 1201—1260.

| mag. | h (14h) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 8.8 | 14 | 25 | 53.4 | 37.9 | 9.0 g |
| 9.8 | | 26 | 12.4 | 5.0 | |
| 9.8 | | | 14.9 | 38.2 | |
| 9.8 | | | 17.2 | 20.9 | g |
| 10.0 | | | 22.9 | 36.5 | |
| 9.2 | | | 33.2 | 28.2 | g |
| 10.0 | | | 46.4 | 39.7 | |
| 10.0 | | | 48.4 | 32.2 | |
| 9.5 | | 27 | 5.7 | 48.8 | 9.0 g |
| 10.0 | | | 5.9 | 34.8 | |
| 9.5 | | | 13.9 | 56.1 | 9.0 g |
| 9.9 | | | 33.9 | 49.7 | |
| 9.4 | | | 45.2 | 20.1 | |
| 9.5 | | | 47.9 | 15.0 | |
| 10.0 | | 28 | 4.9 | 36.7 | |
| 9.6 | | | 29.4 | 36.0 | |
| 10.0 | | | 36.4 | 13.9 | |
| 7.8 | | | 56.5 | 35.7 | 7.0 GSg |
| 10.0 | | 29 | 0.0 | 59.0 | |
| 9.6 | | | 21.1 | 44.3 | |
| 9.2 | | | 49.0 | 19.3 | g |
| 9.4 | | | 55.1 | 44.1 | |
| 10.0 | | 30 | 19.6 | 8.7 | |
| 10.0 | | | 49.1 | 8.8 | |
| 10.0 | | 31 | 9.6 | 6.9 | |
| 8.4 | | | 16.8 | 27.0 | 8.5 g |
| 9.7 | | | 59.6 | 58.7 | |
| 10.0 | | 32 | 9.6 | 13.2 | |
| 9.2 | | | 22.1 | 41.4 | 8.5 g |
| 9.7 | | | 39.3 | 31.1 | |
| 9.4 | | | 46.8 | 19.0 | g |
| 10.0 | | 33 | 1.3 | 58.8 | |
| 9.5 | | | 17.8 | 49.9 | |
| 9.7 | | 34 | 19.6 | 44.0 | |
| 10.0 | | | 28.1 | 58.8 | |
| 9.4 | | | 38.1 | 21.2 | |
| 9.8 | | | 51.9 | 5.3 | |
| 9.9 | | | 57.4 | 25.4 | |
| 10.0 | | 36 | 17.4 | 31.2 | |
| 9.8 | | | 34.4 | 50.9 | |
| 9.8 | | | 55.7 | 1.9 | |
| 9.8 | | | 56.9 | 5.5 | |
| 10.0 | | 37 | 24.9 | 10.2 | |
| 9.5 | | 38 | 1.4 | 25.3 | |
| 10.0 | | | 20.4 | 19.3 | |
| 6.8 | | | 23.9 | 24.5 | 7.2 GSg |
| 10.0 | | | 47.2 | 55.4 | |
| 9.4 | | | 53.9 | 23.7 | |
| 9.4 | | 39 | 21.4 | 47.6 | g |
| 9.5 | | | 41.9 | 26.2 | |
| 10.0 | | | 51.9 | 33.1 | |
| 10.0 | | 40 | 15.9 | 59.7 | |
| 10.0 | | | 16.9 | 12.3 | |
| 9.4 | | | 19.8 | 34.8 | |
| 9.5 | | | 41.8 | 22.9 | |
| 9.0 | | 41 | 15.5 | 0.2 | g |
| 10.0 | | | 40.8 | 44.2 | |
| 8.8 | | | 47.3 | 17.0 | 8.5 Gg |
| 10.0 | | 42 | 3.8 | 8.3 | |
| 9.7 | | | 29.8 | 39.3 | |

## 1261—1320.

| mag. | h (14h) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 10.0 | 14 | 42 | 49.3 | 29.1 | |
| 9.4 | | 43 | 0.8 | 5.4 | g |
| 10.0 | | | 11.8 | 18.4 | |
| 10.0 | | | 15.3 | 48.2 | |
| 9.5 | | | 22.3 | 16.8 | |
| 10.0 | | | 24.3 | 37.6 | |
| 9.4 | | | 47.3 | 5.4 | |
| 9.4 | | 44 | 0.3 | 43.4 | |
| 10.0 | | | 1.3 | 48.6 | |
| 9.5 | | | 9.3 | 16.3 | |
| 9.4 | | | 29.8 | 29.5 | |
| 9.4 | | | 42.3 | 39.4 | |
| 9.8 | | | 59.3 | 29.4 | |
| 10.0 | | | 59.3 | 3.5 | |
| 8.8 | | 45 | 7.3 | 29.8 | g |
| 10.0 | | | 15.3 | 13.5 | |
| 9.8 | | | 35.3 | 10.1 | |
| 9.2 | | 46 | 10.9 | 42.6 | g |
| 10.0 | | | 21.2 | 1.7 | |
| 10.0 | | | 23.7 | 16.1 | |
| 6.0 | | | 30.7 | 31.5 | 6.5 GSg |
| 9.8 | | 47 | 8.7 | 32.5 | |
| 9.9 | | | 10.2 | 40.7 | |
| 9.5 | | | 20.7 | 27.9 | |
| 10.0 | | | 21.7 | 47.8 | |
| 10.0 | | | 31.2 | 58.6 | |
| 10.0 | | | 51.7 | 24.0 | |
| 10.0 | | | 57.6 | 59.2 | |
| 10.0 | | 48 | 38.7 | 45.9 | |
| 10.0 | | | 39.7 | 53.5 | |
| 8.6 | | | 53.7 | 13.4 | 8.0 Gg |
| 10.0 | | 49 | 22.7 | 51.3 | |
| 9.3 | | | 22.7 | 12.7 | g |
| 10.0 | | | 50.7 | 33.2 | |
| 9.5 | | 50 | 3.7 | 31.2 | |
| 9.9 | | | 12.7 | 30.7 | |
| 8.8 | | | 26.2 | 51.1 | 8.5 g |
| 9.5 | | | 29.7 | 26.6 | |
| 10.0 | | | 33.7 | 1.9 | |
| 9.9 | | | 41.7 | 28.7 | |
| 9.8 | | | 41.7 | 30.5 | |
| 10.0 | | | 43.1 | 0.7 | |
| 9.6 | | | 52.6 | 54.7 | |
| 9.2 | | | 59.1 | 27.6 | Gg |
| 9.3 | | 51 | 58.1 | 20.6 | g |
| 8.6 | | 52 | 1.8 | 58.5 | 8.5 g |
| 8.9 | | | 7.1 | 2.0 | 9.0 g |
| 9.7 | | | 19.6 | 22.6 | |
| 8.8 | | | 27.1 | 6.1 | 9.0 Gg |
| 8.9 | | | 50.6 | 35.3 | g |
| 9.5 | | | 51.6 | 3.2 | |
| 9.0 | | 53 | 25.1 | 20.5 | g |
| 9.8 | | | 31.6 | 16.9 | |
| 9.4 | | 54 | 2.6 | 56.4 | |
| 10.0 | | | 11.6 | 13.3 | |
| 10.0 | | 55 | 1.6 | 19.3 | |
| 9.3 | | 56 | 4.1 | 42.7 | g |
| 7.9 | | | 11.3 | 58.5 | 7.5 GSg |
| 9.8 | | | 16.6 | 9.1 | |
| 10.0 | | | 23.1 | 23.7 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 13 | 50 | + 131 + 0.06 d | − 7.4 |
| 14 | 0 | 135 + 0.07 | 7.2 |
| | 10 | 139 + 0.07 | 7.0 |
| | 20 | 144 + 0.08 | 6.8 |
| | 30 | 148 + 0.08 | 6.6 |
| | 40 | 152 + 0.09 | 6.4 |
| | 50 | 156 + 0.09 | 6.2 |
| 15 | 0 | + 159 + 0.10 | − [illegible] |

d = minutes of decl.

25 prec.

| h | m | α (s) | α (s) | δ (′) |
|---|---|---|---|---|
| 14 | 50 | + 156 | + 0·09 d | − 6·2 |
| 15 | 0 | 159 | + 0·10 | 5·9 |
| | 10 | 163 | + 0·10 | 5·6 |
| | 20 | 166 | + 0·10 | 5·4 |
| | 30 | 169 | + 0·11 | 5·1 |
| | 40 | + 172 | + 0·11 | − 4·8 |

d = minutes of decl.

## 1321—1380.

| mag. | h (14h.—15h.) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9·2 | 14 | 57 | 12·1 | 43·8 | |
| 10·0 | | | 14·6 | 45·3 | |
| 9·8 | | | 21·6 | 5·9 | |
| 8·8 | | | 33·1 | 16·1 | 8·2 g |
| 9·4 | | | 45·6 | 8·6 | |
| 9·8 | | 58 | 21·6 | 21·0 | |
| 10·0 | | | 22·1 | 16·4 | |
| 9·4 | | | 23·6 | 35·5 | g |
| 8·9 | | | 30·6 | 46·3 | g |
| 9·7 | | | 38·6 | 14·1 | |
| 10·0 | | | 39·1 | 22·2 | |
| 9·4 | | | 40·6 | 30·3 | |
| 9·0 | | | 44·1 | 22·7 | |
| 9·9 | | | 55·6 | 2·3 | |
| 9·5 | | 59 | 12·1 | 7·8 | |
| 9·8 | | | 14·1 | 32·1 | |
| 9·9 | | | 40·1 | 47·6 | |
| 9·9 | | | 48·6 | 49·7 | |
| 9·0 | | | 56·6 | 36·0 | g |
| 8·4 | 15 | 0 | 3·7 | 26·0 | 7·5 Gg |
| 10·0 | | | 42·7 | 52·5 | |
| 9·8 | | | 48·7 | 11·4 | |
| 8·9 | | | 55·2 | 42·7 | g |
| 9·7 | | 1 | 12·2 | 25·7 | |
| 9·7 | | | 14·2 | 38·2 | |
| 9·8 | | | 19·2 | 18·8 | |
| 9·4 | | | 19·7 | 39·2 | |
| 9·8 | | | 32·7 | 34·0 | |
| 10·0 | | | 41·2 | 56·7 | |
| 10·0 | | 2 | 33·2 | 36·2 | |
| 9·8 | | | 39·2 | 7·0 | |
| 10·0 | | 3 | 2·2 | 57·8 | |
| 9·4 | | | 20·7 | 51·1 | |
| 10·0 | | | 34·2 | 21·7 | |
| 9·5 | | | 44·7 | 2·3 | |
| 8·4 | | 4 | 10·2 | 6·6 | 8·0 g |
| 9·0 | | | 19·3 | 57·4 | |
| 9·9 | | | 42·7 | 17·4 | |
| 10·0 | | 5 | 0·7 | 2·8 | |
| 10·0 | | | 6·7 | 3·8 | |
| 9·5 | | | 32·7 | 24·9 | |
| 8·2 | | | 42·2 | 51·7 | 8·0 g |
| 8·7 | | | 57·2 | 30·9 | g |
| 8·8 | | 6 | 2·2 | 6·1 | 8·8 g |
| 9·4 | | | 16·7 | 51·4 | |
| 9·8 | | | 17·2 | 24·8 | |
| 9·4 | | | 18·3 | 16·1 | |
| 10·0 | | | 32·3 | 10·8 | |
| 8·6 | | 7 | 2·8 | 15·5 | 8·0 Gg |
| 9·8 | | | 2·8 | 47·8 | |
| 10·0 | | | 5·8 | 46·4 | |
| 10·0 | | | 52·8 | 17·8 | |
| 9·9 | | 8 | 46·3 | 27·7 | |
| 9·8 | | | 58·3 | 21·4 | |
| 10·0 | | 9 | 12·3 | 42·7 | |
| 9·5 | | | 24·1 | 1·4 | |
| 9·8 | | | 32·9 | 58·0 | |
| 9·9 | | | 37·8 | 2·5 | |
| 8·0 | | | 45·3 | 45·4 | 8·0 g |
| 8·6 | | | 53·3 | 36·6 | g |

## 1381—1440.

| mag. | h (15h.) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 10·0 | 15 | 9 | 53·3 | 22·3 | |
| 8·8 | | 10 | 8·8 | 46·2 | g |
| 8·4 | | | 9·8 | 36·5 | 8·5 g |
| 9·9 | | | 19·3 | 18·7 | |
| 9·7 | | | 39·8 | 32·4 | |
| 10·0 | | | 42·3 | 56·1 | |
| 9·8 | | 11 | 13·8 | 46·9 | |
| 8·8 | | | 33·8 | 9·6 | g |
| 10·0 | | | 41·3 | 35·4 | |
| 9·3 | | | 58·8 | 21·9 | |
| 8·2 | | 12 | 6·3 | 49·3 | 8·5 g |
| 9·8 | | | 44·3 | 19·9 | |
| 8·9 | | 13 | 1·8 | 12·8 | g |
| 10·0 | | | 4·3 | 1·9 | |
| 9·5 | | | 18·8 | 20·5 | |
| 9·9 | | 14 | 13·3 | 40·8 | |
| 9·0 | | 15 | 7·5 | 1·9 | |
| 9·5 | | | 27·8 | 45·4 | |
| 9·4 | | | 33·8 | 55·3 | |
| 9·5 | | | 43·3 | 34·4 | |
| 8·6 | | 16 | 14·8 | 8·9 | 8·5 g |
| 10·0 | | | 25·3 | 36·8 | |
| 8·4 | | | 36·8 | 18·7 | 9·5 g |
| 10·0 | | | 42·8 | 37·8 | |
| 9·5 | | | 46·3 | 57·0 | |
| 9·4 | | | 46·8 | 21·5 | |
| 9·6 | | | 53·7 | 16·8 | |
| 10·0 | | 17 | 6·2 | 41·0 | |
| 8·4 | | | 13·7 | 21·0 | 9·0 g |
| 9·5 | | | 20·2 | 55·0 | |
| 9·4 | | | 55·2 | 12·6 | |
| 9·9 | | 18 | 10·2 | 25·8 | |
| 10·0 | | | 23·2 | 51·0 | |
| 9·8 | | | 37·2 | 44·1 | |
| 10·0 | | | 47·7 | 51·8 | |
| 9·8 | | | 50·7 | 15·0 | |
| 9·8 | | | 55·7 | 15·4 | |
| 9·8 | | | 56·7 | 6·5 | |
| 10·0 | | 19 | 1·2 | 34·4 | |
| 9·5 | | | 17·2 | 5·0 | |
| 10·0 | | | 34·7 | 32·9 | |
| 10·0 | | 20 | 0·7 | 31·4 | |
| 9·4 | | | 6·7 | 32·3 | |
| 9·5 | | | 23·2 | 7·8 | |
| 9·4 | | | 54·7 | 3·4 | |
| 8·1 | | | 55·2 | 53·8 | 8·5 g |
| 8·5 | | 21 | 8·2 | 28·2 | g |
| 9·4 | | | 20·1 | 3·0 | |
| 10·0 | | | 47·6 | 56·9 | |
| 9·4 | | 22 | 2·6 | 48·1 | |
| 10·0 | | | 20·1 | 39·9 | |
| 10·0 | | | 57·1 | 52·6 | |
| 9·0 | | 23 | 2·1 | 0·4 | g |
| 9·5 | | | 44·1 | 49·4 | |
| 9·6 | | | 45·6 | 53·9 | |
| 8·5 | | | 45·8 | 0·0 | 7·8 GSg |
| 9·3 | | 24 | 17·7 | 58·8 | |
| 9·8 | | | 45·6 | 10·0 | |
| 10·0 | | | 47·6 | 18·6 | |
| 10·0 | | | 52·1 | 8·3 | |

## 1441—1500.

| mag. | h (15h.) | m | s | ′ (−74°) | |
|---|---|---|---|---|---|
| 9·4 | 15 | 24 | 56·1 | 18·7 | |
| 9·4 | | 25 | 24·1 | 36·8 | |
| 9·8 | | | 31·1 | 13·2 | |
| 8·5 | | | 33·1 | 0·7 | 8·2 Gg |
| 9·5 | | | 34·1 | 22·3 | |
| 9·4 | | | 36·1 | 56·1 | |
| 9·4 | | | 43·6 | 46·8 | |
| 9·4 | | | 46·1 | 39·8 | |
| 9·8 | | | 57·1 | 5·3 | |
| 10·0 | | 26 | 4·1 | 3·8 | |
| 8·0 | | | 8·2 | 1·7 | 7·8 GSg |
| 9·3 | | | 11·6 | 18·8 | |
| 9·9 | | | 22·6 | 14·7 | |
| 9·5 | | | 36·0 | 32·3 | |
| 9·5 | | | 46·5 | 44·6 | |
| 8·8 | | | 53·5 | 50·3 | g |
| 9·3 | | 27 | 14·0 | 49·7 | g |
| 9·5 | | | 21·0 | 30·5 | |
| 9·5 | | | 27·5 | 41·9 | |
| 9·5 | | | 38·0 | 46·9 | |
| 9·3 | | | 43·0 | 8·9 | |
| 10·0 | | | 43·5 | 21·9 | |
| 10·0 | | | 43·5 | 44·5 | |
| 10·0 | | | 52·5 | 16·7 | |
| 10·0 | | | 54·5 | 40·9 | |
| 9·6 | | 28 | 9·5 | 25·9 | |
| 10·0 | | | 30·5 | 6·8 | |
| 9·3 | | 29 | 4·5 | 18·3 | |
| 9·6 | | | 25·5 | 9·9 | |
| 10·0 | | 30 | 2·5 | 11·8 | |
| 9·4 | | | 5·1 | 58·0 | |
| 9·7 | | | 18·3 | 14·0 | |
| 9·0 | | | 50·8 | 30·3 | Gg |
| 9·6 | | | 53·3 | 48·9 | |
| 8·2 | | | 57·6 | 27·1 | 7·5 Gg |
| 9·4 | | 31 | 0·4 | 35·1 | |
| 9·3 | | | 35·3 | 45·7 | |
| 8·9 | | | 43·8 | 30·7 | Gg |
| 9·8 | | | 52·8 | 36·6 | |
| 9·8 | | | 53·8 | 8·8 | |
| 9·2 | | 32 | 2·9 | 5·2 | |
| 10·0 | | | 19·3 | 24·9 | |
| 9·8 | | | 57·3 | 4·8 | |
| 9·8 | | 33 | 9·8 | 58·7 | |
| 9·5 | | | 29·4 | 54·6 | |
| 10·0 | | | 30·4 | 58·3 | |
| 9·8 | | 34 | 3·8 | 49·1 | |
| 9·5 | | | 35·3 | 54·7 | |
| 10·0 | | | 36·9 | 1·7 | |
| 8·2 | | | 49·3 | 35·5 | 8·5 g |
| 9·8 | | 35 | 17·3 | 14·8 | |
| 9·4 | | | 31·7 | 34·7 | |
| 9·5 | | 36 | 13·3 | 28·6 | |
| 9·2 | | | 13·6 | 11·7 | |
| 9·8 | | | 19·1 | 1·7 | |
| 9·3 | | | 57·0 | 24·8 | |
| 9·1 | | 37 | 19·1 | 52·5 | |
| 9·2 | | 38 | 46·0 | 22·3 | |
| 9·3 | | | 49·0 | 12·2 | |
| 9·4 | | 39 | 0·0 | 50·2 | |



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## 1501—1560.

| mag. | h | m | s | ′ (15h.–16h., −74°) | |
|---|---|---|---|---|---|
| 9·2 | 15 | 39 | 36·0 | 23·6 | |
| 9·1 | | | 58·0 | 8·4 | g |
| 8·7 | | 41 | 2·0 | 37·2 | 9·0 g |
| 9·2 | | | 36·0 | 20·2 | g |
| 9·3 | | | 40·0 | 10·7 | |
| 9·1 | | 42 | 11·0 | 7·7 | g |
| 9·1 | | 43 | 40·0 | 1·3 | g |
| 9·1 | | 44 | 39·0 | 18·1 | 9·0 g |
| 9·1 | | 45 | 5·0 | 14·2 | 7·8 Gg |
| 8·5 | | 47 | 56·0 | 11·8 | 8·5 g |
| 9·2 | | 50 | 56·0 | 15·1 | g |
| 9·3 | | | 58·0 | 49·0 | |
| 9·4 | | 51 | 10·0 | 9·9 | |
| 9·3 | | | 51·0 | 48·5 | |
| 9·5 | | 52 | 36·0 | 44·4 | g |
| 9·1 | | | 39·0 | 29·3 | g |
| 8·7 | | 55 | 24·0 | 41·1 | 9·2 g |
| 9·5 | | | 26·0 | 40·3 | g |
| 9·1 | | 56 | 26·0 | 25·0 | g |
| 7·8 | | | 37·0 | 43·4 | 8·2 Gg |
| 9·2 | | | 47·0 | 40·5 | 8·5 Gg |
| 8·1 | | | 53·2 | 57·5 | 8·4 GSg |
| 9·2 | | 57 | 45·0 | 28·8 | |
| 9·2 | | 58 | 29·0 | 9·4 | |
| 9·5 | 16 | 0 | 47·0 | 57·4 | g |
| 9·3 | | | 48·0 | 37·1 | |
| 9·5 | | | 54·0 | 36·1 | |
| 9·1 | | 1 | 16·0 | 58·4 | 9·5 g |
| 9·3 | | 2 | 22·0 | 5·4 | |
| 9·3 | | | 57·0 | 19·2 | |
| 9·2 | | 3 | 6·0 | 58·4 | |
| 8·7 | | | 44·0 | 44·6 | 9·5 g |
| 9·1 | | | 52·0 | 56·0 | g |
| 9·3 | | 4 | 28·0 | 36·9 | |
| 9·4 | | | 33·0 | 34·9 | |
| 9·1 | | 5 | 17·0 | 33·3 | |
| 8·7 | | | 39·0 | 47·1 | 9·0 g |
| 9·1 | | 6 | 52·0 | 37·9 | g |
| 9·3 | | 7 | 42·0 | 11·0 | |
| 8·8 | | 8 | 57·0 | 33·8 | 8·5 g |
| 9·1 | | 9 | 33·0 | 44·6 | g |
| 9·1 | | | 40·0 | 36·8 | |
| 9·2 | | 10 | 58·0 | 50·7 | g |
| 9·2 | | 11 | 4·0 | 14·5 | |
| 9·1 | | | 25·5 | 2·9 | g |
| 8·7 | | 14 | 1·0 | 55·1 | 8·0 GSg |
| 8·8 | | 15 | 15·5 | 2·4 | g |
| 9·3 | | | 43·0 | 42·7 | g |
| 9·2 | | 17 | 54·0 | 29·0 | 9·5 Sg |
| 9·3 | | 19 | 0·0 | 5·3 | |
| 9·2 | | 20 | 24·0 | 57·1 | |
| 9·0 | | 21 | 24·0 | 31·1 | g |
| 9·3 | | | 49·0 | 15·1 | |
| 9·1 | | 23 | 36·0 | 16·5 | g |
| 9·0 | | 25 | 43·0 | 10·9 | 9·5 g |
| 9·1 | | | 51·0 | 52·0 | 9·0 g |
| 8·6 | | | 58·0 | 35·1 | 9·0 g |
| 9·2 | | 26 | 9·0 | 18·4 | |
| 9·1 | | | 48·0 | 3·0 | 9·5 g |
| 9·3 | | 27 | 31·0 | 35·1 | |

## 1561—1620.

| mag. | h | m | s | ′ (16h.–17h., −74°) | |
|---|---|---|---|---|---|
| 8·7 | 16 | 27 | 54·0 | 9·0 | 9·5 g |
| 9·3 | | 28 | 7·0 | 22·0 | |
| 9·3 | | 29 | 50·0 | 56·9 | g |
| 9·4 | | 30 | 5·5 | 0·4 | |
| 9·3 | | | 28·0 | 29·7 | |
| 9·3 | | 32 | 35·0 | 37·9 | |
| 8·5 | | 33 | 40·0 | 33·5 | 9·5 g |
| 9·3 | | 34 | 16·0 | 40·1 | |
| 8·9 | | 35 | 0·0 | 18·4 | g |
| 9·3 | | | 22·0 | 53·4 | |
| 9·2 | | 36 | 9·0 | 46·1 | 9·5 g |
| 9·3 | | | 16·0 | 44·9 | |
| 8·2 | | | 22·0 | 36·2 | 8·2 g |
| 9·4 | | | 48·0 | 5·3 | |
| 9·4 | | 37 | 2·0 | 12·2 | |
| 9·1 | | | 6·0 | 21·0 | |
| 8·5 | | 38 | 16·0 | 16·8 | 9·0 g |
| 9·3 | | 39 | 48·0 | 50·0 | g |
| 9·0 | | 40 | 47·0 | 26·0 | g |
| 9·3 | | 41 | 13·0 | 33·2 | |
| 9·0 | | | 22·0 | 44·9 | g |
| 9·4 | | 43 | 37·5 | 58·8 | |
| 9·3 | | | 45·0 | 49·9 | |
| 9·3 | | 44 | 14·0 | 31·1 | |
| 9·3 | | | 14·0 | 3·1 | |
| 8·6 | | 45 | 34·0 | 44·7 | 9·0 g |
| 9·4 | | 46 | 30·0 | 57·0 | |
| 9·0 | | 47 | 52·0 | 7·1 | |
| 8·9 | | 48 | 4·0 | 13·6 | 9·5 g |
| 9·1 | | | 42·0 | 24·1 | g |
| 9·1 | | | 42·0 | 47·4 | g |
| 9·3 | | | 43·0 | 11·0 | |
| 9·2 | | 49 | 18·0 | 52·5 | |
| 9·3 | | 50 | 28·0 | 19·6 | g |
| 9·1 | | | 42·0 | 47·8 | |
| 8·9 | | 52 | 0·0 | 25·8 | |
| 9·3 | | | 34·0 | 28·1 | |
| 9·3 | | | 40·0 | 50·9 | |
| 8·5 | | 53 | 0·0 | 53·3 | 8·0 GSg |
| 8·8 | | | 38·0 | 36·6 | 8·0 g |
| 9·3 | | 54 | 16·0 | 33·0 | |
| 8·8 | | | 46·0 | 13·9 | 9·0 g |
| 9·0 | | 55 | 8·0 | 6·0 | |
| 9·1 | | 56 | 18·0 | 52·9 | |
| 9·2 | | 57 | 27·0 | 16·4 | |
| 9·4 | | 58 | 0·0 | 17·1 | |
| 9·4 | | | 12·0 | 36·4 | |
| 8·9 | | | 45·0 | 24·5 | 9·0 g |
| 9·2 | | | 56·0 | 37·9 | g |
| 6·5 | 17 | 0 | 26·0 | 22·5 | 6·5 GSg |
| 9·4 | | 1 | 21·0 | 52·0 | |
| 8·9 | | | 36·0 | 6·4 | g |
| 9·4 | | 2 | 57·0 | 24·5 | |
| 9·4 | | 3 | 0·0 | 55·0 | g |
| 9·2 | | | 6·5 | 44·4 | g |
| 9·3 | | | 31·0 | 3·6 | |
| 7·6 | | | 33·0 | 27·5 | 7·8 GSg |
| 9·1 | | 4 | 0·0 | 11·2 | 8·5 Gg |
| 9·1 | | | 50·0 | 13·0 | 9·0 g |
| 9·3 | | 5 | 22·0 | 29·9 | |

## 1621—1680.

| mag. | h | m | s | ′ (17h.–18h., −74°) | |
|---|---|---|---|---|---|
| 9·2 | 17 | 6 | 36·0 | 42·0 | |
| 8·2 | | 8 | 8·0 | 54·8 | 8·5 g |
| 8·8 | | 9 | 32·0 | 50·3 | 9·5 g |
| 9·3 | | | 58·0 | 22·0 | g |
| 9·4 | | 10 | 12·0 | 47·5 | |
| 9·3 | | | 44·0 | 58·1 | |
| 9·0 | | 12 | 31·0 | 14·1 | g |
| 9·0 | | 13 | 44·0 | 3·8 | g |
| 8·9 | | | 44·0 | 47·6 | 8·5 g |
| 9·4 | | | 56·0 | 47·7 | g |
| 9·0 | | 16 | 30·0 | 39·0 | g |
| 9·1 | | | 40·0 | 3·6 | g |
| 9·3 | | 17 | 49·0 | 25·9 | 9·5 |
| 9·1 | | 18 | 10·0 | 7·8 | g |
| 9·2 | | 19 | 22·0 | 56·4 | g |
| 8·6 | | 21 | 28·0 | 8·1 | 9·5 g |
| 7·2 | | | 46·0 | 49·2 | 8·0 GSg |
| 9·0 | | 22 | 0·0 | 22·0 | g |
| 9·3 | | 23 | 1·0 | 42·9 | g |
| 9·3 | | | 28·0 | 36·1 | |
| 9·3 | | 24 | 19·0 | 48·4 | |
| 9·2 | | | 31·0 | 27·5 | |
| 9·1 | | | 33·5 | 45·9 | g |
| 9·4 | | | 50·5 | 59·1 | |
| 9·2 | | 25 | 9·0 | 54·8 | |
| 9·4 | | | 49·0 | 51·2 | |
| 9·1 | | 26 | 9·5 | 5·0 | g |
| 9·4 | | | 43·0 | 51·0 | |
| 8·7 | | | 55·5 | 2·0 | g |
| 9·1 | | 28 | 27·5 | 54·8 | 9·5 g |
| 9·3 | | 29 | 49·0 | 47·2 | g |
| 9·0 | | | 52·0 | 11·2 | g |
| 9·3 | | 31 | 30·0 | 17·1 | |
| 9·4 | | | 53·0 | 8·7 | |
| 9·4 | | | 55·0 | 18·4 | g |
| 9·2 | | 34 | 47·0 | 32·7 | |
| 9·1 | | 35 | 20·0 | 14·3 | g |
| 9·4 | | | 37·0 | 22·8 | g |
| 8·6 | | 36 | 19·0 | 57·7 | 8·2 Gg |
| 9·4 | | 40 | 24·0 | 44·1 | |
| 9·4 | | 42 | 10·0 | 52·3 | |
| 9·4 | | 43 | 11·0 | 29·7 | g |
| 8·7 | | 46 | 48·0 | 17·7 | 8·5 g |
| 9·3 | | 50 | 30·0 | 3·9 | 9·5 g |
| 8·9 | | 53 | 18·0 | 15·4 | g |
| 9·2 | | | 28·0 | 6·7 | g |
| 9·5 | | | 48·5 | 0·4 | |
| 9·4 | | | 49·0 | 52·7 | |
| 7·8 | | 56 | 35·0 | 17·9 | 8·0 g |
| 8·9 | | 57 | 27·0 | 13·9 | 9·0 g |
| 8·2 | | | 39·0 | 19·7 | 8·5 g |
| 9·4 | | 59 | 0·0 | 5·9 | |
| 8·3 | | | 5·0 | 3·5 | 8·0 g |
| 8·7 | 18 | 1 | 8·0 | 47·1 | 9·0 g |
| 9·5 | | | 20·0 | 36·1 | |
| 9·4 | | 3 | 37·0 | 23·9 | |
| 8·1 | | 4 | 36·0 | 42·7 | 9·5 g |
| 8·3 | | 5 | 4·0 | 24·8 | 9·0 g |
| 9·3 | | 7 | 18·0 | 6·0 | g |
| 9·4 | | 11 | 52·0 | 37·5 | g |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 15 | 30 | +169 + 0·11 d | −5·1 |
| | 40 | 172 + 0·11 | 4·8 |
| | 50 | 175 + 0·12 | 4·5 |
| 16 | 0 | 178 + 0·12 | 4·2 |
| | 10 | 180 + 0·12 | 3·9 |
| | 20 | 182 + 0·12 | 3·5 |
| | 30 | 185 + 0·13 | 3·2 |
| | 40 | 186 + 0·13 | 2·9 |
| | 50 | 188 + 0·13 | 2·5 |
| 17 | 0 | 189 + 0·13 | 2·2 |
| | 10 | 191 + 0·13 | 1·8 |
| | 20 | 192 + 0·13 | 1·5 |
| | 30 | 192 + 0·14 | 1·1 |
| | 40 | 193 + 0·14 | 0·7 |
| | 50 | 193 + 0·14 | −0·4 |
| 18 | 0 | 193 + 0·14 | 0·0 |
| | 10 | 193 + 0·14 | +0·4 |
| | 20 | +193 + 0·14 | +0·7 |

d = minutes of decl.



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25 prec.

| h | m | a s | s | δ ′ |
|---|---|---|---|---|
| 18 | 10 | + 193 | + 0·14 d | + 0·4 |
| | 20 | 193 | + 0·14 | 0·7 |
| | 30 | 192 | + 0·14 | 1·1 |
| | 40 | 192 | + 0·13 | 1·5 |
| | 50 | 191 | + 0·13 | 1·8 |
| 19 | 0 | 189 | + 0·13 | 2·2 |
| | 10 | 188 | + 0·13 | 2·5 |
| | 20 | 186 | + 0·13 | 2·9 |
| | 30 | 185 | + 0·13 | 3·2 |
| | 40 | 182 | + 0·12 | 3·5 |
| | 50 | + 180 | + 0·12 | + 3·9 |

d = minutes of decl.

## 1681—1740.

| mag. | h (18h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·5 | 18 | 13 | 48·0 | 57·1 | |
| 7·1 | | 16 | 50·5 | 2·3 | 6·5 GScgg |
| 9·4 | | 18 | 38·0 | 25·8 | g |
| 9·5 | | 19 | 22·0 | 5·8 | g |
| 9·4 | | | 53·0 | 20·3 | g |
| 9·0 | | 21 | 14·0 | 10·9 | g |
| 8·8 | | | 17·0 | 27·9 | g |
| 9·4 | | 24 | 49·6 | 49·0 | g |
| 10·2 | | 25 | 22·2 | 37·6 | |
| 10·0 | | | 40·2 | 31·4 | |
| 9·0 | | | 56·2 | 34·0 | g |
| 9·2 | | 26 | 52·2 | 27·4 | g |
| 9·6 | | 27 | 10·2 | 11·6 | |
| 10·0 | | | 10·2 | 35·8 | |
| 8·4 | | | 27·2 | 45·7 | 8·8 g |
| 9·0 | | | 42·2 | 51·0 | 9·0 Gg |
| 10·0 | | 28 | 12·7 | 24·7 | |
| 10·2 | | | 45·7 | 57·0 | |
| 10·0 | | 29 | 43·2 | 29·6 | |
| 10·2 | | 30 | 16·2 | 51·9 | |
| 9·2 | | | 38·2 | 43·3 | g |
| 9·4 | | 31 | 8·4 | 27·7 | g |
| 9·7 | | | 40·2 | 55·1 | |
| 9·7 | | | 52·2 | 7·0 | |
| 10·2 | | 32 | 54·2 | 56·4 | |
| 9·8 | | 33 | 33·2 | 7·4 | |
| 10·2 | | | 49·2 | 43·5 | |
| 10·0 | | 34 | 2·2 | 17·2 | |
| 9·4 | | | 49·7 | 35·6 | g |
| 10·2 | | 35 | 21·2 | 43·8 | |
| 10·2 | | 36 | 8·2 | 2·6 | |
| 9·9 | | | 17·2 | 11·0 | |
| 9·6 | | 37 | 15·7 | 4·7 | |
| 9·8 | | 38 | 1·2 | 57·8 | |
| 10·0 | | | 30·9 | 1·1 | |
| 9·1 | | 39 | 15·7 | 48·8 | 8·5 g |
| 9·7 | | 41 | 21·2 | 46·0 | |
| 9·6 | | | 40·2 | 20·6 | |
| 9·2 | | 42 | 32·2 | 55·9 | 9·5 g |
| 9·6 | | | 43·2 | 4·6 | |
| 9·6 | | 43 | 51·7 | 31·3 | |
| 9·7 | | | 56·2 | 31·6 | |
| 10·2 | | 44 | 14·2 | 2·9 | |
| 10·0 | | | 31·2 | 22·5 | |
| 10·0 | | | 44·2 | 49·3 | |
| 9·7 | | 45 | 9·7 | 33·8 | g |
| 9·6 | | | 22·6 | 0·3 | |
| 9·7 | | | 44·2 | 38·1 | |
| 8·7 | | | 46·2 | 14·7 | 9·0 g |
| 9·6 | | | 49·2 | 26·0 | |
| 9·8 | | 47 | 25·0 | 58·5 | |
| 10·2 | | | 30·2 | 39·1 | |
| 8·6 | | | 50·7 | 45·1 | 9·0 g |
| 9·1 | | 48 | 28·2 | 38·4 | 9·5 g |
| 9·6 | | 49 | 23·2 | 18·7 | |
| 9·7 | | | 50·2 | 17·0 | |
| 9·2 | | | 51·2 | 12·0 | g |
| 9·6 | | 50 | 2·2 | 32·1 | g |
| 7·8 | | | 34·2 | 56·0 | 7·5 GSg |
| 9·6 | | | 43·2 | 1·2 | |

## 1741—1800.

| mag. | h (18h.–19h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9·7 | 18 | 51 | 6·7 | 36·6 | g |
| 10·0 | | | 14·0 | 35·8 | |
| 9·9 | | | 19·7 | 56·0 | |
| 9·7 | | | 44·2 | 23·2 | |
| 10·2 | | 52 | 23·2 | 31·2 | |
| 10·0 | | | 56·2 | 51·1 | |
| 9·6 | | 53 | 40·2 | 6·9 | |
| 9·4 | | 55 | 11·2 | 54·4 | |
| 10·2 | | 56 | 9·7 | 16·1 | |
| 9·7 | | | 19·7 | 12·9 | |
| 9·8 | | 57 | 11·7 | 34·6 | |
| 10·2 | | | 32·7 | 52·2 | |
| 10·0 | | | 34·2 | 24·2 | |
| 9·9 | | | 36·7 | 24·8 | |
| 10·2 | | | 41·2 | 40·2 | |
| 9·8 | | | 44·2 | 45·3 | |
| 9·7 | | 58 | 16·7 | 14·9 | |
| 10·2 | | | 46·2 | 34·0 | |
| 10·2 | 19 | 0 | 38·7 | 8·5 | |
| 8·9 | | 1 | 6·7 | 7·7 | 9·0 g |
| 10·2 | | | 44·2 | 2·9 | |
| 8·6 | | | 52·7 | 31·9 | 9·0 g |
| 9·9 | | | 58·0 | 0·5 | |
| 9·8 | | 2 | 4·8 | 7·0 | |
| 9·7 | | | 20·0 | 59·8 | |
| 10·0 | | | 22·8 | 47·7 | |
| 10·2 | | 3 | 19·3 | 55·6 | |
| 9·0 | | 4 | 33·6 | 59·9 | 8·7 g |
| 8·0 | | | 34·8 | 52·6 | 8·7 GSg |
| 10·2 | | | 49·3 | 45·2 | |
| 10·2 | | 6 | 42·8 | 38·5 | |
| 9·7 | | | 56·3 | 38·2 | |
| 9·6 | | 7 | 10·3 | 58·5 | |
| 10·2 | | | 43·8 | 7·7 | |
| 9·7 | | | 58·3 | 23·1 | |
| 9·6 | | 8 | 3·3 | 47·8 | g |
| 10·2 | | | 3·8 | 41·1 | |
| 10·0 | | | 34·3 | 11·4 | |
| 10·2 | | 9 | 8·8 | 41·5 | |
| 9·7 | | | 20·8 | 27·0 | |
| 8·8 | | | 36·3 | 54·1 | 8·5 g |
| 9·2 | | 10 | 10·8 | 54·0 | 9·0 g |
| 10·0 | | | 27·8 | 14·0 | |
| 9·7 | | | 32·8 | 16·4 | g |
| 9·8 | | | 49·3 | 49·7 | |
| 9·6 | | | 52·3 | 4·2 | |
| 9·7 | | 11 | 4·8 | 6·1 | |
| 10·2 | | | 6·8 | 26·7 | |
| 9·6 | | | 21·8 | 56·3 | |
| 8·7 | | | 32·8 | 26·2 | 9·0 g |
| 10·0 | | 12 | 3·8 | 33·3 | |
| 9·1 | | | 7·8 | 56·3 | |
| 10·2 | | | 36·8 | 53·4 | |
| 9·4 | | | 54·8 | 10·0 | g |
| 9·4 | | 13 | 29·3 | 34·7 | |
| 10·2 | | 14 | 4·3 | 42·1 | |
| 9·7 | | 15 | 22·8 | 42·7 | g |
| 7·8 | | | 27·3 | 13·8 | 8·0 GSgg |
| 9·0 | | | 33·8 | 2·0 | GSg |
| 8·4 | | | 40·6 | 2·8 | GSg |

## 1801—1860.

| mag. | h (19h.) | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 10·2 | 19 | 16 | 3·2 | 27·8 | |
| 9·4 | | | 8·2 | 40·5 | g |
| 10·2 | | | 31·2 | 3·0 | |
| 9·6 | | | 32·2 | 54·2 | |
| 9·9 | | | 37·2 | 38·1 | |
| 9·7 | | | 54·2 | 13·4 | |
| 10·2 | | 17 | 22·3 | 1·2 | |
| 10·2 | | 18 | 23·2 | 3·9 | |
| 9·7 | | | 32·2 | 44·3 | |
| 9·8 | | | 34·2 | 25·9 | |
| 9·6 | | | 57·2 | 42·9 | |
| 10·2 | | 19 | 46·2 | 29·2 | |
| 9·4 | | 20 | 2·2 | 7·5 | |
| 9·6 | | | 13·2 | 30·4 | |
| 9·9 | | | 21·2 | 6·8 | |
| 8·7 | | 21 | 43·7 | 29·5 | 9·0 g |
| 9·6 | | 22 | 5·2 | 44·0 | |
| 9·7 | | 23 | 2·7 | 39·3 | |
| 10·2 | | | 25·7 | 8·1 | |
| 9·6 | | 25 | 14·7 | 53·6 | |
| 10·0 | | 26 | 0·7 | 49·6 | |
| 9·1 | | | 39·6 | 31·8 | g |
| 10·2 | | 27 | 34·7 | 36·2 | |
| 9·6 | | | 35·1 | 40·0 | |
| 9·9 | | 28 | 6·7 | 37·5 | |
| 10·2 | | | 11·7 | 52·6 | |
| 10·2 | | | 18·7 | 2·2 | |
| 9·4 | | | 21·4 | 5·9 | g |
| 7·7 | | | 38·8 | 44·4 | 8·0 GSg |
| 8·8 | | 29 | 6·5 | 40·0 | 9·5 g |
| 9·0 | | | 26·3 | 13·3 | g |
| 9·0 | | 30 | 32·2 | 59·3 | g |
| 9·4 | | 31 | 52·5 | 6·4 | |
| 9·3 | | 32 | 18·9 | 14·3 | g |
| 9·8 | | | 22·5 | 24·3 | |
| 9·6 | | | 40·0 | 23·3 | |
| 9·8 | | | 46·8 | 14·4 | |
| 8·0 | | 33 | 37·0 | 25·4 | GSgg |
| 9·4 | | 34 | 28·1 | 5·3 | |
| 9·8 | | 35 | 9·5 | 54·6 | |
| 9·4 | | | 17·5 | 26·3 | |
| 8·7 | | | 27·5 | 5·0 | 9·0 g |
| 8·5 | | | 49·5 | 23·8 | g |
| 9·2 | | 37 | 20·0 | 10·7 | g |
| 9·8 | | | 36·0 | 5·6 | |
| 9·3 | | 38 | 10·5 | 13·9 | |
| 9·8 | | | 29·3 | 56·6 | |
| 8·8 | | | 54·8 | 39·5 | g |
| 9·8 | | 39 | 28·3 | 5·1 | |
| 9·8 | | 40 | 9·3 | 34·6 | |
| 9·7 | | 42 | 10·3 | 18·9 | |
| 9·4 | | 44 | 3·8 | 0·5 | |
| 9·8 | | | 12·3 | 44·4 | |
| 7·8 | | | 13·3 | 27·2 | 7·5 GSgg |
| 8·7 | | 45 | 28·7 | 41·7 | g |
| 9·6 | | | 29·2 | 11·9 | |
| 9·8 | | | 37·9 | 0·0 | |
| 9·8 | | | 49·7 | 13·3 | |
| 7·7 | | | 52·2 | 20·5 | GScgg |
| 9·2 | | | 56·7 | 53·5 | |

## 1861—1920.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9.8 | 19 | 47 | 22.2 | 28.3 | |
| 9.8 | | | 50.2 | 12.2 | |
| 8.5 | | 48 | 36.7 | 31.5 | g |
| 9.0 | | | 44.7 | 5.2 | g |
| 9.0 | | 49 | 50.2 | 22.9 | 9.0 g |
| 9.4 | | 51 | 33.7 | 29.0 | |
| 9.3 | | | 53.2 | 7.6 | g |
| 9.8 | | 52 | 0.7 | 5.6 | |
| 9.3 | | | 15.7 | 13.6 | |
| 8.5 | | | 25.7 | 55.9 | g |
| 9.4 | | | 44.2 | 25.7 | |
| 9.2 | | 53 | 4.7 | 38.3 | g |
| 9.2 | | | 19.7 | 9.7 | g |
| 7.6 | | 54 | 5.5 | 34.1 | GSg |
| 9.4 | | | 32.5 | 15.0 | |
| 9.8 | | 55 | 20.0 | 31.8 | |
| 8.8 | | | 38.0 | 10.6 | g |
| 9.5 | | 56 | 15.5 | 34.5 | |
| 9.3 | | | 37.5 | 17.8 | |
| 9.2 | | | 54.5 | 49.2 | |
| 9.5 | | 57 | 28.5 | 29.8 | |
| 9.3 | | 58 | 13.0 | 52.0 | |
| 8.8 | | | 39.5 | 28.2 | g |
| 9.2 | | 59 | 5.0 | 17.4 | g |
| 9.4 | 20 | 0 | 53.5 | 22.8 | |
| 9.8 | | 4 | 13.5 | 14.2 | |
| 9.3 | | | 28.5 | 18.7 | |
| 9.7 | | | 51.0 | 13.3 | |
| 9.0 | | 5 | 23.5 | 57.5 | g |
| 8.3 | | 6 | 38.5 | 21.6 | 8.2 GSg |
| 9.8 | | 7 | 11.5 | 3.0 | |
| 9.3 | | | 28.5 | 21.8 | |
| 9.6 | | | 35.0 | 32.5 | |
| 9.8 | | 9 | 24.0 | 15.5 | |
| 9.4 | | | 34.5 | 27.3 | |
| 9.8 | | 10 | 34.5 | 12.5 | |
| 9.8 | | | 55.0 | 15.8 | |
| 9.2 | | 11 | 2.5 | 3.1 | g |
| 9.0 | | | 12.0 | 46.1 | g |
| 9.0 | | | 16.5 | 42.8 | g |
| 9.4 | | | 53.5 | 7.4 | |
| 9.8 | | 12 | 33.0 | 16.6 | |
| 9.2 | | | 38.5 | 14.3 | |
| 9.8 | | | 46.0 | 24.2 | |
| 9.7 | | | 51.5 | 7.1 | |
| 8.3 | | | 55.0 | 41.0 | 8.5 GSg |
| 9.2 | | | 58.5 | 54.1 | |
| 9.3 | | 13 | 23.5 | 6.7 | |
| 9.3 | | | 51.0 | 44.5 | |
| 9.0 | | 14 | 0.0 | 38.3 | g |
| 9.4 | | 17 | 37.5 | 7.2 | |
| 8.8 | | 19 | 19.6 | 57.6 | g |
| 9.8 | | 20 | 18.3 | 57.7 | |
| 9.8 | | | 44.5 | 10.2 | |
| 9.0 | | 22 | 29.5 | 18.9 | |
| 9.4 | | | 55.2 | 1.2 | |
| 9.8 | | 23 | 10.0 | 15.9 | |
| 9.8 | | 25 | 24.5 | 56.4 | |
| 9.8 | | 26 | 3.5 | 49.0 | |
| 8.9 | | 27 | 3.0 | 50.4 | g |

## 1921—1980.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 9.0 | 20 | 27 | 34.6 | 3.7 | g |
| 9.3 | | 28 | 16.3 | 59.6 | |
| 9.3 | | | 34.3 | 54.4 | g |
| 9.4 | | 29 | 20.8 | 39.0 | |
| 9.8 | | 30 | 12.0 | 4.5 | |
| 9.0– | | 32 | 55.1 | 2.9 | |
| 9.2– | | 34 | 25.7 | 45.5 | 9.0 g |
| 8.3 | | | 57.9 | 43.7 | 9.0 g |
| 10.3 | | 35 | 27.2 | 39.5 | |
| 10.3 | | | 49.7 | 17.1 | |
| 9.7* | | 37 | 20.0 | 0.2 | |
| 10.3 | | | 48.7 | 7.6 | |
| 8.0 | | | 58.7 | 8.9 | 8.5 GSg |
| 10.3 | | 38 | 13.2 | 31.1 | |
| 9.7 | | | 19.7 | 18.7 | |
| 10.3 | | 39 | 9.2 | 35.7 | |
| 10.3 | | 41 | 5.2 | 11.7 | |
| 9.9 | | | 39.7 | 44.4 | |
| 10.3 | | 42 | 23.2 | 31.3 | |
| 9.5 | | 44 | 59.6 | 57.8 | 9.5 g |
| 9.7 | | 45 | 47.7 | 15.1 | |
| 9.4 | | | 53.6 | 55.3 | 8.6 g |
| 10.3 | | 46 | 29.6 | 52.9 | |
| 10.0 | | | 54.6 | 29.6 | |
| 9.7 | | 47 | 12.6 | 7.0 | |
| 10.3 | | 48 | 4.6 | 38.7 | |
| 9.5 | | | 6.6 | 58.5 | g |
| 10.3 | | | 8.1 | 10.7 | |
| 9.9 | | | 47.1 | 8.3 | |
| 10.3 | | 49 | 34.1 | 8.7 | |
| 10.0 | | | 39.1 | 22.1 | |
| 9.0 | | 50 | 26.6 | 13.9 | g |
| 9.7 | | | 47.1 | 11.8 | |
| 9.6 | | 51 | 32.1 | 45.6 | |
| 9.6 | | 53 | 1.1 | 39.7 | 9.0 g |
| 9.5 | | | 16.6 | 16.8 | g |
| 10.3 | | | 22.6 | 41.7 | |
| 10.2 | | | 52.1 | 12.9 | |
| 9.2 | | 55 | 6.5 | 17.0 | g |
| 9.4 | | | 25.5 | 6.7 | g |
| 9.5 | | | 36.5 | 22.5 | g |
| 10.2 | | 56 | 31.5 | 9.7 | |
| 10.3 | | | 41.5 | 8.2 | |
| 10.2 | | 57 | 1.5 | 31.4 | |
| 10.3 | | 58 | 39.5 | 56.8 | |
| 10.0 | | 59 | 13.5 | 1.8 | |
| 10.3 | | | 46.0 | 0.8 | |
| 10.3 | 21 | 0 | 47.5 | 15.1 | |
| 9.7 | | 1 | 11.5 | 33.0 | g |
| 9.2 | | 2 | 11.5 | 55.5 | 9.0 g |
| 8.8 | | | 14.0 | 12.8 | 8.5 g |
| 10.3 | | 3 | 31.0 | 10.5 | |
| 10.0 | | | 46.4 | 1.9 | g |
| 9.7 | | 5 | 0.0 | 55.5 | g |
| 10.3 | | 6 | 3.8 | 59.9 | |
| 9.8 | | | 31.5 | 36.2 | |
| 10.3 | | 7 | 45.5 | 41.2 | G |
| 10.3 | | 8 | 3.5 | 46.9 | |
| 10.3 | | | 6.7 | 0.5 | |
| 9.4 | | | 34.5 | 51.6 | 9.5 Gg |

## 1981—2040.

| mag. | h | m | s | −74° ′ | |
|---|---|---|---|---|---|
| 8.3 | 21 | 8 | 59.5 | 22.8 | 8.0 GSgg |
| 9.7 | | 12 | 26.5 | 2.3 | |
| 9.0 | | | 59.5 | 26.4 | 9.0 g |
| 9.4 | | 13 | 2.0 | 32.5 | 9.0 g |
| 10.2 | | | 10.0 | 41.8 | |
| 10.3 | | | 21.0 | 13.2 | |
| 9.6 | | | 44.7 | 2.5 | |
| 9.8 | | | 50.0 | 10.4 | |
| 10.3 | | 14 | 2.0 | 35.0 | |
| 9.2 | | 17 | 50.3 | 43.9 | 9.0 g |
| 10.2 | | 18 | 3.3 | 23.0 | |
| 9.6 | | 19 | 23.3 | 24.7 | g |
| 10.0 | | | 34.3 | 51.4 | |
| 9.0 | | | 59.3 | 26.1 | GSg |
| 9.4 | | 20 | 9.8 | 13.0 | g |
| 10.3 | | | 24.8 | 4.1 | |
| 10.3 | | | 56.3 | 10.1 | |
| 10.3 | | 21 | 46.7 | 24.7 | |
| 9.9 | | 22 | 22.2 | 12.4 | |
| 10.3 | | 24 | 39.2 | 36.2 | |
| 10.3 | | 25 | 3.2 | 59.4 | |
| 9.5 | | | 29.7 | 13.5 | 9.5 |
| 10.3 | | | 58.2 | 4.6 | |
| 10.2 | | 26 | 26.7 | 40.9 | g |
| 7.4 | | 28 | 15.1 | 38.5 | 7.5 GSg |
| 9.6 | | 29 | 36.0 | 27.2 | |
| 10.2 | | | 54.5 | 46.7 | |
| 9.4 | | 31 | 24.5 | 34.1 | 9.0 g |
| 10.3 | | | 31.0 | 39.7 | |
| 10.3 | | | 49.5 | 5.4 | |
| 9.7 | | 33 | 52.3 | 48.9 | |
| 10.2– | | 34 | 0.5 | 55.1 | |
| 9.4 | | 38 | 37.0 | 3.4 | |
| 9.6 | | 39 | 17.0 | 0.2 | |
| 9.4 | | 40 | 36.0 | 31.2 | g |
| 9.2 | | 41 | 3.0 | 43.4 | g |
| 8.7 | | | 34.0 | 18.2 | 9.0 g |
| 9.2 | | 42 | 11.0 | 13.8 | 9.0 g |
| 9.3 | | | 29.0 | 30.2 | g |
| 8.2 | | 43 | 3.0 | 12.2 | 8.5 Gg |
| 7.7 | | | 17.0 | 0.7 | 8.0 GSg |
| 9.2 | | 48 | 19.0 | 29.1 | 9.0 g |
| 9.6 | | | 24.0 | 42.5 | 9.5 g |
| 9.6 | | 49 | 0.0 | 54.4 | |
| 9.6 | | 50 | 1.0 | 27.4 | 9.0 g |
| 9.6 | | 53 | 57.0 | 6.9 | g |
| 9.6 | | 55 | 31.0 | 19.5 | g |
| 8.7 | | | 55.0 | 41.3 | 9.0 g |
| 8.7 | 22 | 2 | 12.0 | 32.6 | 9.5 g |
| 8.4 | | 3 | 18.0 | 1.6 | 9.5 g |
| 9.6 | | 12 | 41.0 | 17.8 | g |
| 8.7 | | 13 | 10.0 | 4.3 | g |
| 9.6 | | 18 | 28.0 | 11.2 | 9.5 g |
| 9.4 | | 21 | 42.0 | 19.7 | 9.5 g |
| 9.6 | | 23 | 24.0 | 22.2 | g |
| 9.6 | | 24 | 30.0 | 10.9 | g |
| 9.6 | | 25 | 2.0 | 46.2 | g |
| 9.2 | | 27 | 31.5 | 12.1 | 9.5 g |
| 7.9– | | | 43.0 | 4.8 | 8.0 g |
| 8.8– | | 29 | 53.5 | 35.8 | 8.5 g |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 19 | 40 | +182 | +0.12 d | +3.5 |
| | 50 | 180 | +0.12 | 3.9 |
| 20 | 0 | 178 | +0.12 | 4.2 |
| | 10 | 175 | +0.12 | 4.5 |
| | 20 | 172 | +0.11 | 4.8 |
| | 30 | 169 | +0.11 | 5.1 |
| | 40 | 166 | +0.10 | 5.4 |
| | 50 | 163 | +0.10 | 5.6 |
| 21 | 0 | 159 | +0.10 | 5.9 |
| | 10 | 156 | +0.09 | 6.2 |
| | 20 | 152 | +0.09 | 6.4 |
| | 30 | 148 | +0.08 | 6.6 |
| | 40 | 144 | +0.08 | 6.8 |
| | 50 | 139 | +0.07 | 7.0 |
| 22 | 0 | 135 | +0.07 | 7.2 |
| | 10 | 131 | +0.06 | 7.4 |
| | 20 | 126 | +0.06 | 7.6 |
| | 30 | +121 | +0.05 | +7.7 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 22 | 20 | + 126 | + 0·06 d | + 7·6 |
| | 30 | 121 | + 0·05 | 7·7 |
| | 40 | 117 | + 0·05 | 7·9 |
| | 50 | 112 | + 0·04 | 8·0 |
| 23 | 0 | 107 | + 0·04 | 8·1 |
| | 10 | 102 | + 0·03 | 8·2 |
| | 20 | 97 | + 0·02 | 8·2 |
| | 30 | 92 | + 0·02 | 8·3 |
| | 40 | 87 | + 0·01 | 8·3 |
| | 50 | 82 | + 0·01 | 8·3 |
| 0 | 0 | + 77 | 0·00 | + 8·4 |

d = minutes of decl.

## 2041—2072

| mag. | h (22h–23h) | m | s | ′ (–74°) | |
|---|---|---|---|---|---|
| 9·1 | 22 | 31 | 36·0 | 13·9 | 8·5 *g* |
| 9·6 | | 32 | 6·0 | 11·3 | *g* |
| 9·4 | | 35 | 53·5 | 37·3 | *g* |
| 9·6 | | 36 | 6·5 | 36·8 | *g* |
| 9·1 | | 37 | 57·0 | 31·2 | 9·0 *g* |
| 9·6 | | 42 | 30·0 | 27·2 | |
| 8·3 | | 44 | 49·0 | 4·2 | 8·0 *g* |
| 9·6 | | 47 | 32·0 | 37·3 | *g* |
| 8·2 | | 49 | 12·0 | 26·5 | 8·0 GS*g* |
| 9·0 | | 50 | 36·0 | 8·4 | 8·0 *g* |
| 9·5 | | 52 | 10·0 | 43·8 | |
| 9·3 | | | 42·0 | 16·1 | |
| 9·5 | | 58 | 47·0 | 42·2 | *g* |
| 7·5 | | 59 | 51·0 | 15·7 | 6·5 GSc*g* |
| 9·6 | 23 | 3 | 13·0 | 35·8 | *g* |
| 9·6 | | 4 | 34·0 | 12·2 | *g* |
| 9·3 | | 6 | 34·0 | 51·9 | *g* |
| 8·6 | | 7 | 26·0 | 33·3 | 9·0 *g* |
| 9·5 | | 8 | 14·0 | 55·0 | *g* |
| 9·3 | | | 20·0 | 49·3 | |
| 9·5 | | | 53·0 | 17·0 | |
| 9·6 | | 9 | 40·0 | 50·5 | |
| 9·3 | | 12 | 17·0 | 8·4 | *g* |
| 8·2 | | 13 | 44·0 | 23·4 | 9·0 *g* |
| 9·0 | | | 49·0 | 51·0 | 8·8 *g* |
| 8·5 | | 16 | 20·0 | 3·0 | 9·0 *g* |
| 9·3 | | 18 | 3·0 | 34·4 | *g* |
| 8·1 | | | 55·0 | 31·3 | GS*g* |
| 9·6 | | 20 | 0·0 | 49·2 | |
| 10·8 | | 22 | 12·8 | 13·8 | |
| 8·2 | | 23 | 14·2 | 49·4 | 8·0 GS*g* |
| 11·1 | | | 54·8 | 51·0 | |

## 2073—2104.

| mag. | h (23h) | m | s | ′ (–74°) | |
|---|---|---|---|---|---|
| 9·8 | 23 | 24 | 10·2 | 54·0 | |
| 8·8 | | | 34·2 | 53·4 | 7·8 GS*g* |
| 8·4 | | 26 | 9·4 | 25·5 | 8·0 GSc*g* |
| 9·8 | | 27 | 22·3 | 30·1 | |
| 11·1 | | 28 | 2·8 | 50·3 | |
| 11·1 | | | 14·8 | 23·0 | |
| 11·1 | | | 38·8 | 10·5 | |
| 9·8 | | | 48·9 | 58·4 | |
| 10·8 | | 29 | 33·8 | 9·2 | |
| 11·1 | | | 52·8 | 35·0 | |
| 9·2 | | 30 | 15·6 | 36·2 | 9·5 *g* |
| 10·2 | | 31 | 22·8 | 40·1 | |
| 9·8 | | 32 | 29·8 | 55·6 | 9·5 *g* |
| 10·6 | | 33 | 9·8 | 35·3 | |
| 10·6 | | | 16·3 | 34·0 | *g* |
| 9·2 | | 34 | 12·4 | 28·3 | *g* |
| 9·8 | | 35 | 20·3 | 55·5 | |
| 10·2 | | | 56·8 | 22·8 | |
| 7·8 | | 36 | 12·7 | 54·5 | 8·0 GS*g* |
| 10·4 | | | 42·3 | 11·5 | |
| 10·6 | | 37 | 18·3 | 17·6 | |
| 11·1 | | | 29·8 | 44·7 | |
| 10·2 | | | 38·8 | 3·2 | |
| 10·2 | | 40 | 5·8 | 48·5 | |
| 11·1 | | | 35·3 | 25·5 | |
| 10·8 | | 41 | 6·3 | 26·9 | |
| 11·1 | | | 26·3 | 21·3 | |
| 10·6 | | 42 | 19·8 | 3·0 | |
| 11·1 | | | 50·4 | 0·5 | |
| 11·1 | | 43 | 12·3 | 24·4 | |
| 10·6 | | | 25·8 | 15·2 | |
| 9·8 | | 44 | 16·3 | 23·9 | 9·5 *g* |

## 2105—2136.

| mag. | h (23h) | m | s | ′ (–74°) | |
|---|---|---|---|---|---|
| 11·0 | 23 | 44 | 32·8 | 5·5 | |
| 9·8 | | | 32·3 | 50·4 | |
| 10·2 | | 46 | 3·8 | 52·1 | |
| 8·9 | | | 10·8 | 37·4 | 8·0 G*g* |
| 11·1 | | | 29·8 | 20·2 | |
| 10·2 | | | 32·8 | 56·0 | |
| 9·2 | | 47 | 45·8 | 38·9 | 9·0 *g* |
| 9·8 | | 48 | 2·8 | 32·3 | |
| 9·8 | | | 9·3 | 36·3 | *g* |
| 10·4 | | 49 | 4·8 | 5·7 | |
| 10·8 | | | 21·8 | 42·8 | |
| 10·2 | | | 52·3 | 12·1 | |
| 8·6 | | 50 | 28·6 | 59·9 | 8·5 *g* |
| 10·8 | | | 29·8 | 54·4 | |
| 11·1 | | | 39·3 | 18·3 | |
| 11·0 | | 52 | 0·3 | 34·9 | |
| 11·1 | | | 15·3 | 30·9 | |
| 9·0 | | | 25·8 | 45·1 | 8·5 *g* |
| 11·0 | | | 36·6 | 58·3 | |
| 11·1 | | | 46·8 | 9·6 | |
| 10·4 | | | 53·1 | 58·3 | |
| 9·2 | | | 57·3 | 40·2 | 8·5 *g* |
| 11·0 | | 53 | 11·8 | 21·5 | |
| 9·8 | | 54 | 35·3 | 3·6 | *g* |
| 11·1 | | 55 | 15·8 | 10·5 | |
| 10·6 | | | 46·3 | 44·2 | |
| 10·8 | | 56 | 1·8 | 33·5 | |
| 9·8 | | 57 | 22·3 | 1·0 | *g* |
| 8·3 | | 58 | 12·3 | 32·8 | *g* |
| 10·8 | | | 30·3 | 11·1 | |
| 11·1 | | 59 | 44·8 | 6·7 | |
| 11·1 | | | 59·1 | 58·8 | |

# ZONE—75°

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 71 | – 0·01 | 8·3 |
| | 20 | + 66 | – 0·01 | + 8·3 |

d = minutes of decl.

## 1—10.

| mag. | h (0h) | m | s | ′ (–75°) | |
|---|---|---|---|---|---|
| 11·1 | 0 | 0 | 7·4 | 37·5 | |
| 9·4 | | | 9·4 | 5·8 | *g* |
| 10·8 | | 1 | 24·9 | 11·8 | |
| 10·2 | | | 47·4 | 20·8 | |
| 9·8 | | 2 | 21·4 | 50·1 | |
| 11·1 | | | 28·9 | 47·1 | |
| 10·8 | | | 48·4 | 54·8 | |
| 9·2 | | | 59·4 | 7·1 | *g* |
| 10·2 | | 3 | 22·9 | 35·6 | |
| 11·1 | | 6 | 21·9 | 17·6 | |

## 11—20.

| mag. | h (0h) | m | s | ′ (–75°) | |
|---|---|---|---|---|---|
| 10·8 | 0 | 6 | 26·4 | 54·8 | |
| 10·6 | | | 45·9 | 25·2 | |
| 10·4 | | | 58·4 | 53·4 | |
| 11·1 | | 7 | 39·4 | 27·5 | |
| 8·9 | | | 55·9 | 22·9 | 9·0 *g* |
| 7·7 | | 8 | 9·4 | 36·5 | 7·0 GS*g* |
| 11·0 | | 9 | 21·4 | 59·0 | |
| 11·0 | | 11 | 39·9 | 16·7 | |
| 9·8 | | | 52·9 | 6·9 | |
| 8·4 | | 12 | 36·4 | 55·0 | *g* |

## 21—30.

| mag. | h (0h) | m | s | ′ (–75°) | |
|---|---|---|---|---|---|
| 10·4 | 0 | 12 | 44·9 | 56·1 | |
| 11·1 | | 13 | 33·4 | 51·0 | |
| 9·8 | | 14 | 40·4 | 48·8 | |
| 10·6 | | 15 | 1·4 | 35·6 | |
| 10·6 | | | 24·4 | 49·8 | |
| 11·0 | | | 25·4 | 24·8 | |
| 8·4 | | | 28·4 | 34·2 | *g* |
| 10·2 | | | 36·4 | 33·6 | |
| 10·4 | | | 54·2 | 2·5 | |
| 11·1 | | 16 | 6·4 | 2·2 | |



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## 31—90.

| mag. | h | m | s (0h.–1h.) | ′ (−75°) | |
|---|---|---|---|---|---|
| 11·1 | 0 | 16 | 7·4 | 52·0 | |
| 11·0 | | 18 | 22·7 | 0·5 | |
| 9·2 | | | 31·9 | 56·5 | g |
| 9·0 | | | 59·9 | 31·0 | g |
| 9·6 | | 19 | 26·4 | 44·5 | g |
| 9·6 | | | 34·5 | 57·5 | g |
| 8·9 | | | 59·5 | 5·9 | g |
| 11·0 | | 22 | 11·4 | 43·2 | |
| 10·6 | | 23 | 4·4 | 8·8 | |
| 8·8 | | | 46·0 | 27·7 | g |
| 9·8 | | | 49·7 | 30·3 | |
| 11·1 | | 25 | 40·0 | 31·6 | |
| 11·1 | | | 43·0 | 34·1 | |
| 10·2 | | 26 | 0·0 | 18·1 | g |
| 10·0 | | | 58·5 | 30·0 | |
| 10·8 | | 27 | 3·5 | 33·0 | |
| 9·2 | | | 9·3 | 56·9 | g |
| 10·0 | | | 18·5 | 57·0 | |
| 11·1 | | 28 | 19·5 | 50·3 | |
| 9·8 | | | 54·9 | 38·9 | |
| 10·4 | | 29 | 37·5 | 29·9 | |
| 10·0 | | | 40·3 | 50·5 | |
| 11·0 | | 30 | 19·2 | 58·7 | |
| 10·8 | | | 34·6 | 0·5 | |
| 8·4 | | | 58·6 | 33·5 | 9·0 Gg |
| 11·1 | | 31 | 21·8 | 53·8 | |
| 8·6 | | 34 | 4·2 | 50·3 | 9·0 g |
| 11·0 | | 35 | 19·3 | 23·7 | |
| 11·0 | | 36 | 56·3 | 48·0 | |
| 10·6 | | 39 | 27·5 | 58·4 | |
| 9·1 | | 41 | 6·0 | 24·2 | g |
| 9·7 | | 42 | 27·0 | 28·1 | g |
| 9·6 | | | 53·0 | 47·5 | |
| 6·6 | | 44 | 14·0 | 36·2 | 6·0 GScgrλ |
| 9·4 | | 45 | 15·0 | 40·3 | g |
| 8·7 | | 47 | 53·0 | 33·0 | 9·0 g |
| 9·6 | | 48 | 22·0 | 58·1 | |
| 7·6 | | | 54·0 | 19·9 | 7·5 GSg |
| 9·4 | | 49 | 32·5 | 0·9 | |
| 9·2 | | 56 | 43·0 | 59·5 | 9·5 g |
| 9·9 | | 57 | 23·0 | 27·7 | g |
| 9·8 | | | 59·0 | 7·6 | |
| 9·3 | | 59 | 50·0 | 2·8 | |
| 9·3 | 1 | 3 | 48·0 | 46·0 | g |
| 9·9 | | 9 | 47·0 | 33·1 | g |
| 9·6 | | | 59·0 | 26·3 | g |
| 9·1 | | 10 | 7·0 | 46·2 | 9·5 g |
| 9·3 | | 11 | 4·0 | 17·4 | 9·5 g |
| 9·8 | | 14 | 58·0 | 37·3 | |
| 9·9 | | 16 | 24·0 | 29·5 | g |
| 9·2 | | 17 | 39·0 | 5·0 | g |
| 9·8 | | 19 | 44·0 | 44·7 | g |
| 9·9 | | 21 | 14·0 | 44·4 | g |
| 9·5 | | 22 | 43·9 | 39·4 | g |
| 10·7 | | | 47·2 | 15·6 | |
| 9·4 | | 23 | 48·0 | 59·8 | |
| 10·9 | | 24 | 21·7 | 23·3 | |
| 8·4 | | 25 | 15·6 | 41·5 | 8·0 GSg |
| 10·9 | | 26 | 0·7 | 50·7 | |
| 10·4 | | 27 | 2·2 | 32·6 | |

## 91—150.

| mag. | h | m | s (1h.–2h.) | ′ (−75°) | |
|---|---|---|---|---|---|
| 10·4 | 1 | 27 | 53·2 | 3·0 | |
| 10·2 | | 28 | 1·2 | 55·7 | |
| 9·2 | | | 14·7 | 52·6 | 9·0 g |
| 10·7 | | | 23·2 | 34·5 | |
| 10·2 | | | 37·2 | 24·5 | |
| 8·3 | | 29 | 4·7 | 15·4 | 9·0 g |
| 10·9 | | | 27·2 | 32·5 | |
| 10·2 | | | 44·2 | 52·7 | |
| 9·6 | | | 45·6 | 17·5 | |
| 10·8 | | | 55·2 | 48·9 | |
| 10·9 | | 30 | 55·2 | 12·7 | |
| 10·8 | | 31 | 43·2 | 29·5 | |
| 10·9 | | 32 | 0·7 | 53·0 | |
| 9·2 | | | 18·7 | 18·8 | 8·5 g |
| 8·6 | | | 53·7 | 33·7 | 9·0 g |
| 10·2 | | 33 | 59·7 | 0·4 | |
| 10·2 | | 34 | 11·3 | 33·2 | g |
| 10·9 | | | 56·3 | 52·5 | |
| 10·2 | | 35 | 6·3 | 44·6 | |
| 9·8 | | 37 | 10·3 | 15·7 | |
| 8·0 | | | 54·8 | 37·1 | GSg |
| 10·2 | | 39 | 37·3 | 13·3 | |
| 10·6 | | 40 | 0·3 | 15·6 | |
| 10·7 | | 41 | 5·8 | 8·2 | |
| 10·6 | | | 40·8 | 6·0 | |
| 10·2 | | 42 | 11·8 | 18·5 | |
| 10·9 | | | 36·8 | 26·1 | |
| 10·7 | | 43 | 8·3 | 18·2 | |
| 10·6 | | | 11·3 | 9·1 | |
| 10·9 | | | 26·3 | 42·7 | |
| 9·8 | | 44 | 20·3 | 25·5 | |
| 10·2 | | | 25·3 | 28·8 | |
| 8·2 | | | 50·8 | 21·9 | 7·5 GSg |
| 10·4 | | | 50·8 | 9·2 | |
| 10·9 | | 45 | 15·8 | 52·4 | |
| 10·9 | | 47 | 6·3 | 45·1 | |
| 8·8 | | 48 | 1·8 | 51·8 | 8·5 Gg |
| 9·0 | | | 14·3 | 26·7 | 9·5 g |
| 10·9 | | | 48·3 | 53·7 | |
| 9·5 | | 49 | 32·3 | 28·7 | g |
| 9·4 | | | 54·8 | 20·4 | g |
| 10·4 | | 50 | 16·8 | 50·8 | |
| 9·8 | | 51 | 11·8 | 22·8 | g |
| 9·4 | | | 43·0 | 14·5 | g |
| 10·0 | | 52 | 13·5 | 5·8 | |
| 10·9 | | | 41·5 | 3·6 | |
| 8·8 | | 53 | 32·5 | 43·6 | g |
| 10·2 | | 54 | 16·5 | 29·9 | |
| 10·9 | | 55 | 34·0 | 39·6 | |
| 8·4 | | | 46·8 | 58·7 | GSg |
| 9·2 | | | 56·0 | 56·0 | g |
| 9·0 | | 59 | 11·0 | 13·2 | 8·0 Gg |
| 10·2 | 2 | 0 | 8·8 | 58·7 | |
| 8·4 | | | 37·0 | 2·8 | 7·0 GSg |
| 10·9 | | 2 | 1·0 | 19·2 | |
| 10·9 | | | 50·5 | 31·7 | |
| 10·6 | | 3 | 30·0 | 3·8 | |
| 10·2 | | 4 | 7·0 | 1·8 | |
| 8·8 | | 6 | 39·5 | 9·2 | 8·8 g |
| 9·6 | | | 47·5 | 17·3 | g |

## 151—210.

| mag. | h | m | s (2h.) | ′ (−75°) | |
|---|---|---|---|---|---|
| 10·0 | 2 | 6 | 54·0 | 55·4 | |
| 10·9 | | 9 | 16·8 | 29·0 | |
| 10·4 | | | 28·8 | 5·9 | |
| 10·4 | | | 41·3 | 41·1 | |
| 10·9 | | 10 | 2·3 | 24·1 | |
| 7·8 | | | 24·3 | 5·2 | 7·0 GScg |
| 10·9 | | 11 | 27·3 | 4·3 | |
| 10·9 | | 12 | 27·3 | 51·0 | |
| 10·6 | | | 37·8 | 46·4 | |
| 10·6 | | 13 | 10·3 | 28·8 | |
| 8·7 | | | 57·3 | 57·6 | g |
| 10·7 | | 14 | 57·3 | 7·4 | |
| 9·4 | | 15 | 23·8 | 14·3 | g |
| 10·9 | | | 40·3 | 4·8 | |
| 10·9 | | 16 | 25·8 | 55·5 | |
| 10·9 | | 17 | 7·3 | 49·8 | |
| 10·7 | | 18 | 27·3 | 34·2 | |
| 10·6 | | 19 | 16·8 | 8·6 | |
| 10·4 | | | 48·8 | 58·5 | |
| 9·8 | | 22 | 24·0 | 11·9 | |
| 9·8 | | | 59·5 | 23·6 | g |
| 8·0 | | 23 | 44·5 | 0·1 | 8·0 GSg |
| 10·0 | | 25 | 52·3 | 58·5 | |
| 10·6 | | 26 | 7·5 | 54·4 | |
| 10·4 | | | 47·5 | 5·7 | |
| 9·4 | | 27 | 8·8 | 21·9 | g |
| 9·2 | | 28 | 12·5 | 3·7 | g |
| 10·0 | | | 14·5 | 55·5 | |
| 10·9 | | | 25·0 | 45·7 | |
| 10·7 | | | 41·3 | 48·1 | |
| 10·9 | | | 55·3 | 0·2 | |
| 10·8 | | 30 | 31·8 | 35·0 | |
| 10·0 | | 31 | 19·2 | 30·6 | |
| 10·9 | | | 37·3 | 58·7 | |
| 10·2 | | 32 | 16·8 | 2·7 | g |
| 10·9 | | 33 | 12·3 | 49·6 | |
| 9·5 | | | 20·4 | 41·8 | |
| 8·7 | | | 55·6 | 37·6 | g |
| 10·8 | | 34 | 7·3 | 21·2 | |
| 9·8 | | 35 | 13·3 | 31·7 | |
| 9·0 | | | 17·4 | 2·5 | 8·5 g |
| 10·9 | | | 20·3 | 41·7 | |
| 10·9 | | 36 | 1·8 | 7·6 | |
| 10·7 | | | 15·3 | 13·7 | |
| 9·4 | | | 19·4 | 24·7 | g |
| 10·0 | | 38 | 6·8 | 22·1 | g |
| 9·3 | | | 51·0 | 14·8 | g |
| 9·1 | | 39 | 21·0 | 27·4 | g |
| 9·2 | | | 30·0 | 21·8 | g |
| 9·1 | | 42 | 29·0 | 46·0 | 9·0 Gg |
| 9·0 | | 45 | 23·0 | 21·3 | 9·0 Gg |
| 9·1 | | 48 | 48·0 | 22·9 | g |
| 9·3 | | 49 | 3·0 | 53·7 | g |
| 6·5 | | 51 | 18·0 | 34·5 | 5·0 GScg |
| 8·1 | | | 50·0 | 28·3 | 8·5 g |
| 9·5 | | 53 | 9·0 | 17·2 | g |
| 8·1 | | 54 | 42·0 | 56·3 | g |
| 9·5 | | 55 | 44·0 | 24·3 | g |
| 9·3 | | 56 | 28·0 | 31·0 | g |
| 9·7 | | 57 | 1·0 | 24·5 | g |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 0 | 10 | + 71 − 0·01 d | + 8·3 |
| | 20 | 66 − 0·01 | 8·3 |
| | 30 | 61 − 0·02 | 8·[illegible] |
| | 40 | 55 − 0·03 | 8·2 |
| | 50 | 50 − 0·03 | 8·2 |
| 1 | 0 | 45 − 0·04 | 8·1 |
| | 10 | 39 − 0·05 | 8·0 |
| | 20 | 34 − 0·05 | 7·9 |
| | 30 | 29 − 0·06 | 7·7 |
| | 40 | 24 − 0·07 | 7·6 |
| | 50 | 19 − 0·07 | 7·4 |
| 2 | 0 | 14 − 0·08 | 7·2 |
| | 10 | 10 − 0·08 | 7·0 |
| | 20 | 5 − 0·09 | 6·8 |
| | 30 | + 1 − 0·09 | 6·6 |
| | 40 | − 3 − 0·10 | 6·4 |
| | 50 | 7 − 0·10 | 6·2 |
| 3 | 0 | − 11 − 0·11 | + 5·9 |

d = minutes of decl.



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25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 2 | 50 | − 7 − 0·10 d | + 6·2 |
| 3 | 0 | 11 − 0·11 | 5·9 |
| | 10 | 15 − 0·11 | 5·6 |
| | 20 | 19 − 0·12 | 5·4 |
| | 30 | 22 − 0·12 | 5·1 |
| | 40 | 25 − 0·13 | 4·8 |
| | 50 | 28 − 0·13 | 4·5 |
| 4 | 0 | 31 − 0·13 | 4·2 |
| | 10 | 34 − 0·14 | 3·9 |
| | 20 | 36 − 0·14 | 3·5 |
| | 30 | 38 − 0·14 | 3·2 |
| | 40 | 40 − 0·15 | 2·9 |
| | 50 | 42 − 0·15 | 2·5 |
| 5 | 0 | 44 − 0·15 | 2·2 |
| | 10 | 45 − 0·15 | 1·8 |
| | 20 | 46 − 0·15 | 1·5 |
| | 30 | 47 − 0·15 | 1·1 |
| | 40 | 47 − 0·15 | 0·7 |
| | 50 | 48 − 0·16 | + 0·4 |
| 6 | 0 | 48 − 0·16 | 0·0 |
| | 10 | 48 − 0·16 | − 0·4 |
| | 20 | 47 − 0·15 | 0·7 |
| | 30 | 47 − 0·15 | 1·1 |
| | 40 | − 46 − 0·15 | − 1·5 |

d = minutes of decl.

## 211—270.

| mag. | $2^{h}$–$4^{h}$ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·2 | 2 | 57 | 42·0 | 48·0 | g |
| 9·4 | | 58 | 1·0 | 59·6 | g |
| 9·7 | 3 | 1 | 27·5 | 41·1 | g |
| 9·0 | | 2 | 27·0 | 41·5 | g |
| 9·5 | | | 47·0 | 58·9 | |
| 8·7 | | | 51·0 | 46·6 | g |
| 9·7 | | 5 | 15·0 | 38·7 | g |
| 9·0 | | 7 | 0·0 | 12·5 | g |
| 9·7 | | | 19·5 | 32·0 | g |
| 8·9 | | | 32·0 | 34·6 | g |
| 9·5 | | 8 | 4·0 | 59·9 | |
| 9·7 | | 10 | 4·0 | 20·4 | g |
| 9·3 | | | 23·0 | 11·0 | g |
| 8·4 | | 12 | 39·0 | 42·0 | g |
| 8·2 | | | 43·0 | 8·0 | 8·0 GSg |
| 9·0 | | 13 | 20·0 | 54·0 | 8·0 g |
| 9·7 | | 15 | 45·0 | 20·9 | g |
| 9·2 | | 18 | 55·0 | 30·5 | g |
| 9·7 | | 19 | 25·0 | 46·1 | |
| 9·7 | | 20 | 29·0 | 1·7 | |
| 7·6 | | 22 | 53·8 | 2·2 | 8·2 GSg |
| 9·0 | | 24 | 9·0 | 37·3 | g |
| 9·2 | | 25 | 20·5 | 43·2 | g |
| 9·1 | | | 44·5 | 25·1 | 9·0 g |
| 9·8 | | 30 | 42·0 | 42·9 | |
| 7·7 | | 31 | 52·0 | 1·1 | 7·8 GSg |
| 9·7 | | 34 | 48·0 | 29·6 | g |
| 8·7 | | 35 | 7·5 | 33·0 | g |
| 9·3 | | | 13·0 | 48·1 | g |
| 9·4 | | | 37·0 | 32·8 | g |
| 9·5 | | 37 | 35·0 | 11·3 | |
| 9·5 | | 38 | 52·0 | 21·5 | g |
| 9·9 | | 39 | 13·0 | 34·0 | |
| 7·4 | | | 49·0 | 13·5 | GSg |
| 9·8 | | 41 | 53·0 | 38·9 | |
| 9·4 | | 43 | 19·0 | 57·0 | g |
| 9·8 | | 44 | 45·0 | 45·6 | |
| 9·5 | | 45 | 28·0 | 24·3 | |
| 9·4 | | 46 | 46·0 | 31·1 | g |
| 9·8 | | 50 | 13·0 | 3·6 | |
| 7·4 | | | 27·0 | 4·4 | 7·2 GSg |
| 9·4 | | 55 | 40·0 | 46·1 | g |
| 9·0 | | 56 | 20·0 | 40·3 | 8·0 Gg |
| 8·5 | | 57 | 54·0 | 31·2 | 8·8 g |
| 9·4 | | 58 | 2·0 | 29·0 | g |
| 9·1 | 4 | 1 | 9·0 | 5·7 | g |
| 9·9 | | 3 | 53·0 | 0·4 | |
| 8·6 | | | 59·0 | 56·9 | 8·5 g |
| 8·7 | | 6 | 4·0 | 29·8 | 9·0 g |
| 8·7 | | 8 | 41·0 | 51·7 | g |
| 9·3 | | 10 | 15·5 | 40·7 | g |
| 9·7 | | 13 | 51·5 | 25·6 | g |
| 9·7 | | 16 | 56·5 | 54·0 | g |
| 9·3 | | 17 | 22·5 | 40·1 | g |
| 8·0 | | 19 | 33·5 | 38·7 | 8·5 g |
| 9·2 | | 23 | 56·5 | 41·2 | 9·0 g |
| 9·5 | | 24 | 39·5 | 22·7 | g |
| 8·4 | | 27 | 42·5 | 53·1 | 8·0 g |
| 8·5 | | 28 | 20·0 | 58·1 | 8·0 g |
| 9·2 | | | 42·5 | 8·8 | g |

## 271—330.

| mag. | $4^{h}$–$5^{h}$ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·7 | 4 | 33 | 1·0 | 59·7 | |
| 9·2 | | | 7·0 | 53·2 | 9·5 g |
| 9·5 | | 35 | 1·0 | 39·7 | g |
| 8·8 | | | 45·0 | 56·1 | 8·5 g |
| 9·7 | | 36 | 21·0 | 54·9 | g |
| 9·1 | | 38 | 32·0 | 55·4 | g |
| 9·7 | | 40 | 58·0 | 2·5 | g |
| 9·2 | | 42 | 33·0 | 20·3 | g |
| 9·2 | | | 47·5 | 1·1 | g |
| 8·9 | | 44 | 1·0 | 23·0 | g |
| 9·7 | | | 4·5 | 11·1 | g |
| 9·6 | | | 53·0 | 44·1 | |
| 9·0 | | 49 | 4·0 | 21·3 | g |
| 9·7 | | 50 | 51·0 | 17·2 | g |
| 9·1 | | 51 | 10·0 | 17·0 | g |
| 9·1 | | 52 | 10·5 | 59·6 | g |
| 9·6 | | 56 | 15·0 | 58·5 | |
| 9·7 | | | 47·0 | 12·6 | g |
| 9·4 | | 58 | 41·0 | 11·5 | |
| 7·5 | | | 48·0 | 7·6 | 6·0 GSog |
| 9·6 | 5 | 0 | 56·0 | 13·8 | |
| 9·0 | | 2 | 12·0 | 27·3 | g |
| 9·6 | | | 35·0 | 5·8 | |
| 9·6 | | 5 | 1·0 | 44·3 | g |
| 9·7 | | | 3·0 | 15·8 | |
| 9·7 | | 7 | 37·0 | 5·3 | g |
| 8·9 | | 8 | 2·0 | 11·0 | 8·5 g |
| 8·7 | | | 5·0 | 5·1 | 8·2 g |
| 9·4 | | 11 | 8·0 | 41·1 | g |
| 8·6 | | 16 | 8·0 | 29·9 | 8·5 g |
| 9·3 | | | 25·0 | 16·8 | g |
| 9·7 | | 18 | 56·0 | 8·0 | g |
| 9·2 | | 19 | 48·0 | 13·8 | g |
| 9·3 | | 20 | 25·0 | 11·2 | g |
| 9·5 | | 21 | 4·0 | 10·4 | g |
| 9·2 | | | 49·0 | 18·5 | g |
| 9·7 | | 24 | 9·5 | 1·3 | |
| 9·3 | | 25 | 17·0 | 44·8 | g |
| 8·3 | | 26 | 14·5 | 7·0 | 8·5 GSg |
| 9·2 | | | 44·0 | 6·6 | 9·5 g |
| 9·4 | | 27 | 13·5 | 49·2 | g |
| 9·9 | | | 39·0 | 12·9 | |
| 9·3 | | 28 | 46·0 | 43·4 | 9·5 g |
| 8·0 | | 29 | 48·0 | 46·9 | 8·0 Gg |
| 9·9 | | 30 | 20·5 | 59·9 | |
| 9·3 | | 31 | 51·5 | 29·7 | g |
| 9·5 | | 32 | 2·5 | 59·3 | |
| 9·4 | | | 33·0 | 13·7 | g |
| 9·8 | | 33 | 52·0 | 53·8 | |
| 9·9 | | 35 | 7·0 | 23 0 | |
| 8·0 | | 37 | 8·0 | 18·7 | 8·2 GSg |
| 9·8 | | | 20·0 | 47·7 | |
| 9·2 | | | 21·0 | 15·4 | 9·2 g |
| 9·3 | | 38 | 24·0 | 10·0 | 9·0 g |
| 9·8 | | 39 | 17·0 | 26·9 | |
| 9·5 | | | 36·0 | 25·4 | 10·0 g |
| 9·5 | | 41 | 1·0 | 13·4 | g |
| 9·9 | | | 23·0 | 40·6 | |
| 8·6 | | | 45·0 | 30·9 | 8 7 g |
| 9·6 | | 42 | 8·0 | 30·9 | g |

## 331—390.

| mag. | $5^{h}$–$6^{h}$ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·6 | 5 | 45 | 55·0 | 10·9 | |
| 9·7 | | 46 | 12·0 | 17·7 | g |
| 9·4 | | | 53·0 | 17·8 | g |
| 8·1 | | | 53·0 | 52·9 | 8·5 GSg |
| 9·8 | | 47 | 22·0 | 54·6 | |
| 9·3 | | | 32·0 | 34·4 | g |
| 9·8 | | 48 | 33·0 | 18·4 | g |
| 9·6 | | | 47·0 | 13·9 | g |
| 9·8 | | | 52·0 | 40·1 | |
| 9·4 | | | 53·0 | 50·1 | g |
| 9·5 | | 50 | 1·0 | 48·2 | g |
| 9·3 | | | 4·0 | 19·1 | g |
| 9·5 | | | 29·0 | 21·8 | g |
| 9·6 | | 51 | 27·0 | 17·3 | g |
| 8·6 | | 52 | 55·0 | 2·8 | 9·5 g |
| 9·9 | | 53 | 27·0 | 37·4 | |
| 9·4 | | 54 | 33·0 | 6·9 | g |
| 9·9 | | 55 | 17·0 | 31·7 | |
| 9·8 | | 56 | 27·0 | 31·3 | |
| 8·3 | | 57 | 49·0 | 21·3 | g |
| 9·3 | | 58 | 3·0 | 37·3 | g |
| 8·5 | | 59 | 14·0 | 28·1 | 9·0 g |
| 9·8 | | | 51·0 | 24·8 | |
| 9·6 | 6 | 1 | 8·0 | 37·9 | |
| 9·3 | | | 24·0 | 42·8 | g |
| 9·8 | | | 28·0 | 3·6 | g |
| 9·5 | | | 28·0 | 5·2 | g |
| 9·9 | | | 29·0 | 39·1 | |
| 9·4 | | 2 | 29·5 | 59·8 | |
| 9·9 | | | 34·0 | 58·9 | |
| 9·4 | | 3 | 2·0 | 23·6 | g |
| 8·7 | | | 2·0 | 9·7 | 8·7 g |
| 9·9 | | 6 | 33·0 | 17·0 | |
| 9·9 | | 10 | 2·0 | 8·9 | |
| 9·4 | | | 32·0 | 51·7 | g |
| 9·8 | | 12 | 20·0 | 58·7 | |
| 9·8 | | 14 | 22·0 | 33·8 | |
| 7·8 | | 16 | 0·5 | 2·6 | 8·0 GSg |
| 9·2 | | 17 | 12·0 | 44·5 | 9·0 g |
| 8·4 | | | 22·0 | 52·9 | 9·0 g |
| 8·5 | | | 33·0 | 54·8 | 9·0 g |
| 9·4 | | 19 | 5·0 | 7·0 | g |
| 9·4 | | | 36·0 | 11·9 | g |
| 8·9 | | 23 | 12·0 | 9·6 | 8·8 Gg |
| 8·3 | | | 48·0 | 38·0 | 8·3 Gg |
| 7·9 | | 25 | 20·0 | 3·4 | 8·4 Gg |
| 9·9 | | | 33·5 | 31·7 | |
| 9·8 | | 26 | 6·0 | 35·1 | |
| 9·5 | | 28 | 53·5 | 15·9 | g |
| 9·6* | | 29 | 18·0 | 39·7 | |
| 9·8 | | 30 | 15·0 | 43·1 | |
| 9·8 | | | 51·0 | 57·8 | |
| 9·5 | | 31 | 47·0 | 44·1 | |
| 9·8 | | | 53·0 | 11·2 | |
| 9·6 | | 34 | 14·0 | 30·1 | |
| 9·6 | | | 30·0 | 52·8 | |
| 9·8 | | 36 | 16·0 | 5·0 | |
| 9·8 | | | 34·0 | 40·5 | |
| 9·8 | | 37 | 47·0 | 38·4 | |
| 9·6 | | 38 | 49·0 | 2·0 | g |

**391—450.**

| mag. | 6ʰ—7ʰ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 8.7 | 6 | 38 | 49.0 | 6.6 | 9.2 *g* |
| 9.8 | | 39 | 0.0 | 42.3 | |
| 9.0 | | | 55.0 | 42.7 | 8.8 *g* |
| 9.8 | | | 57.0 | 52.7 | |
| 8.8 | | 40 | 15.0 | 40.8 | 8.8 *g* |
| 9.2 | | | 52.0 | 32.9 | 9.5 *g* |
| 9.4 | | 42 | 0.0 | 48.9 | |
| 9.3 | | | 39.0 | 39.9 | |
| 8.6 | | 43 | 24.0 | 22.9 | 8.8 *g* |
| 9.6 | | | 26.0 | 38.9 | |
| 9.8 | | 45 | 5.0 | 6.0 | |
| 9.4 | | | 27.0 | 21.5 | *g* |
| 9.2 | | 48 | 1.0 | 26.4 | 9.0 *g* |
| 9.4 | | | 52.0 | 53.8 | |
| 9.5 | | 49 | 12.0 | 46.9 | |
| 9.8 | | | 31.0 | 50.7 | |
| 9.6 | | 50 | 54.0 | 50.8 | |
| 9.2 | | 51 | 52.0 | 33.0 | |
| 9.6 | | 52 | 3.0 | 52.8 | |
| 9.1 | | 53 | 32.0 | 17.7 | |
| 9.6 | | | 50.0 | 10.0 | |
| 9.6 | | 54 | 7.0 | 52.8 | |
| 9.3 | | | 49.0 | 33.8 | |
| 9.5 | | 55 | 55.0 | 14.3 | |
| 9.6 | | 58 | 20.0 | 4.8 | |
| 9.6 | 7 | 1 | 37.0 | 32.5 | |
| 9.3 | | 2 | 27.0 | 13.9 | *g* |
| 9.0 | | | 29.0 | 26.9 | *g* |
| 9.3 | | 3 | 39.5 | 1.4 | *g* |
| 9.3 | | 5 | 23.0 | 25.9 | 9.0 *g* |
| 9.4 | | 8 | 6.0 | 29.9 | |
| 9.0 | | | 8.0 | 2.0 | 8.3 *g* |
| 9.0 | | 10 | 12.0 | 37.0 | 9.0 |
| 9.4 | | | 14.0 | 16.6 | |
| 9.3 | | | 16.0 | 38.9 | |
| 8.5 | | 11 | 55.0 | 50.4 | 8.8 GS*g* |
| 8.4 | | 12 | 8.0 | 5.7 | 8.0 GS*g* |
| 9.8 | | 13 | 24.0 | 3.9 | |
| 9.8 | | 14 | 42.0 | 15.3 | |
| 9.2 | | | 43.5 | 58.2 | |
| 9.3 | | | 48.0 | 15.7 | |
| 9.0 | | 15 | 18.0 | 10.9 | 9.5 *g* |
| 9.3 | | | 53.0 | 58.1 | |
| 9.8 | | 16 | 5.0 | 30.9 | |
| 9.5 | | | 45.0 | 37.9 | |
| 9.6 | | 17 | 3.0 | 27.8 | |
| 7.8 | | 19 | 28.0 | 38.2 | 7.5 GS*g* |
| 9.6 | | | 38.0 | 37.2 | |
| 9.2 | | 21 | 15.0 | 26.7 | 9.0 *g* |
| 9.8 | | | 41.5 | 57.9 | |
| 9.8 | | 22 | 2.0 | 27.9 | |
| 9.6 | | 24 | 41.0 | 54.8 | |
| 8.2 | | 25 | 15.0 | 6.5 | 8.8 *g* |
| 9.6 | | | 36.0 | 41.9 | 9.5 G |
| 8.3 | | 29 | 44.0 | 19.8 | 8.0 GS*g* |
| 9.9 | | 30 | 47.0 | 32.3 | |
| 9.2 | | 31 | 7.5 | 29.4 | G |
| 8.5 | | 32 | 6.0 | 8.5 | 8.5 G*g* |
| 9.5 | | | 12.5 | 18.8 | 9.5 |
| 9.0 | | 34 | 2.0 | 37.8 | *g* |

**451—510.**

| mag. | 7ʰ—8ʰ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.6 | 7 | 35 | 2.0 | 9.9 | |
| 8.5 | | | 10.5 | 15.0 | 8.5 *g* |
| 9.5 | | | 41.0 | 13.0 | |
| 9.4 | | | 49.5 | 3.5 | |
| 9.6 | | 36 | 17.0 | 35.6 | |
| 9.1 | | 37 | 8.0 | 55.3 | *g* |
| 9.8 | | | 34.0 | 30.2 | |
| 7.8 | | 39 | 2.0 | 15.4 | 7.5 GS*g* |
| 9.6 | | 41 | 6.0 | 7.9 | *g* |
| 9.3 | | 43 | 15.0 | 34.4 | |
| 9.9 | | | 15.0 | 58.3 | |
| 8.9 | | 45 | 0.0 | 27.9 | *g* |
| 9.8 | | 46 | 13.0 | 54.9 | |
| 9.5 | | 49 | 26.0 | 26.0 | |
| 9.7 | | 50 | 26.0 | 42.6 | |
| 9.9 | | 51 | 22.0 | 49.2 | 9.0 |
| 9.5 | | 53 | 11.0 | 15.9 | *g* |
| 9.6 | | | 31.0 | 37.9 | |
| 9.8 | | 55 | 16.0 | 18.0 | |
| 9.1 | | | 26.0 | 3.7 | 9.0 *g* |
| 9.5 | | | 58.0 | 54.9 | |
| 9.2 | | 59 | 20.0 | 31.4 | |
| 9.9 | | | 53.0 | 25.9 | |
| 9.9 | 8 | 0 | 55.0 | 10.0 | |
| 9.1 | | 1 | 22.0 | 17.8 | 9.5 |
| 9.5 | | 3 | 0.0 | 43.4 | |
| 9.1 | | | 5.0 | 43.2 | |
| 9.5 | | | 8.0 | 9.0 | 9.5 *g* |
| 9.3 | | | 53.0 | 51.7 | 9.0 *g* |
| 9.9 | | 5 | 31.0 | 37.1 | |
| 9.9 | | | 51.0 | 52.9 | |
| 9.9 | | 6 | 42.0 | 12.5 | |
| 9.8 | | 10 | 38.0 | 13.3 | |
| 9.9 | | 11 | 7.0 | 48.2 | |
| 9.1 | | | 20.0 | 41.3 | 9.0 *g* |
| 9.7 | | 14 | 9.0 | 39.3 | |
| 9.8 | | | 45.0 | 51.0 | |
| 8.7 | | 16 | 34.0 | 46.7 | |
| 9.9 | | | 50.0 | 4.9 | |
| 9.8 | | | 57.0 | 46.1 | |
| 9.9 | | 17 | 4.0 | 0.1 | |
| 9.5 | | | 58.0 | 8.5 | |
| 9.9 | | 18 | 27.0 | 31.8 | |
| 9.7 | | | 45.0 | 9.4 | *g* |
| 9.2 | | 20 | 13.0 | 46.5 | |
| 9.9 | | | 17.0 | 57.4 | 9.5 *g* |
| 9.9 | | 21 | 44.0 | 1.6 | |
| 9.3 | | | 54.0 | 1.6 | |
| 9.2 | | 25 | 4.0 | 19.5 | |
| 9.8 | | 27 | 37.0 | 37.8 | |
| 9.7 | | 29 | 37.0 | 56.8 | |
| 9.7 | | | 54.0 | 53.5 | |
| 9.6 | | 30 | 53.5 | 49.9 | |
| 9.6 | | 31 | 1.0 | 49.7 | |
| 9.0 | | | 12.0 | 52.5 | |
| 9.6 | | | 36.5 | 47.7 | |
| 9.7 | | 32 | 25.0 | 31.5 | |
| 9.7 | | 33 | 24.0 | 18.4 | |
| 9.7 | | 35 | 23.0 | 1.2 | |
| 9.5 | | | 48.5 | 59.3 | |

**511—570.**

| mag. | 8ʰ—9ʰ h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.7 | 8 | 37 | 8.0 | 54.8 | |
| 9.5 | | | 42.0 | 25.9 | |
| 9.7 | | | 44.0 | 52.8 | |
| 9.7 | | 38 | 41.0 | 11.9 | |
| 9.6 | | | 45.0 | 50.4 | |
| 9.7 | | 39 | 2.0 | 11.8 | |
| 9.1 | | | 20.0 | 43.4 | 8.5 *g* |
| 9.5 | | 40 | 8.0 | 36.9 | |
| 9.5 | | | 15.0 | 8.8 | |
| 9.3 | | | 44.0 | 15.9 | |
| 8.8 | | 41 | 16.0 | 16.4 | 9.0 *g* |
| 9.4 | | | 24.0 | 48.9 | |
| 9.1 | | | 28.0 | 11.1 | 9.5 *g* |
| 9.7 | | 42 | 11.0 | 56.8 | |
| 9.7 | | 43 | 19.0 | 34.4 | |
| 9.6 | | 44 | 23.0 | 39.6 | |
| 9.2 | | | 24.0 | 18.9 | |
| 9.6 | | | 30.0 | 32.0 | |
| 9.2 | | | 33.0 | 13.3 | 9.0 *g* |
| 9.6 | | 45 | 25.0 | 3.8 | |
| 9.3 | | | 30.0 | 40.9 | |
| 9.7 | | 46 | 10.0 | 27.3 | |
| 9.6 | | | 32.0 | 56.0 | |
| 9.3 | | | 39.0 | 48.3 | |
| 9.4 | | 47 | 0.0 | 12.9 | 9.0 *g* |
| 8.6 | | | 39.0 | 26.0 | *g* |
| 9.3 | | 49 | 12.0 | 53.0 | |
| 9.1 | | 50 | 33.0 | 27.5 | *g* |
| 9.7 | | 51 | 30.0 | 19.6 | |
| 9.7 | | | 43.0 | 26.3 | |
| 7.9 | | | 44.0 | 11.2 | 9.0 *g* |
| 9.4 | | 52 | 29.0 | 28.9 | |
| 9.5 | | 53 | 10.0 | 44.7 | |
| 9.7 | | 54 | 43.0 | 48.4 | |
| 9.6 | | 55 | 26.0 | 21.9 | |
| 9.7 | | | 37.0 | 25.3 | |
| 9.7 | | 56 | 1.0 | 7.3 | |
| 9.7 | | | 40.0 | 45.0 | |
| 9.7 | | | 44.0 | 26.9 | |
| 9.7 | | 57 | 19.0 | 26.4 | |
| 9.7 | | | 20.0 | 58.9 | |
| 8.3 | | | 32.0 | 45.8 | 8.8 *g* |
| 8.3 | | 58 | 5.0 | 54.3 | 8.2 *g* |
| 8.9 | 9 | 1 | 16.0 | 13.9 | 7.8 GS*g* |
| 9.7 | | 2 | 0.0 | 34.9 | |
| 9.4 | | | 26.0 | 34.0 | |
| 9.5 | | 3 | 18.0 | 48.7 | *g* |
| 9.7 | | | 46.0 | 45.0 | *g* |
| 9.7 | | 4 | 24.7 | 0.2 | |
| 9.7 | | | 51.0 | 13.8 | |
| 9.7 | | 6 | 38.0 | 28.9 | |
| 9.1 | | | 46.0 | 34.7 | 9.5 *g* |
| 8.9 | | 7 | 11.7 | 2.0 | 9.5 |
| 9.7 | | 11 | 3.0 | 15.0 | |
| 9.7 | | | 12.0 | 35.9 | |
| 9.5 | | | 27.0 | 47.9 | *g* |
| 9.7 | | 12 | 0.0 | 48.1 | |
| 9.7 | | | 28.0 | 40.0 | |
| 8.9 | | | 31.0 | 9.6 | 9.5 *g* |
| 7.5 | | 14 | 16.0 | 4.1 | 8.1 GS*g* |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 6 | 30 | − 47 − 0.15 d | − 1.1 |
| | 40 | 46 − 0.15 | 1.5 |
| | 50 | 45 − 0.15 | 1.8 |
| 7 | 0 | 44 − 0.15 | 2.2 |
| | 10 | 42 − 0.15 d | 2.5 |
| | 20 | 40 − 0.15 | 2.9 |
| | 30 | 38 − 0.14 | 3.2 |
| | 40 | 36 − 0.14 | 3.5 |
| | 50 | 34 − 0.14 | 3.9 |
| 8 | 0 | 31 − 0.13 | 4.2 |
| | 10 | 28 − 0.13 | 4.5 |
| | 20 | 25 − 0.13 | 4.8 |
| | 30 | 22 − 0.12 | 5.1 |
| | 40 | 19 − 0.12 | 5.4 |
| | 50 | 15 − 0.11 | 5.6 |
| 9 | 0 | 11 − 0.11 | 5.9 |
| | 10 | 7 − 0.10 | 6.2 |
| | 20 | − 3 − 0.10 | − 6.4 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 9 | 10 | − 7 | − 0·10 d | − 6·2 |
| | 20 | − 3 | − 0·10 | 6·4 |
| | 30 | + 1 | − 0·09 | 6·6 |
| | 40 | 5 | − 0·09 d | 6·8 |
| | 50 | 10 | − 0·08 | 7·0 |
| 10 | 0 | 14 | − 0·08 | 7·2 |
| | 10 | 19 | − 0·07 | 7·4 |
| | 20 | 24 | − 0·07 | 7·6 |
| | 30 | 29 | − 0·06 | 7·7 |
| | 40 | 34 | − 0·05 | 7·9 |
| | 50 | 39 | − 0·05 | 8·0 |
| 11 | 0 | 45 | − 0·04 | 8·1 |
| | 10 | 50 | − 0·03 | 8·2 |
| | 20 | 55 | − 0·03 | 8·2 |
| | 30 | 61 | − 0·02 | 8·3 |
| | 40 | + 66 | − 0·01 | − 8·3 |

d = minutes of decl.

## 571—630.

| mag. | h (9h.) | m | s | ′ (−75°) | |
|---|---|---|---|---|---|
| 9·6 | 9 | 14 | 23·0 | 13·2 | |
| 9·0 | | 15 | 49·0 | 37·8 | g |
| 9·2 | | 16 | 6·0 | 33·5 | 9·5 g |
| 9·0 | | 17 | 11·0 | 45·0 | 9·5 g |
| 7·3 | | 20 | 54·0 | 10·8 | 8·0 GSg |
| 9·7 | | | 55·0 | 20·0 | |
| 8·7 | | 21 | 46·0 | 10·0 | 9·0 g |
| 9·2 | | 23 | 0·0 | 32·9 | |
| 9·4 | | | 46·0 | 53·4 | |
| 8·9 | | 24 | 30·0 | 24·9 | |
| 9·1 | | 25 | 50·0 | 17·0 | |
| 8·2 | | | 50·5 | 13·8 | 8·0 GSg |
| 9·7 | | 27 | 2·0 | 7·8 | |
| 9·0 | | 28 | 27·0 | 34·9 | g |
| 9·6 | | 29 | 0·0 | 41·7 | |
| 9·8 | | | 5·0 | 5·6 | |
| 9·8 | | | 21·8 | 57·4 | g |
| 9·9 | | 30 | 26·0 | 45·0 | |
| 9·8 | | | 45·0 | 31·0 | |
| 8·8 | | 31 | 33·0 | 9·5 | 9·0 g |
| 9·8 | | 32 | 14·0 | 9·0 | |
| 9·8 | | | 24·0 | 25·5 | |
| 9·3 | | 33 | 14·5 | 48·9 | |
| 9·0 | | | 57·0 | 37·5 | g |
| 9·6 | | 34 | 12·0 | 18·7 | |
| 8·1 | | | 53·0 | 6·7 | 8·2 g |
| 8·7 | | 35 | 25·5 | 4·9 | 9·5 g |
| 9·9 | | 36 | 10·0 | 28·7 | |
| 9·4 | | 37 | 9·0 | 11·2 | ? |
| 9·9 | | | 12·0 | 29·1 | |
| 9·8 | | | 17·0 | 45·0 | |
| 9·9 | | 39 | 20·0 | 27·1 | |
| 9·6 | | | 48·0 | 39·3 | g |
| 9·8 | | 40 | 19·0 | 36·8 | g |
| 9·8 | | | 29·0 | 37·0 | |
| 9·8 | | 41 | 15·0 | 33·1 | |
| 9·3 | | | 33·0 | 5·5 | |
| 9·9 | | | 39·0 | 7·1 | |
| 9·6 | | | 53·0 | 32·9 | |
| 8·5 | | 42 | 19·0 | 21·1 | g |
| 9·8 | | | 48·0 | 36·2 | g |
| 9·8 | | | 49·0 | 46·1 | |
| 9·2 | | 43 | 19·0 | 14·6 | |
| 9·9 | | 44 | 22·0 | 9·4 | |
| 8·6 | | | 29·0 | 19·3 | 8·5 g |
| 9·0 | | | 36·0 | 30·0 | |
| 9·6 | | 45 | 0·5 | 2·6 | |
| 9·9 | | | 36·0 | 32·1 | |
| 9·8 | | 46 | 49·0 | 13·9 | |
| 9·8 | | 47 | 44·0 | 33·6 | |
| 7·5 | | | 53·0 | 11·9 | 7·0 GScg |
| 8·7 | | 48 | 13·0 | 34·7 | 9·0 g |
| 9·8 | | | 52·0 | 51·1 | |
| 9·4 | | 49 | 28·0 | 17·1 | |
| 9·9 | | 50 | 7·0 | 7·9 | |
| 9·0 | | 51 | 38·0 | 59·6 | g |
| 9·6 | | 52 | 26·0 | 31·0 | |
| 9·5 | | | 34·0 | 15·1 | |
| 9·8 | | 54 | 5·0 | 57·2 | |
| 9·9 | | 58 | 14·0 | 11·6 | |

## 631—690.

| mag. | h (9h.—10h.) | m | s | ′ (−75°) | |
|---|---|---|---|---|---|
| 9·9 | 9 | 59 | 40·0 | 28·7 | |
| 9·6 | 10 | 1 | 12·0 | 33·4 | |
| 9·8 | | | 28·0 | 2·6 | |
| 9·0 | | 2 | 54·0 | 27·5 | 9·0 g |
| 9·3 | | | 57·0 | 9·0 | |
| 9·0 | | 3 | 4·0 | 27·8 | 9·0 g |
| 9·8 | | 7 | 11·0 | 47·8 | |
| 9·4 | | 9 | 9·0 | 13·9 | |
| 9·2 | | 10 | 24·0 | 33·0 | g |
| 8·0 | | 11 | 4·0 | 27·4 | 8·0 GSg |
| 9·8 | | | 43·0 | 13·0 | |
| 9·9 | | | 44·0 | 16·8 | |
| 9·8 | | 12 | 17·0 | 38·7 | g |
| 8·8 | | 15 | 14·0 | 25·5 | |
| 8·5 | | 16 | 19·0 | 10·9 | 9·2 Gg |
| 9·9 | | 17 | 9·0 | 29·5 | |
| 9·2 | | | 49·0 | 12·2 | |
| 9·8 | | | 58·0 | 4·2 | |
| 9·4 | | 18 | 2·0 | 5·1 | |
| 9·9 | | | 54·0 | 16·7 | |
| 8·6 | | 20 | 14·0 | 8·7 | 9·5 g |
| 9·6 | | | 46·0 | 28·4 | |
| 9·8 | | 21 | 12·0 | 15·1 | |
| 8·7 | | 22 | 33·0 | 20·1 | 9·0 g |
| 9·4 | | | 34·0 | 33·7 | g |
| 9·5 | | 23 | 4·0 | 51·9 | |
| 9·3 | | | 23·0 | 21·9 | |
| 9·6 | | | 50·0 | 5·8 | |
| 9·8 | | 24 | 15·0 | 20·5 | |
| 8·8 | | | 20·0 | 49·0 | g |
| 9·9 | | | 29·0 | 42·2 | g |
| 9·6 | | | 46·0 | 46·3 | g |
| 9·0 | | 25 | 2·0 | 11·2 | g |
| 8·6 | | | 57·0 | 35·7 | g |
| 8·9 | | 26 | 44·0 | 39·1 | g |
| 9·8 | | 28 | 12·5 | 52·2 | |
| 9·5 | | | 50·0 | 23·8 | |
| 9·6 | | 29 | 9·0 | 23·5 | |
| 9·2 | | | 35·5 | 52·1 | |
| 9·6 | | | 35·5 | 37·8 | |
| 8·6 | | 30 | 46·5 | 23·6 | 8·5 GSg |
| 9·0 | | | 50·0 | 14·2 | |
| 9·9 | | | 53·0 | 44·1 | |
| 9·6 | | 31 | 16·5 | 11·7 | |
| 9·8 | | | 49·0 | 33·1 | |
| 9·3 | | | 55·5 | 19·1 | |
| 9·4 | | 32 | 41·0 | 18·0 | |
| 7·6 | | 33 | 5·5 | 39·7 | 7·0 GScg |
| 7·9 | | | 26·0 | 8·8 | 8·0 GSg |
| 9·5 | | | 53·0 | 21·5 | |
| 9·5 | | 34 | 14·5 | 9·3 | |
| 9·3 | | 36 | 29·0 | 55·3 | g |
| 8·9 | | 37 | 9·0 | 45·3 | 9·0 g |
| 9·7 | | 38 | 19·0 | 7·7 | |
| 8·9 | | 40 | 50·0 | 55·6 | g |
| 9·9 | | | 58·0 | 16·2 | |
| 9·5 | | 42 | 44·0 | 40·4 | |
| 9·4 | | 45 | 22·0 | 6·7 | 9·0 g |
| 9·6 | | | 48·0 | 11·4 | 10·0 |
| 8·2 | | 46 | 13·0 | 34·5 | 8·5 GSgg |

## 691—750.

| mag. | h (10h.—11h.) | m | s | ′ (−75°) | |
|---|---|---|---|---|---|
| 9·4 | 10 | 46 | 14·0 | 45·1 | g |
| 9·5 | | | 45·0 | 21·3 | |
| 9·5 | | 47 | 26·0 | 8·2 | |
| 9·6 | | | 49·0 | 53·3 | g |
| 6·9 | | 48 | 22·0 | 13·1 | 7·0 GSggr |
| 9·5 | | 50 | 4·0 | 39·2 | |
| 9·5 | | 53 | 1·0 | 55·9 | |
| 9·7 | | 54 | 30·0 | 37·6 | ? |
| 9·6 | | | 58·0 | 19·4 | |
| 9·6 | | 56 | 10·0 | 18·2 | |
| 9·8 | | | 18·0 | 44·2 | |
| 9·9 | | | 45·0 | 1·9 | |
| 9·9 | | 57 | 26·0 | 13·2 | |
| 9·7 | | | 40·0 | 31·6 | |
| 9·6 | | | 50·0 | 52·4 | |
| 9·4 | | 58 | 22·0 | 5·4 | |
| 8·2 | | | 25·0 | 22·8 | 9·0 g |
| 9·8 | | 59 | 56·0 | 18·5 | |
| 9·7 | 11 | 0 | 33·0 | 42·0 | |
| 9·8 | | | 58·0 | 38·8 | |
| 7·8 | | 2 | 13·0 | 27·3 | 7·5 GSg |
| 9·7 | | | 21·0 | 14·7 | |
| 9·7 | | 5 | 57·0 | 48·4 | |
| 8·6 | | 6 | 1·0 | 56·3 | g |
| 8·8 | | | 57·0 | 26·0 | 8·5 g |
| 9·8 | | 7 | 4·5 | 9·7 | |
| 9·3 | | 8 | 47·0 | 17·3 | 9·5 |
| 9·3 | | | 51·0 | 11·4 | g |
| 9·4 | | 9 | 27·0 | 22·5 | 9·5 |
| 7·7 | | | 40·0 | 6·6 | 8·2 GSg |
| 9·9 | | 10 | 59·0 | 12·7 | |
| 8·7 | | 14 | 41·0 | 8·5 | 7·9 GSg |
| 9·3 | | 16 | 59·0 | 34·7 | g |
| 8·4 | | 18 | 35·0 | 19·3 | g |
| 9·7 | | 19 | 27·0 | 26·3 | |
| 9·4 | | 20 | 19·0 | 55·7 | 9·0 g |
| 9·4 | | | 24·0 | 16·3 | 9·5 |
| 9·1 | | | 49·0 | 12·2 | 9·5 g |
| 8·8 | | | 49·0 | 46·1 | 8·5 g |
| 9·2 | | 21 | 13·0 | 49·4 | 8·5 g |
| 8·9 | | | 21·5 | 2·5 | 9·0 g |
| 8·4 | | 22 | 31·0 | 14·8 | 8·5 g |
| 9·7 | | | 59·0 | 29·2 | |
| 9·7 | | 23 | 35·0 | 44·0 | |
| 9·9 | | 24 | 31·0 | 30·5 | |
| 9·9 | | 26 | 35·0 | 58·3 | |
| 9·6 | | | 37·5 | 32·5 | |
| 9·0 | | 27 | 0·0 | 36·8 | g |
| 9·6 | | | 37·5 | 41·1 | |
| 9·5 | | | 47·0 | 10·1 | |
| 9·8 | | 28 | 21·0 | 57·2 | |
| 9·4 | | 30 | 33·5 | 18·2 | |
| 9·8 | | | 34·0 | 22·4 | |
| 6·7 | | 32 | 6·5 | 12·3 | 6·2 GSgrλ |
| 9·6 | | 34 | 20·0 | 50·0 | |
| 9·6 | | 35 | 16·0 | 41·8 | |
| 9·3 | | 36 | 57·0 | 35·0 | |
| 9·6 | | 37 | 22·0 | 46·1 | |
| 9·6 | | | 50·0 | 9·7 | |
| 9·6 | | 38 | 14·0 | 59·9 | 9·5 g |



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## 751—810.

| mag. | h (11h.–12h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.7 | 11 | 38 | 58.0 | 42.7 | |
| 9.6 | | 39 | 35.0 | 33.3 | |
| 9.3 | | 40 | 44.0 | 58.3 | 9.5 g |
| 8.6 | | 41 | 37.0 | 55.5 | 7.5 GSg |
| 9.6 | | | 40.0 | 4.4 | |
| 9.6 | | 43 | 12.0 | 54.9 | |
| 9.0 | | | 45.0 | 27.8 | g |
| 9.6 | | 45 | 23.0 | 1.3 | |
| 9.6 | | | 42.0 | 16.4 | |
| 9.1 | | 47 | 24.0 | 37.1 | |
| 9.6 | | | 29.0 | 9.7 | |
| 9.6 | | | 57.0 | 19.8 | |
| 9.6 | | 48 | 17.0 | 6.9 | |
| 9.3 | | | 33.0 | 40.5 | |
| 9.5 | | 49 | 26.0 | 46.5 | |
| 9.6 | | | 53.0 | 20.8 | |
| 9.0 | | 51 | 7.0 | 53.0 | |
| 9.5 | | | 31.0 | 53.6 | |
| 9.5 | | | 33.0 | 54.8 | |
| 9.0 | | 52 | 37.0 | 42.0 | g |
| 9.5 | | | 51.0 | 57.8 | g |
| 9.5 | | 53 | 15.0 | 21.1 | |
| 9.0 | | 54 | 31.0 | 58.0 | g |
| 9.6 | | 55 | 5.0 | 3.8 | |
| 9.6 | | | 31.5 | 57.1 | |
| 9.5 | | | 55.0 | 29.9 | |
| 7.0 | | 58 | 21.0 | 49.5 | GScgλ |
| 9.6 | | | 28.0 | 40.9 | |
| 9.6 | | | 49.0 | 16.4 | |
| 8.8 | 12 | 0 | 36.0 | 5.5 | g |
| 9.5 | | 1 | 5.0 | 14.0 | |
| 9.3 | | | 7.0 | 6.6 | |
| 9.3 | | | 20.0 | 13.4 | |
| 8.8 | | 2 | 8.0 | 47.3 | 9.5 g |
| 8.8 | | | 31.5 | 56.5 | 9.5 g |
| 9.6 | | 4 | 28.0 | 5.0 | |
| 9.6 | | 5 | 21.5 | 58.9 | |
| 9.5 | | | 33.0 | 52.0 | |
| 9.2 | | | 55.0 | 27.2 | |
| 9.6 | | 6 | 19.0 | 32.1 | |
| 9.5 | | | 50.0 | 6.0 | |
| 8.2 | | 7 | 3.0 | 19.4 | 9.0 g |
| 9.3 | | | 43.0 | 15.1 | |
| 9.6 | | 8 | 42.0 | 0.4 | |
| 9.6 | | | 57.0 | 41.2 | |
| 9.6 | | 9 | 37.0 | 5.9 | |
| 9.3 | | | 49.0 | 55.4 | g |
| 9.0 | | | 54.0 | 24.5 | |
| 9.6 | | | 57.0 | 25.4 | |
| 9.1 | | 11 | 16.0 | 28.9 | |
| 9.5 | | 12 | 22.0 | 35.1 | |
| 9.6 | | | 39.0 | 42.7 | |
| 9.6 | | 13 | 13.0 | 0.5 | |
| 9.6 | | | 41.0 | 38.9 | |
| 9.5 | | 14 | 25.0 | 42.9 | |
| 9.6 | | | 56.0 | 45.4 | |
| 9.2 | | | 59.0 | 50.4 | |
| 9.5 | | 15 | 4.0 | 17.9 | |
| 9.6 | | | 34.0 | 45.6 | |
| 9.3 | | | 38.0 | 10.0 | |

## 811—870.

| mag. | h (12h.–13h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.1 | 12 | 17 | 40.0 | 3.5 | |
| 8.6 | | 18 | 7.0 | 20.9 | g |
| 9.2 | | 19 | 35.0 | 3.9 | 9.0 g |
| 8.1 | | | 54.5 | 58.5 | 8.5 g |
| 8.9 | | 20 | 26.0 | 32.4 | g |
| 9.3 | | 21 | 12.0 | 10.8 | |
| 9.3 | | 22 | 24.0 | 5.0 | |
| 9.6 | | | 39.0 | 14.6 | |
| 9.6 | | 23 | 8.0 | 43.9 | |
| 9.6 | | | 18.0 | 34.9 | g |
| 9.6 | | | 45.0 | 27.1 | |
| 9.3 | | 24 | 19.5 | 34.1 | g |
| 9.6 | | | 40.0 | 4.0 | |
| 9.6 | | | 45.0 | 58.3 | |
| 9.3 | | | 53.5 | 18.0 | |
| 9.3 | | 27 | 36.5 | 48.8 | g |
| 8.3 | | 30 | 52.0 | 22.5 | 7.0 GSg |
| 9.6 | | 31 | 37.0 | 4.1 | |
| 9.6 | | 32 | 38.0 | 1.1 | |
| 9.6 | | 33 | 10.0 | 21.4 | |
| 9.6 | | | 11.5 | 1.5 | |
| 9.4 | | 34 | 15.5 | 36.0 | g |
| 9.4 | | | 52.5 | 18.6 | |
| 9.6 | | 35 | 40.0 | 30.0 | |
| 9.3 | | 36 | 31.0 | 11.0 | g |
| 9.6 | | 40 | 30.0 | 4.1 | |
| 9.6 | | | 32.0 | 7.1 | |
| 9.6 | | 44 | 8.0 | 17.1 | |
| 9.4 | | 45 | 39.0 | 29.8 | g |
| 9.6 | | | 57.0 | 9.9 | |
| 9.4 | | 50 | 44.0 | 24.0 | |
| 9.6 | | 51 | 25.0 | 12.0 | |
| 9.0 | | 53 | 13.0 | 28.9 | |
| 9.6 | | 54 | 31.0 | 52.8 | |
| 9.3 | | 55 | 30.0 | 0.9 | |
| 8.5 | | | 34.5 | 58.6 | g |
| 9.6 | | | 36.0 | 43.1 | |
| 9.4 | | 57 | 8.0 | 19.8 | |
| 9.3 | | | 27.0 | 18.5 | |
| 9.6 | | | 42.0 | 6.8 | |
| 9.6 | | | 55.0 | 8.2 | |
| 9.3 | | 58 | 32.0 | 30.7 | |
| 9.6 | 13 | 0 | 7.0 | 47.3 | |
| 9.6 | | 2 | 35.0 | 39.5 | |
| 9.6 | | 3 | 6.0 | 21.5 | |
| 9.6 | | 7 | 24.0 | 43.6 | |
| 9.3 | | 9 | 4.0 | 19.9 | g |
| 9.4 | | | 20.0 | 23.1 | g |
| 8.0 | | 10 | 4.0 | 45.6 | 9.0 g |
| 9.4 | | | 25.0 | 17.0 | |
| 9.6 | | 13 | 8.3 | 2.6 | |
| 9.6 | | | 18.8 | 1.7 | |
| 8.0 | | | 51.0 | 16.3 | Gkg |
| 9.2 | | 14 | 22.0 | 30.9 | |
| 9.3 | | | 48.0 | 7.5 | g |
| 9.6 | | 15 | 19.0 | 48.4 | |
| 9.6 | | | 43.0 | 42.1 | |
| 9.4 | | | 44.0 | 40.7 | g |
| 9.6 | | | 57.8 | 2.2 | g |
| 9.3 | | 18 | 1.0 | 5.0 | |

## 871—930.

| mag. | h (13h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.7 | 13 | 18 | 5.0 | 34.5 | g |
| 9.3 | | | 28.8 | 1.1 | |
| 8.8 | | 19 | 9.0 | 32.0 | g |
| 7.7 | | | 31.0 | 55.4 | GSg |
| 9.4 | | | 32.0 | 44.0 | |
| 9.2 | | | 36.0 | 55.1 | g |
| 9.1 | | | 50.0 | 53.0 | g |
| 9.6 | | 25 | 38.0 | 3.1 | |
| 8.1 | | 26 | 14.0 | 52.1 | 8.5 GSg |
| 9.3 | | 27 | 55.0 | 37.1 | 8.5 g |
| 9.4 | | | 59.0 | 36.1 | 8.0 g |
| 6.3 | | 28 | 33.5 | 2.8 | 6.5 GScg |
| 9.6 | | | 51.5 | 10.7 | |
| 9.6 | | 29 | 12.0 | 41.8 | |
| 9.4 | | | 20.5 | 0.5 | |
| 9.6 | | | 34.0 | 44.0 | |
| 9.6 | | 30 | 46.0 | 28.2 | |
| 9.6 | | 32 | 8.0 | 6.1 | |
| 9.6 | | | 9.0 | 30.1 | g |
| 9.6 | | 33 | 28.0 | 15.9 | |
| 9.6 | | 34 | 5.0 | 41.0 | |
| 9.4 | | | 13.0 | 43.6 | |
| 9.6 | | | 33.0 | 42.1 | |
| 9.2 | | | 48.0 | 27.2 | |
| 9.6 | | 35 | 26.0 | 8.9 | |
| 9.4 | | 36 | 20.0 | 41.4 | g |
| 9.6 | | | 31.0 | 45.7 | |
| 9.2 | | 37 | 22.0 | 10.0 | 9.5 g |
| 9.6 | | | 36.0 | 1.3 | g |
| 9.3 | | | 46.0 | 1.4 | |
| 9.6 | | | 52.0 | 32.1 | |
| 9.3 | | 38 | 10.0 | 12.1 | g |
| 9.6 | | | 31.0 | 36.8 | g |
| 9.4 | | 39 | 16.0 | 22.1 | |
| 9.4 | | 40 | 41.0 | 5.0 | |
| 9.6 | | 41 | 5.0 | 16.2 | |
| 9.1 | | | 8.0 | 24.7 | |
| 9.4 | | 42 | 29.0 | 26.5 | |
| 9.4 | | | 54.0 | 14.2 | |
| 8.8 | | 43 | 54.0 | 39.0 | g |
| 9.4 | | | 55.0 | 4.8 | |
| 9.3 | | | 58.0 | 38.1 | g |
| 9.4 | | 44 | 36.0 | 21.6 | |
| 9.0 | | 46 | 0.0 | 23.9 | |
| 9.4 | | | 47.0 | 31.2 | |
| 9.0 | | 47 | 59.0 | 23.8 | 9.0 g |
| 9.6 | | 49 | 13.0 | 53.8 | |
| 9.6 | | | 44.0 | 25.8 | |
| 9.6 | | | 54.0 | 42.6 | |
| 9.4 | | 51 | 13.0 | 5.3 | 9.5 g |
| 9.1 | | | 39.0 | 5.2 | g |
| 9.4 | | 53 | 2.0 | 27.8 | |
| 9.4 | | | 39.0 | 38.6 | |
| 9.6 | | 54 | 13.0 | 29.2 | |
| 9.6 | | | 15.0 | 27.8 | |
| 8.8 | | | 36.0 | 7.7 | 9.2 g |
| 8.8 | | | 59.0 | 28.1 | g |
| 7.9 | | 56 | 2.0 | 10.9 | 8.5 Gg |
| 9.6 | | | 33.0 | 43.0 | |
| 9.6 | | 57 | 13.0 | 0.0 | |

25 prec.

| h | m | α s | s | δ |
|---|---|---|---|---|
| 11 | 30 | + 61 | − 0.02 d | − 8.3 |
| | 40 | 66 | − 0.01 | 8.3 |
| | 50 | 71 | − 0.01 | 8.3 |
| 12 | 0 | 77 | 0.00 | 8.4 |
| | 10 | 82 | + 0.01 | 8.3 |
| | 20 | 88 | + 0.01 | 8.3 |
| | 30 | 93 | + 0.02 | 8.3 |
| | 40 | 98 | + 0.03 | 8.2 |
| | 50 | 104 | + 0.03 | 8.2 |
| 13 | 0 | 109 | + 0.04 | 8.1 |
| | 10 | 114 | + 0.05 | 8.0 |
| | 20 | 119 | + 0.05 | 7.9 |
| | 30 | 125 | + 0.06 | 7.7 |
| | 40 | 130 | + 0.07 | 7.6 |
| | 50 | 134 | + 0.07 | 7.4 |
| 14 | 0 | + 139 | + 0.08 | − 7.2 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 13 | 50 | + 134 + 0·07 d | − 7·4 |
| 14 | 0 | 139 + 0·08 | 7·2 |
| | 10 | 144 + 0·08 | 7·0 |
| | 20 | 148 + 0·09 | 6·8 |
| | 30 | 153 + 0·09 | 6·6 |
| | 40 | 157 + 0·10 | 6·4 |
| | 50 | 161 + 0·10 | 6·2 |
| 15 | 0 | + 165 + 0·11 | − 5·9 |

d = minutes of decl.

## 931—990.

| mag. | h (13ʰ–14ʰ) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·6 | 13 | 58 | 47·0 | 18·6 | |
| 9·6 | | 59 | 9·0 | 17·0 | |
| 9·6 | | | 19·0 | 22·7 | |
| 9·6 | | | 22·0 | 14·2 | |
| 9·6 | | | 29·0 | 34·5 | |
| 9·6 | | | 36·0 | 12·1 | |
| 8·7 | | | 59·0 | 10·0 | 9·5 *g* |
| 9·2 | 14 | 0 | 23·0 | 39·6 | *g* |
| 7·9 | | 2 | 6·0 | 52·1 | GS*g* |
| 9·4 | | | 20·0 | 30·0 | |
| 7·9 | | | 25·0 | 10·2 | 8·0 *g* |
| 9·6 | | | 27·0 | 27·8 | |
| 9·6 | | | 51·0 | 1·2 | |
| 9·6 | | 3 | 2·0 | 27·0 | |
| 9·3 | | | 24·0 | 23·3 | *g* |
| 9·6 | | 4 | 9·0 | 12·8 | |
| 9·6 | | | 20·0 | 11·2 | 9·5 *g* |
| 9·6 | | 5 | 20·5 | 2·3 | |
| 8·9 | | | 21·0 | 30·2 | GS*g* |
| 9·6 | | 6 | 17·0 | 16·7 | |
| 9·6 | | 9 | 2·5 | 59·1 | 9·0 *g* |
| 9·6 | | | 7·0 | 58·8 | *g* |
| 9·6 | | 12 | 16·0 | 4·4 | |
| 8·9 | | | 59·0 | 18·4 | 7·5 G*g* |
| 7·6 | | 13 | 58·5 | 57·0 | 7·5 GS*g* : |
| 9·6 | | 14 | 6·0 | 4·4 | |
| 9·6 | | | 13·0 | 43·5 | |
| 8·7 | | | 44·0 | 19·7 | *g* |
| 9·4 | | 15 | 52·5 | 59·6 | *g* |
| 9·3 | | 17 | 18·0 | 22·0 | |
| 9·4 | | | 27·0 | 6·0 | |
| 9·6 | | | 38·0 | 17·2 | |
| 8·4 | | 18 | 0·0 | 56·3 | *g* |
| 9·3 | | | 39·0 | 12·9 | |
| 8·2 | | | 48·0 | 42·9 | GS*g* |
| 9·6 | | 20 | 26·0 | 6·0 | |
| 9·6 | | | 29·0 | 25·2 | |
| 9·6 | | | 31·0 | 4·8 | |
| 9·4 | | 21 | 23·0 | 54·4 | |
| 8·3 | | | 28·0 | 50·0 | *g* |
| 8·9 | | | 54·0 | 4·2 | 9·0 *g* |
| 9·4 | | | 54·0 | 45·2 | *g* |
| 8·4 | | | 57·0 | 7·4 | 9·0 *g* |
| 9·4 | | | 58·0 | 45·5 | *g* |
| 9·4 | | 23 | 11·0 | 57·1 | *g* |
| 9·2 | | | 21·5 | 59·2 | |
| 8·8 | | | 35·5 | 38·7 | *g* |
| 9·6 | | 24 | 3·5 | 31·1 | |
| 9·3 | | | 10·5 | 11·8 | |
| 8·2 | | | 46·2 | 0·1 | 8·5 *g* |
| 10·0 | | 25 | 8·0 | 10·2 | |
| 9·4 | | | 13·8 | 47·1 | |
| 9·0 | | | 35·3 | 41·5 | |
| 10·0 | | | 40·0 | 41·3 | |
| 9·3 | | | 46·0 | 5·6 | |
| 9·6 | | 26 | 4·5 | 45·7 | |
| 9·5 | | | 18·0 | 48·2 | |
| 9·8 | | | 23·0 | 21·2 | |
| 10·0 | | | 41·0 | 30·4 | |
| 9·4 | | 27 | 35·0 | 20·4 | |

## 991—1050.

| mag. | h (14ʰ) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 10·0 | 14 | 27 | 41·5 | 0·8 | |
| 10·0 | | | 53·0 | 10·6 | |
| 10·0 | | 28 | 5·0 | 54·4 | |
| 9·0 | | 29 | 8·8 | 45·5 | |
| 9·8 | | | 11·5 | 49·6 | |
| 9·4 | | | 26·8 | 22·3 | |
| 8·2 | | | 40·8 | 17·0 | 7·5 G*g* |
| 10·0 | | | 47·0 | 55·9 | |
| 9·4 | | | 55·8 | 26·7 | |
| 8·8 | | 30 | 19·0 | 39·7 | *g* |
| 10·0 | | | 39·5 | 18·0 | |
| 9·5 | | | 46·5 | 4·5 | |
| 9·4 | | | 55·7 | 1·6 | |
| 9·0 | | 31 | 12·8 | 15·3 | *g* |
| 8·4 | | | 27·8 | 24·0 | *g* |
| 10·0 | | | 30·5 | 44·2 | |
| 9·2 | | | 45·5 | 18·8 | |
| 9·5 | | | 55·0 | 32·8 | |
| 10·0 | | 32 | 22·5 | 41·5 | |
| 10·0 | | | 25·5 | 33·1 | |
| 10·0 | | 33 | 0·5 | 31·4 | |
| 9·2 | | | 11·3 | 38·7 | *g* |
| 9·6 | | | 11·5 | 26·4 | |
| 9·8 | | | 24·5 | 51·9 | |
| 9·4 | | | 41·0 | 18·5 | |
| 9·5 | | | 45·1 | 57·0 | |
| 10·0 | | | 50·0 | 4·7 | |
| 8·1 | | 34 | 6·3 | 27·0 | 8·8 G*g* : |
| 9·8 | | | 8·0 | 33·8 | |
| 8·8 | | 35 | 2·7 | 26·4 | |
| 10·0 | | | 4·0 | 5·6 | |
| 9·0 | | | 51·5 | 32·7 | 9·0 *g* |
| 10·0 | | | 58·0 | 28·1 | |
| 10·0 | | 36 | 25·5 | 17·3 | |
| 9·4 | | | 43·5 | 34·9 | |
| 8·9 | | | 55·0 | 59·7 | 9·0 |
| 9·5 | | 37 | 4·4 | 1·5 | |
| 9·5 | | | 5·5 | 28·8 | |
| 8·4 | | | 49·2 | 0·3 | 8·3 G*g* |
| 9·9 | | | 59·5 | 23·4 | |
| 9·8 | | 38 | 41·0 | 51·1 | |
| 8·8 | | | 46·5 | 55·7 | *g* |
| 9·5 | | 39 | 28·0 | 43·9 | |
| 10·0 | | | 52·5 | 40·4 | |
| 9·6 | | | 57·9 | 1·8 | |
| 9·5 | | 40 | 2·0 | 25·4 | |
| 10·0 | | | 9·5 | 12·6 | |
| 10·0 | | | 23·3 | 50·8 | |
| 9·8 | | | 34·8 | 13·3 | |
| 9·5 | | | 56·8 | 35·0 | |
| 8·2 | | 41 | 9·3 | 5·0 | 7·5 G*g* |
| 9·4 | | | 20·3 | 25·7 | |
| 9·4 | | | 27·8 | 34·7 | |
| 9·5 | | | 33·8 | 10·5 | |
| 9·6 | | | 35·8 | 38·2 | |
| 10·0 | | 42 | 9·8 | 37·0 | |
| 10·0 | | | 41·8 | 15·4 | |
| 9·5 | | 43 | 11·3 | 41·7 | |
| 10·0 | | | 20·8 | 52·0 | |
| 9·4 | | | 58·3 | 15·5 | *g* |

## 1051—1110.

| mag. | h (14ʰ) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·5 | 14 | 43 | 59·7 | 59·8 | |
| 9·8 | | 44 | 5·8 | 57·3 | |
| 10·0 | | | 24·8 | 19·2 | |
| 9·4 | | | 36·8 | 48·4 | |
| 9·5 | | | 58·3 | 39·9 | |
| 8·6 | | 45 | 5·8 | 2·2 | *g* |
| 10·0 | | | 23·8 | 16·6 | |
| 9·5 | | | 24·8 | 42·4 | |
| 9·7 | | | 54·4 | 29·7 | |
| 10·0 | | 46 | 0·4 | 28·0 | |
| 9·4 | | | 0·4 | 16·9 | *g* |
| 10·0 | | | 11·9 | 22·7 | |
| 9·5 | | | 13·4 | 47·9 | |
| 9·6 | | | 20·4 | 0·9 | |
| 9·5 | | | 31·4 | 38·5 | *g* |
| 9·8 | | | 48·4 | 51·1 | |
| 10·0 | | 47 | 43·4 | 37·3 | |
| 9·3 | | | 52·9 | 5·3 | |
| 10·0 | | 48 | 5·4 | 19·5 | |
| 9·2 | | | 8·9 | 57·7 | |
| 9·6 | | | 17·9 | 15·4 | |
| 10·0 | | | 27·4 | 29·5 | |
| 8·7 | | | 28·4 | 4·6 | |
| 10·0 | | | 51·4 | 16·1 | |
| 10·0 | | | 55·9 | 48·7 | |
| 10·0 | | 49 | 6·9 | 10·9 | |
| 9·3 | | | 20·5 | 22·7 | |
| 10·0 | | | 35·5 | 31·2 | |
| 8·5 | | | 36·0 | 30·1 | 9·0 G*g* |
| 9·4 | | | 46·0 | 2·3 | |
| 9·5 | | 50 | 1·0 | 15·6 | |
| 8·4 | | | 16·0 | 22·0 | 8·5 *g* |
| 8·4 | | | 18·5 | 0·8 | 9·0 *g* |
| 8·8 | | | 28·0 | 18·4 | |
| 10·0 | | | 40·5 | 59·0 | |
| 8·9 | | | 46·0 | 17·2 | 9·0 |
| 9·6 | | 51 | 4·5 | 27·4 | |
| 9·8 | | | 26·5 | 37·8 | |
| 9·6 | | | 30·5 | 1·4 | |
| 8·5 | | | 30·5 | 8·6 | 9·0 G*g* |
| 10·0 | | | 36·5 | 1·0 | |
| 9·5 | | | 39·5 | 20·1 | |
| 9·4 | | | 40·0 | 42·0 | |
| 9·5 | | | 51·0 | 28·9 | |
| 10·0 | | 52 | 43·0 | 33·4 | |
| 10·0 | | 53 | 12·0 | 9·5 | |
| 10·0 | | | 23·5 | 27·7 | |
| 9·9 | | | 31·0 | 41·0 | |
| 10·0 | | | 50·0 | 12·6 | |
| 10·0 | | 54 | 11·0 | 17·5 | |
| 8·6 | | | 48·0 | 44·7 | *g* |
| 8·8 | | 55 | 0·5 | 43·4 | *g* |
| 9·7 | | | 32·0 | 40·3 | |
| 9·5 | | 56 | 17·0 | 43·5 | |
| 9·8 | | | 20·5 | 14·2 | |
| 9·5 | | | 28·5 | 19·0 | |
| 9·5 | | | 39·5 | 12·7 | |
| 9·8 | | | 41·0 | 13·1 | |
| 9·2 | | | 46·5 | 43·5 | *g* |
| 9·8 | | | 47·0 | 29·1 | |



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## 1111—1170.

| mag. | h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.5 | 14 | 56 | 49.0 | 47.8 | |
| 9.8 | | 57 | 52.0 | 31.3 | |
| 9.8 | | | 54.5 | 40.3 | |
| 9.5 | | 58 | 13.5 | 36.3 | |
| 8.2 | | | 33.9 | 48.5 | *g* |
| 10.0 | | | 57.4 | 4.6 | |
| 9.4 | | 59 | 8.4 | 28.2 | |
| 9.5 | | | 20.9 | 36.6 | *g* |
| 9.6 | | | 40.4 | 36.2 | |
| 9.3 | | | 56.4 | 7.9 | |
| 10.0 | 15 | 0 | 3.4 | 13.9 | |
| 8.4 | | | 33.4 | 4.5 | 7.5 *g* |
| 10.0 | | 1 | 18.2 | 0.7 | |
| 9.6 | | | 59.9 | 28.9 | |
| 9.4 | | 2 | 4.4 | 11.0 | |
| 9.5 | | | 21.9 | 7.2 | |
| 9.8 | | | 59.0 | 1.4 | |
| 10.0 | | 4 | 18.7 | 32.6 | |
| 10.0 | | | 36.4 | 45.4 | |
| 9.4 | | | 40.9 | 55.7 | *g* |
| 8.7 | | | 48.4 | 4.7 | 9.0 *g* |
| 9.5 | | | 48.9 | 32.1 | |
| 8.9 | | 5 | 5.9 | 8.8 | |
| 8.9 | | | 39.9 | 49.9 | *g* |
| 8.0 | | 6 | 0.4 | 6.0 | 7.5 G*g* |
| 9.8 | | | 6.4 | 56.8 | |
| 8.9 | | | 14.4 | 16.8 | |
| 9.8 | | | 44.1 | 2.4 | |
| 9.6 | | | 54.4 | 54.8 | |
| 8.6 | | 7 | 50.4 | 7.0 | 8.5 G*g* |
| 9.7 | | | 51.4 | 55.8 | |
| 9.4 | | | 58.9 | 37.4 | |
| 9.3 | | 8 | 17.9 | 21.9 | 9.5 |
| 9.5 | | | 24.9 | 21.8 | |
| 9.2 | | | 35.9 | 46.8 | |
| 9.5 | | 9 | 9.9 | 18.8 | |
| 9.8 | | | 29.4 | 28.4 | |
| 9.7 | | | 52.9 | 25.6 | |
| 10.0 | | 10 | 8.4 | 42.6 | |
| 9.4 | | | 35.4 | 9.3 | |
| 8.6 | | 11 | 19.9 | 29.7 | 8.2 G*g* |
| 8.9 | | | 49.3 | 1.2 | |
| 9.8 | | | 52.9 | 38.7 | |
| 9.0 | | 12 | 10.4 | 16.1 | 9.0 *g* |
| 9.4 | | | 18.4 | 42.8 | |
| 9.8 | | | 29.9 | 22.3 | |
| 10.0 | | 13 | 2.4 | 50.0 | |
| 10.0 | | | 14.4 | 28.9 | 8.5 G*g* |
| 10.0 | | | 54.4 | 40.5 | |
| 9.4 | | 14 | 9.3 | 0.0 | |
| 9.4 | | | 19.9 | 27.8 | |
| 10.0 | | | 34.9 | 2.9 | |
| 8.9 | | | 41.9 | 30.8 | 9.5 *g* |
| 10.0 | | | 43.9 | 46.9 | |
| 9.5 | | | 49.9 | 44.0 | |
| 10.0 | | 15 | 10.2 | 4.5 | |
| 7.8 | | | 28.2 | 53.5 | 8.2 *g* |
| 10.0 | | | 37.2 | 53.1 | |
| 9.4 | | | 39.2 | 48.7 | *g* |
| 8.8 | | | 40.2 | 14.7 | |

(14h.—15h.)

## 1171—1230.

| mag. | h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9.8 | 15 | 15 | 45.2 | 15.4 | |
| 9.9 | | | 46.7 | 44.1 | |
| 9.6 | | | 55.7 | 18.8 | |
| 8.4 | | | 56.2 | 8.4 | 9.0 *g* |
| 9.9 | | 16 | 16.7 | 5.1 | |
| 9.2 | | | 22.2 | 57.5 | |
| 9.3 | | | 30.7 | 52.9 | |
| 9.9 | | | 31.7 | 55.0 | |
| 9.5 | | | 35.7 | 40.5 | |
| 10.0 | | | 38.2 | 6.9 | |
| 9.8 | | | 42.7 | 16.0 | |
| 10.0 | | | 48.2 | 56.0 | |
| 8.9 | | | 50.7 | 16.8 | |
| 9.6 | | 17 | 8.2 | 55.9 | |
| 10.0 | | | 34.7 | 17.8 | |
| 9.6 | | | 55.2 | 44.2 | |
| 10.0 | | 18 | 4.2 | 12.1 | |
| 9.6 | | | 5.2 | 12.3 | |
| 9.7 | | | 17.2 | 48.8 | |
| 9.6 | | | 23.7 | 6.5 | |
| 9.9 | | | 31.2 | 22.9 | |
| 8.9 | | 19 | 12.2 | 32.0 | *g* |
| 8.2 | | | 13.7 | 47.8 | *g* |
| 8.7 | | | 20.7 | 3.9 | 8.2 *g* |
| 9.4 | | | 43.7 | 34.3 | |
| 9.4 | | | 44.2 | 26.1 | |
| 8.4 | | 20 | 2.7 | 14.2 | 9.0 *g* |
| 8.4 | | | 11.7 | 11.8 | 8.5 *g* |
| 10.0 | | | 32.2 | 10.7 | |
| 10.0 | | | 32.7 | 48.9 | |
| 9.8 | | 21 | 0.7 | 21.3 | |
| 8.5 | | | 15.2 | 53.8 | *g* |
| 9.6 | | | 27.2 | 12.3 | |
| 9.8 | | | 28.7 | 6.8 | |
| 9.5 | | | 33.2 | 49.5 | |
| 8.8 | | | 34.7 | 43.4 | *g* |
| 8.6 | | | 38.7 | 21.8 | |
| 9.3 | | | 45.7 | 52.9 | |
| 9.7 | | | 46.7 | 57.2 | |
| 10.0 | | 23 | 7.7 | 44.7 | |
| 9.8 | | | 20.2 | 41.7 | |
| 9.5 | | | 47.7 | 35.0 | |
| 8.7 | | | 50.2 | 14.0 | 9.0 |
| 8.8 | | | 53.2 | 50.6 | *g* |
| 8.9 | | | 55.7 | 8.8 | 9.0 *g* |
| 9.8 | | 24 | 3.2 | 4.2 | |
| 9.5 | | | 7.2 | 42.2 | |
| 10.0 | | | 48.2 | 0.6 | |
| 9.6 | | 26 | 17.2 | 56.5 | |
| 10.0 | | | 26.7 | 22.3 | |
| 10.0 | | | 26.7 | 20.9 | |
| 6.0 | | | 36.4 | 40.0 | 6.5 GSc*g* |
| 10.0 | | | 53.2 | 50.5 | |
| 9.7 | | 27 | 46.7 | 9.9 | |
| 8.7 | | 28 | 23.5 | 17.9 | *g* |
| 9.4 | | | 24.5 | 51.5 | *g* |
| 10.0 | | | 29.2 | 43.7 | |
| 9.6 | | | 37.0 | 53.4 | |
| 8.9 | | | 57.0 | 17.9 | *g* |
| 8.9 | | 29 | 0.5 | 23.8 | 9.0 |

(15h.)

## 1231—1290.

| mag. | h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 8.9 | 15 | 29 | 5.8 | 57.1 | *g* |
| 10.0 | | | 13.5 | 56.6 | |
| 10.0 | | | 24.0 | 9.9 | |
| 9.3 | | | 33.0 | 35.0 | |
| 10.0 | | | 56.2 | 26.9 | |
| 8.4 | | 30 | 14.5 | 30.7 | 9.0 *g* |
| 9.3 | | 31 | 21.8 | 16.1 | |
| 9.3 | | | 34.6 | 0.0 | |
| 9.8 | | | 38.0 | 15.3 | |
| 9.9 | | | 45.0 | 20.6 | |
| 10.0 | | 32 | 9.5 | 30.9 | |
| 9.5 | | | 10.5 | 12.7 | |
| 9.9 | | | 14.2 | 46.5 | |
| 10.0 | | 33 | 1.6 | 52.9 | |
| 9.0 | | | 11.1 | 52.5 | |
| 9.6 | | | 30.1 | 55.7 | |
| 9.8 | | 34 | 9.1 | 17.6 | |
| 9.4 | | | 12.6 | 44.9 | |
| 9.5 | | | 24.1 | 39.3 | |
| 9.5 | | | 25.6 | 8.9 | |
| 9.9 | | | 26.6 | 53.9 | |
| 10.0 | | | 42.6 | 35.8 | |
| 10.0 | | 35 | 3.1 | 57.2 | |
| 10.0 | | | 9.1 | 5.8 | |
| 10.0 | | | 24.1 | 17.1 | |
| 10.0 | | | 55.6 | 40.5 | |
| 9.6 | | | 55.6 | 5.6 | |
| 9.8 | | 36 | 6.1 | 47.5 | |
| 9.9 | | | 35.1 | 3.8 | |
| 10.0 | | 37 | 9.6 | 20.6 | |
| 9.0 | | | 14.5 | 45.8 | 8.0 *g* |
| 9.2 | | 38 | 47.5 | 1.4 | *g* |
| 9.2 | | | 50.0 | 52.3 | |
| 8.3 | | 39 | 44.0 | 6.4 | 8.2 *g* |
| 9.3 | | 42 | 7.0 | 38.4 | *g* |
| 9.2 | | 43 | 13.0 | 17.2 | |
| 9.4 | | | 33.5 | 56.5 | *g* |
| 9.3 | | | 35.0 | 14.8 | |
| 9.2 | | 45 | 14.0 | 15.8 | |
| 7.9 | | | 42.0 | 15.1 | GS*g* |
| 8.8 | | 47 | 11.0 | 57.7 | *g* |
| 9.1 | | 49 | 22.0 | 24.4 | |
| 9.3 | | | 36.0 | 28.7 | |
| 9.2 | | 50 | 15.0 | 27.0 | *g* |
| 9.3 | | | 40.0 | 8.9 | |
| 9.0 | | | 47.0 | 30.4 | |
| 8.6 | | 51 | 6.0 | 54.5 | GS*g* |
| 9.1 | | | 43.0 | 46.9 | *g* |
| 9.2 | | | 52.0 | 51.5 | |
| 9.4 | | 53 | 55.0 | 12.6 | *g* |
| 9.2 | | 54 | 6.0 | 25.8 | |
| 9.0 | | 56 | 21.0 | 39.6 | |
| 9.2 | | 57 | 15.0 | 12.7 | |
| 9.2 | | | 21.0 | 56.3 | 9.5 *g* |
| 9.3 | | | 40.0 | 18.7 | |
| 9.2 | | 58 | 18.0 | 28.6 | *g* |
| 9.3 | | | 24.0 | 28.8 | *g* |
| 8.6 | 16 | 0 | 18.0 | 43.8 | 8.8 *g* |
| 9.2 | | | 54.0 | 34.8 | 8.8 *g* |
| 9.3 | | 1 | 3.0 | 6.5 | |

(15h.—16h.)

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 14 | 50 | + 161 + 0.10 d | − 6.2 |
| 15 | 0 | 165 + 0.11 | 5.9 |
| | 10 | 169 + 0.11 | 5.6 |
| | 20 | 172 + 0.12 | 5.4 |
| | 30 | 176 + 0.12 | 5.1 |
| | 40 | 179 + 0.13 | 4.8 |
| | 50 | 182 + 0.13 | 4.5 |
| 16 | 0 | 185 + 0.13 | 4.2 |
| | 10 | + 187 + 0.14 | − 3.9 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 16 | 0 | +18·5 | +0·13 d | −4·2 |
| | 10 | 18·7 | +0·14 | 3·9 |
| | 20 | 19·0 | +0·14 | 3·5 |
| | 30 | 19·2 | +0·14 | 3·2 |
| | 40 | 19·4 | +0·15 | 2·9 |
| | 50 | 19·6 | +0·15 | 2·5 |
| 17 | 0 | 19·7 | +0·15 | 2·2 |
| | 10 | 19·9 | +0·15 | 1·8 |
| | 20 | 20·0 | +0·15 | 1·5 |
| | 30 | 20·1 | +0·15 | 1·1 |
| | 40 | 20·1 | +0·15 | 0·7 |
| | 50 | 20·1 | +0·16 | −0·4 |
| 18 | 0 | 20·2 | +0·16 | 0·0 |
| | 10 | 20·1 | +0·16 | +0·4 |
| | 20 | 20·1 | +0·15 | 0·7 |
| | 30 | 20·1 | +0·15 | 1·1 |
| | 40 | 20·0 | +0·15 | 1·5 |
| | 50 | 19·9 | +0·15 | 1·8 |
| 19 | 0 | +19·7 | +0·15 | +2·2 |

d = minutes of decl.

## 1291—1350.

| mag. | h (16h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·2 | 16 | 2 | 26·0 | 6·5 | |
| 9·3 | | 3 | 19·0 | 11·9 | |
| 9·2 | | 5 | 51·0 | 10·9 | |
| 8·8 | | 6 | 25·0 | 22·0 | GS*g* |
| 9·1 | | | 27·0 | 35·8 | 8·5 *g* |
| 8·8 | | | 37·0 | 39·9 | 7·5 GS*g* |
| 8·8 | | 7 | 16·0 | 12·3 | 8·5 *g* |
| 9·3 | | 8 | 27·0 | 12·1 | |
| 9·1 | | 9 | 27·0 | 11·7 | *g* |
| 9·0 | | | 40·0 | 39·9 | 9·0 *g* |
| 9·3 | | 10 | 21·0 | 12·1 | |
| 8·8 | | | 28·0 | 42·1 | 9·5 *g* |
| 8·8 | | | 50·0 | 36·7 | 8·5 *g* |
| 9·3 | | 11 | 4·0 | 51·3 | *g* |
| 9·0 | | 12 | 14·0 | 1·0 | 9·5 *g* |
| 9·1 | | | 59·0 | 39·2 | *g* |
| 9·2 | | 13 | 20·0 | 31·5 | |
| 9·1 | | 14 | 39·0 | 51·0 | |
| 9·1 | | | 42·5 | 58·8 | |
| 9·3 | | 16 | 5·0 | 23·2 | |
| 9·2 | | | 32·0 | 26·1 | |
| 7·8 | | | 38·0 | 40·1 | GS*g* |
| 9·1 | | 17 | 22·0 | 50·7 | |
| 9·3 | | 18 | 56·0 | 43·6 | |
| 9·2 | | 19 | 36·0 | 13·9 | 9·5 *g* |
| 9·1 | | | 53·0 | 43·4 | *g* |
| 9·2 | | 20 | 15·0 | 19·7 | |
| 9·0 | | 21 | 33·0 | 26·8 | |
| 9·2 | | | 38·0 | 24·3 | |
| 8·0 | | 22 | 54·0 | 13·4 | GS*g* : |
| 9·0 | | 23 | 17·0 | 25·5 | *g* |
| 9·3 | | 25 | 28·0 | 42·6 | |
| 9·3 | | 26 | 38·5 | 30·6 | |
| 8·8 | | 28 | 53·0 | 13·8 | *g* |
| 9·3 | | 29 | 20·0 | 53·9 | |
| 9·3 | | 30 | 59·0 | 27·2 | *g* |
| 9·3 | | 33 | 36·0 | 35·0 | |
| 9·2 | | | 48·0 | 42·6 | *g* |
| 8·7 | | 34 | 38·5 | 23·9 | 9·5 *g* |
| 9·3 | | 35 | 48·0 | 21·8 | |
| 9·3 | | | 51·0 | 11·4 | |
| 9·3 | | 39 | 15·0 | 32·3 | |
| 9·4 | | 40 | 35·0 | 51·1 | |
| 9·4 | | 41 | 13·0 | 14·1 | ? |
| 8·5 | | 42 | 29·0 | 36·0 | 9·0 *g* |
| 8·9 | | | 41·0 | 31·4 | 9·0 *g* |
| 8·8 | | 43 | 9·5 | 59·7 | 9·5 *g* : |
| 9·2 | | 44 | 48·0 | 47·5 | 9·0 *g* |
| 9·3 | | | 50·0 | 18·9 | |
| 9·4 | | 45 | 49·0 | 14·0 | |
| 9·0 | | 46 | 26·0 | 49·3 | 9·0 *g* |
| 9·3 | | | 48·0 | 2·7 | |
| 9·3 | | 47 | 31·0 | 44·9 | *g* |
| 9·5 | | 52 | 8·0 | 48·9 | *g* |
| 9·4 | | | 43·0 | 24·9 | |
| 9·4 | | | 45·0 | 44·9 | |
| 8·9 | | | 56·0 | 37·8 | *g* |
| 8·1 | | 53 | 37·0 | 12·1 | 7·8 GS*g* |
| 8·9 | | 54 | 5·0 | 24·9 | *g* |
| 9·3 | | | 32·0 | 0·9 | |

## 1351—1410.

| mag. | h (16h.—17h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·2 | 16 | 55 | 5·0 | 56·1 | *g* |
| 9·4 | | | 24·0 | 23·9 | |
| 9·2 | | | 37·0 | 30·8 | |
| 9·3 | | 56 | 31·0 | 3·9 | |
| 9·1 | | | 41·0 | 15·4 | |
| 9·2 | | | 54·0 | 14·8 | 8·5 *g* |
| 9·2 | | 57 | 36·0 | 6·9 | *g* |
| 9·2 | | | 38·0 | 21·8 | |
| 9·4 | | 58 | 17·0 | 36·3 | |
| 9·3 | | | 27·0 | 56·1 | |
| 8·9 | | | 45·0 | 19·2 | 8·0 *g* |
| 9·1 | | | 57·0 | 54·8 | *g* |
| 9·0 | | 59 | 18·0 | 32·8 | *g* |
| 9·2 | | | 45·5 | 59·0 | *g* |
| 9·3 | 17 | 1 | 22·5 | 58·9 | 10·0 *g* |
| 9·2 | | 3 | 9·0 | 7·4 | |
| 9·3 | | 4 | 13·0 | 11·0 | |
| 8·0 | | 5 | 55·0 | 12·0 | 7·0 GS*g* |
| 9·3 | | 7 | 33·0 | 47·0 | |
| 9·2 | | | 52·0 | 50·6 | 10·0 *g* |
| 8·7 | | | 53·0 | 52·1 | 8·5 *g* |
| 9·4 | | 8 | 3·0 | 45·2 | |
| 9·0 | | | 3·0 | 31·0 | *g* |
| 9·3 | | 9 | 59·0 | 49·4 | 9·5 *g* |
| 9·4 | | 10 | 13·0 | 26·9 | |
| 9·0 | | | 50·0 | 5·7 | |
| 9·3 | | 12 | 0·0 | 43·5 | *g* |
| 9·0 | | 14 | 58·0 | 14·9 | |
| 9·4 | | 15 | 22·5 | 57·1 | |
| 9·4 | | 16 | 0·0 | 34·2 | |
| 9·3 | | | 8·0 | 36·9 | |
| 9·4 | | | 47·0 | 23·8 | |
| 8·8 | | 19 | 12·0 | 45·6 | 9·5 *g* |
| 9·4 | | | 33·0 | 24·3 | |
| 9·1 | | | 37·0 | 20·1 | 9·0 *g* |
| 9·0 | | | 43·0 | 14·9 | *g* |
| 9·3 | | 20 | 33·0 | 7·9 | |
| 9·3 | | | 59·0 | 31·5 | |
| 8·9 | | 22 | 22·5 | 30·3 | *g* |
| 9·3 | | 24 | 39·0 | 5·7 | |
| 8·5 | | 26 | 48·5 | 36·4 | 9·5 *g* |
| 9·3 | | 28 | 11·0 | 5·2 | |
| 9·5 | | | 49·0 | 4·8 | |
| 9·5 | | 29 | 43·0 | 51·3 | *g* |
| 9·4 | | 30 | 16·5 | 53·8 | *g* |
| 9·3 | | 31 | 31·0 | 3·0 | |
| 9·4 | | | 51·0 | 1·0 | |
| 8·5 | | 37 | 11·0 | 11·3 | 8·5 G*g* |
| 9·3 | | 38 | 44·0 | 31·1 | |
| 9·0 | | 40 | 51·0 | 12·1 | 9·5 *g* |
| 9·1 | | 41 | 45·0 | 46·1 | *g* |
| 9·5 | | 45 | 38·5 | 30·7 | G |
| 8·2 | | | 54·0 | 40·3 | 8·0 G*gg* |
| 9·4 | | 46 | 20·0 | 5·2 | |
| 8·5 | | | 49·0 | 6·7 | 8·5 *g* |
| 9·4 | | 50 | 43·5 | 16·7 | |
| 9·4 | | | 57·5 | 18·2 | |
| 8·8 | | 51 | 42·5 | 6·3 | 7·5 GS*g* |
| 7·3 | | 53 | 38·5 | 11·6 | 7·6 GS*g* |
| 7·8 | | | 47·5 | 53·4 | 6·0 GS*g* |

## 1411—1470.

| mag. | h (17h.—18h.) | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·2 | 17 | 55 | 32·5 | 55·4 | *g* |
| 9·4 | | 56 | 16·5 | 6·2 | |
| 7·3 | | | 30·5 | 33·8 | 8·0 GS*g* |
| 9·4 | | 59 | 24·5 | 49·1 | |
| 9·3 | 18 | 0 | 28·5 | 1·0 | 9·5 *g* |
| 9·4 | | 5 | 29·5 | 3·0 | |
| 6·4 | | 6 | 44·5 | 5·4 | 6·0 GS*g* |
| 9·4 | | 8 | 47·5 | 33·0 | |
| 9·5 | | 9 | 48·5 | 25·9 | |
| 9·4 | | 12 | 0·5 | 4·7 | |
| 9·2 | | 13 | 45·5 | 28·0 | *g* |
| 9·2 | | | 59·5 | 29·0 | *g* |
| 9·1 | | 17 | 54·0 | 44·0 | *g* |
| 9·4 | | 18 | 20·0 | 56·0 | *g* |
| 9·4 | | 19 | 21·0 | 46·5 | |
| 9·4 | | 20 | 49·0 | 54·1 | 8·0 *g* |
| 10·2 | | 28 | 25·2 | 32·2 | |
| 9·9 | | 29 | 9·7 | 9·9 | |
| 10·2 | | | 39·2 | 24·7 | |
| 9·6 | | | 59·2 | 55·5 | *g* |
| 9·7 | | 30 | 50·2 | 36·7 | |
| 10·2 | | 31 | 59·2 | 16·7 | |
| 9·6 | | 34 | 10·7 | 35·5 | |
| 9·9 | | 36 | 56·2 | 55·2 | |
| 8·6 | | | 59·0 | 57·3 | 8·5 *g* |
| 7·8 | | 37 | 6·2 | 5·7 | 7·8 GS*g* |
| 10·0 | | | 19·2 | 2·8 | |
| 9·1 | | 38 | 9·2 | 58·6 | 9·0 *g* |
| 9·6 | | | 19·2 | 44·6 | |
| 9·2 | | 39 | 7·9 | 53·9 | *g* |
| 8·6 | | | 10·3 | 59·7 | 8·0 G*g* |
| 9·7 | | | 31·9 | 10·1 | |
| 9·7 | | | 37·9 | 15·7 | |
| 9·6 | | 40 | 6·4 | 12·3 | |
| 9·8 | | | 50·9 | 45·1 | |
| 9·6 | | 41 | 21·4 | 29·9 | |
| 10·0 | | 42 | 16·4 | 41·2 | |
| 8·4 | | | 33·4 | 32·5 | 7·0 GS*g* |
| 10·2 | | 43 | 21·9 | 48·0 | |
| 10·2 | | 44 | 38·6 | 43·4 | |
| 10·0 | | 45 | 44·4 | 30·5 | |
| 9·4 | | 46 | 22·9 | 16·3 | |
| 9·8 | | | 48·4 | 44·9 | |
| 9·7 | | | 51·9 | 32·0 | |
| 9·9 | | 47 | 59·4 | 19·8 | |
| 10·0 | | 48 | 56·4 | 0·4 | |
| 9·0 | | 49 | 44·9 | 31·8 | *g* |
| 10·0 | | 52 | 8·8 | 5·5 | |
| 10·0 | | | 12·8 | 32·7 | |
| 10·2 | | 53 | 7·3 | 11·2 | |
| 9·0 | | | 45·3 | 51·8 | *g* |
| 9·0 | | 54 | 7·3 | 48·1 | *g* |
| 9·4 | | | 39·8 | 18·9 | *g* |
| 9·8 | | | 40·3 | 58·5 | |
| 10·2 | | | 42·3 | 35·9 | |
| 10·2 | | 55 | 13·3 | 25·3 | |
| 10·2 | | | 27·3 | 46·5 | |
| 9·7 | | 56 | 21·3 | 36·1 | |
| 9·5 | | | 22·8 | 13·3 | |
| 10·2 | | | 31·3 | 52·1 | |

580

**1471—1530.**

| mag. | 18h.—19h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·7 | 18 | 56 | 34·8 | 42·6 | |
| 8·8 | | 58 | 22·8 | 25·3 | 9·2 *g* |
| 9·5 | | | 48·3 | 1·9 | |
| 10·2 | | 59 | 1·3 | 54·7 | |
| 10·2 | | | 31·8 | 4·9 | |
| 10·0 | 19 | 0 | 0·8 | 4·6 | |
| 9·4 | | | 18·8 | 46·3 | *g* |
| 9·5 | | | 27·8 | 49·9 | *g* |
| 9·5 | | 1 | 1·3 | 44·8 | |
| 9·7 | | | 16·8 | 41·4 | |
| 9·5 | | | 47·8 | 22·9 | |
| 10·2 | | 3 | 40·9 | 31·6 | |
| 9·2 | | 4 | 1·4 | 10·1 | *g* |
| 9·7 | | | 14·4 | 51·2 | |
| 9·6 | | | 16·9 | 36·8 | |
| 10·0 | | | 41·4 | 24·0 | |
| 9·9 | | 5 | 42·9 | 36·4 | |
| 10·2 | | 6 | 1·4 | 22·6 | |
| 10·2 | | | 25·4 | 40·0 | |
| 9·6 | | | 29·4 | 23·5 | |
| 9·7 | | 7 | 15·9 | 43·9 | |
| 10·2 | | | 34·9 | 3·3 | |
| 9·6 | | | 34·9 | 23·9 | |
| 9·8 | | | 41·4 | 30·7 | |
| 9·2 | | 9 | 23·9 | 13·5 | |
| 9·1 | | 10 | 41·4 | 53·8 | 9·0 *g* |
| 10·0 | | 11 | 3·4 | 55·8 | |
| 10·0 | | | 50·9 | 37·7 | |
| 10·0 | | 12 | 4·4 | 55·2 | |
| 8·0 | | | 5·9 | 24·7 | 8·0 GS*g* |
| 10·0 | | | 8·9 | 26·2 | |
| 9·0 | | | 13·9 | 25·8 | 10·0 *g* |
| 9·8 | | | 42·9 | 34·3 | |
| 9·4 | | 14 | 10·4 | 19·1 | |
| 9·4 | | | 35·9 | 20·6 | |
| 9·0 | | 15 | 5·4 | 54·5 | *g* |
| 9·6 | | | 38·4 | 32·1 | |
| 8·6 | | | 53·9 | 13·8 | 9·0 *g* |
| 9·6 | | 16 | 11·4 | 6·3 | |
| 9·6 | | | 13·4 | 37·5 | |
| 9·6 | | | 49·4 | 27·8 | 9·5 G*g* |
| 10·2 | | 17 | 2·4 | 32·4 | |
| 9·6 | | | 8·9 | 39·7 | |
| 8·6 | | | 9·4 | 27·6 | 8·5 G*g* |
| 8·6 | | | 26·9 | 30·2 | 8·5 *g* |
| 10·2 | | | 27·4 | 32·6 | |
| 10·0 | | 18 | 12·9 | 28·1 | |
| 9·7 | | | 17·5 | 31·9 | |
| 10·2 | | | 23·0 | 37·6 | |
| 9·7 | | | 47·0 | 25·6 | |
| 10·2 | | | 51·0 | 31·3 | |
| 10·2 | | 19 | 9·5 | 21·9 | |
| 10·0 | | | 17·1 | 2·0 | |
| 9·4 | | | 23·0 | 12·8 | |
| 8·8 | | 20 | 33·0 | 5·2 | 8·5 *g* |
| 9·7 | | 21 | 30·3 | 59·5 | |
| 9·1 | | | 30·9 | 40·2 | 9·0 *g* |
| 9·7 | | | 48·0 | 50·9 | |
| 9·9 | | 22 | 54·0 | 47·4 | |
| 10·2 | | 23 | 0·5 | 35·2 | |

**1531—1590.**

| mag. | 19h.—20h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·7 | 19 | 23 | 21·5 | 34·7 | |
| 9·1 | | | 33·0 | 30·7 | |
| 9·1 | | 24 | 53·5 | 54·4 | *g* |
| 8·9 | | | 53·5 | 53·1 | 10·0 *g* |
| 9·9 | | 25 | 18·0 | 36·9 | |
| 10·0 | | 26 | 12·8 | 28·0 | |
| 8·0 | | | 43·5 | 40·8 | 7·8 G*g* |
| 10·0 | | | 47·0 | 34·9 | |
| 9·8 | | 27 | 5·5 | 34·4 | |
| 8·3 | | | 32·3 | 3·0 | 7·9 GS*g* |
| 9·3 | | | 41·5 | 14·9 | |
| 9·8 | | 28 | 40·5 | 0·5 | |
| 9·2 | | 30 | 35·5 | 35·3 | *g* |
| 9·4 | | 31 | 3·2 | 2·1 | |
| 8·7 | | | 11·8 | 12·2 | 9·0 *g* |
| 9·8 | | 32 | 18·3 | 29·7 | |
| 9·6 | | 33 | 45·2 | 17·4 | |
| 9·2 | | 34 | 30·0 | 28·5 | 9·0 |
| 8·3 | | | 31·7 | 23·1 | 8·0 *g* |
| 9·4 | | 36 | 56·0 | 41·4 | |
| 9·7 | | 37 | 53·8 | 11·0 | |
| 9·6 | | 38 | 34·3 | 21·7 | |
| 9·7 | | 40 | 7·3 | 16·4 | |
| 9·2 | | | 18·3 | 3·5 | |
| 9·3 | | | 52·3 | 48·4 | *g* |
| 9·7 | | 41 | 23·6 | 56·7 | |
| 9·3 | | | 30·8 | 54·7 | |
| 9·8 | | 43 | 29·2 | 1·5 | |
| 9·7 | | 44 | 29·3 | 7·9 | |
| 9·5 | | 45 | 45·8 | 26·0 | |
| 8·5 | | 46 | 10·3 | 5·7 | 7·0 GS*g* |
| 9·2 | | | 12·3 | 26·3 | |
| 9·8 | | | 33·8 | 42·0 | |
| 8·0 | | | 59·3 | 41·1 | 7·5 *g* |
| 9·4 | | 47 | 47·3 | 1·2 | |
| 8·7 | | 48 | 20·3 | 46·7 | *g* |
| 9·5 | | | 42·8 | 36·8 | |
| 9·4 | | 50 | 3·8 | 53·3 | |
| 9·8 | | | 26·8 | 47·1 | |
| 9·3 | | 51 | 31·3 | 10·1 | |
| 9·5 | | 52 | 45·3 | 52·3 | |
| 8·0 | | 53 | 10·3 | 6·4 | 7·5 GS*g* |
| 9·2 | | | 24·8 | 43·0 | *g* |
| 9·8 | | 54 | 5·0 | 28·1 | |
| 9·2 | | 55 | 41·3 | 8·5 | *g* |
| 9·4 | | 57 | 32·8 | 41·6 | |
| 9·7 | | | 38·8 | 49·9 | |
| 9·5 | | 58 | 0·8 | 35·2 | |
| 9·0 | | | 2·3 | 10·6 | 9·0 *g* |
| 9·8 | | 59 | 9·3 | 0·2 | |
| 9·7 | | | 29·3 | 55·8 | |
| 9·8 | | | 31·3 | 3·4 | |
| 9·7 | | | 56·3 | 18·2 | |
| 9·8 | 20 | 0 | 36·8 | 39·0 | |
| 9·2 | | | 45·3 | 47·2 | *g* |
| 8·7 | | 1 | 32·8 | 40·1 | *g* |
| 8·6 | | | 39·3 | 11·7 | 8·5 *g* |
| 9·8 | | | 50·3 | 25·1 | |
| 8·6 | | 2 | 29·8 | 22·2 | 8·0 *g* |
| 8·8 | | | 44·8 | 58·1 | *g* |

**1591—1650.**

| mag. | 20h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·6 | 20 | 3 | 11·8 | 53·8 | |
| 9·4 | | | 38·3 | 55·9 | |
| 9·8 | | | 54·8 | 22·3 | |
| 9·4 | | 4 | 16·8 | 7·4 | |
| 9·8 | | | 22·8 | 9·8 | |
| 8·5 | | | 53·0 | 57·8 | 8·0 *g* |
| 9·5 | | 5 | 30·3 | 24·9 | |
| 9·0 | | | 51·3 | 33·9 | |
| 9·8 | | 6 | 0·8 | 31·8 | |
| 8·3 | | 7 | 34·3 | 56·0 | *g* |
| 9·8 | | | 41·3 | 29·9 | |
| 9·3 | | | 46·3 | 38·5 | |
| 9·8 | | 8 | 7·3 | 7·2 | |
| 9·0 | | | 9·3 | 31·5 | |
| 9·8 | | | 41·8 | 20·3 | |
| 9·2 | | 9 | 6·3 | 48·1 | *g* |
| 9·8 | | | 12·8 | 30·4 | |
| 9·7 | | | 27·3 | 21·9 | |
| 9·3 | | 10 | 42·8 | 41·8 | *g* |
| 8·8 | | 11 | 28·8 | 49·5 | *g* |
| 9·3 | | | 30·3 | 47·8 | *g* |
| 9·5 | | 12 | 9·3 | 22·9 | |
| 9·2 | | | 36·8 | 0·9 | *g* |
| 9·6 | | | 56·8 | 29·6 | |
| 9·8 | | 13 | 0·8 | 13·5 | |
| 9·4 | | 14 | 6·3 | 33·6 | |
| 9·7 | | | 24·3 | 42·5 | |
| 9·8 | | 15 | 32·0 | 0·0 | |
| 9·8 | | | 35·3 | 2·6 | |
| 9·4 | | 16 | 5·8 | 32·1 | |
| 8·2 | | | 6·3 | 40·0 | 8·5 G*g* |
| 9·8 | | | 47·3 | 57·2 | |
| 9·6 | | 17 | 14·2 | 2·5 | |
| 9·2 | | | 54·7 | 3·3 | 8·5 *g* |
| 9·2 | | 18 | 4·7 | 7·3 | |
| 9·6 | | | 26·7 | 14·5 | |
| 9·7 | | | 27·7 | 45·6 | |
| 8·8 | | | 29·7 | 28·5 | *g* |
| 9·3 | | | 53·7 | 20·3 | |
| 9·3 | | 19 | 4·7 | 41·9 | |
| 8·6 | | | 14·2 | 12·4 | 8·5 *g* |
| 8·7 | | | 20·7 | 11·1 | 9·0 *g* |
| 9·8 | | | 20·7 | 35·6 | |
| 9·2 | | | 25·7 | 38·6 | |
| 9·5 | | | 44·7 | 15·2 | |
| 9·2 | | 20 | 9·7 | 35·0 | 8·5 *g* |
| 9·3 | | | 53·7 | 50·9 | |
| 9·8 | | 21 | 18·2 | 57·6 | |
| 9·6 | | | 43·2 | 49·0 | |
| 9·3 | | 23 | 25·2 | 7·8 | |
| 9·2 | | | 59·4 | 57·7 | *g* |
| 9·2 | | 24 | 23·2 | 10·3 | |
| 9·2 | | | 39·0 | 35·6 | *g* |
| 7·0 | | 26 | 47·9 | 46·7 | *65* GSc*g* : |
| 9·7 | | 27 | 21·5 | 43·2 | |
| 8·3 | | | 30·2 | 29·5 | 8·5 GS*g* |
| 9·5 | | 30 | 14·4 | 46·8 | |
| 9·8 | | 31 | 3·0 | 4·0 | |
| 9·4 | | | 8·0 | 27·5 | |
| 9·8 | | | 41·7 | 9·6 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 18 | 50 | + 199 + 0·15 d | + 1·8 |
| 19 | 0 | 197 + 0·15 | 2·2 |
| | 10 | 196 + 0·15 | 2·5 |
| | 20 | 194 + 0·15 | 2·9 |
| | 30 | 192 + 0·14 | 3·2 |
| | 40 | 190 + 0·14 | 3·5 |
| | 50 | 187 + 0·14 | 3·9 |
| 20 | 0 | 185 + 0·13 | 4·2 |
| | 10 | 182 + 0·13 | 4·5 |
| | 20 | 179 + 0·13 | 4·8 |
| | 30 | 176 + 0·12 | 5·1 |
| | 40 | + 172 + 0·12 | + 5·4 |

d = minutes of decl.



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25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 20 | 30 | + 176 + 0·12 d | + 5·1 |
| | 40 | 172 + 0·12 | 5·4 |
| | 50 | 169 + 0·11 | 5·6 |
| 21 | 0 | 165 + 0·11 | 5·9 |
| | 10 | 161 + 0·10 | 6·2 |
| | 20 | 157 + 0·10 | 6·4 |
| | 30 | 153 + 0·09 | 6·6 |
| | 40 | 148 + 0·09 | 6·8 |
| | 50 | 144 + 0·08 | 7·0 |
| 22 | 0 | 139 + 0·08 | 7·2 |
| | 10 | 134 + 0·07 | 7·4 |
| | 20 | 130 + 0·07 | 7·6 |
| | 30 | 125 + 0·06 | 7·7 |
| | 40 | 119 + 0·05 | 7·9 |
| | 50 | 114 + 0·05 | 8·0 |
| 23 | 0 | 109 + 0·04 | 8·1 |
| | 10 | 104 + 0·03 | 8·2 |
| | 20 | 98 + 0·03 | 8·2 |
| | 30 | 93 + 0·02 | 8·3 |
| | 40 | 88 + 0·01 | 8·3 |
| | 50 | 82 + 0·01 | 8·3 |
| 0 | 0 | + 77 0·00 | + 8·4 |

d = minutes of decl.

## 1651—1710.

| mag. | 20h.—21h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·6 | 20 | 33 | 0·5 | 51·0 | |
| 8·8 | | | 15·7 | 44·0 | 9·0 |
| 9·8 | | | 33·0 | 30·1 | |
| 10·3 | | | 48·9 | 7·0 | |
| 10·3 | | 34 | 36·4 | 43·2 | |
| 10·3 | | 35 | 27·4 | 38·3 | |
| 8·1 | | | 50·6 | 29·5 | 9·0 g |
| 10·3 | | 36 | 6·6 | 35·9 | |
| 10·3 | | 37 | 1·1 | 39·5 | |
| 10·3 | | | 40·3 | 46·2 | |
| 8·8 | | | 43·1 | 46·4 | 9·0 Gg |
| 9·9 | | 39 | 49·7 | 54·3 | g |
| 9·7 | | 40 | 11·2 | 29·7 | |
| 10·3 | | | 19·2 | 24·2 | |
| 10·2 | | 41 | 3·2 | 33·7 | |
| 10·3 | | 42 | 23·2 | 3·6 | |
| 9·6 | | | 27·0 | 12·7 | |
| 9·2 | | 43 | 6·5 | 41·4 | 9·5 g |
| 9·8 | | | 8·0 | 26·1 | 9·5 g |
| 10·3 | | 44 | 52·5 | 57·7 | |
| 9·8 | | 45 | 12·0 | 10·7 | |
| 10·3 | | | 49·0 | 21·6 | |
| 8·0 | | 47 | 5·5 | 54·4 | 8·1 GSg : |
| 9·8 | | 48 | 2·0 | 18·6 | |
| 10·3 | | 49 | 7·0 | 50·8 | |
| 10·2 | | 50 | 45·5 | 57·1 | |
| 10·2 | | | 52·5 | 37·3 | |
| 10·2 | | 51 | 11·5 | 48·0 | |
| 10·3 | | | 36·0 | 36·2 | |
| 10·2 | | | 52·0 | 9·1 | |
| 9·2 | | 53 | 11·0 | 40·8 | |
| 9·6 | | 54 | 22·5 | 49·9 | g |
| 8·6 | | 56 | 8·0 | 52·4 | 8·5 g |
| 10·2 | | 57 | 10·5 | 29·7 | |
| 9·7 | | 58 | 11·0 | 8·8 | |
| 10·3 | | 59 | 4·6 | 29·8 | |
| 10·3 | | | 13·1 | 40·0 | |
| 9·8 | | | 39·6 | 34·0 | |
| 10·3 | | | 57·6 | 15·9 | |
| 10·3 | 21 | 0 | 26·1 | 0·5 | |
| 9·4 | | 1 | 31·1 | 23·8 | |
| 9·6 | | | 50·1 | 48·9 | g |
| 10·3 | | 3 | 1·6 | 20·0 | |
| 9·8 | | | 21·8 | 2·5 | |
| 8·8 | | | 49·1 | 32·8 | 8·5 Gg |
| 9·6 | | 4 | 20·1 | 33·0 | |
| 7·0 | | | 34·1 | 51·6 | 7·0 GScg |
| 10·3 | | | 54·1 | 2·5 | |
| 9·8 | | 5 | 55·1 | 13·2 | g |
| 10·3 | | 7 | 41·5 | 1·7 | |
| 9·9 | | | 42·1 | 30·2 | |
| 10·3 | | | 42·6 | 34·2 | |
| 9·7 | | 12 | 10·1 | 17·9 | g |
| 9·7 | | 14 | 36·7 | 57·1 | |
| 10·3 | | 15 | 25·6 | 41·0 | |
| 9·5 | | | 34·1 | 6·6 | |
| 8·8 | | | 34·1 | 33·2 | 9·0 g |
| 10·3 | | 16 | 18·6 | 0·0 | |
| 10·0 | | 17 | 15·1 | 5·4 | |
| 8·3 | | | 35·1 | 44·7 | 7·8 GSg |

## 1711—1770.

| mag. | 21h.—22h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 9·8 | 21 | 18 | 12·6 | 43·7 | 9·5 g |
| 10·2 | | | 15·6 | 17·7 | |
| 9·9 | | | 17·7 | 0·1 | S |
| 8·8 | | | 38·6 | 48·1 | 9·0 Gg |
| 9·7 | | 19 | 15·2 | 1·3 | g |
| 8·3 | | 20 | 23·7 | 57·5 | 8·8 GSg |
| 10·3 | | 22 | 33·1 | 38·4 | |
| 10·3 | | 23 | 57·1 | 48·9 | |
| 8·8 | | 25 | 5·8 | 32·9 | 8·8 g |
| 9·0 | | | 16·0 | 13·8 | 9·0 g |
| 8·2 | | 26 | 41·0 | 2·4 | 8·5 g |
| 9·7 | | 27 | 20·5 | 37·8 | |
| 10·3 | | 28 | 5·0 | 13·1 | |
| 9·9 | | | 11·5 | 2·1 | |
| 10·3 | | | 55·5 | 40·8 | |
| 10·3 | | 29 | 1·5 | 18·5 | |
| 9·7 | | | 25·7 | 30·1 | |
| 10·0 | | 30 | 24·0 | 45·5 | |
| 9·7 | | 32 | 23·9 | 32·0 | g |
| 10·3 | | 33 | 34·4 | 38·9 | |
| 10·3 | | 34 | 33·4 | 31·4 | |
| 8·7 | | 38 | 15·2 | 52·6 | 8·5 g |
| 8·7 | | | 34·4 | 21·0 | 8·0 Gg |
| 9·6 | | 39 | 32·5 | 52·4 | g |
| 9·6 | | 40 | 40·0 | 29·0 | g |
| 9·4 | | | 43·0 | 28·8 | g |
| 9·4 | | 41 | 2·0 | 13·7 | g |
| 9·4 | | 46 | 3·0 | 30·7 | |
| 9·6 | | | 35·0 | 45·0 | g |
| 8·7 | | 47 | 7·5 | 2·5 | 9·0 g |
| 8·0 | | 50 | 25·0 | 5·8 | 8·5 g |
| 8·4 | | 51 | 26·5 | 2·8 | 9·0 g |
| 9·6 | | 54 | 48·0 | 26·5 | |
| 8·0 | 22 | 3 | 26·0 | 36·7 | 8·5 g |
| 9·2 | | 6 | 11·0 | 34·1 | g |
| 8·5 | | 10 | 7·0 | 35·5 | 8·0 GSg |
| 8·8 | | 14 | 55·0 | 20·9 | g |
| 6·6 | | | 55·0 | 38·8 | 6·4 GScg |
| 9·6 | | 21 | 21·0 | 25·1 | g |
| 9·6 | | 22 | 22·5 | 12·2 | |
| 9·4 | | 23 | 2·5 | 26·0 | g |
| 9·3 | | | 6·5 | 18·3 | g |
| 9·5 | | 24 | 40·5 | 7·0 | |
| 9·4 | | 25 | 14·5 | 41·4 | g |
| 9·4 | | 27 | 15·0 | 51·0 | g |
| 9·5 | | 30 | 22·5 | 44·3 | 9·0 g |
| 9·6 | | 33 | 1·0 | 56·7 | |
| 9·4 | | | 4·5 | 15·5 | |
| 7·8 | | 34 | 19·5 | 28·3 | 8·0 GSg |
| 8·5 | | 35 | 52·0 | 25·8 | 9·0 g |
| 9·4 | | 40 | 1·0 | 30·1 | |
| 9·3 | | 41 | 56·0 | 54·6 | 9·0 g |
| 9·4 | | 43 | 46·0 | 18·2 | g |
| 7·5 | | 44 | 52·0 | 31·8 | GSg |
| 9·6 | | 45 | 36·5 | 7·6 | g |
| 8·3 | | 46 | 24·0 | 39·6 | 8·0 GSg |
| 9·5 | | 50 | 30·0 | 47·0 | 9·5 g |
| 8·5 | | 52 | 40·0 | 23·0 | 9·0 g |
| 9·5 | | 54 | 25·0 | 13·8 | g |
| 8·1 | | 56 | 59·0 | 26·3 | g |

## 1771—1830.

| mag. | 22h.—23h. h | m | s | −75° ′ | |
|---|---|---|---|---|---|
| 8·5 | 22 | 58 | 20·0 | 41·4 | g |
| 9·1 | 23 | 1 | 16·0 | 17·1 | g |
| 9·5 | | 3 | 24·0 | 49·6 | |
| 9·5 | | | 42·0 | 35·1 | |
| 9·5 | | 4 | 33·5 | 0·3 | g |
| 8·6 | | 6 | 46·0 | 12·2 | g |
| 7·9 | | 10 | 1·0 | 12·0 | 8·0 GSg |
| 9·6 | | 14 | 15·0 | 29·7 | g |
| 9·5 | | | 16·0 | 4·0 | g |
| 9·5 | | 16 | 24·0 | 5·1 | g |
| 9·5 | | | 32·0 | 11·1 | g |
| 9·5 | | 22 | 1·4 | 47·4 | g |
| 10·4 | | 23 | 20·2 | 9·3 | |
| 8·2 | | 25 | 35·4 | 32·7 | 8·0 g |
| 10·6 | | | 37·2 | 34·6 | |
| 9·2 | | 26 | 42·3 | 15·0 | g |
| 11·1 | | 28 | 54·4 | 32·8 | |
| 11·1 | | 29 | 13·9 | 9·4 | |
| 9·8 | | | 25·4 | 12·3 | |
| 9·8 | | | 25·9 | 50·3 | |
| 10·6 | | | 47·1 | 0·5 | |
| 10·2 | | 31 | 10·9 | 53·4 | |
| 10·2 | | 32 | 22·9 | 56·3 | g |
| 10·2 | | 33 | 16·9 | 56·3 | g |
| 10·6 | | | 31·9 | 17·4 | |
| 9·2 | | 34 | 29·4 | 35·3 | g |
| 9·6 | | 35 | 14·4 | 24·8 | g |
| 11·1 | | | 18·9 | 1·2 | |
| 9·8 | | 36 | 38·4 | 36·8 | |
| 9·2 | | | 52·9 | 51·1 | |
| 11·1 | | 37 | 5·4 | 3·9 | |
| 8·9 | | | 59·4 | 19·8 | g |
| 11·1 | | 38 | 17·1 | 0·7 | |
| 9·8 | | | 44·9 | 28·6 | |
| 11·1 | | | 52·9 | 4·6 | |
| 10·8 | | 39 | 16·4 | 27·6 | |
| 10·8 | | 40 | 5·4 | 16·0 | |
| 10·6 | | | 36·4 | 37·8 | |
| 11·1 | | 41 | 55·9 | 25·2 | |
| 11·1 | | 42 | 57·4 | 14·6 | |
| 9·2 | | | 59·4 | 13·6 | 9·0 g |
| 11·1 | | 43 | 1·4 | 19·5 | |
| 9·8 | | | 32·9 | 13·8 | |
| 10·0 | | | 58·9 | 15·2 | |
| 10·6 | | 44 | 18·9 | 44·9 | |
| 9·4 | | 45 | 19·4 | 36·1 | 9·0 g |
| 9·8 | | | 49·6 | 1·0 | |
| 9·2 | | 47 | 30·9 | 19·3 | 8·5 g |
| 10·4 | | 48 | 0·0 | 57·5 | |
| 10·4 | | | 41·4 | 28·2 | |
| 10·0 | | 49 | 13·4 | 14·6 | |
| 10·0 | | 50 | 1·3 | 2·6 | |
| 11·0 | | 51 | 9·9 | 49·1 | |
| 11·1 | | | 50·9 | 24·2 | |
| 11·1 | | | 50·9 | 54·2 | |
| 11·1 | | | 56·9 | 53·5 | |
| 10·4 | | 53 | 44·9 | 41·2 | |
| 9·8 | | 56 | 23·9 | 17·5 | g |
| 10·6 | | | 25·9 | 16·8 | |
| 9·8 | | 59 | 19·4 | 52·6 | |

582

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# ZONE—76°

## 1—40.

| mag. | h (0h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 11·0 | 0 | 1 | 25·5 | 41·9 | |
| 10·6 | | | 47·5 | 47·0 | |
| 10·0 | | 2 | 31·0 | 12·9 | |
| 11·1 | | | 43·0 | 32·7 | |
| 10·2 | | | 53·5 | 44·7 | |
| 10·4 | | 3 | 58·0 | 28·8 | |
| 10·2 | | 4 | 58·3 | 33·0 | |
| 10·6 | | 5 | 39·3 | 12·6 | |
| 11·1 | | | 47·3 | 58·4 | |
| 11·1 | | | 52·3 | 39·5 | |
| 8·4 | | | 56·8 | 10·4 | 7·5 GS*g* |
| 11·1 | | 7 | 9·8 | 15·9 | |
| 9·8 | | | 45·3 | 10·8 | 9·5 *g* |
| 11·0 | | | 58·8 | 4·5 | |
| 11·1 | | 8 | 1·8 | 8·6 | |
| 9·8 | | | 19·6 | 57·3 | *g* |
| 10·0 | | 9 | 52·1 | 21·8 | |
| 11·0 | | 10 | 4·1 | 36·2 | |
| 7·4 | | | 10·1 | 36·4 | 6·5 GSc*g* |
| 10·0 | | | 41·1 | 12·0 | |
| 11·1 | | 12 | 29·6 | 43·0 | |
| 8·6 | | | 36·6 | 21·5 | 8·5 *g* |
| 11·0 | | 13 | 3·2 | 32·6 | |
| 11·1 | | | 40·7 | 53·5 | |
| 10·0 | | 14 | 38·7 | 23·8 | *g* |
| 10·0 | | | 57·7 | 25·5 | |
| 9·2 | | 15 | 8·2 | 27·1 | 9·5 *g* |
| 11·1 | | | 34·7 | 47·9 | |
| 10·6 | | 16 | 12·7 | 21·7 | |
| 10·8 | | | 20·2 | 23·4 | |
| 10·8 | | | 27·2 | 17·7 | |
| 11·1 | | | 33·7 | 20·3 | |
| 10·4 | | 17 | 14·2 | 53·7 | |
| 11·0 | | | 49·2 | 36·3 | |
| 9·2 | | | 52·0 | 41·9 | *g* |
| 8·4 | | 18 | 52·5 | 22·2 | 9·0 *g* |
| 10·6 | | 19 | 36·0 | 47·1 | |
| 9·2 | | 21 | 47·0 | 28·5 | *g* |
| 10·4 | | | 52·0 | 33·4 | |
| 8·4 | | 22 | 22·5 | 18·3 | 9·0 *g* |

## 41—80.

| mag. | h (0h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 10·0 | 0 | 22 | 27·0 | 14·0 | |
| 9·8 | | | 40·0 | 6·0 | |
| 9·2 | | | 50·5 | 16·0 | 10·0 *g* |
| 10·8 | | 23 | 10·5 | 20·7 | |
| 10·8 | | | 23·0 | 46·0 | |
| 10·0 | | | 36·0 | 50·1 | |
| 11·0 | | | 39·0 | 30·1 | |
| 11·1 | | | 59·5 | 5·6 | |
| 10·2 | | 24 | 9·5 | 5·1 | |
| 9·0 | | | 17·3 | 59·8 | *g* |
| 9·8 | | | 19·5 | 29·9 | |
| 10·2 | | | 38·4 | 28·1 | |
| 11·0 | | | 50·9 | 39·5 | |
| 11·1 | | | 54·9 | 40·8 | |
| 10·2 | | 25 | 31·6 | 2·3 | |
| 10·4 | | 27 | 11·4 | 54·8 | |
| 9·2 | | | 44·4 | 11·5 | |
| 9·2 | | | 57·0 | 34·5 | 9·0 G*g* |
| 9·0 | | 28 | 53·5 | 23·7 | *g* |
| 8·8 | | 29 | 12·7 | 6·7 | 9·0 *g* |
| 8·6 | | | 41·0 | 16·7 | *g* |
| 10·2 | | 30 | 19·0 | 15·8 | |
| 10·2 | | | 41·0 | 17·6 | |
| 11·0 | | 31 | 0·5 | 54·7 | |
| 9·2 | | | 0·8 | 23·2 | |
| 10·4 | | 32 | 4·5 | 43·8 | |
| 6·9 | | | 9·3 | 59·9 | 7·0 GS*g* |
| 7·8 | | | 40·2 | 17·6 | GS*g* |
| 9·2 | | | 47·5 | 58·8 | 9·5 *g* |
| 11·0 | | 34 | 2·0 | 10·4 | |
| 10·2 | | 36 | 17·0 | 26·9 | |
| 8·4 | | | 50·1 | 29·8 | 9·0 *g* |
| 9·8 | | 37 | 25·6 | 28·4 | |
| 11·1 | | | 50·8 | 4·3 | |
| 10·6 | | 40 | 46·3 | 39·2 | |
| 11·0 | | | 53·8 | 57·7 | |
| 8·6 | | 41 | 15·4 | 36·1 | *g* |
| 10·6 | | | 47·8 | 45·3 | |
| 8·7 | | 42 | 38·4 | 43·9 | 10·0 *g* |
| 8·5 | | 52 | 45·0 | 5·2 | 9·5 *g* |

## 81—120.

| mag. | h (0h.—1h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 8·3 | 0 | 55 | 59·0 | 29·2 | 8·5 GS*g* |
| 8·9 | | 56 | 5·0 | 29·2 | 9·0 GS*g* |
| 9·5 | | | 27·0 | 58·4 | *g* |
| 8·9 | | | 42·0 | 57·5 | *g* |
| 9·5 | | 57 | 16·0 | 27·0 | 10·0 *g* |
| 9·2 | | 58 | 44·0 | 28·2 | 9·5 *g* |
| 9·5 | | 59 | 9·0 | 36·1 | |
| 9·5 | 1 | 3 | 43·0 | 31·1 | *g* |
| 9·6 | | 7 | 25·0 | 41·5 | |
| 9·9 | | 9 | 40·0 | 58·2 | *g* |
| 8·0 | | 13 | 13·0 | 37·4 | 9·0 G*g* |
| 9·6 | | 15 | 5·0 | 43·0 | *g* |
| 7·5 | | 16 | 46·0 | 48·3 | 8·0 GS*g* |
| 9·3 | | 18 | 9·0 | 12·5 | *g* |
| 9·5 | | 19 | 24·0 | 49·1 | *g* |
| 9·8 | | 22 | 57·1 | 15·0 | |
| 9·8 | | 23 | 22·4 | 59·1 | |
| 10·8 | | | 38·6 | 8·9 | |
| 10·9 | | 24 | 42·6 | 13·6 | |
| 9·4 | | 25 | 19·8 | 43·2 | *g* |
| 10·4 | | | 33·6 | 32·2 | |
| 10·0 | | | 42·1 | 11·4 | |
| 9·6 | | 26 | 37·3 | 38·2 | *g* |
| 10·4 | | 27 | 10·0 | 14·6 | |
| 10·6 | | | 15·1 | 28·2 | |
| 10·9 | | | 16·1 | 47·6 | |
| 10·9 | | | 54·6 | 14·8 | |
| 9·5 | | 29 | 9·3 | 35·4 | *g* |
| 10·7 | | 30 | 20·1 | 15·8 | |
| 10·9 | | 31 | 0·1 | 27·4 | |
| 10·9 | | 32 | 23·8 | 32·6 | |
| 8·3 | | | 37·3 | 20·1 | 9·0 *g* |
| 10·9 | | | 55·8 | 40·7 | |
| 10·0 | | | 58·0 | 0·3 | *g* |
| 10·7 | | 33 | 55·8 | 24·3 | |
| 10·2 | | | 56·1 | 47·2 | |
| 9·0 | | 35 | 43·6 | 3·9 | 8·5 G*g* |
| 10·9 | | | 46·1 | 20·0 | |
| 10·2 | | | 53·1 | 16·0 | |
| 10·7 | | | 57·6 | 50·8 | |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 71 | − 0·01 | 8·3 |
| | 20 | 65 | − 0·02 | 8·3 |
| | 30 | 59 | − 0·02 | 8·3 |
| | 40 | 54 | − 0·03 | 8·2 |
| | 50 | 48 | − 0·04 | 8·2 |
| 1 | 0 | 42 | − 0·05 | 8·1 |
| | 10 | 36 | − 0·05 | 8·0 |
| | 20 | 31 | − 0·06 | 7·9 |
| | 30 | 25 | − 0·07 | 7·7 |
| | 40 | + 20 | − 0·08 | + 7·6 |

d = minutes of decl.



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25 prec.

| h | m | a (s) | a (s) | δ (′) |
|---|---|---|---|---|
| 1 | 30 | + 25 | − 0.07 d | + 7.7 |
| | 40 | 20 | − 0.08 | 7.6 |
| | 50 | 15 | − 0.08 | 7.4 |
| 2 | 0 | 10 | − 0.09 | 7.2 |
| | 10 | + 5 | − 0.10 | 7.0 |
| | 20 | 0 | − 0.10 | 6.8 |
| | 30 | − 5 | − 0.11 | 6.6 |
| | 40 | 9 | − 0.11 | 6.4 |
| | 50 | 14 | − 0.12 | 6.2 |
| 3 | 0 | 18 | − 0.13 | 5.9 |
| | 10 | 22 | − 0.13 | 5.6 |
| | 20 | 26 | − 0.14 | 5.4 |
| | 30 | 30 | − 0.14 | 5.1 |
| | 40 | 33 | − 0.15 | 4.8 |
| | 50 | 36 | − 0.15 | 4.5 |
| 4 | 0 | 39 | − 0.15 | 4.2 |
| | 10 | 42 | − 0.16 | 3.9 |
| | 20 | 45 | − 0.16 | 3.5 |
| | 30 | 47 | − 0.16 | 3.2 |
| | 40 | 49 | − 0.17 | 2.9 |
| | 50 | 51 | − 0.17 | 2.5 |
| 5 | 0 | 53 | − 0.17 | 2.2 |
| | 10 | − 54 | − 0.17 | + 1.8 |

d = minutes of decl.

## 121—180.

| mag. | 1ʰ—2ʰ h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 10.2 | 1 | 36 | 54.6 | 12.6 | |
| 10.2 | | 37 | 21.6 | 31.2 | |
| 8.0 | | | 40.8 | 39.2 | 8.0 GSg |
| 10.0 | | | 43.1 | 32.8 | |
| 7.9 | | 39 | 31.6 | 52.5 | 8.5 GSg |
| 8.0 | | | 36.1 | 17.6 | GSg |
| 10.9 | | | 46.6 | 49.9 | |
| 10.0 | | | 55.6 | 10.9 | |
| 10.4 | | 40 | 16.6 | 54.4 | |
| 10.8 | | 42 | 4.1 | 12.1 | |
| 9.2 | | | 28.6 | 45.5 | 9.5 g |
| 9.8 | | | 47.1 | 24.7 | g |
| 10.9 | | 43 | 26.1 | 28.8 | |
| 10.2 | | | 26.1 | 50.9 | |
| 10.9 | | | 38.6 | 43.2 | |
| 10.7 | | 44 | 14.1 | 19.2 | |
| 9.5 | | | 23.1 | 4.8 | |
| 8.9 | | | 25.6 | 30.7 | 9.0 Gg |
| 10.9 | | 46 | 10.6 | 2.0 | |
| 10.2 | | 47 | 28.6 | 8.9 | |
| 10.4 | | 48 | 8.6 | 36.9 | |
| 10.2 | | | 39.1 | 16.3 | |
| 8.8 | | | 53.1 | 42.6 | 8.5 g |
| 9.4 | | 49 | 1.6 | 56.8 | g |
| 10.9 | | | 20.1 | 56.3 | |
| 9.6 | | | 36.6 | 27.9 | |
| 8.3 | | 50 | 39.1 | 36.5 | 8.5 g |
| 9.8 | | | 57.6 | 8.0 | g |
| 10.2 | | 52 | 25.6 | 46.5 | |
| 10.4 | | 53 | 30.1 | 59.5 | |
| 10.9 | | | 39.1 | 11.0 | |
| 9.8 | | 55 | 26.6 | 41.7 | |
| 10.0 | | 56 | 42.6 | 45.6 | |
| 10.2 | | 57 | 47.1 | 56.8 | g |
| 10.0 | | 58 | 59.6 | 5.5 | g |
| 9.4 | | 59 | 23.1 | 21.7 | 9.5 g |
| 9.8 | | | 26.1 | 10.0 | g |
| 10.2 | 2 | 0 | 8.6 | 24.1 | g |
| 9.0 | | 1 | 42.8 | 31.0 | g |
| 10.2 | | 2 | 8.8 | 11.1 | |
| 9.2 | | | 36.8 | 30.0 | g |
| 9.5 | | | 56.8 | 47.7 | |
| 10.0 | | 3 | 4.3 | 25.0 | g |
| 10.7 | | | 35.3 | 45.3 | |
| 9.5 | | 4 | 48.3 | 7.8 | g |
| 10.9 | | 6 | 3.3 | 6.0 | |
| 10.0 | | | 43.3 | 45.6 | |
| 10.9 | | 7 | 4.1 | 45.1 | |
| 10.0 | | 8 | 56.6 | 28.7 | |
| 7.8 | | 10 | 37.6 | 32.8 | GSg |
| 10.2 | | | 52.6 | 16.7 | |
| 10.8 | | 11 | 5.7 | 0.3 | |
| 8.0 | | | 6.1 | 53.1 | 8.0 GSg |
| 9.2 | | | 19.6 | 41.6 | 9.5 Gg |
| 10.4 | | | 24.1 | 30.1 | |
| 10.2 | | 12 | 21.6 | 32.7 | |
| 9.0 | | | 25.1 | 40.2 | 9.2 Gg |
| 10.8 | | | 49.3 | 25.8 | |
| 10.9 | | 13 | 7.3 | 59.9 | |
| 9.0 | | 14 | 22.3 | 36.8 | 9.0 g |

## 181—240.

| mag. | 2ʰ—3ʰ h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 7.4 | 2 | 14 | 22.3 | 56.4 | 6.5 GSg |
| 10.8 | | 15 | 58.3 | 20.7 | |
| 10.9 | | 16 | 15.8 | 47.6 | |
| 8.7 | | 18 | 41.8 | 1.4 | g |
| 10.9 | | | 51.3 | 26.2 | |
| 8.4 | | 19 | 18.3 | 19.1 | 9.0 g |
| 10.9 | | | 32.3 | 3.7 | |
| 10.2 | | | 36.9 | 6.7 | |
| 10.0 | | | 37.5 | 57.7 | |
| 10.4 | | | 47.9 | 48.4 | |
| 10.4 | | 20 | 48.9 | 10.3 | |
| 10.9 | | 21 | 19.9 | 46.9 | |
| 10.9 | | 22 | 48.4 | 23.0 | |
| 10.0 | | 23 | 4.9 | 20.0 | g |
| 10.9 | | 24 | 21.9 | 44.7 | |
| 10.9 | | 25 | 13.1 | 42.8 | |
| 10.6 | | | 52.6 | 46.7 | |
| 10.9 | | 26 | 36.6 | 33.6 | |
| 10.2 | | 27 | 30.1 | 6.0 | |
| 10.9 | | | 27.1 | 54.0 | |
| 8.2 | | | 48.0 | 17.8 | 7.5 GSg |
| 9.2 | | | 48.0 | 35.8 | 9.5 g |
| 10.9 | | 28 | 46.1 | 33.6 | |
| 9.0 | | 30 | 1.6 | 22.1 | 8.5 g |
| 10.2 | | | 16.4 | 22.5 | |
| 7.8 | | | 29.7 | 20.1 | 8.0 GSg |
| 10.4 | | | 47.7 | 1.7 | |
| 10.7 | | 31 | 18.9 | 5.6 | |
| 10.4 | | 32 | 16.9 | 18.8 | |
| 9.2 | | 33 | 37.2 | 8.3 | g |
| 6.8 | | | 50.0 | 26.4 | 7.0 GSg |
| 10.9 | | 35 | 16.1 | 23.0 | |
| 10.8 | | 37 | 9.1 | 53.9 | |
| 10.7 | | | 16.9 | 41.0 | |
| 8.8 | | 45 | 12.5 | 59.9 | 9.0 g |
| 9.2 | | | 17.0 | 14.1 | |
| 8.0 | | 47 | 48.0 | 42.9 | 7.5 GSg |
| 9.2 | | 50 | 49.0 | 49.5 | g |
| 9.6 | | 52 | 27.0 | 30.1 | G |
| 9.3 | | 54 | 0.0 | 11.4 | 8.5 g |
| 9.6 | | | 2.0 | 17.4 | g |
| 8.6 | | 55 | 42.0 | 20.0 | g |
| 8.0 | | 59 | 33.0 | 49.5 | 8.0 g |
| 9.1 | 3 | 2 | 58.0 | 39.4 | 8.5 g |
| 9.7 | | 3 | 38.0 | 41.3 | g |
| 9.3 | | 5 | 42.0 | 45.0 | g |
| 8.0 | | 7 | 3.0 | 10.4 | 8.0 Gg |
| 8.8 | | 11 | 26.0 | 7.2 | g |
| 9.3 | | 12 | 23.0 | 10.7 | 8.0 Gg |
| 7.8 | | 13 | 13.0 | 16.6 | g |
| 9.2 | | 18 | 20.5 | 59.0 | g |
| 8.5 | | 19 | 50.0 | 15.0 | g |
| 9.3 | | 22 | 20.0 | 19.0 | g |
| 9.4 | | 26 | 11.0 | 35.6 | |
| 9.9 | | 29 | 10.0 | 22.6 | |
| 9.8 | | | 28.0 | 50.6 | |
| 9.4 | | | 42.0 | 45.9 | g |
| 9.4 | | 31 | 13.0 | 46.9 | g |
| 9.4 | | | 41.0 | 4.7 | g |
| 9.7 | | 38 | 47.0 | 7.7 | |

## 241—300.

| mag. | 3ʰ—5ʰ h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 9.5 | 3 | 39 | 7.0 | 30.5 | |
| 8.6 | | 41 | 19.0 | 9.8 | 7.5 GSg |
| 9.9 | | 42 | 12.0 | 58.8 | |
| 9.9 | | 43 | 2.0 | 35.9 | g |
| 9.4 | | 45 | 34.0 | 34.2 | g |
| 9.7 | | 47 | 21.0 | 20.4 | |
| 8.7 | | 50 | 43.0 | 48.1 | 8.5 GSg |
| 8.8 | | 51 | 3.0 | 50.9 | 8.5 GSg |
| 9.4 | | | 43.0 | 4.6 | 9.0 g |
| 9.7 | | 52 | 58.0 | 20.9 | |
| 8.5 | | 53 | 25.0 | 15.8 | 7.5 GSg |
| 9.4 | | | 43.0 | 46.3 | |
| 9.5 | | 54 | 36.0 | 45.5 | g |
| 9.7 | | 55 | 58.0 | 28.5 | |
| 8.8 | | 56 | 24.0 | 50.2 | 9.5 g |
| 9.8 | | 58 | 24.0 | 11.1 | |
| 9.8 | | 59 | 42.0 | 16.8 | g |
| 9.9 | | | 59.0 | 5.1 | |
| 7.9 | 4 | 0 | 57.0 | 51.7 | 8.0 GSg |
| 9.2 | | 2 | 41.0 | 0.5 | 9.5 g |
| 8.7 | | 7 | 7.0 | 52.8 | |
| 9.5 | | 9 | 3.5 | 0.0 | |
| 8.9 | | 11 | 9.0 | 11.2 | 9.0 g |
| 9.5 | | 12 | 50.0 | 55.8 | 9.0 g |
| 8.3 | | 18 | 7.0 | 6.8 | 8.0 GSg |
| 9.4 | | 19 | 12.0 | 17.5 | g |
| 9.9 | | | 13.0 | 44.9 | |
| 9.5 | | 20 | 47.0 | 50.7 | |
| 8.3 | | 22 | 39.0 | 0.7 | 8.5 g |
| 8.3 | | 24 | 56.0 | 1.0 | 9.0 g |
| 9.5 | | 25 | 15.0 | 34.5 | g |
| 9.5 | | 27 | 11.0 | 51.2 | |
| 9.4 | | | 12.0 | 27.9 | g |
| 9.8 | | 28 | 22.0 | 33.4 | g |
| 9.6 | | | 44.0 | 26.1 | g |
| 9.8* | | | 49.0 | 30.9 | ! |
| 9.2 | | 29 | 19.0 | 28.0 | g |
| 9.2 | | | 23.5 | 0.7 | |
| 8.9 | | 31 | 11.5 | 48.3 | 9.0 g |
| 9.4 | | 32 | 23.5 | 40.3 | g |
| 8.9 | | 33 | 28.5 | 23.1 | |
| 9.6 | | 35 | 12.0 | 19.5 | |
| 9.3 | | | 46.0 | 56.4 | |
| 9.2 | | 38 | 54.0 | 21.4 | g |
| 9.2 | | 39 | 35.5 | 21.3 | g |
| 9.6 | | 41 | 9.0 | 27.9 | g |
| 9.3 | | 42 | 52.0 | 27.2 | g |
| 9.2 | | 43 | 29.0 | 17.9 | g |
| 9.6 | | 45 | 17.0 | 50.0 | |
| 9.3 | | | 37.0 | 22.0 | g |
| 8.9 | | 46 | 34.0 | 28.8 | 9.5 g |
| 9.5 | | 47 | 48.0 | 47.1 | |
| 9.7 | | 48 | 12.0 | 58.6 | |
| 8.1 | | | 33.0 | 31.7 | 8.0 GSg |
| 8.9 | | 50 | 13.0 | 31.2 | 9.0 Gg |
| 9.3 | | 52 | 45.0 | 28.6 | g |
| 9.3 | | 55 | 58.0 | 6.7 | 9.5 g |
| 9.3 | | 58 | 55.0 | 20.3 | 9.5 g |
| 9.7 | 5 | 1 | 23.0 | 22.9 | |
| 9.7 | | | 25.0 | 41.8 | |



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### 301—360.

| mag. | h ($5^h$) | m | s | $-76°$ ′ | |
|---|---|---|---|---|---|
| 9·7 | 5 | 1 | 41·0 | 20·9 | g |
| 9·7 | | 3 | 31·0 | 7·8 | |
| 7·6 | | 6 | 59·0 | 47·5 | 8·0 GSg |
| 9·2 | | 9 | 9·0 | 31·2 | g |
| 9·6 | | | 57·0 | 53·2 | g |
| 9·7 | | 12 | 18·0 | 31·9 | g |
| 8·8 | | | 47·0 | 35·6 | 9·2 g |
| 9·6 | | 13 | 31·0 | 53·8 | |
| 8·9 | | | 54·0 | 36·6 | 9·5 g |
| 9·2 | | 14 | 51·0 | 16·8 | 9·0 g |
| 9·4 | | 17 | 4·0 | 43·9 | |
| 9·5 | | | 27·0 | 15·8 | |
| 9·7 | | 20 | 56·0 | 41·5 | g |
| 9·5 | | 21 | 34·0 | 58·7 | g |
| 9·7 | | | 53·0 | 27·9 | g |
| 9·7 | | 22 | 4·0 | 27·2 | g |
| 9·6 | | | 28·0 | 52·2 | |
| 8·0 | | 25 | 49·5 | 1·7 | 8·5 GSg |
| 8·9 | | 27 | 55·5 | 43·1 | Gg |
| 9·6 | | 28 | 37·5 | 17·0 | |
| 9·6 | | 29 | 28·0 | 24·4 | |
| 9·3 | | | 53·0 | 59·9 | g |
| 9·9 | | 30 | 3·0 | 42·1 | |
| 9·5 | | 31 | 7·0 | 11·0 | g |
| 9·4 | | | 11·0 | 48·0 | g |
| 9·4 | | | 33·0 | 17·3 | g |
| 9·9 | | | 37·0 | 34·9 | |
| 9·9 | | 33 | 27·0 | 31·0 | |
| 8·8 | | 34 | 57·0 | 19·8 | 8·5 Gg |
| 9·5 | | 35 | 10·5 | 25·2 | |
| 9·6 | | 36 | 14·0 | 14·8 | g |
| 9·8 | | | 26·0 | 56·2 | |
| 7·1 | | | 49·0 | 25·5 | 5·3 GScg |
| 9·6 | | 37 | 21·0 | 41·8 | |
| 9·9 | | 38 | 3·0 | 6·2 | |
| 9·6 | | | 27·0 | 50·6 | g |
| 9·5 | | | 33·5 | 58·0 | |
| 9·5 | | 40 | 46·0 | 32·8 | g |
| 9·1 | | 41 | 17·0 | 4·9 | 8·8 g |
| 9·9 | | | 35·0 | 0·4 | |
| 9·2 | | 42 | 44·0 | 44·1 | g |
| 9·5 | | | 55·0 | 29·1 | |
| 9·8 | | | 56·0 | 29·9 | |
| 9·3 | | 43 | 54·0 | 21·4 | g |
| 9·3 | | 44 | 21·0 | 5·2 | g |
| 9·6 | | | 35·0 | 21·2 | |
| 9·9 | | | 37·0 | 7·7 | |
| 9·4 | | 45 | 22·0 | 26·2 | g |
| 9·2 | | 46 | 25·0 | 7·4 | |
| 9·8 | | | 39·0 | 23·0 | |
| 9·9 | | 48 | 38·0 | 31·1 | |
| 8·9 | | | 55·0 | 49·0 | 9·0 g |
| 9·8 | | 50 | 33·0 | 47·7 | g |
| 9·9 | | | 35·0 | 49·9 | |
| 8·9 | | 51 | 31·0 | 12·0 | 9·0 g |
| 9·1 | | 53 | 2·0 | 7·8 | 9·0 g |
| 9·4 | | | 45·0 | 34·0 | 9·2 g |
| 9·3 | | 54 | 37·0 | 6·8 | 8·5 g |
| 9·9 | | 57 | 10·0 | 36·0 | |
| 9·2 | | 58 | 31·0 | 51·7 | 9·5 g |

### 361—420.

| mag. | h ($5^h$—$6^h$) | m | s | $-76°$ ′ | |
|---|---|---|---|---|---|
| 9·6 | 5 | 58 | 48·5 | 1·3 | |
| 8·4 | 6 | 0 | 15·0 | 49·0 | 9·0 g |
| 9·4 | | | 21·0 | 1·6 | 9·0 g |
| 9·0 | | | 55·0 | 5·9 | 9·2 g |
| 9·6 | | 2 | 34·0 | 17·8 | |
| 9·6 | | 3 | 10·0 | 14·0 | |
| 9·1 | | 5 | 59·0 | 25·5 | 9·5 g |
| 9·4 | | 6 | 33·0 | 56·1 | |
| 9·9 | | 7 | 29·0 | 51·7 | |
| 9·9 | | | 36·0 | 35·0 | |
| 9·5 | | 10 | 37·0 | 22·8 | |
| 9·8 | | | 47·0 | 0·8 | |
| 9·4 | | | 49·0 | 49·9 | g |
| 9·2 | | 11 | 24·0 | 19·9 | 9·5 g |
| 9·9 | | | 41·0 | 32·3 | |
| 8·5 | | 12 | 50·0 | 39·8 | 9·0 g |
| 9·4 | | | 54·0 | 19·1 | |
| 9·2 | | | 59·0 | 54·0 | g |
| 9·4 | | 14 | 27·0 | 59·8 | 9·2 g |
| 9·2 | | | 54·0 | 13·0 | g |
| 9·9 | | 15 | 50·0 | 12·2 | |
| 9·1 | | 17 | 42·0 | 56·4 | 9·2 g |
| 9·5 | | 18 | 5·0 | 43·6 | |
| 8·3 | | 20 | 15·0 | 8·7 | g |
| 9·5 | | 21 | 20·0 | 33·0 | |
| 9·2 | | | 30·0 | 34·7 | g |
| 8·6 | | 23 | 18·0 | 34·8 | 8·2 Gg |
| 9·4 | | 24 | 17·0 | 40·0 | g |
| 9·8* | | 27 | 50·0 | 2·0 | |
| 9·5 | | 28 | 15·5 | 41·2 | |
| 9·5 | | 30 | 31·5 | 20·5 | |
| 9·3 | | 31 | 3·5 | 55·0 | 9·0 g |
| 9·5 | | | 46·0 | 35·1 | |
| 9·6 | | 32 | 32·5 | 29·4 | |
| 9·3 | | | 37·0 | 38·7 | |
| 9·4 | | 33 | 26·5 | 0·0 | 9·0 |
| 9·6 | | | 28·5 | 6·9 | |
| 9·3 | | | 49·5 | 2·0 | 8·8 g |
| 9·6 | | 34 | 39·5 | 21·7 | |
| 9·4 | | | 50·0 | 40·9 | 9·5 |
| 9·2 | | 35 | 6·5 | 20·6 | g |
| 8·9 | | | 23·0 | 6·1 | 8·0 Gg |
| 9·4 | | | 59·5 | 45·0 | |
| 9·5 | | 38 | 9·0 | 40·8 | |
| 9·4 | | 40 | 14·0 | 52·9 | g |
| 9·8 | | | 24·0 | 31·7 | |
| 9·6 | | 41 | 58·0 | 17·5 | |
| 9·2 | | 42 | 1·0 | 40·9 | 8·0 g |
| 9·5 | | | 36·0 | 23·5 | |
| 9·4 | | | 54·0 | 37·3 | |
| 9·0 | | 43 | 6·0 | 48·5 | 9·5 g |
| 9·6 | | | 18·0 | 27·7 | |
| 9·3 | | | 40·0 | 23·3 | |
| 9·6 | | 45 | 45·0 | 48·8 | |
| 9·3 | | 48 | 20·0 | 33·8 | |
| 9·6 | | | 40·0 | 44·0 | |
| 9·4 | | | 55·0 | 15·9 | g |
| 9·4 | | 49 | 49·0 | 46·7 | |
| 9·4 | | 50 | 15·0 | 54·7 | |
| 9·6 | | | 34·0 | 53·3 | |

### 421—480.

| mag. | h ($6^h$—$7^h$) | m | s | $-76°$ ′ | |
|---|---|---|---|---|---|
| 9·5 | 6 | 52 | 33·0 | 8·9 | |
| 8·5 | | | 39·0 | 42·0 | 7·0 GSg |
| 9·3 | | | 42·0 | 41·8 | |
| 9·6 | | 54 | 8·0 | 19·1 | |
| 9·5 | | | 28·0 | 19·1 | |
| 9·3 | | 56 | 55·5 | 58·3 | 10·0 G |
| 9·0 | | 57 | 1·0 | 58·5 | 9·0 G |
| 9·1 | 7 | 1 | 52·0 | 27·8 | g |
| 9·0 | | 4 | 13·0 | 31·3 | 9·5 g |
| 9·0 | | 5 | 56·0 | 57·9 | |
| 9·5 | | 8 | 30·0 | 42·7 | G |
| 9·5 | | | 57·0 | 37·8 | |
| 9·5 | | 9 | 15·0 | 12·2 | |
| 9·8 | | 13 | 22·0 | 44·5 | |
| 9·8 | | | 29·0 | 39·3 | |
| 9·8 | | | 29·0 | 11·7 | |
| 9·4 | | 14 | 15·0 | 57·9 | |
| 9·8 | | | 49·0 | 23·9 | |
| 9·8 | | 15 | 24·0 | 59·0 | |
| 9·1 | | | 25·0 | 48·6 | |
| 9·8 | | 17 | 51·0 | 14·0 | |
| 9·6 | | 18 | 57·0 | 52·2 | |
| 9·6 | | 19 | 5·0 | 42·7 | |
| 9·1 | | 20 | 13·0 | 47·8 | 8·8 g |
| 8·2 | | 23 | 25·0 | 10·7 | 8·2 GSg |
| 9·5 | | | 54·0 | 29·8 | |
| 9·6 | | 24 | 28·0 | 26·8 | |
| 9·2 | | 25 | 4·5 | 3·9 | 10·0 |
| 9·8 | | | 55·5 | 8·7 | |
| 9·8 | | 28 | 3·0 | 24·7 | |
| 9·8 | | 29 | 1·0 | 11·8 | |
| 9·4 | | | 12·5 | 48·9 | |
| 9·2 | | 30 | 21·0 | 55·7 | g |
| 9·1 | | | 33·5 | 24·4 | g |
| 9·8 | | 31 | 11·0 | 47·9 | |
| 9·5 | | 33 | 43·5 | 32·7 | |
| 9·7 | | 35 | 58·5 | 52·9 | |
| 7·1 | | 38 | 1·5 | 48·0 | 7·2 GSg |
| 9·3 | | | 14·0 | 43·7 | 10·0 g |
| 9·4 | | | 23·0 | 1·9 | |
| 9·3 | | 41 | 14·0 | 32·6 | |
| 9·5 | | | 25·5 | 0·4 | |
| 9·5 | | 43 | 13·0 | 7·9 | |
| 9·5 | | | 50·0 | 9·9 | |
| 9·5 | | 44 | 24·0 | 31·5 | |
| 9·5 | | | 25·0 | 7·6 | |
| 9·9 | | | 30·0 | 18·7 | |
| 9·7 | | 45 | 5·0 | 21·2 | |
| 8·6 | | | 25·0 | 58·4 | 9·0 g |
| 9·9 | | 46 | 6·0 | 28·3 | |
| 9·8 | | | 40·0 | 21·1 | |
| 9·9 | | 47 | 27·0 | 53·0 | |
| 9·9 | | 48 | 54·0 | 53·2 | |
| 9·4 | | 49 | 33·0 | 2·3 | g |
| 9·8 | | 50 | 51·0 | 51·9 | |
| 9·8 | | 52 | 25·0 | 54·9 | |
| 8·0 | | | 47·0 | 26·9 | 8·5 g |
| 8·6 | | | 50·0 | 49·7 | 9·0 g |
| 9·8 | | 53 | 42·0 | 45·9 | |
| 9·8 | | 54 | 14·0 | 4·9 | |

25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 5 | 0 | − 53 | − 0·17 | d | + 2·2 |
| | 10 | 54 | − 0·17 | | 1·8 |
| | 20 | 55 | − 0·18 | | 1·5 |
| | 30 | 56 | − 0·18 | | 1·1 |
| | 40 | 57 | − 0·18 | | 0·7 |
| | 50 | 57 | − 0·18 | | + 0·4 |
| 6 | 0 | 57 | − 0·18 | | 0·0 |
| | 10 | 57 | − 0·18 | | − 0·4 |
| | 20 | 57 | − 0·18 | | 0·7 |
| | 30 | 56 | − 0·18 | | 1·1 |
| | 40 | 55 | − 0·18 | | 1·5 |
| | 50 | 54 | − 0·17 | | 1·8 |
| 7 | 0 | 53 | − 0·17 | | 2·2 |
| | 10 | 51 | − 0·17 | | 2·5 |
| | 20 | 49 | − 0·17 | | 2·9 |
| | 30 | 47 | − 0·16 | | 3·2 |
| | 40 | 45 | − 0·16 | | 3·5 |
| | 50 | 42 | − 0·16 | | 3·9 |
| 8 | 0 | − 39 | − 0·15 | | − 4·2 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | | δ (′) |
|---|---|---|---|---|
| 7 | 50 | − 42 | − 0.16 d | − 3.9 |
| 8 | 0 | 39 | − 0.15 | 4.2 |
| | 10 | 36 | − 0.15 | 4.5 |
| | 20 | 33 | − 0.15 | 4.8 |
| | 30 | 30 | − 0.14 | 5.1 |
| | 40 | 26 | − 0.14 | 5.4 |
| | 50 | 22 | − 0.13 | 5.6 |
| 9 | 0 | 18 | − 0.13 | 5.9 |
| | 10 | 14 | − 0.12 | 6.2 |
| | 20 | 9 | − 0.11 | 6.4 |
| | 30 | − 5 | − 0.11 | 6.6 |
| | 40 | 0 | − 0.10 | 6.8 |
| | 50 | + 5 | − 0.10 | 7.0 |
| 10 | 0 | 10 | − 0.09 | 7.2 |
| | 10 | 15 | − 0.08 | 7.4 |
| | 20 | 20 | − 0.08 | 7.6 |
| | 30 | 25 | − 0.07 | 7.7 |
| | 40 | 31 | − 0.06 | 7.9 |
| | 50 | 36 | − 0.05 | 8.0 |
| 11 | 0 | 42 | − 0.05 | 8.1 |
| | 10 | 48 | − 0.04 | 8.2 |
| | 20 | + 54 | − 0.03 | − 8.2 |

d = minutes of decl.

## 481—540.

7h.—8h. −76°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 8.6 | 7 | 56 | 35.0 | 16.7 | 9.2 *g* |
| 9.6 | | | 41.0 | 49.2 | |
| 9.7 | | 57 | 50.0 | 13.9 | 9.5 *g* |
| 9.3 | | 58 | 57.0 | 9.7 | 8.8 S*g* |
| 9.8 | | 59 | 2.5 | 59.9 | |
| 9.8 | 8 | 2 | 18.0 | 40.3 | |
| 9.5 | | 3 | 54.0 | 43.8 | |
| 9.3 | | 5 | 0.0 | 53.2 | |
| 9.5 | | 6 | 26.0 | 16.2 | |
| 9.4 | | 8 | 5.0 | 20.2 | 9.5 *g* |
| 9.8 | | | 15.0 | 54.9 | |
| 9.5 | | 9 | 34.0 | 43.4 | *g* |
| 9.8 | | 11 | 37.0 | 16.2 | 10.0 |
| 8.9 | | 12 | 6.0 | 15.4 | 8.8 *g* |
| 9.6 | | 14 | 9.0 | 40.7 | |
| 9.3 | | | 34.0 | 21.6 | 9.0 *g* |
| 9.0 | | | 52.0 | 43.0 | 8.0 *g* |
| 9.9 | | 15 | 41.0 | 41.8 | |
| 9.8 | | 16 | 43.0 | 9.0 | |
| 9.3 | | | 57.0 | 32.1 | |
| 9.8 | | 17 | 54.0 | 23.2 | |
| 9.5 | | 18 | 25.0 | 42.1 | |
| 9.9 | | | 42.0 | 1.9 | |
| 9.4 | | 19 | 9.0 | 7.3 | 9.0 *g* |
| 9.5 | | | 39.0 | 56.8 | |
| 8.3 | | | 52.0 | 2.2 | 8.5 *g* |
| 4.5 | | 21 | 42.0 | 31.4 | 4.0 GSc*g*rλ |
| 9.4 | | | 53.0 | 27.5 | *g* |
| 9.6 | | | 57.0 | 48.1 | |
| 9.1 | | 22 | 3.0 | 22.4 | |
| 9.6 | | | 11.0 | 23.3 | |
| 9.4 | | | 25.0 | 40.2 | |
| 9.5 | | | 31.0 | 52.0 | |
| 7.4 | | 25 | 34.5 | 1.4 | 8.0 GS*g* |
| 8.6 | | | 41.5 | 1.7 | 8.5 GS*g* |
| 9.1 | | 28 | 59.0 | 11.1 | 8.8 *g* |
| 9.9 | | 29 | 23.5 | 50.6 | |
| 9.2 | | | 59.5 | 49.5 | |
| 9.3 | | 30 | 15.5 | 19.2 | 9.5 *g* |
| 9.7 | | 31 | 32.0 | 46.5 | |
| 9.5 | | | 45.0 | 44.5 | |
| 9.2 | | | 49.5 | 50.3 | |
| 9.3 | | 32 | 6.0 | 33.8 | |
| 8.8 | | 34 | 37.5 | 59.5 | 9.5 *g* |
| 8.3 | | 35 | 11.5 | 30.0 | 8.0 GS*g* |
| 9.7 | | | 47.5 | 58.2 | |
| 9.7 | | 37 | 11.0 | 44.8 | |
| 8.5 | | 38 | 35.0 | 33.8 | 7.5 GS*g* |
| 9.3 | | 39 | 18.0 | 52.2 | |
| 8.3 | | 40 | 18.0 | 17.7 | 7.8 GS*g* |
| 9.7 | | 41 | 1.0 | 28.7 | |
| 9.5 | | | 58.0 | 19.0 | |
| 8.9 | | 42 | 6.0 | 36.5 | |
| 9.6 | | | 53.0 | 39.3 | |
| 9.5 | | 44 | 18.5 | 56.4 | |
| 9.5 | | | 33.0 | 53.7 | |
| 9.6 | | | 33.0 | 14.8 | |
| 7.8 | | 45 | 34.0 | 39.7 | 8.0 GS*g* |
| 7.7 | | 46 | 9.0 | 35.5 | 8.0 GS*g* |
| 9.5 | | | 50.0 | 22.2 | |

## 541—600.

8h.—9h. −76°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9.1 | 8 | 46 | 52.0 | 20.8 | *g* |
| 9.5 | | | 52.0 | 2.4 | |
| 9.4 | | 47 | 37.0 | 21.8 | *g* |
| 7.1 | | 48 | 7.0 | 36.7 | 7.0 GS*g* |
| 9.7 | | 52 | 36.0 | 59.7 | |
| 8.9 | | 53 | 3.0 | 48.9 | 9.5 *g* |
| 9.3 | | 54 | 6.0 | 45.7 | |
| 9.1 | | | 21.0 | 53.0 | 9.5 *g* |
| 9.7 | | 55 | 7.0 | 32.5 | |
| 9.4 | | | 16.0 | 35.7 | |
| 9.7 | | | 22.0 | 18.8 | |
| 9.7 | | | 35.0 | 19.8 | |
| 9.5 | | 56 | 58.0 | 45.1 | |
| 9.4 | | 57 | 17.0 | 10.5 | |
| 9.4 | 9 | 0 | 36.0 | 39.9 | |
| 9.7 | | | 40.0 | 19.0 | |
| 9.5 | | | 51.0 | 55.0 | |
| 9.1 | | 2 | 9.0 | 54.9 | |
| 9.7 | | | 30.0 | 32.7 | |
| 9.6 | | 3 | 15.5 | 0.7 | |
| 9.1 | | | 44.5 | 57.2 | |
| 8.5 | | | 47.0 | 23.9 | 9.0 *g* |
| 9.7 | | 5 | 55.0 | 11.6 | |
| 9.7 | | 6 | 0.0 | 35.9 | |
| 9.5 | | | 13.0 | 28.0 | |
| 9.6 | | | 52.0 | 5.9 | |
| 9.7 | | 7 | 34.5 | 57.0 | |
| 7.3 | | | 36.0 | 3.6 | 8.0 GS*g* |
| 8.4 | | 8 | 4.0 | 17.7 | 8.5 *g* |
| 9.7 | | | 24.0 | 20.0 | *g* |
| 9.2 | | 9 | 8.0 | 28.0 | 9.0 *g* |
| 9.7 | | | 14.0 | 56.8 | |
| 9.6 | | 10 | 47.0 | 0.4 | 10.0 *g* |
| 7.2 | | 13 | 27.0 | 8.4 | 6.7 GS*g* |
| 9.3 | | | 39.0 | 6.7 | 9.8 |
| 9.5 | | 15 | 57.0 | 48.8 | |
| 9.7 | | 16 | 14.0 | 47.0 | |
| 9.6 | | 17 | 1.0 | 31.4 | |
| 9.7 | | 18 | 3.0 | 38.0 | *g* |
| 9.7 | | | 10.0 | 39.4 | |
| 9.0 | | | 23.0 | 40.0 | 10.0 *g* |
| 8.9 | | | 47.0 | 14.9 | |
| 9.7 | | 24 | 2.0 | 31.7 | |
| 8.5 | | 25 | 22.0 | 11.0 | GS*g* |
| 8.5 | | 26 | 9.0 | 42.5 | 8.0 GS*g* |
| 9.7 | | 27 | 41.0 | 59.6 | |
| 9.6 | | | 45.0 | 41.6 | 9.0 *g* |
| 9.6 | | 29 | 31.0 | 1.2 | *g* |
| 9.5 | | | 46.5 | 56.8 | |
| 9.9 | | 31 | 22.0 | 14.5 | ? |
| 9.5 | | 34 | 26.0 | 5.6 | |
| 9.4 | | 40 | 19.0 | 12.1 | |
| 9.9 | | 41 | 6.0 | 3.9 | *g* |
| 9.4 | | 42 | 18.0 | 53.6 | |
| 9.9 | | | 41.0 | 30.9 | |
| 9.5 | | 43 | 35.0 | 25.3 | *g* |
| 8.0 | | | 50.0 | 11.5 | 8.5 GS*g* |
| 7.4 | | 46 | 16.0 | 11.6 | 6.0 GS*gg* |
| 9.9 | | 47 | 14.0 | 14.3 | |
| 8.9 | | 49 | 7.0 | 25.7 | 7.5 G*g* |

## 601—660.

9h.—11h. −76°

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| 9.6 | 9 | 50 | 10.0 | 19.9 | 9.5 *g* |
| 9.3 | | | 58.0 | 44.1 | 9.0 *g* |
| 9.9 | | 51 | 29.0 | 10.0 | |
| 9.9 | | | 44.0 | 35.9 | |
| 9.3 | | 55 | 21.0 | 22.9 | |
| 9.0 | | | 24.0 | 41.7 | 8.0 G*g* |
| 9.6 | | | 47.0 | 10.0 | 9.0 |
| 9.6 | | | 54.0 | 10.6 | |
| 8.6 | | 58 | 37.0 | 9.3 | 9.0 *g* |
| 9.5 | | 59 | 59.0 | 6.8 | *g* |
| 9.8 | 10 | 2 | 11.0 | 6.2 | |
| 9.6 | | 4 | 37.0 | 0.5 | |
| 9.6 | | 6 | 30.0 | 39.8 | *g* |
| 9.3 | | | 43.0 | 55.8 | *g* |
| 9.9 | | 7 | 42.0 | 9.0 | |
| 9.5 | | | 49.0 | 3.2 | *g* |
| 9.5 | | 8 | 49.0 | 14.2 | |
| 9.6 | | 11 | 11.0 | 43.2 | |
| 8.7 | | 14 | 15.0 | 27.8 | 9.0 *g* |
| 9.5 | | | 32.0 | 18.8 | |
| 9.6 | | | 41.0 | 46.3 | |
| 9.8 | | 15 | 7.0 | 51.0 | |
| 9.9 | | | 18.0 | 27.4 | |
| 9.9 | | | 47.0 | 4.9 | |
| 9.9 | | 17 | 59.0 | 15.9 | |
| 9.1 | | 19 | 6.0 | 20.1 | 8.5 *g* |
| 9.3 | | 21 | 6.0 | 25.9 | 9.5 *g* |
| 9.6 | | 22 | 12.0 | 6.0 | |
| 9.6 | | | 52.0 | 25.4 | *g* |
| 9.8 | | 23 | 27.0 | 14.0 | |
| 9.6 | | 25 | 44.5 | 21.2 | |
| 9.3 | | 28 | 54.5 | 16.9 | *g* |
| 9.9 | | 30 | 1.5 | 9.5 | |
| 9.9 | | | 3.0 | 12.0 | |
| 9.5 | | | 24.0 | 2.9 | |
| 9.5 | | | 39.0 | 15.6 | 9.0 *g* |
| 9.7 | | 38 | 20.5 | 0.9 | |
| 9.2 | | 42 | 34.0 | 35.3 | *g* |
| 9.3 | | 44 | 12.0 | 56.7 | *g* |
| 9.8 | | 46 | 0.0 | 45.5 | |
| 9.5 | | | 14.0 | 32.6 | *g* |
| 9.2 | | | 49.0 | 26.8 | *g* |
| 8.3 | | 48 | 8.0 | 27.5 | 8.0 GS*g* |
| 9.9 | | | 32.0 | 44.9 | |
| 9.4 | | 51 | 28.0 | 51.5 | *g* |
| 9.8 | | 53 | 22.0 | 0.4 | |
| 9.6 | | 55 | 55.0 | 25.7 | *g* |
| 9.7 | | 57 | 6.0 | 21.1 | |
| 9.4 | | 58 | 3.0 | 4.9 | *g* |
| 9.3 | | | 10.0 | 56.0 | *g* |
| 9.5 | 11 | 0 | 4.5 | 15.5 | |
| 9.9 | | 3 | 52.0 | 57.7 | |
| 9.5 | | 4 | 27.0 | 2.0 | *g* |
| 8.5 | | | 32.0 | 58.8 | *g* |
| 9.8 | | 10 | 14.0 | 20.1 | |
| 9.9 | | 11 | 11.0 | 21.1 | *g* |
| 8.2 | | | 21.0 | 50.1 | GS*g* |
| 9.1 | | 13 | 2.0 | 12.0 | 9.5 *g* |
| 9.6 | | 14 | 11.0 | 26.1 | *g* |
| 9.5 | | 15 | 24.0 | 58.3 | 9.5 *g* |

## 661—720.

| mag. | h (11ʰ—12ʰ) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9·6 | 11 | 17 | 39·0 | 38·5 | g |
| 7·1 | | | 44·0 | 55·4 | 6·5 GSg |
| 9·8 | | 18 | 33·0 | 8·9 | 9·5 g |
| 9·5 | | | 36·5 | 2·0 | 8·5 g |
| 9·8 | | | 56·0 | 10·7 | |
| 9·5 | | | 56·5 | 59·7 | 9·0 g |
| 9·5 | | 21 | 26·0 | 50·5 | g |
| 9·9 | | 22 | 33·0 | 57·9 | |
| 9·6 | | 23 | 5·0 | 26·1 | |
| 9·8 | | | 31·0 | 54·9 | g |
| 9·8 | | 24 | 40·0 | 23·4 | |
| 9·7 | | 25 | 52·0 | 16·9 | g |
| 9·2 | | 26 | 26·5 | 22·9 | g |
| 9·5 | | 27 | 55·5 | 44·9 | g |
| 9·9 | | 28 | 49·0 | 45·3 | |
| 9·4 | | | 59·0 | 18·7 | g |
| 9·6 | | 30 | 54·5 | 9·1 | g |
| 9·3 | | 31 | 37·0 | 48·8 | g |
| 9·1 | | | 40·5 | 0·1 | 9·5 g |
| 9·2 | | 32 | 17·5 | 40·9 | g |
| 9·6 | | | 54·5 | 32·1 | |
| 9·6 | | 34 | 31·5 | 32·7 | |
| 9·6 | | | 35·5 | 46·5 | g |
| 9·6 | | | 56·5 | 37·0 | |
| 9·5 | | 35 | 6·0 | 9·0 | |
| 7·5 | | 36 | 12·5 | 21·5 | 7·0 GSg |
| 9·1 | | 40 | 1·5 | 5·2 | 9·0 g |
| 7·7 | | | 13·5 | 9·9 | 8·0 Gg |
| 8·2 | | 42 | 22·5 | 12·0 | 8·0 Gg |
| 9·2 | | 43 | 26·5 | 34·8 | |
| 9·1 | | | 53·5 | 49·7 | g |
| 9·3 | | 44 | 26·5 | 3·5 | |
| 8·8 | | 46 | 21·5 | 53·4 | g |
| 9·3 | | 47 | 6·5 | 8·6 | 9·5 g |
| 9·5 | | | 21·5 | 43·5 | |
| 9·6 | | 48 | 44·5 | 32·1 | |
| 8·9 | | 49 | 56·5 | 18·7 | 8·5 g |
| 9·5 | | 50 | 39·7 | 58·4 | |
| 9·1 | | 51 | 12·5 | 45·3 | GSgg |
| 9·6 | | 52 | 24·5 | 48·1 | Gg |
| 9·6 | | 53 | 24·5 | 28·7 | |
| 9·1 | | 54 | 16·0 | 16·7 | g |
| 9·6 | | | 28·0 | 0·1 | |
| 9·3 | | 55 | 39·0 | 16·8 | g |
| 9·6 | | | 54·0 | 49·9 | |
| 9·6 | | | 58·0 | 50·0 | |
| 9·5 | | 56 | 18·0 | 50·0 | |
| 9·5 | | | 58·0 | 34·8 | g |
| 9·6 | | 57 | 9·0 | 15·4 | |
| 9·6 | | 58 | 32·0 | 29·6 | |
| 9·2 | | | 35·0 | 30·2 | |
| 9·6 | | | 48·0 | 55·6 | |
| 9·5 | | 59 | 19·0 | 7·8 | |
| 9·6 | 12 | 1 | 15·0 | 22·6 | |
| 9·5 | | | 48·0 | 41·9 | g |
| 9·5 | | 2 | 14·5 | 59·6 | g |
| 9·5 | | 4 | 46·0 | 37·5 | |
| 9·6 | | 5 | 6·0 | 11·8 | |
| 9·6 | | 6 | 2·5 | 2·3 | |
| 9·3 | | | 56·0 | 23·2 | |

## 721—780.

| mag. | h (12ʰ—13ʰ) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9·5 | 12 | 7 | 11·5 | 28·3 | |
| 9·3 | | 8 | 46·0 | 6·8 | |
| 9·3 | | 10 | 2·5 | 40·3 | g |
| 9·5 | | | 9·5 | 57·2 | 9·0 g |
| 9·1 | | | 58·5 | 43·5 | g |
| 7·6 | | 12 | 38·5 | 6·2 | 7·5 GSg |
| 9·5 | | 14 | 38·5 | 5·9 | |
| 8·4 | | 16 | 2·5 | 59·3 | g |
| 8·2 | | | 59·5 | 31·1 | 7·5 GSg |
| 8·8 | | 18 | 22·5 | 11·3 | 8·5 g |
| 9·3 | | | 58·5 | 21·8 | g |
| 9·0 | | 19 | 15·5 | 31·2 | g |
| 8·9 | | | 41·5 | 17·9 | g |
| 8·4 | | | 51·0 | 3·8 | 8·0 Gg |
| 9·5 | | | 55·5 | 23·0 | g |
| 9·5 | | 29 | 2·5 | 8·0 | |
| 9·5 | | 33 | 46·0 | 5·9 | g |
| 9·6 | | | 51·5 | 27·0 | |
| 8·8 | | 34 | 38·5 | 39·9 | 9·0 g |
| 9·6 | | 35 | 43·0 | 53·1 | |
| 9·6 | | 38 | 55·0 | 23·9 | |
| 9·6 | | 51 | 36·0 | 7·1 | |
| 9·6 | | 52 | 46·5 | 1·2 | |
| 8·8 | | 54 | 10·0 | 21·4 | g |
| 9·4 | | 57 | 15·0 | 3·9 | g |
| 9·3 | | | 58·0 | 33·1 | g |
| 9·3 | | 58 | 22·0 | 38·3 | g |
| 9·4 | | | 46·0 | 10·3 | |
| 9·6 | | 59 | 45·0 | 16·7 | |
| 9·0 | 13 | 0 | 22·0 | 34·7 | 9·5 g |
| 8·0 | | 3 | 55·0 | 47·7 | g |
| 9·4 | | 5 | 22·0 | 59·2 | g |
| 9·6 | | | 49·5 | 2·2 | |
| 9·7 | | 6 | 37·0 | 49·9 | g |
| 9·6 | | 7 | 26·0 | 47·1 | |
| 9·6 | | | 49·0 | 58·5 | |
| 9·6 | | | 55·0 | 1·6 | g |
| 9·6 | | 8 | 19·0 | 52·9 | |
| 9·6 | | 9 | 37·0 | 37·1 | |
| 8·9 | | 13 | 11·0 | 19·4 | g |
| 9·4 | | 15 | 37·0 | 43·1 | Gkg |
| 9·6 | | 16 | 10·0 | 30·9 | g |
| 9·3 | | | 27·0 | 13·6 | |
| 9·0 | | | 28·0 | 30·7 | g |
| 9·6 | | | 39·5 | 1·6 | |
| 9·7 | | | 52·0 | 43·0 | Gg |
| 7·2 | | 22 | 27·0 | 55·0 | 6·5 GSg |
| 9·4 | | | 27·0 | 41·8 | g |
| 9·1 | | | 33·0 | 55·4 | 9·5 Gg |
| 9·4 | | 26 | 14·5 | 31·7 | |
| 9·1 | | 27 | 57·0 | 51·0 | g |
| 9·0 | | 28 | 37·5 | 15·1 | g |
| 9·4 | | 29 | 12·0 | 45·9 | g |
| 8·3 | | 30 | 19·5 | 52·6 | 8·0 g |
| 8·5 | | 31 | 39·0 | 9·2 | g |
| 9·4 | | | 54·0 | 17·9 | |
| 9·6 | | 32 | 7·0 | 34·6 | |
| 9·6 | | 33 | 6·5 | 37·7 | |
| 9·0 | | 34 | 12·5 | 26·6 | 9·0 g |
| 9·6 | | 35 | 5·0 | 21·0 | |

## 781—840.

| mag. | h (13ʰ—14ʰ) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 8·7 | | 5 | 31·5 | 53·7 | 8·0 Gg |
| 9·3 | | 39 | 12·5 | 58·4 | g |
| 9·6 | | | 55·0 | 16·2 | g |
| 9·4 | | 41 | 37·0 | 33·6 | |
| 9·6 | | 42 | 43·0 | 50·4 | |
| 7·9 | | 44 | 34·0 | 37·2 | 8·0 g |
| 8·9 | | | 43·0 | 2·5 | g |
| 9·4 | | 45 | 33·0 | 16·4 | g |
| 9·3 | | | 49·0 | 51·7 | |
| 9·3 | | 46 | 20·0 | 11·8 | g |
| 9·6 | | 47 | 1·0 | 23·8 | |
| 9·4 | | | 6·0 | 4·9 | |
| 9·3 | | | 10·0 | 44·3 | g |
| 8·5 | | | 17·0 | 10·2 | 8·5 g |
| 9·4 | | 49 | 41·0 | 4·0 | 8·5 g |
| 9·6 | | | 55·0 | 34·6 | |
| 9·4 | | 51 | 28·0 | 22·8 | g |
| 9·6 | | 52 | 33·0 | 38·8 | |
| 7·4 | | 53 | 14·0 | 11·4 | 6·0 GSg |
| 9·6 | | 54 | 9·0 | 6·8 | 9·0 g |
| 9·4 | | | 19·0 | 3·0 | |
| 9·6 | | | 35·0 | 22·9 | |
| 9·6 | | 56 | 56·0 | 3·3 | |
| 9·3 | | 59 | 36·0 | 29·8 | g |
| 9·3 | | | 43·0 | 5·9 | |
| 9·6 | | | 49·0 | 40·8 | |
| 9·0 | 14 | 0 | 45·0 | 56·0 | g |
| 9·4 | | 1 | 21·0 | 45·0 | |
| 9·6 | | 2 | 55·0 | 15·1 | |
| 9·3 | | 3 | 12·0 | 26·5 | g |
| 9·4 | | | 24·0 | 37·9 | g |
| 9·3 | | | 52·0 | 14·9 | |
| 9·3 | | 6 | 14·0 | 30·8 | g |
| 8·1 | | 8 | 14·0 | 7·2 | 8·5 g |
| 9·6 | | | 36·0 | 22·9 | |
| 9·4 | | | 43·0 | 44·0 | |
| 9·6 | | 9 | 35·0 | 7·6 | 8·5 g |
| 9·6 | | 13 | 52·0 | 36·5 | g |
| 9·3 | | | 58·0 | 43·4 | g |
| 9·1 | | 14 | 5·0 | 38·9 | 9·0 g |
| 9·3 | | | 30·0 | 23·6 | |
| 9·2 | | | 38·0 | 21·9 | g |
| 8·8 | | 15 | 14·0 | 15·9 | g |
| 8·9 | | | 47·0 | 36·1 | 9·0 g |
| 9·6 | | 16 | 17·0 | 9·5 | |
| 7·5 | | | 30·0 | 9·9 | GScgr |
| 9·6 | | | 34·0 | 50·8 | |
| 9·6 | | | 41·5 | 59·4 | |
| 8·5 | | 18 | 56·0 | 36·2 | g |
| 9·4 | | 19 | 47·0 | 50·6 | g |
| 8·5 | | | 55·0 | 53·1 | g |
| 9·6 | | 20 | 37·0 | 12·1 | |
| 9·4 | | 21 | 33·0 | 39·7 | g |
| 7·2 | | 22 | 18·0 | 33·4 | 7·5 GSg |
| 9·6 | | | 43·0 | 51·0 | |
| 9·6 | | 23 | 9·0 | 51·9 | |
| 9·3 | | | 40·6 | 36·4 | |
| 9·9 | | | 47·7 | 18·0 | |
| 9·6 | | 24 | 5·2 | 35·8 | |
| 9·8 | | | 11·7 | 43·6 | |

25 prec.

| h | m | a (s) | | δ (′) |
|---|---|---|---|---|
| 11 | 10 | + 48 | − 0·04 d | − 8·2 |
| | 20 | 54 | − 0·03 | 8·2 |
| | 30 | 59 | − 0·02 | 8·3 |
| | 40 | 65 | − 0·02 | 8·3 |
| | 50 | 71 | − 0·01 | 8·3 |
| 12 | 0 | 77 | 0·00 | 8·4 |
| | 10 | 83 | + 0·01 | 8·3 |
| | 20 | 88 | + 0·02 | 8·3 |
| | 30 | 94 | + 0·02 | 8·3 |
| | 40 | 100 | + 0·03 | 8·2 |
| | 50 | 106 | + 0·04 | 8·2 |
| 13 | 0 | 112 | + 0·05 | 8·1 |
| | 10 | 117 | + 0·05 | 8·0 |
| | 20 | 123 | + 0·06 | 7·9 |
| | 30 | 128 | + 0·07 | 7·7 |
| | 40 | 133 | + 0·08 | 7·6 |
| | 50 | 139 | + 0·08 | 7·4 |
| 14 | 0 | 144 | + 0·09 | 7·2 |
| | 10 | 149 | + 0·10 | 7·0 |
| | 20 | 154 | + 0·10 | 6·8 |
| | 30 | + 158 | + 0·11 | − 6·6 |

d = minutes of decl.



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25 prec.

| h | m | α (s) | δ (′) |
|---|---|---|---|
| 14 | 20 | +154 + 0.10 d | −6.8 |
| | 30 | 158 + 0.11 | 6.6 |
| | 40 | 163 + 0.11 | 6.4 |
| | 50 | 167 + 0.12 | 6.2 |
| 15 | 0 | 172 + 0.13 | 5.9 |
| | 10 | 176 + 0.13 | 5.6 |
| | 20 | +180 + 0.14 | −5.4 |

d = minutes of decl.

## 841—900.

| mag. | 14h. h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 10.0 | 14 | 24 | 48.7 | 53.3 | |
| 8.6 | | 25 | 49.7 | 16.1 | |
| 8.7 | | 26 | 42.1 | 47.8 | g |
| 9.8 | | | 47.6 | 1.1 | |
| 10.0 | | | 55.7 | 51.1 | |
| 9.8 | | 27 | 46.7 | 12.6 | |
| 9.5 | | 28 | 8.7 | 17.3 | |
| 6.6 | | | 11.9 | 28.1 | 7.0 GSg |
| 9.8 | | | 16.9 | 57.5 | |
| 9.9 | | | 21.7 | 4.7 | |
| 8.2 | | | 37.1 | 47.1 | g |
| 10.0 | | | 49.2 | 56.1 | |
| 9.3 | | 29 | 9.6 | 51.0 | g |
| 10.0 | | | 13.7 | 8.1 | |
| 10.0 | | | 25.2 | 7.9 | |
| 8.6 | | | 42.9 | 30.5 | 9.0 g |
| 10.0 | | | 50.7 | 6.5 | |
| 10.0 | | | 54.7 | 5.5 | |
| 9.5 | | 30 | 5.2 | 42.0 | |
| 9.8 | | | 10.2 | 56.2 | |
| 10.0 | | | 19.7 | 32.3 | |
| 9.5 | | | 29.1 | 42.0 | |
| 9.4 | | | 36.4 | 32.5 | g |
| 9.4 | | 31 | 1.7 | 13.5 | |
| 9.8 | | | 16.7 | 54.1 | |
| 8.8 | | | 21.6 | 48.7 | 9.0 g |
| 9.5 | | | 48.2 | 55.8 | |
| 10.0 | | | 50.2 | 53.2 | |
| 10.0 | | 32 | 4.7 | 22.8 | |
| 9.2 | | | 24.4 | 32.6 | 9.0 g |
| 9.8 | | | 33.2 | 14.4 | |
| 8.2 | | | 40.1 | 1.6 | 8.0 g |
| 9.8 | | 33 | 16.7 | 37.0 | |
| 9.8 | | | 22.7 | 46.5 | |
| 9.4 | | | 34.7 | 17.2 | |
| 9.4 | | | 46.7 | 34.8 | |
| 10.0 | | | 48.2 | 35.0 | |
| 9.3 | | 34 | 6.7 | 39.3 | |
| 9.5 | | | 11.9 | 1.4 | |
| 10.0 | | | 42.7 | 5.0 | |
| 8.8 | | 35 | 12.2 | 27.6 | g |
| 9.6 | | | 28.2 | 29.2 | |
| 9.5 | | | 38.7 | 7.4 | |
| 9.2 | | | 48.7 | 27.8 | g |
| 10.0 | | | 58.7 | 23.8 | |
| 10.0 | | | 58.7 | 26.2 | |
| 10.0 | | 36 | 2.2 | 26.4 | |
| 9.2 | | | 9.7 | 19.2 | |
| 10.0 | | | 25.2 | 33.0 | |
| 9.5 | | | 30.2 | 35.4 | |
| 9.9 | | | 56.2 | 13.0 | |
| 8.7 | | | 58.7 | 32.5 | 9.0 g |
| 9.5 | | 37 | 3.2 | 9.6 | |
| 6.7 | | | 14.2 | 39.1 | 7.2 GSg |
| 10.0 | | | 39.2 | 44.6 | |
| 10.0 | | | 47.2 | 5.2 | |
| 9.4 | | | 55.7 | 33.1 | g |
| 9.8 | | | 59.7 | 46.0 | |
| 10.0 | | 38 | 5.7 | 7.6 | |
| 9.3 | | | 7.2 | 41.5 | |

## 901—960.

| mag. | 14h. h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 9.5 | 14 | 38 | 29.2 | 23.5 | |
| 10.0 | | | 40.2 | 17.0 | |
| 9.7 | | | 40.2 | 27.2 | |
| 9.6 | | | 42.7 | 33.3 | |
| 8.5 | | 39 | 12.7 | 48.4 | g |
| 8.9 | | | 32.7 | 37.9 | g |
| 9.4 | | | 34.2 | 20.6 | |
| 9.5 | | 40 | 40.2 | 20.0 | |
| 9.5 | | | 41.2 | 37.9 | |
| 9.9 | | 41 | 0.7 | 14.5 | |
| 9.4 | | | 9.2 | 26.6 | |
| 9.9 | | | 23.2 | 13.5 | |
| 9.8 | | | 24.7 | 43.0 | |
| 9.0 | | | 37.2 | 25.1 | g |
| 9.6 | | | 55.2 | 24.9 | |
| 9.9 | | 42 | 4.2 | 48.6 | |
| 10.0 | | | 6.2 | 24.4 | |
| 9.8 | | | 16.7 | 10.0 | |
| 9.5 | | | 35.2 | 24.3 | |
| 9.4 | | | 59.1 | 17.1 | |
| 10.0 | | 43 | 13.1 | 14.1 | |
| 7.9 | | | 31.1 | 36.6 | 8.0 g |
| 9.2 | | | 41.6 | 33.4 | 8.2 g |
| 7.4 | | | 42.1 | 9.1 | 6.2 GScgr |
| 9.6 | | 44 | 1.6 | 36.9 | |
| 10.0 | | | 27.1 | 22.6 | |
| 10.0 | | | 37.6 | 15.4 | |
| 9.5 | | | 55.6 | 43.2 | |
| 9.5 | | 45 | 3.1 | 7.5 | |
| 10.0 | | | 3.6 | 6.4 | |
| 7.1 | | | 35.6 | 39.1 | 6.5 GSg |
| 8.9 | | | 42.6 | 33.8 | g |
| 9.7 | | | 54.1 | 45.6 | |
| 9.3 | | 46 | 2.1 | 14.2 | |
| 9.8 | | | 2.6 | 12.4 | |
| 8.9 | | | 21.6 | 32.2 | Gg |
| 10.0 | | | 35.9 | 21.7 | |
| 9.4 | | | 57.9 | 16.8 | |
| 8.4 | | | 58.9 | 57.4 | g |
| 9.4 | | 47 | 31.9 | 18.1 | |
| 8.7 | | | 38.4 | 47.6 | 8.2 g |
| 9.9 | | | 50.4 | 53.5 | |
| 9.9 | | 48 | 10.9 | 40.7 | |
| 9.5 | | | 56.4 | 37.9 | |
| 9.8 | | 49 | 8.4 | 35.6 | |
| 9.5 | | | 20.9 | 8.4 | |
| 10.0 | | | 27.9 | 35.5 | |
| 9.4 | | 50 | 11.4 | 7.7 | |
| 9.9 | | | 15.4 | 45.3 | |
| 9.5 | | | 32.9 | 43.2 | |
| 9.8 | | 51 | 16.0 | 45.4 | |
| 9.5 | | | 53.0 | 47.7 | g |
| 10.0 | | 52 | 1.0 | 37.9 | |
| 9.5 | | | 2.5 | 32.8 | |
| 8.9 | | | 8.0 | 47.0 | g |
| 10.0 | | | 23.0 | 37.8 | |
| 9.4 | | | 23.0 | 14.6 | |
| 10.0 | | | 40.0 | 37.9 | |
| 9.3 | | | 46.0 | 13.5 | g |
| 10.0 | | | 54.0 | 54.9 | |

## 961—1020.

| mag. | 14h.—15h. h | m | s | −76° ′ | |
|---|---|---|---|---|---|
| 9.4 | 14 | 52 | 55.5 | 29.1 | |
| 8.9 | | 53 | 7.0 | 3.3 | g |
| 8.4 | | | 20.5 | 35.8 | 8.5 g |
| 9.5 | | | 42.0 | 56.2 | |
| 8.8 | | 54 | 12.5 | 34.8 | 9.0 g |
| 9.7 | | | 16.5 | 34.6 | |
| 9.5 | | | 38.0 | 1.7 | |
| 9.0 | | | 49.5 | 31.9 | 9.0 g |
| 9.9 | | | 50.0 | 16.9 | |
| 9.8 | | 55 | 2.5 | 0.4 | |
| 9.8 | | | 18.0 | 23.4 | |
| 9.0 | | | 26.5 | 50.0 | 9.0 g |
| 9.9 | | | 41.5 | 50.1 | |
| 10.0 | | | 53.0 | 7.7 | |
| 9.4 | | 56 | 4.5 | 21.8 | g |
| 9.9 | | | 11.5 | 23.8 | |
| 8.4 | | | 16.0 | 27.8 | 8.5 g |
| 9.7 | | | 21.0 | 5.7 | |
| 9.5 | | 57 | 11.0 | 24.7 | |
| 9.7 | | | 53.8 | 8.9 | |
| 9.2 | | | 59.3 | 42.7 | g |
| 8.8 | | 58 | 11.3 | 36.0 | g |
| 9.8 | | | 13.8 | 38.3 | |
| 9.4 | | | 16.3 | 59.9 | |
| 9.4 | | | 33.8 | 27.3 | |
| 9.5 | | | 36.3 | 8.3 | |
| 9.7 | | | 52.8 | 27.3 | |
| 8.9 | | 59 | 14.3 | 58.8 | g |
| 9.7 | | | 37.3 | 21.1 | |
| 9.7 | | | 46.8 | 4.7 | |
| 9.8 | | | 48.8 | 49.0 | |
| 10.0 | 15 | 0 | 4.8 | 25.0 | |
| 10.0 | | | 48.8 | 24.6 | |
| 8.1 | | 1 | 3.8 | 52.7 | 7.5 GSg |
| 10.0 | | | 9.8 | 31.0 | |
| 9.4 | | | 13.8 | 43.7 | |
| 9.8 | | 2 | 56.1 | 0.7 | |
| 10.0 | | 3 | 13.8 | 8.0 | |
| 8.9 | | | 40.8 | 22.9 | g |
| 9.0 | | 4 | 50.3 | 29.9 | |
| 10.0 | | 5 | 2.3 | 49.0 | |
| 9.4 | | | 37.3 | 8.6 | |
| 9.8 | | | 47.8 | 7.0 | |
| 9.8 | | | 53.8 | 42.3 | |
| 9.9 | | | 54.3 | 42.5 | |
| 9.8 | | 6 | 22.8 | 49.7 | |
| 9.4 | | | 45.3 | 52.0 | |
| 9.6 | | | 56.3 | 41.0 | |
| 9.4 | | 7 | 37.8 | 45.6 | |
| 8.8 | | 8 | 6.3 | 17.4 | g |
| 10.0 | | | 11.3 | 7.7 | |
| 9.9 | | | 11.3 | 16.9 | |
| 9.5 | | | 42.8 | 42.5 | |
| 9.4 | | 9 | 5.3 | 26.4 | |
| 9.0 | | | 11.8 | 44.9 | |
| 9.4 | | | 23.3 | 37.9 | |
| 9.8 | | | 37.8 | 35.0 | |
| 9.7 | | | 42.8 | 32.2 | |
| 10.0 | | | 54.3 | 19.8 | |
| 7.2 | | | 55.3 | 4.3 | 7.5 GSg |

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### 1021—1080.

| mag. | h (15h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9.8 | 15 | 10 | 10.3 | 22.8 | |
| 9.5 | | | 22.3 | 5.9 | |
| 9.4 | | 11 | 4.9 | 0.4 | |
| 9.9 | | | 22.8 | 47.2 | |
| 8.9 | | | 33.3 | 14.4 | 8.5 *g* |
| 10.0 | | | 55.3 | 1.5 | |
| 9.9 | | 12 | 2.8 | 1.8 | |
| 8.6 | | | 28.8 | 14.1 | 9.0 *g* |
| 9.0 | | | 39.8 | 4.1 | |
| 9.7 | | | 47.8 | 15.5 | |
| 10.0 | | | 57.3 | 24.5 | |
| 9.7 | | | 58.8 | 8.0 | |
| 8.6 | | 13 | 37.3 | 4.8 | 9.0 *g* |
| 9.7 | | | 43.8 | 52.9 | |
| 9.2 | | 14 | 9.8 | 21.0 | *g* |
| 9.2 | | | 11.8 | 23.8 | |
| 9.8 | | 15 | 3.8 | 19.1 | |
| 9.9 | | | 54.2 | 1.7 | |
| 9.6 | | 16 | 1.8 | 20.1 | |
| 9.8 | | | 6.3 | 42.8 | |
| 10.0 | | | 21.3 | 31.7 | |
| 9.5 | | | 24.3 | 19.1 | |
| 9.8 | | | 32.8 | 28.7 | |
| 8.5 | | | 43.8 | 32.9 | *g* |
| 9.4 | | | 44.3 | 29.4 | |
| 8.5 | | 17 | 4.8 | 34.1 | *g* |
| 10.0 | | | 44.3 | 52.8 | |
| 9.4 | | | 45.8 | 41.9 | |
| 8.4 | | 18 | 6.8 | 20.8 | 8.5 *g* |
| 8.9 | | | 10.8 | 3.0 | *g* |
| 9.6 | | | 14.8 | 45.4 | |
| 9.4 | | 19 | 24.3 | 28.5 | |
| 10.0 | | | 44.8 | 6.0 | |
| 9.8 | | 20 | 3.3 | 33.7 | |
| 9.8 | | | 4.3 | 49.8 | |
| 10.0 | | | 30.3 | 14.6 | |
| 9.0 | | | 52.3 | 26.1 | |
| 10.0 | | 21 | 3.3 | 56.3 | |
| 10.0 | | | 26.3 | 41.2 | |
| 8.9 | | 22 | 9.8 | 34.1 | |
| 8.5 | | | 13.8 | 16.4 | *g* |
| 9.9 | | | 15.3 | 37.2 | |
| 9.4 | | | 24.8 | 31.0 | |
| 9.2 | | | 34.8 | 14.9 | *g* |
| 9.4 | | | 44.3 | 50.9 | |
| 9.4 | | | 47.8 | 5.5 | |
| 9.5 | | | 48.3 | 47.9 | |
| 9.7 | | 23 | 27.3 | 1.1 | |
| 9.4 | | | 39.3 | 42.6 | |
| 9.5 | | | 44.3 | 16.1 | |
| 9.6 | | | 51.3 | 40.0 | |
| 9.5 | | | 53.5 | 46.9 | |
| 10.0 | | 24 | 16.0 | 16.1 | |
| 9.8 | | | 32.5 | 41.2 | |
| 10.0 | | | 48.5 | 56.2 | |
| 9.9 | | 25 | 2.4 | 59.2 | |
| 10.0 | | | 3.0 | 20.0 | |
| 10.0 | | | 5.0 | 19.4 | |
| 9.8 | | | 13.5 | 16.7 | |
| 9.9 | | 26 | 20.5 | 49.1 | |

### 1081—1140.

| mag. | h (15h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 10.0 | 15 | 26 | 25.5 | 17.1 | |
| 9.0 | | | 30.1 | 2.1 | |
| 9.8 | | 27 | 22.5 | 33.9 | |
| 10.0 | | | 51.5 | 58.7 | |
| 9.5 | | 28 | 5.5 | 47.5 | |
| 9.4 | | | 26.5 | 17.9 | |
| 9.2 | | 29 | 10.7 | 2.2 | *g* |
| 9.8 | | | 16.2 | 54.8 | |
| 9.4 | | | 38.7 | 16.9 | *g* |
| 9.7 | | | 45.7 | 13.2 | |
| 9.2 | | | 48.7 | 1.0 | *g* |
| 10.0 | | | 57.8 | 25.2 | |
| 10.0 | | 30 | 4.2 | 19.4 | |
| 10.0 | | | 13.2 | 11.2 | |
| 8.4 | | | 26.1 | 38.4 | 9.5 *g* |
| 9.8 | | | 26.7 | 25.1 | |
| 10.0 | | | 36.2 | 28.0 | |
| 9.5 | | 31 | 4.7 | 37.1 | |
| 10.0 | | | 59.2 | 40.0 | |
| 9.6 | | 32 | 1.7 | 17.6 | |
| 9.4 | | | 5.6 | 46.8 | |
| 8.2 | | | 55.1 | 47.8 | 8.0 *g* |
| 9.6 | | 33 | 29.2 | 33.1 | |
| 9.6 | | | 56.8 | 19.9 | |
| 9.8 | | 34 | 46.7 | 56.4 | |
| 9.7 | | | 50.2 | 35.0 | |
| 9.8 | | 35 | 25.2 | 33.3 | |
| 9.5 | | | 45.7 | 34.3 | |
| 10.0 | | 36 | 7.2 | 22.8 | |
| 8.8 | | | 9.3 | 6.3 | *g* |
| 9.5 | | | 19.7 | 45.2 | |
| 8.8 | | | 45.4 | 49.6 | *g* |
| 9.8 | | 37 | 9.2 | 5.2 | |
| 9.4 | | | 19.2 | 43.9 | |
| 9.2 | | | 35.4 | 22.5 | |
| 9.0 | | | 50.9 | 7.5 | *g* |
| 9.1 | | | 59.0 | 56.6 | |
| 9.1 | | 38 | 33.0 | 35.0 | |
| 9.0 | | | 48.0 | 23.8 | *g* |
| 9.2 | | | 50.0 | 20.5 | *g* |
| 9.0 | | 40 | 7.0 | 50.8 | *g* |
| 9.2 | | 42 | 34.0 | 57.0 | *g* |
| 9.1 | | | 56.0 | 14.8 | *g* |
| 9.3 | | 43 | 19.0 | 47.7 | |
| 9.2 | | 45 | 19.5 | 1.1 | |
| 9.1 | | 46 | 23.0 | 35.6 | |
| 9.3 | | 47 | 59.0 | 13.8 | |
| 9.3 | | 48 | 24.0 | 15.7 | |
| 9.1 | | | 27.0 | 48.7 | |
| 8.7 | | | 32.0 | 53.1 | GS*g* |
| 9.0 | | 49 | 2.0 | 55.1 | *g* |
| 9.2 | | | 39.0 | 6.0 | |
| 9.1 | | 50 | 3.0 | 5.8 | |
| 9.3 | | 51 | 10.0 | 2.5 | *g* |
| 7.4 | | | 15.5 | 56.4 | GS*g* |
| 9.3 | | | 30.0 | 2.5 | *g* |
| 8.1 | | | 33.0 | 53.5 | 7.5 GS*g* |
| 9.3 | | 52 | 8.0 | 11.9 | |
| 9.2 | | 53 | 38.0 | 34.1 | *g* |
| 9.3 | | 54 | 17.0 | 0.0 | |

### 1141—1200.

| mag. | h (15h.—17h.) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9.2 | 15 | 54 | 56.0 | 14.6 | *g* |
| 9.1 | | 55 | 53.0 | 37.5 | *g* |
| 9.2 | | 56 | 3.0 | 4.1 | |
| 9.2 | | | 42.0 | 51.0 | |
| 8.7 | | 58 | 16.0 | 21.4 | 9.0 *g* |
| 9.1 | 16 | 0 | 43.0 | 2.9 | |
| 9.2 | | 1 | 12.0 | 15.9 | *g* |
| 9.3 | | | 41.0 | 56.1 | *g* |
| 8.0 | | | 46.0 | 49.3 | 9.0 *g* |
| 9.1 | | 2 | 12.0 | 40.7 | *g* |
| 9.2 | | | 18.0 | 18.8 | |
| 9.0 | | | 52.0 | 48.3 | *g* |
| 9.0 | | 5 | 44.0 | 10.0 | *g* |
| 9.2 | | 6 | 9.0 | 3.1 | |
| 9.1 | | 7 | 10.0 | 50.9 | 9.0 *g* |
| 9.2 | | | 13.0 | 31.0 | |
| 8.6 | | | 22.0 | 52.0 | 9.5 *g* |
| 9.3 | | 10 | 38.0 | 29.9 | |
| 9.3 | | 13 | 18.0 | 18.8 | |
| 9.2 | | | 50.0 | 1.9 | |
| 9.3 | | 14 | 9.0 | 10.3 | |
| 9.1 | | | 55.0 | 4.1 | 9.5 *g* |
| 8.7 | | 15 | 28.0 | 13.2 | 9.0 *g* |
| 8.7 | | 16 | 58.0 | 57.1 | 9.5 *g* |
| 9.1 | | 17 | 51.0 | 21.1 | *g* |
| 9.2 | | 25 | 5.0 | 18.3 | |
| 9.0 | | 26 | 4.5 | 57.7 | *g* |
| 9.4 | | | 24.0 | 15.2 | *g* |
| 9.2 | | 27 | 22.0 | 25.8 | |
| 9.2 | | 28 | 46.0 | 14.2 | |
| 9.2 | | 30 | 22.2 | 59.3 | |
| 9.4 | | 31 | 42.0 | 18.1 | |
| 9.3 | | 33 | 1.0 | 26.0 | |
| 9.1 | | 34 | 59.0 | 14.0 | *g* |
| 9.4 | | 36 | 53.0 | 50.3 | *g* |
| 9.3 | | 37 | 6.0 | 35.2 | *g* |
| 9.3 | | | 34.0 | 6.2 | |
| 9.1 | | | 47.0 | 9.9 | *g* |
| 9.4 | | 38 | 0.0 | 37.9 | |
| 9.3 | | | 44.0 | 41.1 | |
| 9.3 | | | 48.0 | 11.2 | |
| 8.4 | | 40 | 11.0 | 12.2 | *g* |
| 9.3 | | 41 | 27.0 | 10.9 | *g* |
| 9.3 | | | 31.0 | 37.0 | 9.5 *g* |
| 9.4 | | 43 | 39.0 | 0.4 | *g* |
| 7.8 | | | 45.5 | 0.8 | 8.5 GS*g* |
| 9.1 | | | 50.0 | 11.1 | *g* |
| 8.6 | | 46 | 30.0 | 43.7 | 9.0 *g* |
| 9.3 | | | 49.0 | 57.8 | |
| 9.3 | | | 50.0 | 8.2 | |
| 8.8 | | 47 | 27.0 | 10.9 | *g* |
| 9.4 | | 48 | 14.5 | 41.6 | 9.5 *g* |
| 9.1 | | 49 | 28.0 | 4.9 | *g* |
| 7.7 | | 50 | 3.0 | 2.3 | GS*g* |
| 9.4 | | | 48.0 | 13.2 | |
| 9.4 | | 53 | 18.0 | 46.2 | |
| 9.4 | | 58 | 26.0 | 15.5 | |
| 8.5 | | | 36.0 | 11.4 | 8.5 *g* |
| 9.3 | | 59 | 26.0 | 2.5 | *g* |
| 9.2 | 17 | 1 | 6.0 | 11.9 | *g* |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 15 | 10 | + 176 + 0.13 d | − 5.6 |
| | 20 | 180 + 0.14 | 5.4 |
| | 30 | 183 + 0.14 | 5.1 |
| | 40 | 187 + 0.15 | 4.8 |
| | 50 | 190 + 0.15 | 4.5 |
| 16 | 0 | 193 + 0.15 | 4.2 |
| | 10 | 196 + 0.16 | 3.9 |
| | 20 | 198 + 0.16 | 3.5 |
| | 30 | 201 + 0.16 | 3.2 |
| | 40 | 203 + 0.17 | 2.9 |
| | 50 | 205 + 0.17 | 2.5 |
| 17 | 0 | 206 + 0.17 | 2.2 |
| | 10 | + 208 + 0.17 | − 1.8 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ' |
|---|---|---|---|---|
| 17 | 0 | +206 | +0·17 d | −2·2 |
| | 10 | 208 | +0·17 | 1·8 |
| | 20 | 209 | +0·18 | 1·5 |
| | 30 | 210 | +0·18 | 1·1 |
| | 40 | 210 | +0·18 | 0·7 |
| | 50 | 211 | +01·8 | −0·4 |
| 18 | 0 | 211 | +0·18 | 0·0 |
| | 10 | 211 | +0·18 | +0·4 |
| | 20 | 210 | +0·18 | 0·7 |
| | 30 | 210 | +0·18 | 1·1 |
| | 40 | 209 | +0·18 | 1·5 |
| | 50 | 208 | +0·17 | 1·8 |
| 19 | 0 | 206 | +0·17 | 2·2 |
| | 10 | 205 | +0·17 | 2·5 |
| | 20 | 203 | +0·17 | 2·9 |
| | 30 | 201 | +0·16 | 3·2 |
| | 40 | 198 | +0·16 | 3·5 |
| | 50 | +196 | +0·16 | +3·9 |

d = minutes of decl.

## 1201—1260.

| mag. | 17h–18h h | m | s | −76° ' | |
|---|---|---|---|---|---|
| 9·3 | 17 | 4 | 38·0 | 51·1 | 9·0 Gg |
| 9·3 | | 5 | 2·0 | 5·0 | |
| 8·9 | | | 3·0 | 20·6 | 9·0 g |
| 8·2 | | | 32·0 | 12·7 | 8·0 Gg |
| 9·4 | | 6 | 28·0 | 11·0 | g |
| 9·4 | | | 36·0 | 9·9 | |
| 9·1 | | 7 | 4·0 | 2·9 | g |
| 9·1 | | 9 | 12·0 | 29·8 | g |
| 9·4 | | 11 | 13·0 | 56·6 | g |
| 9·2 | | 13 | 12·0 | 7·0 | |
| 9·4 | | 17 | 36·0 | 4·8 | |
| 8·9 | | | 57·0 | 46·7 | 9·5 g |
| 9·4 | | 20 | 41·0 | 9·1 | |
| 9·3 | | 27 | 21·5 | 39·8 | 9·5 g |
| 9·2 | | 28 | 45·5 | 55·0 | g |
| 9·3 | | | 56·5 | 37·0 | 9·5 g |
| 9·3 | | 29 | 2·5 | 5·2 | g |
| 9·1 | | | 5·0 | 57·9 | g |
| 8·9 | | 32 | 3·5 | 32·4 | 9·5 g |
| 8·6 | | | 5·0 | 8·5 | 8·5 GSg |
| 9·4 | | 33 | 7·5 | 38·1 | 8·0 g |
| 8·3 | | | 20·8 | 0·1 | 8·0 GSg |
| 9·3 | | 36 | 31·5 | 47·8 | g |
| 9·5 | | 37 | 3·0 | 46·4 | g |
| 9·1 | | | 33·0 | 27·4 | g |
| 8·0 | | 40 | 0·0 | 8·7 | 6·0 GSg |
| 8·9 | | | 41·5 | 56·9 | 9·5 g |
| 9·3 | | 47 | 51·0 | 32·4 | 9·5 g |
| 9·2 | | 49 | 19·0 | 6·4 | 9·5 g |
| 9·4 | | | 33·0 | 12·6 | |
| 9·4 | | 50 | 37·5 | 58·6 | g |
| 8·3 | | 57 | 17·0 | 41·1 | 8·5 Sg |
| 8·8 | | 58 | 52·0 | 5·8 | g |
| 8·6 | | 59 | 11·0 | 36·3 | 7·5 GSg |
| 9·2 | 18 | 0 | 33·0 | 6·4 | g |
| 9·4 | | | 56·0 | 4·5 | g |
| 9·5 | | 2 | 0·0 | 14·4 | g |
| 9·2 | | 5 | 48·0 | 38·0 | |
| 8·8 | | 8 | 27·0 | 55·7 | g |
| 8·8 | | 12 | 3·0 | 44·7 | g |
| 9·3 | | 19 | 55·0 | 52·1 | 9·0 g |
| 9·5 | | 20 | 7·0 | 2·9 | |
| 8·2 | | | 57·2 | 35·2 | 7·8 Gg |
| 9·2 | | 21 | 31·5 | 54·1 | 9·5 g |
| 9·6 | | | 33·4 | 42·1 | |
| 9·8 | | | 50·4 | 32·5 | |
| 9·0 | | | 52·9 | 59·4 | 9·0 Gg |
| 9·8 | | 22 | 9·9 | 44·8 | |
| 10·0 | | | 29·9 | 50·6 | |
| 10·0 | | 24 | 1·9 | 59·3 | |
| 9·7 | | | 9·9 | 25·9 | |
| 9·4 | | | 45·4 | 11·7 | 9·0 g |
| 10·0 | | 25 | 13·3 | 57·1 | |
| 9·9 | | | 16·0 | 58·8 | |
| 9·4 | | 26 | 33·4 | 41·9 | 9·5 g |
| 8·8 | | 28 | 5·2 | 15·8 | g |
| 10·2 | | | 30·8 | 5·7 | |
| 8·7 | | | 31·0 | 0·1 | 9·5 g |
| 9·1 | | | 37·1 | 2·6 | 9·5 g |
| 9·1 | | | 38·4 | 43·3 | g |

## 1261—1320.

| mag. | 18h h | m | s | −76° ' | |
|---|---|---|---|---|---|
| 9·6 | 18 | 29 | 26·4 | 59·0 | g |
| 9·8 | | | 44·3 | 6·1 | |
| 9·4 | | | 47·8 | 24·1 | |
| 10·2 | | 30 | 8·3 | 31·9 | |
| 9·7 | | 31 | 0·8 | 6·9 | |
| 10·2 | | | 26·3 | 24·3 | |
| 9·7 | | | 27·4 | 58·5 | |
| 10·0 | | | 59·3 | 21·6 | |
| 9·7 | | 32 | 8·8 | 25·0 | |
| 10·0 | | | 33·3 | 50·5 | |
| 9·2 | | 33 | 8·6 | 50·0 | |
| 10·0 | | | 47·8 | 37·4 | |
| 10·0 | | 35 | 7·8 | 35·1 | |
| 9·8 | | | 12·3 | 39·3 | |
| 9·1 | | 36 | 46·8 | 55·9 | g |
| 9·6 | | 37 | 2·8 | 29·9 | |
| 10·0 | | | 34·0 | 1·0 | |
| 10·2 | | 38 | 12·8 | 43·1 | |
| 9·6 | | | 18·8 | 53·1 | g |
| 9·9 | | | 34·3 | 44·1 | |
| 9·2 | | | 51·8 | 22·8 | |
| 9·0 | | 40 | 0·8 | 30·3 | g |
| 10·0 | | 41 | 1·3 | 53·5 | |
| 10·2 | | | 3·0 | 0·7 | |
| 9·7 | | 42 | 38·8 | 22·3 | |
| 9·0 | | | 52·8 | 25·5 | |
| 9·7 | | 43 | 28·3 | 32·7 | |
| 9·1 | | 44 | 19·3 | 45·1 | 9·5 g |
| 9·1 | | | 58·3 | 48·2 | 9·5 g |
| 9·4 | | 45 | 40·8 | 37·1 | |
| 9·0 | | | 56·3 | 33·6 | |
| 10·0 | | | 57·8 | 22·8 | |
| 8·6 | | 46 | 4·3 | 16·6 | 8·2 Gg |
| 10·2 | | | 32·5 | 56·1 | |
| 10·0 | | 47 | 26·3 | 32·7 | |
| 9·4 | | | 36·8 | 48·9 | g |
| 10·2 | | 48 | 50·8 | 27·0 | |
| 10·0 | | 49 | 7·3 | 27·2 | |
| 10·0 | | | 56·8 | 21·5 | |
| 9·6 | | 50 | 9·8 | 50·5 | g |
| 9·6 | | | 31·8 | 52·0 | g |
| 9·6 | | | 56·8 | 17·4 | |
| 9·8 | | 51 | 2·8 | 21·9 | |
| 9·7 | | | 26·8 | 50·0 | |
| 10·2 | | | 36·8 | 22·9 | |
| 9·6 | | 53 | 3·3 | 44·7 | |
| 10·2 | | | 10·5 | 22·9 | |
| 8·0 | | | 12·8 | 35·1 | 7·0 GSg |
| 10·2 | | | 51·3 | 37·8 | |
| 9·9 | | 54 | 53·8 | 57·0 | g |
| 9·6 | | 55 | 30·3 | 56·9 | |
| 10·2 | | | 36·8 | 19·7 | |
| 9·1 | | 56 | 25·3 | 49·8 | |
| 10·0 | | | 41·3 | 16·8 | |
| 9·6 | | 57 | 4·8 | 20·7 | |
| 9·7 | | | 15·3 | 40·3 | |
| 9·7 | | 58 | 14·3 | 35·2 | |
| 9·6 | | | 38·8 | 26·2 | |
| 7·2 | | 59 | 21·2 | 0·2 | 6·5 GSg |
| 9·6 | | | 56·6 | 32·2 | |

## 1321—1380.

| mag. | 19h h | m | s | −76° ' | |
|---|---|---|---|---|---|
| 9·9 | 19 | 0 | 3·1 | 5·0 | |
| 9·7 | | | 20·1 | 43·8 | |
| 10·0 | | 1 | 14·6 | 54·2 | |
| 9·0 | | 3 | 5·5 | 2·7 | 9·0 g |
| 10·0 | | 4 | 53·1 | 23·1 | |
| 9·7 | | 5 | 25·6 | 32·8 | |
| 9·0 | | 6 | 35·6 | 22·1 | 9·5 g |
| 9·9 | | 8 | 3·6 | 9·1 | |
| 9·2 | | | 27·1 | 29·9 | g |
| 10·2 | | | 44·1 | 49·7 | |
| 8·5 | | 9 | 1·1 | 35·7 | 8·5 g |
| 9·1 | | | 2·6 | 8·5 | |
| 10·2 | | | 10·1 | 10·0 | |
| 9·5 | | | 11·0 | 57·2 | g |
| 9·6 | | | 21·6 | 53·0 | |
| 9·6 | | 11 | 9·1 | 51·6 | g |
| 9·1 | | | 12·5 | 1·6 | 9·5 g |
| 10·2 | | | 30·1 | 29·0 | |
| 9·9 | | | 37·6 | 57·4 | |
| 9·6 | | 12 | 14·5 | 2·6 | |
| 9·7 | | | 34·1 | 15·0 | |
| 9·2 | | 14 | 9·6 | 54·1 | g |
| 9·4 | | 16 | 6·1 | 3·0 | |
| 10·0 | | 17 | 4·1 | 9·1 | |
| 10·0 | | 18 | 27·1 | 33·7 | |
| 9·6 | | | 42·1 | 51·7 | |
| 9·6 | | 19 | 37·1 | 39·1 | |
| 9·7 | | 20 | 1·1 | 42·0 | |
| 9·7 | | | 47·1 | 42·0 | |
| 9·7 | | 21 | 38·1 | 6·9 | |
| 8·4 | | 22 | 13·3 | 21·0 | 9·0 g |
| 10·2 | | 23 | 1·6 | 20·3 | |
| 9·4 | | | 24·1 | 54·0 | g |
| 10·2 | | 25 | 29·6 | 56·2 | |
| 9·6 | | 26 | 17·6 | 5·1 | |
| 9·7 | | 27 | 18·6 | 27·2 | |
| 10·0 | | 28 | 31·2 | 47·6 | |
| 10·0 | | 29 | 44·8 | 52·2 | |
| 9·7 | | | 57·3 | 37·8 | g |
| 10·2 | | 31 | 13·3 | 19·8 | |
| 10·2 | | 32 | 25·3 | 30·2 | |
| 8·8 | | | 36·9 | 42·1 | g |
| 9·7 | | | 52·1 | 6·6 | |
| 9·6 | | | 59·6 | 14·6 | |
| 9·0 | | 34 | 9·9 | 8·2 | g |
| 9·3 | | | 51·3 | 59·8 | g |
| 9·8 | | 35 | 39·9 | 34·6 | |
| 7·7 | | 36 | 11·6 | 29·2 | 7·5 g |
| 9·5 | | 37 | 11·4 | 34·6 | |
| 9·8 | | | 54·9 | 29·0 | |
| 9·8 | | 39 | 14·9 | 19·2 | |
| 9·4 | | | 32·9 | 46·6 | g |
| 9·2 | | 41 | 7·4 | 7·5 | |
| 8·9 | | | 25·9 | 37·9 | 8·5 g |
| 9·5 | | 43 | 0·6 | 16·5 | |
| 9·8 | | | 42·6 | 3·9 | |
| 8·1 | | 44 | 24·6 | 58·4 | g |
| 8·2 | | | 32·6 | 33·7 | g |
| 9·8 | | 45 | 11·6 | 41·3 | |
| 9·0 | | 46 | 27·6 | 39·1 | g |



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## 1381—1440.

| mag. | h | m | s (19h–20h) | ′ (−76°) | |
|---|---|---|---|---|---|
| 9·4 | 19 | 46 | 31·6 | 27·7 | |
| 9·3 | | 48 | 1·6 | 32·7 | |
| 9·6 | | 51 | 9·1 | 5·7 | |
| 9·6 | | | 11·1 | 43·2 | |
| 9·8 | | 53 | 20·6 | 38·7 | |
| 9·0 | | | 49·3 | 13·8 | g |
| 9·4 | | 54 | 3·8 | 24·0 | |
| 8·8 | | | 39·3 | 58·2 | 8·0 g |
| 9·6 | | 56 | 42·8 | 36·2 | |
| 9·7 | | 57 | 21·3 | 12·8 | |
| 9·2 | | | 39·3 | 41·6 | |
| 9·8 | | | 43·5 | 16·7 | |
| 8·1 | | 58 | 4·8 | 13·8 | g |
| 9·0 | | | 32·3 | 45·0 | |
| 9·5 | | 59 | 56·3 | 15·0 | |
| 9·8 | 20 | 1 | 14·8 | 35·7 | |
| 9·4 | | 2 | 11·3 | 8·6 | g |
| 9·8 | | | 22·8 | 41·4 | |
| 9·5 | | | 25·8 | 52·5 | |
| 9·8 | | | 41·5 | 40·8 | |
| 9·8 | | 3 | 4·3 | 43·7 | |
| 9·8 | | | 9·5 | 45·8 | |
| 8·6 | | | 17·3 | 30·0 | g |
| 9·8 | | | 22·5 | 31·2 | |
| 8·6 | | | 22·8 | 2·8 | 8·0 g |
| 9·3 | | 4 | 16·1 | 0·4 | |
| 9·0 | | 6 | 9·4 | 34·5 | g |
| 9·8 | | 7 | 30·9 | 1·8 | |
| 9·3 | | 8 | 31·9 | 18·2 | |
| 9·6 | | 9 | 34·4 | 32·5 | |
| 9·8 | | 13 | 18·4 | 1·7 | |
| 9·8 | | 14 | 24·4 | 0·9 | |
| 9·4 | | 16 | 22·4 | 36·9 | |
| 9·3 | | | 36·9 | 11·4 | g |
| 9·8 | | 17 | 11·9 | 28·5 | |
| 9·4 | | | 37·5 | 40·0 | |
| 9·7 | | 19 | 20·0 | 6·4 | |
| 9·8 | | | 32·0 | 13·6 | |
| 9·6 | | | 47·0 | 27·2 | |
| 9·2 | | 20 | 47·0 | 39·6 | g |
| 9·4 | | 21 | 0·5 | 17·0 | |
| 9·8 | | | 19·0 | 54·0 | |
| 9·2 | | | 52·5 | 17·6 | 9·5 g |
| 8·8 | | 22 | 3·0 | 4·0 | g |
| 9·8 | | | 11·5 | 9·2 | |
| 9·3 | | 23 | 15·0 | 36·2 | g |
| 9·8 | | | 22·0 | 49·6 | |
| 9·8 | | 24 | 9·0 | 38·2 | |
| 9·7 | | 25 | 10·8 | 15·2 | |
| 9·3 | | | 21·5 | 25·0 | |
| 8·8 | | | 44·5 | 33·0 | g |
| 9·3 | | | 48·5 | 1·4 | |
| 9·3 | | 26 | 28·1 | 45·2 | |
| 7·0 | | | 32·1 | 36·8 | 6·0 GScgg |
| 9·8 | | 27 | 13·0 | 30·0 | |
| 8·0 | | | 33·8 | 58·8 | 7·8 SGg |
| 9·2 | | 29 | 30·3 | 1·8 | |
| 9·8 | | 30 | 7·8 | 21·6 | |
| 9·7 | | | 14·8 | 8·0 | |
| 9·8 | | 31 | 22·3 | 35·1 | |

## 1441—1500.

| mag. | h | m | s (20h–21h) | ′ (−76°) | |
|---|---|---|---|---|---|
| 10·3* | 20 | 31 | 40·0 | 21·5 | |
| 9·5 | | | 51·5 | 21·4 | |
| 9·8 | | | 52·0 | 30·2 | |
| 9·4 | | 33 | 8·3 | 22·7 | |
| 9·8 | | 34 | 29·0 | 42·2 | |
| 8·1 | | | 42·5 | 17·0 | 7·5 GSgg |
| 8·8 | | 35 | 7·5 | 21·7 | 9·5 Sg |
| 9·4 | | 36 | 38·6 | 5·7 | 8·5 Gg |
| 10·2 | | | 49·8 | 58·2 | |
| 10·3 | | | 55·3 | 23·4 | |
| 10·0 | | 37 | 48·7 | 41·7 | |
| 10·3 | | 38 | 11·1 | 27·3 | |
| 10·0 | | | 15·6 | 58·4 | g |
| 9·7 | | | 27·8 | 28·6 | |
| 9·6 | | | 43·4 | 4·1 | 9·5 g |
| 9·4 | | 40 | 14·8 | 19·8 | |
| 10·2 | | | 30·3 | 18·4 | |
| 10·3 | | | 45·1 | 9·7 | |
| 10·2 | | | 53·6 | 14·7 | |
| 10·2 | | 41 | 30·6 | 54·3 | |
| 10·0 | | | 35·1 | 22·5 | |
| 10·3 | | 42 | 59·6 | 33·3 | |
| 9·2 | | 43 | 6·6 | 33·8 | 9·0 g |
| 8·8 | | | 33·1 | 29·5 | 8·0 GSg |
| 9·8 | | 45 | 3·6 | 15·4 | |
| 9·6 | | | 19·1 | 54·0 | |
| 10·3 | | | 27·7 | 3·4 | |
| 9·6 | | 46 | 18·7 | 31·4 | 9·5 g |
| 9·4 | | | 51·7 | 50·4 | |
| 10·3 | | 51 | 48·7 | 48·4 | |
| 9·4 | | 53 | 43·7 | 48·4 | 9·0 Gg |
| 7·8 | | | 57·7 | 28·3 | 8·0 GSg |
| 7·2 | | 54 | 17·2 | 42·4 | 7·0 GSg |
| 9·6 | | 55 | 29·7 | 30·4 | |
| 9·7 | | 56 | 33·2 | 40·4 | g |
| 10·3 | | | 46·7 | 25·2 | |
| 10·3 | | 58 | 53·9 | 43·9 | |
| 9·2 | | 59 | 47·2 | 58·3 | 9·5 g |
| 9·4 | | | 53·4 | 22·9 | g |
| 10·3 | 21 | 0 | 4·9 | 43·5 | |
| 10·3 | | | 49·9 | 18·1 | |
| 8·8 | | 1 | 6·9 | 4·6 | 9·5 g |
| 10·3 | | | 9·4 | 53·1 | |
| 8·8 | | | 10·9 | 43·9 | 9·0 g |
| 9·7 | | | 19·9 | 26·5 | |
| 10·3 | | | 25·7 | 1·1 | |
| 9·2 | | 2 | 7·4 | 35·5 | 9·0 Gg |
| 10·3 | | | 21·4 | 27·9 | |
| 8·8 | | | 23·4 | 24·7 | 9·2 g |
| 10·3 | | | 56·4 | 18·1 | |
| 10·3 | | | 59·4 | 42·6 | |
| 10·0 | | 3 | 4·9 | 34·5 | |
| 9·8 | | | 42·9 | 18·9 | |
| 10·3 | | 5 | 15·4 | 44·7 | |
| 9·8 | | | 36·5 | 40·0 | |
| 8·8 | | | 51·5 | 21·8 | 8·2 g |
| 10·3 | | 7 | 12·5 | 55·9 | |
| 10·3 | | | 16·5 | 4·8 | |
| 10·3 | | | 21·5 | 9·0 | |
| 9·7 | | | 33·5 | 51·2 | |

## 1501—1560.

| mag. | h | m | s (21h–22h) | ′ (−76°) | |
|---|---|---|---|---|---|
| 10·3 | 21 | 7 | 41·0 | 14·4 | |
| 10·3 | | 9 | 12·8 | 2·7 | |
| 10·3 | | | 37·5 | 19·6 | |
| 8·0 | | | 51·5 | 1·5 | 8·0 GSg |
| 9·5 | | | 56·0 | 19·0 | |
| 9·6 | | 10 | 3·0 | 31·0 | |
| 10·0 | | 11 | 29·0 | 42·1 | |
| 10·3 | | 12 | 5·5 | 7·6 | |
| 9·2 | | 14 | 36·5 | 36·0 | 9·5 g |
| 10·3 | | | 36·5 | 29·2 | |
| 10·3 | | | 44·5 | 12·8 | |
| 8·8 | | 15 | 12·0 | 32·6 | 9·2 g |
| 9·9 | | | 15·5 | 35·0 | g |
| 10·3 | | | 52·0 | 38·2 | |
| 10·0 | | 16 | 59·0 | 28·6 | |
| 9·0 | | 17 | 8·5 | 8·9 | g |
| 9·8 | | | 41·5 | 32·9 | g |
| 10·2 | | 20 | 11·0 | 18·0 | |
| 10·3 | | | 20·0 | 27·8 | |
| 10·3 | | | 57·0 | 27·3 | |
| 10·3 | | 21 | 44·0 | 2·1 | |
| 10·3 | | 22 | 18·0 | 13·4 | |
| 10·3 | | | 28·0 | 24·5 | |
| 9·5 | | | 44·8 | 33·5 | g |
| 10·3 | | 24 | 45·5 | 56·7 | |
| 10·2 | | 25 | 29·5 | 19·8 | |
| 10·3 | | 27 | 14·0 | 53·3 | |
| 9·9 | | 29 | 25·5 | 49·9 | |
| 10·3 | | 30 | 16·0 | 33·8 | |
| 10·0 | | | 26·5 | 54·2 | |
| 9·2 | | 31 | 14·2 | 2·8 | g |
| 9·9 | | | 50·0 | 46·8 | |
| 9·9 | | 34 | 58·5 | 3·8 | g |
| 10·3 | | 35 | 17·5 | 39·0 | |
| 10·0 | | | 38·5 | 16·8 | |
| 10·3 | | 37 | 10·5 | 47·6 | |
| 9·0 | | | 36·2 | 54·5 | g |
| 9·2 | | 38 | 7·0 | 46·9 | g |
| 9·6 | | 41 | 32·0 | 51·0 | Gg |
| 7·3 | | 44 | 32·0 | 48·0 | 7·2 GSg |
| 8·0 | | 49 | 58·0 | 16·4 | 7·0 GSg |
| 6·0 | | 50 | 45·0 | 42·8 | 6·5 GScg |
| 9·6 | | | 52·0 | 3·7 | g |
| 9·6 | | 51 | 24·0 | 29·7 | g |
| 9·6 | | 52 | 52·0 | 49·4 | g |
| 9·6 | | 56 | 4·0 | 53·6 | |
| 7·3 | | 58 | 50·0 | 29·3 | 7·0 GSg |
| 9·4 | | 59 | 38·0 | 39·4 | 9·0 g |
| 7·0 | 22 | 0 | 1·0 | 43·6 | 7·0 GSg |
| 9·6 | | 3 | 5·0 | 0·8 | g |
| 8·1 | | 8 | 13·0 | 44·6 | g |
| 9·6 | | 9 | 56·0 | 35·2 | g |
| 9·6 | | 12 | 58·0 | 25·0 | g |
| 9·6 | | 13 | 0·0 | 2·5 | g |
| 9·6 | | 15 | 15·0 | 22·3 | g |
| 9·6 | | | 19·0 | 24·5 | g |
| 9·4 | | 19 | 8·5 | 16·9 | g |
| 9·6 | | | 45·0 | 25·9 | g |
| 9·6 | | 22 | 28·0 | 46·3 | g |
| 9·6 | | 23 | 38·0 | 41·8 | g |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 19 | 40 | + 198 + 0·16 d | + 3·5 |
| | 50 | 196 + 0·16 | 3·9 |
| 20 | 0 | 193 + 0·15 | 4·2 |
| | 10 | 190 + 0·15 | 4·5 |
| | 20 | 187 + 0·15 | 4·8 |
| | 30 | 183 + 0·14 | 5·1 |
| | 40 | 180 + 0·14 | 5·4 |
| | 50 | 176 + 0·13 | 5·6 |
| 21 | 0 | 172 + 0·13 | 5·9 |
| | 10 | 167 + 0·12 | 6·2 |
| | 20 | 163 + 0·11 | 6·4 |
| | 30 | 158 + 0·11 | 6·6 |
| | 40 | 154 + 0·10 | 6·8 |
| | 50 | 149 + 0·10 | 7·0 |
| 22 | 0 | 144 + 0·09 | 7·2 |
| | 10 | 139 + 0·08 | 7·4 |
| | 20 | 133 + 0·08 | 7·6 |
| | 30 | + 128 + 0·07 | + 7·7 |

d = minutes of decl.



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25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 22 | 20 | +133+0·08 d | +7·6 |
| | 30 | 128+0·07 | 7·7 |
| | 40 | 123+0·06 | 7·9 |
| | 50 | 117+0·05 | 8·0 |
| 23 | 0 | 112+0·05 | 8·1 |
| | 10 | 106+0·04 | 8·2 |
| | 20 | 100+0·03 | 8·2 |
| | 30 | 94+0·02 | 8·3 |
| | 40 | 88+0·02 | 8·3 |
| | 50 | 83+0·01 | 8·3 |
| 0 | 0 | +77+0·00 | +8·4 |

d = minutes of decl.

**1561—1587.**

| mag. | h (22h—23h) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9·0 | 22 | 24 | 35·5 | 12·0 | g |
| 9·6 | | 26 | 57·0 | 32·4 | g |
| 9·5 | | 36 | 4·0 | 2·7 | g |
| 7·1 | | | 17·5 | 4·8 | 7·0 GSg |
| 9·5 | | 47 | 37·0 | 24·2 | 9·0 g |
| 9·6 | | | 55·0 | 25·8 | 9·5 g |
| 9·0 | | 50 | 28·0 | 33·8 | g |
| 9·5 | | 51 | 46·0 | 8·6 | 9·5 g |
| 8·9 | | 55 | 49·0 | 26·0 | |
| 8·9 | | 58 | 1·0 | 49·1 | |
| 9·6 | 23 | 0 | 3·0 | 31·3 | g |
| 8·5 | | | 4·0 | 34·3 | 8·5 g |
| 9·6 | | 6 | 7·0 | 15·2 | g |
| 9·6 | | 7 | 30·0 | 12·3 | g |
| 8·6 | | 8 | 0·0 | 12·9 | g |
| 7·2 | | 12 | 8·0 | 18·9 | 7·5 GSg |
| 9·6 | | 14 | 27·0 | 18·1 | g |
| 9·6 | | 16 | 42·0 | 13·4 | g |
| 9·4 | | | 49·5 | 47·3 | 8·5 g |
| 9·6 | | 17 | 31·8 | 0·2 | |
| 9·5 | | 18 | 42·5 | 19·5 | |
| 8·7 | | 19 | 16·5 | 42·3 | 9·0 g |
| 8·3 | | | 25·5 | 6·3 | 9·0 g |
| 9·3– | | 20 | 21·3 | 3·9 | 9·5 g |
| 9·2 | | 21 | 19·7 | 37·8 | g |
| 10·4 | | | 29·7 | 50·8 | g |
| 10·0 | | 22 | 25·7 | 40·9 | g |

**1588—1613.**

| mag. | h (23h) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 10·6 | 23 | 23 | 12·7 | 2·1 | |
| 11·0 | | | 31·7 | 23·4 | |
| 10·6 | | 24 | 0·7 | 35·9 | |
| 11·1 | | | 16·7 | 8·3 | |
| 9·2 | | 26 | 3·6 | 17·3 | g |
| 10·2 | | | 11·7 | 37·3 | |
| 10·0 | | | 16·7 | 45·1 | |
| 11·0 | | | 24·2 | 6·3 | |
| 10·2 | | | 28·7 | 38·1 | |
| 11·1 | | 27 | 17·7 | 32·4 | |
| 11·1 | | | 49·7 | 13·4 | |
| 9·8 | | 28 | 22·7 | 41·3 | |
| 9·4 | | 29 | 9·1 | 31·4 | |
| 9·8 | | | 29·2 | 46·2 | |
| 10·2 | | | 41·2 | 10·4 | |
| 10·0 | | 31 | 31·7 | 56·4 | g |
| 10·8 | | | 56·7 | 12·3 | |
| 8·8 | | 32 | 0·4 | 55·4 | 8·5 g |
| 9·2 | | | 18·6 | 48·2 | 8·5 g |
| 11·1 | | | 41·2 | 39·7 | |
| 11·1 | | 33 | 50·4 | 42·7 | |
| 9·0 | | 36 | 20·2 | 15·3 | g |
| 11·1 | | | 26·9 | 14·5 | |
| 10·0 | | 38 | 0·4 | 43·8 | |
| 10·6 | | 39 | 21·4 | 46·2 | |
| 11·0 | | | 35·4 | 28·2 | |

**1614—1639.**

| mag. | h (23h) | m | s | ′ (−76°) | |
|---|---|---|---|---|---|
| 9·8 | 23 | 40 | 9·9 | 10·6 | |
| 9·8 | | | 22·9 | 45·5 | |
| 10·6 | | | 25·9 | 30·4 | |
| 11·0 | | | 57·4 | 11·6 | |
| 10·0 | | 44 | 58·8 | 3·5 | |
| 10·2 | | 46 | 49·3 | 18·9 | |
| 9·6 | | | 50·3 | 45·0 | |
| 9·8 | | | 52·8 | 9·7 | g |
| 11·1 | | 47 | 12·8 | 37·7 | |
| 10·0 | | | 18·3 | 2·7 | |
| 8·4 | | | 36·3 | 51·7 | 8·5 g |
| 11·1 | | 48 | 0·7 | 32·1 | |
| 9·4 | | | 23·2 | 12·7 | 9·5 g |
| 9·8 | | 49 | 40·7 | 16·4 | |
| 10·4 | | 50 | 48·7 | 22·2 | |
| 10·6 | | | 49·7 | 32·4 | |
| 10·8 | | 51 | 5·7 | 22·2 | |
| 11·1 | | 52 | 52·7 | 31·4 | |
| 10·6 | | 53 | 35·2 | 40·9 | |
| 10·0 | | | 47·7 | 45·9 | |
| 10·4 | | | 57·7 | 24·0 | |
| 11·1 | | 54 | 28·0 | 24·0 | |
| 10·8 | | | 55·0 | 36·7 | |
| 11·1 | | 55 | 7·0 | 57·5 | |
| 11·1 | | 57 | 49·0 | 54·8 | |
| 10·2 | | 58 | 27·5 | 3·6 | |

# ZONE—77°.

PLATE 561 —563 (BELT 75°).
PLATE 585†—586‡ (BELT 80°).

25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 0 | 0 | +77 0·00 d | +8·4 |
| | 10 | 70−0·01 | 8·3 |
| | 20 | 64−0·02 | 8·3 |
| | 30 | 58−0·03 | 8·3 |
| | 40 | 52−0·04 | 8·2 |
| | 50 | 45−0·04 | 8·2 |
| 1 | 0 | 39−0·05 | 8·1 |
| | 10 | 33−0·06 | 8·0 |
| | 20 | 27−0·07 | 7·9 |
| | 30 | 21−0·08 | 7·7 |
| | 40 | +16−0·09 | +7·6 |

d = minutes of decl.

**1—20.**

| mag. | h (0h) | m | s | ′ (−77°) | |
|---|---|---|---|---|---|
| 7·8 | 0 | 1 | 0·3 | 25·5 | 8·0 GSg |
| 9·2 | | 2 | 19·3 | 17·3 | g |
| 11·1 | | 4 | 30·9 | 0·6 | |
| 10·8 | | 6 | 41·2 | 2·7 | |
| 8·4 | | 7 | 36·4 | 26·1 | 8·5 g |
| 9·8 | | 10 | 2·1 | 7·5 | g |
| 11·1 | | 12 | 27·1 | 15·5 | |
| 8·6 | | 13 | 23·5 | 34·2 | Gg |
| 9·8 | | | 23·6 | 32·2 | g |
| 7·8† | | 14 | 53·5 | 55·0 | 8·0 GSg |
| 10·6 | | | 55·6 | 4·7 | |
| 10·0 | | 15 | 14·1 | 31·5 | g |
| 9·8 | | 16 | 9·6 | 29·4 | g |
| 10·6 | | | 50·7 | 33·3 | |
| 7·8 | | 17 | 57·2 | 25·1 | 8·5 GSg |
| 3·3† | | 19 | 16·5 | 57·4 | 3·0 GSggrλ |
| 9·4 | | 20 | 35·3 | 1·3 | g |
| 11·1 | | | 43·7 | 7·4 | |
| 9·6 | | 21 | 49·1 | 0·7 | g |
| 10·0 | | 22 | 8·7 | 5·4 | |

**21—40.**

| mag. | h (0h) | m | s | ′ (−77°) | |
|---|---|---|---|---|---|
| 11·0 | 0 | 24 | 4·7 | 12·3 | |
| 10·6 | | | 15·2 | 21·3 | |
| 11·0 | | 25 | 24·2 | 30·5 | |
| 11·1 | | | 58·0 | 3·2 | |
| 9·0† | | 26 | 8·5 | 44·6 | 9·5 Gg |
| 11·1 | | 27 | 12·5 | 20·2 | |
| 9·8 | | | 22·5 | 9·2 | |
| 11·1 | | 31 | 40·5 | 15·2 | |
| 10·4– | | 32 | 56·0 | 3·3 | |
| 9·4† | | 33 | 25·5 | 52·0 | |
| 9·7 | | 35 | 22·0 | 31·1 | g |
| 9·1 | | 42 | 3·0 | 14·1 | g |
| 8·9 | | | 27·5 | 36·4 | g |
| 9·8 | | 47 | 48·5 | 4·0 | g |
| 9·8 | | 49 | 39·0 | 16·4 | g |
| 9·5‡ | | 52 | 55·9 | 43·6 | g |
| 8·3 | | 53 | 50·0 | 13·9 | 7·5 GSg |
| 9·6 | | 56 | 50·2 | 30·8 | |
| 9·4 | | 58 | 9·0 | 28·1 | g |
| 9·3‡ | | | 43·0 | 42·0 | g |

**41—60.**

| mag. | h (0h—1h) | m | s | ′ (−77°) | |
|---|---|---|---|---|---|
| 9·6 | 1 | 1 | 13·0 | 13·7 | |
| 9·2‡ | | | 44·0 | 35·2 | g |
| 8·5 | | 4 | 26·0 | 20·5 | 8·5 GSg |
| 9·2‡ | | 5 | 29·0 | 48·2 | g |
| 8·3‡ | | 7 | 25·0 | 52·2 | 9·0 GSg |
| 8·0‡ | | 16 | 42·5 | 41·3 | 8·0 GSg |
| 8·5– | | 21 | 11·5 | 15·9 | 8·5 GSg |
| 10·7 | | | 23·6 | 21·0 | |
| 10·7 | | | 32·1 | 16·4 | |
| 9·5‡ | | 24 | 46·5 | 53·9 | |
| 9·2‡ | | 26 | 56·5 | 56·7 | g |
| 8·4 | | 29 | 30·8 | 18·3 | 8·0 Gg |
| 9·6 | | | 57·3 | 17·8 | |
| 8·6 | | 30 | 10·6 | 33·3 | 9·0 g |
| 9·8 | | | 56·3 | 34·8 | |
| 10·0 | | 31 | 6·1 | 27·9 | |
| 10·2 | | 33 | 46·1 | 16·0 | |
| 9·4 | | 34 | 55·7 | 0·6 | 8·0 Gg |
| 10·7 | | 35 | 27·6 | 27·7 | |
| 9·8 | | 37 | 13·5 | 26·6 | |



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## 61—120.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| | 1h.—2h. | | | | |
| 9·4 | 1 | 37 | 15·1 | 7·9 | 9·0 g |
| 10·2 | | 42 | 45·6 | 22·9 | |
| 10·9 | | 43 | 37·6 | 15·6 | |
| 7·1‡ | | 44 | 37·5 | 58·9 | 7·0 GSg |
| 9·4 | | 45 | 45·3 | 34·9 | g |
| 10·8 | | | 53·5 | 21·8 | |
| 10·9 | | 46 | 33·0 | 2·6 | |
| 8·6 | | | 45·0 | 24·0 | g |
| 9·2 | | 47 | 35·0 | 3·0 | g |
| 10·6 | | 48 | 18·5 | 7·6 | |
| 10·2 | | | 40·0 | 28·9 | |
| 9·2 | | 50 | 36·0 | 37·6 | g |
| 10·7 | | 51 | 24·5 | 11·5 | |
| 10·6 | | 53 | 56·5 | 7·5 | |
| 8·6‡ | | 54 | 3·0 | 51·4 | 8·5 g |
| 10·9 | | | 10·1 | 0·2 | |
| 9·4 | | 55 | 1·5 | 38·6 | |
| 10·9 | | | 40·6 | 24·9 | |
| 10·9 | | 56 | 3·1 | 27·1 | |
| 9·2‡ | | 57 | 32·0 | 48·6 | g |
| 9·2‡ | | 58 | 44·0 | 40·2 | g |
| 10·9 | | | 48·1 | 33·2 | |
| 10·0 | | | 59·1 | 30·0 | |
| 10·9 | 2 | 0 | 18·6 | 12·4 | |
| 10·8 | | | 57·1 | 32·9 | |
| 9·8 | | 1 | 54·1 | 34·3 | g |
| 10·9 | | 2 | 5·1 | 10·0 | |
| 10·9 | | | 33·1 | 11·4 | |
| 10·9 | | | 41·1 | 27·2 | |
| 10·4 | | 5 | 10·7 | 2·6 | |
| 9·2‡ | | 6 | 16·5 | 46·8 | g |
| 10·2 | | | 49·7 | 24·4 | |
| 9·8 | | 8 | 58·7 | 12·6 | 8·5 g |
| 9·6 | | 9 | 22·2 | 16·6 | 9·5 g |
| 7·1 | | 10 | 23·2 | 12·7 | 6·5 GScg |
| 10·0 | | | 40·6 | 25·2 | g |
| 10·9 | | 11 | 9·2 | 34·9 | |
| 8·8 | | | 30·2 | 16·8 | 9·0 g |
| 9·2§ | | 13 | 0·0 | 50·1 | |
| 9·0§ | | | 4·5 | 37·8 | g |
| 9·8 | | 15 | 11·6 | 29·1 | g |
| 9·0 | | | 31·4 | 16·4 | 9·0 g |
| 10·2 | | | 31·7 | 13·1 | |
| 9·5 | | 18 | 47·4 | 9·1 | |
| 8·7§ | | 19 | 28·0 | 46·6 | g |
| 9·4 | | 20 | 41·6 | 21·4 | g |
| 8·7§ | | 21 | 42·0 | 58·9 | g |
| 10·2 | | 23 | 58·2 | 7·4 | |
| 8·4 | | 25 | 35·6 | 22·1 | 9·0 g |
| 9·0§ | | 26 | 30·5 | 44·0 | 9·0 |
| 8·7§ | | 29 | 8·0 | 58·5 | 8·5 |
| 10·9 | | 30 | 39·7 | 18·7 | |
| 10·9 | | 32 | 1·7 | 16·6 | |
| 10·4 | | | 5·7 | 21·5 | |
| 10·2 | | | 33·3 | 9·0 | |
| 10·9 | | 33 | 42·7 | 6·4 | |
| 10·4 | | 34 | 58·2 | 22·2 | |
| 9·2§ | | 35 | 41·5 | 35·6 | |
| 9·0§ | | 36 | 30·5 | 37·7 | |
| 10·9 − | | 37 | 51·2 | 5·1 | |

## 121—180.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| | 2h.—4h. | | | | |
| 9·3§ | 2 | 41 | 56·0 | 25·7 | |
| 9·3§ | | 42 | 15·5 | 43·4 | |
| 9·2§ | | | 21·8 | 47·8 | |
| 9·5 | | 46 | 27·0 | 15·7 | |
| 9·3§ | | 48 | 47·0 | 31·8 | |
| 9·3 | | 49 | 51·0 | 7·6 | |
| 9·5 | | 52 | 39·0 | 10·0 | |
| 9·3 | | | 39·5 | 9·3 | |
| 9·1 | | 57 | 21·0 | 10·4 | 9·0 g |
| 8·7§ | 3 | 6 | 56·0 | 58·3 | 9·2 g |
| 7·8§ | | 7 | 11·0 | 38·6 | 8·0 GSg |
| 9·1 | | 9 | 7·0 | 14·2 | |
| 8·8 | | 15 | 54·5 | 29·4 | 8·5 Gg |
| 5·8§ | | 19 | 7·5 | 50·6 | 6·0 GSg |
| 6·9 − | | 27 | 38·5 | 10·7 | 7·0 GSg |
| 9·4 | | 29 | 0·0 | 2·9 | 9·0 g |
| 9·4 | | 35 | 18·0 | 31·1 | g |
| 9·0§ | | 36 | 12·0 | 49·1 | g |
| 9·7 | | | 57·0 | 20·6 | g |
| 9·0§ | | 37 | 24·5 | 58·4 | 9·0 g |
| 8·6 | | | 33·6 | 17·3 | 8·5 g |
| 8·9 | | 40 | 6·0 | 31·3 | 9·0 g |
| 8·8 | | | 29·5 | 29·5 | 8·5 GSg |
| 9·8 | | 43 | 50·0 | 20·0 | |
| 9·2‡ | | 44 | 27·0 | 36·8 | |
| 9·4‡ | | 47 | 8·5 | 42·3 | g |
| 9·2‡ | | | 37·0 | 53·6 | g |
| 9·4‡ | | | 59·0 | 50·7 | g |
| 9·8 | | 49 | 57·8 | 22·4 | |
| 7·7 | | 50 | 12·0 | 5·8 | GSgg |
| 9·8‡ | | 51 | 6·0 | 46·0 | g |
| 9·2‡ | | | 6·5 | 43·7 | g |
| 9·0‡ | | 52 | 53·0 | 42·7 | 9·0 g |
| 9·2 | 4 | 1 | 33·3 | 10·9 | g |
| 9·4 | | | 35·0 | 18·8 | |
| 9·7 | | 2 | 55·3 | 13·7 | |
| 9·3‡ | | 5 | 54·0 | 53·3 | g |
| 9·8 | | 8 | 12·0 | 5·5 | |
| 9·4‡ | | 12 | 3·0 | 53·4 | g |
| 9·4 | | 13 | 12·3 | 4·3 | g |
| 8·5 | | | 44·0 | 22·1 | 9·0 g |
| 9·7‡ | | 19 | 5·0 | 53·9 | |
| 9·9 | | 20 | 21·5 | 2·7 | |
| 9·4 | | 22 | 7·0 | 27·9 | 10·0 g |
| 9·7‡ | | | 47·5 | 46·8 | g |
| 9·8‡ | | 23 | 17·0 | 48·8 | g |
| 9·2 − | | | 26·0 | 20·8 | 9·0 g |
| 9·5‡ | | 24 | 8·0 | 38·3 | g |
| 9·3 | | 26 | 51·5 | 14·1 | |
| 9·7 | | 28 | 3·0 | 0·0 | ? |
| 9·7 | | | 17·0 | 0·0 | ? |
| 7·5‡ | | 30 | 24·0 | 57·5 | 7·8 GSg |
| 9·2 | | 31 | 37·5 | 0·1 | |
| 9·0‡ | | 37 | 32·0 | 43·8 | 9·0 g |
| 9·1 | | 39 | 45·0 | 6·2 | g |
| 9·5 | | | 51·0 | 5·7 | g |
| 9·4 | | 40 | 13·0 | 18·9 | |
| 9·1 | | | 51·0 | 35·9 | g |
| 9·1 | | 41 | 32·0 | 7·6 | 9·0 g |
| 9·0 | | 42 | 59·0 | 19·2 | 9·5 g |

## 181—240.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| | 4h.—6h. | | | | |
| 7·0‡ | 4 | 44 | 3·5 | 53·4 | 6·5 GSg |
| 9·7 | | 45 | 18·0 | 19·6 | |
| 9·7‡ | | 47 | 28·5 | 47·0 | g |
| 9·5‡ | | 48 | 6·5 | 47·0 | g |
| 9·4 | | | 15·0 | 13·9 | |
| 9·8‡ | | 49 | 58·0 | 54·4 | g |
| 9·5‡ | | 50 | 12·5 | 47·7 | g |
| 8·5 | | 51 | 20·0 | 14·2 | 9·0 g |
| 9·3 | | 54 | 19·0 | 12·9 | |
| 8·9 | | 57 | 40·0 | 14·2 | g |
| 9·7 | 5 | 12 | 28·0 | 28·9 | |
| 7·5‡ | | | 28·5 | 42·4 | 8·5 GSg |
| 9·7‡ | | 13 | 24·0 | 55·8 | |
| 9·2 | | | 29·0 | 10·7 | 9·5 g |
| 10·2† | | 15 | 14·0 | 35·1 | |
| 8·4 | | 16 | 8·5 | 21·4 | 8·2 GSg |
| 9·3 | | 20 | 34·5 | 6·5 | g |
| 8·9 | | 23 | 27·0 | 1·7 | 9·0 g |
| 9·6 | | | 59·0 | 17·9 | |
| 10·1† | | 24 | 53·0 | 38·2 | |
| 9·6 − | | 25 | 34·5 | 11·6 | |
| 9·6 | | 27 | 38·0 | 25·2 | |
| 9·6† | | | 41·5 | 48·0 | g |
| 9·4† | | 32 | 45·5 | 49·0 | g |
| 9·3† | | 33 | 20·8 | 35·5 | |
| 9·1 | | | 29·0 | 28·1 | 9·5 g |
| 9·6 | | 37 | 11·0 | 3·0 | g |
| 9·8† | | 39 | 0·5 | 56·0 | |
| 9·6† | | 43 | 13·5 | 47·8 | g |
| 9·9 | | 45 | 50·0 | 26·5 | |
| 10·3† | | 47 | 2·0 | 49·9 | |
| 9·4 | | | 25·5 | 20·3 | |
| 9·8 | | | 47·0 | 26·0 | |
| 9·2† | | 48 | 4·5 | 44·8 | g |
| 9·3 | | | 45·7 | 29·8 | 9·2 g |
| 9·5 | | 50 | 26·0 | 23·2 | 9·5 g |
| 10·0† | | | 52·0 | 41·8 | g |
| 9·8 | | | 59·0 | 13·2 | |
| 9·3 | | 53 | 49·5 | 35·9 | g |
| 8·9 | | 54 | 7·7 | 24·1 | 8·5 g |
| 9·8 | | 57 | 1·0 | 12·5 | |
| 9·9 | 6 | 0 | 19·0 | 10·7 | |
| 9·8 | | | 27·0 | 23·1 | |
| 9·6† | | 2 | 2·5 | 53·8 | g |
| 9·2† | | | 23·5 | 51·0 | g |
| 9·4 | | | 26·5 | 10·7 | g |
| 9·3 | | | 29·0 | 13·6 | g |
| 9·8 | | 4 | 59·0 | 1·1 | |
| 9·3 | | 5 | 7·0 | 15·9 | 9·0 Gg |
| 9·4† | | | 7·0 | 35·8 | 9·5 Gg |
| 9·9 | | | 21·0 | 7·9 | |
| 9·4 | | | 47·5 | 27·5 | |
| 9·3† | | 7 | 49·5 | 42·4 | g |
| 8·4 | | 9 | 14·5 | 15·5 | 9·0 g |
| 9·9 | | 10 | 24·0 | 2·5 | |
| 9·4 | | 12 | 37·5 | 29·5 | |
| 9·6 | | | 53·0 | 27·9 | |
| 9·0† | | 13 | 0·5 | 55·6 | 9·5 g |
| 9·6† | | | 59·0 | 36·0 | 10·0 |
| 9·5 | | 14 | 19·0 | 22·2 | |

25 prec.

| h | m | a (s s) | δ |
|---|---|---|---|
| 1 | 30 | + 21 − 0·08 d | + 7·7 |
| | 40 | 16 − 0·09 | 7·6 |
| | 50 | 10 − 0·10 | 7·4 |
| 2 | 0 | + 4 − 0·10 | 7·2 |
| | 10 | − 1 − 0·11 | 7·0 |
| | 20 | 6 − 0·12 | 6·8 |
| | 30 | 11 − 0·13 | 6·6 |
| | 40 | 16 − 0·13 | 6·4 |
| | 50 | 21 − 0·14 | 6·2 |
| 3 | 0 | 26 − 0·15 | 5·9 |
| | 10 | 30 − 0·15 | 5·6 |
| | 20 | 34 − 0·16 | 5·4 |
| | 30 | 38 − 0·16 | 5·1 |
| | 40 | 42 − 0·17 | 4·8 |
| | 50 | 45 − 0·18 | 4·5 |
| 4 | 0 | 49 − 0·18 | 4·2 |
| | 10 | 52 − 0·18 | 3·9 |
| | 20 | 54 − 0·19 | 3·5 |
| | 30 | 57 − 0·19 | 3·2 |
| | 40 | 59 − 0·20 | 2·9 |
| | 50 | 61 − 0·20 | 2·5 |
| 5 | 0 | 63 − 0·20 | 2·2 |
| | 10 | 65 − 0·20 | 1·8 |
| | 20 | 66 − 0·20 | 1·5 |
| | 30 | 67 − 0·21 | 1·1 |
| | 40 | 67 − 0·21 | 0·7 |
| | 50 | 68 − 0·21 | + 0·4 |
| 6 | 0 | 68 − 0·21 | 0·0 |
| | 10 | 68 − 0·21 | − 0·4 |
| | 20 | − 67 − 0·21 | − 0·7 |

d = minutes of decl.

§ From the rejected plates 230 and 235 (80°, 3h 0m).

25 prec.

| h | m | a (s) | a (s) | δ (′) |
|---|---|---|---|---|
| 6 | 10 | − 68 | − 0·21 d | − 0·4 |
| | 20 | 67 | − 0·21 | 0·7 |
| | 30 | 67 | − 0·21 | 1·1 |
| | 40 | 66 | − 0·20 | 1·5 |
| | 50 | 65 | − 0·20 | 1·8 |
| 7 | 0 | 63 | − 0·20 | 2·2 |
| | 10 | 61 | − 0·20 | 2·5 |
| | 20 | 59 | − 0·20 | 2·9 |
| | 30 | 57 | − 0·19 | 3·2 |
| | 40 | 54 | − 0·19 | 3·5 |
| | 50 | 52 | − 0·18 | 3·9 |
| 8 | 0 | 49 | − 0·18 | 4·2 |
| | 10 | 45 | − 0·18 | 4·5 |
| | 20 | 42 | − 0·17 | 4·8 |
| | 30 | 38 | − 0·16 | 5·1 |
| | 40 | 34 | − 0·16 | 5·4 |
| | 50 | − 30 | − 0·15 | − 5·6 |

d = minutes of decl.

## 241—300.

| mag. | 6h.–7h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·7† | 6 | 14 | 42·5 | 37·1 | |
| 9·9† | | 15 | 34·0 | 53·0 | |
| 7·0 | | 16 | 8·8 | 3·9 | 7·5 GS*g* |
| 9·4 | | | 19·5 | 25·7 | |
| 9·4 | | | 33·0 | 30·4 | |
| 9·3 | | 17 | 22·0 | 27·7 | *g* |
| 8·8 | | | 28·0 | 28·0 | *g* |
| 8·8 | | | 42·0 | 18·8 | 8·5 *g* |
| 9·8 | | 19 | 5·0 | 14·4 | |
| 8·1 | | 20 | 50·5 | 0·0 | 8·8 S*g* |
| 8·8 | | 22 | 42·0 | 2·7 | 9·0 G*g* |
| 9·8† | | 23 | 18·0 | 50·2 | |
| 8·8 | | 24 | 55·0 | 15·8 | 9·2 *g* |
| 9·6 | | 26 | 18·0 | 16·8 | |
| 9·6 | | | 40·0 | 14·8 | |
| 9·6 | | 27 | 15·0 | 17·1 | |
| 9·3 | | 29 | 46·5 | 22·3 | |
| 7·1 | | 34 | 0·5 | 11·9 | 7·0 GS*g* |
| 9·7‡ | | | 16·0 | 52·3 | |
| 9·5 | | 35 | 8·0 | 22·0 | |
| 9·7‡ | | | 32·0 | 54·6 | |
| 9·0 | | 36 | 3·0 | 5·6 | |
| 9·3 | | | 23·0 | 31·5 | |
| 9·8 | | 37 | 27·0 | 30·5 | |
| 10·0‡ | | 38 | 51·0 | 53·6 | |
| 9·4 | | 39 | 17·0 | 29·1 | |
| 9·5 | | | 25·0 | 40·0 | G |
| 9·8 | | | 26·0 | 19·1 | |
| 9·2 | | | 55·5 | 0·5 | |
| 7·5 | | 40 | 10·0 | 34·4 | 7·0 GS*g* : |
| 9·1 | | 43 | 7·5 | 33·6 | 8·8 *g* |
| 9·1 | | | 38·5 | 25·0 | 8·0 GS*g* |
| 9·6 | | 44 | 49·0 | 20·2 | |
| 9·6 | | 45 | 45·0 | 27·2 | |
| 8·9 | | 46 | 47·5 | 26·7 | 9·0 *g* |
| 10·0‡ | | 47 | 37·0 | 58·1 | |
| 10·0‡ | | | 59·0 | 54·6 | |
| 9·8 | | 48 | 7·5 | 35·0 | |
| 9·7‡ | | | 11·0 | 50·2 | |
| 8·8 | | 49 | 59·5 | 6·4 | 8·8 *g* |
| 9·4 | | 50 | 5·5 | 37·4 | |
| 9·8 | | 51 | 1·0 | 5·2 | |
| 9·8 | | 52 | 33·0 | 30·1 | |
| 8·8‡ | | 56 | 2·5 | 56·0 | 8·0 GS*g* |
| 9·1 | | | 8·0 | 17·2 | 9·0 |
| 7·5 | | 57 | 1·5 | 30·8 | 7·5 GS*g* |
| 9·2 | | 58 | 27·0 | 42·9 | |
| 7·4 | 7 | 0 | 2·0 | 36·7 | 7·5 GS*g* |
| 9·5 | | 4 | 26·7 | 17·5 | |
| 9·8 | | 5 | 4·0 | 22·2 | |
| 9·1‡ | | 9 | 2·5 | 55·8 | |
| 9·8 | | | 30·0 | 15·6 | |
| 8·2 | | | 31·7 | 44·7 | 8·2 *g* |
| 9·1‡ | | 10 | 32·5 | 58·7 | |
| 9·8 | | | 59·0 | 3·3 | |
| 9·2‡ | | 11 | 7·5 | 52·1 | |
| 9·4 | | | 52·5 | 29·2 | |
| 9·4‡ | | 13 | 13·0 | 42·5 | |
| 9·8 | | 15 | 6·0 | 9·7 | |
| 9·1 | | 16 | 37·0 | 11·3 | *g* |

## 301—360.

| mag. | 7h.–8h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·2 | 7 | 17 | 42·0 | 34·0 | |
| 8·8 | | 18 | 15·5 | 32·2 | |
| 9·4 | | 19 | 36·2 | 20·1 | 9·0 |
| 8·9 | | 21 | 53·5 | 6·5 | *g* |
| 9·6 | | 23 | 32·5 | 29·7 | |
| 9·2‡ | | 25 | 40·0 | 36·9 | |
| 9·8 | | | 47·0 | 2·7 | |
| 9·5 | | 26 | 21·0 | 22·0 | |
| 9·7‡ | | | 22·0 | 37·1 | 10·0 |
| 9·2‡ | | 27 | 38·5 | 40·2 | 9·2 *g* |
| 9·4‡ | | | 47·2 | 41·3 | 9·8 |
| 9·8‡ | | 28 | 28·0 | 27·1 | |
| 9·0 | | 30 | 20·0 | 11·3 | *g* |
| 9·8 | | 32 | 27·3 | 0·1 | |
| 9·7‡ | | 33 | 18·5 | 57·0 | |
| 9·1 | | | 38·0 | 16·5 | 10·0 |
| 8·4 | | 34 | 27·3 | 33·7 | 8·0 *g* |
| 9·8 | | 36 | 21·0 | 34·7 | |
| 8·0‡ | | 37 | 57·5 | 48·3 | 8·0 GS*g* |
| 9·4‡ | | 39 | 3·0 | 40·2 | |
| 8·1 | | 41 | 4·5 | 20·6 | 7·0 GS*g* |
| 9·8 | | 42 | 1·0 | 29·3 | |
| 9·1 | | 44 | 4·5 | 34·4 | 9·5 |
| 9·1‡ | | | 56·0 | 58·6 | 9·3 *g* |
| 9·5 | | 45 | 13·5 | 32·6 | |
| 8·6 | | | 34·0 | 39·2 | 8·0 *g* |
| 9·9 | | 46 | 42·0 | 25·9 | |
| 9·8 | | 49 | 22·0 | 5·1 | |
| 9·5‡ | | | 47·0 | 37·2 | |
| 8·3‡ | | 50 | 53·5 | 51·1 | 8·8 *g* |
| 9·1 | | 51 | 44·5 | 19·0 | 8·2 *g* |
| 9·4‡ | | 52 | 31·0 | 47·0 | |
| 9·8‡ | | 55 | 54·0 | 49·7 | |
| 8·8‡ | | 56 | 48·5 | 43·7 | |
| 9·4 | | 58 | 11·5 | 19·8 | |
| 9·4 | | 59 | 30·5 | 5·0 | |
| 8·8‡ | | | 52·5 | 57·6 | |
| 9·4‡ | 8 | 1 | 31·0 | 48·2 | 10·0 |
| 9·9 | | 5 | 8·0 | 29·8 | |
| 9·9 | | | 14·0 | 18·2 | |
| 9·4‡ | | | 46·0 | 53·9 | |
| 9·4 | | 6 | 54·5 | 11·7 | |
| 9·5‡ | | | 57·0 | 56·9 | |
| 9·5† | | 9 | 4·0 | 45·4 | |
| 9·9 | | | 16·3 | 8·1 | |
| 9·6† | | 10 | 5·0 | 57·5 | |
| 10·0† | | | 20·5 | 25·5 | |
| 9·9† | | | 30·5 | 40·7 | |
| 9·8 | | 11 | 0·0 | 6·3 | |
| 8·7 | | | 38·0 | 8·9 | *g* |
| 9·6 | | 12 | 10·5 | 17·4 | |
| 9·8† | | 13 | 7·5 | 15·8 | |
| 9·5 | | | 22·0 | 12·1 | |
| 10·2† | | | 39·0 | 17·0 | |
| 10·0† | | | 43·5 | 26·4 | |
| 9·7† | | 14 | 5·5 | 53·8 | |
| 9·8 | | | 23·5 | 19·3 | |
| 9·1 | | | 50·5 | 38·6 | 9·0 *g* |
| 9·6† | | 15 | 7·0 | 59·4 | 9·0 *g* |
| 9·9 | | | 18·8 | 23·2 | |

## 361—420.

| mag. | 8h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·9 | 8 | 15 | 38·0 | 33·6 | |
| 9·9 | | | 41·2 | 7·5 | |
| 9·8† | | | 43·5 | 52·5 | |
| 8·9† | | | 55·5 | 43·1 | 9·2 *g* |
| 9·8† | | 16 | 6·5 | 53·8 | |
| 9·9 | | | 26·0 | 15·2 | |
| 9·5 | | | 46·0 | 31·8 | 9·0 *g* |
| 9·6† | | 17 | 7·0 | 37·9 | |
| 9·7† | | 18 | 28·5 | 57·5 | |
| 9·2 | | 19 | 4·0 | 2·9 | |
| 10·3† | | | 6·5 | 23·7 | |
| 10·2† | | | 30·5 | 3·2 | |
| 9·8 | | 20 | 1·0 | 26·0 | |
| 9·8 | | | 4·0 | 23·5 | |
| 10·0† | | | 33·5 | 7·4 | |
| 9·8† | | | 39·5 | 15·4 | |
| 10·0† | | | 46·5 | 56·7 | |
| 9·9† | | 22 | 36·0 | 38·2 | |
| 9·7† | | | 44·5 | 59·4 | |
| 9·7† | | 23 | 5·0 | 50·7 | |
| 10·2† | | | 7·0 | 25·5 | |
| 10·1† | | | 10·5 | 32·7 | |
| 5·8 | | 24 | 20·0 | 4·9 | 5·0 GS*cgr* |
| 8·2† | | | 24·0 | 55·5 | 8·5 GS*g* |
| 9·5 | | | 38·0 | 17·1 | |
| 10·2† | | 25 | 15·5 | 56·4 | |
| 9·9 | | | 28·3 | 8·6 | |
| 9·5 | | | 47·0 | 26·7 | *g* |
| 10·1† | | 28 | 3·5 | 3·5 | |
| 8·2 | | | 48·0 | 22·1 | 9·5 *g* |
| 9·7† | | | 48·5 | 37·6 | |
| 10·2† | | | 57·0 | 47·7 | |
| 9·7 | | 29 | 15·0 | 27·9 | |
| 10·3† | | 30 | 16·0 | 57·4 | |
| 8·7 | | | 55·5 | 18·6 | 8·8 *g* |
| 10·2† | | 31 | 3·5 | 45·4 | |
| 9·7† | | | 16·5 | 56·6 | |
| 9·7† | | | 26·5 | 51·0 | |
| 9·8† | | | 53·5 | 41·5 | |
| 10·0† | | | 58·5 | 31·4 | |
| 9·8† | | 32 | 4·5 | 44·3 | |
| 9·6 | | | 8·0 | 21·9 | |
| 10·1† | | | 21·5 | 51·8 | |
| 9·4 | | 33 | 21·7 | 30·9 | 9·5 *g* |
| 9·1 | | | 52·0 | 31·7 | 10·0 |
| 10·2† | | 34 | 3·5 | 21·2 | |
| 9·7† | | | 22·5 | 42·6 | |
| 10·2† | | | 30·5 | 22·1 | |
| 10·2† | | | 50·0 | 54·8 | |
| 9·0 | | 35 | 2·0 | 20·7 | |
| 10·2† | | | 42·5 | 52·5 | |
| 10·2† | | | 54·5 | 41·8 | |
| 9·6† | | | 56·5 | 58·3 | |
| 9·8† | | 37 | 5·5 | 42·8 | |
| 10·1† | | | 39·0 | 48·3 | |
| 9·6† | | 38 | 35·5 | 53·8 | *g* |
| 10·3† | | 39 | 8·5 | 13·4 | |
| 10·2† | | | 25·0 | 35·8 | |
| 10·1† | | | 49·0 | 36·6 | |
| 10·1† | | 40 | 45·0 | 43·2 | |



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## 421—480.

| mag. | h (8h–9h) | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·4 | 8 | 40 | 48·3 | 10·0 | 9·5 *g* |
| 9·2 | | 41 | 0·0 | 4·3 | 9·5 |
| 9·0 | | 42 | 7·0 | 9·7 | 9·0 *g* |
| 10·2† | | 43 | 12·0 | 44·6 | |
| 10·3† | | | 42·5 | 5·1 | |
| 9·7 | | | 52·8 | 12·5 | |
| 10·2† | | 44 | 11·5 | 13·8 | |
| 10·1† | | | 16·0 | 32·9 | |
| 9·4 | | | 27·0 | 22·6 | |
| 10·3† | | | 55·0 | 57·9 | |
| 9·7 | | 45 | 42·0 | 6·4 | |
| 9·7 | | | 45·0 | 3·0 | |
| 9·9† | | | 46·0 | 45·9 | |
| 10·0† | | 46 | 5·5 | 17·9 | |
| 10·3† | | | 12·0 | 39·8 | |
| 10·0† | | 47 | 16·0 | 37·5 | |
| 9·7 | | 48 | 54·3 | 27·7 | |
| 10·2† | | 49 | 13·0 | 29·0 | |
| 10·1† | | | 41·5 | 22·4 | |
| 9·7 | | 50 | 17·8 | 7·7 | |
| 9·7 | | | 43·0 | 10·7 | |
| 10·3† | | 51 | 26·5 | 17·0 | |
| 9·7 | | | 46·0 | 7·0 | |
| 9·6 | | | 47·3 | 3·7 | |
| 9·6 | | | 54·8 | 7·8 | 9·5 *g* |
| 9·3† | | 52 | 2·0 | 35·7 | |
| 9·7 | | | 19·3 | 15·4 | |
| 10·1† | | | 30·0 | 36·2 | |
| 8·8† | | | 44·0 | 39·5 | 9·5 |
| 9·7 | | 53 | 5·0 | 25·4 | |
| 9·2† | | | 43·0 | 34·3 | *g* |
| 10·0† | | | 54·0 | 55·9 | |
| 9·9† | | | 54·0 | 46·6 | |
| 9·7 | | | 57·3 | 13·7 | |
| 10·2† | | 54 | 0·5 | 10·1 | |
| 10·3† | | | 6·0 | 45·7 | |
| 10·0† | | | 35·5 | 11·0 | |
| 9·8† | | 55 | 44·7 | 31·5 | |
| 9·5 | | 56 | 39·0 | 29·7 | 9·5 *g* |
| 7·8 | | 57 | 24·0 | 7·4 | 8·5 *g* |
| 9·6 | | | 55·8 | 18·0 | |
| 9·6† | | 58 | 25·5 | 30·4 | 9·5 *g* |
| 10·3† | | | 26·0 | 51·6 | |
| 10·3† | 9 | 0 | 14·5 | 26·1 | |
| 9·7 | | | 46·3 | 5·5 | |
| 10·2† | | | 49·0 | 34·7 | |
| 9·8† | | 1 | 21·5 | 26·6 | |
| 10·3† | | 2 | 2·5 | 23·0 | |
| 9·3† | | | 8·0 | 36·0 | 8·5 *g* |
| 9·3† | | | 42·0 | 54·6 | |
| 10·3† | | 3 | 0·5 | 7·2 | |
| 10·3† | | | 10·0 | 50·2 | |
| 9·5† | | 4 | 14·0 | 59·2 | |
| 10·3† | | | 16·0 | 50·8 | |
| 10·0† | | | 54·5 | 46·1 | |
| 10·2† | | | 58·0 | 25·8 | |
| 10·0† | | 5 | 7·0 | 35·6 | |
| 10·2† | | | 31·0 | 5·4 | |
| 10·0† | | 7 | 23·0 | 28·7 | |
| 9·5† | | 8 | 1·5 | 53·7 | |

## 481—540.

| mag. | h (9h) | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·8† | 9 | 8 | 19·0 | 39·5 | |
| 10·0† | | | 38·0 | 32·7 | |
| 10·2† | | 9 | 56·0 | 45·3 | |
| 9·7 | | | 58·5 | 8·7 | |
| 9·1† | | 11 | 7·5 | 48·9 | 9·5 |
| 10·3† | | | 15·3 | 51·5 | |
| 9·0 | | 12 | 2·5 | 0·0 | 9·5 *g* |
| 10·1† | | 14 | 6·0 | 34·1 | |
| 10·1† | | | 18·5 | 14·0 | |
| 8·3† | | 15 | 37·5 | 42·4 | 8·8 *g* |
| 9·4† | | 16 | 14·0 | 49·1 | 9·5 |
| 10·0† | | | 21·5 | 18·9 | |
| 9·7 | | 17 | 3·7 | 9·4 | |
| 9·4† | | | 19·0 | 35·5 | *g* |
| 10·0† | | 18 | 8·0 | 56·5 | |
| 9·7† | | | 23·5 | 29·4 | |
| 10·0† | | | 34·5 | 23·7 | |
| 9·7 | | | 56·0 | 12·2 | |
| 9·0 | | 19 | 18·0 | 6·9 | *g* |
| 10·3† | | | 19·0 | 53·9 | |
| 10·1† | | | 41·0 | 35·5 | |
| 8·2† | | 20 | 4·0 | 53·8 | 8·8 *g* |
| 8·0 | | 21 | 3·0 | 6·8 | 8·5 GS*g* |
| 9·5 | | | 37·5 | 9·3 | |
| 10·3† | | 22 | 42·0 | 40·2 | |
| 9·9† | | 25 | 3·0 | 10·0 | |
| 7·4 | | | 7·0 | 21·6 | GS*g* |
| 10·0† | | | 29·0 | 28·4 | |
| 9·5† | | | 45·0 | 51·6 | 9·0 |
| 10·1† | | | 49·0 | 50·5 | |
| 9·6† | | 26 | 14·0 | 30·2 | |
| 9·8† | | | 31·5 | 30·4 | |
| 10·1† | | | 57·0 | 36·2 | |
| 10·1† | | 27 | 11·0 | 27·5 | |
| 9·5 | | | 51·0 | 6·4 | |
| 9·2 | | 28 | 8·5 | 8·3 | 8·0 G*g* |
| 10·0† | | | 57·0 | 20·5 | |
| 9·6 | | | 57·5 | 11·9 | *g* |
| 9·3† | | 29 | 51·0 | 42·3 | 8·5 *g* |
| 9·3† | | | 56·3 | 42·5 | *g* |
| 9·9† | | 30 | 48·0 | 50·4 | |
| 9·7† | | 31 | 15·0 | 59·7 | S |
| 8·7† | | | 46·0 | 2·8 | 9·0 *g* |
| 10·1† | | 32 | 9·0 | 29·8 | |
| 10·1† | | | 23·0 | 34·5 | |
| 9·7† | | | 33·0 | 29·3 | |
| 9·7† | | 33 | 43·0 | 59·2 | |
| 10·0† | | 35 | 3·0 | 31·3 | |
| 9·0† | | 36 | 7·0 | 47·3 | 9·0 *g* |
| 10·2† | | | 41·0 | 48·4 | |
| 9·8† | | 37 | 7·0 | 20·8 | |
| 9·8† | | | 24·0 | 9·9 | |
| 9·8† | | | 24·0 | 49·4 | |
| 8·8† | | | 39·0 | 46·9 | 9·0 *g* |
| 10·3† | | | 51·0 | 51·2 | |
| 9·7† | | 38 | 5·0 | 41·0 | |
| 10·0† | | | 40·5 | 32·9 | |
| 10·2† | | 39 | 32·0 | 21·3 | |
| 9·7† | | | 34·5 | 15·7 | *g* |
| 9·2‡ | | | 54·1 | 1·1 | |

## 541—600.

| mag. | h (9h–10h) | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·8† | 9 | 40 | 25·0 | 53·0 | |
| 10·0† | | | 38·0 | 32·1 | |
| 9·8† | | 41 | 6·0 | 28·7 | |
| 10·1† | | | 9·0 | 10·2 | |
| 10·0† | | | 32·0 | 18·5 | |
| 9·4† | | 42 | 5·0 | 51·1 | |
| 9·8‡ | | 45 | 21·0 | 39·8 | |
| 9·4‡ | | | 31·0 | 44·6 | |
| 9·3‡ | | | 45·5 | 22·0 | |
| 9·4‡ | | 46 | 4·5 | 47·1 | |
| 9·8‡ | | | 57·5 | 39·0 | |
| 9·2‡ | | 48 | 0·8 | 22·3 | |
| 9·2‡ | | | 32·0 | 58·9 | *g* |
| 9·4‡ | | | 36·0 | 8·0 | |
| 9·3‡ | | | 48·5 | 37·5 | *g* |
| 7·7‡ | | 49 | 48·3 | 41·8 | 8·5 GS*g* |
| 9·2‡ | | 50 | 17·0 | 22·5 | |
| 9·7‡ | | 51 | 52·0 | 58·6 | |
| 9·4‡ | | 52 | 3·5 | 28·2 | |
| 9·6‡ | | | 44·0 | 13·0 | |
| 9·2‡ | | 53 | 1·0 | 3·7 | |
| 9·8‡ | | | 10·0 | 4·0 | 9·0 |
| 9·2‡ | | | 12·0 | 12·7 | |
| 9·5‡ | | | 35·0 | 41·3 | |
| 9·1‡ | | | 40·0 | 15·7 | |
| 9·1‡ | | | 43·0 | 2·3 | 9·5 *g* |
| 9·5‡ | | 54 | 20·0 | 26·9 | |
| 9·7‡ | | | 28·0 | 6·6 | |
| 9·9‡ | | | 53·0 | 46·0 | |
| 8·9‡ | | | 57·0 | 18·4 | *g* |
| 9·8‡ | | 55 | 42·0 | 38·4 | |
| 9·9‡ | | 56 | 3·0 | 29·2 | |
| 9·4‡ | | | 52·3 | 8·9 | |
| 9·7‡ | | 57 | 3·0 | 9·9 | |
| 9·4‡ | | | 59·7 | 21·2 | *g* |
| 9·4‡ | | 58 | 30·0 | 40·9 | |
| 9·8‡ | | | 44·0 | 25·4 | |
| 9·7‡ | | 59 | 13·0 | 33·1 | |
| 9·6‡ | | | 38·0 | 51·7 | |
| 9·9‡ | | | 38·0 | 5·2 | |
| 9·9‡ | 10 | 1 | 12·0 | 30·7 | |
| 9·9‡ | | 4 | 6·0 | 16·7 | |
| 9·7‡ | | | 45·0 | 15·4 | |
| 9·5‡ | | | 48·0 | 42·7 | |
| 9·2‡ | | 5 | 13·0 | 53·2 | 10·0 |
| 9·6‡ | | 6 | 15·0 | 52·9 | |
| 9·4‡ | | | 57·0 | 5·5 | |
| 9·4‡ | | 7 | 47·0 | 40·6 | |
| 9·1‡ | | 8 | 18·0 | 56·7 | *g* |
| 9·7‡ | | 9 | 47·0 | 57·1 | |
| 9·9‡ | | | 56·0 | 24·7 | |
| 9·7‡ | | 10 | 27·0 | 27·8 | |
| 9·4‡ | | 11 | 32·7 | 5·0 | |
| 9·5‡ | | | 44·0 | 42·8 | |
| 9·8‡ | | 12 | 2·0 | 59·5 | |
| 9·3‡ | | 13 | 2·7 | 33·6 | |
| 9·4 | | | 39·5 | 0·0 | |
| 9·6‡ | | | 46·0 | 59·1 | |
| 9·4‡ | | | 53·4 | 1·4 | |
| 8·0‡ | | 14 | 24·0 | 39·5 | 8·0 G*g* |

25 prec.

| h | m | | α (s s) | δ ′ |
|---|---|---|---|---|
| 8 | 30 | − | 38 − 0·16 d | − 5·1 |
| | 40 | | 34 − 0·16 | 5·4 |
| | 50 | | 30 − 0·15 | 5·6 |
| 9 | 0 | | 26 − 0·15 | 5·9 |
| | 10 | | 21 − 0·14 | 6·2 |
| | 20 | | 16 − 0·13 | 6·4 |
| | 30 | | 11 − 0·13 | 6·6 |
| | 40 | | 6 − 0·12 | 6·8 |
| | 50 | − | 1 − 0·11 | 7·0 |
| 10 | 0 | + | 4 − 0·10 | 7·2 |
| | 10 | | 10 − 0·10 | 7·4 |
| | 20 | + | 16 − 0·09 | − 7·6 |

d = minutes of decl.



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25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 10 | 10 | + 10 − 0·10 d | − 7·4 |
| | 20 | 16 − 0·09 | 7·6 |
| | 30 | 21 − 0·08 | 7·7 |
| | 40 | 27 − 0·07 | 7·9 |
| | 50 | 33 − 0·06 | 8·0 |
| 11 | 0 | 39 − 0·05 | 8·1 |
| | 10 | 45 − 0·04 | 8·2 |
| | 20 | 52 − 0·04 | 8·2 |
| | 30 | 58 − 0·03 | 8·3 |
| | 40 | 64 − 0·02 | 8·3 |
| | 50 | 70 − 0·01 | 8·3 |
| 12 | 0 | + 77 0·00 | − 8·4 |

d = minutes of decl.

## 601—660.

| mag. | 10h.—11h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·2‡ | 10 | 14 | 58·0 | 26·8 | |
| 8·8‡ | | 15 | 6·0 | 14·4 | 9·0 g |
| 9·4‡ | | | 26·0 | 49·3 | |
| 9·8‡ | | | 36·0 | 56·4 | |
| 9·4‡ | | 18 | 42·7 | 34·6 | |
| 9·2‡ | | 19 | 44·7 | 18·3 | g |
| 9·5‡ | | 20 | 33·0 | 47·7 | |
| 9·5‡ | | 21 | 52·0 | 45·9 | |
| 9·6‡ | | 24 | 2·0 | 26·7 | |
| 9·4‡ | | | 32·0 | 43·5 | |
| 8·0‡ | | | 49·0 | 57·6 | 8·5 GSg |
| 9·4‡ | | 28 | 46·0 | 27·7 | |
| 9·7‡ | | 29 | 13·0 | 28·8 | |
| 8·5‡ | | | 40·5 | 31·6 | 9·0 g |
| 9·3‡ | | 30 | 24·5 | 4·9 | |
| 9·7‡ | | 31 | 32·0 | 55·2 | |
| 9·8‡ | | | 35·0 | 46·2 | |
| 9·3‡ | | 32 | 49·0 | 28·6 | g |
| 9·5‡ | | | 54·0 | 55·6 | |
| 9·6‡ | | 33 | 3·0 | 19·3 | g |
| 9·7‡ | | | 32·0 | 42·3 | |
| 6·8‡ | | | 57·0 | 57·5 | 4·5 GScgr |
| 9·8‡ | | | 59·0 | 59·0 | |
| 9·7‡ | | 34 | 17·0 | 13·3 | |
| 9·4‡ | | 35 | 4·5 | 14·2 | g |
| 9·7‡ | | | 48·0 | 6·8 | |
| 9·8‡ | | 36 | 50·0 | 19·3 | |
| 9·4‡ | | | 52·0 | 45·6 | |
| 9·7‡ | | 37 | 2·5 | 20·9 | |
| 9·6‡ | | | 14·0 | 18·3 | g |
| 9·6‡ | | | 44·0 | 10·6 | |
| 9·3‡ | | | 45·5 | 21·5 | g |
| 9·5‡ | | | 59·5 | 20·8 | |
| 9·8‡ | | 38 | 22·0 | 47·2 | |
| 9·6‡ | | | 40·0 | 3·5 | |
| 9·2‡ | | | 45·0 | 50·3 | 9·0 |
| 9·8‡ | | 39 | 22·0 | 14·9 | |
| 9·2‡ | | | 58·7 | 31·9 | g |
| 9·7‡ | | 40 | 5·0 | 7·2 | |
| 9·6‡ | | 41 | 17·5 | 10·6 | |
| 9·6‡ | | | 37·0 | 32·9 | g |
| 9·5‡ | | 42 | 46·0 | 30·6 | |
| 9·6‡ | | 44 | 7·0 | 57·9 | |
| 9·7‡ | | | 16·0 | 19·6 | |
| 9·8‡ | | 45 | 7·0 | 44·0 | |
| 9·1‡ | | 48 | 5·0 | 18·3 | g |
| 9·5‡ | | 50 | 24·0 | 51·9 | |
| 9·7‡ | 11 | 0 | 30·0 | 5·9 | |
| 9·8‡ | | 2 | 49·0 | 28·8 | |
| 9·7‡ | | 3 | 44·0 | 56·7 | |
| 8·3‡ | | 5 | 42·5 | 6·9 | g |
| 9·5‡ | | 6 | 49·5 | 36·2 | |
| 9·5‡ | | 7 | 37·0 | 43·6 | |
| 9·1‡ | | 10 | 15·0 | 37·8 | g |
| 9·6‡ | | 11 | 35·5 | 40·4 | |
| 9·5‡ | | 12 | 39·5 | 45·0 | |
| 10·0† | | | 43·9 | 44·4 | |
| 9·6† | | 15 | 41·0 | 37·5 | |
| 9·5† | | 16 | 5·0 | 37·2 | |
| 9·9† | | | 19·0 | 47·5 | |

## 661—720.

| mag. | 11h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·9† | 11 | 17 | 28·0 | 8·9 | |
| 9·5† | | 18 | 31·0 | 39·4 | g |
| 10·2† | | 20 | 6·0 | 10·0 | |
| 9·9† | | | 9·0 | 11·7 | |
| 9·5† | | | 11·5 | 9·6 | |
| 9·9† | | | 50·0 | 48·6 | |
| 8·8† | | | 55·3 | 0·9 | g |
| 9·6† | | | 58·5 | 14·4 | |
| 10·2† | | 21 | 29·0 | 16·4 | |
| 10·3† | | | 39·0 | 24·4 | |
| 9·4† | | | 55·5 | 25·8 | g |
| 10·0† | | 22 | 10·0 | 36·3 | |
| 10·0† | | | 19·0 | 38·2 | |
| 10·0† | | | 35·0 | 5·7 | |
| 8·3† | | | 55·5 | 50·1 | 8·0 GSg |
| 10·2† | | 23 | 3·0 | 41·3 | |
| 10·0† | | | 21·0 | 13·3 | |
| 9·8† | | 24 | 14·0 | 37·1 | |
| 10·2† | | | 19·0 | 47·1 | |
| 10·0† | | | 50·0 | 59·5 | |
| 9·3† | | | 58·0 | 4·9 | g |
| 9·5† | | 26 | 9·0 | 22·8 | |
| 9·4† | | 27 | 4·8 | 1·2 | |
| 10·2† | | | 14·0 | 30·1 | |
| 10·2† | | | 53·0 | 41·8 | |
| 9·9† | | | 55·0 | 27·8 | |
| 9·3† | | 28 | 4·0 | 49·8 | g |
| 9·9† | | | 13·0 | 55·7 | |
| 9·5† | | | 41·3 | 24·6 | |
| 10·2† | | | 44·0 | 21·0 | |
| 10·3† | | | 45·0 | 57·8 | |
| 9·0† | | 29 | 17·5 | 3·1 | |
| 9·8† | | | 27·0 | 16·6 | |
| 10·0† | | | 45·0 | 43·8 | |
| 9·8† | | 30 | 6·0 | 28·6 | |
| 8·5† | | | 24·0 | 16·7 | g |
| 9·3† | | | 48·3 | 6·8 | |
| 9·9† | | | 51·0 | 21·6 | |
| 9·0† | | 31 | 5·0 | 16·3 | g |
| 10·0† | | | 12·0 | 55·0 | |
| 9·0† | | | 21·0 | 18·9 | 8·5 g |
| 10·2† | | | 38·0 | 26·0 | |
| 9·8† | | 32 | 2·0 | 27·0 | |
| 8·9† | | | 25·0 | 17·3 | 9·0 g |
| 9·9† | | | 43·0 | 52·1 | |
| 9·9† | | | 55·0 | 8·8 | |
| 9·7† | | 33 | 24·0 | 42·0 | |
| 10·2† | | | 34·0 | 23·1 | |
| 10·3† | | | 39·0 | 58·2 | |
| 9·8† | | | 46·0 | 36·4 | g |
| 9·5† | | 34 | 19·5 | 9·6 | |
| 10·0† | | | 22·0 | 58·6 | |
| 9·3† | | | 23·0 | 19·4 | |
| 9·8† | | 35 | 3·0 | 50·3 | |
| 9·2† | | | 5·5 | 39·1 | g |
| 9·7† | | | 26·5 | 33·9 | |
| 10·2† | | | 48·0 | 56·3 | |
| 9·9† | | 36 | 10·0 | 28·1 | |
| 9·9† | | | 37·0 | 18·1 | |
| 9·0† | | | 42·0 | 27·5 | 9·0 g |

## 721—780.

| mag. | 11h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·9† | 11 | 36 | 44·0 | 14·4 | |
| 10·0† | | | 52·0 | 31·1 | |
| 10·0† | | 37 | 15·0 | 26·9 | |
| 9·9† | | | 18·0 | 29·1 | |
| 10·2† | | | 22·0 | 45·5 | |
| 10·0† | | | 45·0 | 54·7 | |
| 8·6† | | | 49·0 | 31·5 | g |
| 10·0† | | | 59·0 | 29·5 | |
| 9·9† | | 38 | 18·0 | 19·1 | |
| 10·0† | | | 33·0 | 3·1 | |
| 9·1† | | 39 | 12·5 | 7·5 | g |
| 9·8† | | | 25·0 | 49·5 | |
| 9·8† | | | 28·0 | 46·3 | |
| 9·7† | | | 29·5 | 30·5 | |
| 9·6† | | | 38·0 | 22·6 | |
| 9·1† | | | 54·0 | 55·2 | g |
| 9·9† | | 40 | 16·0 | 31·4 | |
| 9·3† | | | 49·0 | 49·7 | g |
| 9·8† | | | 56·0 | 14·8 | |
| 10·2† | | 41 | 10·0 | 37·9 | |
| 9·9† | | | 12·0 | 22·7 | |
| 10·3† | | | 14·0 | 31·5 | |
| 9·2† | | | 28·0 | 59·8 | |
| 9·3† | | | 35·0 | 45·0 | g |
| 10·0† | | | 36·0 | 19·7 | |
| 8·3† | | | 37·0 | 12·6 | 8·5 g |
| 10·2† | | | 39·0 | 38·2 | |
| 8·8† | | 42 | 8·5 | 11·6 | 8·0 g |
| 9·0 | | | 35·0 | 0·2 | 8·5 g |
| 10·2† | | | 54·0 | 12·1 | |
| 10·2† | | 43 | 6·0 | 51·0 | |
| 9·5† | | 44 | 41·0 | 42·7 | 9·5 g |
| 9·1† | | | 59·0 | 53·3 | |
| 8·6† | | 45 | 16·5 | 35·5 | 9·0 g |
| 9·5† | | 46 | 4·0 | 48·8 | g |
| 9·9† | | 47 | 28·0 | 19·2 | |
| 10·0† | | | 36·0 | 55·0 | |
| 10·3† | | 48 | 30·0 | 26·5 | |
| 9·8† | | 49 | 44·0 | 16·7 | |
| 10·2† | | 50 | 20·0 | 43·5 | |
| 10·2† | | 51 | 38·0 | 44·4 | |
| 9·7† | | | 45·5 | 20·8 | |
| 10·3† | | 52 | 8·0 | 37·9 | |
| 10·0† | | | 11·0 | 18·1 | |
| 9·9† | | | 22·0 | 12·8 | |
| 7·0† | | | 27·0 | 7·8 | 7·0 GSgg |
| 9·8† | | | 46·5 | 40·0 | |
| 8·7† | | 53 | 2·0 | 17·3 | g |
| 9·7† | | | 7·0 | 47·4 | |
| 9·5† | | | 20·5 | 11·5 | 9·5 g |
| 10·2† | | | 26·0 | 13·9 | |
| 5·1† | | | 26·5 | 31·6 | 5·0 GSgrλ |
| 9·0† | | | 37·0 | 30·0 | 8·5 g |
| 6·8† | | | 53·5 | 29·7 | 7·0 GSgr |
| 9·0† | | 54 | 35·5 | 28·2 | 9·5 g |
| 10·2† | | | 43·0 | 15·5 | |
| 9·8† | | 55 | 59·0 | 13·1 | |
| 9·0† | | 57 | 13·0 | 4·4 | g |
| 10·3† | | | 26·0 | 55·4 | |
| 9·9† | | | 30·0 | 56·0 | |

## 781—840.

| mag. | 11h.–12h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·4† | 11 | 58 | 4·5 | 4·6 | |
| 10·0† | | | 10·0 | 48·7 | |
| 9·7† | | | 15·0 | 55·1 | |
| 10·2† | | | 40·0 | 7·4 | |
| 9·3† | | 59 | 29·0 | 43·5 | |
| 9·9† | | | 31·0 | 46·8 | |
| 10·0† | 12 | 0 | 4·0 | 52·9 | |
| 10·3† | | 1 | 27·0 | 38·5 | |
| 9·9† | | 2 | 2·0 | 49·2 | |
| 9·0† | | | 11·0 | 24·1 | g |
| 10·2† | | | 19·5 | 33·2 | |
| 9·2† | | | 22·0 | 17·3 | g |
| 10·0† | | | 22·0 | 6·2 | |
| 9·9† | | | 34·0 | 34·8 | |
| 10·1† | | 3 | 2·0 | 51·8 | |
| 10·3† | | | 15·0 | 6·6 | |
| 9·8† | | | 57·0 | 27·5 | |
| 9·5† | | 4 | 18·5 | 14·1 | |
| 9·9† | | 5 | 41·5 | 36·9 | |
| 9·5† | | | 45·5 | 14·6 | |
| 9·9† | | 6 | 23·0 | 42·7 | |
| 9·9† | | | 25·0 | 13·0 | |
| 10·0† | | | 26·0 | 52·9 | |
| 7·7† | | | 57·0 | 52·7 | 7·0 GSg |
| 9·4† | | | 58·0 | 22·6 | |
| 9·9† | | 8 | 0·0 | 53·1 | |
| 9·4† | | 9 | 7·0 | 50·0 | g |
| 9·8† | | | 26·0 | 49·7 | |
| 10·0† | | 10 | 1·0 | 14·7 | |
| 9·0† | | | 2·0 | 51·7 | g |
| 9·5† | | | 3·5 | 8·8 | g |
| 9·7† | | | 4·0 | 45·0 | |
| 10·0† | | | 20·0 | 13·7 | |
| 10·3† | | 11 | 7·0 | 51·6 | |
| 9·3† | | | 8·0 | 13·9 | g |
| 9·8† | | | 16·0 | 59·6 | |
| 10·0† | | | 23·0 | 57·7 | |
| 10·2† | | | 37·0 | 12·4 | |
| 9·4† | | 13 | 20·5 | 21·5 | g |
| 9·8† | | | 33·5 | 17·9 | |
| 9·8† | | | 38·0 | 17·1 | |
| 9·5† | | | 51·5 | 28·2 | g |
| 9·9† | | 15 | 10·0 | 50·1 | |
| 8·8† | | 16 | 36·5 | 40·5 | g |
| 10·2† | | 18 | 2·0 | 30·1 | |
| 9·9† | | 19 | 25·0 | 50·7 | |
| 9·9† | | | 25·0 | 51·4 | |
| 10·0† | | 20 | 0·0 | 15·9 | |
| 9·5† | | | 23·0 | 7·0 | |
| 9·8† | | | 35·0 | 47·4 | |
| 10·2† | | | 42·0 | 20·4 | |
| 10·0† | | 21 | 5·0 | 58·9 | |
| 9·7† | | 22 | 31·0 | 41·9 | |
| 8·5† | | | 41·5 | 14·6 | 9·0 g |
| 9·8† | | | 54·0 | 54·1 | |
| 9·8† | | 23 | 23·0 | 41·6 | |
| 10·2† | | | 28·0 | 33·9 | |
| 10·0† | | | 42·0 | 53·8 | |
| 9·5 | | 24 | 16·5 | 0·7 | g |
| 7·6† | | | 20·3 | 30·1 | 8·0 GSg |

## 841—900.

| mag. | 12h.–13h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 10·2† | 12 | 24 | 42·0 | 35·9 | |
| 10·2† | | 25 | 22·0 | 45·5 | |
| 9·7† | | | 43·0 | 3·4 | |
| 9·2† | | 26 | 42·5 | 36·4 | 9·0 g |
| 10·2† | | | 44·0 | 46·6 | |
| 9·2† | | | 45·0 | 27·4 | |
| 10·2† | | 28 | 15·0 | 10·3 | |
| 9·0 | | | 19·3 | 1·0 | 9·5 g |
| 9·8† | | | 28·0 | 17·5 | |
| 9·8† | | | 36·0 | 46·9 | |
| 10·2† | | 29 | 11·0 | 7·0 | |
| 10·2† | | | 23·0 | 57·6 | |
| 10·2† | | 30 | 4·0 | 40·0 | |
| 10·2† | | | 12·0 | 45·5 | |
| 9·2† | | 31 | 3·0 | 9·5 | g |
| 10·2† | | | 49·0 | 39·4 | |
| 9·3† | | | 51·0 | 46·4 | g |
| 10·2† | | | 58·0 | 18·8 | |
| 9·3† | | 32 | 0·0 | 10·1 | 9·0 g |
| 10·2† | | | 12·0 | 48·0 | |
| 9·3† | | | 18·5 | 15·7 | 9·0 g |
| 9·6† | | | 31·0 | 43·4 | |
| 10·3† | | | 55·0 | 31·2 | |
| 9·9† | | 33 | 38·0 | 47·8 | |
| 10·2† | | | 51·0 | 38·8 | |
| 9·7† | | | 59·0 | 2·7 | |
| 10·2† | | 35 | 14·0 | 27·4 | |
| 10·2† | | | 44·0 | 34·2 | |
| 10·2† | | 36 | 29·0 | 8·5 | |
| 10·3† | | 37 | 12·0 | 30·0 | |
| 9·9† | | | 15·0 | 33·1 | |
| 10·2† | | | 23·0 | 17·1 | |
| 9·6† | | | 29·0 | 45·3 | |
| 10·2† | | | 42·0 | 15·4 | |
| 9·0† | | | 58·5 | 53·5 | 9·5 g |
| 9·8† | | 42 | 38·0 | 35·4 | |
| 9·2† | | 43 | 5·5 | 14·0 | g |
| 9·6† | | | 36·5 | 28·2 | 10·0 |
| 9·9† | | 44 | 30·0 | 44·0 | |
| 8·8† | | 45 | 3·0 | 21·4 | 8·0 GS |
| 9·8† | | 46 | 33·0 | 50·6 | |
| 10·0† | | 48 | 7·0 | 48·0 | |
| 10·0† | | | 37·0 | 40·2 | |
| 9·9† | | 49 | 42·0 | 7·6 | |
| 10·0† | | 50 | 54·0 | 11·5 | |
| 8·4‡ | | 57 | 10·0 | 12·0 | 9·5 g |
| 6·9‡ | | 58 | 20·0 | 46·6 | 6·5 GSg |
| 9·1‡ | | 59 | 44·0 | 39·7 | |
| 9·3‡ | 13 | 3 | 23·0 | 11·1 | |
| 7·5‡ | | | 57·5 | 47·0 | 6·5 GSgr |
| 9·4‡ | | 4 | 20·5 | 30·1 | |
| 8·6‡ | | 9 | 52·0 | 18·0 | 9·0 Gg |
| 8·8‡ | | 10 | 46·0 | 28·2 | 9·0 g |
| 9·5‡ | | 11 | 17·0 | 13·1 | g |
| 8·9‡ | | | 20·0 | 31·1 | 8·5 g |
| 8·4‡ | | 14 | 28·0 | 24·0 | g |
| 9·4‡ | | 15 | 45·5 | 4·8 | |
| 9·0‡ | | 19 | 54·0 | 24·6 | g |
| 9·5‡ | | 22 | 14·0 | 16·9 | g |
| 8·8‡ | | | 59·5 | 13·0 | g |

## 901—960.

| mag. | 13h.–14h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·0‡ | 13 | 23 | 3·0 | 23·8 | |
| 9·5‡ | | | 11·8 | 12·2 | g |
| 9·4‡ | | 27 | 20·0 | 17·2 | |
| 9·0‡ | | | 58·0 | 6·8 | g |
| 9·2‡ | | 28 | 41·0 | 44·4 | |
| 9·4‡ | | | 56·0 | 4·9 | g |
| 9·2‡ | | 31 | 39·5 | 13·7 | g |
| 9·4‡ | | 33 | 33·0 | 9·9 | 9·5 g |
| 8·3‡ | | 36 | 17·5 | 18·0 | 9·0 g |
| 8·5‡ | | | 27·3 | 1·8 | 9·0 g |
| 9·5‡ | | 37 | 58·0 | 15·9 | 9·0 g |
| 9·1‡ | | 39 | 12·0 | 14·5 | 8·5 g |
| 9·1‡ | | | 23·0 | 43·6 | |
| 9·4‡ | | | 42·0 | 35·6 | |
| 9·3‡ | | 40 | 58·5 | 32·7 | |
| 9·0‡ | | 41 | 24·0 | 47·3 | 9·0 g |
| 9·4‡ | | 42 | 17·0 | 52·9 | |
| 8·1‡ | | 43 | 1·5 | 31·2 | g |
| 9·3‡ | | 44 | 22·0 | 50·6 | 8·5 g |
| 8·7‡ | | | 35·0 | 6·0 | g |
| 9·5‡ | | 46 | 56·0 | 37·9 | |
| 6·4‡ | | 47 | 44·0 | 58·7 | 6·5 GSgg |
| 9·1‡ | | 48 | 0·0 | 54·9 | g |
| 8·2‡ | | | 31·0 | 36·3 | g |
| 9·6 | | | 40·0 | 9·9 | |
| 9·3‡ | | 49 | 21·5 | 44·1 | |
| 8·3‡ | | | 57·0 | 47·7 | 9·0 g |
| 8·2‡ | | 51 | 3·5 | 9·0 | 8·0 g |
| 9·2‡ | | | 45·5 | 36·9 | g |
| 8·8‡ | | 54 | 36·0 | 13·8 | 9·0 g |
| 8·8‡ | | | 38·5 | 38·6 | |
| 9·1‡ | | 55 | 1·5 | 25·6 | g |
| 9·3‡ | | 56 | 1·5 | 8·7 | |
| 9·3‡ | | 57 | 15·0 | 43·0 | |
| 8·6‡ | | | 30·5 | 16·0 | g |
| 9·6 | | 58 | 17·0 | 24·8 | |
| 8·3‡ | 14 | 0 | 23·5 | 39·5 | 9·0 g |
| 9·5‡ | | | 44·0 | 54·1 | |
| 9·3‡ | | 2 | 27·0 | 52·5 | g |
| 7·8‡ | | 3 | 49·5 | 4·8 | 7·0 GSg |
| 8·7‡ | | | 59·0 | 5·8 | 8·5 Sg |
| 9·6 | | 4 | 32·0 | 18·5 | |
| 9·5‡ | | | 59·0 | 37·1 | |
| 8·4‡ | | 7 | 16·5 | 20·5 | g |
| 9·6 | | 8 | 3·0 | 4·5 | |
| 9·2‡ | | 9 | 3·0 | 49·3 | 8·5 g |
| 9·3‡ | | 10 | 50·0 | 4·0 | |
| 8·9‡ | | 11 | 21·5 | 12·6 | g |
| 9·4† | | | 37·0 | 2·4 | |
| 9·5† | | | 44·0 | 49·7 | |
| 9·1† | | | 45·7 | 23·8 | |
| 9·5† | | | 46·0 | 40·3 | |
| 8·9† | | | 57·5 | 53·0 | g |
| 9·6† | | 12 | 20·0 | 51·9 | |
| 9·7† | | | 43·0 | 33·7 | |
| 9·3† | | | 54·5 | 36·9 | |
| 9·6† | | 13 | 31·0 | 36·5 | |
| 9·5† | | | 55·0 | 12·8 | |
| 9·6† | | 14 | 23·0 | 47·2 | |
| 9·4† | | 15 | 19·0 | 54·3 | g |

25 prec.

| h | m | a (s) | (s) | | δ (′) |
|---|---|---|---|---|---|
| 11 | 50 | + 70 | − 0·01 | d | − 8·3 |
| 12 | 0 | 77 | 0·00 | | 8·4 |
| | 10 | 83 | + 0·01 | | 8·3 |
| | 20 | 89 | + 0·02 | | 8·3 |
| | 30 | 96 | + 0·03 | | 8·3 |
| | 40 | 102 | + 0·04 | | 8·2 |
| | 50 | 108 | + 0·04 | | 8·2 |
| 13 | 0 | 114 | + 0·05 | | 8·1 |
| | 10 | 120 | + 0·06 | | 8·0 |
| | 20 | 126 | + 0·07 | | 7·9 |
| | 30 | 132 | + 0·08 | | 7·7 |
| | 40 | 138 | + 0·09 | | 7·6 |
| | 50 | 144 | + 0·10 | | 7·4 |
| 14 | 0 | 149 | + 0·10 | | 7·2 |
| | 10 | 155 | + 0·11 | | 7·0 |
| | 20 | + 160 | + 0·12 | | − 6·8 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 14 | 10 | + 155 | + 0·11 | d | − 7·0 |
| | 20 | 160 | + 0·12 | | 6·8 |
| | 30 | 165 | + 0·13 | | 6·6 |
| | 40 | 170 | + 0·13 | | 6·4 |
| | 50 | 175 | + 0·14 | | 6·2 |
| 15 | 0 | 179 | + 0·15 | | 5·9 |
| | 10 | 184 | + 0·15 | | 5·6 |
| | 20 | 188 | + 0·16 | | 5·4 |
| | 30 | + 192 | + 0·16 | | − 5·1 |

d = minutes of decl.

## 961—1020.

| mag. | 14ʰ h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 8·9† | 14 | 15 | 56·5 | 35·5 | 8·5 *g* |
| 9·5† | | 16 | 0·0 | 13·7 | |
| 8·8† | | 17 | 41·5 | 44·1 | *g* |
| 9·2† | | 18 | 18·0 | 43·9 | |
| 9·5† | | | 40·0 | 4·0 | |
| 9·4† | | | 57·5 | 24·3 | |
| 9·4† | | 19 | 17·0 | 25·2 | |
| 9·6† | | | 57·0 | 37·5 | |
| 9·6† | | 20 | 39·0 | 4·2 | |
| 9·5† | | | 54·0 | 34·6 | |
| 9·6† | | 21 | 3·0 | 20·0 | |
| 9·5† | | 22 | 13·0 | 10·0 | |
| 8·9† | | | 30·3 | 45·9 | |
| 9·4* | | 23 | 4·5 | 29·9 | |
| 9·4 | | | 29·0 | 4·0 | |
| 9·9 | | | 36·7 | 28·0 | |
| 9·5 | | | 40·2 | 26·3 | |
| 9·8 | | 24 | 5·0 | 11·1 | |
| 9·2 | | | 14·7 | 27·6 | *g* |
| 10·0 | | | 31·2 | 21·7 | |
| 8·6 | | | 38·0 | 4·1 | *g* |
| 9·5† | | | 42·1 | 47·4 | |
| 10·0 | | | 45·7 | 20·6 | |
| 9·6† | | 25 | 34·3 | 51·9 | |
| 9·8 | | | 41·7 | 33·6 | |
| 9·0 | | 26 | 1·1 | 24·5 | |
| 9·8 | | | 24·8 | 9·2 | |
| 9·8 | | 27 | 10·6 | 29·7 | |
| 10·0 | | | 21·6 | 0·8 | |
| 9·5† | | 28 | 32·0 | 57·1 | |
| 9·6† | | | 33·5 | 41·3 | |
| 8·2 | | 29 | 1·1 | 9·5 | 8·8 *g* |
| 9·2 | | | 18·5 | 20·0 | |
| 9·5 | | | 50·1 | 8·3 | |
| 9·5† | | 30 | 0·0 | 40·3 | |
| 8·7† | | | 8·5 | 46·3 | *g* |
| 8·4 | | | 15·6 | 11·8 | 7·5 G*g* |
| 9·5† | | | 42·3 | 50·0 | |
| 8·8 | | 31 | 19·6 | 13·9 | *g* |
| 9·8 | | | 30·6 | 0·3 | |
| 10·0 | | 32 | 51·1 | 12·6 | |
| 10·0 | | 33 | 51·6 | 4·6 | |
| 9·4† | | 34 | 13·7 | 48·7 | |
| 9·5 | | | 28·8 | 16·3 | |
| 9·3 | | | 42·0 | 22·1 | |
| 9·5 | | | 55·9 | 12·1 | |
| 9·8 | | | 58·9 | 22·7 | |
| 9·6† | | 35 | 16·4 | 42·0 | |
| 9·7† | | | 22·7 | 34·1 | |
| 10·0 | | | 57·9 | 5·4 | |
| 9·6† | | 37 | 16·9 | 41·0 | |
| 9·3† | | | 56·5 | 33·9 | |
| 9·7† | | 38 | 5·4 | 52·7 | |
| 10·0 | | | 42·9 | 3·9 | |
| 9·9 | | | 51·9 | 9·4 | |
| 9·3† | | 39 | 6·4 | 46·5 | *g* |
| 9·6† | | | 9·2 | 37·6 | |
| 9·8 | | 40 | 21·5 | 8·5 | |
| 9·7† | | | 52·2 | 55·7 | |
| 8·8 | | 41 | 10·4 | 2·4 | *g* |

## 1021—1080.

| mag. | 14ʰ—15ʰ h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·6† | 14 | 41 | 10·7 | 53·5 | |
| 8·5 | | | 21·4 | 7·7 | 9·5 *g* |
| 10·0 | | | 46·9 | 1·9 | |
| 10·0 | | 42 | 6·9 | 3·4 | |
| 9·5† | | | 38·9 | 38·1 | |
| 9·4† | | 43 | 2·6 | 45·2 | |
| 10·0 | | | 9·8 | 14·5 | |
| 9·6† | | | 14·6 | 36·2 | |
| 9·4 | | | 20·4 | 4·8 | |
| 8·7 | | 45 | 14·8 | 25·6 | 8·5 *g* |
| 9·7† | | 46 | 24·4 | 38·1 | |
| 10·0 | | | 32·8 | 0·2 | |
| 9·9 | | | 59·8 | 10·4 | |
| 9·7† | | 47 | 4·4 | 33·6 | |
| 9·6† | | | 23·9 | 32·2 | |
| 9·5 | | | 25·2 | 12·9 | |
| 9·4† | | | 31·2 | 43·0 | |
| 9·7 | | 48 | 35·5 | 6·0 | |
| 9·4† | | | 36·7 | 50·0 | |
| 9·5 | | 49 | 10·0 | 10·1 | |
| 9·8 | | | 16·4 | 1·6 | |
| 7·7† | | | 53·5 | 40·2 | 7·5 *g* |
| 9·7† | | 50 | 9·7 | 34·4 | |
| 9·8 | | | 22·0 | 13·7 | |
| 9·7 | | | 30·9 | 8·1 | |
| 9·5 | | 51 | 5·0 | 23·0 | |
| 8·8† | | | 29·4 | 50·6 | 8·0 G*g* |
| 9·8 | | | 32·4 | 25·3 | |
| 9·2 | | | 42·6 | 1·3 | |
| 10·0 | | | 51·7 | 5·9 | |
| 9·6† | | | 53·0 | 44·0 | |
| 9·6† | | 52 | 41·7 | 43·0 | |
| 9·7 | | | 52·4 | 20·8 | |
| 9·4 | | 53 | 38·4 | 7·4 | *g* |
| 9·8 | | | 53·7 | 9·9 | |
| 9·8 | | 54 | 38·9 | 5·7 | |
| 9·7† | | | 55·0 | 50·5 | |
| 10·0 | | 55 | 22·9 | 2·7 | |
| 9·5 | | | 35·9 | 26·1 | |
| 9·4 | | 56 | 10·4 | 18·5 | |
| 10·0 | | | 53·3 | 51·9 | |
| 9·6† | | 57 | 2·6 | 33·4 | |
| 10·0 | | | 12·3 | 16·5 | |
| 9·4 | | | 17·8 | 20·9 | |
| 9·4 | | | 53·1 | 24·1 | |
| 8·9 | | 58 | 58·8 | 13·8 | |
| 9·8 | | 59 | 7·3 | 18·0 | |
| 9·4† | | | 39·0 | 34·5 | |
| 9·5† | | | 42·1 | 42·8 | |
| 9·4† | | | 53·7 | 45·8 | *g* |
| 8·4 | | | 54·4 | 13·3 | 9·0 *g* |
| 9·9 | 15 | 0 | 18·2 | 14·1 | |
| 9·7† | | | 20·0 | 33·7 | |
| 9·8 | | | 59·7 | 8·8 | |
| 9·7† | | 1 | 48·6 | 50·2 | |
| 8·6 | | 2 | 14·3 | 23·9 | *g* |
| 10·0 | | | 17·8 | 22·2 | |
| 8·7 | | | 21·8 | 20·6 | *g* |
| 10·0 | | | 22·8 | 15·8 | |
| 9·6 | | | 22·8 | 0·6 | |

## 1081—1140.

| mag. | 15ʰ h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·8 | 15 | 2 | 57·4 | 14·3 | |
| 9·6† | | 3 | 52·4 | 44·8 | |
| 9·7 | | 4 | 0·8 | 2·8 | |
| 9·6 | | | 7·4 | 15·1 | |
| 8·8 | | | 19·7 | 19·5 | *g* |
| 9·6† | | | 22·6 | 37·8 | |
| 9·4† | | 5 | 9·9 | 33·1 | |
| 8·5 | | | 39·7 | 3·3 | 9·0 *g* |
| 9·3† | | 6 | 23·0 | 58·2 | |
| 9·5 | | | 37·0 | 0·8 | |
| 8·4 | | | 57·4 | 14·7 | 8·8 *g* |
| 8·2 | | 7 | 17·2 | 4·3 | 8·5 *g* |
| 9·4† | | | 30·6 | 50·7 | |
| 9·5† | | 8 | 15·0 | 33·4 | |
| 9·6† | | | 40·6 | 47·8 | |
| 9·8 | | | 56·9 | 26·8 | |
| 9·5† | | | 59·0 | 59·6 | *g* |
| 9·7† | | 9 | 13·0 | 48·5 | |
| 9·5 | | | 33·2 | 15·1 | |
| 9·8 | | | 50·4 | 14·4 | |
| 9·4† | | | 59·0 | 30·9 | |
| 9·8 | | 10 | 9·1 | 4·3 | |
| 9·7 | | | 30·6 | 18·7 | |
| 9·0 | | | 37·7 | 18·3 | |
| 10·0 | | 11 | 41·2 | 27·4 | |
| 8·7† | | | 48·0 | 59·6 | *g* |
| 10·0 | | 12 | 19·7 | 33·0 | |
| 10·0 | | | 41·2 | 49·8 | |
| 9·7† | | 13 | 10·0 | 32·8 | |
| 9·7 | | | 33·2 | 20·2 | |
| 9·9 | | | 33·2 | 12·8 | |
| 9·5 | | | 35·3 | 17·0 | |
| 9·4† | | | 36·3 | 54·4 | |
| 9·8 | | | 53·7 | 5·9 | |
| 9·6† | | 14 | 20·6 | 56·7 | |
| 9·4 | | | 57·6 | 26·0 | |
| 10·0 | | 15 | 30·2 | 10·5 | |
| 9·6† | | | 32·3 | 34·6 | |
| 9·5† | | | 37·0 | 57·9 | |
| 9·6† | | | 40·6 | 49·9 | |
| 9·5 | | | 52·2 | 25·9 | |
| 9·3† | | 16 | 28·0 | 50·9 | |
| 8·5 | | | 28·2 | 4·7 | 9·0 *g* |
| 8·9 | | | 30·2 | 4·4 | *g* |
| 9·5† | | | 46·3 | 53·6 | |
| 9·5† | | | 55·1 | 54·2 | |
| 9·3 | | 17 | 7·7 | 13·0 | |
| 9·3† | | 18 | 12·0 | 39·9 | |
| 10·0 | | | 45·4 | 48·7 | |
| 10·0 | | 20 | 13·4 | 18·4 | |
| 9·8 | | 21 | 0·7 | 10·7 | |
| 9·5† | | | 58·0 | 58·9 | |
| 7·4† | | 22 | 10·4 | 48·6 | 7·2 GS*g* |
| 7·2 | | | 44·9 | 29·4 | 6·8 GSc*g* |
| 9·3† | | | 54·0 | 47·6 | 9·5 *g* |
| 9·5† | | 23 | 11·4 | 47·8 | |
| 9·7† | | 24 | 2·2 | 36·0 | |
| 8·4† | | | 3·0 | 44·4 | 9·0 *g* |
| 10·0 | | | 14·4 | 9·9 | |
| 9·5 | | | 22·5 | 12·8 | |



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### 1141—1200.

| mag. | h | m | s (15h.) | ′ (−77°) | |
|---|---|---|---|---|---|
| 9·4† | 15 | 24 | 39·0 | 48·9 | |
| 9·8 | | 25 | 23·0 | 25·5 | |
| 9·4† | | 26 | 7·4 | 39·2 | |
| 9·7 | | | 58·5 | 6·3 | |
| 9·3† | | 27 | 42·9 | 38·8 | *g* |
| 10·0 | | 29 | 14·9 | 9·3 | |
| 9·6 | | | 42·8 | 15·9 | |
| 10·0 | | | 47·5 | 47·8 | |
| 8·6 | | | 58·7 | 1·9 | 9·0 *g* |
| 9·9 | | 30 | 19·0 | 14·1 | |
| 9·1† | | | 20·8 | 33·6 | *g* |
| 9·6† | | | 48·5 | 35·6 | *g* |
| 7·8 | | 31 | 2·5 | 3·5 | 8·2 *g* |
| 9·5 | | | 52·5 | 24·3 | |
| 10·0 | | | 54·5 | 3·6 | |
| 9·5† | | 32 | 9·7 | 47·9 | |
| 10·0 | | | 14·5 | 2·7 | |
| 9·7† | | | 28·2 | 39·8 | |
| 10·0 | | 33 | 19·0 | 32·8 | |
| 9·4† | | | 21·0 | 40·7 | |
| 10·0 | | | 27·0 | 3·2 | |
| 9·7 | | | 50·8 | 19·9 | |
| 10·0 | | 34 | 36·0 | 0·9 | |
| 9·8 | | 35 | 20·9 | 0·6 | |
| 9·5† | | | 48·0 | 32·6 | |
| 10·0 | | 36 | 15·0 | 10·4 | |
| 9·9– | | | 34·5 | 29·3 | |
| 7·7† | | | 36·1 | 46·3 | 8·0 **GS***g* |
| 9·6† | | | 59·0 | 52·9 | |
| 8·0† | | 38 | 31·5 | 20·9 | 7·5 GS*g* |
| 9·5† | | | 40·0 | 17·6 | |
| 9·4† | | 39 | 0·5 | 19·0 | |
| 9·3† | | | 6·5 | 49·9 | |
| 9·5† | | | 26·0 | 7·3 | |
| 8·3† | | | 32·5 | 45·7 | 8·8 *g* |
| 8·3† | | 40 | 28·0 | 25·9 | 8·5 *g* |
| 9·6† | | | 46·0 | 12·3 | |
| 9·4† | | | 54·0 | 34·7 | |
| 9·3† | | 41 | 23·5 | 9·4 | |
| 9·5† | | 42 | 17·0 | 40·7 | |
| 7·2† | | | 34·0 | 39·2 | 7·0 GS*g* |
| 9·4† | | | 51·0 | 45·4 | |
| 9·1† | | 43 | 3·0 | 59·9 | *g* |
| 9·5† | | | 35·0 | 9·6 | |
| 9·6† | | 44 | 6·0 | 51·5 | |
| 9·2† | | | 9·0 | 57·1 | *g* |
| 9·4† | | | 20·0 | 22·7 | |
| 9·7† | | | 31·0 | 6·0 | |
| 9·7† | | 45 | 3·0 | 58·8 | |
| 9·7† | | | 11·0 | 57·6 | |
| 9·4† | | | 18·0 | 31·9 | |
| 8·5† | | | 27·0 | 6·8 | 8·5 *g* |
| 9·1† | | | 36·0 | 42·5 | |
| 9·4† | | | 42·0 | 44·7 | |
| 9·4† | | 46 | 26·0 | 28·0 | *g* |
| 9·1† | | 47 | 1·2 | 7·5 | |
| 8·9† | | 48 | 7·2 | 28·4 | *g* |
| 9·3 | | 50 | 7·0 | 21·6 | |
| 9·3 | | | 7·0 | 4·3 | |
| 8·8 | | 52 | 8·0 | 7·2 | 8·0 G*g* |

### 1201—1260.

| mag. | h | m | s (15h.—17h.) | ′ (−77°) | |
|---|---|---|---|---|---|
| 9·3 | 15 | 53 | 36·0 | 21·8 | |
| 8·4‡ | | 58 | 38·0 | 48·3 | *g* |
| 9·3 | 16 | 1 | 5·0 | 30·9 | |
| 9·3 | | 2 | 18·0 | 2·0 | |
| 9·1 | | 3 | 43·5 | 23·0 | 8·2 G*g* |
| 9·1 | | 6 | 41·0 | 2·8 | *g* |
| 9·1‡ | | | 43·0 | 50·5 | *g* |
| 8·6 | | | 50·3 | 9·3 | *g* |
| 9·3‡ | | 8 | 10·0 | 47·2 | *g* |
| 9·3 | | 9 | 26·0 | 4·9 | |
| 9·1 | | 10 | 35·0 | 5·0 | |
| 9·3 | | 11 | 8·0 | 20·2 | *g* |
| 9·4‡ | | 12 | 26·0 | 45·9 | *g* |
| 9·6‡ | | 16 | 6·5 | 57·7 | *g* |
| 9·3 | | | 38·5 | 16·5 | |
| 9·3 | | 18 | 20·0 | 28·0 | *g* |
| 7·4 | | | 59·7 | 4·2 | 8·5 GS*g* |
| 9·6‡ | | 20 | 43·5 | 32·7 | *g* |
| 8·0 | | 24 | 31·0 | 17·5 | 9·0 *g* |
| 9·1 | | | 56·0 | 12·5 | *g* |
| 6·4– | | 25 | 14·5 | 15·0 | 5·0 GSc*gr* |
| 9·3 | | 28 | 45·0 | 11·1 | |
| 9·3 | | 33 | 48·3 | 22·9 | 9·5 *g* |
| 9·0‡ | | 34 | 20·0 | 42·7 | *g* |
| 9·3‡ | | | 24·7 | 31·9 | 9·5 *g* |
| 9·3 | | | 34·0 | 11·9 | |
| 8·5‡ | | | 46·0 | 47·8 | 9·5 *g* |
| 9·2 | | 39 | 13·0 | 23·0 | |
| 9·0 | | 40 | 17·0 | 15·6 | 9·5 *g* |
| 9·4 | | | 39·0 | 11·2 | *g* |
| 9·4 | | 41 | 9·0 | 2·0 | |
| 8·6 | | | 58·0 | 16·0 | 9·0 *g* |
| 9·0 | | 43 | 48·5 | 19·5 | *g* |
| 9·1 | | 44 | 22·5 | 25·2 | *g* |
| 7·1‡ | | | 39·0 | 52·9 | GS*g* |
| 9·1 | | | 47·0 | 26·0 | *g* |
| 9·4 | | 46 | 22·0 | 22·7 | |
| 9·2 | | 49 | 29·5 | 24·8 | 9·5 *g* |
| 9·1 | | 50 | 39·5 | 20·9 | 9·0 *g* |
| 9·3 | | 51 | 55·0 | 21·4 | |
| 9·4‡ | | 52 | 11·0 | 42·5 | 9·5 *g* |
| 9·1 | | | 15·5 | 4·9 | *g* |
| 9·3 | | 58 | 24·0 | 20·6 | |
| 8·4‡ | 17 | 0 | 37·0 | 54·8 | *g* |
| 9·0 | | 3 | 33·5 | 3·0 | 7·5 G*g* |
| 9·5‡ | | 7 | 27·5 | 42·1 | |
| 9·2 | | 8 | 18·5 | 10·3 | |
| 9·3 | | 9 | 16·5 | 4·5 | |
| 9·1 | | | 47·0 | 23·7 | *g* |
| 9·3 | | 10 | 32·7 | 16·4 | *g* |
| 9·4 | | 14 | 30·0 | 20·9 | |
| 9·2 | | | 32·5 | 22·0 | *g* |
| 9·6† | | | 59·6 | 49·3 | *g* |
| 9·1† | | 15 | 25·0 | 44·6 | *g* |
| 8·7† | | | 58·0 | 43·6 | *g* |
| 9·6† | | 17 | 16·0 | 40·9 | |
| 9·1 | | | 33·5 | 29·9 | *g* |
| 9·4† | | | 54·0 | 55·0 | |
| 9·7† | | | 58·0 | 41·7 | |
| 9·4† | | 19 | 13·0 | 52·2 | |

### 1261—1320.

| mag. | h | m | s (17h.—18h.) | ′ (−77°) | |
|---|---|---|---|---|---|
| 9·4† | 17 | 19 | 40·0 | 52·3 | |
| 8·9† | | 23 | 19·0 | 31·2 | *g* |
| 8·3 | | 26 | 14·0 | 16·6 | 8·5 *g* |
| 8·6† | | | 54·5 | 33·1 | *g* |
| 9·4 | | 28 | 22·5 | 0·9 | *g* |
| 9·3– | | 29 | 0·5 | 8·2 | |
| 9·4† | | | 7·5 | 31·7 | *g* |
| 9·0† | | 31 | 1·5 | 10·6 | *g* |
| 8·7† | | | 28·7 | 31·9 | *g* |
| 9·3† | | 33 | 29·7 | 29·8 | |
| 9·6† | | | 47·0 | 50·8 | *g* |
| 9·4† | | 34 | 24·0 | 13·7 | |
| 9·3† | | | 49·0 | 38·3 | |
| 9·4† | | 35 | 36·0 | 4·5 | |
| 9·4† | | 36 | 0·0 | 48·5 | *g* |
| 8·4† | | | 42·0 | 30·9 | 9·0 *g* |
| 7·5† | | 40 | 4·0 | 47·7 | 7·0 GS*g* |
| 9·6† | | | 6·0 | 32·3 | |
| 9·4† | | | 42·0 | 45·0 | |
| 9·1† | | 41 | 10·0 | 16·8 | |
| 8·8† | | | 24·5 | 3·6 | *g* |
| 9·4† | | 42 | 11·0 | 18·4 | |
| 8·6† | | 44 | 52·5 | 15·0 | *g* |
| 9·0† | | 48 | 34·0 | 29·9 | *g* |
| 9·4† | | 52 | 46·0 | 54·3 | *g* |
| 8·6† | | 53 | 43·5 | 18·5 | *g* |
| 9·0† | | 56 | 28·3 | 32·9 | *g* |
| 9·6† | | | 56·0 | 24·9 | |
| 7·5† | | 57 | 2·0 | 5·7 | 8·0 GS*g* |
| 9·6† | | 59 | 36·5 | 2·8 | *g* |
| 9·6† | 18 | 0 | 27·2 | 2·6 | *g* |
| 9·1† | | 1 | 6·0 | 42·4 | 9·5 *g* |
| 9·6† | | | 16·0 | 32·2 | |
| 9·2† | | 3 | 53·0 | 52·7 | *g* |
| 9·0† | | 5 | 21·0 | 58·5 | *g* |
| 9·3† | | 8 | 37·0 | 56·4 | *g* |
| 9·1† | | 9 | 43·0 | 18·9 | *g* |
| 7·8† | | | 46·0 | 25·2 | 7·0 GS*g* |
| 9·3† | | 14 | 13·0 | 45·3 | |
| 9·6† | | | 16·5 | 9·8 | |
| 9·3† | | 18 | 0·0 | 24·0 | 10·0 *g* |
| 10·2– | | 19 | 40·6 | 41·6 | |
| 9·6 | | 20 | 8·6 | 1·1 | |
| 10·2 | | 21 | 18·1 | 28·4 | |
| 9·3† | | 22 | 2·0 | 48·6 | |
| 10·2 | | | 39·6 | 5·3 | |
| 9·6 | | 23 | 3·5 | 15·5 | |
| 8·6 | | 25 | 50·6 | 22·8 | 9·0 *g* |
| 9·7† | | | 52·3 | 47·8 | |
| 9·6 | | 26 | 25·3 | 7·0 | |
| 9·9 | | | 26·6 | 18·1 | |
| 9·6 | | 27 | 5·8 | 15·5 | |
| 10·0 | | 28 | 1·6 | 47·7 | |
| 7·0† | | | 35·0 | 59·3 | 6·5 GS*g* |
| 9·0† | | | 35·5 | 35·2 | *g* |
| 10·0 | | 29 | 43·1 | 34·7 | |
| 9·7 | | | 46·3 | 53·8 | |
| 10·0 | | 30 | 15·1 | 6·5 | |
| 9·6 | | 32 | 21·1 | 49·4 | |
| 9·6 | | 34 | 43·3 | 51·6 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 15 | 20 | + 188 + 0·16 d | − 5·4 |
| | 30 | 192 + 0·16 | 5·1 |
| | 40 | 195 + 0·17 | 4·8 |
| | 50 | 199 + 0·18 | 4·5 |
| 16 | 0 | 202 + 0·18 | 4·2 |
| | 10 | 205 + 0·18 | 3·9 |
| | 20 | 208 + 0·19 | 3·5 |
| | 30 | 211 + 0·19 | 3·2 |
| | 40 | 213 + 0·20 | 2·9 |
| | 50 | 215 + 0·20 | 2·5 |
| 17 | 0 | 217 + 0·20 | 2·2 |
| | 10 | 218 + 0·20 | 1·8 |
| | 20 | 219 + 0·20 | 1·5 |
| | 30 | 220 + 0·21 | 1·1 |
| | 40 | 221 + 0·21 | 0·7 |
| | 50 | 222 + 0·21 | − 0·4 |
| 18 | 0 | 222 + 0·21 | 0·0 |
| | 10 | 222 + 0·21 | + 0·4 |
| | 20 | 221 + 0·21 | 0·7 |
| | 30 | 220 + 0·21 | 1·1 |
| | 40 | + 219 + 0·20 | + 1·5 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 18 | 30 | +220 | +0·21 | d | +1·1 |
| | 40 | 219 | +0·20 | | 1·5 |
| | 50 | 218 | +0·20 | | 1·8 |
| 19 | 0 | 217 | +0·20 | | 2·2 |
| | 10 | 215 | +0·20 | | 2·5 |
| | 20 | 213 | +0·20 | | 2·9 |
| | 30 | 211 | +0·19 | | 3·2 |
| | 40 | 208 | +0·19 | | 3·5 |
| | 50 | 205 | +0·18 | | 3·9 |
| 20 | 0 | 202 | +0·18 | | 4·2 |
| | 10 | 199 | +0·18 | | 4·5 |
| | 20 | 195 | +0·17 | | 4·8 |
| | 30 | 192 | +0·16 | | 5·1 |
| | 40 | 188 | +0·16 | | 5·4 |
| | 50 | 184 | +0·15 | | 5·6 |
| 21 | 0 | 179 | +0·15 | | 5·9 |
| | 10 | 175 | +0·14 | | 6·2 |
| | 20 | +170 | +0·13 | | +6·4 |

d = minutes of decl.

## 1321—1380.

| mag. | 18h.–19h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 8·2 | 18 | 34 | 43·5 | 11·3 | 8·5 G*g* |
| 9·1 | | 35 | 3·8 | 37·0 | *g* |
| 10·0 | | | 14·6 | 3·6 | |
| 9·9 | | | 45·1 | 47·8 | |
| 9·8 | | | 48·6 | 48·2 | |
| 9·6 | | 36 | 41·6 | 21·2 | *g* |
| 9·7 | | 39 | 9·6 | 29·6 | |
| 9·2 | | | 54·6 | 42·8 | *g* |
| 9·7 | | 41 | 27·1 | 1·0 | |
| 9·7 | | 42 | 20·1 | 50·7 | |
| 10·2 | | | 45·1 | 17·4 | |
| 10·0 | | 43 | 9·1 | 29·2 | |
| 9·1 | | 45 | 53·8 | 1·1 | *g* |
| 9·8‡ | | 47 | 0·9 | 31·9 | |
| 9·3‡ | | | 13·7 | 54·7 | |
| 9·6‡ | | | 32·9 | 56·5 | |
| 9·1 | | 48 | 1·7 | 13·0 | *g* |
| 9·2 | | | 9·9 | 41·9 | *g* |
| 9·8 | | | 30·3 | 20·2 | |
| 10·2 | | 50 | 15·8 | 13·8 | |
| 9·6‡ | | | 40·0 | 56·5 | |
| 9·6‡ | | | 48·0 | 44·5 | |
| 9·4‡ | | | 55·4 | 53·4 | |
| 9·6‡ | | 51 | 54·5 | 30·1 | |
| 9·8‡ | | 54 | 33·0 | 34·3 | |
| 9·9 | | 56 | 7·3 | 20·2 | |
| 8·0 | | | 14·4 | 14·6 | 7·5 GS*g* |
| 9·6 | | 58 | 47·8 | 0·1 | *g* |
| 9·6 | | | 55·3 | 5·0 | |
| 10·2 | | 59 | 56·5 | 26·0 | |
| 9·6‡ | 19 | 0 | 15·0 | 34·7 | |
| 9·4‡ | | | 20·3 | 34·8 | |
| 9·6 | | | 47·0 | 14·9 | |
| 9·8‡ | | 1 | 57·5 | 36·7 | |
| 10·0 | | 2 | 41·5 | 10·5 | |
| 9·4‡ | | 3 | 5·0 | 42·1 | *g* |
| 9·3‡ | | | 20·5 | 42·5 | *g* |
| 8·8‡ | | 6 | 8·8 | 54·0 | 10·0 *g* |
| 9·8 | | 7 | 41·0 | 21·6 | |
| 9·8‡ | | | 46·0 | 56·4 | |
| 10·2 | | 8 | 6·5 | 0·9 | |
| 10·2 | | | 38·0 | 37·9 | |
| 9·6‡ | | 11 | 44·3 | 58·9 | |
| 8·8‡ | | 12 | 37·2 | 41·9 | *g* |
| 9·6 | | 13 | 5·0 | 8·1 | *g* |
| 9·8 | | | 41·5 | 28·8 | |
| 9·6‡ | | 17 | 40·5 | 43·3 | |
| 9·0 | | 21 | 29·1 | 27·4 | *g* |
| 9·4‡ | | 22 | 11·0 | 37·3 | |
| 8·1‡ | | 23 | 35·5 | 50·8 | 8·0 GS*g* |
| 10·2 | | 24 | 4·5 | 27·9 | |
| 9·8‡ | | 25 | 48·6 | 49·6 | |
| 9·6 | | 26 | 47·9 | 13·5 | |
| 9·6 | | | 51·5 | 32·1 | *g* |
| 9·6 | | 27 | 57·7 | 16·9 | *g* |
| 10·0 | | 28 | 21·3 | 29·7 | |
| 9·6 | | | 47·9 | 27·2 | |
| 7·9– | | | 58·5 | 22·4 | 8·8 *g* |
| 9·4 | | 29 | 50·6 | 34·6 | |
| 9·6‡ | | 30 | 49·2 | 54·4 | |

## 1381—1440.

| mag. | 19h.–20h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9·4‡ | 19 | 30 | 56·5 | 51·8 | |
| 9·7 | | 31 | 43·4 | 4·7 | |
| 7·4 | | | 46·1 | 12·2 | 7·5 GS*g* |
| 9·2‡ | | 32 | 33·0 | 46·0 | *g* |
| 9·0 | | 35 | 52·9 | 9·1 | *g* |
| 9·6 | | 36 | 48·8 | 12·0 | |
| 9·6‡ | | 37 | 25·7 | 42·8 | |
| 9·8 | | 38 | 24·4 | 6·5 | |
| 8·9 | | | 34·3 | 13·0 | 9·0 *g* |
| 9·4‡ | | | 37·7 | 46·1 | *g* |
| 9·1‡ | | | 52·7 | 52·5 | *g* |
| 9·3 | | 39 | 2·8 | 19·5 | |
| 9·2 | | | 45·4 | 13·6 | 8·5 *g* |
| 9·4 | | 40 | 18·8 | 7·1 | 8·5 *g* |
| 8·0‡ | | | 42·0 | 37·3 | 8·0 GS*g* |
| 9·6 | | | 58·3 | 1·7 | |
| 9·4‡ | | 41 | 56·7 | 49·5 | |
| 9·2‡ | | 43 | 21·0 | 51·3 | |
| 8·5‡ | | | 39·2 | 45·8 | 8·0 *g* |
| 9·7‡ | | 44 | 5·6 | 36·1 | |
| 9·6 | | 45 | 51·3 | 6·0 | |
| 9·3‡ | | 46 | 52·4 | 54·9 | |
| 9·8 | | 47 | 48·8 | 7·4 | |
| 9·3‡ | | 49 | 17·2 | 40·8 | *g* |
| 9·8 | | | 39·4 | 39·8 | |
| 8·4 | | 51 | 23·4 | 26·3 | 8·0 GS*g* |
| 9·8 | | 52 | 24·9 | 1·4 | |
| 9·3 | | | 57·9 | 29·7 | |
| 9·3 | | 54 | 28·9 | 27·7 | |
| 8·4‡ | | | 42·5 | 46·6 | 8·0 *g* |
| 9·4‡ | | | 50·0 | 34·4 | |
| 8·4 | | 55 | 13·7 | 21·2 | 8·0 *g* |
| 9·2‡ | | | 28·2 | 53·8 | |
| 9·6‡ | | 56 | 6·7 | 53·6 | |
| 8·7‡ | | | 24·7 | 38·1 | 7·5 G*g* |
| 9·6 | | | 38·4 | 7·7 | |
| 9·7‡ | | 57 | 50·7 | 59·6 | |
| 9·2 | | 58 | 11·7 | 26·3 | |
| 9·8‡ | | | 36·0 | 45·7 | |
| 9·1‡ | 20 | 0 | 15·5 | 35·1 | |
| 9·3‡ | | 1 | 6·3 | 51·0 | |
| 9·8 | | 2 | 13·2 | 15·9 | |
| 9·8 | | 3 | 0·7 | 4·7 | |
| 9·4‡ | | 5 | 27·6 | 41·7 | |
| 9·4 | | | 34·7 | 10·3 | |
| 9·3‡ | | 6 | 55·0 | 49·3 | *g* |
| 9·4‡ | | 7 | 46·3 | 44·5 | |
| 9·8 | | | 59·3 | 2·3 | |
| 9·3 | | 8 | 8·7 | 6·5 | |
| 9·2 | | | 54·7 | 10·9 | |
| 9·8 | | 9 | 17·2 | 15·0 | |
| 9·6 | | | 32·2 | 11·3 | |
| 9·4 | | | 58·1 | 13·3 | |
| 9·4 | | 10 | 47·6 | 19·2 | |
| 9·5 | | | 49·1 | 4·4 | |
| 9·6 | | 12 | 8·6 | 26·9 | *g* |
| 9·7 | | 13 | 18·6 | 18·2 | |
| 8·4 | | | 25·1 | 7·7 | 8·5 *g* |
| 9·8 | | 15 | 9·6 | 9·7 | |
| 8·1‡ | | | 22·0 | 36·5 | 8·5 GS*g* |

## 1441—1500.

| mag. | 20h.–21h. h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 8·3‡ | 20 | 15 | 58·1 | 42·2 | 8·0 GS*g* |
| 9·8 | | 16 | 28·1 | 25·6 | |
| 9·7 | | 17 | 0·6 | 14·3 | |
| 8·5 | | 18 | 33·6 | 20·9 | 8·5 *g* |
| 9·8 | | 20 | 5·1 | 15·9 | |
| 10·0† | | | 31·2 | 43·9 | |
| 8·0 | | 22 | 5·6 | 18·9 | 7·7 GS*g* |
| 9·3 | | 25 | 23·1 | 14·4 | |
| 9·2† | | | 47·3 | 40·2 | *g* |
| 9·8 | | 27 | 26·6 | 29·0 | |
| 8·9 | | | 28·8 | 18·2 | *g* |
| 9·8 | | 28 | 35·1 | 30·2 | |
| 9·7† | | 30 | 21·7 | 43·5 | |
| 9·8 | | | 57·1 | 26·5 | |
| 9·8† | | 31 | 58·6 | 52·3 | |
| 9·8† | | 32 | 0·8 | 49·3 | |
| 9·0† | | | 24·6 | 51·1 | 9·0 *g* |
| 9·8 | | 33 | 3·7 | 10·2 | |
| 9·6† | | | 13·5 | 48·1 | |
| 9·2 | | 34 | 20·5 | 17·4 | *g* |
| 9·6† | | 35 | 47·6 | 39·5 | |
| 9·6† | | 36 | 16·6 | 48·5 | |
| 9·3 | | 37 | 29·5 | 26·8 | |
| 9·8– | | 38 | 14·7 | 30·2 | |
| 9·5 | | 39 | 7·9 | 13·9 | *g* |
| 10·0 | | 41 | 8·4 | 9·0 | |
| 10·0† | | | 10·5 | 41·7 | |
| 10·3 | | 44 | 42·0 | 0·5 | |
| 10·3 | | 45 | 37·4 | 22·3 | |
| 9·6† | | | 59·2 | 40·4 | |
| 9·4† | | 46 | 2·5 | 57·0 | |
| 10·3 | | | 39·4 | 14·1 | |
| 10·3 | | 49 | 5·4 | 13·9 | |
| 6·6 | | | 29·7 | 29·8 | 5·5 GS*og* |
| 8·6† | | 50 | 38·7 | 52·1 | 9·0 *g* |
| 9·6† | | 52 | 0·0 | 53·8 | |
| 10·0† | | | 59·5 | 45·5 | |
| 9·7† | | 53 | 35·0 | 42·6 | |
| 10·2† | | 54 | 12·0 | 47·0 | |
| 9·6† | | 55 | 57·0 | 43·4 | |
| 9·2† | | 57 | 0·0 | 38·3 | |
| 10·2† | | | 31·5 | 43·8 | |
| 9·0 | | | 32·0 | 26·1 | 8·8 *g* |
| 9·3† | | 59 | 40·9 | 42·6 | *g* |
| 9·2 | | | 55·9 | 20·8 | *g* |
| 9·4 | 21 | 2 | 54·7 | 22·0 | *g* |
| 9·6† | | 4 | 0·4 | 41·8 | |
| 10·3 | | | 8·4 | 13·2 | |
| 9·5 | | 5 | 25·5 | 18·6 | *g* |
| 8·4† | | 6 | 32·2 | 46·8 | 9·2 *g* |
| 10·3 | | 9 | 4·5 | 3·9 | |
| 9·6 | | | 38·0 | 16·8 | *g* |
| 9·6† | | 10 | 24·5 | 35·2 | *g* |
| 7·8 | | | 56·5 | 3·3 | 8·2 GS*g* |
| 9·4† | | 12 | 43·0 | 34·1 | 9·2 *g* |
| 10·3 | | 14 | 9·5 | 16·2 | |
| 9·7 | | 16 | 43·0 | 4·7 | |
| 10·3 | | 17 | 12·0 | 5·1 | |
| 10·3 | | 18 | 23·5 | 32·4 | |
| 9·6† | | | 36·5 | 53·4 | |



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Plate {582—584, 561 (Belt 75°). 599†—600‡, 585† (Belt 80°).



### 1501—1533.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 10.3 | 21 | 19 | 0.5 | 26.1 | |
| 10.0 | | | 34.0 | 10.7 | |
| 8.4† | | 20 | 56.1 | 45.7 | *g* |
| 10.3 | | 21 | 54.0 | 10.0 | |
| 9.7† | | 22 | 10.5 | 39.2 | |
| 9.7† | | | 38.5 | 31.9 | |
| 8.6 | | 23 | 39.0 | 4.1 | 9.5 *g* |
| 10.3 | | 26 | 35.3 | 6.7 | |
| 8.9† | | 27 | 2.0 | 34.4 | 8.5 *g* |
| 5.9† | | | 29.0 | 56.6 | 4.0 GSg |
| 10.3 | | 30 | 2.0 | 1.9 | |
| 9.5 | | 31 | 17.5 | 12.9 | 9.5 *g* |
| 10.2 | | | 45.0 | 3.9 | 9.5 *g* |
| 9.6† | | | 56.5 | 48.8 | |
| 9.9 | | 34 | 16.0 | 20.1 | *g* |
| 9.7– | | | 28.5 | 24.4 | *g* |
| 9.7† | | | 54.0 | 48.8 | |
| 8.9† | | 35 | 54.0 | 51.2 | 9.5 *g* |
| 9.6† | | 37 | 24.0 | 55.7 | |
| 9.3† | | | 59.0 | 57.1 | *g* |
| 9.2† | | 39 | 57.7 | 58.7 | *g* |
| 8.4† | | 41 | 24.5 | 55.0 | 8.5 GS*g* |
| 8.7† | | 42 | 5.5 | 31.5 | 8.2 *g* |
| 9.7† | | 43 | 40.5 | 53.3 | |
| 8.9 | | | 52.5 | 13.2 | 8.8 *g* |
| 10.2† | | 44 | 28.7 | 59.2 | |
| 9.7† | | 46 | 5.0 | 29.1 | |
| 7.7† | | 49 | 31.2 | 54.5 | 8.5 GS*g* |
| 10.0† | | 50 | 31.5 | 49.8 | |
| 8.5‡ | | 56 | 23.0 | 46.0 | 9.5 *g* |
| 9.4‡ | | 58 | 41.0 | 34.7 | |
| 9.4‡ | | | 55.0 | 22.4 | |
| 9.2‡ | | 59 | 34.0 | 45.5 | 9.5 *g* |

### 1534—1567.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9.3‡ | 22 | 0 | 41.0 | 57.4 | 9.5 *g* |
| 8.0‡ | | 2 | 21.5 | 33.4 | 9.0 *g* |
| 9.5‡ | | | 54.0 | 33.1 | 9.5 *g* |
| 9.4‡ | | 3 | 19.0 | 46.2 | *g* |
| 8.4‡ | | 8 | 7.5 | 7.1 | *g* |
| 9.6 | | 10 | 53.0 | 5.0 | |
| 8.6‡ | | 12 | 15.0 | 28.8 | 8.5 GS*g*g |
| 9.4– | | 15 | 17.0 | 5.0 | *g* |
| 9.6‡ | | 16 | 42.0 | 22.6 | |
| 9.6‡ | | 18 | 50.0 | 44.2 | |
| 8.1‡ | | 19 | 7.0 | 19.0 | 8.5 GS*g* |
| 9.5‡ | | | 7.5 | 38.8 | |
| 9.5‡ | | | 53.0 | 45.0 | 9.0 *g* |
| 9.5‡ | | 21 | 6.0 | 51.9 | |
| 9.4‡ | | 22 | 0.0 | 44.3 | *g* |
| 8.6‡ | | | 22.0 | 47.0 | 8.0 *g* |
| 9.3 | | 25 | 44.0 | 5.8 | |
| 9.4‡ | | 26 | 0.0 | 33.7 | |
| 9.6‡ | | | 19.0 | 40.0 | |
| 9.6 | | | 50.0 | 16.5 | *g* |
| 6.6‡ | | 39 | 11.7 | 42.6 | 6.8 GSc*g* |
| 8.6 | | | 34.0 | 0.7 | 9.0 *g* |
| 8.8 | | 40 | 43.0 | 26.9 | 9.2 *g* |
| 9.4 | | 41 | 24.0 | 24.6 | 9.5 *g* |
| 9.3 | | 46 | 38.5 | 27.9 | 9.5 *g* |
| 9.0 | | 53 | 19.5 | 29.1 | *g* |
| 9.5‡ | | 55 | 3.0 | 47.9 | |
| 9.0‡ | | | 18.5 | 36.0 | 9.0 *g* |
| 9.3‡ | | 58 | 53.5 | 38.1 | |
| 8.6 | 23 | 1 | 37.0 | 8.4 | 8.5 GS*g* |
| 9.2‡ | | | 44.5 | 31.0 | *g* |
| 9.4‡ | | 4 | 6.0 | 57.3 | *g* |
| 9.4‡ | | 5 | 5.0 | 35.8 | *g* |
| 9.5 | | | 17.0 | 21.0 | *g* |

### 1568—1600.

| mag. | h | m | s | −77° ′ | |
|---|---|---|---|---|---|
| 9.4‡ | 23 | 7 | 43.0 | 47.9 | |
| 9.4‡ | | 8 | 9.0 | 36.8 | *g* |
| 9.7‡ | | | 31.0 | 57.8 | *g* |
| 9.4‡ | | 13 | 50.0 | 59.1 | *g* |
| 9.7‡ | | 14 | 13.0 | 10.7 | *g* |
| 9.0 | | 18 | 34.0 | 28.5 | *g* |
| 9.0† | | 19 | 20.0 | 52.8 | *g* |
| 9.1– | | | 45.0 | 39.0 | *g* |
| 10.0 | | 20 | 4.6 | 13.5 | |
| 8.2 | | 21 | 33.6 | 0.9 | 8.5 *g* |
| 10.0 | | | 55.1 | 3.7 | |
| 9.7† | | | 29.0 | 37.5 | *g* |
| 9.4† | | 27 | 2.0 | 36.9 | *g* |
| 9.4 | | 30 | 0.5 | 13.4 | *g* |
| 10.6 | | | 12.6 | 31.0 | *g* |
| 6.9 | | | 35.6 | 33.6 | 6.5 GSc*g* |
| 10.4 | | 34 | 40.1 | 16.5 | |
| 9.8 | | 37 | 1.1 | 15.6 | *g* |
| 9.9† | | | 51.0 | 46.2 | *g* |
| 8.8† | | 39 | 12.0 | 57.4 | 9.0 *g* |
| 8.3† | | | 58.5 | 55.7 | 8.5 *g* |
| 9.0 | | 41 | 22.2 | 1.6 | 9.5 *g* |
| 10.0 | | 42 | 2.6 | 33.2 | |
| 10.4 | | | 30.1 | 32.2 | |
| 8.9 | | 44 | 29.3 | 2.9 | 8.5 *g* |
| 8.8 | | | 49.6 | 28.1 | 9.0 *g* |
| 8.0† | | 54 | 0.5 | 43.0 | 8.5 *g* |
| 9.8 | | | 32.6 | 18.9 | |
| 6.0† | | 55 | 8.5 | 45.4 | 5.0 GS*g* |
| 11.1 | | | 58.6 | 9.1 | |
| 9.8 | | 57 | 43.6 | 9.7 | |
| 9.0 | | 58 | 10.1 | 34.1 | *g* |
| 9.0 | | | 11.8 | 2.6 | 9.0 *g* |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 21 | 10 | +175 + 0.14 d | +6.2 |
| | 20 | 170 + 0.13 | 6.4 |
| | 30 | 165 + 0.13 | 6.6 |
| | 40 | 160 + 0.12 | 6.8 |
| | 50 | 155 + 0.11 | 7.0 |
| 22 | 0 | 149 + 0.10 | 7.2 |
| | 10 | 144 + 0.10 | 7.4 |
| | 20 | 138 + 0.09 | 7.6 |
| | 30 | 132 + 0.08 | 7.7 |
| | 40 | 126 + 0.07 | 7.9 |
| | 50 | 120 + 0.06 | 8.0 |
| 23 | 0 | 114 + 0.05 | 8.1 |
| | 10 | 108 + 0.04 | 8.2 |
| | 20 | 102 + 0.04 | 8.2 |
| | 30 | 96 + 0.03 | 8.3 |
| | 40 | 89 + 0.02 | 8.3 |
| | 50 | 83 + 0.01 | 8.3 |
| 0 | 0 | + 77 0.00 | +8.4 |

d = minutes of decl.





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# ZONE—78°.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 70 | − 0·01 | 8·3 |
| | 20 | 63 | − 0·02 | 8·3 |
| | 30 | 56 | − 0·03 | 8·3 |
| | 40 | 49 | − 0·04 | 8·2 |
| | 50 | 43 | − 0·05 | 8·2 |
| 1 | 0 | 36 | − 0·06 | 8·1 |
| | 10 | 30 | − 0·07 | 8·0 |
| | 20 | 23 | − 0·08 | 7·9 |
| | 30 | 17 | − 0·09 | 7·7 |
| | 40 | 10 | − 0·10 | 7·6 |
| | 50 | + 4 | − 0·11 | 7·4 |
| 2 | 0 | − 2 | − 0·12 | 7·2 |
| | 10 | 8 | − 0·13 | 7·0 |
| | 20 | 13 | − 0·14 | 6·8 |
| | 30 | 19 | − 0·15 | 6·6 |
| | 40 | 24 | − 0·16 | 6·4 |
| | 50 | 29 | − 0·17 | 6·2 |
| 3 | 0 | 34 | − 0·17 | 5·9 |
| | 10 | 39 | − 0·18 | 5·6 |
| | 20 | 44 | − 0·19 | 5·4 |
| | 30 | 48 | − 0·19 | 5·1 |
| | 40 | 52 | − 0·20 | 4·8 |
| | 50 | 56 | − 0·21 | 4·5 |
| 4 | 0 | 59 | − 0·21 | 4·2 |
| | 10 | − 63 | − 0·22 | + 3·9 |

d = minutes of decl.

## 1—40.

| mag. | h (0h.—1h.) | m | s | ′ (−78°) | |
|---|---|---|---|---|---|
| 8·6 | 0 | 1 | 17·0 | 11·4 | 8·5 g |
| 8·3 | | | 52·0 | 54·4 | 8·0 GSg |
| 8·8 | | 4 | 3·0 | 10·6 | g |
| 7·9 | | | 10·0 | 59·8 | 7·0 GSg |
| 10·0 | | 6 | 48·0 | 14·1 | g |
| 7·5 | | 13 | 37·0 | 41·0 | 8·0 GSg |
| 9·3 | | | 56·0 | 4·5 | Gg |
| 9·4 | | 14 | 59·0 | 31·8 | g |
| 7·0 | | 16 | 8·0 | 7·2 | 7·0 GScg |
| 10·0 | | 18 | 44·0 | 20·2 | Gg |
| 8·5 | | 19 | 24·0 | 56·6 | g |
| 8·8 | | 26 | 45·0 | 34·0 | g |
| 9·7 | | 29 | 35·0 | 19·0 | g |
| 8·2 | | 32 | 54·0 | 10·3 | 9·5 g |
| 9·7 | | 34 | 27·0 | 30·8 | |
| 8·8 | | | 29·0 | 25·0 | g |
| 9·4 | | 35 | 5·0 | 3·2 | g |
| 9·4 | | 36 | 40·0 | 9·3 | |
| 9·4 | | 38 | 14·0 | 28·8 | g |
| 9·7 | | 39 | 48·0 | 46·2 | |
| 7·6 | | 40 | 41·0 | 46·1 | 7·0 GSg |
| 9·4 | | 41 | 46·0 | 52·2 | |
| 8·9 | | 44 | 12·0 | 56·8 | 9·5 g |
| 9·1 | | 45 | 13·0 | 6·6 | g |
| 9·1 | | 50 | 45·0 | 32·2 | 9·5 g |
| 9·2 | | 54 | 27·0 | 8·9 | g |
| 9·0 | | 55 | 53·0 | 8·7 | g |
| 8·1 | | 59 | 35·0 | 13·2 | 7·5 GSg |
| 7·9 | 1 | 2 | 10·0 | 58·1 | 8·0 GSg |
| 7·2 | | | 41·0 | 15·2 | 8·0 GSg |
| 9·2 | | 5 | 1·0 | 45·6 | g |
| 9·1 | | 7 | 30·0 | 56·9 | 10·0 g |
| 9·3 | | 8 | 25·0 | 26·0 | |
| 9·4 | | 10 | 15·0 | 53·1 | |
| 9·1 | | 22 | 22·0 | 43·2 | g |
| 8·5 | | 30 | 41·0 | 42·6 | 7·8 GSg |
| 9·2 | | 33 | 26·0 | 2·4 | |
| 8·8 | | 42 | 1·0 | 52·3 | g |
| 9·5 | | 51 | 59·0 | 24·8 | g |
| 6·9 | | 53 | 50·0 | 6·4 | 7·0 GSg |

## 41—80.

| mag. | h (1h.—2h.) | m | s | ′ (−78°) | |
|---|---|---|---|---|---|
| 8·8 | 1 | 55 | 46·0 | 11·3 | 8·0 Gg |
| 6·4 | | 56 | 5·5 | 57·6 | GScg |
| 9·0 | 2 | 4 | 5·0 | 36·4 | g |
| 9·1 | | | 27·0 | 7·0 | g |
| 9·2 | | 8 | 5·0 | 30·8 | Sg |
| 9·4 | | 9 | 40·1 | 51·3 | g |
| 9·8 | | 10 | 1·0 | 49·5 | |
| 8·6 | | 19 | 34·1 | 39·7 | 9·0 g |
| 8·7 | | 22 | 31·1 | 12·8 | 9·0 g |
| 9·8 | | 23 | 12·0 | 0·4 | |
| 8·7 | | 26 | 14·1 | 18·7 | g |
| 9·8 | | 29 | 18·1 | 15·9 | |
| 9·6 | | | 40·7 | 58·7 | |
| 9·6 | | 30 | 57·6 | 23·7 | g |
| 9·1 | | 31 | 32·5 | 43·8 | |
| 9·6 | | | 49·5 | 34·3 | g |
| 8·1 | | 33 | 22·5 | 54·9 | 9·0 g |
| 9·4 | | 34 | 20·5 | 34·3 | g |
| 8·6 | | | 29·0 | 10·5 | g |
| 8·4 | | | 42·5 | 10·5 | g |
| 9·2 | | 41 | 54·6 | 36·2 | |
| 9·2 | | 43 | 24·0 | 27·0 | g |
| 8·2 | | 44 | 17·5 | 20·0 | 9·0 g |
| 9·4 | | | 25·5 | 42·9 | |
| 9·8 | | 45 | 40·0 | 40·4 | |
| 9·8 | | | 57·0 | 50·8 | |
| 8·6 | | 46 | 13·0 | 38·8 | g |
| 9·2 | | | 17·0 | 51·2 | |
| 8·6 | | | 42·5 | 53·4 | 9·5 Gg |
| 8·6 | | 47 | 36·5 | 53·7 | 9·0 Gg |
| 8·1 | | 48 | 51·5 | 2·4 | 8·8 g |
| 9·0 | | 49 | 16·5 | 53·3 | g |
| 8·8 | | | 33·4 | 9·8 | 9·5 g |
| 9·2 | | 51 | 31·0 | 57·9 | |
| 9·8 | | 53 | 59·4 | 53·6 | |
| 9·8 | | 54 | 24·4 | 43·0 | |
| 8·3 | | 55 | 48·4 | 22·0 | 7·5 GSg |
| 9·4 | | 56 | 49·9 | 32·0 | |
| 8·4 | | | 56·4 | 42·0 | g |
| 9·8 | | 57 | 41·9 | 20·2 | g |

## 81—120.

| mag. | h (2h.—4h.) | m | s | ′ (−78°) | |
|---|---|---|---|---|---|
| 8·2 | 2 | 57 | 42·2 | 34·8 | 8·5 g |
| 8·6 | | 58 | 6·9 | 9·3 | 8·5 g |
| 8·6 | 3 | 0 | 53·4 | 9·2 | g |
| 8·4 | | 1 | 59·4 | 19·8 | g |
| 9·2 | | 3 | 39·4 | 10·6 | g |
| 9·3 | | 9 | 29·4 | 5·1 | 8·5 g |
| 9·2 | | 12 | 15·4 | 50·5 | |
| 9·4 | | 14 | 30·2 | 18·9 | g |
| 9·8 | | | 34·9 | 16·0 | g |
| 9·4 | | 15 | 48·9 | 46·8 | |
| 8·0 | | 16 | 2·5 | 22·6 | 8·0 g |
| 9·3 | | 17 | 12·0 | 1·6 | |
| 9·8 | | 19 | 11·0 | 34·4 | g |
| 9·1 | | 21 | 51·2 | 56·9 | 8·5 g |
| 9·6 | | 22 | 37·5 | 49·5 | 9·5 g |
| 9·2 | | 25 | 32·5 | 30·5 | g |
| 9·8 | | 26 | 0·5 | 51·7 | |
| 9·8 | | 27 | 7·1 | 58·4 | |
| 7·8 | | 31 | 47·8 | 2·4 | 7·5 GSg |
| 9·3 | | 32 | 1·0 | 16·6 | g |
| 6·2 | | 34 | 34·0 | 46·1 | 6·0 GScg |
| 9·8 | | 35 | 7·0 | 47·0 | |
| 9·7 | | 37 | 28·0 | 57·6 | g |
| 9·5 | | 39 | 8·0 | 5·6 | |
| 7·7 | | 41 | 18·0 | 43·5 | 6·5 GSg |
| 9·5 | | | 28·0 | 53·9 | |
| 9·2 | | 42 | 55·0 | 15·4 | g |
| 10·0 | | | 58·0 | 33·6 | |
| 9·7 | | 43 | 14·0 | 10·6 | |
| 10·0 | | 44 | 15·0 | 16·9 | |
| 9·7 | | 46 | 23·0 | 45·0 | |
| 9·0 | | | 31·0 | 41·3 | 8·5 Gg |
| 9·8 | | | 34·0 | 42·8 | g |
| 9·4 | | 47 | 24·0 | 5·6 | |
| 9·7 | | 53 | 4·0 | 26·7 | |
| 9·4 | | | 5·0 | 7·1 | |
| 10·0 | | | 10·0 | 39·3 | |
| 9·3 | | 57 | 35·0 | 13·4 | 8·5 g |
| 9·5 | 4 | 0 | 17·0 | 23·5 | g |
| 10·0 | | | 35·0 | 26·5 | |



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## 121—180.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·0 | 4 | 1 | 11·0 | 53·0 | 8·5 G*g* |
| 10·0 | | 5 | 55·0 | 34·2 | |
| 8·5 | | 7 | 16·0 | 53·1 | 8·5 G*g* |
| 10·0 | | 8 | 13·0 | 11·1 | |
| 7·7 | | | 24·0 | 58·0 | 7·0 GSc*gg* |
| 8·8 | | | 51·0 | 14·9 | 8·5 *g* |
| 9·8 | | 16 | 30·0 | 7·7 | |
| 10·0 | | 17 | 51·0 | 8·0 | |
| 9·8 | | 18 | 1·0 | 52·9 | |
| 9·1 | | | 12·0 | 5·0 | *g* |
| 9·4 | | | 29·0 | 56·2 | |
| 9·5 | | 20 | 55·0 | 15·7 | *g* |
| 9·2 | | 21 | 45·0 | 19·2 | *g* |
| 9·6 | | 22 | 42·0 | 37·4 | |
| 8·9 | | 24 | 49·0 | 19·8 | *g* |
| 9·3 | | 25 | 28·0 | 42·2 | |
| 8·5 | | 29 | 21·0 | 59·6 | *g* |
| 9·4 | | 30 | 45·0 | 9·5 | *g* |
| 9·7 | | 32 | 45·0 | 2·7 | *g* |
| 9·1 | | 34 | 35·0 | 13·8 | *g* |
| 9·4 | | | 55·0 | 10·0 | *g* |
| 9·0 | | 36 | 6·0 | 30·0 | 9·5 *g* |
| 9·4 | | | 25·0 | 1·0 | *g* |
| 9·4 | | | 57·0 | 46·4 | *g* |
| 7·3 | | 37 | 50·0 | 53·2 | 8·5 GS*g* |
| 9·8 | | 39 | 4·0 | 22·6 | 9·0 *g* |
| 8·1 | | | 26·0 | 37·2 | 9·0 *g* |
| 9·8 | | 40 | 24·0 | 21·0 | *g* |
| 9·7 | | 45 | 15·0 | 19·7 | |
| 10·0 | | 48 | 11·0 | 56·6 | *g* |
| 9·8 | | 49 | 14·0 | 23·9 | *g* |
| 7·8 | | 50 | 13·0 | 14·3 | 9·0 *g* |
| 9·7 | | | 35·5 | 49·9 | *g* |
| 9·2 | | | 47·0 | 5·7 | *g* |
| 9·4 | | 53 | 27·0 | 46·1 | |
| 9·8 | | 55 | 35·5 | 19·2 | *g* |
| 9·8 | | 58 | 55·5 | 55·1 | *g* |
| 9·2 | | 59 | 2·0 | 28·2 | *g* |
| 8·2 | | | 43·0 | 20·2 | 9·0 GS*g* |
| 7·4 | | | 48·0 | 35·5 | 8·0 GS*g* |
| 8·6 | 5 | 2 | 26·0 | 48·7 | 8·5 *g* |
| 9·2 | | 4 | 35·0 | 53·7 | |
| 7·9 | | 5 | 4·0 | 21·7 | 8·5 GS*g* |
| 9·8 | | 6 | 11·0 | 31·3 | |
| 7·6 | | | 58·0 | 28·2 | 6·5 GSc*g* |
| 8·3 | | 8 | 16·0 | 21·0 | 8·2 GS*g* |
| 9·8 | | 11 | 15·0 | 28·2 | *g* |
| 9·8 | | | 41·0 | 23·9 | *g* |
| 9·6 | | 13 | 23·0 | 33·7 | *g* |
| 9·2 | | 15 | 31·0 | 54·9 | *g* |
| 9·4 | | 18 | 5·0 | 28·0 | G*g* |
| 9·6 | | 20 | 2·0 | 21·0 | *g* |
| 9·6 | | | 31·0 | 26·4 | *g* |
| 9·6 | | 22 | 45·0 | 54·9 | |
| 9·6 | | 24 | 23·0 | 34·0 | 9·5 *g* |
| 9·4 | | | 39·0 | 55·3 | 9·5 *g* |
| 9·4 | | 25 | 22·0 | 20·1 | *g* |
| 9·8 | | 26 | 42·0 | 15·3 | *g* |
| 9·8 | | | 45·0 | 42·8 | |
| 9·8 | | 27 | 3·0 | 2·8 | *g* |

## 181—240.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·2 | 5 | 27 | 25·0 | 2·3 | *g* |
| 9·8 | | | 46·0 | 19·4 | *g* |
| 9·5 | | 28 | 42·0 | 15·8 | *g* |
| 9·8 | | | 43·0 | 25·7 | |
| 9·8 | | 29 | 9·0 | 28·5 | |
| 8·4 | | 31 | 38·0 | 26·5 | 9·2 *g* |
| 9·3 | | 32 | 6·0 | 46·5 | *g* |
| 10·0 | | 34 | 0·0 | 1·3 | |
| 9·5 | | 36 | 52·0 | 30·5 | *g* |
| 9·8 | | 38 | 21·0 | 51·6 | |
| 9·5 | | | 58·0 | 21·9 | *g* |
| 9·6 | | 39 | 23·0 | 41·8 | |
| 9·5 | | 40 | 0·0 | 21·0 | *g* |
| 9·4 | | 42 | 24·0 | 51·9 | 9·0 *g* |
| 6·2 | | 43 | 17·0 | 53·1 | 6·8 GS*g* |
| 9·8 | | 44 | 49·0 | 36·0 | |
| 10·0 | | 45 | 11·0 | 42·1 | *g* |
| 9·4 | | 46 | 8·0 | 42·2 | *g* |
| 9·8 | | | 40·0 | 46·1 | |
| 9·8 | | 48 | 6·0 | 8·6 | |
| 9·2 | | | 42·0 | 40·7 | 9·0 *g* |
| 9·8 | | 49 | 23·0 | 28·8 | *g* |
| 9·8 | | 50 | 35·0 | 5·6 | |
| 9·8 | | 52 | 38·0 | 41·7 | |
| 9·8 | | | 50·0 | 25·0 | *g* |
| 9·8 | | 53 | 23·0 | 49·8 | |
| 8·6 | | 59 | 32·0 | 36·1 | 8·5 GS*g* |
| 9·9 | 6 | 2 | 1·0 | 37·8 | |
| 9·8 | | | 6·0 | 20·8 | *g* |
| 9·4 | | | 15·0 | 4·9 | *g* |
| 9·8 | | 4 | 2·0 | 46·8 | *g* |
| 9·6 | | 6 | 2·0 | 16·5 | *g* |
| 9·8 | | 7 | 1·0 | 6·1 | |
| 9·6 | | 8 | 1·0 | 13·4 | 9·5 *g* |
| 9·8 | | | 16·0 | 23·2 | |
| 9·9 | | 9 | 24·0 | 17·5 | *g* |
| 9·8 | | 10 | 12·0 | 30·1 | 10·0 *g* |
| 9·4 | | 11 | 57·0 | 32·1 | 8·8 *g* |
| 9·3 | | 13 | 42·0 | 55·7 | |
| 9·4 | | 20 | 11·0 | 11·1 | |
| 9·8 | | | 40·0 | 7·1 | |
| 10·0 | | 23 | 19·0 | 19·3 | *g* |
| 9·4 | | 24 | 32·0 | 42·1 | *g* |
| 8·9 | | 25 | 31·0 | 27·7 | 9·0 *g* |
| 9·5 | | 26 | 16·0 | 55·0 | |
| 8·2 | | 28 | 5·0 | 20·2 | 8·1 GS*g* |
| 7·8 | | | 47·0 | 59·5 | 7·7 GS*g* |
| 9·2 | | 29 | 23·0 | 38·6 | *g* |
| 9·8 | | 30 | 6·0 | 57·6 | |
| 9·8 | | 32 | 38·0 | 29·1 | |
| 9·5 | | 33 | 22·0 | 58·8 | |
| 7·9 | | 36 | 15·0 | 48·5 | 7·5 GS*g* |
| 9·5 | | | 25·0 | 48·7 | |
| 9·2 | | 37 | 0·0 | 42·8 | 9·5 *g* |
| 10·0 | | 38 | 56·0 | 43·8 | |
| 9·8 | | 39 | 1·0 | 2·1 | |
| 9·4 | | 41 | 30·0 | 21·7 | |
| 9·9 | | 42 | 6·0 | 43·1 | *g* |
| 9·5 | | 45 | 55·0 | 23·9 | |
| 8·2 | | 46 | 33·0 | 18·7 | 8·5 GS*g* |

## 241—300.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 8·9 | 6 | 54 | 51·0 | 40·5 | *g* |
| 9·4 | | 58 | 16·0 | 55·2 | |
| 8·7 | 7 | 5 | 52·0 | 59·3 | |
| 9·2 | | 7 | 49·0 | 38·3 | *g* |
| 9·2 | | 10 | 28·0 | 34·9 | 8·5 *g* |
| 9·2 | | 11 | 40·0 | 12·9 | 9·0 *g* |
| 9·5 | | 12 | 27·0 | 41·9 | *g* |
| 9·1 | | | 56·0 | 37·7 | *g* |
| 9·2 | | | 59·0 | 20·2 | 9·5 *g* |
| 9·7 | | 16 | 19·0 | 35·5 | |
| 9·8 | | | 26·0 | 2·5 | |
| 8·9 | | | 38·0 | 43·5 | 8·5 G*g* |
| 8·7 | | | 44·0 | 40·9 | 9·0 *g* |
| 8·9 | | 18 | 23·0 | 45·8 | 9·5 *g* |
| 9·2 | | | 46·0 | 29·1 | |
| 9·2 | | 20 | 14·0 | 5·5 | |
| 9·5 | | | 29·0 | 22·4 | |
| 9·2 | | 21 | 52·0 | 11·8 | 9·2 *g* |
| 8·9 | | 22 | 17·0 | 5·0 | 8·0 GS*g* |
| 10·0 | | 27 | 18·0 | 44·5 | |
| 8·6 | | 28 | 39·0 | 54·9 | 7·5 GS*g* |
| 9·8 | | 29 | 23·0 | 10·3 | |
| 9·4 | | | 32·0 | 56·1 | |
| 9·4 | | 30 | 11·0 | 14·6 | |
| 6·7 | | 32 | 27·0 | 49·9 | 6·0 GSc*g* |
| 8·6 | | 34 | 3·0 | 25·0 | 9·5 *g* |
| 8·6 | | 37 | 39·0 | 55·3 | 9·0 |
| 9·2 | | 38 | 43·0 | 48·9 | 8·8 *g* |
| 8·8 | | 41 | 24·0 | 43·4 | *g* |
| 9·5 | | 43 | 15·0 | 4·2 | 8·8 *g* |
| 9·2 | | 45 | 2·0 | 55·5 | |
| 9·2 | | | 9·0 | 35·3 | *g* |
| 6·2 | | 46 | 0·0 | 5·2 | 7·0 GS*g* |
| 9·8 | | 47 | 40·0 | 18·4 | |
| 10·0 | | 49 | 16·0 | 1·6 | |
| 10·1 | | 55 | 13·0 | 47·9 | |
| 10·0 | | 58 | 27·0 | 57·9 | |
| 9·8* | 8 | 1 | 17·0 | 35·0 | |
| 9·9* | | | 24·0 | 36·0 | |
| 9·1 | | | 27·0 | 32·1 | *g* |
| 9·8* | | 2 | 24·5 | 56·2 | |
| 8·8 | | 4 | 26·0 | 27·6 | 9·5 *g* |
| 9·8 | | 5 | 12·0 | 12·2 | |
| 8·0 | | 6 | 37·0 | 48·1 | 7·8 GS*g* |
| 10·0 | | | 56·0 | 14·7 | |
| 9·9* | | 8 | 10·5 | 35·0 | |
| 9·9 | | | 22·0 | 44·3 | *g* |
| 8·9 | | 9 | 24·0 | 7·7 | 10·0 *g* |
| 10·3 | | 10 | 12·0 | 36·1 | |
| 10·2 | | | 54·0 | 18·2 | |
| 10·3 | | 12 | 2·0 | 51·9 | |
| 9·8 | | | 6·0 | 53·5 | |
| 9·4 | | | 24·0 | 32·5 | |
| 10·3 | | | 30·0 | 27·7 | |
| 10·2 | | 13 | 4·0 | 36·3 | |
| 9·8 | | | 8·0 | 15·3 | |
| 8·3 | | | 16·0 | 19·2 | 7·0 GS*g* |
| 10·0 | | | 16·0 | 21·1 | |
| 10·1 | | | 38·0 | 55·7 | |
| 9·8 | | 14 | 3·0 | 18·0 | |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 4 | 0 | − 59 − 0·21 d | + 4·2 |
| | 10 | 63 − 0·22 | 3·9 |
| | 20 | 66 − 0·22 | 3·5 |
| | 30 | 69 − 0·23 | 3·2 |
| | 40 | 71 − 0·23 | 2·9 |
| | 50 | 73 − 0·23 | 2·5 |
| 5 | 0 | 75 − 0·24 | 2·2 |
| | 10 | 77 − 0·24 | 1·8 |
| | 20 | 78 − 0·24 | 1·5 |
| | 30 | 79 − 0·24 | 1·1 |
| | 40 | 80 − 0·24 | 0·7 |
| | 50 | 80 − 0·24 | + 0·4 |
| 6 | 0 | 81 − 0·24 | 0·0 |
| | 10 | 80 − 0·24 | − 0·4 |
| | 20 | 80 − 0·24 | 0·7 |
| | 30 | 79 − 0·24 | 1·1 |
| | 40 | 78 − 0·24 | 1·5 |
| | 50 | 77 − 0·24 | 1·8 |
| 7 | 0 | 75 − 0·24 | 2·2 |
| | 10 | 73 − 0·23 | 2·5 |
| | 20 | 71 − 0·23 | 2·9 |
| | 30 | 69 − 0·23 | 3·2 |
| | 40 | 66 − 0·22 | 3·5 |
| | 50 | 63 − 0·22 | 3·9 |
| 8 | 0 | 59 − 0·21 | 4·2 |
| | 10 | 56 − 0·21 | 4·5 |
| | 20 | − 52 − 0·20 | − 4·8 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 8 | 10 | − 56 − 0·21 d | − 4·5 |
| | 20 | 52 − 0·20 | 4·8 |
| | 30 | 48 − 0·19 | 5·1 |
| | 40 | 44 − 0·19 | 5·4 |
| | 50 | 39 − 0·18 | 5·6 |
| 9 | 0 | 34 − 0·17 | 5·9 |
| | 10 | 29 − 0·17 | 6·2 |
| | 20 | 24 − 0·16 | 6·4 |
| | 30 | 19 − 0·15 | 6·6 |
| | 40 | 13 − 0·14 | 6·8 |
| | 50 | 8 − 0·13 | 7·0 |
| 10 | 0 | − 2 − 0·12 | − 7·2 |

d = minutes of decl.

## 301—360.

| mag. | h (8h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 10·1 | 8 | 14 | 26·0 | 54·1 | |
| 10·0 | | | 26·0 | 50·5 | |
| 10·0 | | | 33·0 | 3·8 | |
| 9·8 | | | 44·0 | 40·6 | |
| 9·8 | | | 55·0 | 42·3 | |
| 9·9 | | 15 | 20·0 | 43·6 | |
| 9·7 | | 16 | 19·0 | 16·1 | *g* |
| 9·8 | | | 24·0 | 46·5 | |
| 10·1 | | | 32·0 | 52·2 | |
| 10·3 | | | 42·0 | 19·7 | |
| 9·9 | | 17 | 36·0 | 27·1 | |
| 10·3 | | | 49·0 | 14·8 | |
| 9·9 | | 19 | 5·0 | 0·9 | |
| 10·2 | | | 7·0 | 24·8 | |
| 7·4 | | 20 | 35·0 | 55·6 | 7·5 GSg |
| 10·3 | | | 47·0 | 11·1 | |
| 9·4 | | 21 | 3·0 | 3·3 | |
| 9·8 | | | 4·0 | 14·2 | |
| 10·3 | | | 5·0 | 6·9 | |
| 10·3 | | | 36·0 | 4·9 | |
| 10·3 | | 22 | 2·0 | 49·7 | |
| 9·6 | | | 22·0 | 9·8 | |
| 10·2 | | | 24·0 | 14·7 | |
| 9·9 | | | 41·0 | 44·7 | |
| 9·8 | | | 42·0 | 33·8 | |
| 9·5 | | | 58·0 | 30·7 | *g* |
| 10·0 | | 23 | 44·0 | 30·7 | |
| 10·0 | | 24 | 20·0 | 40·4 | |
| 9·9 | | | 26·0 | 50·0 | |
| 9·2 | | | 45·0 | 57·6 | *g* |
| 10·3 | | | 49·0 | 54·1 | |
| 9·7 | | 25 | 38·0 | 12·0 | |
| 9·5 | | 26 | 10·0 | 42·2 | *g* |
| 10·1 | | | 48·0 | 31·5 | |
| 9·4 | | 27 | 16·0 | 16·0 | 9·5 *g* |
| 9·8 | | 28 | 25·0 | 49·8 | |
| 9·4 | | | 26·0 | 18·2 | *g* |
| 9·5 | | | 43·0 | 53·5 | |
| 9·8 | | 29 | 1·0 | 20·1 | |
| 9·3 | | | 48·0 | 23·9 | *g* |
| 10·0 | | 30 | 3·0 | 38·8 | |
| 9·3 | | | 34·0 | 43·0 | |
| 10·0 | | | 48·0 | 17·7 | |
| 10·3 | | | 53·0 | 21·8 | |
| 10·0 | | 31 | 54·0 | 35·5 | |
| 9·7 | | 32 | 35·0 | 2·4 | |
| 9·9 | | | 42·0 | 56·9 | |
| 9·7 | | 33 | 1·0 | 11·2 | |
| 8·7 | | | 26·0 | 30·0 | 8·0 GS*g*g |
| 9·6 | | 34 | 47·0 | 13·8 | 9·5 |
| 9·4 | | 35 | 13·0 | 16·4 | 9·2 *g* |
| 9·6 | | | 23·0 | 11·7 | 10·0 |
| 10·0 | | | 37·0 | 47·9 | |
| 10·2 | | | 47·0 | 31·0 | |
| 9·6 | | 36 | 36·0 | 7·3 | |
| 9·7 | | | 42·0 | 12·6 | |
| 10·0 | | 37 | 4·0 | 44·4 | |
| 10·0 | | | 20·0 | 8·7 | |
| 9·8 | | | 35·0 | 18·3 | |
| 10·0 | | 38 | 17·0 | 35·5 | |

## 361—420.

| mag. | h (8h.—9h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 10·3 | 8 | 38 | 27·0 | 43·8 | |
| 9·9 | | | 42·0 | 25·7 | |
| 10·0 | | | 45·0 | 2·1 | |
| 9·4 | | 39 | 0·0 | 46·5 | 8·5 *g* |
| 9·8 | | | 14·0 | 42·2 | *g* |
| 8·7 | | 40 | 21·0 | 3·3 | 9·0 GS*g* |
| 10·0 | | 41 | 18·0 | 30·1 | |
| 9·9 | | 42 | 4·0 | 26·6 | |
| 9·6 | | 43 | 3·0 | 11·5 | |
| 10·2 | | | 26·0 | 56·9 | |
| 10·3 | | | 33·0 | 36·4 | |
| 5·8 | | 45 | 29·0 | 30·6 | 6·0 GSc*g* |
| 10·2 | | | 30·0 | 2·8 | |
| 10·0 | | | 36·0 | 42·9 | |
| 7·6 | | 46 | 0·0 | 35·6 | 7·5GS*g* |
| 10·1 | | | 6·0 | 59·6 | |
| 9·5 | | | 38·0 | 41·4 | |
| 6·7 | | 47 | 24·0 | 36·7 | 6·8 GS*cg* |
| 10·0 | | | 44·0 | 4·5 | |
| 9·9 | | 48 | 8·0 | 27·9 | *g* |
| 9·8 | | | 10·0 | 24·0 | *g* |
| 9·8 | | | 11·0 | 17·7 | |
| 9·8 | | | 52·0 | 4·0 | |
| 9·7 | | | 58·0 | 57·0 | |
| 9·8 | | 49 | 22·0 | 2·8 | |
| 9·9 | | | 37·0 | 11·7 | |
| 9·0 | | | 56·0 | 23·7 | *g* |
| 10·3 | | 51 | 1·0 | 31·5 | |
| 10·0 | | | 38·0 | 59·9 | |
| 10·2 | | 52 | 6·0 | 38·5 | |
| 9·7 | | | 54·0 | 38·4 | |
| 10·1 | | 53 | 10·0 | 6·6 | |
| 9·5 | | | 42·0 | 0·6 | |
| 9·7 | | | 42·0 | 30·0 | |
| 9·7 | | 55 | 21·0 | 31·6 | |
| 10·2 | | 57 | 42·0 | 42·0 | |
| 10·2 | | | 51·0 | 10·0 | |
| 9·9 | | 58 | 22·0 | 24·3 | |
| 10·0 | | | 57·0 | 23·6 | |
| 8·6 | | 59 | 6·0 | 15·0 | 9·5 G*g* |
| 9·8 | | | 6·0 | 50·5 | |
| 10·2 | | | 12·0 | 47·9 | |
| 10·0 | | | 45·0 | 25·5 | |
| 10·2 | 9 | 0 | 0·0 | 33·9 | |
| 9·4 | | | 8·0 | 18·6 | 9·2G*g* |
| 10·1 | | 2 | 4·0 | 48·9 | |
| 9·3 | | | 10·0 | 2·6 | |
| 9·3 | | 4 | 7·0 | 24·5 | |
| 9·8 | | | 13·0 | 8·8 | |
| 9·9 | | | 27·0 | 11·0 | |
| 8·4 | | 5 | 6·0 | 57·5 | 9·5 *g* |
| 9·9 | | 6 | 24·0 | 22·9 | |
| 10·3 | | 8 | 38·0 | 57·9 | |
| 10·0 | | 9 | 15·0 | 17·0 | |
| 10·2 | | | 34·0 | 22·7 | |
| 9·6 | | 11 | 43·0 | 18·9 | |
| 9·8 | | 12 | 14·0 | 17·1 | |
| 10·0 | | | 54·0 | 15·0 | |
| 10·2 | | 13 | 7·0 | 10·0 | |
| 9·5 | | | 39·0 | 18·0 | |

## 421—480.

| mag. | h (9h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 10·3 | 9 | 13 | 48·0 | 30·8 | |
| 9·9 | | | 51·0 | 51·1 | |
| 9·8 | | | 56·0 | 44·1 | |
| 7·9 | | 14 | 4·0 | 50·5 | 8·2 GS*g* |
| 9·7 | | | 47·0 | 36·0 | *g* |
| 9·8 | | | 53·0 | 15·7 | |
| 10·0 | | 16 | 27·0 | 27·4 | |
| 9·5 | | 17 | 24·0 | 16·7 | S*g* |
| 10·2 | | | 35·0 | 53·0 | |
| 9·9 | | | 39·0 | 54·0 | |
| 9·5 | | | 46·0 | 29·1 | G |
| 9·6 | | 18 | 19·0 | 48·4 | 9·0 *g* |
| 10·3 | | | 40·0 | 58·0 | |
| 9·8 | | 19 | 4·0 | 46·5 | |
| 10·2 | | | 42·0 | 42·1 | |
| 10·3 | | | 42·0 | 23·9 | |
| 10·0 | | 20 | 12·0 | 38·2 | |
| 8·7 | | 21 | 1·0 | 36·2 | 9·0 G*g* |
| 10·1 | | 23 | 42·0 | 47·7 | |
| 9·8 | | | 45·0 | 1·8 | |
| 9·7 | | | 45·0 | 33·1 | G |
| 10·3 | | 25 | 26·0 | 57·5 | |
| 10·1 | | 26 | 19·0 | 12·0 | |
| 10·0 | | | 48·0 | 31·4 | |
| 10·3 | | | 58·0 | 45·8 | |
| 7·7 | | 27 | 3·0 | 31·8 | 8·5 GS*g* |
| 9·6 | | 28 | 8·0 | 28·2 | |
| 10·0 | | 29 | 53·0 | 34·8 | |
| 10·1 | | | 57·0 | 30·1 | |
| 10·0 | | 31 | 6·0 | 49·1 | |
| 10·2 | | | 18·0 | 42·2 | |
| 10·0 | | | 42·0 | 32·1 | |
| 10·0 | | 32 | 23·0 | 34·4 | |
| 9·8 | | | 42·0 | 30·1 | |
| 9·3 | | 34 | 32·0 | 18·9 | *g* |
| 10·3 | | 35 | 30·0 | 26·3 | |
| 10·0 | | 36 | 4·0 | 31·8 | |
| 10·0 | | 38 | 21·0 | 12·3 | |
| 10·1 | | | 30·0 | 40·1 | |
| 10·1 | | 42 | 4·0 | 28·6 | |
| 10·3 | | | 54·0 | 46·4 | |
| 9·6 | | 43 | 21·0 | 25·5 | *g* |
| 9·4 | | 45 | 16·0 | 11·0 | |
| 9·7 | | | 41·0 | 47·9 | |
| 9·7 | | | 57·0 | 41·1 | |
| 9·5 | | 46 | 43·0 | 1·6 | |
| 9·3 | | 48 | 1·0 | 44·0 | |
| 9·6 | | | 56·0 | 30·5 | |
| 8·9 | | 49 | 15·0 | 11·8 | *g* |
| 9·5 | | 50 | 25·0 | 24·7 | |
| 9·1 | | | 48·0 | 2·4 | |
| 9·7 | | | 51·0 | 41·9 | |
| 9·7 | | 51 | 1·0 | 14·7 | |
| 9·8 | | | 47·0 | 6·1 | |
| 9·6 | | | 49·0 | 21·4 | |
| 9·7 | | | 51·0 | 31·0 | |
| 9·4 | | 52 | 52·0 | 26·2 | |
| 9·8 | | 53 | 4·0 | 1·4 | |
| 9·5 | | | 12·0 | 44·3 | |
| 9·7 | | | 14·0 | 8·6 | |



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## 481—540.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.5 | 9 | 53 | 15.0 | 9.6 | |
| 9.6 | | | 19.0 | 7.9 | |
| 9.5 | | | 21.0 | 46.0 | |
| 9.9 | | | 48.0 | 19.7 | |
| 8.8 | | 54 | 21.0 | 5.6 | 9.0 *g* |
| 9.5 | | | 21.0 | 49.7 | |
| 9.2 | | | 32.0 | 57.8 | *g* |
| 9.5 | | | 41.0 | 17.6 | |
| 9.9 | | | 46.0 | 46.3 | |
| 9.5 | | 55 | 4.0 | 23.7 | |
| 9.4 | | 57 | 41.0 | 53.4 | |
| 9.7 | | 58 | 7.0 | 28.8 | |
| 9.9 | | | 20.0 | 45.8 | |
| 9.7 | | 59 | 1.0 | 7.5 | |
| 9.4 | | | 16.0 | 25.5 | |
| 9.1 | 10 | 0 | 52.0 | 35.0 | 9.5 *g* |
| 9.3 | | | 58.0 | 34.5 | *g* |
| 9.6 | | 1 | 36.0 | 50.1 | |
| 9.9 | | 2 | 23.0 | 41.2 | |
| 9.8 | | 3 | 17.0 | 16.9 | |
| 9.8 | | | 32.0 | 23.4 | |
| 9.8 | | | 34.0 | 22.9 | |
| 9.5 | | | 42.0 | 17.0 | |
| 9.0 | | 4 | 6.0 | 32.9 | 9.0 *g* |
| 9.6 | | | 17.0 | 59.4 | |
| 9.1 | | | 18.0 | 35.0 | 9.5 *g* |
| 9.5 | | | 53.0 | 6.8 | |
| 9.3 | | 5 | 5.0 | 48.6 | |
| 7.7 | | | 36.0 | 27.2 | 7.0 GS*g* |
| 9.4 | | 6 | 2.0 | 56.7 | |
| 9.7 | | | 7.0 | 18.5 | |
| 9.4 | | | 16.0 | 40.0 | |
| 9.9 | | 7 | 34.0 | 13.9 | |
| 9.6 | | | 36.0 | 57.7 | |
| 9.8 | | 8 | 0.0 | 37.9 | |
| 9.4 | | | 34.0 | 26.7 | |
| 9.5 | | | 41.0 | 53.9 | |
| 9.8 | | 9 | 7.0 | 8.2 | |
| 8.6 | | | 25.0 | 9.6 | *g* |
| 9.6 | | 10 | 25.0 | 7.8 | |
| 9.8 | | | 32.0 | 55.9 | |
| 9.6 | | | 36.0 | 12.4 | |
| 9.2 | | 11 | 22.0 | 58.5 | *g* |
| 9.7 | | 12 | 22.0 | 47.8 | |
| 9.5 | | | 57.0 | 9.8 | |
| 9.7 | | 13 | 9.0 | 30.3 | |
| 8.1 | | | 19.0 | 44.3 | 9.0 *g* |
| 9.7 | | | 40.0 | 15.1 | |
| 7.5 | | | 47.0 | 22.8 | 8.0 GS*g* |
| 9.9 | | 14 | 56.0 | 32.6 | |
| 9.8 | | 15 | 15.0 | 40.5 | |
| 9.7 | | | 58.0 | 18.2 | |
| 9.8 | | 16 | 26.0 | 55.0 | |
| 9.4 | | | 34.0 | 26.9 | |
| 9.5 | | 17 | 0.0 | 27.8 | |
| 9.5 | | | 3.0 | 36.9 | |
| 9.5 | | | 38.0 | 22.5 | |
| 9.4 | | 18 | 1.0 | 23.7 | |
| 9.9 | | | 1.0 | 46.7 | |
| 9.5 | | 20 | 38.0 | 58.2 | |

(9h.–10h.)

## 541—600.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.3 | 10 | 20 | 38.0 | 37.5 | |
| 9.7 | | 21 | 19.0 | 38.9 | |
| 9.7 | | | 45.0 | 43.7 | |
| 9.4 | | 22 | 16.0 | 43.1 | |
| 9.9 | | 23 | 1.0 | 42.4 | |
| 9.4 | | 24 | 13.0 | 29.6 | *g* |
| 9.8 | | | 27.0 | 10.8 | |
| 9.4 | | | 52.0 | 53.9 | |
| 9.5 | | 25 | 28.0 | 17.6 | 8.5 |
| 8.4 | | | 37.0 | 5.9 | 9.0 *g* |
| 9.5 | | 26 | 2.0 | 35.1 | *g* |
| 9.8 | | | 56.0 | 16.3 | |
| 9.9 | | 27 | 11.0 | 17.5 | |
| 9.8 | | | 18.0 | 39.9 | |
| 9.0 | | | 20.0 | 10.2 | |
| 9.0 | | | 42.0 | 40.7 | *g* |
| 9.7 | | 29 | 14.0 | 3.3 | |
| 9.4 | | | 39.0 | 19.3 | |
| 9.1 | | 30 | 9.0 | 33.5 | |
| 9.4 | | 31 | 24.0 | 21.5 | *g* |
| 9.2 | | | 39.0 | 23.6 | *g* |
| 9.7 | | 33 | 8.0 | 3.2 | |
| 9.9 | | | 17.0 | 47.6 | |
| 8.9 | | 34 | 49.0 | 8.2 | 9.0 |
| 9.6 | | 35 | 0.0 | 42.6 | |
| 9.6 | | | 36.0 | 55.6 | |
| 9.3 | | | 36.0 | 20.5 | *g* |
| 9.6 | | 36 | 21.0 | 59.9 | |
| 9.7 | | | 27.0 | 24.6 | |
| 7.7 | | 37 | 12.0 | 51.6 | 8.5 GS*g* |
| 9.7 | | 38 | 8.0 | 33.8 | |
| 9.5 | | 39 | 41.0 | 27.7 | |
| 9.5 | | 40 | 12.0 | 43.0 | |
| 9.5 | | | 56.0 | 9.8 | |
| 9.8 | | 42 | 26.0 | 59.9 | |
| 9.5 | | | 36.0 | 43.2 | |
| 9.7 | | | 50.0 | 11.2 | |
| 9.9 | | 43 | 16.0 | 51.3 | |
| 9.6 | | | 20.0 | 36.8 | |
| 9.7 | | | 39.0 | 22.1 | |
| 9.7 | | 44 | 1.0 | 48.6 | |
| 9.8 | | | 7.0 | 6.1 | |
| 9.6 | | 45 | 19.0 | 5.9 | |
| 9.8 | | | 36.0 | 20.4 | |
| 9.7 | | 46 | 32.0 | 28.0 | |
| 9.7 | | 48 | 22.0 | 7.0 | |
| 9.7 | | | 42.0 | 55.8 | |
| 9.3 | | 50 | 8.0 | 4.7 | |
| 8.1 | | | 21.0 | 53.7 | 6.8 GS*gr* |
| 9.2 | | | 57.0 | 54.1 | 9.0 *g* |
| 9.1 | | 51 | 18.0 | 22.8 | *g* |
| 9.5 | | | 21.0 | 37.4 | |
| 9.4 | | | 41.0 | 57.4 | 9.0 *g* |
| 9.8 | | | 49.0 | 32.7 | |
| 9.8 | | 52 | 16.0 | 12.7 | |
| 9.7 | | 53 | 17.0 | 11.9 | |
| 9.9 | | | 39.0 | 31.7 | |
| 9.7 | | 54 | 7.0 | 50.8 | |
| 9.9 | | | 34.0 | 7.5 | |
| 9.4 | | | 41.0 | 59.4 | |

(10h.)

## 601—660.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.9 | 10 | 55 | 42.0 | 29.7 | |
| 9.8 | | 56 | 14.0 | 2.9 | |
| 9.6 | | 57 | 0.0 | 49.6 | |
| 9.7 | | | 46.0 | 41.8 | |
| 9.9 | | | 51.0 | 3.1 | |
| 9.3 | | | 57.0 | 54.8 | |
| 9.4 | | 59 | 16.0 | 26.8 | |
| 9.7 | | | 48.0 | 52.2 | |
| 9.8 | 11 | 0 | 14.0 | 20.0 | |
| 9.7 | | | 16.0 | 36.9 | |
| 9.7 | | | 47.0 | 37.7 | |
| 9.5 | | 1 | 25.0 | 2.0 | |
| 9.1 | | | 27.0 | 11.8 | 9.0 *g* |
| 8.8 | | | 30.0 | 29.1 | 9.0 *g* |
| 9.6 | | | 33.0 | 52.9 | |
| 9.7 | | 2 | 16.0 | 41.2 | |
| 9.7 | | | 18.0 | 59.8 | |
| 9.7 | | | 21.0 | 40.6 | |
| 9.6 | | | 47.0 | 40.8 | |
| 9.4 | | 5 | 10.0 | 59.9 | |
| 9.6 | | | 36.0 | 13.1 | |
| 9.6 | | 6 | 58.0 | 35.2 | |
| 9.8 | | 7 | 42.0 | 33.8 | |
| 8.8 | | 9 | 50.0 | 41.9 | 9.0 *g* |
| 9.3 | | 10 | 7.0 | 45.6 | |
| 9.8 | | | 40.0 | 44.5 | |
| 9.5 | | | 42.0 | 7.2 | |
| 9.7 | | 11 | 21.0 | 51.1 | |
| 9.2 | | 12 | 41.0 | 24.2 | *g* |
| 9.9 | | | 44.0 | 45.9 | |
| 9.5 | | | 55.0 | 2.0 | |
| 10.2 | | | 58.0 | 31.6 | |
| 9.6 | | 13 | 4.0 | 34.9 | *g* |
| 9.0 | | | 57.0 | 40.7 | *g* |
| 10.2 | | 14 | 23.0 | 50.9 | |
| 9.8 | | | 28.0 | 43.7 | |
| 9.5 | | | 34.0 | 8.0 | |
| 6.8 | | | 56.0 | 59.0 | 6.5 GS*g* |
| 9.8 | | 15 | 8.0 | 49.3 | |
| 10.0 | | | 47.0 | 30.3 | |
| 10.3 | | | 55.0 | 33.7 | |
| 9.8 | | 16 | 40.0 | 24.3 | |
| 9.0 | | 17 | 44.0 | 58.7 | 8.5 G*g* |
| 9.7 | | 18 | 23.0 | 23.8 | |
| 10.3 | | | 41.0 | 26.5 | |
| 9.5 | | | 54.0 | 38.6 | |
| 9.9 | | 20 | 38.0 | 34.1 | |
| 9.4 | | | 43.0 | 21.6 | *g* |
| 9.9 | | 21 | 17.0 | 26.9 | |
| 9.9 | | | 52.0 | 28.9 | |
| 9.9 | | 22 | 36.0 | 11.9 | |
| 9.2 | | 24 | 10.0 | 48.9 | 9.5 *g* |
| 9.5 | | | 15.0 | 6.9 | |
| 9.9 | | | 35.0 | 1.9 | |
| 9.6 | | | 44.0 | 30.0 | |
| 10.2 | | 25 | 29.0 | 19.5 | |
| 9.0 | | | 43.0 | 15.1 | 9.0 *g* |
| 10.2 | | | 43.0 | 2.9 | |
| 10.2 | | | 58.0 | 59.3 | |
| 9.8 | | 26 | 1.0 | 32.6 | |

(10h.–11h.)

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 9 | 50 | − 8 − 0.13 d | −7.0 |
| 10 | 0 | − 2 − 0.12 | 7.2 |
| | 10 | + 4 − 0.11 | 7.4 |
| | 20 | 10 − 0.10 | 7.6 |
| | 30 | 17 − 0.09 | 7.7 |
| | 40 | 23 − 0.08 | 7.9 |
| | 50 | 30 − 0.07 | 8.0 |
| 11 | 0 | 36 − 0.06 | 8.1 |
| | 10 | 43 − 0.05 | 8.2 |
| | 20 | 49 − 0.04 | 8.2 |
| | 30 | + 56 − 0.03 | −8.3 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 11 | 20 | + 49 − 0.04 d | − 8.2 |
| | 30 | 56 − 0.03 | 8.3 |
| | 40 | 63 − 0.02 | 8.3 |
| | 50 | 70 − 0.01 | 8.3 |
| 12 | 0 | 77 0.00 | 8.4 |
| | 10 | 84 + 0.01 | 8.3 |
| | 20 | 91 + 0.02 | 8.3 |
| | 30 | 97 + 0.03 | 8.3 |
| | 40 | 104 + 0.04 | 8.2 |
| | 50 | 111 + 0.05 | 8.2 |
| 13 | 0 | 118 + 0.06 | 8.1 |
| | 10 | 124 + 0.07 | 8.0 |
| | 20 | 131 + 0.08 | 7.9 |
| | 30 | 137 + 0.09 | 7.7 |
| | 40 | 143 + 0.10 | 7.6 |
| | 50 | 149 + 0.11 | 7.4 |
| 14 | 0 | + 155 + 0.12 | − 7.2 |

d = minutes of decl.

## 661—720.

| mag. | 11ʰ h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.2 | 11 | 26 | 26.0 | 16.9 | |
| 9.6 | | | 42.0 | 55.0 | |
| 9.2 | | 27 | 40.0 | 51.7 | 8.5 *g* |
| 10.0 | | | 40.0 | 13.9 | |
| 9.3 | | 28 | 34.0 | 47.0 | 9.5 *g* |
| 9.6 | | | 56.0 | 9.8 | |
| 10.2 | | 29 | 8.0 | 23.0 | |
| 10.2 | | | 59.0 | 0.5 | |
| 9.5 | | 30 | 32.0 | 57.8 | |
| 9.6 | | | 40.0 | 21.5 | |
| 9.7 | | 31 | 25.0 | 53.0 | |
| 9.9 | | | 40.0 | 8.6 | |
| 9.3 | | 33 | 0.0 | 33.0 | 9.0 *g* |
| 9.5 | | | 46.0 | 44.1 | *g* |
| 9.9 | | 35 | 47.0 | 16.2 | |
| 9.9 | | 36 | 5.0 | 1.3 | |
| 7.3 | | 37 | 40.0 | 36.7 | 6.5 GSc*g* |
| 10.0 | | 39 | 37.0 | 53.6 | |
| 9.6 | | | 52.0 | 7.6 | *g* |
| 9.7 | | 40 | 17.0 | 22.5 | |
| 10.3 | | | 40.0 | 49.8 | |
| 9.9 | | 42 | 11.0 | 22.0 | |
| 10.2 | | | 16.0 | 32.2 | |
| 9.7 | | | 20.0 | 25.1 | |
| 9.9 | | | 27.0 | 33.5 | |
| 9.9 | | | 59.0 | 5.6 | |
| 9.9 | | 43 | 3.0 | 27.1 | |
| 9.9 | | | 18.0 | 28.4 | |
| 9.4 | | | 50.0 | 11.9 | |
| 9.5 | | 44 | 45.0 | 59.4 | |
| 9.7 | | | 50.0 | 54.0 | |
| 9.8 | | 45 | 2.0 | 0.5 | |
| 10.0 | | | 7.0 | 18.9 | |
| 10.3 | | | 51.0 | 10.3 | |
| 9.4 | | 46 | 47.0 | 5.5 | |
| 9.9 | | 48 | 35.0 | 26.4 | |
| 9.9 | | | 55.0 | 54.5 | |
| 9.0 | | 50 | 20.0 | 14.6 | *g* |
| 10.0 | | | 51.0 | 20.8 | |
| 10.2 | | | 54.0 | 11.0 | |
| 9.8 | | 51 | 45.0 | 41.4 | |
| 9.8 | | | 51.0 | 25.9 | |
| 10.0 | | | 52.0 | 49.3 | |
| 9.9 | | 52 | 20.0 | 10.9 | |
| 8.9 | | | 42.0 | 5.7 | *g* |
| 9.9 | | 54 | 6.0 | 2.1 | |
| 9.9 | | | 21.0 | 1.7 | |
| 9.6 | | | 58.0 | 10.9 | 9.5 *g* |
| 9.6 | | 55 | 1.0 | 5.1 | |
| 9.7 | | | 20.0 | 18.0 | |
| 8.7 | | | 22.0 | 17.6 | 8.5 *g* |
| 9.8 | | 56 | 16.0 | 17.7 | |
| 10.2 | | | 40.0 | 47.3 | |
| 10.0 | | 57 | 20.0 | 44.0 | |
| 10.0 | | 58 | 0.0 | 38.9 | |
| 9.7 | | | 10.0 | 9.2 | |
| 10.0 | | | 19.0 | 45.9 | |
| 9.6 | | | 24.0 | 15.7 | |
| 9.9 | | | 26.0 | 28.7 | |
| 9.4 | | | 30.0 | 50.4 | |

## 721—780.

| mag. | 11ʰ—12ʰ h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.6 | 11 | 58 | 45.0 | 48.8 | |
| 10.2 | | | 46.0 | 15.6 | |
| 9.3 | | 59 | 6.0 | 20.7 | 9.5 *g* |
| 9.5 | | | 26.0 | 10.1 | |
| 10.0 | 12 | 0 | 0.0 | 52.0 | |
| 8.4 | | | 24.0 | 26.5 | 9.2 *g* |
| 7.3 | | | 28.0 | 2.7 | 7.5 GS*g* |
| 8.9 | | | 30.0 | 4.8 | *g* |
| 9.8 | | 1 | 32.0 | 33.9 | |
| 6.9 | | 2 | 23.0 | 5.2 | 7.0 GS*g* |
| 10.0 | | 3 | 7.0 | 19.5 | |
| 9.7 | | | 25.0 | 23.0 | |
| 9.6 | | | 25.0 | 45.0 | |
| 10.3 | | 4 | 19.0 | 24.9 | |
| 10.0 | | 5 | 21.0 | 58.0 | |
| 10.2 | | | 47.0 | 48.5 | |
| 10.2 | | 6 | 15.0 | 6.9 | |
| 9.8 | | 7 | 25.0 | 28.6 | |
| 9.8 | | 9 | 22.0 | 24.3 | |
| 9.7 | | 10 | 0.0 | 3.8 | |
| 4.5 | | 11 | 3.0 | 37.1 | 5.0 GS*g*grλ |
| 9.8 | | | 17.0 | 9.8 | |
| 9.7 | | | 37.0 | 10.6 | *g* |
| 10.2 | | 12 | 24.0 | 38.3 | |
| 9.7 | | 13 | 3.0 | 36.2 | |
| 10.0 | | | 19.0 | 28.8 | |
| 7.4 | | 14 | 15.0 | 46.3 | 8.0 GS*g* |
| 8.9 | | | 21.0 | 49.8 | 9.5 *g* |
| 9.8 | | 15 | 6.0 | 31.4 | |
| 9.7 | | 16 | 57.0 | 36.6 | |
| 9.7 | | 17 | 34.0 | 16.0 | |
| 9.8 | | 18 | 49.0 | 0.9 | |
| 10.2 | | 20 | 40.0 | 0.4 | |
| 9.8 | | 21 | 8.0 | 51.1 | |
| 9.3 | | | 17.0 | 38.8 | |
| 9.9 | | 23 | 4.0 | 10.4 | |
| 9.8 | | 24 | 10.0 | 47.0 | |
| 10.2 | | 25 | 3.0 | 40.1 | |
| 9.8 | | | 10.0 | 14.1 | |
| 9.9 | | | 18.0 | 36.1 | |
| 9.7 | | 26 | 2.0 | 59.2 | |
| 10.3 | | 27 | 1.0 | 36.9 | |
| 9.6 | | | 11.0 | 4.0 | |
| 9.9 | | | 51.0 | 50.2 | |
| 9.3 | | | 57.0 | 17.7 | 9.5 *g* |
| 9.9 | | 28 | 0.0 | 11.4 | |
| 10.0 | | | 46.0 | 0.3 | |
| 9.8 | | 29 | 0.0 | 48.1 | |
| 9.7 | | | 33.0 | 48.3 | |
| 9.5 | | 30 | 38.0 | 14.6 | |
| 9.6 | | 32 | 20.0 | 25.8 | *g* |
| 10.2 | | | 48.0 | 22.8 | |
| 10.2 | | 34 | 10.0 | 8.8 | |
| 8.7 | | 36 | 55.0 | 46.6 | 9.0 *g* |
| 10.0 | | 37 | 1.0 | 3.5 | |
| 10.0 | | 38 | 40.0 | 24.4 | |
| 9.4 | | 42 | 20.0 | 20.7 | |
| 9.9 | | 44 | 25.0 | 1.7 | |
| 9.7 | | 46 | 34.0 | 45.2 | |
| 9.4 | | 47 | 40.0 | 29.5 | |

## 781—840.

| mag. | 12ʰ—13ʰ h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9.8 | 12 | 48 | 11.0 | 48.0 | |
| 9.7 | | 50 | 56.0 | 29.9 | |
| 8.9 | | 51 | 24.0 | 19.8 | *g* |
| 8.5 | | 52 | 39.0 | 41.4 | 9.5 *g* |
| 8.9 | | 55 | 4.0 | 50.5 | 10.0 *g* |
| 9.5 | | | 55.0 | 34.4 | |
| 8.8 | | 57 | 5.0 | 50.8 | *g* |
| 9.9* | | | 18.2 | 20.1 | |
| 9.9* | | | 33.2 | 20.9 | |
| 9.5 | | 58 | 32.0 | 6.0 | |
| 9.5 | 13 | 2 | 40.0 | 3.1 | |
| 9.4 | | | 42.0 | 43.7 | |
| 9.7 | | 3 | 46.0 | 37.8 | |
| 8.6 | | 4 | 0.0 | 31.7 | 8.0 *g* |
| 8.5 | | | 4.0 | 37.5 | 9.0 *g* |
| 9.1 | | | 17.0 | 27.3 | 9.5 *g* |
| 9.5 | | 5 | 56.0 | 33.7 | 10.0 *g* |
| 9.0 | | 6 | 38.0 | 59.4 | *g* |
| 9.4 | | 7 | 3.0 | 13.7 | |
| 7.2 | | | 44.0 | 9.8 | GS*g* |
| 8.9 | | 8 | 37.0 | 36.9 | *g* |
| 9.4 | | | 38.0 | 6.3 | *g* |
| 8.9 | | 9 | 7.0 | 23.8 | 9.5 *g* |
| 9.1 | | 11 | 20.0 | 34.4 | |
| 9.6 | | 12 | 0.0 | 36.9 | |
| 9.5 | | | 0.0 | 13.8 | 9.5 *g* |
| 9.4 | | | 43.0 | 24.5 | |
| 7.9 | | 14 | 7.0 | 17.8 | 8.5 GS*g* |
| 9.3 | | | 24.0 | 54.8 | *g* |
| 9.5 | | 15 | 37.0 | 41.7 | *g* |
| 9.4 | | 18 | 0.0 | 52.2 | |
| 9.5 | | | 1.0 | 27.9 | *g* |
| 7.7 | | 19 | 0.0 | 12.5 | 9.0 *g* |
| 9.7 | | | 10.0 | 57.5 | |
| 8.9 | | 20 | 20.0 | 17.9 | 9.5 *g* |
| 8.6 | | 21 | 7.0 | 25.7 | 8.5 GS*g* |
| 9.1 | | | 23.0 | 17.6 | *g* |
| 8.3 | | | 51.0 | 38.6 | Gk*g* |
| 9.5 | | 23 | 33.0 | 40.2 | |
| 8.8 | | | 52.0 | 10.0 | *g* |
| 9.7 | | 24 | 37.0 | 18.9 | |
| 9.0 | | 28 | 20.0 | 14.5 | *g* |
| 9.3 | | 29 | 0.0 | 48.0 | |
| 9.1 | | 32 | 57.0 | 17.6 | |
| 9.0 | | 33 | 9.0 | 45.8 | *g* |
| 9.1 | | 36 | 11.0 | 23.8 | *g* |
| 9.0 | | | 24.0 | 26.1 | *g* |
| 9.1 | | 37 | 42.0 | 57.0 | |
| 8.8 | | 41 | 1.0 | 0.2 | 8.0 G*g* |
| 9.4 | | | 7.0 | 49.8 | |
| 9.4 | | 42 | 28.0 | 8.2 | |
| 9.1 | | 43 | 22.0 | 30.0 | *g* |
| 9.3 | | 46 | 2.0 | 48.4 | *g* |
| 9.5 | | | 38.0 | 35.5 | |
| 9.4 | | 47 | 59.0 | 58.8 | *g* |
| 9.3 | | 49 | 44.0 | 23.9 | *g* |
| 9.2 | | 50 | 37.0 | 44.8 | *g* |
| 9.3 | | | 55.0 | 3.6 | |
| 9.3 | | 53 | 8.0 | 14.8 | G*g*g |
| 9.5 | | | 28.0 | 52.8 | |



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## 841—900.

| mag. | 13h.–14h. h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 8·5 | 13 | 54 | 14·0 | 38·9 | 8·5 g |
| 9·3 | | 56 | 31·0 | 18·3 | |
| 9·7 | | | 40·0 | 22·4 | |
| 9·4 | | 57 | 16·0 | 24·8 | |
| 9·2 | | 58 | 8·0 | 31·5 | g |
| 9·4 | | 59 | 14·0 | 41·7 | |
| 9·3 | | | 22·0 | 47·4 | |
| 9·1 | 14 | 0 | 22·0 | 18·2 | g |
| 9·0 | | 4 | 57·0 | 53·5 | g |
| 9·1 | | 6 | 22·0 | 36·3 | g |
| 9·1 | | 9 | 22·0 | 0·1 | |
| 9·5 | | 13 | 6·0 | 52·7 | |
| 7·9 | | | 9·0 | 2·9 | GSg |
| 9·4 | | | 20·0 | 10·6 | |
| 9·6 | | | 34·0 | 15·5 | |
| 9·5 | | | 49·0 | 46·1 | |
| 9·6 | | 14 | 43·0 | 2·0 | |
| 9·7 | | | 43·0 | 8·7 | |
| 9·6 | | 15 | 19·0 | 37·2 | |
| 9·4 | | | 35·0 | 30·3 | |
| 9·4 | | | 38·0 | 8·2 | g |
| 9·3 | | | 46·0 | 35·8 | g |
| 9·0 | | 16 | 44·0 | 14·1 | 8·5 g |
| 9·5 | | | 48·0 | 15·6 | |
| 9·3 | | | 55·0 | 54·5 | |
| 9·5 | | 17 | 43·0 | 31·1 | |
| 9·1 | | | 54·0 | 55·0 | 9·0 g |
| 9·4 | | 18 | 0·0 | 40·2 | |
| 9·7 | | | 24·0 | 14·4 | |
| 9·5 | | | 47·0 | 34·1 | |
| 9·6 | | 19 | 15·0 | 5·4 | |
| 9·4 | | 20 | 15·0 | 32·1 | |
| 9·7 | | 21 | 38·0 | 1·7 | |
| 9·5 | | | 55·0 | 49·2 | |
| 9·6 | | 23 | 5·0 | 24·6 | |
| 9·0 | | | 7·0 | 0·3 | 9·0 g |
| 9·4 | | | 20·0 | 33·8 | g |
| 9·5 | | 24 | 1·0 | 20·2 | |
| 9·6 | | | 45·0 | 15·6 | |
| 9·7 | | | 52·0 | 25·7 | |
| 9·5 | | 26 | 58·0 | 51·3 | |
| 9·6 | | 28 | 16·0 | 38·6 | |
| 9·3 | | 29 | 40·0 | 7·7 | |
| 9·2 | | 30 | 41·0 | 52·0 | |
| 9·1 | | | 42·0 | 22·9 | 9·0 g |
| 8·8 | | | 55·0 | 35·0 | 8·0 Gg |
| 9·4 | | 31 | 4·0 | 25·2 | |
| 9·1 | | | 19·0 | 15·2 | g |
| 9·6 | | | 22·0 | 14·9 | |
| 9·1 | | | 24·0 | 24·4 | 9·0 g |
| 9·4 | | | 25·0 | 35·4 | |
| 9·6 | | 32 | 22·0 | 14·1 | |
| 6·9 | | | 24·0 | 30·7 | 4·0 GScgr |
| 9·4 | | | 40·0 | 5·0 | g |
| 9·4 | | 33 | 39·0 | 40·8 | |
| 9·3 | | | 46·0 | 37·6 | |
| 9·0 | | 34 | 22·0 | 44·3 | g |
| 9·4 | | | 26·0 | 17·7 | |
| 9·7 | | 35 | 6·0 | 57·7 | |
| 9·5 | | | 7·0 | 1·7 | |

## 901—960.

| mag. | 14h. h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·0 | 14 | 35 | 21·0 | 36·8 | 8·5 g |
| 9·6 | | | 25·0 | 32·8 | |
| 9·2 | | | 54·0 | 28·1 | 8·5 g |
| 9·6 | | 36 | 0·0 | 18·0 | |
| 9·1 | | | 11·0 | 2·6 | |
| 9·7 | | | 37·0 | 21·1 | |
| 9·4 | | 37 | 16·0 | 58·2 | |
| 8·7 | | | 20·0 | 19·5 | 8·5 g |
| 9·1 | | | 46·0 | 59·5 | |
| 9·4 | | | 53·0 | 53·9 | |
| 9·7 | | 38 | 19·0 | 38·3 | |
| 9·4 | | | 20·0 | 38·6 | |
| 9·6 | | | 22·0 | 42·1 | |
| 9·4 | | | 47·0 | 13·8 | |
| 9·6 | | 39 | 9·0 | 49·8 | |
| : 9·3 | | | 56·0 | 32·7 | |
| 7·5 | | 40 | 0·0 | 21·9 | 7·5 GSg |
| 9·5 | | | 4·0 | 1·9 | |
| 9·4 | | | 5·0 | 52·9 | |
| 9·4 | | 41 | 20·0 | 30·7 | |
| 9·5 | | | 22·0 | 8·1 | |
| 9·7 | | | 52·0 | 59·8 | |
| 9·7 | | 42 | 17·0 | 4·3 | |
| 9·3 | | | 40·0 | 40·8 | g |
| 9·7 | | 43 | 0·0 | 36·4 | |
| 9·4 | | | 6·0 | 59·9 | |
| 8·9 | | | 9·0 | 32·8 | 8·5 g |
| 9·5 | | | 17·0 | 55·8 | |
| 9·4 | | | 23·0 | 28·0 | |
| 9·4 | | | 28·0 | 24·3 | 9·0 g |
| 9·7 | | | 28·0 | 51·9 | |
| 9·6 | | | 43·0 | 20·9 | |
| : 9·4 | | | 54·0 | 24·9 | |
| 8·7 | | 44 | 7·0 | 0·0 | 8·5 g |
| 9·1 | | | 26·0 | 20·2 | 9·0 |
| 9·4 | | 45 | 41·0 | 38·3 | |
| 9·6 | | 46 | 20·0 | 32·6 | |
| 9·7 | | | 20·0 | 2·4 | |
| 9·6 | | | 38·0 | 52·2 | |
| 9·4 | | | 46·0 | 53·4 | |
| 9·4 | | 48 | 4·0 | 31·1 | |
| 9·7 | | 49 | 16·0 | 8·8 | |
| 9·7 | | 50 | 21·0 | 34·5 | |
| 9·5 | | | 24·0 | 42·9 | |
| 9·3 | | | 57·0 | 33·0 | g |
| 9·6 | | 51 | 53·0 | 12·9 | |
| 9·5 | | 52 | 24·0 | 16·1 | |
| 9·3 | | | 41·0 | 1·2 | 9·0 g |
| 9·4 | | | 57·0 | 2·4 | g |
| 9·7 | | 53 | 0·0 | 16·1 | |
| 9·5 | | | 12·0 | 8·9 | |
| 9·7 | | | 36·0 | 29·5 | |
| 9·7 | | | 57·0 | 8·5 | |
| 9·4 | | 55 | 35·0 | 41·7 | |
| 9·4 | | | 51·0 | 9·0 | |
| 8·8 | | 56 | 2·0 | 31·8 | 8·5 g |
| 9·6 | | | 6·0 | 54·8 | |
| 9·5 | | | 41·0 | 4·4 | |
| 9·6 | | | 43·0 | 4·7 | |
| 9·4 | | | 57·0 | 29·9 | |

## 961—1020.

| mag. | 14h.–15h. h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·1 | 14 | 57 | 7·0 | 31·9 | |
| 9·4 | | | 27·0 | 28·3 | |
| 9·7 | | | 30·0 | 6·1 | |
| 8·9 | | | 48·0 | 58·1 | 9·0 g |
| 7·7 | | 58 | 43·0 | 39·5 | 7·0 GSg |
| ? 9·7 | | 59 | 43·0 | 23·3 | |
| 9·7 | | | 51·0 | 3·2 | |
| 9·6 | 15 | 0 | 16·0 | 22·3 | |
| 9·7 | | | 43·0 | 0·5 | |
| 9·4 | | | 48·0 | 57·0 | |
| 9·6 | | 1 | 1·0 | 38·5 | |
| 7·3 | | 2 | 20·0 | 0·2 | 7·0 GSg |
| 8·8 | | | 28·0 | 32·6 | 9·0 g |
| 9·5 | | | 29·0 | 1·5 | |
| 9·4 | | | 34·0 | 8·7 | |
| 9·4 | | 3 | 10·0 | 47·4 | |
| 9·0 | | | 22·0 | 1·4 | 9·0 g |
| 8·9 | | | 36·0 | 49·5 | g |
| 9·4 | | 4 | 6·0 | 23·6 | |
| 9·3 | | | 25·0 | 26·2 | |
| 9·1 | | | 31·0 | 15·6 | |
| 9·6 | | 5 | 9·0 | 52·6 | |
| 9·5 | | | 16·0 | 8·3 | |
| 9·7 | | | 20·0 | 0·8 | |
| 9·7 | | 6 | 22·0 | 8·6 | |
| 9·3 | | 7 | 0·0 | 9·1 | |
| 9·7 | | | 23·0 | 13·0 | |
| 9·6 | | | 53·0 | 49·8 | |
| 9·7 | | | 55·0 | 30·7 | |
| 9·6 | | 9 | 17·0 | 51·2 | |
| 9·5 | | | 37·0 | 26·1 | |
| 9·4 | | 10 | 1·0 | 8·5 | |
| 9·7 | | | 4·0 | 2·0 | |
| 8·3 | | | 21·0 | 51·4 | 8·0 GSg |
| 9·4 | | | 43·0 | 25·0 | g |
| 9·6 | | 11 | 4·0 | 0·4 | |
| 9·7 | | | 4·0 | 2·1 | |
| 9·1 | | 12 | 57·0 | 23·8 | g |
| 9·4 | | | 58·0 | 31·1 | |
| 9·7 | | 13 | 8·0 | 32·5 | |
| 9·6 | | | 30·0 | 23·9 | |
| 9·4 | | | 49·0 | 8·2 | |
| 9·7 | | | 50·0 | 30·0 | |
| 9·4 | | 14 | 2·0 | 31·9 | |
| 8·0 | | | 9·0 | 18·6 | GSg |
| 9·4 | | | 40·0 | 4·2 | |
| 9·4 | | 15 | 31·0 | 55·6 | g |
| 9·7 | | | 37·0 | 4·8 | |
| 9·6 | | 17 | 3·0 | 44·9 | |
| 9·7 | | | 15·0 | 9·2 | |
| 9·6 | | | 16·0 | 14·0 | |
| 9·0 | | | 16·0 | 32·6 | 9·2 g |
| 9·3 | | | 35·0 | 0·5 | g |
| 7·4 | | 18 | 25·0 | 39·2 | 8·0 GSg |
| 9·4 | | | 39·0 | 7·2 | g |
| 9·7 | | | 55·0 | 20·5 | |
| 9·7 | | 19 | 3·0 | 24·9 | |
| 9·7 | | | 35·0 | 50·6 | |
| 9·7 | | | 45·0 | 35·0 | |
| 8·1 | | | 51·0 | 26·9 | 8·0 GSg |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 13 | 50 | + 149 | + 0·11.d | − 7·4 |
| 14 | 0 | 155 | + 0·12 | 7·2 |
| | 10 | 161 | + 0·13 | 7·0 |
| | 20 | 167 | + 0·14 | 6·8 |
| | 30 | 173 | + 0·15 | 6·6 |
| | 40 | 178 | + 0·16 | 6·4 |
| | 50 | 183 | + 0·17 | 6·2 |
| 15 | 0 | 188 | + 0·17 | 5·9 |
| | 10 | 193 | + 0·18 | 5·6 |
| | 20 | + 197 | + 0·19 | − 5·4 |

d = minutes of decl.

25 prec.

| h | m | a (s s) | δ (′) |
|---|---|---|---|
| 15 | 20 | +197 +0·19 d | −5·4 |
| | 30 | 202 +0·19 | 5·1 |
| | 40 | 206 +0·20 | 4·8 |
| | 50 | 209 +0·21 | 4·5 |
| 16 | 0 | 213 +0·21 | 4·2 |
| | 10 | 216 +0·22 | 3·9 |
| | 20 | 219 +0·22 | 3·5 |
| | 30 | 222 +0·23 | 3·2 |
| | 40 | 225 +0·23 | 2·9 |
| | 50 | 227 +0·23 | 2·5 |
| 17 | 0 | 229 +0·24 | 2·2 |
| | 10 | 230 +0·24 | 1·8 |
| | 20 | 232 +0·24 | 1·5 |
| | 30 | 233 +0·24 | 1·1 |
| | 40 | 234 +0·24 | 0·7 |
| | 50 | 234 +0·24 | −0·4 |
| 18 | 0 | 234 +0·24 | 0·0 |
| | 10 | 234 +0·24 | +0·4 |
| | 20 | 234 +0·24 | 0·7 |
| | 30 | 233 +0·24 | 1·1 |
| | 40 | 232 +0·24 | 1·5 |
| | 50 | +230 +0·24 | +1·8 |

d = minutes of decl.

## 1021—1080.

| mag. | h (15h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·6 | 15 | 20 | 48·0 | 56·5 | |
| 9·7 | | 21 | 27·0 | 55·9 | |
| 9·4 | | | 43·0 | 28·2 | |
| 9·6 | | | 45·0 | 5·8 | |
| 9·5 | | 23 | 45·0 | 33·9 | |
| 9·5 | | | 46·0 | 27·9 | |
| 9·7 | | 24 | 37·0 | 42·6 | |
| 9·4 | | | 56·0 | 1·5 | |
| 9·6 | | 25 | 6·0 | 50·7 | |
| 9·7 | | 26 | 1·0 | 17·2 | |
| 8·8 | | | 5·0 | 18·0 | g |
| 9·5 | | | 11·0 | 6·6 | |
| 9·3 | | | 22·0 | 4·6 | g |
| 9·6 | | | 45·0 | 21·8 | |
| 9·6 | | | 56·0 | 46·9 | |
| 9·7 | | | 57·0 | 50·3 | |
| 9·0 | | | 59·0 | 19·1 | |
| 9·6 | | 28 | 8·0 | 39·4 | |
| 9·7 | | | 13·0 | 12·6 | |
| 9·5 | | | 26·0 | 15·8 | |
| 9·7 | | 29 | 23·0 | 28·1 | |
| 9·4 | | 30 | 23·0 | 37·6 | |
| 9·5 | | | 59·0 | 1·7 | |
| 9·4 | | 31 | 36·0 | 35·3 | |
| 9·5 | | | 59·0 | 58·5 | |
| 9·3 | | 32 | 25·0 | 17·8 | g |
| 9·5 | | | 59·0 | 17·4 | |
| 9·5 | | 33 | 5·0 | 38·4 | |
| 9·5 | | | 5·0 | 50·9 | |
| 9·0 | | | 9·0 | 13·2 | |
| 9·7 | | | 28·0 | 3·7 | |
| 9·7 | | 34 | 3·0 | 39·8 | |
| 7·9 | | | 15·0 | 19·3 | g |
| 9·5 | | 35 | 3·0 | 30·6 | |
| 9·7 | | | 26·0 | 18·7 | |
| 9·6 | | | 49·0 | 19·9 | |
| 9·4 | | 36 | 32·0 | 36·2 | |
| 9·5 | | | 38·0 | 32·9 | |
| 9·5 | | 37 | 0·0 | 26·8 | |
| 9·5 | | | 0·0 | 30·0 | |
| 9·4 | | 39 | 3·0 | 20·3 | |
| 9·3 | | 40 | 4·0 | 32·3 | |
| 9·5 | | | 45·0 | 10·6 | S |
| 9·1 | | 41 | 19·0 | 45·8 | g |
| 9·6 | | | 58·0 | 6·6 | |
| 9·5 | | 42 | 17·0 | 22·2 | |
| 9·4 | | | 17·0 | 34·5 | |
| 9·2 | | | 23·0 | 56·6 | |
| 9·3 | | 43 | 32·0 | 18·3 | |
| 8·2 | | | 35·0 | 20·4 | 8·5 g |
| 8·9 | | 44 | 19·0 | 0·2 | g |
| 9·6 | | | 25·0 | 26·3 | |
| 9·1 | | | 41·0 | 49·3 | |
| 9·4 | | | 58·0 | 12·8 | |
| 9·4 | | | 58·0 | 2·8 | |
| 9·6 | | 45 | 18·0 | 40·2 | |
| 9·5 | | | 22·0 | 50·7 | |
| 9·5 | | 46 | 19·0 | 31·5 | |
| 9·5 | | | 38·0 | 33·9 | |
| 9·0 | | 47 | 35·0 | 54·0 | 9·5 g |

## 1081—1140.

| mag. | h (15h.–17h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·4 | 15 | 47 | 38·0 | 24·0 | |
| 8·8 | | | 43·0 | 21·7 | 9·5 g |
| 9·3 | | 48 | 52·0 | 21·7 | 9·5 g |
| 9·6 | | | 59·0 | 33·3 | |
| 9·5– | | 50 | 34·0 | 28·2 | |
| 9·0 | | | 40·0 | 51·0 | |
| 8·8 | | 51 | 20·0 | 41·3 | 8·5 g |
| 8·5 | | | 24·0 | 14·6 | 8·8 Gg |
| 8·6 | | | 40·0 | 11·3 | 9·0 g |
| 8·7 | | 57 | 15·0 | 37·8 | 8·5 g |
| 9·3 | 16 | 0 | 56·0 | 24·0 | g |
| 7·0 | | 1 | 44·0 | 22·5 | 5·0 GSg |
| 7·3 | | | 53·0 | 20·9 | 5·5 GSg |
| 9·4 | | 3 | 2·0 | 16·4 | g |
| 9·3 | | | 11·8 | 49·7 | g |
| 9·6 | | | 36·8 | 14·6 | g |
| 9·2 | | | 55·0 | 39·0 | |
| 9·6 | | 4 | 58·0 | 2·7 | g |
| 9·1 | | 7 | 40·0 | 15·8 | g |
| 9·3 | | 10 | 2·0 | 12·3 | |
| 9·3 | | | 5·0 | 45·4 | g |
| 9·4 | | 13 | 52·0 | 19·8 | |
| 5·2 | | 14 | 21·0 | 36·7 | 4·0 GScgr |
| 9·0 | | 15 | 1·0 | 30·7 | g |
| 8·7 | | 19 | 22·0 | 29·8 | 9·5 g |
| 8·8 | | 20 | 13·0 | 18·0 | g |
| 9·2 | | | 35·0 | 18·6 | g |
| 9·6 | | 21 | 20·8 | 12·7 | g |
| 9·5 | | | 23·0 | 2·9 | g |
| 8·0 | | 23 | 18·0 | 46·0 | 8·0 GSg |
| 9·1 | | 24 | 53·0 | 55·0 | g |
| 9·5 | | 27 | 20·0 | 36·0 | |
| 9·6 | | 28 | 7·8 | 19·0 | g |
| 9·6 | | | 18·8 | 15·4 | g |
| 9·6 | | 32 | 13·8 | 32·5 | g |
| 9·7 | | | 24·0 | 14·9 | g |
| 9·6 | | 33 | 53·8 | 10·3 | g |
| 9·6 | | 36 | 29·8 | 33·6 | g |
| 9·7 | | 39 | 42·0 | 31·7 | |
| 9·0 | | 44 | 26·0 | 23·3 | g |
| 9·0 | | 45 | 1·0 | 16·6 | g |
| 9·0 | | 47 | 40·0 | 21·4 | g |
| 9·4 | | 51 | 38·0 | 28·3 | |
| 8·2 | | 52 | 50·0 | 17·7 | 9·0 g |
| 9·4 | | 55 | 15·0 | 28·0 | 9·5 Gg |
| 7·3 | | | 47·0 | 14·1 | 8·5 GSg |
| 8·8 | | 56 | 55·0 | 45·8 | g |
| 8·4 | | 59 | 40·0 | 43·6 | 8·5 g |
| 7·5 | 17 | 1 | 11·0 | 55·0 | 8·0 GSg |
| 8·7 | | 3 | 17·0 | 34·9 | 9·0 g |
| 9·1– | | 7 | 42·0 | 55·3 | g |
| 9·4 | | 13 | 59·0 | 5·9 | g |
| 8·0 | | 14 | 35·0 | 1·7 | 9·5 g |
| 9·4 | | 16 | 7·0 | 17·1 | |
| 8·9 | | 18 | 1·0 | 40·6 | g |
| 9·4 | | | 57·0 | 6·5 | g |
| 9·3 | | 19 | 54·0 | 2·8 | |
| 9·1 | | 20 | 16·0 | 34·4 | Gg |
| 9·4 | | 21 | 18·0 | 48·4 | g |
| 9·4 | | 22 | 32·0 | 12·0 | |

## 1141—1200.

| mag. | h (17h.–18h.) | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·0 | 17 | 22 | 55·0 | 54·2 | g |
| 8·2 | | 23 | 16·0 | 36·7 | 7·5 GSg |
| 9·4 | | 25 | 25·0 | 2·8 | |
| 8·8 | | 26 | 44·0 | 12·3 | 9·0 g |
| 9·7 | | 27 | 38·0 | 48·6 | |
| 9·2 | | 30 | 57·0 | 31·0 | 9·5 g |
| 9·6 | | 31 | 38·0 | 54·9 | |
| 9·7 | | | 44·0 | 52·5 | |
| 9·1 | | 32 | 7·0 | 43·6 | g |
| 8·7 | | | 28·0 | 59·2 | 9·0 g |
| 9·4 | | | 46·0 | 38·0 | |
| 8·7 | | 41 | 13·0 | 21·1 | 7·5 Gg |
| 9·1 | | 42 | 52·0 | 20·0 | g |
| 9·0 | | 43 | 16·0 | 40·9 | 9·0 g |
| 9·6 | | 46 | 55·0 | 30·1 | |
| 8·7 | | 49 | 34·0 | 59·0 | g |
| 9·4 | | 50 | 23·0 | 49·5 | |
| 9·6 | | | 45·0 | 18·8 | |
| 9·0 | | 52 | 2·0 | 59·8 | g |
| 9·3 | | 53 | 14·0 | 55·0 | |
| 9·3 | | | 20·0 | 32·0 | g |
| 9·6 | | 54 | 36·0 | 48·1 | |
| 8·9 | | 55 | 4·0 | 14·7 | g |
| 9·6 | | | 43·0 | 6·0 | |
| 9·6 | 18 | 0 | 11·0 | 57·6 | |
| 9·1 | | 5 | 46·0 | 25·0 | g |
| 9·4 | | 7 | 37·0 | 30·6 | |
| 8·7 | | 8 | 50·0 | 39·9 | 8·5 Gg |
| 9·0 | | 9 | 18·0 | 23·9 | g |
| 9·2 | | | 41·0 | 43·9 | g |
| 9·3 | | 11 | 24·0 | 6·9 | |
| 9·7 | | | 38·0 | 17·7 | |
| 9·0 | | 12 | 52·0 | 17·0 | g |
| 9·3 | | 15 | 22·0 | 47·6 | g |
| 9·4 | | 16 | 22·0 | 9·4 | |
| 8·8 | | 20 | 20·0 | 15·7 | 9·5 g |
| 9·4 | | 21 | 54·0 | 54·4 | |
| 9·0 | | 23 | 16·0 | 18·7 | 9·5 g |
| 8·9 | | | 18·0 | 0·7 | 9·0 g |
| 7·1 | | | 33·0 | 10·1 | 7·0 GSg |
| 9·4 | | 24 | 38·0 | 50·6 | |
| 9·4 | | 25 | 33·0 | 18·4 | g |
| 9·3 | | 28 | 38·0 | 34·2 | g |
| 9·1 | | 29 | 15·0 | 7·1 | g |
| 8·9 | | | 23·0 | 47·9 | g |
| 9·3 | | 30 | 18·0 | 6·3 | g |
| 9·1 | | 31 | 24·0 | 19·3 | g |
| 9·6 | | 32 | 33·0 | 15·2 | g |
| 9·7 | | 35 | 1·0 | 0·2 | |
| 9·3 | | 38 | 47·0 | 2·0 | |
| 9·3 | | 39 | 3·0 | 43·1 | g |
| 9·4– | | | 33·0 | 15·0 | g |
| 9·8 | | 41 | 28·5 | 49·0 | |
| 9·8 | | | 31·5 | 49·5 | |
| 8·5 | | | 32·0 | 47·0 | g |
| 9·6 | | | 33·5 | 32·2 | |
| 9·1 | | | 38·0 | 56·9 | g |
| 8·4 | | 42 | 9·5 | 31·7 | g |
| 9·8 | | | 58·5 | 46·5 | |
| 9·2 | | 44 | 19·5 | 36·7 | |



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## 1201—1260.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| | 18h.—19h. | | | | |
| 9.8 | 18 | 45 | 17.5 | 25.8 | |
| 9.4 | | | 37.5 | 42.5 | |
| 9.4 | | | 40.5 | 36.7 | |
| 8.5 | | 46 | 22.3 | 39.7 | *g* |
| 8.4 | | | 45.0 | 1.5 | *g* |
| 9.8 | | | 56.5 | 36.9 | |
| 9.8 | | 48 | 5.5 | 30.7 | |
| 9.2 | | 49 | 4.5 | 47.0 | |
| 9.3 | | 50 | 5.0 | 14.4 | |
| 9.7 | | | 17.0 | 18.9 | |
| 8.0 | | 51 | 18.5 | 14.5 | *g* |
| 9.4 | | 52 | 29.5 | 9.0 | |
| 8.9 | | | 30.0 | 21.5 | |
| 9.0 | | 53 | 16.3 | 47.2 | *g* |
| 8.3 | | | 18.5 | 47.6 | *g* |
| 9.8 | | | 19.5 | 13.8 | |
| 7.9 | | 54 | 11.2 | 3.3 | 7.0 GS*g* |
| 8.5 | | | 36.4 | 11.6 | *g* |
| 9.6 | | 55 | 5.4 | 51.1 | |
| 9.2 | | | 7.0 | 27.5 | |
| 9.4 | | | 20.4 | 49.9 | |
| 9.4 | | | 23.9 | 39.7 | |
| 9.3 | | 56 | 32.4 | 17.0 | |
| 8.9 | | 57 | 27.0 | 10.9 | *g* |
| 9.3 | | 58 | 52.7 | 58.4 | |
| 9.6 | | | 56.1 | 2.0 | |
| 9.3 | 19 | 1 | 12.4 | 45.3 | |
| 9.8 | | 3 | 4.4 | 59.9 | |
| 9.8 | | 4 | 1.4 | 23.9 | |
| 9.7 | | 5 | 12.2 | 9.1 | |
| 8.0 | | 8 | 27.9 | 27.2 | 8.0 G*g* |
| 9.6 | | | 30.4 | 7.0 | |
| 9.4 | | 9 | 8.2 | 58.3 | |
| 9.4 | | 10 | 35.5 | 58.9 | |
| 9.4 | | 11 | 13.9 | 24.5 | |
| 9.8 | | 13 | 1.9 | 12.8 | |
| 9.2 | | | 4.9 | 56.1 | |
| 9.6 | | | 56.4 | 23.1 | |
| 9.2 | | 14 | 4.9 | 47.9 | |
| 9.4 | | | 26.9 | 9.4 | |
| 9.8 | | 15 | 32.9 | 18.3 | |
| 9.8 | | 16 | 33.4 | 21.1 | |
| 8.8 | | 17 | 20.4 | 5.0 | |
| 9.7 | | | 56.9 | 29.7 | |
| 9.4 | | 19 | 33.4 | 16.9 | *g* |
| 9.8 | | 22 | 13.4 | 51.8 | |
| 9.4 | | | 15.9 | 17.1 | |
| 9.0 | | 23 | 9.0 | 47.6 | *g* |
| 9.7 | | | 21.9 | 3.2 | |
| 9.2 | | 25 | 24.4 | 18.9 | *g* |
| 8.6 | | 26 | 9.9 | 36.3 | *g* |
| 9.3 | | | 11.4 | 43.4 | |
| 9.8 | | | 47.9 | 14.3 | |
| 9.6 | | | 58.4 | 20.1 | |
| 8.8 | | 27 | 1.9 | 1.3 | *g* |
| 9.2 | | | 22.9 | 27.0 | |
| 8.7 | | 28 | 56.4 | 25.9 | 9.0 *g* |
| 8.9 | | | 57.4 | 9.8 | *g* |
| 9.7 | | 29 | 48.2 | 38.2 | |
| 9.8 | | 30 | 24.9 | 1.9 | |

## 1261—1320.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| | 19h.—20h. | | | | |
| 9.6 | 19 | 30 | 51.9 | 51.7 | |
| 9.2 | | 31 | 44.4 | 15.8 | |
| 9.7 | | 32 | 30.9 | 22.2 | |
| 9.6 | | | 47.9 | 2.3 | |
| 9.7 | | 34 | 11.9 | 36.3 | |
| 9.6 | | | 48.9 | 38.0 | |
| 8.9 | | 35 | 28.2 | 44.0 | *g* |
| 9.8 | | 36 | 27.4 | 0.1 | |
| 9.2 | | 37 | 22.4 | 21.7 | *g* |
| 9.4 | | 38 | 38.4 | 21.2 | |
| 9.4 | | | 40.4 | 59.3 | |
| 9.8 | | | 44.2 | 49.6 | |
| 9.2 | | 41 | 9.9 | 0.1 | *g* |
| 9.4 | | 42 | 37.4 | 20.0 | |
| 9.4 | | | 43.9 | 44.7 | |
| 8.6 | | 43 | 23.9 | 21.3 | 9.0 *g* |
| 9.8 | | | 42.4 | 53.2 | |
| 9.8 | | | 51.9 | 45.8 | |
| 9.6 | | 44 | 21.9 | 24.1 | |
| 8.9 | | | 42.9 | 40.2 | |
| 8.2 | | 45 | 27.9 | 35.8 | 8.0 *g* |
| 9.3 | | 46 | 42.9 | 6.1 | |
| 8.7 | | | 48.9 | 11.9 | *g* |
| 9.6 | | 47 | 15.0 | 7.1 | |
| 9.7 | | | 35.0 | 55.1 | |
| 9.8 | | | 39.5 | 35.1 | |
| 8.9 | | | 45.0 | 8.4 | *g* |
| 8.7 | | | 55.7 | 22.1 | *g* |
| 9.1 | | 48 | 7.5 | 9.1 | *g* |
| 8.7 | | 49 | 13.0 | 31.3 | *g* |
| 9.6 | | | 32.5 | 29.9 | |
| 9.6 | | | 57.5 | 54.2 | |
| 9.7 | | 50 | 41.5 | 17.8 | |
| 9.8 | | | 45.5 | 51.5 | |
| 9.2 | | 53 | 19.7 | 17.9 | |
| 9.3 | | 55 | 46.2 | 13.1 | *g* |
| 9.8 | | 56 | 23.2 | 4.9 | |
| 9.4 | | | 58.7 | 19.8 | |
| 8.4 | | 57 | 7.0 | 42.9 | 8.5 *g* |
| 9.2 | | 59 | 48.2 | 10.0 | |
| 9.4 | 20 | 2 | 15.2 | 55.0 | |
| 9.8 | | 4 | 59.8 | 10.1 | |
| 9.6 | | 5 | 16.2 | 0.4 | |
| 9.4 | | 7 | 26.5 | 46.2 | |
| 9.6 | | | 27.0 | 37.5 | |
| 9.3 | | | 29.2 | 34.3 | |
| 9.7 | | | 46.4 | 57.8 | |
| 7.8 | | 9 | 12.0 | 35.1 | 8.5 *g* |
| 9.4 | | 10 | 30.0 | 19.5 | |
| 9.4 | | 11 | 21.0 | 6.2 | |
| 8.1 | | 13 | 1.8 | 3.7 | 8.5 *g* |
| 8.4 | | | 12.5 | 1.2 | 8.0 *g* |
| 9.3 | | | 17.3 | 33.4 | |
| 9.0 | | 14 | 4.0 | 47.7 | *g* |
| 9.2 | | 15 | 26.0 | 16.6 | *g* |
| 10.0 | | 17 | 42.5 | 12.4 | |
| 8.7 | | 18 | 23.0 | 53.3 | 8.5 *g* |
| 10.1 | | | 24.0 | 39.5 | |
| 9.3 | | 19 | 22.7 | 36.4 | *g* |
| 9.2 | | 20 | 7.5 | 23.7 | |

## 1321—1380.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| | 20h. | | | | |
| 9.0 | 20 | 20 | 27.1 | 25.0 | |
| 9.6 | | | 44.8 | 23.3 | |
| 10.0 | | 22 | 48.1 | 54.2 | |
| 9.6 | | 23 | 25.8 | 57.7 | |
| 8.6 | | 26 | 8.1 | 16.6 | *g* |
| 9.6 | | | 10.1 | 46.1 | |
| 9.0 | | 27 | 28.1 | 25.5 | |
| 9.6 | | 28 | 5.6 | 13.4 | |
| 9.7 | | | 47.6 | 47.4 | |
| 10.1 | | | 56.1 | 1.7 | |
| 10.0 | | 30 | 24.6 | 47.1 | |
| 9.7 | | 32 | 3.6 | 7.1 | |
| 9.6 | | | 32.6 | 10.5 | |
| 9.7 | | | 45.6 | 14.7 | |
| 9.6 | | | 54.1 | 11.3 | |
| 10.1 | | | 57.1 | 14.8 | |
| 9.2 | | 33 | 11.6 | 3.3 | 8.5 *g* |
| 9.7 | | | 21.6 | 23.9 | |
| 9.6 | | | 25.1 | 22.7 | |
| 10.1 | | 34 | 5.1 | 49.4 | |
| 9.6 | | | 14.1 | 41.0 | *g* |
| 9.6 | | | 16.0 | 13.7 | |
| 9.6 | | | 23.5 | 54.5 | |
| 7.9 | | | 32.0 | 35.1 | 8.1 GS*g* |
| 9.8 | | 35 | 18.0 | 17.3 | |
| 9.7 | | 36 | 6.5 | 42.2 | |
| 9.4 | | | 16.5 | 52.1 | 9.0 G*g* |
| 8.9 | | 37 | 15.0 | 17.7 | *g* |
| 9.6 | | | 48.0 | 28.5 | |
| 10.1 | | | 50.0 | 14.3 | |
| 10.1 | | 38 | 13.0 | 34.8 | |
| 10.0 | | | 51.5 | 12.9 | |
| 9.6 | | 40 | 51.5 | 7.2 | |
| 9.8 | | 41 | 4.0 | 53.5 | |
| 9.7 | | | 11.5 | 52.9 | |
| 9.6 | | | 57.0 | 30.4 | |
| 9.0 | | 42 | 35.0 | 41.6 | |
| 10.3 | | | 43.5 | 25.5 | |
| 8.4 | | | 54.0 | 39.0 | 9.0 G*g* |
| 9.7 | | 43 | 36.2 | 22.6 | |
| 10.0 | | | 39.7 | 5.2 | |
| 10.3 | | 44 | 32.7 | 31.1 | |
| 9.4 | | | 39.2 | 49.6 | *g* |
| 9.4 | | | 51.7 | 49.9 | *g* |
| 9.0 | | 45 | 2.2 | 21.5 | *g* |
| 10.1 | | | 2.7 | 37.0 | |
| 9.6 | | | 10.2 | 28.9 | |
| 10.2 | | | 43.2 | 9.3 | |
| 9.4 | | 46 | 15.2 | 7.1 | |
| 8.6 | | 48 | 45.1 | 1.9 | 8.0 GS*g* |
| 9.6 | | | 57.7 | 29.6 | |
| 10.1 | | 51 | 0.7 | 50.8 | |
| 9.7 | | | 37.2 | 44.5 | |
| 10.3 | | | 59.7 | 29.8 | |
| 9.6 | | 53 | 4.7 | 32.9 | *g* |
| 10.2 | | | 29.2 | 58.1 | |
| 10.3 | | 54 | 26.2 | 12.9 | |
| 10.3 | | 56 | 31.2 | 21.5 | |
| 8.8 | | | 56.8 | 15.7 | *g* |
| 9.6 | | 59 | 17.3 | 20.4 | |

25 prec.

| h | m | α (s s) | δ ′ |
|---|---|---|---|
| 18 | 40 | +232 + 0.24 d | +1.5 |
| | 50 | 230 + 0.24 | 1.8 |
| 19 | 0 | 229 + 0.24 | 2.2 |
| | 10 | 227 + 0.23 | 2.5 |
| | 20 | 225 + 0.23 | 2.9 |
| | 30 | 222 + 0.23 | 3.2 |
| | 40 | 219 + 0.22 | 3.5 |
| | 50 | 216 + 0.22 | 3.9 |
| 20 | 0 | 213 + 0.21 | 4.2 |
| | 10 | 209 + 0.21 | 4.5 |
| | 20 | 206 + 0.20 | 4.8 |
| | 30 | 202 + 0.19 | 5.1 |
| | 40 | 197 + 0.19 | 5.4 |
| | 50 | 193 + 0.17 | 5.6 |
| 21 | 0 | +188 + 0.17 | +5.9 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 20 | 50 | + 193 + 0·18 d | + 5·6 |
| 21 | 0 | 188 + 0·17 | 5·9 |
| | 10 | 183 + 0·17 | 6·2 |
| | 20 | 178 + 0·16 | 6·4 |
| | 30 | 173 + 0·15 | 6·6 |
| | 40 | 167 + 0·14 | 6·8 |
| | 50 | 161 + 0·13 | 7·0 |
| 22 | 0 | 155 + 0·12 | 7·2 |
| | 10 | 149 + 0·11 | 7·4 |
| | 20 | 143 + 0·10 | 7·6 |
| | 30 | 137 + 0·09 | 7·7 |
| | 40 | 131 + 0·08 | 7·9 |
| | 50 | 124 + 0·07 | 8·0 |
| 23 | 0 | 118 + 0·06 | 8·1 |
| | 10 | 111 + 0·05 | 8·2 |
| | 20 | 104 + 0·04 | 8·2 |
| | 30 | 97 + 0·03 | 8·3 |
| | 40 | 91 + 0·02 | 8·3 |
| | 50 | + 84 + 0·01 | + 8·3 |

d = minutes of decl.

## 1381—1415.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·8 | 20 | 59 | 50·8 | 14·2 | |
| 10·2 | 21 | 0 | 47·8 | 31·2 | |
| 9·7 | | 1 | 1·3 | 46·5 | |
| 9·7 | | 2 | 39·3 | 14·1 | |
| 9·7 | | 3 | 8·1 | 2·6 | |
| 9·2 | | 4 | 7·3 | 55·4 | *g* |
| 10·0 | | | 49·3 | 58·3 | |
| 9·4 | | 8 | 42·6 | 2·6 | *g* |
| 9·4 | | 9 | 17·8 | 5·7 | *g* |
| 9·3 | | | 25·6 | 26·8 | |
| 9·4 | | 10 | 5·8 | 49·1 | |
| 9·2 | | | 50·3 | 21·5 | *g* |
| 9·4 | | 11 | 40·6 | 24·9 | *g* |
| 9·2 | | 12 | 6·1 | 22·0 | *g* |
| 9·6 | | | 14·1 | 19·7 | |
| 10·3 | | | 34·6 | 13·1 | *g* |
| 9·6 | | | 47·1 | 5·3 | |
| 9·6 | | 13 | 9·9 | 49·9 | |
| 8·9 | | | 57·2 | 29·8 | *g* |
| 9·6 | | 14 | 55·4 | 2·1 | |
| 9·7 | | 15 | 50·4 | 10·1 | |
| 9·8 | | 16 | 41·6 | 59·2 | |
| 9·7 | | 18 | 49·9 | 35·0 | *g* |
| 10·2 | | 19 | 19·9 | 50·0 | |
| 9·8 | | | 38·9 | 29·1 | |
| 9·5 | | 20 | 43·4 | 40·1 | |
| 10·1 | | 21 | 59·2 | 57·5 | |
| 10·0 | | 23 | 30·4 | 20·8 | |
| 9·7 | | | 50·4 | 19·2 | |
| 9·7 | | | 54·9 | 25·4 | |
| 10·0 | | 24 | 53·9 | 39·8 | |
| 9·6 | | 25 | 25·4 | 58·0 | |
| 9·7 | | 27 | 57·4 | 55·8 | *g* |
| 9·8 | | 28 | 47·4 | 4·7 | |
| 9·6 | | 32 | 31·6 | 59·0 | |

## 1416—1450.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·6 | 21 | 35 | 24·7 | 2·3 | |
| 10·3 | | | 56·9 | 17·5 | |
| 8·4 | | | 57·9 | 47·7 | 8·8 GS*g* |
| 9·7 | | 37 | 2·4 | 27·7 | |
| 9·6 | | 38 | 16·4 | 42·2 | |
| 8·6 | | 39 | 6·4 | 23·4 | 9·5 *g* |
| 10·3 | | | 38·9 | 27·8 | |
| 10·0 | | | 54·9 | 21·3 | |
| 10·0 | | 40 | 51·9 | 36·9 | |
| 9·2 | | 41 | 2·6 | 20·2 | 9·5 *g* |
| 9·7 | | | 15·7 | 42·2 | |
| 10·1 | | | 59·2 | 39·3 | |
| 9·4 | | 46 | 18·6 | 57·5 | *g* |
| 10·1 | | 47 | 56·2 | 52·0 | |
| 7·3 | | 48 | 41·9 | 15·5 | 6·5 GSc*gg* |
| 9·6 | | 49 | 16·7 | 17·9 | |
| 10·0 | | | 41·2 | 7·0 | |
| 8·9 | | 51 | 15·9 | 46·7 | 9·5 *g* |
| 10·3 | | | 38·2 | 47·9 | |
| 9·6 | | 54 | 55·3 | 57·9 | |
| 9·2 | | 56 | 50·0 | 24·9 | *g* |
| 9·4 | | 58 | 32·0 | 37·3 | *g* |
| 8·2 | 22 | 1 | 5·0 | 56·7 | 9·0 *g* |
| 9·0 | | 2 | 27·0 | 7·0 | *g* |
| 9·6 | | 3 | 28·0 | 53·6 | |
| 9·4 | | 4 | 6·0 | 54·0 | *g* |
| 6·0 | | 5 | 37·0 | 7·9 | 6·0 GS*g* |
| 9·4 | | 6 | 12·0 | 11·9 | *g* |
| 8·7 | | 8 | 36·0 | 3·1 | 9·5 *g* |
| 8·7 | | 9 | 16·0 | 59·9 | *g* |
| 9·6 | | 10 | 51·0 | 29·7 | |
| 8·0 | | 15 | 37·0 | 20·9 | 7·5 GS*g* |
| 9·4 | | 17 | 35·0 | 24·8 | *g* |
| 8·2 | | | 51·0 | 50·9 | 7·5 GS*g* |
| 9·4 | | 18 | 20·0 | 38·5 | *g* |

## 1451—1484.

| mag. | h | m | s | −78° ′ | |
|---|---|---|---|---|---|
| 9·5 | 22 | 24 | 59·0 | 37·8 | |
| 8·5 | | 28 | 15·0 | 44·7 | 8·5 *g* |
| 9·6 | | 30 | 28·0 | 35·6 | |
| 9·5 | | 32 | 6·0 | 49·0 | 9·0 *g* |
| 9·4 | | 33 | 4·0 | 40·4 | 9·5 *g* |
| 9·6 | | | 36·0 | 29·1 | |
| 9·0 | | 37 | 19·0 | 7·2 | 8·5 *g* |
| 9·6 | | | 20·0 | 24·6 | |
| 8·7 | | 42 | 40·0 | 12·3 | 8·5 *g* |
| 9·5 | | 44 | 36·0 | 48·9 | |
| 9·0 | | 49 | 40·0 | 23·9 | *g* |
| 9·5 | | 50 | 12·0 | 5·1 | |
| 9·0 | | 57 | 37·0 | 58·8 | 9·5 *g* |
| 9·2 | 23 | 0 | 38·0 | 14·9 | *g* |
| 9·5 | | 1 | 25·0 | 17·6 | *g* |
| 9·6 | | 2 | 33·0 | 27·6 | *g* |
| 9·3 | | 5 | 14·0 | 56·4 | 9·5 *g* |
| 8·6 | | 6 | 22·0 | 34·4 | 9·0 *g* |
| 8·9 | | 10 | 25·0 | 17·3 | *g* |
| 9·3 | | 13 | 44·0 | 15·5 | |
| 8·0 | | 14 | 19·0 | 28·3 | 8·0 GS*g* |
| 8·8 | | | 51·0 | 51·4 | *g* |
| 6·4 | | 25 | 10·0 | 4·5 | 6·0 GSc*g* |
| 8·8 | | 29 | 24·0 | 50·7 | 8·5 *g* |
| 9·6 | | 30 | 22·0 | 0·8 | |
| 9·0 | | 32 | 36·0 | 54·2 | 9·0 *g* |
| 8·8 | | 33 | 34·0 | 51·5 | 9·5 *g* |
| 8·8 | | 34 | 29·0 | 20·6 | *g* |
| 8·6 | | 36 | 4·0 | 30·0 | 9·0 *g* |
| 9·2 | | | 7·0 | 15·3 | *g* |
| 8·6 | | | 26·0 | 48·8 | 8·5 *g* |
| 8·8 | | | 29·0 | 10·5 | 9·0 *g* |
| 9·0 | | 38 | 51·0 | 15·8 | 9·0 *g* |
| 9·5 | | 47 | 17·0 | 13·8 | *g* |

# ZONE—79°.

## 1—40.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 6·5 | 0 | 1 | 53·0 | 17·7 | 7·5 GS*g*g |
| 10·0 | | 3 | 33·0 | 32·1 | *g* |
| 9·0 | | | 56·0 | 17·1 | 9·0 *g* |
| 7·4 | | 4 | 6·0 | 41·8 | 8·0 GS*g* |
| 9·8 | | 9 | 13·0 | 5·6 | *g* |
| 9·4 | | 10 | 43·0 | 22·3 | 9·0 *g* |
| 6·4 | | 11 | 15·0 | 28·4 | 7·0 GSc*g* |
| 7·6 | | 12 | 26·0 | 55·5 | GS*g* |
| 9·2 | | 22 | 28·0 | 13·1 | *g* |
| 9·2 | | 28 | 45·0 | 21·5 | 9·5 *g* |
| 9·5 | | 30 | 44·0 | 11·9 | 9·5 *g* |
| 9·4 | | 32 | 3·0 | 9·1 | 9·5 *g* |
| 9·0 | | 33 | 0·0 | 46·2 | *g* |
| 9·4 | | 40 | 34·0 | 36·0 | |
| 9·4 | | | 47·0 | 5·6 | |
| 9·0 | | 42 | 11·0 | 30·3 | *g* |
| 9·6 | | | 26·0 | 12·1 | |
| 9·3 | | 44 | 27·0 | 8·9 | |
| 9·0 | | 46 | 47·0 | 53·7 | *g* |
| 9 3 | | 47 | 41·0 | 10·6 | *g* |
| 9·3 | | | 55·0 | 19·1 | *g* |
| 9·5 | | 50 | 42·0 | 50·9 | *g* |
| 9·1 | | 56 | 34·0 | 1·3 | *g* |
| 9·3 | | 59 | 39·0 | 5·9 | |
| 7·8 | 1 | 1 | 4·0 | 0·8 | 8·5 GS*g* |
| 9·4 | | | 24·0 | 0·4 | 9·5 *g* |
| 9·3 | | 3 | 57·0 | 54·2 | *g* |
| 9·3 | | 4 | 13·0 | 6·3 | *g* |
| 9·4 | | | 38·0 | 22·4 | *g* |
| 8·7 | | 6 | 42·0 | 5·1 | 9·0 *g* |
| 9·3 | | | 56·0 | 53·5 | *g* |
| 9·3 | | 8 | 38·0 | 22·1 | *g* |
| 9·3 | | 10 | 42·0 | 43·2 | *g* |
| 8·8 | | 13 | 40·0 | 2·4 | 9·5 *g* |
| 9·3 | | 18 | 7·0 | 43·9 | 10·0 *g* |
| 8·9 | | 22 | 38·0 | 51·7 | 9·5 *g* |
| 8·5 | | 26 | 58·0 | 41·2 | 7·8 GS*g* |
| 9·2 | | 27 | 41·0 | 3·3 | *g* |
| 9·2 | | 30 | 32·0 | 36·1 | 8·0 G*g* |
| 7·1 | | 32 | 49·0 | 8·4 | GSc*g* |

## 41—80.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·2 | 1 | 33 | 11·0 | 15·6 | *g* |
| 8·6 | | 34 | 16·0 | 13·7 | *g* |
| 8·7 | | 39 | 3·0 | 56·6 | 9·5 *g* |
| 7·0 | | 41 | 18·0 | 46·8 | 6·5 GSc*g*r |
| 8·2 | | 48 | 54·0 | 6·2 | 9·0 *g* |
| 9·0 | | 51 | 19·0 | 8·7 | 8·5 *g* |
| 9·4 | | 55 | 18·0 | 49·3 | *g* |
| 9·0 | | | 57·0 | 27·6 | *g* |
| 9·8 | | 58 | 24·0 | 7·0 | *g* |
| 7·7 | | | 29·0 | 22·2 | 7·5 GS*g* |
| 7·8 | 2 | 1 | 49·6 | 28·2 | 7·0 GS*g* |
| 8·2 | | 4 | 39·1 | 17·8 | 8·0 GS*g* |
| 9·0 | | 9 | 2·1 | 34·6 | *g* |
| 9·8 | | 10 | 43·1 | 59·3 | *g* |
| 9·1 | | 13 | 48·6 | 53·5 | *g* |
| 8·9 | | 15 | 11·6 | 36·3 | S*g* |
| 8·3 | | 17 | 36·1 | 36·1 | 9·0 S*g* |
| 8·4 | | | 54·6 | 46·0 | 8·0 G*g* |
| 9·1 | | 18 | 0·6 | 13·5 | 8·5 *g* |
| 9·1 | | 24 | 11·7 | 54·4 | |
| 9·2 | | | 33·2 | 22·2 | |
| 9·5 | | 30 | 24·8 | 37·7 | |
| 9·0 | | 31 | 22·5 | 0·9 | *g* |
| 8·6 | | | 42·4 | 44·6 | *g* |
| 8·7 | | 32 | 21·6 | 2·4 | 8·5 *g* |
| 6·4 | | 34 | 21·8 | 39·3 | 5·5 GS*g*gλ |
| 9·0 | | | 21·9 | 22·7 | |
| 8·1 | | 35 | 49·0 | 34·7 | 8·0 GS*g* |
| 9·5 | | 38 | 18·4 | 7·1 | |
| 9·8 | | 39 | 30·4 | 47·1 | |
| 8·0 | | 41 | 6·9 | 16·1 | 8·5 *g* |
| 9·2 | | 42 | 38·4 | 40·1 | *g* |
| 9·3 | | 43 | 49·4 | 36·0 | *g* |
| 9·6 | | 45 | 7·4 | 33·4 | |
| 9·8 | | 47 | 59·4 | 45·0 | |
| 9·2 | | 48 | 14·3 | 47·0 | |
| 9·2 | | 52 | 37·3 | 28·0 | *g* |
| 8·6 | | 53 | 50·4 | 11·7 | 8·5 *g* |
| 9·0 | | 55 | 2·4 | 18·3 | *g* |
| 9·8 | | 58 | 21·8 | 17·2 | |

## 81—120.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 8·7 | 3 | 1 | 52·4 | 20·3 | *g* |
| 9·2 | | 2 | 19·0 | 57·7 | 9·0 *g* |
| 9·8 | | | 48·3 | 33·6 | |
| 9·2 | | | 51·3 | 44·7 | |
| 9·3 | | 3 | 36·8 | 37·0 | |
| 9·4 | | | 50·3 | 9·9 | |
| 8·4 | | 5 | 49·9 | 15·4 | *g* |
| 9·0 | | 6 | 21·4 | 8·0 | |
| 9·8 | | 10 | 22·7 | 53·4 | |
| 8·9 | | 11 | 14·3 | 23·3 | |
| 5·6 | | | 50·3 | 27·8 | 6·0 GSc*g* |
| 9·3 | | | 56·7 | 24·6 | |
| 9·6 | | 14 | 22·7 | 34·7 | |
| 9·8 | | | 32·2 | 32·4 | |
| 9·8 | | 16 | 46·2 | 25·0 | |
| 9·2 | | 17 | 17·6 | 51·0 | 8·5 *g* |
| 9·8 | | | 59·2 | 11·4 | |
| 7·1 | | 18 | 15·3 | 16·9 | 7·5 GS*g* |
| 8·9 | | | 41·8 | 24·1 | |
| 9·8 | | 25 | 48·7 | 5·6 | |
| 9·2 | | 29 | 18·3 | 47·4 | GS*g* |
| 9·2 | | | 55·6 | 5·7 | 8·5 *g* |
| 9·8 | | 30 | 30·6 | 22·6 | |
| 9·2 | | 31 | 0·8 | 2·4 | 8·5 |
| 9·8 | | | 29·6 | 14·7 | |
| 9·0 | | 36 | 15·6 | 32·9 | *g* |
| 10·0 | | 38 | 58·0 | 7·2 | |
| 9·5 | | 41 | 17·0 | 14·5 | |
| 7·7 | | 42 | 4·0 | 30·0 | 7·0 GSc*g* |
| 9·4 | | | 25·0 | 32·2 | |
| 9·5 | | 45 | 33·0 | 34·4 | |
| 8·6 | | | 52·0 | 52·1 | 8·5 *g* |
| 8·9 | | 47 | 21·0 | 9·4 | 9·0 *g* |
| 8·7 | | | 31·0 | 57·7 | *g* |
| 9·5 | | | 31·0 | 31·4 | 9·5 |
| 9·7 | | | 50·0 | 34·8 | |
| 9·4 | | 53 | 6·0 | 16·3 | |
| 9·2 | | 54 | 39·0 | 46·1 | *g* |
| 9·4 | | 57 | 23·0 | 8·0 | |
| 10·0 | | | 52·0 | 35·3 | |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·00 d | + 8·4 |
| | 10 | 69 | − 0·01 | 8·3 |
| | 20 | 62 | − 0·03 | 8·3 |
| | 30 | 54 | − 00·4 | 8·3 |
| | 40 | 47 | − 0·05 | 8·2 |
| | 50 | 40 | − 0·06 | 8·2 |
| 1 | 0 | 32 | − 0·08 | 8·1 |
| | 10 | 25 | − 0·09 | 8·0 |
| | 20 | 18 | − 0·10 | 7·9 |
| | 30 | 11 | − 0·11 | 7·7 |
| | 40 | + 4 | − 0·12 | 7·6 |
| | 50 | − 3 | − 0·14 | 7·4 |
| 2 | 0 | 9 | − 0·15 | 7·2 |
| | 10 | 16 | − 0·16 | 7·0 |
| | 20 | 22 | − 0·17 | 6·8 |
| | 30 | 28 | − 0·18 | 6·6 |
| | 40 | 34 | − 0·19 | 6·4 |
| | 50 | 39 | − 0·20 | 6·2 |
| 3 | 0 | 45 | − 0·21 | 5·9 |
| | 10 | 50 | − 0·22 | 5·6 |
| | 20 | 55 | − 0·22 | 5·4 |
| | 30 | 60 | − 0·23 | 5·1 |
| | 40 | 64 | − 0·24 | 4·8 |
| | 50 | 68 | − 0·25 | 4·5 |
| 4 | 0 | − 72 | − 0·25 | + 4·2 |

d = minutes of decl.

25 prec.

| h | m | α (s) | δ (′) |
|---|---|---|---|
| 3 | 50 | − 68 − 0·25 d | + 4·5 |
| 4 | 0 | 72 − 0·25 | 4·2 |
| | 10 | 76 − 0·26 | 3·9 |
| | 20 | 79 − 0·27 | 3·5 |
| | 30 | 82 − 0·27 | 3·2 |
| | 40 | 85 − 0·28 | 2·9 |
| | 50 | 87 − 0·28 | 2·5 |
| 5 | 0 | 89 − 0·28 | 2·2 |
| | 10 | 91 − 0·29 | 1·8 |
| | 20 | 93 − 0·29 | 1·5 |
| | 30 | 94 − 0·29 | 1·1 |
| | 40 | 95 − 0·29 | 0·7 |
| | 50 | 95 − 0·29 | + 0·4 |
| 6 | 0 | 95 − 0·29 | 0·0 |
| | 10 | 95 − 0·29 | − 0·4 |
| | 20 | 95 − 0·29 | 0·7 |
| | 30 | 94 − 0·29 | 1·1 |
| | 40 | 93 − 0·29 | 1·5 |
| | 50 | 91 − 0·29 | 1·8 |
| 7 | 0 | 89 − 0·28 | 2·2 |
| | 10 | 87 − 0·28 | 2·5 |
| | 20 | 85 − 0·28 | 2·9 |
| | 30 | 82 − 0·27 | 3·2 |
| | 40 | 79 − 0·27 | 3·5 |
| | 50 | 76 − 0·26 | 3·9 |
| 8 | 0 | 72 − 0·25 | 4·2 |
| | 10 | 68 − 0·25 | 4·5 |
| | 20 | 64 − 0·24 | 4·8 |
| | 30 | − 60 − 0·23 | − 5·1 |

d = minutes of decl.

## 121—180.

| mag. | $3^{h.}$–$5^{h.}$ h | m | s | –79° ′ | |
|---|---|---|---|---|---|
| 8·7 | 3 | 59 | 10·0 | 42·0 | *g* |
| 9·5 | 4 | 0 | 2·0 | 31·0 | |
| 9·4 | | | 46·0 | 37·4 | |
| 9·7 | | 1 | 17·0 | 25·0 | *g* |
| 9·4 | | 2 | 3·0 | 8·6 | *g* |
| 9·7 | | | 35·0 | 26·7 | *g* |
| 10·0 | | 3 | 38·0 | 30·5 | |
| 9·5 | | 7 | 11·0 | 37·2 | |
| 8·4 | | | 19·0 | 32·7 | 9·0 *g* |
| 9·5 | | | 35·0 | 4·8 | *g* |
| 9·7 | | 14 | 43·0 | 43·1 | |
| 9·3 | | 15 | 0·0 | 43·8 | |
| 9·8 | | 16 | 7·0 | 29·1 | |
| 8·0 | | | 29·0 | 19·9 | 8·5 GS*g* |
| 9·0 | | | 45·0 | 39·4 | 9·0 *g* |
| 9·7 | | 19 | 4·0 | 46·5 | *g* |
| 9·3 | | 20 | 2·0 | 0·8 | *g* |
| 9·1 | | | 32·0 | 55·5 | |
| 9·4 | | | 37·0 | 12·7 | |
| 9·8 | | 23 | 3·0 | 0·3 | |
| 6·8 | | 26 | 38·0 | 48·5 | GS*g* |
| 9·0 | | 27 | 10·0 | 51·7 | Gk*g* |
| 8·7 | | | 30·0 | 32·1 | *g* |
| 9·5 | | | 42·0 | 26·0 | |
| 9·3 | | 30 | 49·0 | 37·9 | |
| 9·7 | | 32 | 41·0 | 22·3 | |
| 9·5 | | 38 | 8·0 | 33·3 | *g* |
| 9·7 | | | 10·0 | 16·3 | |
| 9·5 | | | 55·0 | 43·3 | |
| 9·0 | | 40 | 3·0 | 24·5 | 9·5 *g* |
| 9·2 | | | 30·0 | 25·8 | *g* |
| 8·2 | | 45 | 5·0 | 41·7 | 8·5 G$*g* |
| 9·2 | | 46 | 28·0 | 33·4 | 9·5 *g* |
| 8·9 | | | 51·0 | 2·0 | *g* |
| 8·3 | | 50 | 51·0 | 20·7 | 9·0 *g* |
| 9·5 | | 52 | 56·0 | 53·4 | *g* |
| 10·0 | | 53 | 27·0 | 49·6 | *g* |
| 9·3 | | 55 | 42·0 | 12·4 | *g* |
| 9·0 | | 57 | 14·0 | 33·4 | 9·0 *g* |
| 9·8 | 5 | 2 | 9·0 | 21·8 | *g* |
| 9·0 | | | 49·0 | 48·6 | *g* |
| 9·7 | | 3 | 18·0 | 33·6 | *g* |
| 9·8 | | | 24·0 | 33·7 | *g* |
| 9·3 | | | 42·0 | 18·9 | 9·0 *g* |
| 9·7 | | 7 | 3·0 | 23·0 | |
| 10·0 | | 9 | 53·0 | 31·3 | |
| 9·4 | | 12 | 6·0 | 40·0 | *g* |
| 8·5 | | | 21·0 | 51·8 | 9·5 *g* |
| 9·3 | | 16 | 34·0 | 55·2 | *g* |
| 9·6 | | 17 | 2·0 | 34·3 | *g* |
| 10·0 | | 18 | 35·0 | 54·5 | |
| 9·5 | | | 37·0 | 57·6 | 9·0 *g* |
| 9·2 | | 19 | 58·0 | 7·2 | 9·5 *g* |
| 9·4 | | 20 | 17·0 | 12·1 | 9·5 *g* |
| 9·8 | | 22 | 41·0 | 55·7 | |
| 9·8 | | 23 | 44·0 | 15·0 | |
| 9·8 | | 28 | 52·0 | 28·0 | |
| 9·4 | | 29 | 19·0 | 47·2 | 9·0 *g* |
| 9·8 | | 31 | 4·0 | 1·3 | |
| 9·6 | | 32 | 32·0 | 47·4 | 9·5 *g* |

## 181—240.

| mag. | $5^{h.}$–$7^{h.}$ h | m | s | –79° ′ | |
|---|---|---|---|---|---|
| 9·6 | 5 | 32 | 35·0 | 41·0 | |
| 9·8 | | | 55·0 | 50·6 | *g* |
| 10·0 | | | 55·0 | 53·0 | *g* |
| 8·6 | | 34 | 45·0 | 51·3 | 9·2 *g* |
| 9·8 | | 36 | 27·0 | 55·5 | |
| 8·6 | | 39 | 13·0 | 5·2 | 9·0 *g* |
| 9·8 | | | 26·0 | 55·7 | |
| 9·6 | | 42 | 26·0 | 52·0 | |
| 9·3 | | | 44·0 | 35·6 | *g* |
| 9·2 | | 43 | 19·0 | 53·5 | 9·2 *g* |
| 9·6 | | | 41·0 | 26·4 | |
| 9·9 | | 45 | 35·0 | 54·0 | *g* |
| 8·0 | | | 36·0 | 58·3 | 8·8 GS*g* |
| 9·8 | | 50 | 57·0 | 33·3 | |
| 9·8 | | 51 | 27·0 | 13·9 | |
| 8·8 | | | 50·0 | 34·4 | 9·2 *g* |
| 9·9 | | | 57·0 | 22·1 | |
| 9·6 | | 52 | 58·0 | 20·6 | 9·0 *g* |
| 9·8 | | 57 | 7·0 | 10·9 | |
| 9·4 | | | 53·0 | 48·7 | |
| 10·0 | | 58 | 28·0 | 16·9 | |
| 5·6 | | | 42·0 | 22·9 | 6·0 GSc*g* |
| 9·2 | | 59 | 0·0 | 19·0 | 9·0 *g* |
| 9·8 | 6 | 1 | 20·0 | 43·1 | |
| 9·6 | | 4 | 37·0 | 31·4 | *g* |
| 10·0 | | 5 | 28·0 | 23·0 | *g* |
| 9·2 | | 7 | 56·0 | 44·2 | |
| 9·5 | | 8 | 45·0 | 12·4 | 9·0 *g* |
| 9·8 | | 9 | 28·0 | 52·3 | |
| 8·4 | | 10 | 27·0 | 51·3 | 9·0 *g* |
| 9·5 | | 12 | 27·0 | 30·7 | |
| 9·8 | | | 29·0 | 27·0 | |
| 9·6 | | 15 | 20·0 | 13·0 | |
| 8·6 | | 17 | 7·0 | 41·2 | *g* |
| 9·4 | | 18 | 21·0 | 10·0 | 9·5 *g* |
| 9·8 | | 24 | 4·0 | 8·6 | |
| 9·8 | | 25 | 1·0 | 22·8 | |
| 9·4 | | 30 | 59·0 | 33·0 | |
| 9·0 | | 33 | 11·0 | 37·8 | *g* |
| 9·4 | | 36 | 48·c | 42·1 | 9·0 *g* |
| 9·2 | | 38 | 26·0 | 50·8 | |
| 9·2 | | | 55·0 | 21·6 | |
| 10·0 | | 46 | 21·0 | 4·8 | |
| 9·7 | | 47 | 7·0 | 34·9 | |
| 10·0 | | 48 | 20·0 | 5·5 | |
| 9·5 | | | 37·0 | 44·7 | |
| 9·5 | | | 55·0 | 3·6 | |
| 8·9 | | 50 | 24·0 | 28·2 | |
| 8·7 | | | 29·0 | 59·2 | 9·0 *g* |
| 9·2 | | | 32·0 | 23·2 | |
| 9·5 | | 51 | 33·0 | 55·2 | 9·5 *g* |
| 9·0 | | 52 | 26·0 | 41·9 | 9·5 |
| 9·3 | | 54 | 58·0 | 2·3 | *g* |
| 9·2 | | 56 | 16·0 | 40·9 | |
| 8·9 | | 59 | 33·0 | 58·3 | 8·5 GS*g* |
| 9·8 | 7 | 1 | 42·0 | 47·0 | |
| 9·2 | | 4 | 17·0 | 26·5 | 9·0 *g* |
| 5·2 | | | 27·0 | 14·1 | 6·0 GS*g* |
| 9·5 | | | 43·0 | 57·4 | |
| 9·2 | | 5 | 4·0 | 14·8 | |

## 241—300.

| mag. | $7^{h.}$–$8^{h.}$ h | m | s | –79° ′ | |
|---|---|---|---|---|---|
| 9·3 | 7 | 8 | 41·0 | 30·1 | |
| 9·2 | | 15 | 39·0 | 16·0 | |
| 7·2 | | 17 | 6·0 | 12·9 | 8·0 GS*g* |
| 9·5 | | 19 | 54·0 | 29·5 | |
| 8·2 | | | 58·0 | 45·6 | *g* |
| 9·9 | | 26 | 31·0 | 32·9 | |
| 8·8 | | 29 | 36·0 | 42·6 | 9·5 *g* |
| 9·5 | | 30 | 11·0 | 29·7 | |
| 9·8 | | 32 | 42·0 | 55·6 | |
| 9·7 | | 38 | 8·0 | 25·0 | |
| 9·2 | | 41 | 19·0 | 0·2 | 9·5 |
| 9·1 | | 43 | 59·0 | 47·7 | |
| 8·9 | | 45 | 24·0 | 30·4 | *g* |
| 8·6 | | | 42·0 | 7·2 | 8·5 *g* |
| 8·7 | | 52 | 36·0 | 21·0 | 9·0 *g* |
| 8·4 | | 57 | 44·0 | 50·4 | 9·0 *g* |
| 8·7 | 8 | 4 | 22·0 | 17·0 | 7·8 GS*g* |
| 9·2 | | 7 | 24·0 | 30·1 | |
| 8·9 | | 8 | 7·0 | 19·2 | 9·0 *g* |
| 10·2 | | | 34·0 | 47·7 | |
| 9·6 | | 9 | 20·0 | 48·4 | |
| 9·8 | | | 45·0 | 17·9 | |
| 9·7 | | | 53·0 | 1·1 | |
| 10·0 | | 10 | 26·0 | 51·8 | |
| 10·2 | | | 35·0 | 42·7 | |
| 9·8 | | 11 | 6·0 | 13·9 | |
| 10·0 | | | 13·0 | 37·3 | |
| 9·9 | | | 39·0 | 15·8 | |
| 9·8 | | 12 | 16·0 | 6·5 | |
| 10·3 | | 14 | 20·0 | 58·7 | |
| 10·1 | | | 43·0 | 23·3 | |
| 9·8 | | 15 | 20·0 | 35·0 | |
| 10·1 | | | 57·c | 2·3 | |
| 10·0 | | 17 | 3·0 | 3·2 | |
| 9·2 | | | 38·0 | 22·2 | 9·5 *g* |
| 9·8 | | 18 | 26·0 | 12·4 | |
| 9·8 | | | 43·0 | 44·8 | |
| 9·1 | | | 52·0 | 36·1 | 10·0 *g* |
| 9·9 | | 19 | 12·0 | 2·0 | |
| 9·9 | | | 56·0 | 9·6 | |
| 9·7 | | | 59·0 | 29·0 | |
| 10·3 | | 20 | 16·0 | 55·6 | |
| 10·0 | | | 53·0 | 9·7 | |
| 9·6 | | | 56·0 | 58·0 | |
| 10·0 | | 21 | 1·0 | 35·8 | |
| 10·0 | | | 36·0 | 31·6 | |
| 9·7 | | 22 | 21·0 | 18·5 | |
| 10·2 | | 23 | 5·0 | 2·3 | |
| 10·2 | | | 16·0 | 32·1 | |
| 9·4 | | 24 | 1·0 | 44·7 | |
| 10·2 | | | 26·0 | 53·9 | |
| 10·2 | | 25 | 23·0 | 36·7 | |
| 10·3 | | | 30·0 | 41·3 | |
| 9·5 | | | 37·0 | 9·7 | |
| 10·1 | | | 40·0 | 34·3 | |
| 10·3 | | 26 | 31·0 | 38·7 | |
| 9·5 | | | 31·0 | 32·0 | *g* |
| 10·0 | | | 42·0 | 25·5 | |
| 10·2 | | 28 | 4·0 | 10·9 | |
| 10·3 | | | 5·0 | 46·3 | |



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### 301—360.

| mag. | h | m | s (8h.) | −79° ′ | |
|---|---|---|---|---|---|
| 10·2 | 8 | 28 | 41·0 | 29·4 | |
| 9·7 | | 29 | 6·0 | 26·2 | |
| 10·0 | | | 20·0 | 41·7 | |
| 10·1 | | | 52·0 | 30·8 | |
| 9·6 | | 30 | 29·0 | 19·3 | |
| 10·0 | | | 36·0 | 12·0 | |
| 9·6 | | | 39·0 | 56·8 | |
| 9·8 | | | 43·0 | 22·5 | |
| 10·3 | | | 59·0 | 36·1 | |
| 9·8 | | 31 | 7·0 | 38·8 | |
| 10·0 | | | 39·0 | 8·7 | |
| 10·2 | | | 59·0 | 0·5 | |
| 10·0 | | 32 | 21·0 | 10·6 | |
| 9·8 | | | 45·0 | 57·2 | |
| 10·0 | | 34 | 1·0 | 18·4 | |
| 10·3 | | | 9·0 | 10·2 | |
| 10·3 | | | 22·0 | 15·7 | |
| 10·2 | | 35 | 12·0 | 56·7 | |
| 10·1 | | | 36·0 | 13·4 | |
| 10·3 | | 36 | 24·0 | 24·0 | |
| 10·0 | | | 52·0 | 21·0 | |
| 10·0 | | 38 | 36·0 | 40·4 | |
| 10·2 | | | 36·0 | 11·1 | |
| 10·0 | | | 46·0 | 57·6 | |
| 9·6 | | | 51·0 | 2·5 | |
| 9·9 | | 39 | 1·0 | 5·4 | |
| 8·4 | | | 24·0 | 43·1 | 7·5 GS*g* |
| 10·3 | | | 25·0 | 0·6 | |
| 9·8 | | 41 | 0·0 | 8·1 | |
| 10·0 | | | 13·0 | 1·3 | |
| 10·2 | | | 38·0 | 12·0 | |
| 10·3 | | 43 | 2·0 | 44·7 | |
| 10·2 | | | 12·0 | 17·8 | |
| 10·3 | | | 14·0 | 22·4 | |
| 10·1 | | | 50·0 | 44·8 | |
| 10·0 | | 44 | 14·0 | 4·0 | |
| 10·2 | | | 19·0 | 0·0 | |
| 9·7 | | | 25·0 | 31·9 | |
| 10·3 | | | 41·0 | 0·8 | |
| 8·4 | | 45 | 8·0 | 13·0 | 8·2 GS*g* |
| 10·3 | | | 18·0 | 21·1 | |
| 9·9 | | | 37·0 | 28·2 | |
| 9·8 | | | 38·0 | 39·3 | |
| 10·2 | | 46 | 42·0 | 1·9 | |
| 10·0 | | 48 | 0·0 | 49·5 | |
| 9·8 | | | 25·0 | 35·3 | |
| 9·9 | | | 41·0 | 53·7 | |
| 10·2 | | | 51·0 | 57·6 | |
| 10·0 | | 49 | 54·0 | 34·8 | |
| 9·9 | | | 54·0 | 20·8 | |
| 9·8 | | 50 | 13·0 | 5·5 | |
| 7·7 | | | 25·0 | 2·4 | 6·5 GSc*g*r |
| 8·7 | | | 35·0 | 13·4 | 9·0 *g* |
| 10·3 | | 51 | 28·0 | 9·0 | |
| 10·3 | | 52 | 4·0 | 11·9 | |
| 10·0 | | | 17·0 | 8·4 | |
| 10·0 | | 54 | 11·0 | 44·8 | |
| 10·0 | | | 57·0 | 14·1 | *g* |
| 10·2 | | 55 | 53·0 | 38·5 | |
| 9·7 | | | 57·0 | 37·3 | 10·0 *g* |

### 361—420.

| mag. | h | m | s (8h.—9h.) | −79° ′ | |
|---|---|---|---|---|---|
| 9·8 | 8 | 56 | 15·0 | 39·8 | *g* |
| 9·8 | | | 38·0 | 42·3 | *g* |
| 9·5 | | | 49·0 | 49·7 | 10·0 *g* |
| 10·3 | | | 59·0 | 10·9 | |
| 9·0 | | 57 | 5·0 | 43·3 | 9·0 *g* |
| 10·2 | | | 27·0 | 7·0 | |
| 9·9 | | 58 | 50·0 | 17·3 | |
| 10·1 | | 59 | 35·0 | 38·5 | |
| 10·3 | | | 45·0 | 10·6 | |
| 10·2 | 9 | 0 | 34·0 | 57·6 | |
| 8·0 | | 1 | 26·0 | 38·9 | 9·0 *g* |
| 10·0 | | 2 | 18·0 | 42·7 | *g* |
| 9·7 | | | 40·0 | 4·6 | *g* |
| 9·6 | | 4 | 13·0 | 1·3 | *g* |
| 10·3 | | | 32·0 | 5·2 | |
| 9·7 | | 5 | 46·0 | 21·7 | |
| 9·9 | | 6 | 11·0 | 16·5 | |
| 10·0 | | 7 | 12·0 | 56·8 | |
| 9·8 | | | 23·0 | 14·2 | |
| 10·1 | | | 54·0 | 49·2 | |
| 9·5 | | 8 | 41·0 | 14·0 | *g* |
| 9·9 | | | 59·0 | 5·5 | |
| 10·2 | | 9 | 36·0 | 50·9 | |
| 10·1 | | 10 | 46·0 | 4·4 | |
| 10·0 | | 11 | 3·0 | 38·1 | |
| 10·1 | | | 18·0 | 3·0 | |
| 10·2 | | | 58·0 | 30·9 | |
| 10·2 | | 12 | 50·0 | 30·0 | |
| 9·3 | | 14 | 55·0 | 32·9 | *g* |
| 9·5 | | 15 | 1·0 | 15·0 | |
| 10·2 | | | 31·0 | 12·5 | |
| 10·1 | | 16 | 11·0 | 30·8 | |
| 10·2 | | | 45·0 | 37·9 | |
| 10·1 | | 17 | 27·0 | 30·4 | |
| 10·1 | | 18 | 41·0 | 6·0 | |
| 9·5 | | 19 | 4·0 | 0·5 | 9·0 *g* |
| 10·0 | | | 26·0 | 20·5 | |
| 10·0 | | | 59·0 | 34·4 | |
| 9·9 | | 20 | 17·0 | 47·3 | |
| 10·1 | | | 40·0 | 12·8 | |
| 8·9 | | 21 | 20·0 | 12·3 | 9·0 *g* |
| 8·5 | | | 35·0 | 54·3 | 9·0 *g* |
| 9·8 | | 22 | 5·0 | 25·0 | |
| 10·2 | | 23 | 56·0 | 1·6 | |
| 9·4 | | 24 | 17·0 | 4·7 | *g* |
| 8·4 | | | 29·0 | 51·4 | 7·5 GS*g* |
| 9·9 | | | 49·0 | 29·1 | |
| 10·3 | | | 56·0 | 57·0 | |
| 9·7 | | 25 | 2·0 | 12·0 | |
| 10·1 | | | 39·0 | 52·8 | |
| 10·2 | | 26 | 57·0 | 50·5 | *g* |
| 10·1 | | 27 | 27·0 | 28·4 | |
| 10·1 | | 28 | 54·0 | 50·5 | *g* |
| 10·1 | | 29 | 15·0 | 1·1 | |
| 9·4 | | 30 | 5·0 | 17·0 | |
| 9·9 | | 31 | 0·0 | 7·9 | |
| 10·3 | | 32 | 5·0 | 50·5 | |
| 9·5 | | | 17·0 | 7·1 | |
| 10·0 | | | 38·0 | 11·0 | |
| 9·5 | | | 56·0 | 24·3 | 9·0 *g* |

### 421—480.

| mag. | h | m | s (9h.—10h.) | −79° ′ | |
|---|---|---|---|---|---|
| 9·7 | 9 | 33 | 19·0 | 44·6 | |
| 9·0 | | | 51·0 | 49·6 | 9·0 *g* |
| 10·2 | | 34 | 36·0 | 41·1 | |
| 9·7 | | | 59·0 | 56·2 | |
| 10·1 | | 35 | 50·0 | 18·1 | |
| 10·1 | | 36 | 10·0 | 57·9 | |
| 10·0 | | | 22·0 | 54·9 | |
| 9·8 | | 37 | 3·0 | 54·9 | |
| 9·0 | | | 13·0 | 18·5 | 9·0 *g* |
| 9·9 | | | 21·0 | 0·2 | *g* |
| 9·9 | | | 22·0 | 11·1 | |
| 9·8 | | | 40·0 | 37·8 | *g* |
| 9·1 | | 39 | 19·0 | 16·4 | 9·0 *g* |
| 9·7 | | | 35·0 | 39·6 | *g* |
| 10·2 | | | 59·0 | 31·9 | |
| 7·8 | | 40 | 41·0 | 46·9 | 8·5 *g* |
| 9·7 | | | 48·0 | 1·9 | |
| 10·1 | | 41 | 12·0 | 23·7 | |
| 10·2 | | | 26·0 | 34·4 | |
| 10·2 | | | 32·0 | 38·9 | |
| 10·2 | | | 34·0 | 8·5 | |
| 9·3 | | | 34·0 | 10·6 | 9·0 *g* |
| 9·8 | | | 39·0 | 18·0 | |
| 9·7 | | | 54·0 | 49·0 | 9·0 *g* |
| 9·4 | | 42 | 20·0 | 6·5 | 9·0 *g* |
| 8·4 | | | 28·0 | 49·0 | 9·0 *g* |
| 9·8 | | 44 | 31·0 | 21·5 | |
| 8·4 | | | 54·0 | 1·0 | 8·0 GS*g*g |
| 9·7 | | 47 | 17·0 | 35·0 | |
| 8·8 | | | 25·0 | 55·8 | *g* |
| 9·4 | | | 39·0 | 4·0 | |
| 9·7 | | | 57·0 | 4·0 | |
| 9·6 | | | 58·0 | 56·9 | |
| 9·7 | | 50 | 30·0 | 57·9 | |
| 9·9 | | 51 | 55·0 | 51·9 | |
| 9·8 | | 52 | 34·0 | 11·1 | |
| 6·9 | | | 47·0 | 28·2 | 7·0 GS*g* |
| 9·4 | | 54 | 26·0 | 56·3 | |
| 9·5 | | | 36·0 | 55·9 | |
| 9·8 | | 55 | 56·0 | 10·9 | |
| 9·7 | | 56 | 7·0 | 55·0 | |
| 9·5 | | | 15·0 | 36·0 | |
| 9·7 | | | 16·0 | 13·3 | |
| 9·1 | | | 20·0 | 49·5 | *g* |
| 9·9 | | 57 | 7·0 | 38·8 | |
| 9·9 | | 59 | 3·0 | 9·7 | |
| 9·7 | | | 33·0 | 25·3 | |
| 9·4 | 10 | 0 | 0·0 | 0·0 | |
| 9·7 | | | 16·0 | 28·1 | |
| 9·3 | | | 25·0 | 22·4 | |
| 9·6 | | 2 | 34·0 | 15·9 | |
| 9·8 | | 3 | 54·0 | 44·3 | |
| 9·4 | | 4 | 15·0 | 18·1 | |
| 9·7 | | | 21·0 | 57·2 | |
| 8·6 | | | 52·0 | 31·2 | 9·0 *g* |
| 9·7 | | | 57·0 | 4·0 | |
| 9·2 | | 5 | 59·0 | 3·0 | 9·0 *g* |
| 9·7 | | 6 | 26·0 | 35·5 | |
| 9·7 | | 7 | 11·0 | 2·0 | |
| 9·7 | | 8 | 57·0 | 4·3 | |

25 prec

| h | m | α s | α s | δ ′ |
|---|---|---|---|---|
| 8 | 20 | − 64 | − 0·24 d | − 4·8 |
| | 30 | 60 | − 0·23 | 5·1 |
| | 40 | 55 | − 0·22 | 5·4 |
| | 50 | 50 | − 0·22 | 5·6 |
| 9 | 0 | 45 | − 0·21 | 5·9 |
| | 10 | 39 | − 0·20 | 6·2 |
| | 20 | 34 | − 0·19 | 6·4 |
| | 30 | 28 | − 0·18 | 6·6 |
| | 40 | 22 | − 0·17 | 6·8 |
| | 50 | 16 | − 0·16 | 7·0 |
| 10 | 0 | 9 | − 0·15 | 7·2 |
| | 10 | − 3 | − 0·14 | − 7·4 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 10 | 0 | − 9 − 0·15 d | − 7·2 |
| | 10 | − 3 − 0·14 | 7·4 |
| | 20 | + 4 − 0·12 | 7·6 |
| | 30 | 11 − 0·11 | 7·7 |
| | 40 | 18 − 0·10 | 7·9 |
| | 50 | 25 − 0·09 | 8·0 |
| 11 | 0 | 32 − 0·08 | 8·1 |
| | 10 | 40 − 0·06 | 8·2 |
| | 20 | 47 − 0·05 | 8·2 |
| | 30 | 54 − 0·04 | 8·3 |
| | 40 | 62 − 0·03 | 8·3 |
| | 50 | 69 − 0·01 | 8·3 |
| 12 | 0 | + 77 0·00 | − 8·4 |

d = minutes of decl.

## 481—540.

| mag. | h (10h.) | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·3 | 10 | 9 | 0·0 | 42·0 | 10·0 *g* |
| 9·4 | | | 13·0 | 44·4 | 9·5 *g* |
| 9·9 | | | 37·0 | 26·5 | |
| 9·5 | | 11 | 39·0 | 18·8 | |
| 9·8 | | 12 | 10·0 | 16·3 | |
| 9·9 | | | 20·0 | 54·2 | |
| 9·9 | | | 55·0 | 41·0 | |
| 9·5 | | 14 | 46·0 | 40·9 | |
| 9·6 | | 15 | 6·0 | 35·5 | |
| 9·8 | | | 19·0 | 59·8 | |
| 9·8 | | 17 | 42·0 | 5·0 | |
| 9·7 | | | 44·0 | 43·4 | |
| 9·9 | | 18 | 19·0 | 6·4 | |
| 9·6 | | 19 | 40·0 | 47·3 | |
| 9·4 | | | 41·0 | 27·8 | |
| 9·5 | | | 57·0 | 10·4 | |
| 9·9 | | 20 | 16·0 | 41·8 | |
| 9·8 | | | 23·0 | 51·5 | |
| 9·6 | | | 31·0 | 46·1 | |
| 9·9 | | 21 | 4·0 | 48·0 | |
| 9·7 | | | 36·0 | 19·8 | |
| 9·9 | | 22 | 31·0 | 41·7 | |
| 9·4 | | | 38·0 | 0·8 | *g* |
| 9·6 | | | 48·0 | 6·3 | |
| 9·5 | | 23 | 56·0 | 1·8 | *g* |
| 9·7 | | 24 | 0·0 | 19·9 | |
| 9·2 | | 25 | 18·0 | 37·2 | |
| 9·4 | | | 41·0 | 39·8 | |
| 9·4 | | 27 | 20·0 | 6·8 | G*gg* |
| 9·7 | | 28 | 12·0 | 22·8 | |
| 9·4 | | | 12·0 | 35·2 | |
| 9·7 | | | 12·0 | 25·5 | |
| 9·5 | | | 41·0 | 45·7 | |
| 9·7 | | | 47·0 | 25·0 | |
| 9·6 | | | 55·0 | 59·0 | |
| 8·9 | | 29 | 19·0 | 52·2 | *g* |
| 8·7 | | | 31·0 | 7·5 | 9·0 G*gg* |
| 9·8 | | | 33·0 | 1·4 | |
| 9·7 | | 30 | 0·0 | 8·8 | |
| 9·4 | | | 6·0 | 20·6 | |
| 9·4 | | | 10·0 | 0·0 | |
| 9·5 | | | 31·0 | 12·9 | |
| 9·5 | | | 50·0 | 39·3 | |
| 9·8 | | 31 | 38·0 | 37·1 | |
| 9·7 | | 32 | 36·0 | 1·2 | |
| 9·8 | | | 55·0 | 49·5 | |
| 9·3 | | 33 | 22·0 | 45·5 | |
| 9·4 | | | 25·0 | 21·7 | |
| 7·4 | | | 28·0 | 52·3 | GS*g* |
| 9·5 | | | 37·0 | 15·4 | |
| 9·7 | | | 53·0 | 9·6 | |
| 9·5 | | | 56·0 | 33·2 | |
| 9·4 | | 34 | 0·0 | 16·1 | *g* |
| 9·7 | | | 22·0 | 31·4 | |
| 9·7 | | | 46·0 | 15·3 | |
| 9·9 | | | 53·0 | 33·1 | |
| 9·7 | | | 56·0 | 8·7 | |
| 9·8 | | | 56·0 | 19·8 | |
| 8·4 | | 35 | 19·0 | 38·9 | 9·0 *g* |
| 9·9 | | 36 | 39·0 | 17·1 | |

## 541—600.

| mag. | h (10h.—11h.) | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·5 | 10 | 37 | 21·0 | 9·8 | |
| 9·7 | | 38 | 59·0 | 37·1 | |
| 9·8 | | 39 | 57·0 | 1·9 | |
| 9·9 | | | 59·0 | 0·2 | |
| 9·9 | | 40 | 17·0 | 32·8 | |
| 9·4 | | | 21·0 | 4·1 | |
| 9·5 | | | 22·0 | 38·3 | |
| 6·0 | | | 32·0 | 7·8 | 6·5 GS*g* |
| 9·4 | | 41 | 58·0 | 40·2 | |
| 9·8 | | 43 | 34·0 | 11·7 | |
| 9·7 | | | 36·0 | 0·1 | |
| 9·7 | | | 38·0 | 9·0 | |
| 9·6 | | | 40·0 | 38·7 | |
| 7·2 | | 44 | 1·0 | 48·5 | 6·0 GS*gr* |
| 9·1 | | | 15·0 | 56·1 | 8·8 *g* |
| 4·8 | | | 36·0 | 52·8 | 5·0 GSc*grλ* |
| 9·3 | | | 37·0 | 8·9 | *g* |
| 9·4 | | 45 | 51·0 | 52·3 | |
| 9·4 | | | 57·0 | 2·7 | |
| 9·5 | | 46 | 3·0 | 37·9 | |
| 9·5 | | | 20·0 | 42·3 | |
| 9·7 | | | 33·0 | 16·8 | |
| 9·1 | | 47 | 15·0 | 30·0 | 9·0 *g* |
| 9·6 | | | 16·0 | 16·0 | |
| 9·4 | | | 23·0 | 1·6 | |
| 9·7 | | 48 | 33·0 | 25·6 | |
| 9·6 | | | 57·0 | 36·8 | |
| 9·3 | | 49 | 34·0 | 20·0 | |
| 9·3 | | | 37·0 | 29·0 | |
| 8·9 | | | 53·0 | 17·9 | 8·5 G*g* |
| 9·7 | | 50 | 41·0 | 28·2 | |
| 9·8 | | 51 | 15·0 | 39·0 | |
| 9·5 | | | 56·0 | 35·1 | |
| 9·5 | | 53 | 6·0 | 30·5 | |
| 9·6 | | | 51·0 | 38·9 | |
| 9·2 | | 54 | 57·0 | 49·1 | 9·0 *g* |
| 9·3 | | 55 | 16·0 | 23·2 | |
| 9·8 | | 57 | 16·0 | 47·2 | |
| 9·5 | | | 19·0 | 43·8 | |
| 9·3 | | | 39·0 | 40·8 | *g* |
| 9·2 | | | 47·0 | 6·9 | |
| 9·3 | | 58 | 3·0 | 17·1 | *g* |
| 9·1 | | | 11·0 | 36·2 | *g* |
| 9·2 | | 59 | 47·0 | 5·2 | *g* |
| 9·9 | | | 58·0 | 35·1 | |
| 9·8 | 11 | 0 | 2·0 | 59·8 | |
| 9·5 | | 1 | 34·0 | 17·4 | |
| 9·6 | | | 40·0 | 51·9 | |
| 9·5 | | 2 | 26·0 | 40·7 | |
| 9·8 | | | 55·0 | 53·0 | |
| 9·7 | | 3 | 37·0 | 7·1 | |
| 9·5 | | | 41·0 | 30·7 | |
| 9·3 | | 4 | 4·0 | 38·3 | |
| 9·5 | | | 15·0 | 39·8 | |
| 9·2 | | | 22·0 | 47·3 | 9·0 *g* |
| 9·1 | | | 30·0 | 51·0 | |
| 8·5 | | | 34·0 | 4·8 | 9·0 *g* |
| 9·8 | | 5 | 7·0 | 37·2 | |
| 9·8 | | | 14·0 | 59·4 | |
| 9·3 | | | 42·0 | 42·7 | 9·5 *g* |

## 601—660.

| mag. | h (11h.) | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·9 | 11 | 6 | 5·0 | 44·2 | |
| 9·4 | | | 16·0 | 17·0 | |
| 9·8 | | | 32·0 | 11·6 | |
| 9·4 | | 7 | 16·0 | 32·9 | |
| 9·7 | | | 22·0 | 35·4 | |
| 9·0 | | 10 | 28·0 | 43·1 | *g* |
| 9·7 | | | 35·0 | 39·0 | |
| 9·7 | | 11 | 33·0 | 25·3 | |
| 9·5 | | 12 | 0·0 | 34·0 | |
| 9·4 | | | 13·0 | 58·2 | *g* |
| 10·2 | | | 40·0 | 33·3 | |
| 9·9 | | | 53·0 | 23·3 | |
| 9·9 | | 13 | 7·0 | 33·7 | |
| 9·2 | | | 16·0 | 46·9 | |
| 10·0 | | | 21·0 | 7·1 | |
| 9·8 | | | 36·0 | 31·7 | |
| 9·9 | | | 54·0 | 11·1 | |
| 10·1 | | 14 | 43·0 | 7·4 | |
| 9·6 | | 15 | 31·0 | 6·1 | |
| 10·0 | | | 36·0 | 34·0 | |
| 9·7 | | 16 | 55·0 | 34·0 | |
| 10·3 | | 17 | 32·0 | 49·4 | |
| 9·5 | | | 45·0 | 58·2 | *g* |
| 9·8 | | | 51·0 | 25·0 | |
| 10·0 | | 18 | 0·0 | 29·1 | |
| 10·3 | | | 28·0 | 4·9 | |
| 10·3 | | 19 | 35·0 | 5·0 | |
| 10·0 | | 20 | 58·0 | 30·0 | |
| 10·2 | | 21 | 3·0 | 4·9 | |
| 10·0 | | | 24·0 | 52·1 | |
| 9·6 | | | 28·0 | 57·0 | |
| 9·4 | | | 29·0 | 50·0 | *g* |
| 10·3 | | | 47·0 | 35·9 | |
| 9·7 | | 25 | 10·0 | 4·7 | |
| 9·9 | | | 43·0 | 23·7 | |
| 9·7 | | | 51·0 | 29·9 | |
| 7·9 | | 29 | 17·0 | 33·6 | 8·5 *g* |
| 10·0 | | | 20·0 | 5·5 | |
| 10·2 | | 30 | 12·0 | 52·5 | |
| 9·3 | | 31 | 40·0 | 38·7 | 9·0 *g* |
| 9·7 | | 32 | 48·0 | 52·0 | |
| 10·0 | | 33 | 7·0 | 43·6 | |
| 9·7 | | | 36·0 | 18·7 | *g* |
| 9·4 | | 35 | 19·0 | 49·7 | *g* |
| 9·9 | | | 33·0 | 30·2 | |
| 9·6 | | | 42·0 | 33·6 | *g* |
| 10·0 | | 38 | 12·0 | 42·4 | |
| 6·6 | | | 34·0 | 47·4 | 7·0 GS*g* |
| 9·8 | | | 51·0 | 40·0 | |
| 10·2 | | 40 | 4·0 | 37·7 | |
| 10·0 | | | 55·0 | 39·7 | |
| 10·2 | | 42 | 28·0 | 39·5 | |
| 9·0 | | 43 | 43·0 | 28·6 | |
| 9·5 | | 45 | 15·0 | 58·9 | |
| 9·9 | | | 49·0 | 6·1 | |
| 9·8 | | | 56·0 | 31·0 | |
| 9·8 | | 46 | 39·0 | 2·8 | |
| 10·0 | | 47 | 22·0 | 10·0 | |
| 9·0 | | 49 | 28·0 | 1·1 | 9·5 *g* |
| 10·0 | | 50 | 48·0 | 47·1 | |



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## 661—720.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 7·6 | 11 | 51 | 17·0 | 47·9 | 7·5 Gg |
| 9·9 | | 53 | 24·0 | 23·4 | |
| 9·8 | | 54 | 26·0 | 16·7 | |
| 10·3 | | | 41·0 | 4·1 | |
| 10·0 | | 55 | 27·0 | 41·2 | |
| 10·0 | | 56 | 15·0 | 1·7 | |
| 10·0 | | | 34·0 | 35·6 | |
| 10·0 | | 57 | 9·0 | 56·1 | |
| 9·7 | | 58 | 45·0 | 24·0 | g |
| 10·2 | | 59 | 8·0 | 34·6 | |
| 9·9 | | | 20·0 | 20·9 | |
| 9·8 | 12 | 0 | 2·0 | 11·4 | |
| 10·2 | | | 15·0 | 34·7 | |
| 9·3 | | | 17·0 | 1·4 | g |
| 8·8 | | | 30·0 | 33·7 | g |
| 9·3 | | 2 | 0·0 | 17·8 | g |
| 9·8 | | | 39·0 | 41·2 | |
| 9·9 | | | 59·0 | 45·1 | |
| 9·7 | | 3 | 7·0 | 36·2 | |
| 9·3 | | | 45·0 | 1·9 | g |
| 9·8 | | 8 | 22·0 | 45·4 | g |
| 8·9 | | 10 | 4·0 | 53·3 | 9·0 g |
| 9·8 | | | 41·0 | 0·0 | |
| 9·8 | | 11 | 55·0 | 49·4 | |
| 9·9 | | 12 | 21·0 | 50·3 | |
| 7·6 | | 13 | 50·0 | 22·0 | 8·0 GSg |
| 9·8 | | 16 | 58·0 | 10·9 | |
| 9·8 | | 17 | 25·0 | 23·6 | |
| 9·9 | | 19 | 36·0 | 24·1 | |
| 9·9 | | 23 | 12·0 | 20·9 | |
| 9·9 | | | 15·0 | 41·6 | |
| 9·0 | | | 39·0 | 30·1 | g |
| 7·3 | | 24 | 4·0 | 5·5 | 7·0 GSg |
| 9·8 | | | 4·0 | 6·1 | |
| 8·7 | | 25 | 18·0 | 3·7 | 9·2 Gg |
| 10·0 | | 26 | 26·0 | 47·1 | |
| 10·0 | | | 59·0 | 1·6 | |
| 10·0 | | 28 | 10·0 | 26·9 | |
| 9·5 | | 29 | 32·0 | 8·6 | |
| 9·7 | | 30 | 1·0 | 59·1 | |
| 10·0 | | 31 | 37·0 | 25·7 | |
| 10·2 | | 32 | 10·0 | 24·5 | |
| 9·9 | | 37 | 58·0 | 15·3 | |
| 10·0 | | 38 | 0·0 | 19·6 | g |
| 10·0 | | | 18·0 | 53·1 | |
| 9·9 | | 39 | 26·0 | 5·8 | |
| 9·5 | | 43 | 21·0 | 54·0 | g |
| 9·5 | | 44 | 53·0 | 23·6 | g |
| 10·3 | | 45 | 54·0 | 52·1 | |
| 9·8 | | 47 | 42·0 | 58·4 | |
| 9·8 | | 48 | 20·0 | 27·0 | |
| 9·8 | | | 41·0 | 49·9 | |
| 8·2 | | 49 | 43·0 | 16·3 | 8·5 g |
| 9·4 | | 51 | 23·0 | 20·7 | 9·5 g |
| 9·5 | | 52 | 42·0 | 10·6 | g |
| 9·7 | | 53 | 42·0 | 10·5 | |
| 8·0 | | | 56·0 | 32·8 | 8·5 GSg |
| 9·7 | | 54 | 31·0 | 20·4 | |
| 8·8 | | 57 | 10·0 | 8·2 | g |
| 9·7 | | | 51·0 | 14·4 | |

## 721—780.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·0 | 12 | 58 | 29·0 | 26·7 | 8·5 g |
| 9·7 | 13 | 0 | 25·0 | 26·9 | |
| 6·7 | | 7 | 38·0 | 18·9 | 6·5 GSg |
| 8·9 | | 8 | 4·0 | 5·1 | g |
| 9·3 | | 9 | 43·0 | 31·4 | g |
| 9·4 | | | 57·0 | 30·3 | |
| 9·7 | | 11 | 52·0 | 45·5 | g |
| 9·3 | | 14 | 20·0 | 2·7 | |
| 9·4 | | | 29·0 | 0·0 | |
| 8·0 | | 17 | 5·0 | 36·3 | 8·5 g |
| 9·4 | | | 7·0 | 7·4 | |
| 9·7 | | 19 | 23·0 | 29·6 | |
| 8·2 | | 20 | 21·0 | 0·7 | 7·0 GSg |
| 9·3 | | 21 | 22·0 | 7·5 | 10·0 g |
| 9·5 | | 24 | 13·0 | 18·3 | g |
| 9·4 | | 26 | 40·0 | 25·0 | Gg |
| 9·4 | | | 53·0 | 28·0 | k |
| 9·3 | | 27 | 22·0 | 2·7 | 9·5 |
| 8·2 | | | 56·0 | 11·9 | 9·0 g |
| 9·0 | | 28 | 44·0 | 56·4 | g |
| 9·0 | | 31 | 6·0 | 14·2 | 9·2 Gg |
| 9·0 | | 32 | 39·0 | 8·1 | 8·0 g |
| 9·5 | | 37 | 29·0 | 3·6 | |
| 7·7 | | 40 | 3·0 | 39·0 | 8·0 g |
| 9·3 | | 41 | 24·0 | 3·4 | |
| 9·4 | | 44 | 17·0 | 8·9 | g |
| 9·2 | | 46 | 29·0 | 56·5 | g |
| 9·5 | | 47 | 58·0 | 2·8 | |
| 9·5 | | 50 | 5·0 | 4·9 | |
| 9·0 | | 51 | 32·0 | 28·4 | g |
| 9·5 | | 52 | 46·0 | 13·0 | g |
| 8·4 | | 56 | 1·0 | 0·7 | g |
| 9·4 | 14 | 0 | 48·0 | 59·2 | 9·0 g |
| 9·4 | | 5 | 19·0 | 54·7 | g |
| 5·2 | | 7 | 22·0 | 31·7 | 6·0 GSgr |
| 8·7 | | | 55·0 | 8·1 | 7·5 g |
| 9·4 | | 11 | 11·0 | 54·1 | g |
| 7·8 | | 13 | 48·0 | 46·7 | g |
| 9·5 | | | 49·0 | 43·6 | g |
| 7·7 | | 14 | 3·0 | 32·2 | GSg |
| 8·5 | | | 8·0 | 10·9 | g |
| 9·6 | | | 15·0 | 10·9 | |
| 9·4 | | 15 | 33·0 | 25·4 | |
| 9·4 | | 16 | 22·0 | 22·0 | g |
| 9·4 | | 17 | 42·0 | 40·9 | |
| 8·0 | | 18 | 17·0 | 23·7 | 7·5 GSg |
| 9·1 | | | 47·0 | 17·0 | g |
| 9·1 | | 19 | 59·0 | 3·1 | |
| 9·7 | | 21 | 10·0 | 23·8 | |
| 8·0 | | 22 | 19·0 | 26·6 | 8·0 GSg |
| 9·6 | | | 32·0 | 49·6 | |
| 8·8 | | 23 | 58·0 | 4·7 | g |
| 9·7 | | 24 | 50·0 | 1·5 | |
| 9·5 | | 26 | 5·0 | 36·4 | |
| 9·5 | | | 35·0 | 23·7 | |
| 9·4 | | | 48·0 | 48·1 | |
| 9·6 | | 27 | 2·0 | 55·1 | |
| 9·7 | | | 3·0 | 46·6 | |
| 9·6 | | 29 | 2·0 | 15·1 | |
| 9·2 | | 30 | 18·0 | 51·1 | g |

## 781—840.

| mag. | h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·5 | 14 | 32 | 38·0 | 3·0 | |
| 9·0 | | 33 | 17·0 | 40·9 | g |
| 9·4 | | 34 | 57·0 | 24·5 | |
| 9·2 | | 35 | 38·0 | 48·0 | g |
| 9·3 | | 36 | 18·0 | 7·7 | |
| 9·3 | | 37 | 24·0 | 30·8 | |
| 9·1 | | | 31·0 | 6·0 | g |
| 9·4 | | | 40·0 | 10·6 | |
| 8·9 | | 39 | 12·0 | 17·1 | 9·0 g |
| 9·4 | | 43 | 14·0 | 49·5 | |
| 9·6 | | | 26·0 | 20·8 | |
| 9·0 | | 44 | 59·0 | 46·2 | 8·5 g |
| 9·1 | | 47 | 38·0 | 30·8 | g |
| 9·6 | | 50 | 24·0 | 21·4 | |
| 7·0 | | | 54·0 | 49·3 | 7·0 GSg |
| 9·1 | | 51 | 42·0 | 22·8 | g |
| 8·7 | | 52 | 54·0 | 53·4 | 9·0 g |
| 7·7 | | 53 | 20·0 | 7·5 | 8·0 GSg |
| 9·6 | | 54 | 11·0 | 30·1 | |
| 9·4 | | | 26·0 | 2·0 | g |
| 9·5 | | | 36·0 | 2·6 | |
| 9·1 | | | 58·0 | 48·4 | g |
| 9·5 | | 55 | 0·0 | 38·7 | |
| 9·7 | | | 32·0 | 9·0 | |
| 9·7 | | | 39·0 | 30·0 | |
| 8·8 | | | 44·0 | 14·1 | 8·5 g |
| 9·4 | | 57 | 13·0 | 39·4 | |
| 9·7 | | | 16·0 | 14·9 | |
| 9·2 | | | 20·0 | 8·0 | g |
| 9·6 | | | 40·0 | 37·2 | |
| 9·7 | | | 44·0 | 3·7 | |
| 9·1 | | 58 | 28·0 | 2·5 | 9·0 g |
| 9·4 | 15 | 0 | 15·0 | 36·8 | |
| 9·4 | | | 44·0 | 25·0 | |
| 9·3 | | 1 | 38·0 | 56·9 | |
| 8·7 | | | 44·0 | 49·6 | g |
| 9·7 | | 2 | 29·0 | 1·7 | |
| 9·7 | | | 41·0 | 7·6 | |
| 9·5 | | | 44·0 | 2·4 | |
| 9·2 | | | 46·0 | 8·4 | |
| 9·7 | | | 57·0 | 40·3 | |
| 9·6 | | 3 | 24·0 | 37·5 | |
| 9·4 | | | 32·0 | 7·9 | |
| 9·6 | | | 40·0 | 22·4 | |
| 9·7 | | | 52·0 | 21·9 | |
| 9·5 | | 4 | 26·0 | 3·2 | |
| 8·3 | | 6 | 1·0 | 58·8 | 8·0 Gg |
| 9·7 | | | 20·0 | 27·7 | |
| 9·3 | | | 26·0 | 5·0 | g |
| 9·7 | | | 41·0 | 16·7 | |
| 9·4 | | 7 | 56·0 | 45·7 | |
| 9·4 | | 8 | 4·0 | 16·7 | |
| 9·4 | | | 32·0 | 52·5 | |
| 9·0 | | 9 | 36·0 | 25·0 | g |
| 9·7 | | 10 | 21·0 | 7·0 | |
| 9·4 | | | 57·0 | 15·0 | g |
| 9·6 | | 11 | 18·0 | 56·7 | |
| 9·1 | | 12 | 7·0 | 42·6 | |
| 9·7 | | | 19·0 | 29·0 | |
| 9·7 | | 15 | 43·0 | 4·3 | |

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 11 | 50 | + 69 − 0·01 d | − 8·3 |
| 12 | 0 | 77 0·00 | 8·4 |
| | 10 | 84 + 0·01 | 8·3 |
| | 20 | 92 + 0·03 | 8·3 |
| | 30 | 99 + 0·04 | 8·3 |
| | 40 | 107 + 0·05 | 8·2 |
| | 50 | 114 + 0·06 | 8·2 |
| 13 | 0 | 121 + 0·08 | 8·1 |
| | 10 | 129 + 0·09 | 8·0 |
| | 20 | 136 + 0·10 | 7·9 |
| | 30 | 143 + 0·11 | 7·7 |
| | 40 | 150 + 0·12 | 7·6 |
| | 50 | 156 + 0·14 | 7·4 |
| 14 | 0 | 163 + 0·15 | 7·2 |
| | 10 | 169 + 0·16 | 7·0 |
| | 20 | 175 + 0·17 | 6·8 |
| | 30 | 182 + 0·18 | 6·6 |
| | 40 | 187 + 0·19 | 6·4 |
| | 50 | 193 + 0·20 | 6·2 |
| 15 | 0 | 198 + 0·21 | 5·9 |
| | 10 | 204 + 0·22 | 5·6 |
| | 20 | + 209 + 0·22 | − 5·4 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 15 | 10 | + 204 + 0.22 d | − 5.6 |
| | 20 | 209 + 0.22 | 5.4 |
| | 30 | 213 + 0.23 | 5.1 |
| | 40 | 218 + 0.24 | 4.8 |
| | 50 | 222 + 0.25 | 4.5 |
| 16 | 0 | 226 + 0.25 | 4.2 |
| | 10 | 229 + 0.26 | 3.9 |
| | 20 | 233 + 0.27 | 3.5 |
| | 30 | 236 + 0.27 | 3.2 |
| | 40 | 238 + 0.28 | 2.9 |
| | 50 | 241 + 0.28 | 2.5 |
| 17 | 0 | 243 + 0.28 | 2.2 |
| | 10 | 245 + 0.29 | 1.8 |
| | 20 | 246 + 0.29 | 1.5 |
| | 30 | 247 + 0.29 | 1.1 |
| | 40 | 248 + 0.29 | 0.7 |
| | 50 | 249 + 0.29 | − 0.4 |
| 18 | 0 | 249 + 0.29 | 0.0 |
| | 10 | 249 + 0.29 | + 0.4 |
| | 20 | 248 + 0.29 | 0.7 |
| | 30 | 247 + 0.29 | 1.1 |
| | 40 | 246 + 0.29 | 1.5 |
| | 50 | 245 + 0.29 | 1.8 |
| 19 | 0 | 243 + 0.28 | 2.2 |
| | 10 | + 241 + 0.28 | + 2.5 |

d = minutes of decl.

## 841—900.

| mag. | h (15h.–16h.) | m | s | ′ (−79°) | |
|---|---|---|---|---|---|
| 9.1 | 15 | 15 | 53.0 | 18.6 | g |
| 9.5 | | 16 | 0.0 | 7.2 | |
| 9.6 | | | 5.0 | 29.4 | |
| 8.7 | | | 58.0 | 46.3 | g |
| 9.5 | | 17 | 2.0 | 46.0 | |
| 9.6 | | | 59.0 | 8.6 | |
| 9.6 | | 18 | 14.0 | 14.8 | |
| 9.4 | | | 21.0 | 39.6 | |
| 9.5 | | 19 | 1.0 | 7.3 | |
| 9.4 | | | 13.0 | 6.9 | g |
| 8.5 | | | 21.0 | 10.9 | g |
| 9.2 | | 20 | 40.0 | 32.7 | g |
| 9.1 | | | 54.0 | 49.6 | |
| 9.7 | | 23 | 33.0 | 47.9 | |
| 9.0 | | | 40.0 | 16.6 | g |
| 9.3 | | 24 | 56.0 | 55.7 | g |
| 9.7 | | 26 | 18.0 | 44.3 | |
| 9.4 | | | 54.0 | 26.0 | |
| 8.9 | | | 59.0 | 18.9 | 8.5 g |
| 9.7 | | 28 | 0.0 | 52.8 | |
| 9.3 | | | 5.0 | 7.9 | g |
| 9.4 | | | 42.0 | 2.8 | |
| 9.6 | | | 58.0 | 31.3 | |
| 9.7 | | 30 | 24.0 | 31.1 | |
| 8.4 | | | 44.0 | 13.3 | 9.0 g |
| 9.6 | | 33 | 20.0 | 6.2 | |
| 7.5 | | 34 | 9.0 | 0.7 | 8.0 GSg |
| 9.4 | | 35 | 55.0 | 33.9 | g |
| 9.6 | | 36 | 37.0 | 29.6 | |
| 9.5 | | 38 | 27.0 | 23.4 | |
| 9.4 | | | 33.0 | 42.9 | |
| 9.1 | | | 42.0 | 13.6 | 9.2 g |
| 9.5 | | | 54.0 | 26.3 | |
| 8.3 | | 40 | 8.0 | 48.3 | 8.5 g |
| 9.7 | | 42 | 16.0 | 38.9 | |
| 9.4 | | | 58.0 | 46.4 | |
| 9.6 | | 43 | 33.0 | 44.2 | |
| 9.7 | | | 41.0 | 17.0 | |
| 9.1 | | | 41.0 | 12.6 | g |
| 9.1 | | | 58.0 | 23.7 | g |
| 9.4 | | 44 | 47.0 | 57.1 | g |
| 9.5 | | 45 | 36.0 | 6.3 | |
| 9.4 | | | 56.0 | 53.6 | |
| 9.5 | | | 58.0 | 4.8 | |
| 9.5 | | 46 | 20.0 | 31.6 | |
| 9.4 | | 47 | 9.0 | 7.9 | g |
| 9.3 | | | 24.0 | 13.4 | g |
| 9.1 | | | 43.0 | 43.9 | |
| 9.4 | | 48 | 3.0 | 29.2 | |
| 9.2 | | | 23.0 | 13.7 | g |
| 9.0 | | 50 | 24.0 | 49.3 | g |
| 9.7 | | 51 | 43.0 | 24.2 | |
| 9.7 | | 58 | 42.0 | 10.3 | g |
| 9.3 | | 59 | 1.0 | 13.1 | 8.5 g |
| 9.1 | | | 41.0 | 50.5 | g |
| 8.2 | 16 | 1 | 44.0 | 30.7 | 8.2 g |
| 9.0 | | 8 | 38.0 | 47.9 | g |
| 9.6 | | 10 | 31.0 | 57.8 | |
| 8.6 | | 13 | 30.0 | 6.1 | g |
| 9.6 | | 15 | 56.0 | 8.7 | g |

## 901—960.

| mag. | h (16h.–18h.) | m | s | ′ (−79°) | |
|---|---|---|---|---|---|
| 9.7 | 16 | 24 | 2.0 | 50.8 | |
| 9.6 | | 25 | 20.0 | 4.6 | g |
| 8.6 | | 27 | 39.0 | 25.1 | 9.0 g |
| 9.7 | | 28 | 31.0 | 13.3 | |
| 9.5 | | | 42.0 | 30.9 | g |
| 8.6 | | | 56.0 | 7.1 | g |
| 9.4 | | 30 | 42.0 | 33.2 | |
| 7.5 | | 36 | 51.0 | 51.4 | 8.5 GSg |
| 9.0 | | 37 | 24.0 | 30.0 | 9.0 g |
| 9.6 | | 38 | 34.0 | 52.6 | 9.5 g |
| 8.8 | | 42 | 57.0 | 16.1 | g |
| 9.2 | | 47 | 48.0 | 1.3 | g |
| 9.6 | | 48 | 17.0 | 18.6 | g |
| 8.6 | | 50 | 51.0 | 55.3 | 9.5 g |
| 9.5 | | 51 | 56.0 | 15.1 | |
| 9.6 | | 53 | 21.0 | 51.6 | g |
| 9.3 | 17 | 0 | 3.0 | 57.3 | g |
| 9.6 | | 4 | 48.0 | 54.1 | g |
| 8.6 | | 7 | 27.0 | 43.0 | g |
| 9.7 | | | 40.0 | 13.1 | g |
| 9.4 | | 10 | 42.0 | 59.3 | g |
| 9.1 | | 12 | 55.0 | 31.8 | |
| 9.2 | | 16 | 54.0 | 14.5 | |
| 9.6 | | | 55.0 | 14.1 | |
| 9.4 | | 18 | 55.0 | 35.6 | |
| 9.3 | | 21 | 43.0 | 23.5 | g |
| 9.1 | | 24 | 19.0 | 25.7 | g |
| 9.2 | | | 30.0 | 17.2 | |
| 9.6 | | 27 | 47.0 | 35.4 | |
| 8.8 | | 28 | 3.0 | 39.3 | |
| 9.4 | | | 9.0 | 56.3 | |
| 9.2 | | | 45.0 | 44.4 | |
| 9.3 | | 29 | 11.0 | 21.7 | g |
| 9.4 | | | 34.0 | 20.2 | g |
| 8.9 | | | 37.0 | 13.8 | g |
| 9.3 | | | 56.0 | 38.9 | |
| 8.9 | | 33 | 17.0 | 14.1 | g |
| 9.6 | | 37 | 9.0 | 4.2 | g |
| 9.7 | | 38 | 39.0 | 57.0 | |
| 9.6 | | 41 | 3.0 | 4.2 | |
| 9.4 | | 43 | 57.0 | 20.6 | |
| 8.8 | | 45 | 15.0 | 49.5 | 9.0 g |
| 9.3 | | 48 | 42.0 | 30.4 | g |
| 9.6 | | | 53.0 | 21.6 | g |
| 9.6 | | 50 | 57.0 | 14.3 | |
| 9.0 | | 54 | 51.0 | 11.4 | 9.5 g |
| 9.0 | | | 54.0 | 30.6 | g |
| 9.0 | | 55 | 45.0 | 55.1 | g |
| 9.3 | | 57 | 40.0 | 18.9 | g |
| 9.3 | 18 | 0 | 3.0 | 55.2 | |
| 9.3 | | 1 | 53.0 | 0.0 | |
| 9.0 | | 4 | 13.0 | 58.4 | 8.0 GSg |
| 9.6 | | 5 | 9.0 | 34.2 | |
| 9.1 | | | 10.0 | 6.1 | g |
| 8.4 | | | 53.0 | 19.0 | 7.5 GSg |
| 9.0 | | 9 | 5.0 | 56.9 | g |
| 9.5 | | 10 | 11.0 | 8.9 | |
| 9.6 | | 11 | 2.0 | 17.3 | |
| 9.6 | | | 20.0 | 34.4 | |
| 8.4 | | 15 | 30.0 | 42.6 | 8.0 Gg |

## 961—1020.

| mag. | h (18h.–19h.) | m | s | ′ (−79°) | |
|---|---|---|---|---|---|
| 9.6 | 18 | 16 | 30.3 | 58.8 | g |
| 9.0 | | 22 | 1.0 | 22.5 | g |
| 8.6 | | 25 | 18.0 | 20.0 | 9.0 g |
| 9.3 | | 28 | 31.0 | 22.6 | |
| 9.6 | | 29 | 0.3 | 55.7 | g |
| 9.6 | | 30 | 53.3 | 31.1 | g |
| 9.0 | | 31 | 3.0 | 2.7 | g |
| 9.2 | | | 8.0 | 29.3 | g |
| 8.3 | | 33 | 1.0 | 18.8 | 8.8 g |
| 9.6 | | | 29.3 | 56.1 | g |
| 9.1 | | | 38.0 | 58.7 | 8.8 g |
| 9.4 | | 35 | 10.0 | 47.5 | |
| 9.4* | | 36 | 14.0 | 58.1 | |
| 9.3 | | | 46.0 | 11.4 | 9.5 g |
| 8.9 | | 37 | 42.0 | 16.7 | 9.0 g |
| 9.4 | | | 48.0 | 22.7 | |
| 9.8 | | | 50.0 | 26.6 | |
| 9.8 | | 38 | 1.0 | 57.7 | |
| 9.6 | | 39 | 48.0 | 38.8 | |
| 9.1 | | 41 | 3.0 | 28.9 | |
| 9.4 | | | 3.5 | 6.1 | |
| 8.7 | | | 13.0 | 47.9 | |
| 9.8 | | | 26.0 | 32.2 | |
| 9.0 | | | 33.0 | 11.3 | |
| 7.4 | | | 41.5 | 22.3 | 8.0 g |
| 8.9 | | 42 | 50.0 | 24.1 | |
| 9.2 | | 43 | 42.5 | 8.5 | |
| 9.4 | | | 55.0 | 44.5 | |
| 8.9 | | 44 | 16.3 | 25.0 | |
| 9.3 | | | 16.5 | 27.3 | |
| 9.6 | | 45 | 5.0 | 6.9 | |
| 9.8 | | 46 | 23.5 | 53.1 | |
| 9.7 | | | 28.0 | 52.5 | |
| 9.2 | | 49 | 1.0 | 5.8 | |
| 8.1 | | 50 | 8.5 | 40.5 | 8.5 g |
| 9.6 | | | 38.0 | 45.7 | |
| 9.4 | | | 52.5 | 28.9 | |
| 8.9 | | 52 | 15.0 | 5.5 | |
| 8.8 | | | 34.4 | 14.9 | 9.5 g |
| 9.7 | | 53 | 47.0 | 25.0 | |
| 9.4 | | | 55.7 | 59.5 | |
| 9.2 | | | 59.5 | 40.7 | |
| 9.2 | | 54 | 24.7 | 58.4 | |
| 7.7 | | 55 | 6.5 | 13.3 | 8.2 Gg |
| 9.4 | | | 12.9 | 58.8 | |
| 9.1 | | 56 | 28.5 | 35.4 | g |
| 9.7 | | 57 | 25.5 | 22.5 | |
| 9.8 | | | 31.5 | 24.4 | |
| 9.8 | | | 32.0 | 23.1 | |
| 9.7 | | | 46.0 | 20.0 | |
| 8.5 | | 58 | 34.7 | 1.0 | g |
| 9.0 | 19 | 0 | 22.5 | 28.9 | g |
| 8.7 | | | 43.8 | 37.9 | g |
| 9.6 | | 1 | 19.9 | 0.1 | |
| 9.8 | | 3 | 56.0 | 27.7 | |
| 9.4 | | 4 | 6.1 | 50.4 | |
| 9.8 | | | 7.1 | 11.8 | |
| 9.2 | | 5 | 37.6 | 50.3 | |
| 9.7 | | 6 | 11.1 | 26.4 | |
| 9.6 | | 8 | 53.6 | 7.1 | |



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## 1021—1080.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 19ʰ·–20ʰ· | | | −79° | |
| 9·4 | 19 | 9 | 19·1 | 56·1 | |
| 8·6 | | | 21·6 | 45·9 | 10·0 g |
| 9·6 | | 10 | 30·6 | 51·8 | |
| 9·3 | | 11 | 25·1 | 18·4 | |
| 9·0 | | 12 | 11·0 | 59·1 | |
| 8·3 | | | 22·6 | 26·4 | g |
| 9·4 | | 13 | 25·1 | 17·5 | |
| 9·2 | | | 28·1 | 47·8 | |
| 9·2 | | 14 | 2·6 | 39·1 | |
| 9·8 | | | 10·1 | 26·0 | |
| 9·4 | | 16 | 27·6 | 3·0 | g |
| 9·2 | | 17 | 21·6 | 43·7 | |
| 9·6 | | 21 | 17·1 | 19·2 | |
| 9·8 | | 24 | 32·4 | 24·0 | |
| 9·2 | | 26 | 10·9 | 10·0 | g |
| 9·2 | | 27 | 26·4 | 29·4 | |
| 9·4 | | | 28·4 | 14·8 | |
| 9·2 | | 28 | 17·9 | 30·7 | |
| 9·4 | | | 50·4 | 42·8 | |
| 9·4 | | | 54·1 | 1·0 | g |
| 9·4 | | 33 | 40·7 | 52·4 | |
| 9·6 | | | 59·7 | 2·0 | |
| 9·2 | | 34 | 50·8 | 34·8 | 8·5 g |
| 9·8 | | 37 | 36·7 | 26·2 | |
| 9·4 | | 39 | 2·7 | 30·2 | |
| 9·7 | | 41 | 19·7 | 21·8 | |
| 9·7 | | 43 | 27·2 | 25·9 | |
| 9·4 | | | 56·0 | 0·1 | |
| 7·9 | | 44 | 33·2 | 9·8 | 7·5 GSg |
| 7·8 | | 45 | 5·2 | 6·8 | 7·5 GSg |
| 8·5 | | | 11·6 | 7·2 | 9·0 Gg |
| 7·5 | | 46 | 25·2 | 45·6 | GSg |
| 8·4 | | | 48·6 | 2·7 | 8·5 Gg |
| 8·4 | | 48 | 46·1 | 12·6 | GSg |
| 9·8 | | 49 | 28·2 | 22·5 | |
| 7·7 | | 51 | 9·7 | 27·7 | 7·0 GSg |
| 9·8 | | | 36·7 | 59·4 | |
| 9·1 | | | 48·4 | 35·6 | 8·0 g |
| 9·3 | | 52 | 33·2 | 40·4 | g |
| 9·1 | | 53 | 8·2 | 23·1 | g |
| 9·2 | | | 30·7 | 26·9 | |
| 8·8 | | 55 | 10·3 | 14·2 | |
| 7·8 | | | 29·6 | 56·6 | 8·0 GSg |
| 9·6 | | 56 | 39·2 | 6·3 | |
| 7·8 | | 57 | 41·7 | 22·4 | 7·5 GSg |
| 9·4 | | 58 | 26·7 | 8·2 | |
| 8·6 | | | 36·9 | 10·6 | |
| 9·4 | 20 | 0 | 8·7 | 19·1 | |
| 8·5 | | | 33·2 | 48·1 | 9·0 g |
| 9·4 | | 1 | 42·7 | 11·6 | |
| 9·8 | | | 45·7 | 15·3 | |
| 8·1 | | | 50·8 | 26·7 | 8·5 g |
| 8·8 | | 2 | 6·7 | 28·8 | 8·5 g |
| 7·2 | | | 19·7 | 58·6 | 8·0 GScg |
| 9·1 | | | 33·6 | 24·1 | |
| 9·3 | | 3 | 12·2 | 33·2 | |
| 9·7 | | | 30·7 | 21·0 | |
| 9·6 | | | 43·2 | 9·7 | |
| 6·7 | | 4 | 6·6 | 20·5 | GSg |
| 9·4 | | | 30·2 | 11·0 | |

## 1081—1140.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 20ʰ·–21ʰ· | | | −79° | |
| 7·6 | 20 | 5 | 16·0 | 26·1 | 7·5 GScg |
| 9·6 | | | 36·2 | 19·3 | |
| 9·8 | | | 44·2 | 32·6 | |
| 9·6 | | | 56·2 | 6·6 | |
| 9·3 | | 8 | 26·2 | 25·0 | |
| 9·3 | | | 31·9 | 21·1 | |
| 10·1 | | | 35·1 | 44·2 | |
| 8·6 | | | 43·9 | 47·2 | 7·5 GSg |
| 7·8 | | 9 | 15·9 | 9·1 | 8·0 GSg |
| 10·1 | | 10 | 5·2 | 58·3 | |
| 9·6 | | | 21·9 | 36·0 | |
| 7·8 | | 11 | 47·9 | 18·5 | 8·0 GSg |
| 10·2 | | | 52·6 | 51·0 | |
| 9·7 | | 12 | 19·5 | 2·0 | |
| 10·2 | | | 34·1 | 28·4 | |
| 9·7 | | 15 | 57·4 | 52·8 | |
| 9·7 | | 18 | 23·8 | 14·8 | |
| 9·7 | | 19 | 28·6 | 32·6 | |
| 10·0 | | 20 | 13·3 | 21·8 | |
| 9·0 | | | 24·3 | 38·9 | g |
| 9·2 | | | 27·3 | 45·1 | |
| 9·7 | | 21 | 45·1 | 30·8 | |
| 10·1 | | 23 | 4·0 | 32·4 | |
| 9·3 | | | 52·7 | 43·4 | 9·5 g |
| 9·4 | | 24 | 3·0 | 8·5 | |
| 9·0 | | | 28·0 | 14·3 | |
| 9·3 | | 27 | 29·5 | 31·8 | Sg |
| 7·9 | | 30 | 37·2 | 23·8 | 8·2 GSg |
| 10·1 | | | 49·0 | 42·5 | |
| 10·0 | | 31 | 5·5 | 42·1 | |
| 10·2 | | | 27·5 | 6·3 | |
| 8·7 | | 32 | 48·0 | 43·2 | g |
| 9·7 | | 34 | 17·0 | 16·3 | |
| 9·4 | | | 34·2 | 19·7 | 8·8 Gg |
| 10·2 | | | 46·0 | 11·4 | |
| 10·1 | | 35 | 44·0 | 50·0 | |
| 9·6 | | | 49·0 | 52·3 | |
| 9·0 | | 36 | 19·5 | 4·1 | Gg |
| 8·4 | | | 28·0 | 3·1 | 8·8 Gg |
| 9·7 | | | 34·0 | 37·4 | |
| 9·7 | | | 55·3 | 7·6 | |
| 9·6 | | 37 | 3·8 | 33·7 | |
| 9·4 | | 38 | 3·0 | 40·6 | |
| 9·7 | | 39 | 44·3 | 50·4 | |
| 9·7 | | 41 | 15·3 | 21·6 | |
| 9·4 | | 43 | 24·3 | 4·4 | |
| 10·0 | | 46 | 33·3 | 48·5 | |
| 9·6 | | 47 | 31·3 | 34·2 | |
| 9·6 | | | 59·3 | 18·8 | |
| 10·0 | | 48 | 0·8 | 11·4 | |
| 9·6 | | | 11·3 | 38·0 | |
| 10·2 | | 49 | 50·0 | 58·6 | |
| 8·2 | | 52 | 34·5 | 46·1 | 8·2 GSg |
| 9·6 | | 55 | 48·0 | 38·1 | |
| 9·3 | | | 59·5 | 9·4 | |
| 10·2 | 21 | 0 | 13·5 | 51·6 | |
| 9·4 | | 2 | 17·2 | 59·3 | |
| 9·8 | | 3 | 56·5 | 40·3 | |
| 9·6 | | 4 | 23·5 | 9·0 | |
| 9·8 | | 5 | 25·0 | 14·1 | |

## 1141—1200.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 21ʰ·–22ʰ· | | | −79° | |
| 9·8 | 21 | 6 | 0·1 | 2·0 | |
| 9·0 | | | 29·5 | 41·4 | g |
| 10·3 | | 8 | 22·5 | 17·5 | |
| 9·6 | | 11 | 7·3 | 35·5 | g |
| 9·7 | | | 42·3 | 48·9 | |
| 10·3 | | 12 | 2·8 | 38·7 | |
| 9·4 | | 13 | 41·8 | 5·0 | |
| 9·4 | | 14 | 19·3 | 42·7 | |
| 10·1 | | 15 | 6·8 | 43·8 | |
| 10·3 | | | 56·3 | 31·1 | |
| 10·2 | | 16 | 40·8 | 16·9 | |
| 8·0 | | 17 | 55·7 | 5·2 | 7·8 GSg |
| 9·8 | | 18 | 30·3 | 6·6 | |
| 9·7 | | 19 | 20·0 | 37·9 | |
| 10·2 | | | 49·7 | 0·7 | |
| 9·8 | | 20 | 20·7 | 1·1 | |
| 10·1 | | | 27·0 | 11·7 | |
| 7·0 | | 23 | 10·3 | 59·7 | 7·0 GSg |
| 9·8 | | 24 | 12·0 | 21·6 | |
| 9·6 | | | 12·5 | 55·5 | |
| 10·3 | | | 32·0 | 4·0 | |
| 10·0 | | | 49·5 | 46·3 | |
| 9·6 | | 27 | 20·0 | 50·0 | |
| 10·0 | | 28 | 8·0 | 29·8 | |
| 9·7 | | | 17·7 | 36·8 | |
| 9·6 | | 29 | 59·7 | 9·5 | |
| 9·3 | | 30 | 43·6 | 10·2 | |
| 9·6 | | 31 | 41·2 | 30·5 | |
| 9·6 | | 33 | 46·2 | 47·9 | |
| 8·6 | | 34 | 15·5 | 0·6 | 8·8 Gg |
| 9·6 | | | 31·7 | 13·0 | |
| 9·8 | | | 49·7 | 4·4 | |
| 8·8 | | 38 | 26·6 | 12·8 | 9·5 g |
| 9·2 | | | 33·0 | 57·7 | g |
| 9·6 | | | 41·2 | 54·9 | |
| 8·0 | | 39 | 7·2 | 9·5 | 7·8 GSg |
| 9·2 | | 40 | 16·3 | 0·5 | |
| 9·0 | | 41 | 32·0 | 10·7 | 9·5 g |
| 10·3 | | 42 | 34·7 | 10·8 | |
| 8·9 | | 43 | 53·0 | 35·9 | g |
| 9·7 | | 44 | 46·7 | 13·9 | |
| 9·4 | | 45 | 24·7 | 11·7 | |
| 9·0 | | | 48·2 | 53·0 | g |
| 9·8 | | 46 | 28·5 | 14·4 | |
| 10·1 | | 48 | 22·0 | 28·5 | |
| 9·4 | | 49 | 32·5 | 48·2 | g |
| 10·3 | | 50 | 4·5 | 39·8 | |
| 10·2 | | | 43·0 | 7·4 | |
| 10·1 | | 51 | 42·0 | 56·4 | |
| 10·0 | | 55 | 44·0 | 31·2 | |
| 10·1 | | 56 | 15·7 | 45·2 | |
| 10·0 | | 58 | 50·7 | 56·2 | |
| 9·6 | | 59 | 41·2 | 43·3 | g |
| 9·7 | 22 | 1 | 35·0 | 41·2 | g |
| 9·2 | | | 43·0 | 58·1 | 9·0 g |
| 8·8 | | 4 | 55·0 | 3·0 | 9·0 g |
| 8·2 | | 7 | 6·0 | 55·0 | 8·5 GSg |
| 9·5 | | 8 | 16·0 | 52·9 | 9·5 g |
| 8·6 | | 11 | 13·0 | 50·1 | 9·0 GSg |
| 9·4 | | 12 | 53·0 | 0·5 | |

25 prec.

| h | m | a (s s) | δ |
|---|---|---|---|
| 19 | 0 | + 243 + 0·28 d | + 2·2 |
| | 10 | 241 + 0·28 | 2·5 |
| | 20 | 238 + 0·28 | 2·9 |
| | 30 | 236 + 0·27 | 3·2 |
| | 40 | 233 + 0·27 | 3·5 |
| | 50 | 229 + 0·26 | 3·9 |
| 20 | 0 | 226 + 0·25 | 4·2 |
| | 10 | 222 + 0·25 | 4·5 |
| | 20 | 218 + 0·24 | 4·8 |
| | 30 | 213 + 0·23 | 5·1 |
| | 40 | 209 + 0·22 | 5·4 |
| | 50 | 204 + 0·22 | 5·6 |
| 21 | 0 | 198 + 0·21 | 5·9 |
| | 10 | 193 + 0·20 | 6·2 |
| | 20 | 187 + 0·19 | 6·4 |
| | 30 | 182 + 0·18 | 6·6 |
| | 40 | 175 + 0·17 | 6·8 |
| | 50 | 169 + 0·16 | 7·0 |
| 22 | 0 | 163 + 0·15 | 7·2 |
| | 10 | 156 + 0·14 | 7·4 |
| | 20 | + 150 + 0·12 | + 7·6 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 22 | 10 | + 156 | + 0·14 d | + 7·4 |
| | 20 | 150 | + 0·12 | 7·6 |
| | 30 | 143 | + 0·11 | 7·7 |
| | 40 | 136 | + 0·10 | 7·9 |
| | 50 | 129 | + 0·09 | 8·0 |
| 23 | 0 | 121 | + 0·08 | 8·1 |
| | 10 | 114 | + 0·06 | 8·2 |
| | 20 | 107 | + 0·05 | 8·2 |
| | 30 | 99 | + 0·04 | 8·3 |
| | 40 | 92 | + 0·03 | 8·3 |
| | 50 | 84 | + 0·01 | 8·3 |
| 0 | 0 | + 77 | 0·00 | + 8·4 |

d = minutes of decl.

### 1201—1217.

| mag. | 22ʰ· h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 8·3 | 22 | 14 | 34·0 | 9·5 | 9·0 *g* |
| 8·8 | | 19 | 42·0 | 56·9 | *g* |
| 9·6 | | 22 | 22·0 | 28·0 | *g* |
| 9·6 | | 23 | 8·0 | 49·5 | *g* |
| 8·2 | | | 23·0 | 15·2 | 8·0 GS*g* |
| 7·4 | | | 25·0 | 24·9 | 6·5 GS*g* |
| 9·2 | | | 41·0 | 8·3 | 8·5 *g* |
| 9·4 | | 29 | 41·0 | 52·6 | *g* |
| 8·7 | | 32 | 1·0 | 30·4 | 8·5 *g* |
| 9·6 | | 34 | 23·0 | 34·1 | |
| 9·6 | | 35 | 43·0 | 15·3 | |
| 9·4 | | | 51·0 | 34·1 | *g* |
| 9·4 | | 39 | 0·0 | 51·0 | 9·5 *g* |
| 9·4 | | | 22·0 | 20·0 | |
| 8·9 | | | 41·0 | 49·3 | 9·0 *g* |
| 9·7 | | 40 | 34·0 | 43·7 | *g* |
| 9·5 | | 43 | 47·0 | 50·0 | |

### 1218—1234.

| mag. | 22ʰ·—23ʰ· h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·2 | 22 | 45 | 47·0 | 53·2 | *g* |
| 9·2 | | 46 | 38·0 | 25·7 | *g* |
| 8·4 | | 51 | 1·0 | 33·3 | 9·0 *g* |
| 9·3 | | 52 | 49·0 | 57·3 | |
| 9·7 | | 53 | 52·0 | 36·7 | *g* |
| 9·6 | | | 53·0 | 4·8 | |
| 9·7 | | 55 | 6·0 | 49·2 | *g* |
| 9·4 | | | 17·0 | 14·1 | *g* |
| 9·5 | | | 26·0 | 17·7 | *g* |
| 8·5 | | 57 | 47·0 | 20·0 | 9·5 *g* |
| 9·0 | 23 | 0 | 14·0 | 26·2 | 9·0 *g* |
| 8·4 | | 3 | 52·0 | 1·3 | 9·0 *g* |
| 9·4 | | 4 | 5·0 | 5·5 | 9·5 *g* |
| 9·4 | | 5 | 24·0 | 0·9 | 9·0 *g* |
| 9·6 | | 13 | 32·0 | 3·1 | |
| 9·1 | | 17 | 26·0 | 40·7 | *g* |
| 8·8 | | 18 | 28·0 | 31·6 | *g* |

### 1235—1250.

| mag. | 23ʰ· h | m | s | −79° ′ | |
|---|---|---|---|---|---|
| 9·0 | 23 | 21 | 41·0 | 15·7 | *g* |
| 8·5 | | 24 | 34·0 | 37·5 | *g* |
| 9·9 | | 25 | 33·0 | 34·4 | *g* |
| 8·7 | | 26 | 47·0 | 46·0 | 9·0 *g* |
| 6·4 | | 37 | 2·0 | 29·1 | 6·0 GS*g* |
| 9·9 | | 40 | 29·0 | 22·3 | *g* |
| 9·9 | | 42 | 23·0 | 16·6 | *g* |
| 9·0 | | 44 | 42·0 | 51·3 | *g* |
| 7·9 | | 47 | 55·0 | 12·0 | 7·5 GS*g* |
| 7·7 | | 50 | 55·0 | 57·7 | 9·0 *g* |
| 8·4 | | 53 | 45·0 | 45·2 | 8·7 *g* |
| 9·6 | | 54 | 27·0 | 16·1 | *g* |
| 9·0 | | 55 | 41·0 | 58·6 | |
| 9·7 | | 58 | 29·0 | 15·7 | *g* |
| 8·0 | | 59 | 6·0 | 57·0 | 8·0 *g* |
| 9·9 | | | 56·0 | 21·1 | *g* |

# ZONE—80°.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | − 0·00 d | + 8·4 |
| | 10 | 69 | − 0·02 | 8·3 |
| | 20 | 60 | − 0·03 | 8·3 |
| | 30 | 52 | − 0·05 | 8·3 |
| | 40 | 44 | − 0·06 | 8·2 |
| | 50 | 36 | − 0·08 | 8·2 |
| 1 | 0 | 28 | − 0·09 | 8·1 |
| | 10 | 20 | − 0·11 | 8·0 |
| | 20 | 12 | − 0·12 | 7·9 |
| | 30 | + 4 | − 0·14 | 7·7 |
| | 40 | − 3 | − 0·15 | 7·6 |
| | 50 | 11 | − 0·16 | 7·4 |
| 2 | 0 | 18 | − 0·18 | 7·2 |
| | 10 | 25 | − 0·19 | 7·0 |
| | 20 | 32 | − 0·20 | 6·8 |
| | 30 | 39 | − 0·22 | 6·6 |
| | 40 | 45 | − 0·23 | 6·4 |
| | 50 | − 51 | − 0·24 | + 6·2 |

d = minutes of decl.

### 1—20.

| mag. | 0ʰ·—1ʰ· h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 8·8 | 0 | 0 | 13 | 27·9 | *g* |
| 9·9 | | 2 | 44 | 41·0 | *g* |
| 7·4 | | 5 | 53 | 52·2 | GS*g* |
| 9·0 | | 6 | 38 | 53·7 | *g* |
| 9·2 | | 7 | 19 | 12·2 | *g* |
| 10·0 | | | 53 | 35·8 | |
| 6·7 | | 10 | 25 | 32·6 | GS*g* |
| 9·2 | | 16 | 25 | 33·6 | |
| 9·0 | | 17 | 42 | 0·2 | *g* |
| 9·4 | | 22 | 24 | 41·3 | *g* |
| 9·4 | | 41 | 31 | 7·2 | *g* |
| 9·1 | | | 38 | 20·8 | *g* |
| 9·2 | | 44 | 33 | 12·8 | *g* |
| 9·3 | | 45 | 28 | 52·6 | *g* |
| 9·2 | | 48 | 30 | 37·3 | |
| 9·3 | 1 | 3 | 46 | 43·9 | *g* |
| 8·2 | | 10 | 20 | 46·6 | *g* |
| 9·4 | | 11 | 1 | 0·3 | |
| 9·5 | | 14 | 21 | 34·3 | *g* |
| 9·0 | | 15 | 22 | 42·9 | *g* |

### 21—40.

| mag. | 1ʰ· h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·0 | 1 | 16 | 27 | 9·2 | *g* |
| 9·3 | | 17 | 48 | 1·9 | *g* |
| 9·4 | | 24 | 20 | 32·5 | *g* |
| 8·8 | | | 37 | 32·7 | GS*g* |
| 9·6 | | 26 | 0 | 55·8 | |
| 9·3 | | | 10 | 21·7 | |
| 9·2 | | 29 | 18 | 15·7 | *g* |
| 6·9 | | 33 | 11 | 34·0 | GS*g* |
| 7·3 | | 42 | 17 | 40·9 | GS*g* |
| 7·7 | | | 43 | 32·4 | GS*g* |
| 9·5 | | | 53 | 31·0 | *g* |
| 8·2 | | 44 | 48 | 21·8 | GS*g* |
| 9·4 | | 45 | 58 | 48·7 | *g* |
| 9·3 | | 46 | 55 | 55·9 | *g* |
| 6·3 | | 48 | 59 | 47·7 | GS*g* |
| 9·2 | | 49 | 27 | 18·6 | *g* |
| 8·4 | | 51 | 23 | 59·4 | *g* |
| 9·3 | | | 32 | 34·8 | |
| 9·2 | | 55 | 0 | 56·0 | *g* |
| 9·2 | | 56 | 58 | 58·4 | *g* |

### 41—60.

| mag. | 2ʰ· h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·8 | 2 | 11 | 22 | 41·7 | S*g* |
| 9·8 | | 16 | 20 | 7·6 | |
| 9·2 | | 22 | 32 | 23·3 | |
| 9·2 | | 27 | 19 | 36·3 | S*g* |
| 9·8 | | 28 | 56 | 4·5 | |
| 9·0 | | 30 | 23 | 40·5 | *g* |
| 9·8 | | | 35 | 14·1 | |
| 9·8 | | 32 | 24 | 19·7 | |
| 9·8 | | 37 | 27 | 36·7 | |
| 9·8 | | 38 | 0 | 20·5 | |
| 8·3 | | | 1 | 9·1 | 8·5 *g* |
| 9·1 | | 39 | 2 | 38·5 | *g* |
| 9·8 | | | 22 | 27·6 | |
| 8·0 | | 40 | 37 | 20·9 | GS*g* |
| 8·8 | | | 53 | 0·9 | 9·0 *g* |
| 9·8 | | 41 | 16 | 21·3 | |
| 9·1 | | 46 | 25 | 20·0 | |
| 8·9 | | | 33 | 18·7 | *g* |
| 8·6 | | 47 | 1 | 32·1 | *g* |
| 8·8 | | 48 | 31 | 10·0 | *g* |



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## 61—120.

| mag. | 2h.–4h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·0 | 2 | 48 | 39 | 37·0 | g |
| 9·8 | | 49 | 16 | 34·9 | |
| 9·2 | | 53 | 30 | 11·9 | |
| 9·3 | | 54 | 1 | 17·9 | |
| 9·0 | | 55 | 15 | 44·2 | g |
| 9·3 | | | 26 | 10·8 | |
| 9·5 | | 56 | 59 | 32·1 | |
| 9·0 | | 58 | 54 | 34·0 | |
| 8·3 | | 59 | 52 | 48·8 | g |
| 8·2 | 3 | 0 | 37 | 5·4 | 8·0 GSg |
| 8·8 | | 6 | 3 | 17·2 | g |
| 9·2 | | 11 | 34 | 7·6 | |
| 9·8 | | 12 | 33 | 33·3 | |
| 9·5 | | 13 | 3 | 51·9 | |
| 9·6 | | 14 | 15 | 21·5 | g |
| 9·4 | | 15 | 11 | 5·5 | |
| 8·8 | | 22 | 58 | 56·1 | g |
| 9·5 | | 24 | 26 | 2·2 | |
| 9·6 | | | 55 | 5·4 | |
| 9·5 | | 29 | 4 | 49·2 | |
| 8·4 | | 30 | 27 | 51·3 | g |
| 9·8 | | 31 | 42 | 33·6 | g |
| 9·4 | | 32 | 6 | 1·5 | |
| 9·2 | | 33 | 57 | 39·4 | g |
| 9·2 | | 35 | 30 | 35·4 | g |
| 9·8 | | 36 | 7 | 4·5 | |
| 9·7 | | 39 | 58 | 35·0 | |
| 9·0 | | 41 | 31 | 25·0 | g |
| 9·2 | | 44 | 50 | 43·0 | |
| 9·8 | | 46 | 14 | 6·6 | |
| 9·8 | | 47 | 32 | 2·7 | |
| 9·5 | | 48 | 19 | 52·7 | |
| 8·5 | | 49 | 30 | 24·3 | GSg |
| 9·2 | | | 32 | 24·5 | Gg |
| 9·8 | | | 53 | 12·9 | g |
| 9·5 | | 50 | 26 | 59·8 | |
| 8·9 | | 51 | 28 | 51·1 | g |
| 9·0 | | 53 | 45 | 30·8 | g |
| 9·5 | | 55 | 29 | 33·1 | |
| 9·5 | | 57 | 55 | 32·8 | |
| 9·3 | | 59 | 40 | 51·2 | |
| 8·9 | 4 | 0 | 28 | 10·1 | 9·0 g |
| 9·8 | | | 46 | 31·7 | |
| 8·5 | | 1 | 30 | 56·0 | g |
| 9·3 | | 3 | 42 | 26·0 | g |
| 9·7 | | 7 | 6 | 47·8 | |
| 9·7 | | | 47 | 45·8 | |
| 9·7 | | 10 | 27 | 10·7 | g |
| 9·4 | | 12 | 54 | 6·3 | g |
| 9·8 | | 14 | 14 | 31·8 | |
| 9·8 | | | 39 | 50·4 | |
| 9·8 | | 16 | 4 | 17·9 | g |
| 10·0 | | | 8 | 49·5 | g |
| 9·4 | | 21 | 0 | 55·0 | g |
| 9·4 | | 24 | 43 | 17·1 | g |
| 6·5 | | 26 | 32 | 30·3 | GSgλ |
| 8·5 | | 28 | 9 | 24·2 | g |
| 9·6 | | 31 | 36 | 8·4 | |
| 9·5 | | 33 | 15 | 26·8 | |
| 9·5 | | 35 | 49 | 19·0 | g |

## 121—180.

| mag. | 4h.–6h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·4 | 4 | 39 | 25 | 11·1 | |
| 9·4 | | | 58 | 7·2 | 9·5 g |
| 9·4 | | 40 | 41 | 5·2 | |
| 8·5 | | | 52 | 32·3 | g |
| 9·5 | | 42 | 33 | 18·8 | |
| 8·6 | | 49 | 18 | 59·3 | g |
| 10·0 | | | 30 | 54·7 | g |
| 10·0 | | | 59 | 44·8 | g |
| 9·7 | | 53 | 22 | 19·2 | |
| 9·4 | | 54 | 58 | 0·5 | g |
| 7·7 | | 55 | 22 | 51·0 | Gkg |
| 7·5 | | 56 | 9 | 0·6 | 8·0 GSg |
| 8·1 | | 58 | 17 | 58·8 | g |
| 9·8 | 5 | 0 | 12 | 18·3 | g |
| 9·8 | | 1 | 41 | 32·0 | |
| 9·0 | | 3 | 24 | 28·4 | g |
| 9·8 | | 4 | 17 | 34·9 | g |
| 10·0 | | 5 | 24 | 5·0 | |
| 8·9 | | | 25 | 44·0 | g |
| 9·5 | | 7 | 40 | 39·3 | g |
| 10·0 | | 12 | 6 | 36·6 | g |
| 9·0 | | | 49 | 58·1 | g |
| 9·8 | | 17 | 2 | 55·0 | |
| 10·0 | | 18 | 19 | 24·7 | |
| 7·9 | | 20 | 14 | 32·7 | GSg |
| 9·0 | | 21 | 4 | 19·3 | GSg |
| 9·6 | | 23 | 34 | 29·6 | |
| 9·7 | | 24 | 14 | 3·7 | |
| 9·8 | | 25 | 52 | 57·9 | |
| 10·0 | | 26 | 49 | 53·9 | |
| 9·6 | | 30 | 28 | 59·6 | g |
| 9·5 | | 33 | 39 | 31·4 | |
| 9·6 | | 34 | 54 | 27·3 | |
| 9·4 | | 36 | 44 | 55·7 | g |
| 9·6 | | | 55 | 16·2 | |
| 9·7 | | 40 | 25 | 10·1 | |
| 9·4 | | 42 | 32 | 18·8 | g |
| 9·0 | | 43 | 40 | 17·8 | g |
| 8·8 | | 45 | 54 | 54·6 | Gg |
| 8·9 | | | 59 | 25·1 | g |
| 6·5 | | 47 | 10 | 33·6 | GSg |
| 9·8 | | 48 | 58 | 1·6 | |
| 9·6 | | 49 | 39 | 43·2 | g |
| 8·3 | | 55 | 25 | 20·6 | g |
| 9·4 | | 59 | 7 | 9·2 | 9·0 g |
| 10·0 | 6 | 0 | 26 | 43·1 | |
| 9·9 | | 1 | 13 | 12·5 | |
| 9·0 | | 5 | 37 | 6·5 | 9·2 g |
| 9·8 | | 10 | 18 | 27·7 | |
| 8·9 | | | 42 | 34·9 | g |
| 9·6 | | 15 | 17 | 3·4 | |
| 9·6 | | 16 | 25 | 23·0 | |
| 9·8 | | 20 | 0 | 10·7 | |
| 8·5 | | 22 | 54 | 15·3 | g |
| 9·8 | | 25 | 11 | 29·6 | |
| 8·6 | | | 39 | 40·6 | g |
| 9·1 | | | 55 | 57·1 | g |
| 9·6 | | 28 | 21 | 30·4 | |
| 9·6 | | 29 | 12 | 16·4 | |
| 9·2 | | 32 | 9 | 2·4 | |

## 181—240.

| mag. | 6h.–8h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·6 | 6 | 32 | 13 | 39·3 | |
| 9·2 | | 33 | 49 | 20·6 | |
| 9·6 | | 34 | 17 | 54·7 | |
| 9·4 | | 37 | 38 | 59·4 | |
| 8·8 | | 39 | 3 | 26·1 | GSg |
| 8·6 | | | 45 | 29·3 | GSg |
| 8·9 | | 40 | 54 | 44·1 | g |
| 10·0 | | 43 | 11 | 36·4 | |
| 8·9 | | | 15 | 20·0 | g |
| 9·4 | | 44 | 57 | 40·5 | |
| 9·4 | | 46 | 10 | 43·5 | |
| 8·8 | | 47 | 43 | 54·0 | g |
| 10·0 | | 49 | 34 | 9·4 | |
| 9·5 | | | 57 | 37·0 | |
| 9·2 | | 50 | 17 | 41·8 | |
| 6·0 | | | 25 | 40·8 | GScg |
| 9·6 | | 52 | 15 | 54·6 | |
| 9·8 | | | 16 | 51·3 | |
| 9·5 | | 55 | 52 | 50·6 | |
| 9·4 | | 57 | 53 | 29·0 | |
| 8·7 | | 58 | 20 | 54·5 | GSg |
| 10·0 | | | 37 | 33·5 | |
| 10·0 | | 59 | 23 | 29·2 | |
| 9·6 | 7 | 0 | 45 | 2·2 | |
| 9·1 | | 1 | 19 | 51·4 | |
| 9·4 | | 4 | 18 | 9·5 | |
| 9·2 | | 5 | 19 | 55·1 | g |
| 9·1 | | | 31 | 51·2 | |
| 8·6 | | | 47 | 39·4 | GSg |
| 9·2 | | 9 | 12 | 35·4 | |
| 9·4 | | 12 | 39 | 40·7 | |
| 8·5 | | 15 | 27 | 57·5 | g |
| 10·0 | | 17 | 40 | 39·1 | |
| 9·3 | | | 46 | 29·7 | |
| 9·8 | | 18 | 43 | 17·2 | |
| ? 10·0 | | 19 | 13 | 28·5 | |
| 8·9 | | | 57 | 27·1 | |
| 9·4 | | 23 | 15 | 31·6 | |
| 9·8 | | 24 | 47 | 50·7 | |
| 8·2 | | 25 | 18 | 59·1 | GSg |
| 9·6 | | 29 | 54 | 10·8 | |
| 9·6 | | 31 | 7 | 39·7 | |
| 8·8 | | 36 | 21 | 33·1 | g |
| 10·0 | | 38 | 51 | 49·1 | |
| 8·8 | | 40 | 43 | 40·1 | g |
| 8·7 | | 52 | 0 | 20·2 | g |
| 9·1 | | 53 | 30 | 21·6 | g |
| 9·2 | | 58 | 19 | 35·3 | g |
| 9·1 | | | 55 | 52·4 | GSg |
| 9·0 | 8 | 9 | 21 | 10·5 | |
| 9·4 | | 12 | 15 | 39·2 | |
| 9·8 | | | 49 | 48·9 | |
| 9·3 | | 13 | 43 | 31·4 | g |
| 10·3 | | 14 | 26 | 7·8 | |
| 9·5 | | 15 | 15 | 6·8 | |
| 9·8 | | 16 | 3 | 35·9 | |
| 10·1 | | | 19 | 29·9 | |
| 10·3 | | | 25 | 37·0 | |
| 9·5 | | 17 | 58 | 12·0 | g |
| 9·3 | | 18 | 22 | 5·0 | 9·0 g |

25 prec.

| h | m | α s s | δ |
|---|---|---|---|
| 2 | 40 | − 45 − 0·23 d | + 6·4 |
| | 50 | 51 − 0·24 | 6·2 |
| 3 | 0 | 57 − 0·25 | 5·9 |
| | 10 | 63 − 0·26 | 5·6 |
| | 20 | 68 − 0·27 | 5·4 |
| | 30 | 74 − 0·28 | 5·1 |
| | 40 | 79 − 0·29 | 4·8 |
| | 50 | 83 − 0·30 | 4·5 |
| 4 | 0 | 87 − 0·31 | 4·2 |
| | 10 | 91 − 0·32 | 3·9 |
| | 20 | 95 − 0·32 | 3·5 |
| | 30 | 98 − 0·33 | 3·2 |
| | 40 | 101 − 0·34 | 2·9 |
| | 50 | 104 − 0·34 | 2·5 |
| 5 | 0 | 106 − 0·34 | 2·2 |
| | 10 | 108 − 0·35 | 1·8 |
| | 20 | 110 − 0·35 | 1·5 |
| | 30 | 111 − 0·35 | 1·1 |
| | 40 | 112 − 0·36 | 0·7 |
| | 50 | 113 − 0·36 | + 0·4 |
| 6 | 0 | 113 − 0·36 | 0·0 |
| | 10 | 113 − 0·36 | − 0·4 |
| | 20 | 112 − 0·36 | 0·7 |
| | 30 | 111 − 0·35 | 1·1 |
| | 40 | 110 − 0·35 | 1·5 |
| | 50 | 108 − 0·35 | 1·8 |
| 7 | 0 | 106 − 0·34 | 2·2 |
| | 10 | 104 − 0·34 | 2·5 |
| | 20 | 101 − 0·34 | 2·9 |
| | 30 | 98 − 0·33 | 3·2 |
| | 40 | 95 − 0·32 | 3·5 |
| | 50 | 91 − 0·32 | 3·9 |
| 8 | 0 | 87 − 0·31 | 4·2 |
| | 10 | 83 − 0·30 | 4·5 |
| | 20 | − 79 − 0·29 | − 4·8 |

d = minutes of decl.



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25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 8 | 10 | − 83 | − 0·30 d | − 4·5 |
| | 20 | 79 | − 0·29 | 4·8 |
| | 30 | 74 | − 0·28 | 5·1 |
| | 40 | 68 | − 0·27 | 5·4 |
| | 50 | 63 | − 0·26 | 5·6 |
| 9 | 0 | 57 | − 0·25 | 5·9 |
| | 10 | 51 | − 0·24 | 6·2 |
| | 20 | 45 | − 0·23 | 6·4 |
| | 30 | 39 | − 0·22 | 6·6 |
| | 40 | 32 | − 0·20 | 6·8 |
| | 50 | 25 | − 0·19 | 7·0 |
| 10 | 0 | 18 | − 0·18 | 7·2 |
| | 10 | − 11 | − 0·16 | − 7·4 |

d = minutes of decl.

## 241—300.

| mag. | 8h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·8 | 8 | 18 | 26 | 19·6 | |
| 10·0 | | 19 | 38 | 36·3 | |
| 9·8 | | 20 | 9 | 4·3 | |
| 9·6 | | | 38 | 9·7 | 9·0 *g* |
| 9·6 | | 22 | 2 | 12·0 | |
| 9·9 | | | 51 | 54·0 | |
| 9·8 | | 23 | 36 | 45·9 | |
| 9·7 | | 24 | 11 | 27·6 | *g* |
| 10·1 | | | 40 | 13·6 | |
| 9·7 | | 25 | 6 | 53·3 | |
| 10·3 | | | 26 | 30·2 | |
| 8·8 | | 28 | 29 | 17·8 | *g* |
| 10·0 | | | 54 | 5·7 | |
| 9·6 | | | 58 | 0·9 | |
| 9·8 | | 29 | 15 | 19·5 | |
| 9·5 | | | 32 | 6·5 | *g* |
| 10·1 | | 31 | 8 | 8·1 | |
| 7·4 | | | 38 | 30·2 | GS*g* |
| 9·8 | | | 55 | 41·7 | |
| 10·2 | | 32 | 49 | 57·7 | |
| 10·2 | | | 52 | 7·8 | |
| 10·0 | | 33 | 7 | 29·8 | |
| 9·8 | | 34 | 11 | 8·7 | |
| 10·3 | | | 18 | 41·3 | |
| 10·2 | | | 31 | 26·4 | |
| 9·3 | | 35 | 17 | 41·0 | |
| 10·2 | | | 18 | 4·0 | |
| 10·0 | | | 40 | 35·3 | |
| 10·3 | | | 44 | 0·4 | |
| 10·2 | | 36 | 22 | 42·2 | |
| 9·7 | | 37 | 36 | 36·8 | |
| 10·1 | | 38 | 1 | 42·2 | |
| 10·2 | | | 50 | 11·7 | |
| 10·2 | | 39 | 27 | 47·8 | |
| 10·3 | | | 29 | 47·2 | |
| 10·2 | | | 44 | 31·9 | |
| 9·8 | | | 53 | 34·9 | |
| 9·8 | | 40 | 1 | 33·8 | |
| 10·2 | | | 46 | 41·6 | |
| 9·8 | | | 57 | 38·9 | |
| 9·9 | | 41 | 9 | 11·2 | |
| 9·7 | | | 34 | 7·4 | |
| 10·3 | | | 55 | 54·6 | |
| 10·3 | | 42 | 15 | 12·3 | |
| 9·7 | | | 51 | 0·4 | |
| 10·3 | | 43 | 9 | 24·5 | |
| 9·3 | | | 13 | 28·1 | *g* |
| 9·7 | | | 19 | 50·9 | |
| 10·3 | | 44 | 4 | 1·4 | |
| 10·0 | | 46 | 11 | 32·4 | |
| 10·3 | | | 41 | 6·9 | |
| 10·2 | | | 57 | 52·3 | |
| 9·6 | | 47 | 58 | 7·0 | |
| 10·1 | | 49 | 0 | 57·0 | |
| 9·7 | | | 25 | 14·7 | k*g* |
| 10·0 | | | 26 | 48·6 | |
| 10·0 | | 50 | 32 | 54·9 | |
| 9·7 | | | 35 | 12·6 | k*g* |
| 10·2 | | 51 | 17 | 20·2 | |
| 10·0 | | 52 | 21 | 47·0 | |

## 301—360.

| mag. | 8h.—9h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 10·3 | 8 | 52 | 58 | 35·7 | |
| 9·2 | | 53 | 1 | 39·1 | *g* |
| 9·9 | | | 35 | 20·6 | |
| 9·8 | | | 39 | 6·4 | |
| 10·3 | | 55 | 38 | 24·6 | |
| 9·7 | | | 39 | 17·9 | |
| 9·6 | | 56 | 0 | 57·3 | *g* |
| 9·8 | | | 14 | 5·1 | |
| 10·1 | | | 34 | 43·2 | |
| 9·6 | | | 51 | 7·3 | *g* |
| 9·8 | | 57 | 45 | 37·8 | |
| 10·3 | | 58 | 16 | 33·7 | |
| 9·9 | | 59 | 45 | 16·8 | |
| 9·4 | | | 59 | 18·0 | *g* |
| 9·7 | 9 | 2 | 44 | 8·2 | |
| 10·3 | | 4 | 38 | 1·7 | |
| 10·1 | | | 58 | 4·4 | |
| 10·3 | | 5 | 19 | 53·6 | |
| 10·2 | | 6 | 0 | 0·6 | |
| 9·8 | | 7 | 38 | 32·2 | |
| 9·4 | | 8 | 20 | 29·7 | *g* |
| 10·3 | | | 47 | 20·7 | |
| 10·2 | | 10 | 5 | 29·5 | |
| 9·9 | | | 7 | 47·0 | |
| 10·0 | | | 23 | 25·5 | |
| 10·0 | | 12 | 33 | 39·6 | |
| 10·0 | | 14 | 6 | 28·6 | |
| 10·3 | | | 34 | 38·7 | |
| 10·3 | | | 37 | 26·4 | |
| 9·8 | | | 46 | 11·3 | *g* |
| 9·6 | | 16 | 5 | 8·8 | 10·0 *g* |
| 10·0 | | 17 | 7 | 36·7 | |
| 10·0 | | | 36 | 40·6 | |
| 10·0 | | 18 | 9 | 8·5 | |
| 9·9 | | 19 | 24 | 22·1 | |
| 9·7 | | 20 | 36 | 52·9 | *g* |
| 9·8 | | | 53 | 27·5 | |
| 9·8 | | 21 | 15 | 31·3 | |
| 10·3 | | | 16 | 54·5 | |
| 9·8 | | 22 | 29 | 25·7 | |
| 9·8 | | 23 | 16 | 48·8 | |
| 9·8 | | 24 | 7 | 30·0 | |
| 9·7 | | | 17 | 18·0 | *g* |
| 10·2 | | | 29 | 29·3 | |
| 10·3 | | 25 | 12 | 58·9 | |
| 9·7 | | | 37 | 31·4 | |
| 9·8 | | 26 | 30 | 32·9 | |
| 9·7 | | 27 | 41 | 55·6 | |
| 9·5 | | | 56 | 1·1 | *g* |
| 6·1 | | 28 | 14 | 14·8 | GS*g* |
| 9·8 | | | 29 | 33·5 | |
| 9·1 | | | 48 | 34·3 | G*g* |
| 10·2 | | | 52 | 44·9 | |
| 10·3 | | 29 | 5 | 2·9 | |
| 10·1 | | | 9 | 21·7 | |
| 9·4 | | | 11 | 10·7 | *g* |
| 9·6 | | 30 | 47 | 9·4 | *g* |
| 9·8 | | 32 | 3 | 40·8 | |
| 8·3 | | 33 | 38 | 40·1 | GS*g* |
| 9·9 | | 34 | 12 | 14·0 | |

## 361—420.

| mag. | 9h.—10h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·8 | 9 | 34 | 54 | 8·6 | |
| 9·6 | | 36 | 57 | 39·0 | *g* |
| 10·0 | | 37 | 12 | 50·5 | |
| 9·4 | | | 18 | 1·2 | *g* |
| 5·2 | | | 28 | 22·7 | GSc*g* |
| 10·3 | | 38 | 27 | 46·8 | |
| 10·0 | | 39 | 3 | 27·2 | |
| 9·9 | | 40 | 39 | 31·3 | |
| 10·0 | | 41 | 13 | 10·7 | |
| 9·7 | | | 21 | 37·9 | |
| 9·8 | | | 50 | 15·7 | |
| 10·1 | | 42 | 17 | 39·9 | |
| 9·5 | | | 29 | 49·0 | |
| 9·7 | | | 29 | 40·7 | |
| 10·1 | | | 57 | 29·9 | |
| 10·3 | | 43 | 6 | 54·6 | |
| 10·3 | | | 12 | 4·5 | |
| 10·2 | | | 19 | 51·5 | |
| 10·0 | | 44 | 18 | 22·9 | |
| 9·9 | | | 37 | 9·6 | G |
| 9·8 | | | 46 | 56·1 | |
| 9·8 | | 45 | 54 | 49·3 | |
| 8·8 | | | 57 | 18·5 | *g* |
| 9·8 | | | 57 | 55·2 | |
| 9·4 | | 46 | 22 | 42·9 | |
| 9·2 | | | 31 | 45·0 | |
| 9·2 | | | 31 | 46·1 | |
| 9·2 | | | 39 | 44·6 | |
| 9·7 | | | 43 | 19·0 | |
| 9·7 | | 47 | 20 | 45·4 | |
| 9·4 | | | 36 | 24·3 | |
| 9·4 | | 49 | 2 | 8·0 | |
| 9·5 | | | 59 | 10·2 | |
| 8·8 | | 50 | 17 | 28·6 | GS*g* |
| 9·4 | | 54 | 17 | 19·2 | |
| 9·4 | | 55 | 56 | 19·3 | |
| 9·6 | | 56 | 10 | 11·0 | |
| 9·7 | | | 59 | 0·2 | *g* |
| 9·4 | | 57 | 54 | 43·9 | |
| 9·0 | | 58 | 6 | 42·2 | *g* |
| 9·4 | | | 14 | 41·8 | |
| 9·7 | | 59 | 11 | 36·9 | |
| 8·9 | | | 51 | 58·9 | G*g* |
| 9·4 | 10 | 0 | 16 | 29·7 | |
| 9·4 | | | 50 | 34·5 | |
| 9·6 | | 1 | 32 | 30·6 | |
| 9·7 | | | 38 | 37·8 | |
| 9·8 | | 2 | 27 | 46·1 | |
| 9·8 | | | 27 | 32·4 | |
| 9·4 | | 3 | 15 | 38·9 | |
| 9·8 | | | 47 | 29·6 | |
| 9·7 | | | 52 | 12·7 | |
| 9·4 | | 4 | 26 | 42·0 | |
| 9·7 | | 5 | 6 | 3·0 | |
| 9·7 | | | 13 | 36·5 | |
| 9·7 | | | 18 | 58·5 | |
| 9·6 | | | 25 | 19·1 | |
| 9·4 | | | 30 | 4·1 | |
| 9·4 | | | 35 | 10·6 | |
| 9·7 | | 6 | 6 | 9·6 | |



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## 421—480.

| mag. | h | m | s | − 80° ′ | |
|---|---|---|---|---|---|
| 8·9 | 10 | 6 | 10 | 6·6 | g |
| 9·8 | | | 10 | 41·5 | |
| 7·8 | | | 27 | 57·4 | GSg |
| 9·4 | | | 28 | 7·2 | g |
| 9·6 | | | 50 | 45·2 | |
| 9·8 | | 7 | 58 | 27·8 | |
| 9·8 | | 8 | 40 | 16·9 | |
| 9·7 | | 9 | 47 | 56·7 | |
| 9·1 | | 10 | 56 | 39·4 | |
| 9·8 | | 11 | 8 | 16·3 | |
| 9·2 | | | 27 | 27·1 | g |
| 8·6 | | | 59 | 2·0 | 9·0 g |
| 9·6 | | 12 | 3 | 31·9 | |
| 9·5 | | 13 | 36 | 15·0 | |
| 9·6 | | 14 | 10 | 23·2 | |
| 8·6 | | | 29 | 39·4 | g |
| 9·5 | | | 35 | 40·9 | |
| 9·8 | | | 52 | 43·2 | |
| 9·4 | | 15 | 55 | 6·2 | |
| 9·6 | | 16 | 12 | 1·6 | |
| 9·4 | | | 15 | 20·9 | g |
| 8·7 | | | 16 | 34·8 | g |
| 9·6 | | 17 | 9 | 20·2 | |
| 9·5 | | | 53 | 59·5 | |
| 9·7 | | | 59 | 51·6 | |
| 8·5 | | 18 | 6 | 17·8 | g |
| 9·8 | | | 9 | 58·7 | |
| 9·6 | | 19 | 59 | 32·5 | |
| 9·8 | | 20 | 51 | 6·6 | |
| 9·4 | | 21 | 18 | 38·0 | |
| 9·0 | | | 39 | 6·1 | 9·0 g |
| 9·2 | | | 40 | 15·1 | g |
| 8·4 | | 22 | 14 | 55·4 | g |
| 9·4 | | | 59 | 29·5 | |
| 9·8 | | 23 | 14 | 13·2 | |
| 9·4 | | | 18 | 19·6 | |
| 9·5 | | 24 | 6 | 48·4 | |
| 9·7 | | | 50 | 54·6 | |
| 8·9 | | 25 | 1 | 54·3 | g |
| 9·1 | | | 36 | 0·9 | g |
| 9·4 | | 28 | 29 | 25·2 | g |
| 8·4 | | | 49 | 25·1 | GSg |
| 9·8 | | 29 | 16 | 2·8 | |
| 9·7 | | | 24 | 0·0 | |
| 9·8 | | 30 | 34 | 26·1 | |
| 9·4 | | 31 | 15 | 41·3 | S |
| 8·1 | | 32 | 53 | 58·1 | GSg |
| 7·6 | | | 54 | 31·0 | GSg |
| 9·7 | | | 55 | 30·2 | |
| 9·4 | | 34 | 5 | 48·4 | |
| 9·2 | | | 9 | 21·5 | g |
| 9·2 | | 35 | 37 | 9·2 | g |
| 9·8 | | | 58 | 33·5 | |
| 9·6 | | 36 | 35 | 1·9 | |
| 9·6 | | 37 | 47 | 7·6 | |
| 9·5 | | 38 | 53 | 42·4 | |
| 9·8 | | 39 | 45 | 19·3 | |
| 9·5 | | 40 | 12 | 56·4 | |
| 9·4 | | 41 | 36 | 36·3 | |
| 9·8 | | 43 | 33 | 36·7 | |

## 481—540.

| mag. | h | m | s | − 80° ′ | |
|---|---|---|---|---|---|
| 9·2 | 10 | 43 | 52 | 9·5 | |
| 9·6 | | 44 | 1 | 20·9 | |
| 9·2 | | | 29 | 54·6 | g |
| 9·6 | | | 53 | 28·3 | |
| 9·2 | | 45 | 29 | 0·0 | 8·5 g |
| 9·7 | | 46 | 34 | 55·5 | |
| 9·4 | | 47 | 15 | 13·6 | |
| 9·8 | | | 47 | 45·7 | |
| 9·8 | | 48 | 17 | 47·1 | |
| 8·0 | | | 44 | 16·3 | Gg |
| 9·5 | | | 49 | 10·3 | |
| 9·4 | | 49 | 34 | 21·3 | |
| 9·8 | | | 36 | 46·1 | |
| 9·7 | | 50 | 25 | 47·8 | |
| 9·6 | | 51 | 56 | 59·2 | |
| 9·4 | | 52 | 28 | 19·2 | |
| 9·8 | | | 47 | 46·9 | |
| 9·6 | | 53 | 43 | 55·9 | |
| 9·8 | | 54 | 30 | 12·6 | |
| 9·2 | | | 58 | 52·1 | |
| 9·5 | | 55 | 43 | 6·2 | |
| 9·6 | | 56 | 13 | 41·9 | |
| 9·2 | | | 21 | 59·8 | g |
| 7·8 | | | 31 | 9·8 | 8·5 Gg |
| 9·4 | | | 38 | 16·3 | |
| 8·6 | | | 45 | 7·2 | 9·0 g |
| 9·5 | | 57 | 21 | 56·1 | g |
| 9·7 | | | 25 | 9·8 | |
| 7·4 | | | 43 | 53·2 | GSg |
| 9·6 | | | 50 | 31·8 | |
| 9·5 | | 58 | 6 | 30·8 | |
| 9·8 | | | 36 | 38·1 | |
| 9·7 | | | 51 | 27·7 | |
| 9·7 | | 59 | 7 | 0·5 | |
| 9·8 | | | 58 | 30·8 | |
| 9·7 | 11 | 0 | 12 | 21·1 | |
| 9·7 | | | 13 | 47·0 | |
| 9·8 | | | 18 | 4·5 | |
| 9·5 | | | 32 | 32·4 | |
| 9·6 | | 1 | 2 | 58·1 | |
| 9·7 | | | 3 | 25·6 | |
| 8·2 | | | 15 | 56·9 | GSg |
| 9·8 | | | 24 | 35·5 | |
| 9·5 | | 3 | 11 | 10·7 | |
| 9·4 | | | 29 | 45·9 | |
| 9·8 | | | 51 | 47·3 | |
| 9·8 | | 5 | 33 | 9·2 | |
| 9·8 | | | 55 | 0·6 | |
| 9·4 | | | 55 | 12·7 | g |
| 9·4 | | | 59 | 20·7 | g |
| 9·0 | | 6 | 57 | 38·9 | |
| 9·7 | | 7 | 21 | 38·2 | |
| 9·3 | | 8 | 48 | 2·5 | g |
| 9·6 | | 10 | 13 | 5·7 | |
| 9·7 | | | 15 | 36·7 | |
| 9·4 | | | 22 | 7·4 | |
| 9·8 | | 11 | 21 | 43·8 | |
| 9·0 | | 13 | 6 | 53·3 | g |
| 9·4 | | | 49 | 20·1 | |
| 9·5 | | 14 | 4 | 46·2 | |

## 541—600.

| mag. | h | m | s | − 80° ′ | |
|---|---|---|---|---|---|
| 10·2 | 11 | 14 | 53 | 33·5 | |
| 10·0 | | 15 | 13 | 42·5 | |
| 9·6 | | | 24 | 21·8 | g |
| 9·9 | | 16 | 9 | 27·7 | |
| 9·9 | | | 9 | 20·2 | |
| 9·7 | | | 37 | 1·1 | g |
| 10·2 | | | 45 | 26·1 | |
| 9·9 | | 17 | 15 | 40·3 | |
| 10·0 | | | 42 | 8·6 | |
| 9·6 | | | 55 | 38·0 | |
| 9·4 | | 18 | 35 | 13·4 | g |
| 10·2 | | 19 | 7 | 0·2 | |
| 9·8 | | 20 | 24 | 49·5 | |
| 9·8 | | | 53 | 24·2 | g |
| 10·0 | | 21 | 11 | 17·9 | |
| 9·6 | | | 33 | 22·1 | g |
| 9·3 | | | 53 | 53·0 | g |
| 9·4 | | | 56 | 33·5 | |
| 9·9 | | 22 | 51 | 30·5 | |
| 10·0 | | 24 | 5 | 41·9 | |
| 10·0 | | | 8 | 51·0 | |
| 10·2 | | 25 | 30 | 28·2 | |
| 9·7 | | | 31 | 21·0 | |
| 9·6 | | | 37 | 27·6 | g |
| 10·2 | | 26 | 9 | 19·6 | |
| 10·2 | | | 11 | 40·7 | |
| 9·9 | | | 38 | 24·6 | |
| 9·5 | | | 51 | 0·4 | g |
| 10·0 | | 27 | 30 | 17·6 | |
| 8·2 | | | 49 | 44·4 | Sg |
| 9·8 | | | 55 | 33·1 | |
| 9·8 | | 28 | 9 | 36·7 | |
| 10·0 | | 29 | 3 | 42·0 | |
| 10·0 | | | 36 | 39·9 | |
| 10·0 | | 30 | 32 | 49·5 | |
| 9·9 | | | 43 | 14·0 | |
| 9·9 | | 31 | 24 | 40·4 | |
| 9·8 | | 32 | 19 | 32·8 | |
| 9·6 | | | 40 | 33·2 | |
| 8·4 | | 33 | 13 | 1·4 | g |
| 10·2 | | | 53 | 30·3 | |
| 9·8 | | 35 | 20 | 2·0 | g |
| 10·0 | | 36 | 17 | 3·0 | |
| 10·2 | | | 25 | 39·6 | |
| 9·7 | | 37 | 24 | 12·5 | |
| 10·2 | | | 30 | 8·1 | |
| 10·0 | | | 36 | 52·6 | |
| 10·2 | | | 38 | 23·6 | |
| 10·2 | | | 41 | 21·0 | |
| 9·3 | | 38 | 31 | 22·4 | g |
| 10·2 | | 39 | 14 | 4·9 | |
| 9·7 | | | 18 | 44·3 | |
| 9·6 | | | 55 | 1·0 | |
| 10·1 | | 40 | 1 | 7·6 | |
| 9·4 | | 42 | 38 | 10·1 | g |
| 10·2 | | 43 | 22 | 18·6 | |
| 10·2 | | | 37 | 3·5 | |
| 10·0 | | | 46 | 18·6 | |
| 9·8 | | 44 | 10 | 7·1 | |
| 9·8 | | | 59 | 51·0 | |

25 prec.

| h | m | α s s | δ |
|---|---|---|---|
| 10 | 0 | − 18 − 0·18 d | − 7·2 |
| | 10 | 11 − 0·16 | 7·4 |
| | 20 | − 3 − 0·15 | 7·6 |
| | 30 | + 4 − 0·14 | 7·7 |
| | 40 | 12 − 0·12 | 7·9 |
| | 50 | 20 − 0·11 | 8·0 |
| 11 | 0 | 28 − 0·09 | 8·1 |
| | 10 | 36 − 0·08 | 8·2 |
| | 20 | 44 − 0·06 | 8·2 |
| | 30 | 52 − 0·05 | 8·3 |
| | 40 | 60 − 0·03 | 8·3 |
| | 50 | + 69 − 0·02 | − 8·3 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 11 | 40 | + 60 − 0·03 d | − 8·3 |
| | 50 | 69 − 0·02 | 8·3 |
| 12 | 0 | 77 0·00 | 8·4 |
| | 10 | 85 + 0·02 | 8·3 |
| | 20 | 93 + 0·03 | 8·3 |
| | 30 | 102 + 0·05 | 8·3 |
| | 40 | 110 + 0·06 | 8·2 |
| | 50 | 118 + 0·08 | 8·2 |
| 13 | 0 | 126 + 0·09 | 8·1 |
| | 10 | 134 + 0·11 | 8·0 |
| | 20 | 142 + 0·12 | 7·9 |
| | 30 | 149 + 0·14 | 7·7 |
| | 40 | 157 + 0·15 | 7·6 |
| | 50 | 164 + 0·16 | 7·4 |
| 14 | 0 | 172 + 0·18 | 7·2 |
| | 10 | 179 + 0·19 | 7·0 |
| | 20 | 186 + 0·20 | 6·8 |
| | 30 | 192 + 0·22 | 6·6 |
| | 40 | 199 + 0·23 | 6·4 |
| | 50 | 205 + 0·24 | 6·2 |
| 15 | 0 | 211 + 0·25 | 5·9 |
| | 10 | 217 + 0·26 | 5·6 |
| | 20 | 222 + 0·27 | 5·4 |
| | 30 | + 227 + 0·28 | − 5·1 |

d = minutes of decl.

## 601—660.

| mag. | $11^h$–$12^h$ h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·6 | 11 | 46 | 15 | 45·0 | |
| 10·0 | | 47 | 19 | 45·1 | |
| 10·2 | | 48 | 6 | 23·1 | |
| 9·2 | | | 24 | 29·8 | g |
| 8·5 | | 49 | 6 | 18·8 | g |
| 9·2 | | | 14 | 39·3 | g |
| 10·2 | | | 23 | 40·9 | |
| 10·2 | | | 48 | 17·5 | |
| 10·0 | | 50 | 58 | 28·2 | |
| 9·7 | | 51 | 29 | 49·0 | |
| 10·2 | | 52 | 36 | 46·1 | |
| 9·6 | | 53 | 15 | 33·7 | |
| 10·0 | | | 41 | 25·1 | |
| 9·8 | | 54 | 0 | 4·9 | |
| 10·0 | | 55 | 26 | 6·1 | |
| 10·1 | | | 27 | 34·4 | |
| 9·5 | | | 55 | 30·0 | g |
| 9·6 | | 56 | 4 | 47·1 | |
| 9·6 | | | 18 | 26·9 | |
| 10·2 | | 57 | 0 | 48·3 | |
| 9·8 | | | 7 | 36·6 | |
| 10·0 | | | 15 | 43·8 | |
| 10·0 | | | 55 | 32·4 | |
| 9·8 | | | 59 | 40·2 | |
| 10·2 | | 58 | 9 | 52·8 | |
| 8·6 | | | 56 | 34·3 | |
| 10·2 | | 59 | 6 | 52·1 | |
| 9·8 | | | 56 | 20·0 | |
| 10·0 | 12 | 1 | 30 | 29·1 | |
| 9·9 | | 2 | 31 | 51·8 | |
| 9·8 | | 3 | 39 | 10·7 | g |
| 9·6 | | 4 | 6 | 36·3 | |
| 9·3 | | | 27 | 21·7 | g |
| 8·6 | | 5 | 2 | 22·2 | g |
| 9·6 | | | 58 | 24·2 | |
| 8·9 | | 6 | 9 | 8·2 | g |
| 9·6 | | | 16 | 35·2 | |
| 9·8 | | | 24 | 5·8 | |
| 9·8 | | | 53 | 4·7 | |
| 10·0 | | 7 | 16 | 42·0 | |
| 9·8 | | | 21 | 59·9 | |
| 7·6 | | | 38 | 29·9 | g |
| 10·2 | | | 46 | 59·1 | |
| 10·1 | | 8 | 0 | 36·3 | |
| 9·8 | | | 21 | 35·7 | |
| 7·6 | | | 29 | 5·4 | 8·5 g |
| 10·2 | | | 40 | 57·0 | |
| 10·0 | | 9 | 41 | 2·7 | |
| 10·2 | | | 52 | 21·4 | |
| 10·2 | | 10 | 40 | 5·2 | |
| 9·8 | | 11 | 21 | 56·0 | |
| 10·0 | | | 42 | 40·0 | |
| 9·5 | | 14 | 35 | 16·1 | |
| 9·9 | | 15 | 57 | 34·0 | |
| 8·1 | | 16 | 0 | 39·7 | g |
| 9·8 | | | 58 | 57·1 | |
| 10·2 | | 18 | 1 | 44·4 | |
| 9·9 | | 21 | 19 | 52·2 | |
| 9·4 | | 30 | 50 | 12·2 | 9·5 g |
| 10·2 | | 31 | 36 | 49·6 | |

## 661—720.

| mag. | $12^h$–$14^h$ h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·2 | 12 | 32 | 0 | 55·9 | g |
| 9·7 | | 33 | 39 | 59·9 | |
| 9·4 | | | 49 | 48·8 | g |
| 9·8 | | 35 | 13 | 20·6 | g |
| 9·9 | | | 35 | 49·7 | |
| 9·8 | | 36 | 22 | 59·7 | |
| 9·4 | | 37 | 11 | 13·1 | g |
| 9·9 | | | 26 | 34·9 | |
| 10·2 | | 38 | 58 | 37·4 | |
| 7·3 | | 39 | 57 | 1·3 | 7·0 GSg |
| 10·0 | | 40 | 16 | 3·3 | |
| 10·2 | | 42 | 6 | 20·6 | |
| 9·8 | | | 19 | 53·3 | |
| 9·9 | | | 23 | 36·7 | |
| 9·8 | | | 24 | 53·1 | |
| 9·3 | | 43 | 19 | 17·6 | g |
| 10·0 | | 46 | 41 | 21·2 | |
| 10·0 | | 47 | 3 | 3·2 | |
| 9·9 | | | 19 | 39·4 | |
| 9·9 | | 48 | 3 | 3·6 | |
| 10·0 | | | 22 | 23·6 | |
| 10·0 | | 49 | 6 | 45·4 | |
| 8·8 | | | 55 | 39·5 | g |
| 8·3 | | 53 | 41 | 28·7 | GSg |
| 9·8 | | | 41 | 56·4 | |
| 8·6 | 13 | 11 | 5 | 38·9 | Gg |
| 9·2 | | 13 | 16 | 42·6 | |
| 9·4 | | | 36 | 26·1 | g |
| 8·8 | | 18 | 42 | 54·7 | g |
| 9·2 | | 22 | 42 | 33·5 | g |
| 9·3 | | 23 | 31 | 5·8 | Gkg |
| 9·3 | | 25 | 1 | 33·5 | |
| 9·2 | | | 17 | 11·1 | g |
| 9·5 | | | 38 | 41·0 | g |
| 9·5 | | 26 | 54 | 20·5 | g |
| 9·5 | | 27 | 36 | 8·0 | g |
| 9·5 | | 41 | 25 | 54·0 | g |
| 9·3 | | 48 | 10 | 9·9 | g |
| 9·4 | | 50 | 46 | 15·4 | g |
| 9·3 | | 51 | 42 | 0·9 | g |
| 7·6 | | 53 | 21 | 9·7 | 8·0 GSg |
| 9·5 | | 54 | 1 | 4·5 | g |
| 9·0 | | 57 | 7 | 56·7 | g |
| 9·5 | 14 | 2 | 2 | 59·4 | g |
| 9·4 | | | 9 | 10·5 | 8·5 g |
| 6·5 | | | 39 | 25·1 | GSg |
| 9·1 | | 4 | 7 | 57·5 | g |
| 9·1 | | 7 | 48 | 45·3 | g |
| 9·5 | | 10 | 4 | 52·2 | |
| 9·6 | | 12 | 4 | 22·7 | |
| 9·6 | | | 54 | 31·3 | |
| 9·4 | | 13 | 18 | 56·5 | |
| 9·4 | | | 33 | 3·1 | |
| 9·6 | | 14 | 17 | 14·6 | |
| 9·8 | | | 49 | 11·1 | |
| 9·4 | | 16 | 43 | 54·0 | |
| 9·6 | | 18 | 45 | 39·3 | |
| 9·7 | | 19 | 50 | 5·8 | |
| 9·4 | | 20 | 45 | 2·0 | |
| 8·7 | | 22 | 5 | 11·1 | 8·5 g |

## 721—780.

| mag. | $14^h$–$15^h$ h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9·6 | 14 | 22 | 58 | 25·3 | |
| 9·7 | | 23 | 22 | 1·2 | |
| 9·6 | | | 45 | 36·5 | |
| 9·0 | | 24 | 2 | 39·2 | g |
| 9·2 | | | 37 | 55·0 | g |
| 9·6 | | 25 | 58 | 39·0 | |
| 9·4 | | 27 | 56 | 23·0 | |
| 9·7 | | 28 | 55 | 46·3 | |
| 9·3 | | 29 | 53 | 54·5 | |
| 9·4 | | | 56 | 40·9 | |
| 9·4 | | 31 | 2 | 53·0 | |
| 9·6 | | | 32 | 24·0 | |
| 9·4 | | | 52 | 22·0 | |
| 9·7 | | 34 | 37 | 5·6 | |
| 9·1 | | 35 | 13 | 3·5 | g |
| 9·6 | | 36 | 26 | 11·6 | |
| 9·2 | | | 27 | 3·8 | g |
| 8·7 | | | 39 | 15·9 | g |
| 9·6 | | 38 | 44 | 8·1 | |
| 8·9 | | 39 | 39 | 41·7 | g |
| 9·6 | | | 40 | 42·0 | |
| 8·6 | | | 50 | 41·2 | g |
| 9·5 | | 41 | 15 | 29·1 | |
| 9·0 | | | 41 | 11·7 | |
| 9·7 | | 42 | 16 | 42·6 | |
| 9·2 | | | 42 | 26·7 | |
| 9·6 | | 44 | 29 | 39·8 | |
| 9·4 | | 45 | 14 | 17·8 | |
| 9·6 | | 46 | 19 | 43·8 | |
| 9·7 | | | 41 | 29·0 | |
| 9·6 | | 51 | 24 | 44·2 | |
| 9·6 | | 52 | 41 | 58·3 | |
| 9·4 | | 53 | 40 | 12·1 | g |
| 9·2 | | 54 | 47 | 44·9 | g |
| 8·3 | | 56 | 31 | 17·0 | Gg |
| 9·7 | | 59 | 26 | 6·4 | |
| 9·2 | | | 29 | 1·5 | g |
| 9·4 | | | 42 | 46·2 | g |
| 9·6 | 15 | 0 | 10 | 7·6 | |
| 9·5 | | | 47 | 36·1 | |
| 9·6 | | 1 | 37 | 42·8 | |
| 9·3 | | 4 | 12 | 47·0 | g |
| 9·6 | | 6 | 36 | 12·8 | |
| 9·1 | | 9 | 10 | 32·9 | |
| 8·8 | | 11 | 37 | 51·5 | g |
| 9·6 | | 12 | 15 | 43·0 | |
| 9·3 | | 13 | 10 | 36·1 | |
| 9·2 | | | 35 | 4·7 | g |
| 9·7 | | | 35 | 36·7 | |
| 9·6 | | | 58 | 9·3 | |
| 9·6 | | 14 | 11 | 46·1 | |
| 9·4 | | 18 | 38 | 22·8 | |
| 9·2 | | 19 | 37 | 40·6 | |
| 9·6 | | 20 | 38 | 6·1 | g |
| 9·5 | | 22 | 48 | 33·5 | |
| 9·4 | | 23 | 58 | 19·9 | g |
| 8·9 | | 25 | 51 | 29·0 | g |
| 9·7 | | 26 | 22 | 39·0 | |
| 9·0 | | | 53 | 7·7 | |
| 9·6 | | 28 | 7 | 17·2 | |



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## 781—840.

| | 15ʰ·–18ʰ· | | | −80° | |
|---|---|---|---|---|---|
| mag. | h | m | s | ′ | |
| 9·4 | 15 | 28 | 30 | 20·0 | |
| 9·6 | | 30 | 59 | 46·7 | |
| 9·0 | | 34 | 23 | 8·2 | 8·5 *g* |
| 9·4 | | | 30 | 8·9 | |
| 9·6 | | 36 | 47 | 5·4 | |
| 9·5 | | 37 | 36 | 53·7 | |
| 9·2 | | | 44 | 2·2 | |
| 8·9 | | 38 | 7 | 22·6 | *g* |
| 9·7 | | | 18 | 29·1 | |
| 9·4 | | | 23 | 14·8 | |
| 9·4 | | 40 | 17 | 39·6 | *g* |
| 9·6 | | 42 | 51 | 27·8 | |
| 9·1 | | 43 | 31 | 25·3 | *g* |
| 9·5 | | 44 | 34 | 47·6 | |
| 9·8 | | | 39 | 3·0 | |
| 9·1 | | | 49 | 13·1 | *g* |
| 9·4 | | 45 | 23 | 8·0 | *g* |
| 9·5 | | 47 | 6 | 10·7 | |
| 9·5 | | 49 | 20 | 15·1 | |
| 9·4 | | | 43 | 22·9 | |
| 9·5₋ | | 50 | 38 | 20·2 | |
| 9·0 | | 53 | 6 | 30·3 | *g* |
| 8·2 | | 55 | 43 | 28·1 | *g* |
| 7·8 | 16 | 1 | 2 | 25·7 | *g* |
| 8·7 | | 3 | 54 | 51·2 | *g* |
| 9·6 | | 5 | 33 | 30·0 | *g* |
| 9·5 | | 6 | 47 | 6·8 | |
| 8·0 | | 9 | 45 | 1·6 | 9·0 *g* |
| 8·6 | | 12 | 0 | 38·7 | *g* |
| 9·6 | | 14 | 45 | 33·7 | |
| 9·6 | | 16 | 4 | 8·2 | *g* |
| 9·6 | | 20 | 25 | 47·7 | *g* |
| 9·6 | | 22 | 38 | 26·6 | *g* |
| 8·4 | | | 58 | 32·7 | *g* |
| 9·2 | | 23 | 56 | 54·9 | *g* |
| 8·4 | | 26 | 19 | 6·9 | 9·0 *g* |
| 9·6 | | 27 | 14 | 5·4 | *g* |
| 9·6 | | 30 | 45 | 17·5 | *g* |
| 9·0 | | 35 | 40 | 46·1 | *g* |
| 9·0 | | 36 | 1 | 14·4 | *g* |
| 9·0 | | | 8 | 46·7 | *g* |
| 8·4 | | 41 | 39 | 53·1 | *g* |
| 8·8 | | | 59 | 57·2 | *g* |
| 9·4 | | 43 | 46 | 20·1 | |
| 9·6 | 17 | 3 | 5 | 31·3 | *g* |
| 9·6* | | | 35 | 23·5 | *g* |
| 9·3 | | 7 | 22 | 45·7 | *g* |
| 7·4₋ | | 8 | 7 | 44·2 | GSc*g* |
| 9·4 | | 9 | 4 | 38·4 | |
| 7·7 | | 10 | 57 | 57·3 | GS*g* |
| 8·9 | | 11 | 25 | 25·5 | *g* |
| 9·2 | | | 47 | 26·1 | *g* |
| 9·4 | | 18 | 57 | 34·3 | *g* |
| 8·8 | | 19 | 13 | 0·1 | *g* |
| 9·4 | | | 49 | 43·5 | *g* |
| 9·7 | | 22 | 41 | 6·1 | |
| 9·6 | | 23 | 19 | 26·3 | |
| 9·6 | | 36 | 32 | 20·1 | *g* |
| 9·6 | | 40 | 0 | 8·1 | |
| 8·9 | | 41 | 31 | 36·5 | *g* |

## 841—900.

| | 17ʰ·–19ʰ· | | | −80° | |
|---|---|---|---|---|---|
| mag. | h | m | s | ′ | |
| 9·7 | 17 | 46 | 18 | 9·0 | |
| 9·6 | | 52 | 5 | 27·2 | |
| 9·1 | | | 42 | 13·8 | *g* |
| 8·8 | | 53 | 58 | 5·4 | *g* |
| 9·4 | | 54 | 16 | 39·8 | *g* |
| 9·6 | | 55 | 1 | 38·4 | *g* |
| 8·4 | | 57 | 45 | 16·1 | GS*g* |
| 9·7 | 18 | 3 | 37 | 9·4 | |
| 7·6 | | 6 | 45 | 17·1 | GS*g* |
| 9·6 | | 8 | 16 | 16·1 | |
| 9·4 | | 13 | 4 | 41·2 | *g* |
| 9·2 | | | 21 | 16·3 | *g* |
| 9·6 | | | 57 | 10·1 | |
| 9·7 | | 18 | 26 | 42·9 | |
| 9·4 | | 22 | 9 | 50·4 | *g* |
| 9·6 | | 27 | 9 | 19·0 | *g* |
| 9·6₋ | | 32 | 33 | 20·6 | *g* |
| 6·5 | | | 42 | 51·8 | GS*g* |
| 8·9 | | | 48 | 38·3 | |
| 9·2 | | 33 | 8 | 49·3 | |
| 8·0 | | | 9 | 18·6 | *g* |
| 9·8 | | | 52 | 11·8 | |
| 9·1 | | 34 | 10 | 7·9 | |
| 9·8 | | | 24 | 39·5 | |
| 8·9 | | | 30 | 23·3 | *g* |
| 9·4 | | | 39 | 22·5 | |
| 9·6 | | 35 | 21 | 4·5 | |
| 8·7 | | | 22 | 28·7 | *g* |
| 9·1 | | | 23 | 35·8 | |
| 9·8 | | 36 | 15 | 52·2 | |
| 9·4 | | 37 | 6 | 10·4 | |
| 9·6 | | | 17 | 56·1 | |
| 9·4 | | | 44 | 2·7 | |
| 8·5 | | 39 | 20 | 18·8 | *g* |
| 9·4 | | | 57 | 1·8 | |
| 9·4 | | | 59 | 6·7 | |
| 9·8 | | 40 | 0 | 58·5 | |
| 9·6 | | 41 | 39 | 52·1 | |
| 9·3 | | | 53 | 31·5 | |
| 9·8 | | 42 | 5 | 36·1 | |
| 8·3 | | 44 | 24 | 43·2 | *g* |
| 9·3 | | | 26 | 44·9 | |
| 8·9 | | 46 | 3 | 4·8 | |
| 9·1 | | | 22 | 10·8 | |
| 9·7 | | 47 | 21 | 48·7 | |
| 9·4 | | | 24 | 20·7 | |
| 8·4 | | | 33 | 34·0 | *g* |
| 8·4 | | | 56 | 43·3 | *g* |
| 9·4 | | 48 | 36 | 50·3 | |
| 9·4 | | | 37 | 39·1 | |
| 9·4 | | 49 | 13 | 9·3 | |
| 9·4 | | | 25 | 5·5 | |
| 9·4 | | 50 | 50 | 25·8 | |
| 9·2 | | 51 | 21 | 10·9 | |
| 9·4 | | | 53 | 27·0 | |
| 9·4 | | 54 | 44 | 26·8 | |
| 9·8 | | 55 | 23 | 34·6 | |
| 9·0 | | 58 | 3 | 2·9 | |
| 9·2 | | | 18 | 20·0 | |
| 8·8 | 19 | 0 | 1 | 42·9 | *g* |

## 901—960.

| | 19ʰ·–20ʰ· | | | −80° | |
|---|---|---|---|---|---|
| mag. | h | m | s | ′ | |
| 9·8 | 19 | 0 | 34 | 0·5 | |
| 9·2 | | | 40 | 9·9 | |
| 9·2 | | | 46 | 33·9 | |
| 8·3 | | 4 | 10 | 27·6 | *g* |
| 9·4 | | 5 | 37 | 12·4 | |
| 9·2 | | 7 | 6 | 32·4 | |
| 9·7 | | 8 | 23 | 25·6 | |
| 8·3 | | 9 | 25 | 13·4 | *g* |
| 9·0 | | | 55 | 35·7 | |
| 9·2 | | 11 | 11 | 43·3 | |
| 9·7 | | | 44 | 6·8 | |
| 9·8 | | 12 | 35 | 36·1 | |
| 8·8 | | 13 | 17 | 38·1 | |
| 9·3 | | 14 | 35 | 4·5 | |
| 9·6 | | | 45 | 30·5 | |
| 9·2 | | 15 | 33 | 8·2 | |
| 9·4 | | 18 | 4 | 12·2 | |
| 9·4 | | 19 | 19 | 14·6 | |
| 9·8 | | 20 | 33 | 19·8 | |
| 9·8 | | 21 | 16 | 32·2 | |
| 9·3 | | | 23 | 5·0 | |
| 9·7 | | 22 | 30 | 32·2 | |
| 9·6 | | | 38 | 59·2 | |
| 8·5 | | 23 | 40 | 21·9 | *g* |
| 9·4 | | | 48 | 14·0 | *g* |
| 9·4 | | | 49 | 1·8 | |
| 8·9 | | 24 | 15 | 55·2 | |
| 8·6 | | 26 | 11 | 30·1 | *g* |
| 8·6 | | 27 | 32 | 18·5 | *g* |
| 9·2 | | 30 | 20 | 46·2 | |
| 9·6 | | 31 | 54 | 31·5 | |
| 9·8 | | 32 | 59 | 25·6 | |
| 9·4 | | 34 | 35 | 40·0 | |
| 9·2 | | 38 | 56 | 16·9 | |
| 9·5 | | 41 | 25 | 53·3 | |
| 9·8 | | 44 | 6 | 11·4 | |
| 9·2 | | 45 | 21 | 59·1 | *g* |
| 8·3 | | | 26 | 56·2 | *g* |
| 9·8 | | 47 | 11 | 23·1 | |
| 9·8 | | 49 | 30 | 0·4 | |
| 9·4 | | 51 | 30 | 44·3 | |
| 9·4 | | 53 | 50 | 34·5 | |
| 8·6 | | 54 | 23 | 15·5 | *g* |
| 9·8 | | 55 | 5 | 46·3 | |
| 9·2 | 20 | 0 | 22 | 29·3 | |
| 8·9 | | 4 | 4 | 7·3 | |
| 9·6 | | 5 | 12 | 14·1 | |
| 9·7 | | | 22 | 20·9 | |
| 9·8 | | | 33 | 0·8 | |
| 8·9 | | 6 | 11 | 49·0 | |
| 9·0 | | | 46 | 23·5 | *g* |
| 9·2 | | 7 | 41 | 50·5 | *g* |
| 9·6 | | | 44 | 43·8 | |
| 9·3 | | 8 | 19 | 23·3 | |
| 9·4 | | 9 | 55 | 45·0 | |
| 9·8 | | 10 | 26 | 24·0 | |
| 7·6 | | | 55 | 56·8 | GS*g* |
| 9·6 | | 12 | 54 | 32·3 | |
| 8·8 | | 13 | 9 | 20·1 | *g* |
| 9·6 | | | 16 | 6·9 | |

25 prec.

| | | α | δ |
|---|---|---|---|
| h | m | s s | ′ |
| 15 | 20 | +222 + 0·27 d | −5·4 |
| | 30 | 227 + 0·28 | 5·1 |
| | 40 | 232 + 0·29 | 4·8 |
| | 50 | 237 + 0·30 | 4·5 |
| 16 | 0 | 241 + 0·31 | 4·2 |
| | 10 | 245 + 0·32 | 3·9 |
| | 20 | 249 + 0·32 | 3·5 |
| | 30 | 252 + 0·33 | 3·2 |
| | 40 | 255 + 0·34 | 2·9 |
| | 50 | 258 + 0·34 | 2·5 |
| 17 | 0 | 260 + 0·34 | 2·2 |
| | 10 | 262 + 0·35 | 1·8 |
| | 20 | 264 + 0·35 | 1·5 |
| | 30 | 265 + 0·35 | 1·1 |
| | 40 | 266 + 0·36 | 0·7 |
| | 50 | 266 + 0·36 | −0·4 |
| 18 | 0 | 266 + 0·36 | 0·0 |
| | 10 | 266 + 0·36 | +0·4 |
| | 20 | 266 + 0·36 | 0·7 |
| | 30 | 265 + 0·35 | 1·1 |
| | 40 | 264 + 0·35 | 1·5 |
| | 50 | 262 + 0·35 | 1·8 |
| 19 | 0 | 260 + 0·34 | 2·2 |
| | 10 | 258 + 0·34 | 2·5 |
| | 20 | 255 + 0·34 | 2·9 |
| | 30 | 252 + 0·33 | 3·2 |
| | 40 | 249 + 0·32 | 3·5 |
| | 50 | 245 + 0·32 | 3·9 |
| 20 | 0 | 241 + 0·31 | 4·2 |
| | 10 | 237 + 0·30 | 4·5 |
| | 20 | +232 + 0·29 | +4·8 |

d = minutes of decl.



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| | | 25 prec. α | | δ |
|---|---|---|---|---|
| h | m | s | s | ′ |
| 20 | 10 | +237 | +0.30 d | +4.5 |
| | 20 | 232 | +0.29 | 4.8 |
| | 30 | 227 | +0.28 | 5.1 |
| | 40 | 222 | +0.27 | 5.4 |
| | 50 | 217 | +0.26 | 5.6 |
| 21 | 0 | 211 | +0.25 | 5.9 |
| | 10 | 205 | +0.24 | 6.2 |
| | 20 | 199 | +0.23 | 6.4 |
| | 30 | 192 | +0.22 | 6.6 |
| | 40 | 186 | +0.20 | 6.8 |
| | 50 | 179 | +0.19 | 7.0 |
| 22 | 0 | 172 | +0.18 | 7.2 |
| | 10 | 164 | +0.16 | 7.4 |
| | 20 | 157 | +0.15 | 7.6 |
| | 30 | 149 | +0.14 | 7.7 |
| | 40 | 142 | +0.12 | 7.9 |
| | 50 | 134 | +0.11 | 8.0 |
| 23 | 0 | 126 | +0.09 | 8.1 |
| | 10 | 118 | +0.08 | 8.2 |
| | 20 | 110 | +0.06 | 8.2 |
| | 30 | 102 | +0.05 | 8.3 |
| | 40 | 93 | +0.03 | 8.3 |
| | 50 | 85 | +0.02 | 8.3 |
| 0 | 0 | + 77 | +0.00 | +8.4 |

d = minutes of decl.

## 961—1001.

| mag. | 20h.—21h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 8.8 | 20 | 14 | 2 | 42.9 | |
| 9.2 | | 16 | 16 | 55.6 | |
| 9.8 | | 17 | 54 | 30.4 | |
| 9.6 | | 18 | 29 | 18.1 | |
| 9.3 | | | 59 | 30.5 | *g* |
| 9.2 | | 19 | 22 | 25.9 | *g* |
| 9.2 | | | 37 | 47.7 | |
| 9.2 | | | 54 | 12.2 | |
| 9.8 | | 21 | 43 | 31.3 | |
| 8.0 | | 22 | 13 | 57.8 | *g* |
| 9.6 | | | 50 | 30.7 | |
| 10.2 | | 23 | 58 | 24.7 | |
| 10.2 | | 24 | 9 | 14.3 | |
| 10.3 | | 26 | 23 | 52.6 | |
| 9.4 | | 27 | 14 | 46.9 | *g* |
| 10.0 | | 28 | 0 | 35.0 | |
| 8.2 | | | 9 | 46.0 | GS*g* |
| 8.2 | | | 56 | 17.8 | GS*g* |
| 9.2 | | 29 | 20 | 46.7 | |
| 9.0 | | 30 | 37 | 54.4 | |
| 8.4 | | | 40 | 35.0 | GS*g* |
| 9.7 | | 31 | 29 | 40.3 | |
| 10.0 | | | 31 | 46.7 | |
| 9.7 | | 36 | 57 | 17.0 | |
| 9.0 | | 37 | 36 | 49.8 | |
| 9.6 | | | 41 | 20.1 | |
| 9.7 | | 39 | 5 | 14.9 | |
| 9.6 | | | 17 | 2.9 | |
| 10.2 | | | 24 | 46.2 | |
| 9.8 | | | 32 | 28.0 | |
| 9.6 | | | 34 | 4.6 | |
| 9.6 | | 45 | 16 | 57.3 | *g* |
| 10.1 | | 46 | 37 | 14.1 | |
| 9.7 | | 47 | 8 | 28.6 | |
| 10.2 | | | 10 | 29.1 | |
| 10.0 | | | 34 | 6.0 | |
| 10.3 | | 48 | 44 | 47.9 | |
| 9.7 | | 57 | 0 | 45.1 | |
| 9.6 | | | 47 | 54.6 | |
| 7.4 | | 59 | 15 | 51.3 | GS*g* |
| 10.3 | 21 | 0 | 4 | 25.5 | |

## 1002—1042.

| mag. | 21h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9.2 | 21 | 0 | 20 | 24.5 | *g* |
| 9.2 | | 1 | 3 | 18.1 | *g* |
| 10.0 | | 2 | 36 | 13.5 | |
| 9.0 | | 3 | 22 | 39.2 | *g* |
| 8.2 | | 4 | 45 | 37.9 | GS*g* |
| 10.2 | | 6 | 32 | 35.1 | |
| 9.3 | | 7 | 14 | 39.1 | |
| 10.2 | | 8 | 48 | 7.7 | |
| 9.2 | | 9 | 4 | 40.9 | *g* |
| 9.7 | | | 24 | 30.0 | |
| 10.2 | | 10 | 14 | 20.4 | |
| 8.2 | | 12 | 5 | 27.5 | GS*g* |
| 8.8 | | 15 | 30 | 36.9 | *g* |
| 9.6 | | 16 | 25 | 6.3 | |
| 9.8 | | | 32 | 41.3 | |
| 6.4 | | | 43 | 34.8 | GSc*g* |
| 9.4 | | 17 | 48 | 16.6 | *g* |
| 9.6 | | | 50 | 20.9 | *g* |
| 9.8 | | 20 | 1 | 45.5 | |
| 10.0 | | 21 | 13 | 25.1 | |
| 9.7 | | | 24 | 6.8 | |
| 10.1 | | 25 | 12 | 3.8 | |
| 9.7 | | 26 | 33 | 36.5 | |
| 9.6 | | 27 | 52 | 16.0 | |
| 9.0 | | 28 | 50 | 16.1 | *g* |
| 10.2 | | 30 | 6 | 30.0 | |
| 8.6 | | 32 | 41 | 57.4 | *g* |
| 9.2 | | 35 | 37 | 7.3 | 8.5 *g* |
| 10.0 | | 36 | 54 | 11.4 | |
| 10.0 | | 39 | 40 | 40.0 | |
| 8.4 | | | 52 | 56.8 | *g* |
| 8.5 | | 40 | 43 | 18.1 | *g* |
| 7.9 | | 42 | 27 | 18.3 | GS*g* |
| 9.6 | | | 49 | 16.9 | |
| 10.0 | | 43 | 52 | 23.2 | |
| 9.2 | | 46 | 15 | 7.5 | |
| 9.8 | | 47 | 5 | 15.9 | |
| 9.6 | | | 49 | 43.1 | |
| 8.6 | | 49 | 45 | 24.6 | *g* |
| 9.8 | | 52 | 53 | 19.7 | |
| 9.6 | | 53 | 37 | 42.7 | |

## 1043—1083.

| mag. | 21h.—23h. h | m | s | −80° ′ | |
|---|---|---|---|---|---|
| 9.8 | 21 | 53 | 37 | 27.3 | |
| 9.6 | | 54 | 45 | 57.4 | *g* |
| 10.3 | | 59 | 15 | 54.6 | |
| 9.4 | 22 | 1 | 45 | 21.3 | |
| 9.5 | | 3 | 27 | 41.9 | |
| 9.0 | | 4 | 8 | 50.9 | |
| 9.4 | | | 46 | 29.2 | |
| 9.0 | | 15 | 6 | 17.5 | *g* |
| 9.2 | | 22 | 31 | 29.6 | *g* |
| 9.6 | | 29 | 9 | 29.6 | |
| 8.8 | | 32 | 37 | 53.6 | *g* |
| 9.5 | | 33 | 43 | 30.8 | *g* |
| 4.9 | | 38 | 35 | 47.0 | GS*g* |
| 9.6 | | 41 | 49 | 4.1 | |
| 8.6 | | 43 | 47 | 22.9 | GS*g* |
| 9.4 | | 44 | 9 | 6.0 | 9.0 *g* |
| 9.6 | | | 26 | 0.1 | *g* |
| 9.6 | | 47 | 48 | 28.1 | |
| 9.2 | | 51 | 15 | 33.4 | *g* |
| 9.4 | | 57 | 51 | 4.1 | *g* |
| 9.4 | | | 59 | 53.0 | *g* |
| 6.2 | | 58 | 6 | 9.3 | 6.5 GS*g* |
| 7.8 | 23 | 7 | 48 | 7.0 | 8.0 GS*g* |
| 9.6 | | 9 | 35 | 8.3 | |
| 7.0 | | | 39 | 9.3 | 6.5 GSc*g* |
| 9.6 | | 12 | 10 | 12.1 | |
| 9.5 | | 15 | 37 | 25.5 | |
| 9.7 | | 16 | 6 | 37.3 | *g* |
| 8.4 | | 25 | 49 | 47.3 | *g* |
| 9.5 | | 29 | 31 | 44.5 | *g* |
| 9.3 | | | 39 | 23.7 | *g* |
| 9.3 | | 30 | 52 | 27.5 | *g* |
| 9.5 | | 32 | 30 | 28.1 | *g* |
| 9.2 | | 33 | 45 | 54.5 | *g* |
| 9.7 | | 37 | 33 | 37.5 | *g* |
| 7.8 | | 43 | 40 | 35.7 | GS*g* |
| 9.6 | | 47 | 55 | 51.8 | *g* |
| 9.9 | | | 59 | 12.9 | *g* |
| 9.9 | | 50 | 15 | 54.0 | |
| 10.0 | | 55 | 15 | 32.0 | *g* |
| 9.5 | | 58 | 43 | 39.3 | *g* |



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# ZONE—81°.

## 1—40.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.9 | 0 | 4 | 42 | 44.8 | g |
| 9.4 | | 19 | 10 | 44.6 | g |
| 9.7 | | 20 | 33 | 31.6 | |
| 9.7 | | 21 | 7 | 50.7 | g |
| 9.9 | | | 30 | 49.2 | g |
| 9.0 | | 24 | 27 | 55.1 | g |
| 9.7 | | 31 | 41 | 57.8 | g |
| 8.7 | | 34 | 31 | 51.9 | g |
| 7.8 | | 36 | 13 | 20.6 | GSg |
| 9.4 | | 40 | 2 | 1.1 | g |
| 9.4 | | 49 | 6 | 52.6 | |
| 8.3 | | | 12 | 2.1 | g |
| 9.4 | | 51 | 30 | 26.8 | g |
| 8.9 | | | 45 | 20.5 | g |
| 9.1 | | 53 | 36 | 23.0 | g |
| 9.5 | 1 | 3 | 26 | 11.7 | g |
| 9.3 | | 5 | 26 | 14.8 | g |
| 9.2 | | 11 | 0 | 29.5 | |
| 9.2 | | | 50 | 31.0 | |
| 9.5 | | 12 | 33 | 26.1 | g |
| 9.5 | | 16 | 47 | 28.3 | g |
| 8.6 | | 17 | 5 | 53.1 | g |
| 9.4 | | | 38 | 29.0 | g |
| 9.2 | | 18 | 12 | 36.0 | g |
| 9.0 | | 20 | 29 | 40.2 | g |
| 9.2 | | 25 | 32 | 31.1 | g |
| 9.4 | | 26 | 39 | 3.0 | g |
| 8.9 | | 30 | 7 | 51.0 | g |
| 9.2 | | 33 | 50 | 36.5 | g |
| 9.2 | | 38 | 20 | 6.1 | g |
| 9.2 | | | 50 | 50.1 | g |
| 9.2 | | 40 | 43 | 14.1 | g |
| 9.0 | | 41 | 57 | 16.0 | g |
| 9.3 | | | 58 | 58.4 | g |
| 9.3 | | 45 | 30 | 12.0 | g |
| 8.3 | | 51 | 59 | 58.5 | GSg |
| 8.9 | | 54 | 9 | 38.1 | g |
| 9.3 | | 56 | 30 | 54.4 | |
| 8.7 | 2 | 3 | 13 | 7.7 | g |
| 8.9 | | 6 | 28 | 20.0 | g |

## 41—80.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.1 | 2 | 7 | 36 | 12.4 | g |
| 9.8 | | 10 | 19 | 53.7 | g |
| 8.6 | | 17 | 5 | 9.7 | g |
| 8.4 | | 18 | 41 | 6.7 | g |
| 9.8 | | 20 | 25 | 29.9 | |
| 9.2 | | | 38 | 46.5 | |
| 9.1 | | 21 | 41 | 20.9 | g |
| 9.3 | | 25 | 31 | 31.9 | g |
| 9.4 | | | 54 | 11.9 | |
| 8.4 | | 30 | 24 | 30.1 | g |
| 9.8 | | 33 | 7 | 20.6 | |
| 9.8 | | 34 | 57 | 35.1 | |
| 9.2 | | 38 | 53 | 17.6 | g |
| 9.1 | | 41 | 36 | 7.7 | g |
| 8.9 | | 42 | 11 | 5.7 | g |
| 8.3 | | | 49 | 41.1 | g |
| 9.3 | | 51 | 40 | 49.6 | g |
| 9.2 | | 52 | 40 | 35.4 | |
| 9.8 | | 54 | 25 | 58.6 | |
| 9.8 | | 56 | 1 | 10.2 | |
| 8.9 | | | 39 | 55.2 | g |
| 9.6 | | 58 | 32 | 12.2 | |
| 8.8 | | | 57 | 3.8 | g |
| 9.8 | | | 58 | 50.3 | |
| 8.9 | 3 | 5 | 17 | 23.4 | g |
| 8.9 | | 6 | 10 | 9.8 | g |
| 7.6 | | | 52 | 34.5 | GSg |
| 9.3 | | 8 | 21 | 16.2 | |
| 9.8 | | 9 | 3 | 17.9 | |
| 8.4 | | 10 | 33 | 42.0 | g |
| 8.6 | | | 36 | 0.2 | g |
| 9.8 | | 11 | 50 | 42.4 | g |
| 9.0 | | 13 | 20 | 24.0 | g |
| 8.9 | | | 49 | 3.9 | g |
| 8.4 | | 15 | 4 | 27.8 | g |
| 9.8 | | 16 | 45 | 24.0 | g |
| 8.6 | | 21 | 34 | 44.8 | g |
| 8.1 | | 22 | 20 | 20.4 | GSg |
| 9.1 | | | 51 | 16.0 | Gg |
| 9.1 | | 25 | 51 | 57.4 | |

## 81—120.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.0 | 3 | 32 | 16 | 44.9 | g |
| 9.0 | | 33 | 1 | 5.8 | g |
| 8.1 | | 36 | 8 | 7.8 | GSg |
| 9.8 | | | 12 | 18.2 | |
| 9.8 | | 40 | 24 | 26.9 | |
| 9.3 | | | 32 | 38.1 | g |
| 9.5 | | 41 | 3 | 56.0 | g |
| 9.0 | | 45 | 32 | 15.0 | GSg |
| 9.0 | | | 45 | 15.4 | GSg |
| 9.4 | | | 51 | 24.9 | g |
| 10.0 | | 49 | 20 | 54.2 | |
| 9.5 | | | 40 | 26.9 | |
| 10.0 | | 56 | 25 | 28.7 | |
| 9.8 | | 57 | 56 | 31.0 | |
| 9.8 | 4 | 5 | 44 | 59.5 | |
| 8.9 | | 6 | 55 | 0.6 | g |
| 8.7 | | 8 | 28 | 45.2 | g |
| 10.0 | | | 49 | 20.2 | g |
| 9.1 | | 10 | 25 | 30.9 | g |
| 9.8 | | | 56 | 31.5 | g |
| 9.4 | | 12 | 54 | 21.8 | g |
| 8.9 | | 13 | 6 | 13.0 | g |
| 9.7 | | 14 | 32 | 2.8 | g |
| 8.0 | | 15 | 48 | 2.8 | GSg |
| 9.5 | | 17 | 52 | 2.7 | g |
| 9.8 | | 18 | 40 | 55.0 | |
| 9.4 | | 19 | 32 | 22.8 | g |
| 9.0 | | 21 | 3 | 18.1 | g |
| 9.1 | | | 30 | 51.4 | g |
| 9.5 | | 22 | 30 | 34.7 | |
| 9.5 | | 23 | 21 | 10.9 | g |
| 10.0 | | 27 | 34 | 2.3 | |
| 9.5 | | 31 | 8 | 52.8 | |
| 9.7 | | | 10 | 16.8 | |
| 6.3 | | 32 | 8 | 51.6 | GSg |
| 8.2 | | 35 | 52 | 50.7 | g |
| 9.4 | | 36 | 2 | 14.7 | |
| 9.5 | | | 43 | 29.0 | |
| 9.4 | | 39 | 31 | 59.7 | |
| 9.4 | | | 37 | 28.1 | g |

25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 0 | 0 | + 77 | 0.00 | d | + 8.4 |
| | 10 | 68 | − 0.02 | | 8.3 |
| | 20 | 58 | − 0.04 | | 8.3 |
| | 30 | 49 | − 0.06 | | 8.3 |
| | 40 | 40 | − 0.08 | | 8.2 |
| | 50 | 31 | − 0.10 | | 8.2 |
| 1 | 0 | 22 | − 0.12 | | 8.1 |
| | 10 | 13 | − 0.13 | | 8.0 |
| | 20 | + 5 | − 0.15 | | 7.9 |
| | 30 | − 4 | − 0.17 | | 7.7 |
| | 40 | 12 | − 0.19 | | 7.6 |
| | 50 | 21 | − 0.21 | | 7.4 |
| 2 | 0 | 29 | − 0.22 | | 7.2 |
| | 10 | 37 | − 0.24 | | 7.0 |
| | 20 | 44 | − 0.26 | | 6.8 |
| | 30 | 52 | − 0.27 | | 6.6 |
| | 40 | 59 | − 0.29 | | 6.4 |
| | 50 | 66 | − 0.30 | | 6.2 |
| 3 | 0 | 73 | − 0.32 | | 5.9 |
| | 10 | 79 | − 0.33 | | 5.6 |
| | 20 | 85 | − 0.34 | | 5.4 |
| | 30 | 91 | − 0.35 | | 5.1 |
| | 40 | 96 | − 0.36 | | 4.8 |
| | 50 | 101 | − 0.38 | | 4.5 |
| 4 | 0 | 106 | − 0.39 | | 4.2 |
| | 10 | 111 | − 0.40 | | 3.9 |
| | 20 | 115 | − 0.40 | | 3.5 |
| | 30 | 118 | − 0.41 | | 3.2 |
| | 40 | − 122 | − 0.42 | | + 2.9 |

d = minutes of decl.



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25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 4 | 40 | − 122 − 0·42 d | + 2·9 |
|  | 50 | 125 − 0·42 | 2·5 |
| 5 | 0 | 127 − 0·43 | 2·2 |
|  | 10 | 129 − 0·44 | 1·8 |
|  | 20 | 131 − 0·44 | 1·5 |
|  | 30 | 133 − 0·44 | 1·1 |
|  | 40 | 134 − 0·44 | 0·7 |
|  | 50 | 134 − 0·44 | + 0·4 |
| 6 | 0 | 134 − 0·45 | 0·0 |
|  | 10 | 134 − 0·44 | − 0·4 |
|  | 20 | 134 − 0·44 | 0·7 |
|  | 30 | 133 − 0·44 | 1·1 |
|  | 40 | 131 − 0·44 | 1·5 |
|  | 50 | 129 − 0·44 | 1·8 |
| 7 | 0 | 127 − 0·43 | 2·2 |
|  | 10 | 125 − 0·42 | 2·5 |
|  | 20 | 122 − 0·42 | 2·9 |
|  | 30 | 118 − 0·41 | 3·2 |
|  | 40 | 115 − 0·40 | 3·5 |
|  | 50 | 111 − 0·40 | 3·9 |
| 8 | 0 | 106 − 0·39 | 4·2 |
|  | 10 | 101 − 0·38 | 4·5 |
|  | 20 | 96 − 0·36 | 4·8 |
|  | 30 | 91 − 0·35 | 5·1 |
|  | 40 | 85 − 0·34 | 5·4 |
|  | 50 | 79 − 0·33 | 5·6 |
| 9 | 0 | 73 − 0·32 | 5·9 |
|  | 10 | 66 − 0·30 | 6·2 |
|  | 20 | − 59 − 0·29 | − 6·4 |

d = minutes of decl.

## 121—180.

| mag. | h (4h.–6h.) | m | s | ′ (−81°) | |
|---|---|---|---|---|---|
| 9·7 | 4 | 40 | 18 | 25·6 | g |
| 8·8 |  | 42 | 2 | 30·8 | g |
| 9·2 |  | 45 | 35 | 32·4 | g |
| 9·4 |  | 50 | 32 | 2·4 | g |
| 8·6 |  | 54 | 36 | 42·9 | g |
| 9·2 | 5 | 0 | 39 | 18·8 | g |
| 9·0 |  | 8 | 15 | 53·8 | g |
| 9·4 |  | 10 | 39 | 40·4 | g |
| 9·3 |  | 12 | 32 | 32·4 | g |
| 9·8 |  | 16 | 58 | 18·8 |  |
| 9·8 |  | 21 | 1 | 24·9 |  |
| 9·4 |  | 22 | 34 | 12·4 | g |
| 9·6 |  | 24 | 31 | 56·8 | g |
| 7·8 |  |  | 32 | 40·2 | GSg |
| 9·8 |  |  | 53 | 32·3 | g |
| 9·5 |  | 27 | 5 | 11·4 | g |
| 10·0 |  |  | 10 | 43·8 |  |
| 9·9 |  |  | 11 | 56·7 |  |
| 9·8 |  |  | 52 | 17·9 |  |
| 9·8 |  | 28 | 13 | 42·3 |  |
| 8·6 |  | 29 | 8 | 4·6 | g |
| 7·3 |  | 33 | 20 | 8·3 | GSg |
| 9·8 |  |  | 58 | 13·6 |  |
| 10·0 |  | 36 | 43 | 11·5 |  |
| 9·8 |  |  | 55 | 35·3 | g |
| 9·8 |  | 38 | 15 | 59·9 |  |
| 9·6 |  |  | 37 | 51·2 | g |
| 8·1 |  | 39 | 13 | 40·2 | g |
| 9·8 |  | 41 | 10 | 50·3 | g |
| 9·7 |  |  | 58 | 39·2 | g |
| 9·9 |  | 47 | 51 | 51·8 |  |
| 7·4 |  | 48 | 10 | 40·1 | GSg |
| 9·3 |  | 49 | 17 | 52·5 | g |
| 9·0 |  | 54 | 37 | 9·6 | g |
| 9·6 |  | 56 | 15 | 5·8 | g |
| 9·8 |  |  | 32 | 15·0 |  |
| 9·8 |  | 58 | 11 | 43·7 |  |
| 9·3 |  | 59 | 38 | 23·9 | g |
| 9·4 | 6 | 0 | 11 | 58·1 | g |
| 9·8 |  | 2 | 25 | 27·0 | g |
| 9·9 |  | 3 | 23 | 13·1 |  |
| 9·8 |  | 4 | 33 | 55·5 | g |
| 9·9 |  | 5 | 13 | 44·0 |  |
| 9·7 |  |  | 56 | 7·8 |  |
| 9·2 |  | 6 | 46 | 57·0 | g |
| 9·0 |  | 7 | 40 | 33·7 | g |
| 9·8 |  | 8 | 33 | 18·1 |  |
| 9·6 |  |  | 45 | 23·2 | g |
| 9·8 |  | 9 | 13 | 28·2 |  |
| 9·4 |  |  | 56 | 44·8 |  |
| 9·0 |  | 11 | 59 | 6·1 | g |
| 9·8 |  | 13 | 16 | 40·5 |  |
| 9·1 |  |  | 53 | 2·8 | g |
| 10·0 |  | 15 | 10 | 35·1 |  |
| 7·3 |  | 18 | 20 | 1·6 | GSg |
| 8·0 |  |  | 44 | 57·2 | GSg |
| 9·1 |  | 19 | 55 | 0·5 | Gg |
| 9·5 |  | 22 | 29 | 44·5 |  |
| 7·7 |  | 24 | 17 | 29·5 | GSg |
| 9·0 |  | 25 | 28 | 22·4 | g |

## 181—240.

| mag. | h (6h.–8h.) | m | s | ′ (−81°) | |
|---|---|---|---|---|---|
| 9·4 | 6 | 25 | 28 | 13·8 | g |
| 9·4 |  | 26 | 11 | 23·7 |  |
| 9·2 |  |  | 19 | 52·5 |  |
| 9·6 |  | 27 | 21 | 59·6 |  |
| 9·6 |  | 28 | 12 | 25·0 |  |
| 8·9 |  |  | 44 | 33·9 | g |
| 8·9 |  | 32 | 46 | 2·3 |  |
| 9·8 |  | 35 | 54 | 42·7 |  |
| 9·6 |  | 36 | 2 | 18·0 | g |
| 9·5 |  |  | 40 | 30·3 |  |
| 9·6 |  | 38 | 56 | 39·2 |  |
| 9·2 |  | 41 | 12 | 5·1 | g |
| 10·0 |  | 42 | 43 | 16·6 |  |
| 8·9 |  | 49 | 0 | 33·0 | g |
| 9·8 |  |  | 55 | 56·9 |  |
| 8·9 |  | 50 | 20 | 19·7 | g |
| 9·4 |  |  | 45 | 1·2 |  |
| 9·6 |  | 54 | 29 | 30·3 | g |
| 10·0 |  | 59 | 36 | 16·0 |  |
| 9·1 |  |  | 54 | 56·0 | g |
| 9·4 | 7 | 0 | 54 | 12·1 |  |
| 9·4 |  |  | 57 | 37·2 |  |
| 9·6 |  | 1 | 0 | 27·8 |  |
| 9·2 |  | 2 | 21 | 11·7 |  |
| 10·0 |  | 3 | 49 | 30·6 | g |
| 9·6 |  | 4 | 52 | 4·6 |  |
| 9·0 |  | 6 | 32 | 55·5 | g |
| 9·2 |  | 7 | 10 | 33·7 | g |
| 9·6 |  | 8 | 16 | 0·8 |  |
| 9·4 |  |  | 54 | 6·6 |  |
| 9·0 |  | 9 | 2 | 21·7 | g |
| 10·0 |  | 11 | 1 | 37·4 |  |
| 8·9 |  |  | 26 | 34·5 | g |
| 8·2 |  | 15 | 47 | 17·4 | g |
| 9·0 |  | 16 | 36 | 54·1 | g |
| 9·4 |  | 18 | 40 | 24·2 |  |
| 9·9 |  | 20 | 34 | 38·8 |  |
| 9·6 |  | 22 | 3 | 32·7 |  |
| 8·9 |  | 25 | 1 | 21·8 | g |
| 9·2 |  |  | 23 | 51·5 | g |
| 9·2 |  | 31 | 27 | 0·1 |  |
| 9·4 |  |  | 41 | 42·7 |  |
| 10·0 |  | 36 | 19 | 41·6 |  |
| 9·2 |  | 38 | 13 | 8·4 | g |
| 9·2 |  | 40 | 2 | 15·0 |  |
| 8·9 |  |  | 35 | 39·1 | g |
| 9·6 |  | 41 | 1 | 54·0 |  |
| 9·4 |  |  | 51 | 21·0 | g |
| 8·4 |  | 42 | 55 | 57·9 | g |
| 9·0 |  | 43 | 17 | 42·6 |  |
| 9·2 |  | 52 | 41 | 26·6 | g |
| 9·0 |  | 53 | 21 | 20·6 | g |
| 9·4 |  | 54 | 2 | 23·0 | g |
| 9·6 |  |  | 8 | 22·6 | g |
| 9·5 |  |  | 32 | 31·1 |  |
| 7·2 |  | 55 | 57 | 38·6 | GSg |
| 6·5 |  | 57 | 24 | 16·2 | GSg |
| 9·0 |  |  | 58 | 7·3 |  |
| 9·8 |  | 58 | 54 | 42·3 |  |
| 9·5 | 8 | 0 | 3 | 47·2 |  |

## 241—300.

| mag. | h (8h.–9h.) | m | s | ′ (−81°) | |
|---|---|---|---|---|---|
| 9·2 | 8 | 5 | 7 | 19·9 |  |
| 9·7 |  | 9 | 8 | 29·6 |  |
| 9·5 |  | 12 | 52 | 28·0 |  |
| 10·2 |  | 13 | 10 | 57·9 |  |
| 9·8 |  |  | 32 | 12·9 |  |
| 9·8 |  | 14 | 16 | 40·0 |  |
| 9·0 |  |  | 40 | 37·4 | g |
| 9·5 |  | 15 | 0 | 58·0 |  |
| 9·4 |  |  | 8 | 1·1 |  |
| 9·2 |  | 16 | 48 | 13·8 | GSg |
| 9·9 |  |  | 58 | 59·0 |  |
| 9·7 |  | 18 | 58 | 8·1 | k |
| 9·8 |  | 19 | 33 | 10·0 | G |
| 9·4 |  |  | 42 | 42·5 |  |
| 10·1 |  | 21 | 0 | 20·8 |  |
| 9·7 |  | 22 | 37 | 41·3 |  |
| 9·9 |  |  | 57 | 10·3 |  |
| 9·9 |  | 23 | 43 | 33·1 |  |
| 9·9 |  | 24 | 19 | 46·2 |  |
| 9·4 |  | 28 | 6 | 39·8 | g |
| 9·7 |  | 30 | 29 | 8·7 |  |
| 9·8 |  | 31 | 2 | 33·1 |  |
| 9·5 |  | 32 | 19 | 34·3 |  |
| 9·9 |  |  | 50 | 40·8 |  |
| 9·4 |  | 33 | 37 | 38·3 |  |
| 10·0 |  | 34 | 14 | 5·1 |  |
| 10·0 |  | 35 | 8 | 44·3 |  |
| 10·2 |  |  | 56 | 23·8 |  |
| 10·2 |  | 36 | 14 | 28·0 |  |
| 9·6 |  |  | 33 | 0·6 |  |
| 9·7 |  | 37 | 20 | 28·8 |  |
| 10·2 |  |  | 27 | 23·6 |  |
| 10·3 |  | 38 | 26 | 43·6 |  |
| 9·9 |  |  | 40 | 3·6 |  |
| 9·7 |  | 40 | 15 | 49·1 |  |
| 10·2 |  | 41 | 5 | 0·2 |  |
| 9·8 |  |  | 21 | 3·9 |  |
| 10·2 |  |  | 50 | 55·3 |  |
| 9·8 |  | 42 | 8 | 4·0 |  |
| 10·2 |  | 44 | 18 | 27·6 |  |
| 10·1 |  | 45 | 16 | 31·6 |  |
| 10·3 |  | 46 | 12 | 28·8 |  |
| 10·3 |  | 48 | 6 | 16·0 |  |
| 9·3 |  |  | 34 | 6·2 | g |
| 9·5 |  | 50 | 15 | 25·0 |  |
| 9·4 |  |  | 46 | 19·1 |  |
| 10·1 |  | 51 | 29 | 37·8 |  |
| 9·9 |  |  | 59 | 21·8 |  |
| 10·2 |  | 53 | 39 | 0·4 |  |
| 10·0 |  | 55 | 12 | 54·9 |  |
| 9·4 |  | 57 | 15 | 33·9 | g |
| 10·0 | 9 | 1 | 2 | 51·1 |  |
| 8·6 |  |  | 20 | 43·1 | g |
| 10·1 |  | 2 | 25 | 35·3 |  |
| 10·1 |  | 3 | 6 | 54·5 |  |
| 9·7 |  | 5 | 58 | 53·9 |  |
| 9·5 |  | 6 | 28 | 52·5 | g |
| 9·2 |  | 8 | 19 | 36·9 | g |
| 10·3 |  | 12 | 43 | 29·5 |  |
| 10·3 |  | 13 | 6 | 3·8 |  |

### 301—360.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.5 | 9 | 13 | 24 | 44.4 | g |
| 8.0 | | 14 | 46 | 48.5 | GSg |
| 9.3 | | 15 | 16 | 41.9 | g |
| 10.2 | | | 29 | 54.0 | |
| 9.6 | | | 34 | 7.5 | g |
| 9.7 | | | 51 | 15.1 | |
| 10.1 | | 16 | 6 | 19.4 | |
| 10.2 | | | 37 | 11.2 | |
| 10.2 | | 17 | 20 | 53.0 | |
| 10.1 | | | 36 | 24.4 | |
| 10.1 | | | 49 | 58.4 | |
| 8.1 | | 18 | 21 | 14.7 | GSg |
| 10.3 | | | 49 | 7.0 | |
| 10.0 | | 20 | 1 | 37.0 | |
| 10.3 | | | 16 | 49.8 | |
| 9.7 | | | 18 | 17.4 | |
| 9.8 | | | 28 | 46.9 | g |
| 8.4 | | | 28 | 41.6 | g |
| 10.1 | | | 28 | 53.5 | |
| 10.3 | | | 41 | 56.7 | |
| 9.8 | | | 56 | 29.6 | |
| 10.2 | | 22 | 23 | 28.6 | |
| 9.7 | | | 34 | 15.3 | g |
| 9.7 | | | 51 | 21.1 | |
| 9.9 | | 23 | 16 | 51.6 | |
| 9.9 | | | 17 | 55.3 | |
| 9.7 | | | 27 | 45.9 | g |
| 10.3 | | 24 | 21 | 23.0 | |
| 9.7 | | | 32 | 30.9 | |
| 9.8 | | | 50 | 28.0 | |
| 9.8 | | 25 | 4 | 11.8 | Ggg |
| 9.9 | | | 15 | 26.5 | |
| 9.7 | | | 24 | 39.4 | |
| 9.8 | | | 26 | 27.0 | |
| 9.9 | | | 33 | 30.3 | |
| 9.9 | | 26 | 13 | 17.3 | |
| 10.2 | | | 16 | 56.5 | |
| 10.3 | | | 18 | 38.6 | |
| 9.9 | | | 38 | 10.6 | Gg |
| 10.0 | | 27 | 51 | 4.6 | |
| 10.0 | | 28 | 13 | 38.2 | |
| 9.9 | | | 33 | 50.0 | |
| 9.9 | | | 51 | 58.7 | |
| 9.9 | | 30 | 3 | 19.2 | |
| 9.5 | | 31 | 8 | 54.4 | |
| 8.4 | | 32 | 25 | 9.0 | GSg |
| 9.1 | | | 43 | 17.3 | GSg |
| 10.2 | | 34 | 0 | 0.7 | |
| 10.2 | | | 36 | 43.8 | |
| 10.0 | | 35 | 4 | 39.6 | |
| 7.6 | | | 7 | 42.4 | GSg |
| 10.0 | | | 36 | 55.0 | |
| 9.8 | | | 45 | 28.7 | |
| 8.7 | | 36 | 7 | 7.0 | GSg |
| 9.7 | | | 39 | 3.0 | g |
| 8.8 | | 37 | 11 | 51.1 | g |
| 10.1 | | | 59 | 30.5 | |
| 9.8 | | 38 | 50 | 54.4 | |
| 9.9 | | 40 | 25 | 18.2 | |
| 9.9* | | | 33 | 19.2 | |

### 361—420.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.8 | 9 | 40 | 55 | 26.4 | |
| 9.9 | | 41 | 14 | 40.4 | |
| 8.2 | | | 29 | 10.7 | Gg |
| 9.7 | | | 30 | 41.6 | |
| 7.9 | | 42 | 33 | 8.3 | GSg |
| 9.8 | | 44 | 23 | 43.2 | |
| 9.6 | | 46 | 52 | 35.4 | |
| 9.4 | | 48 | 3 | 14.1 | |
| 9.8 | | | 15 | 25.1 | |
| 9.5 | | | 23 | 47.5 | |
| 9.7 | | 49 | 52 | 14.0 | |
| 9.7 | | | 58 | 47.0 | |
| 9.2 | | 50 | 21 | 55.7 | |
| 9.6 | | 51 | 18 | 12.0 | |
| 9.8 | | | 40 | 6.2 | |
| 9.5 | | 52 | 14 | 35.5 | |
| 9.8 | | | 15 | 14.2 | |
| 9.8 | | | 42 | 26.1 | |
| 9.6 | | 53 | 19 | 27.0 | |
| 9.4 | | | 21 | 0.4 | g |
| 9.4 | | | 43 | 1.3 | g |
| 9.4 | | | 54 | 22.0 | |
| 9.5 | | 54 | 50 | 58.0 | |
| 9.6 | | 55 | 28 | 33.6 | |
| 9.5 | | | 40 | 3.8 | |
| 9.2 | | 56 | 7 | 42.3 | |
| 9.8 | | 57 | 22 | 32.0 | |
| 9.6 | | | 57 | 29.9 | |
| 9.8 | | 58 | 15 | 50.5 | |
| 8.4 | | 59 | 58 | 14.2 | GSg |
| 9.7 | 10 | 0 | 39 | 14.0 | |
| 9.1 | | 2 | 34 | 30.4 | g |
| 9.1 | | | 35 | 36.4 | g |
| 9.2 | | 3 | 3 | 30.5 | g |
| 9.8 | | | 16 | 10.5 | |
| 9.8 | | | 17 | 50.9 | |
| 9.6 | | | 37 | 51.3 | |
| 9.6 | | | 53 | 1.9 | |
| 6.3 | | | 58 | 36.6 | GSg |
| 9.8 | | 4 | 28 | 21.8 | |
| 9.2 | | | 29 | 5.6 | g |
| 9.5 | | | 59 | 53.2 | |
| 9.3 | | 5 | 18 | 26.9 | |
| 9.4 | | | 23 | 38.3 | |
| 9.4 | | | 55 | 49.5 | |
| 9.7 | | 6 | 14 | 53.9 | |
| 9.6 | | | 29 | 9.1 | |
| 9.4 | | | 33 | 59.4 | |
| 8.4 | | | 50 | 53.9 | GSg |
| 9.2 | | | 52 | 30.7 | |
| 9.8 | | 8 | 31 | 21.7 | |
| 9.5 | | | 39 | 22.3 | |
| 9.5 | | 9 | 14 | 59.5 | |
| 9.5 | | | 54 | 31.4 | |
| 9.7 | | 10 | 33 | 55.5 | |
| 9.7 | | 12 | 24 | 56.2 | |
| 9.3 | | 13 | 56 | 43.4 | |
| 9.4 | | | 58 | 58.7 | |
| 9.4 | | 14 | 31 | 32.3 | g |
| 9.8 | | 15 | 29 | 24.8 | |

### 421—480.

| mag. | h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9.7 | 10 | 15 | 32 | 18.5 | G |
| 9.3 | | | 38 | 10.7 | G |
| 9.4 | | 16 | 9 | 52.9 | |
| 9.4 | | 17 | 16 | 46.9 | |
| 9.5 | | 18 | 1 | 12.4 | |
| 9.7 | | | 40 | 3.5 | |
| 9.0 | | | 53 | 56.5 | g |
| 9.7 | | 19 | 13 | 24.9 | |
| 9.7 | | | 41 | 46.1 | |
| 9.4 | | 20 | 13 | 4.3 | |
| 9.2 | | | 16 | 12.1 | g |
| 7.3 | | 21 | 33 | 1.0 | GSg |
| 9.8 | | 22 | 11 | 47.3 | |
| 9.8 | | | 13 | 40.5 | |
| 9.4 | | 23 | 21 | 7.4 | g |
| 9.4 | | | 23 | 58.9 | |
| 9.4 | | 24 | 1 | 35.0 | |
| 9.8 | | 25 | 25 | 4.9 | |
| 9.7 | | | 36 | 4.0 | |
| 9.7 | | | 52 | 46.0 | |
| 9.7 | | 26 | 4 | 13.6 | |
| 9.8 | | | 51 | 1.7 | |
| 9.1 | | 27 | 22 | 47.6 | g |
| 9.6 | | 28 | 9 | 50.9 | |
| 9.7 | | 30 | 18 | 23.3 | |
| 9.7 | | 31 | 36 | 35.5 | |
| 9.6 | | | 44 | 29.6 | |
| 9.0 | | 32 | 16 | 16.9 | g |
| 7.1 | | | 33 | 16.5 | GSg |
| 9.8 | | | 44 | 34.7 | |
| 9.5 | | 33 | 14 | 8.5 | |
| 9.8 | | | 51 | 22.8 | |
| 9.2 | | 35 | 18 | 38.7 | g |
| 9.2 | | 36 | 58 | 59.3 | g |
| 9.2 | | 37 | 42 | 37.7 | g |
| 9.2 | | 38 | 25 | 34.3 | g |
| 9.8 | | | 46 | 7.9 | |
| 9.6 | | | 52 | 2.5 | |
| 9.5 | | 39 | 19 | 13.9 | |
| 9.8 | | | 29 | 37.5 | |
| 9.5 | | | 48 | 34.9 | |
| 9.6 | | 40 | 15 | 10.8 | |
| 9.5 | | 41 | 0 | 0.7 | |
| 9.4 | | | 10 | 4.9 | |
| 9.6 | | | 16 | 29.3 | |
| 9.6 | | | 34 | 53.7 | |
| 8.2 | | 42 | 20 | 22.7 | GSg |
| 9.8 | | | 42 | 0.4 | |
| 9.0 | | 43 | 23 | 39.6 | g |
| 9.6 | | | 26 | 43.8 | |
| 9.0 | | 45 | 7 | 39.8 | g |
| 9.8 | | | 27 | 46.7 | |
| 9.7 | | 46 | 3 | 50.5 | |
| 9.5 | | | 35 | 2.1 | |
| 9.8 | | 47 | 37 | 33.0 | |
| 9.2 | | 49 | 26 | 37.1 | g |
| 9.5 | | 54 | 54 | 49.0 | |
| 7.5 | | 57 | 24 | 54.6 | GSg |
| 9.8 | | 58 | 35 | 5.9 | |
| 9.8 | | | 55 | 44.1 | |

25 prec.

| h | m | α s | s | δ |
|---|---|---|---|---|
| 9 | 10 | − 66 | − 0.30 d | − 6.2 |
| | 20 | 59 | − 0.29 | 6.4 |
| | 30 | 52 | − 0.27 | 6.6 |
| | 40 | 44 | − 0.26 | 6.8 |
| | 50 | 37 | − 0.24 | 7.0 |
| 10 | 0 | 29 | − 0.22 | 7.2 |
| | 10 | 21 | − 0.21 | 7.4 |
| | 20 | 12 | − 0.19 | 7.6 |
| | 30 | − 4 | − 0.17 | 7.7 |
| | 40 | + 5 | − 0.15 | 7.9 |
| | 50 | 13 | − 0.13 | 8.0 |
| 11 | 0 | + 22 | − 0.12 | − 8.1 |

d = minutes of decl.

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 10 | 50 | + 13 | − 0·13 d | − 8·0 |
| 11 | 0 | 22 | − 0·12 | 8·1 |
| | 10 | 31 | − 0·10 | 8·2 |
| | 20 | 40 | − 0·08 | 8·2 |
| | 30 | 49 | − 0·06 | 8·3 |
| | 40 | 58 | − 0·04 | 8·3 |
| | 50 | 68 | − 0·02 | 8·3 |
| 12 | 0 | 77 | 0·00 | 8·4 |
| | 10 | 86 | + 0·02 | 8·3 |
| | 20 | 95 | + 0·04 | 8·3 |
| | 30 | 104 | + 0·06 | 8·3 |
| | 40 | 113 | + 0·08 | 8·2 |
| | 50 | 123 | + 0·10 | 8·2 |
| 13 | 0 | 131 | + 0·12 | 8·1 |
| | 10 | 140 | + 0·13 | 8·0 |
| | 20 | 149 | + 0·15 | 7·9 |
| | 30 | 158 | + 0·17 | 7·7 |
| | 40 | 166 | + 0·19 | 7·6 |
| | 50 | 174 | + 0·21 | 7·4 |
| 14 | 0 | 182 | + 0·22 | 7·2 |
| | 10 | 190 | + 0·24 | 7·0 |
| | 20 | + 198 | + 0·26 | − 6·8 |

d = minutes of decl.

## 481—540.

| mag. | 10h.—11h. h | m | s | − 81° ′ | |
|---|---|---|---|---|---|
| 8·6 | 10 | 59 | 58 | 37·3 | g |
| 9·7 | | | 59 | 22·7 | |
| 9·2 | 11 | 0 | 16 | 57·2 | |
| 9·6 | | | 23 | 46·2 | |
| 9·5 | | 4 | 57 | 46·8 | |
| 9·8 | | 5 | 14 | 7·0 | Gg |
| 9·8 | | | 20 | 16·2 | |
| 9·5 | | | 47 | 22·9 | |
| 9·8 | | | 56 | 15·9 | |
| 9·2 | | 7 | 39 | 13·7 | |
| 9·6 | | 13 | 9 | 32·0 | |
| 9·8 | | 14 | 10 | 19·1 | |
| 10·2 | | 16 | 4 | 23·1 | |
| 9·7 | | 17 | 13 | 42·0 | |
| 9·8 | | 18 | 51 | 53·0 | |
| 8·7 | | 19 | 43 | 31·4 | g |
| 9·7 | | | 47 | 17·0 | g |
| 9·6 | | | 47 | 24·1 | |
| 10·2 | | 22 | 24 | 11·4 | |
| 9·2 | | 23 | 54 | 49·8 | g |
| 9·6 | | 24 | 8 | 22·5 | |
| 9·8 | | | 30 | 21·4 | |
| 9·8 | | 25 | 8 | 33·3 | |
| 9·8 | | | 34 | 18·0 | |
| 10·2 | | 26 | 19 | 27·9 | |
| 10·2 | | 30 | 52 | 51·0 | |
| 9·6 | | 31 | 19 | 31·0 | |
| 10·0 | | 32 | 0 | 8·0 | |
| 9·9 | | | 52 | 17·2 | |
| 9·2 | | 34 | 32 | 38·2 | g |
| 10·0 | | | 33 | 12·2 | |
| 10·0 | | 36 | 12 | 36·1 | |
| 10·0 | | 38 | 13 | 17·2 | |
| 10·0 | | | 16 | 9·5 | |
| 10·0 | | | 28 | 22·2 | |
| 10·2 | | | 48 | 36·8 | |
| 9·8 | | 39 | 7 | 35·8 | |
| 9·7 | | | 28 | 53·6 | |
| 9·9 | | 40 | 5 | 49·0 | |
| 9·6 | | | 15 | 3·4 | |
| 9·8 | | | 19 | 57·2 | |
| 9·8 | | | 46 | 4·0 | |
| 10·0 | | 41 | 56 | 57·2 | |
| 10·2 | | 42 | 29 | 3·9 | |
| 9·5 | | 43 | 6 | 44·6 | g |
| 9·6 | | | 23 | 6·3 | g |
| 10·2 | | 44 | 13 | 52·0 | |
| 10·2 | | | 34 | 15·4 | |
| 9·2 | | 46 | 20 | 4·3 | g |
| 10·0 | | | 41 | 8·5 | |
| 9·4 | | 47 | 37 | 35·9 | g |
| 9·9 | | | 58 | 30·2 | |
| 10·2 | | 49 | 33 | 42·0 | |
| 9·9 | | | 50 | 14·9 | |
| 8·8 | | 52 | 0 | 49·7 | g |
| 10·2 | | 53 | 12 | 38·7 | |
| 10·2 | | | 41 | 53·9 | |
| 10·0 | | | 47 | 2·2 | |
| 10·1 | | 54 | 9 | 35·8 | |
| 9·7 | | | 15 | 3·5 | |

## 541—600.

| mag. | 11h.—12h. h | m | s | − 81° ′ | |
|---|---|---|---|---|---|
| 9·8 | 11 | 54 | 40 | 13·3 | |
| 9·8 | | 55 | 7 | 52·3 | |
| 9·3 | | | 13 | 51·8 | g |
| 9·8 | | | 44 | 46·7 | |
| 9·8 | | 56 | 58 | 22·3 | |
| 9·5 | | 57 | 8 | 9·3 | g |
| 8·8 | | 58 | 20 | 33·6 | g |
| 10·2 | 12 | 0 | 6 | 55·7 | |
| 10·0 | | 4 | 37 | 8·7 | |
| 9·9 | | 5 | 33 | 25·7 | |
| 10·0 | | 6 | 20 | 51·1 | |
| 9·3 | | 7 | 47 | 12·3 | g |
| 9·9 | | 8 | 0 | 7·1 | |
| 10·0 | | | 29 | 43·5 | |
| 10·0 | | 9 | 22 | 34·5 | |
| 10·0 | | 11 | 48 | 43·5 | |
| 9·4 | | 12 | 43 | 55·9 | g |
| 9·8 | | 13 | 23 | 42·0 | |
| 9·8 | | 15 | 7 | 6·1 | |
| 9·8 | | | 25 | 35·7 | |
| 9·8 | | | 56 | 54·0 | |
| 10·0 | | 17 | 26 | 45·6 | |
| 9·3 | | | 32 | 43·8 | |
| 10·2 | | | 36 | 29·2 | |
| 9·3 | | | 41 | 24·7 | g |
| 10·1 | | 18 | 4 | 6·9 | |
| 9·5 | | | 30 | 20·7 | g |
| 9·6 | | 20 | 35 | 59·8 | g |
| 9·5 | | | 39 | 52·6 | |
| 9·8 | | 21 | 4 | 28·9 | |
| 10·2 | | | 29 | 37·6 | |
| 10·2 | | | 36 | 49·7 | |
| 9·6 | | | 53 | 47·2 | g |
| 10·0 | | 22 | 40 | 34·9 | |
| 10·2 | | 23 | 37 | 24·9 | |
| 10·0 | | 24 | 37 | 45·0 | |
| 10·1 | | 25 | 38 | 38·8 | |
| 10·0 | | 26 | 6 | 28·2 | |
| 9·7 | | 27 | 8 | 19·0 | |
| 10·0 | | | 56 | 42·3 | |
| 9·6 | | 28 | 36 | 25·7 | |
| 9·5 | | 29 | 6 | 37·5 | |
| 10·0 | | | 22 | 8·7 | |
| 9·9 | | | 25 | 55·3 | |
| 9·5 | | | 48 | 53·8 | |
| 10·0 | | 30 | 0 | 48·2 | |
| 9·7 | | | 0 | 22·0 | |
| 9·8 | | | 1 | 0·8 | |
| 10·0 | | | 29 | 45·5 | |
| 10·2 | | 31 | 24 | 42·9 | |
| 9·9 | | 33 | 6 | 8·0 | |
| 9·1 | | | 38 | 21·3 | g |
| 9·9 | | 34 | 22 | 47·8 | |
| 9·2 | | | 24 | 19·8 | g |
| 10·0 | | 35 | 21 | 15·3 | |
| 10·2 | | 36 | 11 | 22·8 | |
| 9·3 | | | 18 | 22·3 | |
| 10·2 | | | 32 | 48·9 | |
| 10·2 | | | 58 | 45·7 | |
| 9·7 | | 37 | 53 | 7·9 | |

## 601—660.

| mag. | 12h.—14h. h | m | s | − 81° ′ | |
|---|---|---|---|---|---|
| 9·5 | 12 | 38 | 14 | 59·0 | g |
| 10·2 | | | 17 | 45·5 | |
| 10·0 | | | 53 | 0·3 | |
| 10·0 | | | 55 | 26·7 | |
| 10·2 | | 39 | 24 | 41·9 | |
| 10·0 | | | 43 | 28·0 | |
| 10·0 | | 40 | 29 | 39·3 | |
| 10·0 | | | 40 | 16·0 | |
| 10·0 | | 41 | 34 | 41·7 | |
| 9·1 | | 42 | 28 | 11·4 | |
| 9·7 | | 43 | 10 | 4·5 | |
| 9·5 | | 44 | 22 | 55·6 | g |
| 9·6 | | 45 | 37 | 42·2 | |
| 9·5 | | 46 | 54 | 41·4 | |
| 9·2 | | 47 | 12 | 44·2 | g |
| 9·5 | | 48 | 33 | 26·1 | |
| 9·5 | | | 51 | 28·9 | |
| 10·2 | | | 55 | 29·4 | |
| 10·2 | | 49 | 7 | 27·7 | |
| 9·3 | | 51 | 9 | 57·8 | g |
| 9·5 | | 54 | 36 | 24·6 | g |
| 9·8 | | 58 | 33 | 43·4 | |
| 9·7 | | | 43 | 55·6 | g |
| 9·8 | | 59 | 5 | 36·0 | g |
| 10·0 | 13 | 0 | 40 | 27·7 | |
| 9·9 | | 3 | 7 | 53·4 | |
| 9·6 | | | 52 | 28·7 | |
| 9·7 | | 4 | 19 | 55·1 | |
| 9·6 | | 9 | 19 | 7·5 | |
| 9·5 | | 11 | 54 | 8·8 | g |
| 9·5 | | 12 | 26 | 3·9 | g |
| 9·4 | | 16 | 24 | 43·2 | g |
| 9·8 | | 19 | 54 | 37·6 | |
| 9·1 | | 25 | 20 | 16·1 | g |
| 9·1 | | 31 | 40 | 8·6 | g |
| 9·4 | | 36 | 21 | 9·4 | g |
| 9·7 | | 38 | 21 | 6·8 | |
| 9·6 | | 41 | 32 | 47·9 | |
| 9·6 | | 45 | 33 | 51·1 | |
| 9·3 | | 46 | 28 | 19·4 | g |
| 8·8 | | 47 | 23 | 14·4 | g |
| 9·7 | | 48 | 56 | 46·2 | g |
| 9·6 | | 49 | 17 | 53·3 | g |
| 8·7 | | 57 | 18 | 11·7 | g |
| 8·8 | 14 | 3 | 9 | 18·3 | g |
| 9·6 | | | 24 | 28·4 | |
| 8·9 | | 7 | 31 | 38·7 | g |
| 9·4 | | 10 | 7 | 43·7 | |
| 9·4 | | | 46 | 12·8 | |
| 9·4 | | 13 | 30 | 54·9 | |
| 9·4 | | 15 | 15 | 52·9 | g |
| 9·7 | | | 18 | 33·5 | |
| 9·6 | | | 42 | 32·0 | |
| 9·4 | | | 44 | 19·0 | |
| 9·3 | | | 46 | 14·0 | |
| 8·7 | | 16 | 56 | 24·5 | g |
| 8·8 | | | 57 | 13·2 | g |
| 9·6 | | 18 | 36 | 44·5 | |
| 9·6 | | | 56 | 1·6 | |
| 9·8 | | 19 | 31 | 17·2 | |



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## 661—720.

| mag. | h | m | s | 14ʰ–15ʰ −81° ′ | |
|---|---|---|---|---|---|
| 9.3 | 14 | 19 | 40 | 49.3 | |
| 9.4 | | 22 | 25 | 13.0 | |
| 9.6 | | | 35 | 56.8 | |
| 9.0 | | | 57 | 41.1 | g |
| 9.3 | | 24 | 48 | 13.7 | |
| 9.4 | | 25 | 28 | 45.7 | |
| 9.6 | | 26 | 11 | 16.9 | |
| 8.6 | | | 15 | 30.9 | g |
| 9.4 | | 27 | 35 | 42.0 | |
| 9.6 | | 29 | 9 | 39.3 | |
| 9.6 | | | 13 | 25.8 | |
| 8.9 | | | 32 | 31.7 | g |
| 9.2 | | 30 | 15 | 56.3 | |
| 9.6 | | 31 | 42 | 16.0 | |
| 9.7 | | 33 | 18 | 5.9 | |
| 9.2 | | | 52 | 17.4 | |
| 9.0 | | 34 | 8 | 17.9 | g |
| 9.0 | | | 35 | 19.8 | g |
| 8.8 | | 35 | 30 | 42.7 | g |
| 9.7 | | 36 | 1 | 35.6 | |
| 9.3 | | | 49 | 12.2 | |
| 9.1 | | 39 | 49 | 59.0 | |
| 9.6 | | 40 | 21 | 44.1 | |
| 9.8 | | 44 | 36 | 33.9 | |
| 9.5 | | 46 | 38 | 21.4 | |
| 9.6 | | 49 | 3 | 35.6 | |
| 9.3 | | 51 | 12 | 36.7 | |
| 9.5 | | | 55 | 39.1 | |
| 9.7 | | 52 | 41 | 3.0 | |
| 9.4 | | 53 | 20 | 45.8 | |
| 9.6 | | 54 | 34 | 44.0 | |
| 9.5 | | 57 | 19 | 35.8 | |
| 9.6 | | | 28 | 43.9 | |
| 9.2 | | 58 | 3 | 37.8 | |
| 9.6 | 15 | 0 | 23 | 58.7 | |
| 9.4 | | 1 | 8 | 1.4 | |
| 9.0 | | 3 | 8 | 25.3 | g |
| 9.6 | | 5 | 49 | 3.9 | |
| 9.4 | | | 54 | 14.9 | |
| 9.6 | | 10 | 15 | 14.9 | |
| 9.5 | | 11 | 55 | 17.4 | |
| 9.8 | | 12 | 6 | 26.8 | |
| 9.7 | | | 16 | 55.4 | |
| 9.1 | | 13 | 3 | 47.8 | g |
| 9.4 | | | 18 | 54.8 | g |
| 9.8 | | | 39 | 33.5 | |
| 9.3 | | 14 | 46 | 21.1 | |
| 9.4 | | | 55 | 15.5 | |
| 8.5 | | 15 | 10 | 17.6 | g |
| 9.4 | | | 53 | 6.0 | |
| 9.1 | | | 55 | 43.3 | g |
| 9.7 | | 16 | 46 | 45.8 | |
| 9.6 | | 17 | 8 | 10.8 | |
| 9.4 | | 18 | 0 | 37.1 | |
| 9.4 | | | 42 | 26.5 | |
| 9.3 | | 20 | 16 | 0.6 | |
| 9.1 | | | 28 | 0.7 | |
| 9.5 | | | 38 | 0.1 | |
| 9.5 | | | 55 | 38.9 | |
| 9.5 | | 21 | 52 | 23.6 | |

## 721—780.

| mag. | h | m | s | 15ʰ–16ʰ −81° ′ | |
|---|---|---|---|---|---|
| 9.5 | 15 | 22 | 7 | 29.7 | |
| 9.2 | | | 23 | 26.2 | |
| 9.6 | | 23 | 10 | 3.4 | |
| 9.4 | | | 27 | 38.5 | |
| 9.2 | | | 37 | 17.5 | |
| 9.8 | | 24 | 33 | 37.8 | |
| 9.6 | | 26 | 1 | 24.1 | |
| 9.4 | | | 46 | 37.4 | g |
| 9.2 | | 27 | 18 | 40.0 | g |
| 9.6 | | 28 | 11 | 16.6 | |
| 9.6 | | 29 | 1 | 10.7 | |
| 9.5 | | | 11 | 56.8 | |
| 9.4 | | 30 | 0 | 38.9 | |
| 9.4 | | | 36 | 56.2 | |
| 9.4 | | 31 | 36 | 40.4 | |
| 9.6 | | 32 | 32 | 5.9 | |
| 9.6 | | 33 | 39 | 9.8 | |
| 9.7 | | 34 | 21 | 34.8 | |
| 9.4 | | | 49 | 4.1 | |
| 9.4 | | 35 | 1 | 3.9 | |
| 9.3 | | 36 | 9 | 8.5 | g |
| 9.1 | | | 47 | 31.7 | |
| 9.1 | | 37 | 18 | 4.1 | g |
| 9.6 | | 39 | 25 | 36.4 | |
| 9.6 | | 40 | 56 | 29.5 | |
| 8.9 | | 41 | 44 | 10.3 | g |
| 9.2 | | | 45 | 44.4 | |
| 9.4 | | 42 | 44 | 11.4 | |
| 9.7 | | | 51 | 2.9 | |
| 9.6 | | 43 | 14 | 34.3 | |
| 9.5 | | | 22 | 7.8 | |
| 9.6 | | | 38 | 39.1 | |
| 9.6 | | | 40 | 48.3 | |
| 9.2 | | 44 | 44 | 35.0 | |
| 9.5 | | 45 | 7 | 9.8 | |
| 9.1 | | | 52 | 59.3 | g |
| 9.6 | | 47 | 50 | 8.1 | |
| 9.6 | | 49 | 12 | 9.9 | |
| 9.6 | | 50 | 55 | 30.7 | |
| 9.6 - | | 51 | 19 | 26.9 | |
| 9.0 | | | 53 | 36.0 | g |
| 9.5 | | 52 | 10 | 20.5 | |
| 8.4 | | | 32 | 35.1 | g |
| 9.5 | | | 32 | 50.2 | g |
| 9.6 | | 56 | 42 | 42.8 | |
| 9.5 | 16 | 2 | 16 | 40.8 | |
| 8.0 | | 4 | 1 | 39.3 | GSg |
| 9.2 | | | 51 | 14.0 | g |
| 9.6 | | 9 | 53 | 3.0 | g |
| 9.3 | | 19 | 26 | 31.0 | Gg |
| 8.2 | | 29 | 11 | 21.6 | g |
| 8.8 | | 30 | 12 | 43.5 | g |
| 9.0 | | 34 | 56 | 42.5 | |
| 9.2 | | 35 | 42 | 54.0 | g |
| 8.9 | | 37 | 27 | 36.5 | g |
| 9.0 | | 38 | 15 | 13.6 | g |
| 9.0 | | | 55 | 11.6 | g |
| 9.4 | | 44 | 50 | 49.5 | |
| 8.2 | | 45 | 23 | 8.0 | g |
| 9.4 | | 48 | 2 | 37.8 | |

## 781—840.

| mag. | h | m | s | 16ʰ–18ʰ −81° ′ | |
|---|---|---|---|---|---|
| 9.1 | 16 | 52 | 19 | 28.0 | g |
| 9.6 | | 53 | 36 | 23.4 | g |
| 9.1 | | | 38 | 15.5 | g |
| 8.5 | | | 59 | 0.7 | g |
| 9.3 | | 57 | 29 | 36.7 | |
| 9.6 | 17 | 0 | 38 | 39.4 | g |
| 9.2 - | | 6 | 4 | 29.1 | g |
| 9.6 | | 8 | 51 | 33.4 | |
| 9.4 | | 9 | 1 | 0.1 | |
| 9.4 | | | 37 | 24.9 | g |
| 8.9 | | | 58 | 9.9 | g |
| 9.4 | | 12 | 31 | 43.1 | |
| 9.7 | | 16 | 19 | 33.2 | |
| 9.6 | | 20 | 33 | 57.3 | |
| 8.6 | | 22 | 38 | 49.2 | g |
| 9.6 | | 26 | 19 | 37.8 | |
| 9.2 | | 32 | 39 | 26.8 | |
| 7.4 | | 33 | 20 | 24.4 | GSg |
| 8.2 | | 40 | 27 | 27.8 | GSg |
| 8.8 | | 45 | 13 | 24.7 | g |
| 8.5 | | 48 | 3 | 40.2 | g |
| 9.2 | | | 47 | 49.7 | g |
| 7.9 | | 49 | 21 | 50.9 | g |
| 9.4 | | | 21 | 41.6 | |
| 9.4 | | 53 | 40 | 40.0 | |
| 8.6 | | 55 | 7 | 10.0 | g |
| 9.6 | | 57 | 47 | 1.8 | g |
| 9.2 | | 58 | 2 | 10.8 | g |
| 9.4 | 18 | 1 | 33 | 52.1 | |
| 9.1 | | 5 | 18 | 48.9 | g |
| 9.2 | | 7 | 23 | 24.6 | g |
| 9.4 | | 15 | 23 | 34.0 | G |
| 6.4 | | 16 | 35 | 53.8 | GScg |
| 9.6 | | 17 | 13 | 13.3 | |
| 8.6 | | 24 | 59 | 23.1 | g |
| 9.4 - | | 26 | 28 | 33.9 | |
| 8.8 | | 29 | 42 | 41.9 | |
| 9.8 | | 32 | 34 | 20.7 | |
| 9.7 | | 33 | 19 | 4.1 | |
| 9.4 | | 34 | 23 | 23.6 | |
| 9.3 | | | 38 | 17.1 | |
| 8.8 | | | 45 | 33.7 | g |
| 9.7 | | 36 | 1 | 27.6 | |
| 8.9 | | | 16 | 10.7 | |
| 9.6 | | 40 | 7 | 9.7 | |
| 9.7 | | | 38 | 47.9 | |
| 8.5 | | 41 | 49 | 58.8 | g |
| 9.4 | | 42 | 20 | 0.1 | |
| 9.8 | | 45 | 9 | 2.7 | |
| 9.8 | | 46 | 42 | 19.4 | |
| 7.7 | | 47 | 15 | 35.5 | Gg |
| 8.5 | | 49 | 30 | 23.9 | g |
| 9.8 | | | 43 | 35.9 | |
| 9.6 | | 50 | 25 | 29.7 | |
| 9.0 | | 54 | 33 | 8.9 | |
| 9.8 | | 55 | 11 | 20.2 | |
| 9.7 | | 56 | 14 | 32.0 | |
| 8.8 | | | 14 | 27.0 | g |
| 9.2 | | | 32 | 2.0 | g |
| 8.8 | | | 46 | 26.2 | g |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 14 | 10 | + 190 + 0.24 d | − 7.0 |
| | 20 | 198 + 0.26 | 6.8 |
| | 30 | 205 + 0.27 | 6.6 |
| | 40 | 213 + 0.29 | 6.4 |
| | 50 | 219 + 0.30 | 6.2 |
| 15 | 0 | 226 + 0.32 | 5.9 |
| | 10 | 233 + 0.33 | 5.6 |
| | 20 | 239 + 0.34 | 5.4 |
| | 30 | 244 + 0.35 | 5.1 |
| | 40 | 250 + 0.36 | 4.8 |
| | 50 | 255 + 0.38 | 4.5 |
| 16 | 0 | 260 + 0.39 | 4.2 |
| | 10 | 264 + 0.40 | 3.9 |
| | 20 | 268 + 0.40 | 3.5 |
| | 30 | 272 + 0.41 | 3.2 |
| | 40 | 275 + 0.42 | 2.9 |
| | 50 | 278 + 0.42 | 2.5 |
| 17 | 0 | 281 + 0.43 | 2.2 |
| | 10 | 283 + 0.44 | 1.8 |
| | 20 | 285 + 0.44 | 1.5 |
| | 30 | 286 + 0.44 | 1.1 |
| | 40 | 287 + 0.44 | 0.7 |
| | 50 | 288 + 0.44 | − 0.4 |
| 18 | 0 | 288 + 0.45 | 0.0 |
| | 10 | 288 + 0.44 | + 0.4 |
| | 20 | 287 + 0.44 | 0.7 |
| | 30 | 286 + 0.44 | 1.1 |
| | 40 | 285 + 0.44 | 1.5 |
| | 50 | 283 + 0.44 | 1.8 |
| 19 | 0 | + 281 + 0.43 | + 2.2 |

d = minutes of decl.



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| 25 prec. | | a | δ |
|---|---|---|---|
| h | m | s s | ′ |
| 18 | 50 | +283+0·44d | +1·8 |
| 19 | 0 | 281+0·43 | 2·2 |
| | 10 | 278+0·42 | 2·5 |
| | 20 | 275+0·42 | 2·9 |
| | 30 | 272+0·41 | 3·2 |
| | 40 | 268+0·40 | 3·5 |
| | 50 | 264+0·40 | 3·9 |
| 20 | 0 | 260+0·39 | 4·2 |
| | 10 | 255+0·38 | 4·5 |
| | 20 | 250+0·36 | 4·8 |
| | 30 | 244+0·35 | 5·1 |
| | 40 | 239+0·34 | 5·4 |
| | 50 | 233+0·33 | 5·6 |
| 21 | 0 | 226+0·32 | 5·9 |
| | 10 | 219+0·30 | 6·2 |
| | 20 | 213+0·29 | 6·4 |
| | 30 | 205+0·27 | 6·6 |
| | 40 | 198+0·26 | 6·8 |
| | 50 | 190+0·24 | 7·0 |
| 22 | 0 | 182+0·22 | 7·2 |
| | 10 | 174+0·21 | 7·4 |
| | 20 | 166+0·19 | 7·6 |
| | 30 | 158+0·17 | 7·7 |
| | 40 | 149+0·15 | 7·9 |
| | 50 | +140+0·13 | +8·0 |

d = minutes of decl.

## 841—900.

| mag. | 18h.–20h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9·7 | 18 | 57 | 59 | 40·4 | |
| 9·6 | | 58 | 17 | 54·8 | |
| 9·4 | | 59 | 6 | 17·3 | |
| 8·9 | | | 22 | 40·2 | g |
| 8·3 | | | 33 | 45·0 | g |
| 8·5 | | | 38 | 35·8 | g |
| 9·6 | 19 | 0 | 32 | 8·3 | |
| 8·4 | | 2 | 12 | 46·0 | g |
| 8·3 | | 7 | 14 | 8·5 | g |
| 7·8 | | 8 | 27 | 46·0 | Gg |
| 9·3 | | 9 | 18 | 38·6 | |
| 9·4 | | 11 | 0 | 2·9 | |
| 8·3 | | 12 | 38 | 30·0 | g |
| 8·7 | | | 47 | 52·5 | |
| 9·5 | | 13 | 35 | 6·7 | |
| 8·9 | | 15 | 41 | 33·7 | |
| 9·2 | | 18 | 56 | 59·2 | |
| 9·0 | | 21 | 17 | 44·1 | |
| 9·4 | | 23 | 27 | 41·3 | |
| 9·6 | | 24 | 20 | 16·0 | |
| 9·3 | | 25 | 37 | 54·8 | |
| 9·7 | | | 58 | 28·9 | |
| 9·1 | | 26 | 11 | 18·1 | |
| 8·2 | | 27 | 27 | 34·0 | g |
| 9·0 | | 29 | 24 | 34·0 | |
| 9·2 | | 30 | 24 | 0·3 | g |
| 9·6 | | | 52 | 29·3 | |
| 7·6 | | 32 | 51 | 39·4 | GScgg |
| 9·4 | | 34 | 42 | 40·5 | |
| 9·2 | | 37 | 25 | 54·0 | |
| 7·8 | | | 35 | 53·2 | g |
| 9·7 | | | 48 | 16·0 | |
| 8·1 | | 38 | 14 | 34·1 | g |
| 9·4 | | 41 | 0 | 22·4 | |
| 8·7 | | | 34 | 15·2 | g |
| 9·6 | | 42 | 12 | 19·8 | |
| 9·6 | | 43 | 3 | 23·9 | |
| 8·5 | | 44 | 35 | 38·4 | |
| 8·7 | | 46 | 45 | 47·0 | g |
| 9·3 | | 47 | 11 | 0·0 | |
| 9·8 | | | 55 | 52·0 | |
| 9·2 | | 48 | 45 | 29·2 | |
| 8·4 | | 50 | 38 | 12·2 | g |
| 9·4 | | 51 | 31 | 36·4 | |
| 9·4 | | 57 | 9 | 22·0 | |
| 9·4 | | 58 | 9 | 57·6 | |
| 9·6 | | | 22 | 25·9 | |
| 8·1 | | | 24 | 59·0 | g |
| 8·9 | | | 58 | 12·8 | g |
| 8·0 | | 59 | 24 | 39·0 | g |
| 9·1 | | | 47 | 16·2 | g |
| 9·4 | 20 | 4 | 8 | 48·9 | |
| 8·9 | | 5 | 41 | 57·3 | g |
| 9·3 | | 6 | 17 | 36·9 | |
| 9·8 | | | 52 | 12·7 | |
| 9·8 | | 7 | 23 | 25·1 | |
| 8·4 | | 8 | 13 | 6·9 | g |
| 9·7 | | 11 | 2 | 6·0 | |
| 9·4 | | | 28 | 23·8 | |
| 9·2 | | 12 | 20 | 21·7 | |

## 901—960.

| mag. | 20h.–21h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 7·4 | 20 | 12 | 20 | 22·2 | GScg |
| 9·2 | | 13 | 42 | 19·7 | |
| 8·4 | | 15 | 0 | 56·8 | g |
| 8·9 | | | 40 | 38·1 | g |
| 10·0 | | 16 | 9 | 46·4 | |
| 7·2 | | 17 | 1 | 42·4 | GSg |
| 10·3 | | | 12 | 32·7 | |
| 9·6 | | 18 | 3 | 20·1 | |
| 10·0 | | | 6 | 15·4 | |
| 9·8 | | | 34 | 35·3 | |
| 8·8 | | 20 | 52 | 18·3 | g |
| 9·6 | | 21 | 28 | 41·7 | |
| 9·6 | | 22 | 22 | 12·8 | |
| 10·3 | | 23 | 19 | 2·9 | |
| 9·8* | | | 21 | 1·7 | |
| 9·7 | | | 23 | 15·2 | |
| 9·6 | | 24 | 24 | 26·6 | |
| 9·4 | | | 37 | 31·8 | |
| 9·6 | | | 44 | 21·9 | |
| 10·0 | | 25 | 28 | 38·8 | |
| 9·7 | | 27 | 49 | 26·2 | |
| 9·0 | | 28 | 29 | 37·1 | g |
| 10·2 | | 30 | 6 | 43·3 | |
| 10·0 | | 33 | 55 | 41·6 | |
| 10·0 | | 34 | 1 | 32·7 | |
| 10·1 | | 35 | 49 | 30·6 | |
| 8·6 | | 39 | 8 | 5·4 | GSg |
| 9·8 | | | 15 | 3·8 | |
| 9·6 | | 40 | 1 | 24·6 | |
| 9·7 | | | 38 | 29·9 | |
| 9·0 | | | 47 | 13·8 | |
| 9·2 | | | 53 | 40·1 | g |
| 10·3 | | 41 | 49 | 13·0 | |
| 10·0 | | 42 | 15 | 6·5 | |
| 9·6 | | 44 | 42 | 16·9 | |
| 8·3 | | 45 | 19 | 52·7 | GSg |
| 10·2 | | | 58 | 3·1 | |
| 7·4 | | 47 | 47 | 10·7 | GSg |
| 9·0 | | 49 | 35 | 21·5 | |
| 10·2 | | 51 | 41 | 0·1 | |
| 9·3 | | 52 | 48 | 12·1 | |
| 9·4 | | 53 | 3 | 53·9 | |
| 9·7 | | 54 | 12 | 50·8 | |
| 8·6 | | | 20 | 50·3 | g |
| 9·2 | | 58 | 2 | 32·1 | |
| 9·7 | | 59 | 51 | 45·5 | |
| 10·2 | 21 | 0 | 26 | 10·9 | |
| 9·6 | | | 52 | 2·4 | g |
| 10·0 | | 1 | 43 | 11·2 | |
| 9·6 | | 2 | 12 | 19·9 | g |
| 9·6 | | 4 | 48 | 4·3 | |
| 8·7 | | 6 | 31 | 3·1 | g |
| 8·9 | | | 36 | 23·7 | g |
| 8·2 | | 8 | 50 | 12·7 | GSg |
| 10·1 | | 9 | 11 | 33·9 | |
| 9·6 | | | 19 | 53·3 | |
| 9·7 | | 13 | 19 | 36·8 | |
| 9·7 | | | 47 | 22·2 | |
| 10·1 | | | 53 | 45·9 | |
| 10·3 | | 14 | 6 | 50·0 | g |

## 961—1020.

| mag. | 21h.–22h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 8·8 | 21 | 18 | 0 | 7·9 | g |
| 9·2 | | | 15 | 24·7 | g |
| 9·4 | | 19 | 16 | 4·7 | g |
| 9·0 | | 20 | 36 | 52·9 | g |
| 9·0 | | 21 | 44 | 2·7 | g |
| 9·2 | | 22 | 40 | 13·9 | g |
| 9·6 | | 25 | 3 | 30·5 | |
| 9·6 | | 27 | 37 | 5·0 | |
| 9·7 | | 28 | 58 | 36·9 | |
| 10·3 | | 30 | 0 | 2·8 | |
| 10·3 | | 31 | 44 | 13·7 | |
| 8·6 | | | 48 | 48·3 | g |
| 10·3 | | 33 | 13 | 25·5 | |
| 9·6 | | | 39 | 36·1 | |
| 9·7 | | 35 | 21 | 51·5 | |
| 9·7 | | 37 | 13 | 25·8 | |
| 9·4 | | 38 | 0 | 10·5 | |
| 9·8 | | | 6 | 10·3 | |
| 8·6 | | 39 | 41 | 33·3 | g |
| 9·4 | | 42 | 23 | 46·8 | g |
| 8·8 | | 45 | 2 | 37·5 | g |
| 8·5 | | 49 | 0 | 13·4 | g |
| 10·1 | | | 16 | 59·4 | |
| 10·0 | | | 44 | 37·6 | |
| 9·6 | | 51 | 55 | 32·0 | |
| 10·0 | | 54 | 31 | 38·4 | |
| 9·6 | | 56 | 2 | 33·3 | |
| 9·6 | 22 | 1 | 24 | 7·1 | |
| 9·6 | | 3 | 3 | 11·3 | |
| 8·8 | | | 18 | 4·6 | g |
| 9·0 | | | 39 | 0·5 | g |
| 8·7 | | 4 | 5 | 35·8 | g |
| 9·6 | | 5 | 9 | 41·4 | |
| 9·6 | | | 36 | 18·7 | |
| 6·6 | | | 52 | 3·6 | GSg |
| 9·2 | | 6 | 32 | 16·0 | g |
| 9·6 | | | 38 | 10·6 | G |
| 8·4 | | | 44 | 4·6 | Gg |
| 9·7 | | 9 | 42 | 15·9 | g |
| 9·5 | | 10 | 45 | 21·0 | g |
| 9·5 | | 12 | 43 | 56·8 | |
| 9·6 | | 15 | 58 | 41·0 | |
| 9·5 | | 16 | 24 | 40·9 | |
| 8·8 | | 17 | 39 | 19·9 | g |
| 9·7 | | 19 | 41 | 17·9 | g |
| 9·3 | | 22 | 38 | 54·1 | g |
| 9·3 | | 24 | 35 | 33·8 | g |
| 9·2 | | 25 | 18 | 12·9 | g |
| 8·8 | | | 50 | 4·5 | g |
| 9·4 | | 26 | 40 | 56·9 | |
| 9·4 | | 27 | 5 | 31·1 | g |
| 9·3 | | 29 | 22 | 35·2 | g |
| 9·7 | | 30 | 52 | 36·9 | g |
| 9·7 | | 33 | 57 | 23·4 | g |
| 9·6 | | 36 | 3 | 11·0 | |
| 9·4 | | 38 | 40 | 47·9 | g |
| 9·4 | | 39 | 18 | 59·1 | |
| 9·0 | | 44 | 16 | 53·0 | g |
| 9·6 | | | 26 | 7·6 | |
| 8·7 | | 45 | 23 | 46·5 | g |

630

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1021—1030.

| mag. | 22h.–23h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 5 | 22 | 55 | 53 | 51·8 | g |
| 9·3 | | 57 | 3 | 56·0 | g |
| 9·2 | | 59 | 45 | 24·9 | g |
| 7·7 | 23 | 1 | 39 | 35·4 | GSg |
| 9·2 | | 3 | 6 | 18·8 | Gg |
| 9·0 | | 5 | 45 | 26·4 | g |
| 8·1 | | 6 | 15 | 11·7 | GSg |
| 9·2 | | 7 | 31 | 4·4 | GSg |
| 7·6 | | | 59 | 6·4 | GSg |
| 9·6 | | 11 | 37 | 25·6 | |

1031—1040.

| mag. | 23h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 10·0 | 23 | 14 | 50 | 27·4 | |
| 8·6 | | 15 | 54 | 11·7 | g |
| 10·0 | | 16 | 15 | 57·7 | g |
| 8·8 | | 18 | 1 | 0·4 | g |
| 10·0 | | 20 | 23 | 18·6 | |
| 8·2 | | 23 | 0 | 30·9 | GSg |
| 8·8 | | | 37 | 47·6 | g |
| 9·0 | | 24 | 17 | 24·7 | g |
| 9·4 | | 26 | 14 | 44·3 | |
| 8·8 | | 30 | 29 | 56·9 | g |

1041—1050.

| mag. | 23h. h | m | s | −81° ′ | |
|---|---|---|---|---|---|
| 9·0 | 23 | 33 | 5 | 14·6 | g |
| 9·7 | | 40 | 0 | 22·2 | |
| 9·4 | | 43 | 42 | 34·5 | |
| 8·4 | | 46 | 24 | 2·1 | GSg |
| 9·3 | | 52 | 11 | 49·3 | g |
| 9·2 | | 53 | 39 | 22·2 | g |
| 9·2 | | 55 | 33 | 58·8 | g |
| 10·0 | | 56 | 1 | 6·9 | |
| 9·9 | | 57 | 17 | 12·4 | g |
| 7·3 | | | 38 | 5·4 | GSg |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 22 | 50 | + 140 + 0·13d | + 8·0 |
| | | | 8·1 |
| 23 | 0 | 131 + 0·12 | 8·2 |
| | 10 | 123 + 0·10 | 8·2 |
| | 20 | 113 + 0·08 | 8·3 |
| | 30 | 104 + 0·06 | 8·3 |
| | 40 | 95 + 0·04 | 8·3 |
| | 50 | 86 + 0·02 | 8·3 |
| 0 | 0 | + 77 0·00 | + 8·4 |

d = minutes of decl.

# ZONE—82°.

0h—4h PLATE {585 —588 (BELT 80°). 601†—603† (BELT 85°). —82°

1—30.

| mag. | 0h.–1h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·2† | 0 | 0 | 19 | 53·5 | g |
| 9·0† | | 1 | 11 | 10·9 | g |
| 8·9† | | 3 | 56 | 2·7 | g |
| 6·3† | | 4 | 19 | 55·2 | GScgr |
| 9·2† | | 8 | 35 | 48·1 | g |
| 8·7† | | 15 | 58 | 18·4 | g |
| 9·2† | | 16 | 37 | 22·2 | g |
| 9·5† | | 19 | 34 | 7·6 | |
| 9·8† | | 20 | 22 | 26·7 | |
| 9·2† | | 28 | 43 | 20·8 | g |
| 8·6† | | 30 | 38 | 42·4 | g |
| 9·2† | | 40 | 55 | 35·4 | g |
| 9·4† | | 42 | 56 | 37·8 | g |
| 9·4† | | 54 | 50 | 34·4 | g |
| 9·6‡ | 1 | 3 | 21 | 42·1 | g |
| 8·4‡ | | 6 | 1 | 19·0 | GSg |
| 9·4‡ | | | 7 | 51·8 | |
| 9·0‡ | | 7 | 43 | 44·4 | g |
| 9·4 | | 8 | 29 | 27·3 | g |
| 9·4 | | 9 | 49 | 2·5 | g |
| 9·5 | | | 49 | 35·2 | g |
| 8·2‡ | | 16 | 42 | 12·0 | GSg |
| 8·8‡ | | 30 | 22 | 28·0 | g |
| 9·0‡ | | | 35 | 40·8 | g |
| 9·0‡ | | 31 | 0 | 51·3 | g |
| 9·0‡ | | 36 | 6 | 20·5 | g |
| 8·5‡ | | | 29 | 3·5 | g |
| 7·8‡ | | 39 | 55 | 54·8 | GSg |
| 9·6‡ | | 43 | 57 | 35·3 | |
| 9·0‡ | | 47 | 7 | 22·2 | g |

31—60.

| mag. | 1h.–3h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·5 | 1 | 51 | 4 | 51·0 | g |
| 9·0 | | 52 | 55 | 0·6 | g |
| 9·2‡ | | 54 | 19 | 47·9 | g |
| 7·0‡ | | 59 | 41 | 6·3 | GSg |
| 9·2‡ | 2 | 1 | 11 | 41·0 | |
| 9·4‡ | | 2 | 10 | 31·3 | g |
| 8·5‡ | | | 47 | 53·8 | GSg |
| 9·3‡ | | 6 | 50 | 37·9 | g |
| 7·6‡ | | 9 | 38 | 53·5 | GSg |
| 9·8 | | 15 | 51 | 11·8 | g |
| 9·8 | | 18 | 53 | 15·9 | g |
| 9·0‡ | | 27 | 9 | 6·8 | g |
| 8·2‡ | | 33 | 26 | 34·3 | g |
| 9·2‡ | | 35 | 48 | 28·0 | |
| 8·8‡ | | 40 | 0 | 2·1 | g |
| 7·5‡ | | 42 | 5 | 46·1 | GSg |
| 8·6 | | 43 | 58 | 0·1 | g |
| 8·7 | | 50 | 59 | 0·1 | g |
| 9·4† | | 52 | 47 | 34·7 | g |
| 9·4† | | 59 | 10 | 38·8 | |
| 8·9† | 3 | 1 | 47 | 3·4 | g |
| 8·9† | | 3 | 28 | 44·5 | g |
| 9·0† | | 5 | 51 | 15·0 | g |
| 8·6† | | 8 | 48 | 23·1 | g |
| 9·8† | | 9 | 23 | 52·5 | |
| 9·2† | | 16 | 33 | 37·8 | g |
| 8·7† | | 17 | 14 | 16·9 | g |
| 9·5† | | 23 | 24 | 42·8 | |
| 9·2† | | 24 | 49 | 25·2 | |
| 9·6† | | 26 | 29 | 43·0 | |

61—90.

| mag. | 3h.–4h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·4† | 3 | 26 | 55 | 13·0 | |
| 9·2† | | 28 | 13 | 28·9 | |
| 9·0† | | | 23 | 11·4 | g |
| 7·8† | | 30 | 20 | 41·9 | GSg |
| 8·0† | | 32 | 1 | 54·7 | GSg |
| 9·8† | | | 17 | 8·3 | |
| 9·2† | | 34 | 11 | 49·8 | g |
| 8·8† | | 37 | 53 | 43·3 | g |
| 9·5 | | 41 | 21 | 4·7 | g |
| 8·8† | | 46 | 45 | 42·6 | g |
| 9·8 | | 50 | 18 | 4·7 | |
| 8·7† | | | 46 | 10·9 | g |
| 9·0† | | 52 | 0 | 21·6 | g |
| 9·5 | | | 40 | 3·3 | |
| 9·2† | | | 52 | 52·2 | g |
| 9·8† | | 53 | 47 | 26·5 | g |
| 9·2 | | 55 | 40 | 7·2 | |
| 9·8† | 4 | 0 | 46 | 27·5 | |
| 8·9† | | 4 | 31 | 41·0 | g |
| 9·7 | | 8 | 4 | 24·9 | |
| 9·7 | | 11 | 5 | 39·3 | g |
| 9·5 | | 14 | 20 | 50·3 | g |
| 9·2† | | 19 | 32 | 36·0 | g |
| 9·4 | | 21 | 0 | 9·9 | g |
| 8·7† | | 23 | 2 | 53·8 | g |
| 10·0 | | 24 | 31 | 23·7 | |
| 9·5† | | | 39 | 37·9 | g |
| 9·3† | | 31 | 31 | 29·8 | g |
| 8·4† | | 33 | 32 | 3·1 | g |
| 9·7 | | 42 | 23 | 12·1 | g |

25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 0 | 0 | + 77 0·00 d | + 8·4 |
| | 10 | 66 − 0·02 | 8·3 |
| | 20 | 56 − 0·05 | 8·3 |
| | 30 | 46 − 0·07 | 8·3 |
| | 40 | 35 − 0·10 | 8·2 |
| | 50 | 25 − 0·12 | 8·2 |
| 1 | 0 | 15 − 0·15 | 8·1 |
| | 10 | + 5 − 0·17 | 8·0 |
| | 20 | − 5 − 0·20 | 7·9 |
| | 30 | 14 − 0·22 | 7·7 |
| | 40 | 24 − 0·24 | 7·6 |
| | 50 | 33 − 0·26 | 7·4 |
| 2 | 0 | 42 − 0·29 | 7·2 |
| | 10 | 51 − 0·31 | 7·0 |
| | 20 | 60 − 0·33 | 6·8 |
| | 30 | 68 − 0·35 | 6·6 |
| | 40 | 76 − 0·37 | 6·4 |
| | 50 | 84 − 0·39 | 6·2 |
| 3 | 0 | 92 − 0·40 | 5·9 |
| | 10 | 99 − 0·42 | 5·6 |
| | 20 | 106 − 0·44 | 5·4 |
| | 30 | 112 − 0·45 | 5·1 |
| | 40 | 118 − 0·47 | 4·8 |
| | 50 | 124 − 0·48 | 4·5 |
| 4 | 0 | 129 − 0·49 | 4·2 |
| | 10 | 134 − 0·51 | 3·9 |
| | 20 | 139 − 0·52 | 3·5 |
| | 30 | 143 − 0·53 | 3·2 |
| | 40 | 147 − 0·54 | 2·9 |
| | 50 | − 150 − 0·55 | + 2·5 |

d = minutes of decl.



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25 prec.

| h | m | a (s s) | | δ (′) |
|---|---|---|---|---|
| 4 | 40 | − 147 − 0·54 | d | + 2·9 |
| | 50 | 150 − 0·55 | | 2·5 |
| 5 | 0 | 153 − 0·55 | | 2·2 |
| | 10 | 156 − 0·56 | | 1·8 |
| | 20 | 158 − 0·56 | | 1·5 |
| | 30 | 159 − 0·57 | | 1·1 |
| | 40 | 160 − 0·57 | | 0·7 |
| | 50 | 161 − 0·57 | | + 0·4 |
| 6 | 0 | 161 − 0·57 | | 0·0 |
| | 10 | 161 − 0·57 | | − 0·4 |
| | 20 | 160 − 0·57 | | 0·7 |
| | 30 | 159 − 0·57 | | 1·1 |
| | 40 | 158 − 0·56 | | 1·5 |
| | 50 | 156 − 0·56 | | 1·8 |
| 7 | 0 | 153 − 0·55 | | 2·2 |
| | 10 | 150 − 0·55 | | 2·5 |
| | 20 | 147 − 0·54 | | 2·9 |
| | 30 | 143 − 0·53 | | 3·2 |
| | 40 | 139 − 0·52 | | 3·5 |
| | 50 | 134 − 0·51 | | 3·9 |
| 8 | 0 | 129 − 0·49 | | 4·2 |
| | 10 | 124 − 0·48 | | 4·5 |
| | 20 | 118 − 0·47 | | 4·8 |
| | 30 | 112 − 0·45 | | 5·1 |
| | 40 | 106 − 0·44 | | 5·4 |
| | 50 | − 99 − 0·42 | | − 5·6 |

d = minutes of decl.

## 91—150.

| mag. | 4h.–6h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·5 | 4 | 44 | 50 | 19·1 | |
| 9·7 | | 45 | 58 | 10·5 | g |
| 9·6‡ | | 48 | 55 | 54·6 | |
| 9·4‡ | | 49 | 45 | 19·1 | |
| 9·2‡ | | 50 | 24 | 49·1 | g |
| 9·6‡ | | 51 | 9 | 17·9 | |
| 9·8‡ | | | 39 | 32·9 | |
| 10·0‡ | | 55 | 41 | 48·1 | g |
| 8·6‡ | | 57 | 23 | 43·8 | g |
| 9·0‡ | 5 | 0 | 15 | 7·3 | g |
| 10·0‡ | | | 39 | 36·6 | |
| 9·1‡ | | 3 | 44 | 13·3 | g |
| 9·4‡ | | 6 | 23 | 16·2 | |
| 8·6‡ | | | 27 | 39·8 | g |
| 9·2‡ | | 7 | 54 | 8·5 | |
| 6·7‡ – | | 13 | 10 | 38·1 | GScg |
| 9·7 | | 14 | 38 | 39·7 | g |
| 10·2‡ | | 16 | 37 | 57·1 | |
| 9·2‡ | | 17 | 23 | 40·1 | g |
| 8·8‡ | | 20 | 6 | 42·3 | g |
| 9·6‡ | | 22 | 33 | 8·4 | |
| 9·8‡ | | | 45 | 23·7 | |
| 8·9‡ | | 23 | 45 | 50·4 | g |
| 10·0‡ | | | 57 | 14·4 | |
| 9·2‡ | | | 59 | 4·9 | |
| 8·8‡ | | 24 | 40 | 24·9 | g |
| 10·0‡ | | 25 | 8 | 9·6 | |
| 9·4‡ | | | 59 | 6·1 | |
| 8·8‡ | | 26 | 51 | 29·5 | g |
| 10·0‡ | | 29 | 44 | 28·2 | |
| 10·0‡ | | 34 | 31 | 7·3 | |
| 9·4‡ | | 35 | 51 | 19·6 | g |
| 9·8‡ | | 38 | 56 | 42·3 | g |
| 9·8 | | 41 | 57 | 4·6 | |
| 9·8‡ | | 42 | 57 | 10·6 | |
| 9·4‡ | | 44 | 10 | 32·0 | g |
| 9·9 | | 49 | 48 | 35·7 | |
| 9·7‡ | | 50 | 23 | 33·2 | |
| 9·5‡ | | 51 | 8 | 58·1 | g |
| 9·9 | | | 54 | 7·5 | |
| 9·9 | | 57 | 32 | 12·6 | |
| 9·0‡ | | | 39 | 10·0 | g |
| 9·0‡ | | 59 | 27 | 41·3 | g |
| 9·5 | 6 | 0 | 13 | 8·3 | |
| 9·5‡ | | 1 | 12 | 9·3 | g |
| 7·3‡ | | | 26 | 26·7 | g |
| 9·9 | | 5 | 52 | 5·6 | |
| 9·1‡ | | 7 | 17 | 51·4 | g |
| 9·9 | | 8 | 42 | 3·6 | |
| 9·0‡ | | 15 | 11 | 47·5 | g |
| 9·9‡ | | 18 | 22 | 17·7 | |
| 7·8‡ | | 20 | 10 | 33·1 | g |
| 7·2 | | 21 | 28 | 0·0 | GSg |
| 6·7‡ | | 22 | 44 | 6·6 | GSg |
| 9·8‡ – | | 23 | 0 | 30·2 | |
| 8·3‡ | | 32 | 13 | 8·2 | g |
| 9·6‡ | | 34 | 13 | 12·8 | g |
| 7·7‡ | | | 20 | 53·5 | g |
| 9·5‡ | | 40 | 26 | 20·5 | |
| 9·2 | | 46 | 50 | 9·2 | |

## 151—210.

| mag. | 6h.–7h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·8‡ | 6 | 49 | 20 | 30·9 | |
| 9·5 | | 50 | 10 | 32·1 | |
| 9·4‡ | | 51 | 11 | 27·4 | |
| 9·0‡ | | 53 | 57 | 55·2 | |
| 9·8† | | 54 | 16 | 14·7 | |
| 10·4† | | 55 | 6 | 7·2 | |
| 9·9† | | 56 | 47 | 2·8 | g |
| 10·2† | | 58 | 12 | 31·2 | |
| 10·5† | | 59 | 19 | 25·5 | |
| 8·4† | | | 38 | 1·5 | g |
| 8·2† | 7 | 0 | 17 | 44·2 | GSg |
| 10·0† | | 4 | 19 | 33·1 | |
| 10·5† | | 6 | 1 | 36·4 | |
| 9·6† | | | 17 | 6·9 | |
| 10·0† | | | 36 | 4·2 | |
| 9·8† | | 7 | 31 | 30·8 | |
| 10·5† | | | 55 | 43·0 | |
| 10·6† | | 9 | 27 | 24·9 | |
| 10·2† | | 11 | 20 | 32·1 | |
| 9·2† | | 12 | 34 | 34·0 | |
| 9·9† | | | 40 | 18·5 | |
| 10·6† | | 13 | 1 | 6·3 | |
| 10·0† | | 17 | 28 | 56·0 | |
| 9·6† | | 18 | 6 | 51·4 | |
| 10·2† | | 19 | 15 | 50·3 | |
| 9·9 | | 20 | 48 | 0·3 | |
| 9·8† | | 23 | 11 | 59·5 | |
| 10·2† | | 24 | 57 | 38·0 | |
| 10·0† | | 26 | 27 | 19·7 | |
| 10·6† | | | 29 | 37·5 | |
| 10·0† | | | 48 | 24·7 | |
| 9·4† | | 27 | 21 | 2·1 | g |
| 9·8† | | | 33 | 14·1 | |
| 10·4† | | 31 | 29 | 24·2 | |
| 9·6† | | 32 | 4 | 10·7 | |
| 9·2† | | | 18 | 19·7 | g |
| 10·6† | | 34 | 20 | 18·8 | |
| 9·2† | | | 58 | 21·3 | g |
| 10·0† | | 36 | 36 | 21·1 | |
| 9·6† | | 38 | 28 | 47·8 | |
| 10·2† | | | 40 | 33·1 | |
| 9·8† | | 39 | 8 | 35·3 | |
| 9·6† | | | 19 | 4·8 | g |
| 9·2† | | 40 | 37 | 56·2 | g |
| 10·2† | | | 46 | 35·2 | |
| 9·7† | | 41 | 24 | 12·1 | |
| 9·7† | | | 25 | 7·1 | g |
| 10·4† | | | 27 | 19·1 | |
| 9·8† | | | 40 | 38·3 | |
| 10·6† | | 42 | 5 | 26·1 | |
| 9·8† | | | 32 | 48·4 | |
| 9·9† | | | 36 | 33·1 | |
| 9·3† | | 43 | 3 | 47·5 | |
| 10·3† | | | 29 | 38·7 | |
| 9·5† | | | 53 | 22·1 | g |
| 10·0† | | 45 | 4 | 14·1 | |
| 8·6† | | | 36 | 10·7 | g |
| 10·0† | | | 40 | 3·5 | |
| 9·2† | | 47 | 47 | 42·1 | g |
| 9·4† | | | 50 | 29·1 | |

## 211—270.

| mag. | 7h.–8h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 10·0† | 7 | 48 | 1 | 59·8 | |
| 9·9† | | 50 | 41 | 49·0 | |
| 10·2† | | 51 | 34 | 11·1 | g |
| 9·9† | | 52 | 6 | 24·9 | |
| 8·4† | | | 26 | 16·3 | GSg |
| 8·3† | | 53 | 34 | 1·5 | GSg |
| 9·9† | | 54 | 21 | 43·0 | |
| 9·8† | | | 26 | 17·8 | |
| 9·6† | | 55 | 27 | 7·7 | |
| 10·4† | | 58 | 2 | 51·5 | |
| 10·2† | | 59 | 8 | 11·1 | |
| 10·4† | | | 44 | 21·4 | |
| 10·2† | 8 | 0 | 0 | 38·7 | |
| 10·4† | | 1 | 10 | 45·7 | |
| 9·5† | | 2 | 57 | 44·9 | |
| 10·0† | | 3 | 28 | 12·3 | |
| 10·5† | | 4 | 3 | 28·7 | |
| 9·6† | | 5 | 36 | 4·7 | g |
| 9·8† | | 6 | 59 | 30·9 | |
| 9·7† | | 7 | 20 | 7·2 | g |
| 10·2† | | | 25 | 32·7 | |
| 8·8† | | 8 | 41 | 14·5 | g |
| 10·0† – | | 9 | 54 | 19·5 | |
| 10·4† | | 10 | 33 | 49·7 | |
| 10·0† | | 14 | 35 | 52·9 | |
| 10·6† | | | 49 | 22·4 | |
| 10·5† | | 15 | 25 | 17·9 | |
| 10·7† | | 16 | 41 | 18·1 | |
| 10·0† | | 17 | 19 | 38·0 | |
| 9·5† | | 21 | 3 | 43·8 | |
| 9·8† | | 22 | 0 | 57·4 | |
| 10·2† | | | 11 | 53·7 | |
| 9·4† | | 23 | 55 | 33·7 | g |
| 10·2† | | 27 | 23 | 6·2 | |
| 9·3† | | 29 | 56 | 26·1 | |
| 9·7† | | 30 | 0 | 39·3 | |
| 10·6† | | | 17 | 55·2 | |
| 9·9† | | 31 | 10 | 34·4 | |
| 9·2† | | 32 | 21 | 55·9 | |
| 10·6† | | | 51 | 52·7 | |
| 10·7† | | 34 | 0 | 53·0 | |
| 10·0† | | | 18 | 56·7 | |
| 8·9† | | | 55 | 55·7 | |
| 9·8† | | 35 | 5 | 44·0 | |
| 10·2† | | | 12 | 7·0 | |
| 10·2† | | | 31 | 57·1 | |
| 10·7† | | 36 | 23 | 16·3 | |
| 9·4† | | | 41 | 58·9 | |
| 9·9† | | | 43 | 33·9 | |
| 9·8† | | 37 | 11 | 20·8 | |
| 10·0† | | | 50 | 37·9 | |
| 10·6† | | 38 | 34 | 56·5 | |
| 10·3† | | | 53 | 22·2 | |
| 10·6† | | 39 | 26 | 38·9 | |
| 10·4† | | 41 | 26 | 37·1 | |
| 10·2† | | | 50 | 29·9 | |
| 8·6† | | 42 | 29 | 10·5 | g |
| 10·6† | | | 34 | 51·9 | |
| 7·3† | | 43 | 55 | 7·5 | GSg |
| 10·0† | | 44 | 12 | 16·1 | |



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### 271—330.

| mag. | 8h.–9h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·5† | 8 | 44 | 44 | 43·8 | |
| 10·2† | | 45 | 0 | 54·2 | |
| 10·6† | | | 24 | 4·7 | |
| 10·6† | | 46 | 3 | 30·0 | |
| 9·4† | | | 33 | 33·6 | |
| 10·6† | | 47 | 28 | 25·9 | |
| 10·0† | | 48 | 43 | 42·2 | |
| 9·9† | | 49 | 43 | 57·0 | |
| 9·1† | | 50 | 4 | 11·0 | g |
| 10·3† | | 51 | 30 | 25·9 | |
| 9·5† | | | 48 | 24·4 | |
| 9·6† | | 53 | 11 | 35·7 | |
| 9·5† | | 55 | 18 | 8·7 | g |
| 9·9† | | | 36 | 8·4 | |
| 10·0† | | 56 | 28 | 40·1 | |
| 8·9† | | 57 | 13 | 8·1 | g |
| 10·4† | | 58 | 9 | 37·6 | |
| 10·0† | | | 26 | 30·7 | |
| 8·9† | | 59 | 15 | 16·0 | g |
| 9·2‡ | 9 | 1 | 21 | 41·0 | |
| 10·0 | | | 47 | 14·9 | |
| 10·0 | | 2 | 10 | 4·7 | |
| 10·2 | | | 35 | 9·7 | |
| 9·2‡ | | 3 | 5 | 45·8 | |
| 9·1 | | | 58 | 10·8 | g |
| 9·5 | | 4 | 27 | 39·2 | g |
| 9·3 | | 5 | 51 | 33·6 | |
| 10·1 | | 6 | 41 | 34·3 | |
| 9·7‡ | | | 57 | 59·8 | |
| 9·2‡ | | | 58 | 43·6 | |
| 8·9 | | 7 | 31 | 8·5 | g |
| 9·9 | | 8 | 34 | 31·9 | |
| 9·4 | | 9 | 48 | 38·1 | |
| 9·6 | | 11 | 50 | 30·2 | |
| 9·5 | | | 56 | 31·0 | |
| 10·0 | | 12 | 13 | 25·1 | |
| 10·0 | | | 17 | 27·7 | |
| 10·1 | | | 30 | 10·9 | |
| 10·1 | | 13 | 8 | 3·3 | |
| 9·2‡ | | 15 | 14 | 42·2 | |
| 10·2 | | | 39 | 34·9 | |
| 8·6 | | 16 | 52 | 20·3 | g |
| 10·3‡ | | 17 | 4 | 59·4 | |
| 10·3 | | | 5 | 8·6 | |
| 10·3‡ | | 18 | 20 | 40·4 | |
| 9·7‡ | | | 40 | 44·3 | |
| 10·3 | | | 47 | 28·4 | |
| 9·9 | | 19 | 10 | 22·4 | |
| 10·3 | | | 45 | 19·3 | |
| 10·2 | | | 47 | 30·2 | |
| 9·8 | | 20 | 2 | 34·9 | |
| 10·2 | | 22 | 8 | 22·0 | |
| 10·1 | | | 21 | 20·9 | |
| 9·1‡ | | 23 | 17 | 49·9 | g |
| 10·3 | | 24 | 44 | 1·6 | |
| 10·2 | | 25 | 11 | 2·7 | |
| 10·5‡ | | 28 | 50 | 47·8 | |
| 10·0 | | 29 | 19 | 18·3 | |
| 10·3 | | | 51 | 34·5 | |
| 10·1 | | 30 | 44 | 5·3 | |

### 331—390.

| mag. | 9h.–10h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·7 | 9 | 31 | 8 | 7·9 | |
| 10·5‡ | | | 37 | 50·8 | |
| 9·7‡ | | 32 | 37 | 40·5 | |
| 10·3 | | | 37 | 37·7 | |
| 10·3 | | | 44 | 5·9 | |
| 8·7‡ | | 35 | 13 | 57·8 | g |
| 10·1 | | | 42 | 31·3 | |
| 9·7 | | 36 | 10 | 21·4 | g |
| 10·5‡ | | 37 | 38 | 40·4 | |
| 10·1‡ | | 38 | 47 | 39·8 | |
| 10·3 | | 39 | 28 | 13·6 | |
| 9·7 | | | 46 | 27·8 | |
| 9·7 | | 40 | 0 | 19·2 | |
| 10·3 | | | 6 | 2·5 | |
| 10·5‡ | | | 21 | 45·7 | |
| 10·5‡ | | 42 | 11 | 45·6 | |
| 9·5 | | 44 | 10 | 22·7 | g |
| 10·3 | | 45 | 37 | 12·8 | |
| 9·5 | | 46 | 19 | 25·0 | g |
| 9·7 | | | 39 | 25·2 | |
| 8·2 | | 47 | 58 | 12·6 | GSg |
| 9·7 | | 48 | 0 | 17·7 | |
| 9·5 | | 49 | 19 | 17·3 | |
| 9·0‡ | | | 43 | 59·5 | |
| 10·3‡ | | 50 | 29 | 58·7 | |
| 9·9 | | 51 | 4 | 20·5 | |
| 9·6 | | | 15 | 13·7 | |
| 9·5 | | | 18 | 20·9 | |
| 9·9‡ | | | 37 | 55·5 | |
| 9·9‡ | | 52 | 32 | 52·7 | |
| 9·9‡ | | 53 | 22 | 41·3 | |
| 9·7 | | 55 | 32 | 36·6 | |
| 8·3 | | | 42 | 19·1 | Gg |
| 9·9 | | | 57 | 31·4 | |
| 9·1‡ | | 56 | 26 | 54·0 | g |
| 9·5 | | | 31 | 11·0 | |
| 9·5 | | 57 | 38 | 0·9 | |
| 9·6 | | 59 | 5 | 11·8 | |
| 9·9‡ | | | 6 | 46·8 | |
| 9·8 | 10 | 0 | 53 | 4·2 | |
| 9·3 | | 1 | 52 | 21·3 | |
| 9·0‡ | | 2 | 48 | 56·1 | g |
| 9·5 | | 3 | 14 | 6·7 | |
| 9·5 | | | 15 | 16·6 | |
| 10·5‡ | | | 21 | 48·7 | |
| 9·8 | | 4 | 52 | 9·8 | |
| 9·1‡ | | | 56 | 49·4 | |
| 9·6 | | 5 | 8 | 25·6 | |
| 9·6 | | | 17 | 1·8 | |
| 9·4 | | | 31 | 9·2 | g |
| 9·6 | | 6 | 56 | 35·7 | |
| 9·9 | | | 57 | 5·1 | |
| 9·3‡ | | 10 | 3 | 54·5 | |
| 9·5 | | 11 | 1 | 2·2 | |
| 9·6 | | | 29 | 9·8 | |
| 9·4 | | 12 | 20 | 38·6 | |
| 9·7 | | | 33 | 23·8 | |
| 9·9 | | 14 | 9 | 31·2 | |
| 10·0‡ | | | 31 | 44·2 | |
| 8·6‡ | | | 33 | 58·5 | |

### 391—450.

| mag. | 10h.–11h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·9‡ | 10 | 14 | 41 | 45·3 | |
| 9·7‡ | | | 49 | 44·6 | |
| 10·0‡ | | 15 | 25 | 54·2 | |
| 9·5 | | 17 | 14 | 22·1 | |
| 10·2‡ | | | 21 | 47·4 | |
| 8·1 | | 20 | 51 | 16·8 | GSg |
| 9·7 | | 21 | 25 | 16·1 | |
| 10·2‡ | | | 43 | 41·0 | |
| 10·5‡ | | 22 | 22 | 54·5 | |
| 10·4‡ | | | 38 | 46·6 | |
| 9·9 | | 24 | 31 | 22·1 | |
| 10·0‡ | | 25 | 11 | 58·9 | |
| 9·7 | | 26 | 2 | 26·1 | |
| 8·8‡ | | | 43 | 48·1 | g |
| 9·7 | | | 49 | 7·1 | |
| 9·8 | | 28 | 4 | 36·8 | |
| 9·8 | | | 42 | 0·0 | |
| 9·6 | | 29 | 53 | 24·9 | |
| 9·3 | | 30 | 4 | 34·0 | |
| 9·7 | | | 13 | 16·5 | |
| 9·7 | | 31 | 11 | 0·9 | |
| 9·7 | | | 42 | 34·0 | |
| 9·6‡ | | 32 | 2 | 59·7 | |
| 9·2 | | | 40 | 5·9 | g |
| 9·3 | | 33 | 27 | 35·0 | |
| 10·0‡ | | | 40 | 46·6 | |
| 9·7 | | | 48 | 32·8 | |
| 9·5‡ | | 34 | 2 | 54·2 | |
| 10·3 | | | 58 | 46·6 | |
| 9·0‡ | | 35 | 19 | 42·8 | g |
| 9·4 | | 36 | 33 | 0·9 | g |
| 9·5 | | | 50 | 37·1 | |
| 10·4‡ | | 37 | 10 | 52·4 | |
| 8·5 | | | 37 | 16·3 | g |
| 10·0‡ | | 38 | 19 | 53·4 | |
| 9·9‡ | | | 27 | 39·6 | |
| 9·1 | | 40 | 13 | 27·6 | g |
| 9·5‡ | | 42 | 26 | 42·0 | |
| 9·7 | | 43 | 30 | 33·9 | |
| 9·4 | | 44 | 18 | 5·0 | |
| 9·5‡ | | | 54 | 57·5 | |
| 10·4‡ | | 45 | 29 | 58·4 | |
| 9·2 | | 50 | 40 | 33·1 | g |
| 9·4 | | 53 | 58 | 36·4 | |
| 10·3 | | 54 | 29 | 32·9 | |
| 9·3 | | 55 | 2 | 31·8 | |
| 9·8 | | | 2 | 18·0 | |
| 9·5 | | 56 | 21 | 1·5 | |
| 9·4 | | 57 | 34 | 33·6 | |
| 9·5 | | | 48 | 33·0 | |
| 9·4 | | 58 | 39 | 17·8 | g |
| 9·0 | 11 | 0 | 41 | 40·1 | |
| 9·8 | | 5 | 40 | 5·5 | |
| 9·8† | | 10 | 11 | 43·7 | |
| 10·0† | | | 40 | 47·1 | |
| 10·1† | | | 52 | 35·1 | |
| 10·2† | | 13 | 12 | 45·7 | |
| 8·4† | | 15 | 2 | 42·6 | g |
| 10·2 | | 16 | 30 | 30·3 | |
| 10·1† | | 17 | 2 | 54·3 | |

| h | m | 25 prec. α s | s | δ |
|---|---|---|---|---|
| 8 | 40 | −106 | −0·44 d | −5·4 |
| | 50 | 99 | −0·42 | 5·6 |
| 9 | 0 | 92 | −0·40 | 5·9 |
| | 10 | 84 | −0·39 | 6·2 |
| | 20 | 76 | −0·37 | 6·4 |
| | 30 | 68 | −0·35 | 6·6 |
| | 40 | 60 | −0·33 | 6·8 |
| | 50 | 51 | −0·31 | 7·0 |
| 10 | 0 | 42 | −0·29 | 7·2 |
| | 10 | 33 | −0·26 | 7·4 |
| | 20 | 24 | −0·24 | 7·6 |
| | 30 | 14 | −0·22 | 7·7 |
| | 40 | − 5 | −0·20 | 7·9 |
| | 50 | + 5 | −0·17 | 8·0 |
| 11 | 0 | 15 | −0·15 | 8·1 |
| | 10 | 25 | −0·12 | 8·2 |
| | 20 | + 35 | −0·10 | −8·2 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 11 | 10 | + 25 − 0·12 d | − 8·2 |
| | 20 | 35 − 0·10 | 8·2 |
| | 30 | 46 − 0·07 | 8·3 |
| | 40 | 56 − 0·05 | 8·3 |
| | 50 | 66 − 0·02 | 8·3 |
| 12 | 0 | 77 0·00 | 8·4 |
| | 10 | 87 + 0·02 | 8·3 |
| | 20 | 98 + 0·05 | 8·3 |
| | 30 | 108 + 0·07 | 8·3 |
| | 40 | 118 + 0·10 | 8·2 |
| | 50 | 128 + 0·12 | 8·2 |
| 13 | 0 | 138 + 0·15 | 8·1 |
| | 10 | 148 + 0·17 | 8·0 |
| | 20 | 158 + 0·20 | 7·9 |
| | 30 | 168 + 0·22 | 7·7 |
| | 40 | 177 + 0·24 | 7·6 |
| | 50 | 187 + 0·26 | 7·4 |
| 14 | 0 | 196 + 0·29 | 7·2 |
| | 10 | 205 + 0·31 | 7·0 |
| | 20 | 213 + 0·33 | 6·8 |
| | 30 | 222 + 0·35 | 6·6 |
| | 40 | 230 + 0·37 | 6·4 |
| | 50 | + 238 + 0·39 | − 6·2 |

d = minutes of decl.

## 451—510.

| mag. | 11h.–12h. h | m | s | − 82° ′ | |
|---|---|---|---|---|---|
| 10·0 | 11 | 18 | 23 | 6·6 | |
| 10·3† | | 19 | 47 | 40·6 | |
| 9·8 | | 20 | 26 | 36·4 | |
| 9·1† | | | 35 | 45·1 | g |
| 9·4 | | 21 | 29 | 44·0 | g |
| 10·3 | | | 46 | 49·0 | |
| 10·0 | | 22 | 48 | 45·9 | |
| 9·5 | | | 55 | 13·6 | |
| 9·6 | | 23 | 14 | 34·1 | |
| 10·2 | | | 39 | 3·1 | |
| 10·0 | | 25 | 59 | 31·0 | |
| 10·1† | | 28 | 9 | 52·6 | |
| 9·8 | | | 13 | 17·4 | |
| 10·2† | | | 25 | 41·0 | |
| 8·7† | | 29 | 22 | 47·6 | g |
| 9·5† | | 31 | 32 | 41·0 | |
| 8·6 | | 33 | 13 | 22·7 | g |
| 9·5† | | 34 | 46 | 42·4 | |
| 8·0 | | 36 | 40 | 24·4 | GSg |
| 9·6 | | 37 | 14 | 9·6 | |
| 10·3† | | 39 | 48 | 57·0 | |
| 10·2 | | 41 | 10 | 16·1 | |
| 9·8† | | | 34 | 55·6 | |
| 10·2 | | 42 | 53 | 22·2 | |
| 10·2 | | 43 | 20 | 11·4 | |
| 9·1† | | 44 | 32 | 40·8 | |
| 10·2 | | 45 | 45 | 11·4 | |
| 10·2 | | 46 | 26 | 25·5 | |
| 10·2 | | | 57 | 26·8 | |
| 9·6† | | 47 | 10 | 46·3 | |
| 10·0 | | | 57 | 27·7 | |
| 9·1 | | 48 | 52 | 34·7 | Gg |
| 10·0 | | 49 | 1 | 8·0 | |
| 10·2† | | | 13 | 41·4 | |
| 10·0 | | | 40 | 13·3 | |
| 9·7† | | 51 | 9 | 58·3 | |
| 10·0 | | 53 | 0 | 15·8 | |
| 9·2 | | | 20 | 26·8 | g |
| 10·2 | | 55 | 10 | 33·9 | |
| 9·3† | | | 33 | 56·8 | |
| 9·6 | | | 46 | 11·5 | |
| 10·0 | | | 48 | 21·7 | |
| 10·2 | | | 58 | 1·4 | |
| 9·3 | | 56 | 44 | 5·6 | g |
| 9·7 | | 57 | 39 | 7·4 | |
| 9·8 | | 58 | 8 | 5·1 | |
| 9·6 | | | 26 | 29·3 | |
| 10·0 | 12 | 0 | 26 | 15·0 | |
| 9·8 | | 3 | 22 | 25·5 | |
| 10·0 | | | 55 | 29·7 | |
| 9·1 | | 4 | 4 | 1·6 | g |
| 9·0 | | 5 | 5 | 39·7 | g |
| 8·9 | | 6 | 20 | 2·5 | g |
| 10·2 | | 8 | 44 | 26·2 | |
| 9·5 | | | 59 | 29·8 | |
| 10·2 | | 9 | 43 | 11·5 | |
| 9·7 | | 11 | 23 | 32·6 | |
| 10·2 | | | 59 | 16·1 | |
| 9·9 | | 13 | 46 | 4·2 | |
| 8·7 | | 14 | 1 | 37·6 | g |

## 511—570.

| mag. | 12h.–13h. h | m | s | − 82° ′ | |
|---|---|---|---|---|---|
| 9·7 | 12 | 14 | 29 | 6·5 | |
| 9·3 | | 15 | 24 | 5·1 | |
| 9·8 | | | 40 | 4·9 | |
| 10·2 | | 17 | 7 | 34·1 | |
| 10·0 | | | 32 | 18·5 | |
| 10·2 | | 18 | 22 | 9·1 | |
| 10·0 | | 19 | 10 | 18·0 | |
| 10·2 | | | 26 | 7·8 | |
| 9·6 | | | 34 | 8·8 | |
| 10·0 | | 22 | 36 | 0·2 | |
| 9·9 | | 23 | 29 | 3·2 | |
| 10·3† | | 24 | 33 | 47·9 | |
| 9·4 | | 25 | 44 | 17·5 | |
| 9·4 | | 26 | 5 | 9·1 | |
| 9·6† | | | 14 | 57·5 | |
| 9·8† | | 28 | 2 | 48·2 | |
| 9·6† | | | 47 | 43·9 | |
| 9·8 | | 29 | 20 | 23·2 | |
| 9·6 | | | 34 | 28·2 | |
| 9·8 | | 31 | 16 | 38·5 | |
| 10·3† | | 32 | 18 | 55·8 | |
| 9·5 | | 33 | 22 | 0·6 | g |
| 10·2 | | | 23 | 11·2 | |
| 9·0 | | 34 | 3 | 2·9 | g |
| 9·8 | | | 50 | 7·0 | |
| 8·5† | | 35 | 2 | 58·4 | g |
| 9·2 | | | 3 | 8·0 | g |
| 9·9 | | | 43 | 3·3 | |
| 9·7† | | 37 | 7 | 57·7 | g |
| 9·8† | | 38 | 28 | 42·5 | |
| 10·0 | | 40 | 42 | 32·3 | |
| 9·8 | | 41 | 17 | 21·3 | |
| 9·6† | | | 21 | 46·4 | |
| 9·6 | | | 39 | 23·3 | |
| 9·7 | | 42 | 14 | 7·5 | |
| 10·2 | | | 47 | 39·3 | |
| 8·6 | | 43 | 32 | 29·6 | g |
| 10·0 | | 44 | 16 | 30·8 | |
| 9·8 | | 49 | 17 | 10·5 | |
| 9·6 | | | 32 | 17·0 | g |
| 10·3† | | 50 | 23 | 56·8 | |
| 9·9- | | 52 | 37 | 3·8 | |
| 9·1 | | | 40 | 21·3 | g |
| 10·3† | | | 53 | 27·0 | |
| 10·3† | | 53 | 46 | 44·7 | |
| 7·9 | | 54 | 33 | 16·6 | GSg |
| 9·5† | | 55 | 27 | 45·9 | g |
| 9·7 | | | 36 | 19·5 | g |
| 10·4† | | 56 | 19 | 47·5 | |
| 10·3† | | | 27 | 24·5 | |
| 8·6 | | | 36 | 2·9 | GSg |
| 10·3† | | | 50 | 40·1 | |
| 10·2† | | 58 | 11 | 48·7 | |
| 10·4† | 13 | 0 | 47 | 50·0 | |
| 10·2† | | 2 | 22 | 57·8 | |
| 9·7‡ | | 5 | 52 | 58·8 | |
| 9·9‡ | | 9 | 0 | 44·4 | |
| 9·7‡ | | | 8 | 58·2 | |
| 9·9‡ | | | 12 | 54·4 | |
| 9·4 | | 17 | 10 | 21·7 | g |

## 571—630.

| mag. | 13h.–14h. h | m | s | − 82° ′ | |
|---|---|---|---|---|---|
| 9·7 | 13 | 20 | 57 | 11·0 | |
| 9·6 | | 21 | 56 | 14·3 | |
| 9·9‡ | | 23 | 4 | 33·1 | |
| 9·3 | | 25 | 43 | 6·5 | g |
| 8·8‡ | | 26 | 15 | 44·4 | g |
| 9·1‡ | | | 31 | 57·8 | |
| 9·3‡ | | | 50 | 40·8 | g |
| 9·6 | | 30 | 43 | 14·8 | g |
| 9·0‡ | | 35 | 40 | 44·1 | g |
| 9·6‡ | | | 41 | 50·4 | |
| 9·7‡ | | 36 | 28 | 58·2 | |
| 8·6‡ | | 37 | 14 | 56·0 | g |
| 9·5 | | | 24 | 6·1 | |
| 9·6 | | 39 | 37 | 12·0 | g |
| 8·0 | | | 53 | 2·6 | GSg |
| 9·6‡ | | 42 | 7 | 37·1 | |
| 8·7 | | 46 | 25 | 18·6 | GSg |
| 9·9‡ | | 47 | 10 | 56·0 | |
| 9·6‡ | | 51 | 33 | 36·3 | g |
| 9·7‡ | | 53 | 1 | 59·5 | |
| 9·3‡ | | 56 | 55 | 34·6 | |
| 9·9‡ | | 58 | 32 | 45·7 | |
| 9·1‡ | | | 42 | 57·5 | g |
| 9·6‡ | 14 | 0 | 29 | 42·0 | |
| 9·8 | | | 57 | 14·7 | |
| 10·0‡ | | 1 | 39 | 55·7 | |
| 8·0‡ | | 2 | 35 | 41·6 | g |
| 9·7‡ | | 3 | 1 | 41·9 | g |
| 9·9‡ | | | 28 | 52·2 | |
| 9·6‡ | | | 48 | 49·3 | g |
| 7·3 | | 6 | 5 | 16·1 | GSg |
| 9·7‡ | | | 52 | 56·1 | |
| 9·2‡ | | 7 | 58 | 56·9 | g |
| 9·6 | | 8 | 22 | 32·3 | |
| 9·6- | | 11 | 22 | 9·1 | |
| 9·6- | | 12 | 3 | 39·5 | |
| 9·7‡ | | 14 | 22 | 41·5 | |
| 9·6 | | | 43 | 37·1 | |
| 9·7 | | 15 | 32 | 2·5 | |
| 9·6 | | | 37 | 14·3 | |
| 8·5 | | 16 | 12 | 33·6 | g |
| 9·8 | | 18 | 18 | 5·9 | |
| 9·3‡ | | 21 | 17 | 53·2 | |
| 9·4 | | 22 | 43 | 30·1 | |
| 9·4‡ | | 26 | 16 | 51·4 | |
| 9·9‡ | | | 34 | 53·8 | |
| 9·1‡ | | 27 | 25 | 43·8 | |
| 9·4 | | 30 | 35 | 7·0 | g |
| 9·2 | | 33 | 3 | 9·4 | g |
| 9·5 | | | 37 | 1·4 | |
| 9·5 | | 34 | 9 | 12·9 | |
| 9·6 | | | 14 | 6·6 | |
| 8·6 | | | 37 | 23·9 | g |
| 9·4 | | | 42 | 12·0 | |
| 9·9‡ | | 35 | 8 | 51·8 | |
| 9·5 | | 36 | 52 | 0·4 | |
| 9·7 | | 38 | 10 | 34·3 | |
| 9·6 | | 39 | 19 | 7·6 | |
| 7·0‡ | | 40 | 5 | 43·1 | GScg |
| 9·0 | | | 37 | 27·5 | g |



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### 631—690.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 14h.–16h. | | | –82° | |
| 9·3‡ | 14 | 41 | 15 | 52·9 | |
| 9·4‡ | | | 17 | 52·4 | S*g* |
| 9·1 | | | 22 | 30·2 | *g* |
| 9·6 | | 42 | 49 | 17·8 | |
| 9·5 | | 43 | 11 | 25·7 | S |
| 8·0 | | | 13 | 31·9 | GS*g*gr |
| 9·6 | | 44 | 2 | 6·3 | |
| 9·6 | | 46 | 15 | 26·1 | |
| 9·6 | | 47 | 22 | 1·3 | |
| 10·0‡ | | 50 | 56 | 58·7 | |
| 10·0‡ | | 52 | 45 | 50·0 | |
| 9·4 | | | 54 | 12·2 | |
| 9·6 | | 54 | 19 | 32·9 | |
| 9·6 | | 55 | 58 | 10·0 | |
| 9·4 | | 57 | 43 | 24·8 | |
| 9·1‡ | | 58 | 18 | 59·0 | |
| 9·4 | | 59 | 35 | 35·2 | |
| 9·1‡ | 15 | 0 | 6 | 45·9 | *g* |
| 9·3 | | | 50 | 0·7 | *g* |
| 9·5 | | 1 | 17 | 5·4 | |
| 9·7‡ | | | 23 | 48·8 | |
| 9·8 | | | 53 | 9·5 | |
| 9·4 | | 10 | 56 | 23·8 | |
| 8·1† | | 14 | 50 | 48·0 | *g* |
| 9·1 | | 16 | 31 | 26·0 | |
| 9·6 | | 18 | 54 | 17·8 | |
| 9·6 | | 19 | 24 | 34·1 | |
| 9·0 | | | 51 | 14·4 | *g* |
| 8·5 | | 21 | 13 | 16·3 | *g* |
| 9·6 | | | 20 | 25·7 | |
| 9·3 | | 22 | 17 | 34·9 | *g* |
| 9·3 | | 23 | 42 | 22·4 | *g* |
| 9·8† | | 25 | 30 | 57·4 | S |
| 9·6 | | 30 | 52 | 4·9 | |
| 9·7 | | 33 | 16 | 15·2 | |
| 9·6 | | | 36 | 15·1 | |
| 9·5 | | 35 | 2 | 5·8 | |
| 9·6 | | 37 | 3 | 1·6 | |
| 9·4 | | 40 | 13 | 0·5 | |
| 9·7† | | 42 | 32 | 49·5 | *g* |
| 9·1 | | | 46 | 22·3 | *g* |
| 9·4 | | 45 | 57 | 24·8 | |
| 9·6 | | 46 | 1 | 9·5 | |
| 9·3 | | 48 | 0 | 57·3 | |
| 9·3 | | 50 | 40 | 6·9 | |
| 9·3 – | | 51 | 33 | 26·0 | G |
| 9·3 | | 53 | 51 | 1·2 | *g* |
| 8·6† | | 54 | 40 | 54·9 | *g* |
| 9·0 | | 58 | 4 | 28·1 | |
| 9·6 | | | 11 | 7·2 | |
| 9·4† | | 59 | 17 | 48·8 | |
| 7·5 | 16 | 1 | 56 | 15·0 | GS*g* |
| 9·9† | | 2 | 10 | 45·6 | *g* |
| 9·3 | | 3 | 22 | 34·6 | |
| 8·8 | | 9 | 24 | 35·9 | *g* |
| 9·2 | | 16 | 32 | 1·6 | *g* |
| 8·2† | | 18 | 7 | 58·6 | GS*g* |
| 9·5† | | | 25 | 56·0 | |
| 9·5 | | 19 | 18 | 30·3 | |
| 9·5 | | 22 | 10 | 38·0 | |

### 691—750.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 16h.–18h. | | | –82° | |
| 9·5 | 16 | 22 | 54 | 18·9 | |
| 9·4 | | 25 | 8 | 34·8 | *g* |
| 9·0 | | 27 | 23 | 16·5 | *g* |
| 8·9† | | | 51 | 58·9 | *g* |
| 9·9† | | 32 | 15 | 52·0 | *g* |
| 8·4 | | 36 | 14 | 33·1 | *g* |
| 9·2† | | 42 | 3 | 58·9 | *g* |
| 9·4 | | | 10 | 30·2 | |
| 9·6 | | 43 | 18 | 12·5 | |
| 7·1 | | | 51 | 7·7 | GS*g* |
| 8·7 | | | 53 | 7·2 | S*g* |
| 8·7 | | 44 | 43 | 13·5 | *g* |
| 7·1 | | 46 | 36 | 12·4 | GS*g* |
| 8·9† | | 47 | 16 | 40·7 | |
| 9·5‡ | | 53 | 47 | 36·1 | |
| 9·5 | 17 | 0 | 56 | 21·4 | |
| 6·2 | | | 58 | 38·6 | GS*g* |
| 9·0 – | | 10 | 5 | 19·1 | *g* |
| 9·1 | | 17 | 16 | 13·9 | *g* |
| 8·1‡ | | 20 | 22 | 41·9 | *g* |
| 9·1 | | 21 | 12 | 7·9 | *g* |
| 9·3‡ | | 27 | 49 | 44·3 | |
| 9·3‡ | | 28 | 54 | 55·1 | |
| 10·0‡ | | 29 | 10 | 52·0 | |
| 9·4 | | | 16 | 37·5 | |
| 8·7 | | 30 | 26 | 1·1 | *g* |
| 8·4‡ | | 34 | 18 | 42·0 | *g* |
| 9·5‡ | | 35 | 51 | 40·9 | |
| 9·2 | | 40 | 26 | 16·9 | |
| 9·0‡ | | | 38 | 55·2 | *g* |
| 9·1‡ | | | 44 | 55·8 | |
| 9·3‡ | | 45 | 22 | 38·1 | |
| 9·7‡ | | 46 | 19 | 50·4 | |
| 9·7‡ | | 47 | 21 | 34·8 | |
| 8·8 | | 52 | 49 | 31·5 | GS*g* |
| 10·0‡ | | 53 | 6 | 46·4 | |
| 9·3‡ | | 55 | 12 | 56·9 | *g* |
| 10·1‡ | | | 29 | 13·1 | |
| 10·1‡ | | 57 | 5 | 19·0 | |
| 9·2 | | 58 | 20 | 20·5 | *g* |
| 9·9‡ | | | 44 | 6·8 | |
| 10·1‡ | 18 | 5 | 9 | 43·2 | |
| 9·7‡ | | | 33 | 54·5 | |
| 9·4 | | 7 | 2 | 21·5 | *g* |
| 9·8‡ | | 11 | 11 | 13·3 | |
| 9·7‡ | | | 52 | 18·5 | *g* |
| 8·6‡ | | 12 | 23 | 58·8 | *g* |
| 10·0‡ | | 15 | 50 | 20·5 | |
| 9·7‡ | | 18 | 28 | 14·5 | |
| 8·4‡ | | 22 | 32 | 50·6 | *g* |
| 9·5‡ | | 24 | 18 | 40·4 | *g* |
| 9·8‡ | | 25 | 57 | 9·4 | |
| 9·4‡ | | 27 | 54 | 32·7 | |
| 9·8‡ | | 29 | 1 | 46·3 | |
| 9·7‡ | | 30 | 17 | 31·6 | |
| 8·9 – | | 31 | 39 | 41·9 | |
| 8·1 | | 35 | 41 | 42·2 | *g* |
| 9·8 | | 36 | 12 | 17·0 | |
| 9·8 | | | 25 | 50·0 | |
| 9·4 | | 37 | 35 | 28·0 | |

### 751—810.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 18h.–20h. | | | –82° | |
| 9·2 | 18 | 38 | 3 | 52·7 | |
| 9·2 | | | 29 | 27·1 | |
| 8·9 | | | 48 | 52·6 | *g* |
| 9·0 | | 39 | 4 | 42·8 | *g* |
| 7·8 | | | 24 | 39·4 | *g* |
| 9·0 | | 43 | 41 | 56·4 | |
| 9·2 | | 44 | 6 | 53·2 | |
| 9·4 | | 46 | 50 | 24·8 | |
| 8·7 | | 48 | 50 | 32·4 | *g* |
| 8·9 | | 51 | 12 | 2·7 | *g* |
| 9·7 | | 53 | 11 | 43·8 | |
| 8·9 | | 55 | 48 | 18·6 | *g* |
| 8·8 | | 56 | 48 | 0·2 | *g* |
| 9·4 | | | 54 | 45·0 | |
| ? 9·8 | 19 | 0 | 4 | 32·4 | |
| 9·4 | | | 17 | 49·6 | |
| 9·8 | | | 47 | 29·6 | |
| 9·6 | | 4 | 34 | 25·9 | |
| 9·8 | | 7 | 59 | 28·0 | |
| 7·6 | | 10 | 19 | 0·0 | GS*g* |
| 9·4 | | 11 | 49 | 43·5 | |
| 9·7 | | 13 | 6 | 48·7 | |
| 8·6 | | | 53 | 52·3 | *g* |
| 9·4 | | 14 | 15 | 35·6 | |
| 9·3 | | | 15 | 0·1 | |
| 9·8 | | 15 | 27 | 44·6 | |
| 9·8 | | 20 | 5 | 35·1 | |
| 8·8 | | 21 | 20 | 56·7 | *g* |
| 9·7 | | 23 | 45 | 56·5 | |
| 9·8 | | 25 | 20 | 19·8 | |
| 8·5 | | 26 | 51 | 55·5 | *g* |
| 9·7 | | 27 | 7 | 5·0 | |
| 8·5 | | | 31 | 27·0 | *g* Cape 91 |
| 9·4 | | | 32 | 58·5 | |
| 9·3 | | 31 | 8 | 11·9 | *g* |
| 8·9 | | | 25 | 41·4 | *g* |
| 9·8 | | 33 | 2 | 39·1 | |
| 9·0 | | | 3 | 20·6 | |
| 9·8 | | | 59 | 59·1 | |
| 9·4 | | 34 | 22 | 11·5 | |
| 9·8 | | | 59 | 47·0 | |
| 8·9 | | 35 | 18 | 18·6 | |
| 9·4 | | 37 | 15 | 37·8 | *g* |
| 9·4 | | 38 | 28 | 46·7 | |
| 9·4 | | 39 | 13 | 24·6 | |
| 9·4 | | 44 | 35 | 44·1 | |
| 8·4 | | 46 | 26 | 4·4 | *g* |
| 8·2 | | 49 | 13 | 22·6 | *g* |
| 9·2 | | 52 | 8 | 11·1 | |
| 9·1 | | 54 | 47 | 4·0 | |
| 9·2 | | 55 | 45 | 47·9 | |
| 9·0 | | 56 | 21 | 36·8 | *g* |
| 8·5 | | 58 | 7 | 1·6 | *g* |
| 9·2 | | 59 | 45 | 56·3 | |
| 9·6 | 20 | 0 | 18 | 7·9 | |
| 9·8 | | 2 | 29 | 18·9 | |
| 8·8 | | 3 | 10 | 9·9 | *g* |
| 9·8 | | 4 | 20 | 6·4 | |
| 9·4 | | 6 | 35 | 29·1 | |
| 9·8 | | 7 | 20 | 22·3 | |

### 25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 14 | 40 | + 230 + 0·37 d | – 6·4 |
| | 50 | 238 + 0·39 | 6·2 |
| 15 | 0 | 245 + 0·40 | 5·9 |
| | 10 | 252 + 0·42 | 5·6 |
| | 20 | 259 + 0·44 | 5·4 |
| | 30 | 266 + 0·45 | 5·1 |
| | 40 | 272 + 0·47 | 4·8 |
| | 50 | 278 + 0·48 | 4·5 |
| 16 | 0 | 283 + 0·49 | 4·2 |
| | 10 | 288 + 0·51 | 3·9 |
| | 20 | 293 + 0·52 | 3·5 |
| | 30 | 297 + 0·53 | 3·2 |
| | 40 | 301 + 0·54 | 2·9 |
| | 50 | 304 + 0·55 | 2·5 |
| 17 | 0 | 307 + 0·55 | 2·2 |
| | 10 | 309 + 0·56 | 1·8 |
| | 20 | 311 + 0·56 | 1·5 |
| | 30 | 313 + 0·57 | 1·1 |
| | 40 | 314 + 0·57 | 0·7 |
| | 50 | 315 + 0·57 | – 0·4 |
| 18 | 0 | 315 + 0·57 | 0·0 |
| | 10 | 315 + 0·57 | + 0·4 |
| | 20 | 314 + 0·57 | 0·7 |
| | 30 | 313 + 0·57 | 1·1 |
| | 40 | 311 + 0·56 | 1·5 |
| | 50 | 309 + 0·56 | 1·8 |
| 19 | 0 | 307 + 0·55 | 2·2 |
| | 10 | 304 + 0·55 | 2·5 |
| | 20 | 301 + 0·54 | 2·9 |
| | 30 | 297 + 0·53 | 3·2 |
| | 40 | 293 + 0·52 | 3·5 |
| | 50 | 288 + 0·51 | 3·9 |
| 20 | 0 | 283 + 0·49 | 4·2 |
| | 10 | + 278 + 0·48 | + 4·5 |

d = minutes of decl.



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25 prec.

| h | m | a (s) | a (s) | δ (′) |
|---|---|---|---|---|
| 20 | 0 | +283 | +0·49 d | +4·2 |
| | 10 | 278 | +0·48 | 4·5 |
| | 20 | 272 | +0·47 | 4·8 |
| | 30 | 266 | +0·45 | 5·1 |
| | 40 | 259 | +0·44 | 5·4 |
| | 50 | 252 | +0·42 | 5·6 |
| 21 | 0 | 245 | +0·40 | 5·9 |
| | 10 | 238 | +0·39 | 6·2 |
| | 20 | 230 | +0·37 | 6·4 |
| | 30 | 222 | +0·35 | 6·6 |
| | 40 | 213 | +0·33 | 6·8 |
| | 50 | 205 | +0·31 | 7·0 |
| 22 | 0 | 196 | +0·29 | 7·2 |
| | 10 | 187 | +0·26 | 7·4 |
| | 20 | 177 | +0·24 | 7·6 |
| | 30 | 168 | +0·22 | 7·7 |
| | 40 | 158 | +0·20 | 7·9 |
| | 50 | 148 | +0·17 | 8·0 |
| 23 | 0 | 138 | +0·15 | 8·1 |
| | 10 | 128 | +0·12 | 8·2 |
| | 20 | 118 | +0·10 | 8·2 |
| | 30 | 108 | +0·07 | 8·3 |
| | 40 | 98 | +0·05 | 8·3 |
| | 50 | 87 | +0·02 | 8·3 |
| 0 | 0 | + 77 | 0·00 | +8·4 |

d = minutes of decl.

## 811—843.

| mag. | 20h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 8·9 | 20 | 9 | 51 | 19·4 | |
| 9·4 | | 10 | 41 | 31·8 | |
| 9·7 | | 11 | 56 | 26·0 | |
| 8·8 | | 12 | 8 | 0·1 | g |
| 8·5 | | | 33 | 41·9 | g |
| 8·9 | | 13 | 24 | 54·4 | g |
| 9·2 | | 14 | 42 | 11·6 | |
| 8·9 | | 16 | 33 | 44·7 | g |
| 9·2 | | | 59 | 11·8 | |
| 9·8 | | 22 | 46 | 59·4 | g |
| 10·1 | | 24 | 9 | 6·7 | |
| 8·9 | | 25 | 44 | 42·6 | g |
| 9·7 | | | 52 | 43·2 | |
| 9·4 | | 26 | 23 | 26·1 | |
| 9·6 | | | 45 | 43·6 | |
| 9·8 | | 27 | 43 | 17·7 | |
| 8·6 | | | 48 | 42·5 | g |
| 10·3 | | 30 | 56 | 12·9 | |
| 9·4 | | 31 | 34 | 8·8 | g |
| 10·0 | | | 37 | 39·2 | |
| 10·0 | | 33 | 40 | 24·4 | |
| 9·6 | | 34 | 59 | 25·3 | |
| 10·2 | | 36 | 17 | 6·9 | |
| 9·7 | | 37 | 14 | 1·9 | |
| 9·0 | | 38 | 25 | 55·8 | g |
| 8·3 | | 39 | 3 | 41·4 | g |
| 10·2 | | 41 | 1 | 41·1 | |
| 9·0 | | 42 | 20 | 4·6 | g |
| 9·8 | | | 31 | 39·8 | |
| 8·9 | | 44 | 7 | 59·2 | g |
| 9·2 | | | 38 | 59·9 | g |
| 9·7 | | 45 | 25 | 32·7 | |
| 7·6 | | 48 | 6 | 30·9 | GSg |

## 844—876.

| mag. | 20h.—21h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·0 | 20 | 48 | 34 | 54·8 | g |
| 9·0 | | 49 | 20 | 26·2 | g |
| 9·6 | | | 53 | 18·0 | g |
| 9·2 | | 51 | 44 | 58·5 | |
| 10·0 | | | 58 | 14·7 | |
| 9·6 | | 58 | 54 | 16·0 | |
| 7·9 | | 59 | 2 | 43·0 | GSg |
| 10·2 | 21 | 1 | 32 | 23·1 | |
| 10·3 | | 4 | 5 | 55·3 | |
| 10·1 | | 5 | 45 | 10·7 | |
| 9·4 | | | 51 | 32·1 | g |
| 8·2 | | 8 | 7 | 29·6 | g |
| 10·0 | | 10 | 2 | 51·2 | |
| 9·0 | | | 31 | 46·6 | g |
| 9·6 | | 15 | 24 | 9·0 | g |
| 7·6 | | | 36 | 28·1 | GSg |
| 9·6 | | 16 | 52 | 41·6 | |
| 9·6 | | 17 | 57 | 26·1 | |
| 9·6 | | 20 | 8 | 49·3 | |
| 10·1 | | 21 | 0 | 44·5 | |
| 9·7 | | | 12 | 33·9 | |
| 8·8 | | 30 | 30 | 41·6 | g |
| 9·0 | | 35 | 25 | 52·9 | |
| 9·2 | | | 54 | 59·6 | g |
| 8·8 | | 36 | 40 | 15·4 | g |
| 9·6 | | 37 | 43 | 38·4 | |
| 10·0 | | 41 | 38 | 30·3 | |
| 9·2 | | 46 | 40 | 23·9 | g |
| 10·3 | | 49 | 32 | 32·9 | |
| 9·7 | | 51 | 13 | 7·5 | |
| 8·8 | | 56 | 5 | 31·9 | g |
| 9·7 | | | 32 | 8·9 | g |
| 9·4 | | | 51 | 52·3 | |

## 877—908.

| mag. | 21h.—23h. h | m | s | −82° ′ | |
|---|---|---|---|---|---|
| 9·4 | 21 | 57 | 40 | 8·3 | g |
| 8·8 | | 58 | 25 | 47·7 | g |
| 9·2 | | 59 | 6 | 20·5 | g |
| 9·6 | 22 | 0 | 4 | 33·2 | |
| 9·7 | | 5 | 32 | 12·5 | |
| 9·7 | | 8 | 14 | 3·3 | |
| 9·6 | | 9 | 29 | 6·7 | |
| 9·5 | | 18 | 2 | 4·9 | g |
| 9·4 | | 20 | 44 | 31·4 | g |
| 9·4 | | 25 | 2 | 14·9 | |
| 9·6 | | | 56 | 6·2 | |
| 9·6 | | 28 | 18 | 18·7 | |
| 4·7 | | 33 | 7 | 2·0 | GSgrλ |
| 9·3‡ | | 38 | 50 | 58·0 | g |
| 9·7‡ | | 56 | 26 | 40·9 | g |
| 9·0 | | 57 | 38 | 13·2 | g |
| 9·2† | 23 | 9 | 35 | 35·4 | g |
| 8·9† | | 14 | 40 | 19·0 | g |
| 9·6† | | 17 | 29 | 50·0 | g |
| 8·9† | | 20 | 8 | 36·7 | g |
| 8·6† | | 29 | 3 | 47·5 | g |
| 9·2 | | | 34 | 2·9 | |
| 9·4† | | 33 | 36 | 44·0 | g |
| 8·7† | | 36 | 43 | 37·2 | g |
| 9·0† | | 37 | 12 | 49·4 | g |
| 9·8† | | 39 | 50 | 40·6 | |
| 9·5† | | 41 | 11 | 37·4 | g |
| 9·8† | | 42 | 4 | 12·1 | g |
| 6·1† | | 44 | 41 | 42·8 | GScgrλ |
| 9·3† | | 45 | 0 | 53·5 | g |
| 6·7† | | 50 | 38 | 52·0 | GScggr |
| 8·7† | | 58 | 20 | 2·5 | g |



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# ZONE—83°.

### 1—30.

| mag. | $0^{h.}$—$1^{h.}$ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 9·6 | 0 | 2 | 13 | 14·3 | |
| 9·5 | | 5 | 12 | 53·5 | |
| 9·2 | | 13 | 18 | 45·3 | g |
| 9·8 | | 16 | 57 | 44·4 | g |
| 8·7 | | 18 | 32 | 22·5 | g |
| 7·8 | | 23 | 4 | 49·9 | GSg |
| 9·8 | | 31 | 30 | 5·1 | g |
| 9·2 | | 33 | 9 | 37·0 | g |
| 9·8 | | 35 | 1 | 18·4 | g |
| 7·8 | | 36 | 49 | 43·2 | GSg |
| 9·2 | | 37 | 13 | 47·7 | g |
| 9·2 | | 45 | 57 | 11·1 | g |
| 9·4 | | 48 | 58 | 35·2 | g |
| 9·8 | | 49 | 4 | 47·8 | g |
| 9·2 | | | 26 | 3·7 | g |
| 8·9 | | 53 | 26 | 20·8 | Sg |
| 8·9 | | 54 | 20 | 33·7 | g |
| 8·9 | | | 50 | 17·5 | g |
| 9·0 | | 59 | 13 | 48·8 | g |
| 8·7 | 1 | 2 | 36 | 3·4 | g |
| 8·3 | | 3 | 34 | 55·5 | GSg |
| 8·2 | | 7 | 40 | 34·2 | g |
| 9·0 | | 10 | 13 | 57·1 | g |
| 8·5 | | 11 | 24 | 12·4 | g |
| 9·3 | | 13 | 29 | 42·1 | g |
| 9·0 | | 16 | 59 | 29·9 | g |
| 6·3 | | 41 | 19 | 36·6 | GScg |
| 8·2 | | 42 | 24 | 52·5 | GScg |
| 8·7 | | 44 | 25 | 24·9 | g |
| 7·7 | | 47 | 43 | 59·4 | GSg |

### 31—60.

| mag. | $1^{h.}$—$3^{h.}$ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 9·0 | 1 | 48 | 10 | 22·5 | g |
| 7·9 | | 50 | 43 | 17·6 | GSg |
| 9·0 | | 51 | 23 | 1·4 | g |
| 9·0 | 2 | 4 | 45 | 8·5 | |
| 7·5 | | 5 | 30 | 6·4 | GSg |
| 9·3 | | 8 | 28 | 56·2 | g |
| 8·7 | | 9 | 5 | 19·9 | Sg |
| 9·3 | | 11 | 43 | 56·6 | g |
| 9·3 | | 17 | 46 | 52·5 | g |
| 9·2 | | 19 | 55 | 28·2 | g |
| 8·9 | | 21 | 26 | 20·9 | g |
| 8·2 | | | 58 | 5·1 | g |
| 8·5 | | 22 | 41 | 7·5 | g |
| 8·2 | | 26 | 21 | 31·2 | GSg |
| 8·2 | | 29 | 24 | 2·1 | g |
| 9·6 | | 31 | 3 | 57·7 | g |
| 9·3 | | 36 | 50 | 48·6 | g |
| 9·3 | | 49 | 56 | 50·9 | g |
| 9·5 | | 53 | 4 | 6·0 | g |
| 9·2 | | 54 | 16 | 5·9 | g |
| 8·7 | | 56 | 28 | 33·2 | g |
| 9·7 | 3 | 4 | 45 | 15·1 | |
| 9·6 | | 5 | 28 | 17·9 | |
| 9·3 | | 7 | 39 | 37·3 | |
| 9·6 | | 8 | 52 | 35·9 | |
| 9·8 | | 9 | 25 | 59·5 | |
| 9·4 | | 10 | 37 | 15·1 | |
| 8·7 | | 12 | 31 | 49·0 | g |
| 9·8 | | 13 | 40 | 29·7 | g |
| 8·9 | | 15 | 1 | 32·4 | g |

### 61—90.

| mag. | $3^{h.}$—$4^{h.}$ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 8·9 | 3 | 16 | 14 | 34·1 | g |
| 9·5 | | 17 | 22 | 8·9 | g |
| 9·2 | | | 42 | 56·0 | |
| 7·7 | | 22 | 46 | 59·3 | GSg |
| 9·0 | | 24 | 58 | 6·0 | g |
| 9·7 | | 25 | 58 | 56·2 | g |
| 9·1 | | 26 | 1 | 43·8 | g |
| 9·8 | | 27 | 58 | 44·4 | |
| 9·1 | | 28 | 36 | 58·6 | |
| 8·8 | | 36 | 20 | 37·8 | g |
| 8·9 | | 42 | 27 | 47·7 | g |
| 9·1 | | 43 | 18 | 43·7 | g |
| 9·1 | | 45 | 17 | 44·5 | g |
| 9·0 | | 51 | 4 | 50·3 | g |
| 9·1 | | | 23 | 40·2 | |
| 9·5 | | 53 | 15 | 57·8 | |
| 9·0 | 4 | 3 | 52 | 25·4 | g |
| 8·6 | | 5 | 54 | 45·4 | g |
| 8·7 | | 6 | 37 | 22·7 | g |
| 9·8 | | 9 | 25 | 24·0 | g |
| 9·2 | | 12 | 2 | 11·6 | g |
| 9·1 | | 15 | 21 | 12·3 | g |
| 9·4 | | 16 | 9 | 42·2 | g |
| 9·2 | | 22 | 13 | 25·6 | g |
| 8·2 | | 24 | 30 | 24·8 | g |
| 9·4 | | 27 | 55 | 43·9 | g |
| 8·2 | | 28 | 33 | 53·9 | GSg |
| 9·2 | | 30 | 0 | 47·2 | g |
| 9·0 | | 31 | 9 | 4·1 | g |
| 8·0 | | | 30 | 16·8 | g |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 0 | 0 | + 77 | 0·0 d | + 8·4 |
| | 10 | 65 | 0·0 | 8·3 |
| | 20 | 53 | − 0·1 | 8·3 |
| | 30 | 41 | − 0·1 | 8·3 |
| | 40 | 29 | − 0·1 | 8·2 |
| | 50 | 18 | − 0·2 | 8·2 |
| 1 | 0 | + 6 | − 0·2 | 8·1 |
| | 10 | − 5 | − 0·2 | 8·0 |
| | 20 | 16 | − 0·3 | 7·9 |
| | 30 | 27 | − 0·3 | 7·7 |
| | 40 | 38 | − 0·3 | 7·6 |
| | 50 | 49 | − 0·4 | 7·4 |
| 2 | 0 | 59 | − 0·4 | 7·2 |
| | 10 | 70 | − 0·4 | 7·0 |
| | 20 | 80 | − 0·4 | 6·8 |
| | 30 | 89 | − 0·5 | 6·6 |
| | 40 | 98 | − 0·5 | 6·4 |
| | 50 | 107 | − 0·5 | 6·2 |
| 3 | 0 | 116 | − 0·5 | 5·9 |
| | 10 | 124 | − 0·6 | 5·6 |
| | 20 | 132 | − 0·6 | 5·4 |
| | 30 | 139 | − 0·6 | 5·1 |
| | 40 | 146 | − 0·6 | 4·8 |
| | 50 | 153 | − 0·6 | 4·5 |
| 4 | 0 | 159 | − 0·7 | 4·2 |
| | 10 | 165 | − 0·7 | 3·9 |
| | 20 | 170 | − 0·7 | 3·5 |
| | 30 | 175 | − 0·7 | 3·2 |
| | 40 | − 179 | − 0·7 | + 2·9 |

d = minutes of decl.

25 prec.

| h | m | α (s s) | δ (′) |
|---|---|---|---|
| 4 | 30 | − 175 − 0·7 d | + 3·2 |
| | 40 | 179 − 0·7 | 2·9 |
| | 50 | 183 − 0·7 | 2·5 |
| 5 | 0 | 186 − 0·7 | 2·2 |
| | 10 | 189 − 0·7 | 1·8 |
| | 20 | 192 − 0·7 | 1·5 |
| | 30 | 193 − 0·8 | 1·1 |
| | 40 | 194 − 0·8 | 0·7 |
| | 50 | 195 − 0·8 | + 0·4 |
| 6 | 0 | 196 − 0·8 | 0·0 |
| | 10 | 195 − 0·8 | − 0·4 |
| | 20 | 194 − 0·8 | 0·7 |
| | 30 | 193 − 0·8 | 1·1 |
| | 40 | 192 − 0·7 | 1·5 |
| | 50 | 189 − 0·7 | 1·8 |
| 7 | 0 | 186 − 0·7 | 2·2 |
| | 10 | 183 − 0·7 | 2·5 |
| | 20 | 179 − 0·7 | 2·9 |
| | 30 | 175 − 0·7 | 3·2 |
| | 40 | 170 − 0·7 | 3·5 |
| | 50 | 165 − 0·7 | 3·9 |
| 8 | 0 | 159 − 0·7 | 4·2 |
| | 10 | 153 − 0·6 | 4·5 |
| | 20 | 146 − 0·6 | 4·8 |
| | 30 | 139 − 0·6 | 5·1 |
| | 40 | 133 − 0·6 | 5·4 |
| | 50 | 124 − 0·6 | 5·6 |
| 9 | 0 | 116 − 0·5 | 5·9 |
| | 10 | − 107 − 0·5 | − 6·2 |

d = minutes of decl.

## 91—150.

| mag. | 4h.—7h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 6·6 | 4 | 37 | 32 | 10·0 | GS*g* |
| 9·7 | | 39 | 41 | 35·7 | |
| 9·1 | | 53 | 45 | 6·5 | *g* |
| 8·3 | | | 58 | 43·3 | GS*g*g |
| 8·9 | | 58 | 12 | 18·3 | *g* |
| 8·9 | | | 21 | 24·9 | *g* |
| 10·2 | 5 | 0 | 28 | 48·7 | |
| 9·4 | | 5 | 40 | 32·1 | |
| 8·7 | | 6 | 51 | 13·8 | *g* |
| 9·2 | | 8 | 10 | 7·6 | *g* |
| 8·7 | | 9 | 30 | 11·1 | *g* |
| 9·0 | | 13 | 44 | 7·8 | *g* |
| 9·6 | | 19 | 35 | 45·3 | *g* |
| 9·7 | | 25 | 28 | 14·2 | *g* |
| 7·1 | | 26 | 34 | 59·7 | GS*g* |
| 8·6 | | 28 | 29 | 17·3 | *g* |
| 10·0 | | 35 | 12 | 19·9 | *g* |
| 9·6 | | 36 | 23 | 0·9 | *g* |
| 10·0 | | 37 | 44 | 22·1 | |
| 10·2 | | 38 | 48 | 5·5 | *g* |
| 8·7 | | 49 | 38 | 55·9 | *g* |
| 8·9 | | 52 | 39 | 18·5 | *g* |
| 9·9 | | 54 | 15 | 36·1 | |
| 8·3 | | | 22 | 20·0 | *g* |
| 9·7 | 6 | 7 | 35 | 7·7 | |
| 9·1 | | 14 | 3 | 12·1 | *g* |
| 9·7 | | 19 | 23 | 54·2 | *g* |
| 8·9 | | 22 | 51 | 32·5 | *g* |
| 9·3 | | 25 | 41 | 2·5 | *g* |
| 8·0 | | 26 | 52 | 42·6 | *g* |
| 8·1 | | 27 | 46 | 28·0 | *g* |
| 10·2 | | 28 | 9 | 31·1 | *g* |
| 9·3 | | 29 | 3 | 32·1 | *g* |
| 9·0 | | 35 | 17 | 2·2 | *g* |
| 8·6 | | 39 | 49 | 6·8 | *g* |
| 9·0 | | 41 | 2 | 41·9 | |
| 9·7 | | 43 | 0 | 53·4 | *g* |
| 8·6 | | | 50 | 43·9 | *g* |
| 8·1 | | 52 | 21 | 3·4 | *g* |
| 10·3 | | 53 | 45 | 11·3 | |
| 9·8 | | 54 | 19 | 51·5 | *g* |
| 10·2 | | 55 | 27 | 13·0 | |
| 10·2 | | 56 | 40 | 13·1 | |
| 10·3 | | 59 | 18 | 14·4 | |
| 10·2 | | | 19 | 34·0 | |
| 10·2 | 7 | 0 | 11 | 52·2 | |
| 9·7 | | 1 | 58 | 15·7 | |
| 10·2 | | 2 | 30 | 29·3 | |
| 10·0 | | 3 | 43 | 28·0 | |
| 10·3 | | 4 | 38 | 32·8 | |
| 10·4 | | | 49 | 39·4 | |
| 7·9 | | 5 | 9 | 49·6 | GS*g* |
| 10·0 | | | 55 | 47·0 | |
| 10·4 | | 7 | 2 | 35·2 | |
| 10·2 | | | 27 | 34·8 | |
| 10·6 | | 8 | 41 | 55·1 | |
| 10·5 | | 9 | 8 | 42·4 | |
| 10·2 | | 11 | 16 | 54·3 | |
| 8·9 | | | 52 | 56·3 | *g* |
| 10·0 | | 15 | 43 | 14·2 | |

## 151—210.

| mag. | 7h.—8h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 8·4 | 7 | 17 | 19 | 33·1 | GS*g* |
| 10·2 | | | 26 | 21·1 | |
| 10·6 | | 18 | 1 | 36·0 | |
| 10·5 | | | 32 | 38·8 | |
| 9·0 | | 19 | 59 | 41·6 | *g* |
| 10·2 | | 20 | 23 | 6·9 | |
| 9·1 | | 21 | 19 | 39·7 | |
| 9·9 | | 24 | 41 | 11·9 | |
| 10·2 | | | 56 | 0·2 | |
| 10·2 | | 25 | 9 | 33·2 | |
| 10·3 | | 26 | 34 | 15·1 | |
| 9·2 | | | 47 | 32·4 | |
| 9·8 | | 27 | 19 | 30·5 | |
| 10·0 | | 28 | 4 | 59·0 | |
| 9·1 | | 30 | 55 | 40·7 | *g* |
| 10·5 | | 33 | 53 | 59·7 | |
| 9·7 | | 34 | 46 | 3·9 | |
| 10·2 | | 37 | 43 | 57·2 | |
| 10·0 | | 39 | 26 | 39·0 | |
| 10·0 | | | 59 | 56·4 | |
| 10·5 | | 40 | 24 | 11·1 | |
| 10·3 | | 41 | 21 | 50·2 | |
| 9·4 | | 43 | 16 | 22·3 | |
| 10·3 | | | 21 | 4·1 | |
| 9·5 | | 44 | 11 | 19·7 | |
| 10·6 | | | 14 | 6·2 | |
| 9·9 | | 46 | 54 | 12·1 | |
| 9·7 | | 47 | 11 | 45·9 | |
| 10·0 | | | 30 | 47·9 | |
| 10·5 | | 50 | 44 | 33·9 | |
| 9·4 | | | 48 | 25·7 | *g* |
| 10·5 | | 51 | 35 | 52·2 | |
| 10·5 | | 53 | 14 | 55·4 | |
| 9·0 | | 54 | 12 | 19·9 | *g* |
| 9·9 | | 55 | 11 | 52·9 | |
| 10·5 | | | 16 | 8·1 | |
| 10·3 | | 58 | 33 | 55·8 | |
| 10·6 | | | 51 | 49·7 | |
| 9·9 | | 59 | 37 | 22·1 | |
| 9·8 | | | 41 | 57·3 | |
| 10·0 | 8 | 0 | 38 | 32·0 | |
| 10·6 | | | 45 | 2·2 | |
| 10·3 | | 1 | 37 | 26·8 | |
| 10·3 | | 2 | 18 | 49·2 | |
| 10·0 | | | 26 | 6·7 | |
| 10·6 | | 3 | 27 | 7·3 | |
| 9·2 | | 5 | 34 | 26·0 | |
| 10·2 | | 6 | 58 | 4·1 | |
| 10·2 | | 7 | 15 | 20·2 | |
| 9·5 | | | 46 | 28·5 | |
| 9·9 | | | 59 | 31·2 | |
| 10·4 | | 8 | 4 | 31·8 | |
| 7·9 | | | 23 | 22·4 | GS*g* |
| 10·6 | | | 45 | 37·2 | |
| 9·8 | | 10 | 0 | 27·2 | |
| 8·8 | | 11 | 34 | 14·5 | |
| 10·6 | | | 54 | 28·9 | |
| 9·9 | | 12 | 53 | 48·1 | |
| 10·6 | | 13 | 45 | 5·7 | |
| 10·5 | | 14 | 17 | 58·6 | |

## 211—270.

| mag. | 8h.—9h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 10·3 | 8 | 14 | 48 | 16·3 | |
| 8·9 | | 18 | 23 | 30·7 | |
| 10·6 | | 19 | 36 | 41·8 | |
| 10·3 | | | 50 | 8·0 | |
| 10·1 | | 21 | 13 | 1·8 | |
| 10·3 | | | 56 | 5·6 | |
| 10·3 | | 22 | 29 | 5·0 | |
| 9·9 | | 23 | 27 | 52·1 | |
| 10·6 | | 27 | 8 | 42·0 | |
| 8·9 | | | 25 | 50·2 | *g* |
| 10·0 | | 28 | 29 | 57·6 | |
| 8·6 | | 30 | 17 | 59·4 | *g* |
| 10·0 | | 32 | 28 | 20·2 | |
| 9·8 | | | 36 | 16·0 | |
| 8·6 | | | 44 | 38·9 | *g* |
| 9·4 | | 33 | 43 | 47·9 | |
| 10·0 | | 34 | 25 | 59·2 | |
| 9·7 | | | 51 | 2·9 | |
| 10·6 | | 35 | 5 | 41·0 | |
| 9·7 | | | 9 | 30·8 | |
| 9·8 | | | 25 | 42·9 | |
| 10·3 | | 36 | 46 | 59·4 | |
| 10·3 | | 38 | 6 | 14·5 | |
| 8·4 | | 40 | 32 | 55·9 | *g* |
| 10·0 | | 41 | 1 | 52·4 | |
| 10·7 | | | 31 | 30·6 | |
| 10·0 | | | 55 | 0·5 | |
| 7·9 | | 42 | 0 | 39·2 | *g* |
| 9·9 | | | 35 | 16·2 | |
| 10·6 | | 43 | 10 | 8·7 | |
| 10·0 | | | 38 | 0·0 | |
| 10·6 | | 44 | 10 | 3·6 | |
| 9·9 | | 45 | 55 | 13·8 | |
| 10·5 | | 46 | 10 | 34·3 | |
| 10·6 | | 47 | 45 | 28·9 | |
| 9·6 | | 48 | 10 | 22·8 | |
| 10·0 | | 49 | 25 | 54·9 | |
| 10·2 | | 50 | 4 | 20·5 | |
| 10·0 | | | 38 | 0·7 | |
| 10·6 | | 51 | 16 | 9·1 | |
| 9·8 | | | 35 | 1·3 | |
| 9·8 | | 53 | 44 | 32·7 | |
| 10·5 | | 54 | 53 | 23·9 | |
| 9·8 | | 55 | 6 | 55·4 | |
| 10·0 | | 57 | 8 | 25·8 | |
| 9·8 | | | 50 | 52·2 | |
| 9·1 | | 58 | 29 | 0·7 | |
| 10·0 | | 59 | 36 | 12·4 | |
| 10·3 | 9 | 0 | 5 | 8·4 | |
| 9·9 | | | 45 | 17·2 | |
| 9·9 | | 1 | 3 | 15·9 | |
| 9·9 | | | 21 | 5·0 | |
| 9·2 | | 2 | 23 | 0·2 | |
| 9·6 | | 3 | 26 | 16·8 | |
| 9·7 | | | 36 | 30·9 | |
| 10·0 | | 5 | 17 | 20·0 | |
| 9·7 | | 6 | 43 | 11·4 | |
| 9·7 | | | 51 | 29·7 | |
| 10·0 | | | 54 | 33·1 | |
| 10·5 | | 8 | 17 | 29·6 | |



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## 271—330.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 9h·—10h· | | | −83° | |
| 9·1 | 9 | 8 | 49 | 4·9 | |
| 9·9 | | 9 | 36 | 10·1 | |
| 9·9 | | 10 | 28 | 7·6 | |
| 9·9 | | 11 | 1 | 7·3 | |
| 9·6 | | | 21 | 21·8 | |
| 9·9 | | 13 | 21 | 18·1 | |
| 10·0 | | | 29 | 8·6 | |
| 9·9 | | 14 | 27 | 30·2 | |
| 9·9 | | | 28 | 21·3 | |
| 9·5 | | 15 | 10 | 28·3 | |
| 10·4 | | | 37 | 1·2 | |
| 9·6 | | | 57 | 27·7 | |
| 9·2 | | 16 | 0 | 15·6 | |
| 10·0 | | 18 | 8 | 52·6 | |
| 10·0 | | | 13 | 51·4 | |
| 8·9 | | 19 | 31 | 50·1 | g |
| 9·3 | | | 47 | 49·4 | g |
| 10·2 | | 20 | 2 | 8·8 | |
| 8·2 | | | 19 | 13·1 | GSg |
| 9·9 | | 21 | 0 | 56·5 | |
| 10·4 | | | 7 | 58·0 | |
| 9·2 | | | 7 | 1·1 | |
| 9·3 | | 22 | 26 | 35·1 | |
| 10·3 | | 23 | 47 | 21·8 | |
| 9·8 | | 24 | 8 | 37·2 | |
| 9·9 | | | 10 | 38·3 | |
| 10·1 | | 25 | 19 | 45·1 | |
| 10·2 | | | 30 | 19·7 | |
| 9·6 | | 27 | 53 | 26·2 | |
| 10·5 | | 29 | 38 | 59·4 | |
| 10·2 | | 30 | 10 | 22·7 | |
| 10·0 | | 31 | 47 | 10·6 | |
| 9·6 | | 33 | 9 | 47·9 | |
| 10·0 | | 34 | 18 | 47·0 | |
| 10·4 | | 35 | 6 | 23·2 | |
| 10·1 | | 36 | 14 | 12·0 | |
| 10·4 | | 37 | 29 | 15·9 | |
| 10·0 | | 38 | 37 | 55·4 | |
| 10·4 | | 39 | 46 | 3·6 | |
| 9·1 | | 41 | 41 | 57·5 | g |
| 9·6 | | 42 | 37 | 26·7 | |
| 9·9 | | 43 | 15 | 15·3 | |
| 9·6 | | | 43 | 23·6 | |
| 9·7 | | 47 | 2 | 12·5 | |
| 9·4 | | 48 | 17 | 23·8 | |
| 10·0 | | 53 | 37 | 13·5 | |
| 9·6 | | 54 | 11 | 41·8 | |
| 9·9 | | | 35 | 33·9 | |
| 10·1 | | | 54 | 7·5 | |
| 10·2 | | | 54 | 19·8 | |
| 9·9 | | 55 | 13 | 19·2 | |
| 10·4 | | 56 | 7 | 15·7 | |
| 9·7 | | | 30 | 50·5 | |
| 9·9 | | 57 | 10 | 44·6 | |
| 9·4 | | | 31 | 35·9 | |
| 8·5 | | 59 | 59 | 49·6 | g |
| 8·4 | 10 | 1 | 56 | 3·5 | g |
| 10·2 | | 2 | 22 | 41·0 | |
| 10·3 | | 4 | 42 | 51·2 | |
| 9·2 | | 5 | 37 | 20·8 | g |

## 331—390.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 10h·—11h· | | | −83° | |
| 10·0 | 10 | 6 | 37 | 41·5 | |
| 9·7 | | 7 | 41 | 3·6 | |
| 10·0 | | 8 | 52 | 29·8 | |
| 10·0 | | 10 | 15 | 32·7 | |
| 10·0 | | | 50 | 24·8 | |
| 7·4 | | 11 | 16 | 28·5 | GSg |
| 10·3 | | 13 | 14 | 1·6 | |
| 9·7 | | | 38 | 5·3 | |
| 9·9 | | | 54 | 19·5 | |
| 9·9 | | 16 | 0 | 33·6 | |
| 9·3 | | | 53 | 27·4 | g |
| 10·0 | | 17 | 55 | 58·3 | |
| 9·6 | | 18 | 32 | 43·5 | |
| 10·0 | | 19 | 14 | 33·6 | |
| 10·4 | | 20 | 36 | 20·1 | |
| 10·0 | | | 38 | 58·1 | |
| 10·3 | | 22 | 19 | 18·6 | |
| 9·9 | | 24 | 11 | 17·8 | |
| 9·1 | | | 13 | 21·5 | |
| 9·7 | | | 47 | 6·9 | |
| 8·5 | | 27 | 18 | 17·6 | g |
| 10·0 | | 28 | 4 | 59·8 | |
| 9·7 | | | 32 | 56·8 | |
| 10·4 | | | 59 | 0·4 | |
| 8·8 | | 30 | 13 | 42·5 | GSg |
| 9·9 | | | 26 | 22·3 | |
| 9·9 | | 31 | 25 | 10·3 | |
| 10·3 | | | 31 | 40·8 | |
| 8·3 | | | 50 | 29·7 | Ggg |
| 10·0 | | 34 | 10 | 11·9 | |
| 8·6 | | | 22 | 34·4 | Ggg |
| 9·9 | | | 52 | 2·1 | |
| 10·3 | | 37 | 52 | 36·1 | |
| 9·9 | | 40 | 6 | 17·4 | |
| 10·5 | | | 18 | 56·1 | |
| 9·5 | | 41 | 14 | 14·4 | |
| 10·0 | | 42 | 24 | 56·8 | |
| 10·0 | | 43 | 57 | 56·8 | |
| 10·3 | | 44 | 47 | 44·7 | |
| 9·7 | | 47 | 50 | 2·4 | |
| 10·0 | | 49 | 4 | 57·8 | |
| 10·1 | | 52 | 8 | 7·4 | |
| 9·7 | | 53 | 30 | 24·0 | |
| 10·2 | | | 58 | 19·1 | |
| 10·1 | | 55 | 29 | 17·2 | |
| 10·3 | | | 56 | 21·4 | |
| 10·3 | | 56 | 46 | 49·8 | |
| 10·0 | | 57 | 35 | 6·0 | |
| 8·4 | | | 37 | 48·5 | g |
| 9·6 | | | 40 | 23·9 | |
| 10·3 | | 58 | 32 | 53·5 | |
| 9·8 | | | 39 | 56·1 | |
| 9·5 | | 59 | 7 | 14·5 | g |
| 9·9 | | | 28 | 55·4 | |
| 10·3 | | | 43 | 31·4 | |
| 6·5 | 11 | 0 | 5 | 55·4 | GSgrλ |
| 10·1 | | | 40 | 26·9 | |
| 9·8 | | | 46 | 53·7 | |
| 9·9 | | 2 | 14 | 16·8 | |
| 10·2 | | 3 | 14 | 44·9 | |

## 391—450.

| mag. | h | m | s | ′ | |
|---|---|---|---|---|---|
| | 11h·—12h· | | | −83° | |
| 9·5 | 11 | 4 | 3 | 36·7 | |
| 10·3 | | | 38 | 46·0 | |
| 9·9 | | 5 | 11 | 48·5 | |
| 9·2 | | 6 | 29 | 45·4 | g |
| 10·0 | | 7 | 10 | 20·9 | |
| 8·8 | | | 29 | 45·5 | GSg |
| 10·4 | | 8 | 32 | 59·5 | |
| 10·3 | | | 52 | 40·7 | |
| 9·4 | | 9 | 0 | 17·7 | g |
| 10·1 | | 10 | 10 | 14·8 | |
| 10·3 | | 11 | 18 | 7·9 | |
| 10·3 | | 12 | 32 | 7·7 | |
| 10·3 | | | 45 | 56·9 | |
| 10·2 | | 15 | 18 | 31·3 | |
| 10·4 | | | 35 | 33·3 | |
| 9·7 | | 16 | 40 | 8·1 | |
| 10·3 | | 17 | 12 | 38·1 | |
| 9·7 | | | 46 | 38·9 | g |
| 9·1 | | 18 | 8 | 5·7 | g |
| 10·3 | | | 13 | 2·9 | |
| 9·2 | | | 50 | 39·3 | g |
| 9·9 | | 19 | 3 | 4·8 | |
| 10·3 | | | 52 | 3·2 | |
| 9·8 | | 20 | 32 | 49·9 | g |
| 10·2 | | 21 | 40 | 41·0 | |
| 10·3 | | 23 | 24 | 34·7 | |
| 8·0 | | 27 | 14 | 24·4 | GSg |
| 10·1 | | 28 | 26 | 46·0 | |
| 9·9 | | 29 | 44 | 21·8 | |
| 10·1 | | 30 | 32 | 40·9 | |
| 10·1 | | 31 | 24 | 55·6 | |
| 10·2 | | 32 | 25 | 38·5 | |
| 9·3 | | | 29 | 24·0 | |
| 10·3 | | 38 | 2 | 19·0 | |
| 10·0 | | | 45 | 59·1 | |
| 9·7 | | 39 | 26 | 4·2 | |
| 10·2 | | 40 | 2 | 57·9 | |
| 10·0 | | 41 | 46 | 59·3 | |
| 10·1 | | | 55 | 21·8 | |
| 10·3 | | 42 | 41 | 9·6 | |
| 10·3 | | 43 | 33 | 32·3 | G |
| 10·0 | | 44 | 13 | 28·7 | G |
| 10·0 | | 47 | 19 | 20·9 | |
| 10·3 | | 48 | 34 | 50·7 | |
| 9·9 | | 51 | 28 | 0·3 | |
| 9·7 | | 52 | 18 | 25·8 | g |
| 9·9 | | | 18 | 11·3 | |
| 10·4 | | 56 | 1 | 34·3 | |
| 10·2 | | | 45 | 25·4 | |
| 10·3 | | 59 | 10 | 10·3 | |
| 10·1 | 12 | 2 | 41 | 18·6 | |
| 9·9 | | 3 | 2 | 52·1 | |
| 10·3 | | | 18 | 24·0 | |
| 7·0 | | | 59 | 4·9 | GSg |
| 10·0 | | 4 | 1 | 46·4 | |
| 10·3 | | | 1 | 5·8 | |
| 10·3 | | 5 | 27 | 26·9 | |
| 10·3 | | | 29 | 9·1 | |
| 10·3 | | 7 | 16 | 44·9 | |
| 10·1 | | 8 | 33 | 44·7 | |

25 prec.

| h | m | α s | s | δ ′ |
|---|---|---|---|---|
| 9 | 0 | −116 | −0·5 d | −5·9 |
| | 10 | 107 | −0·5 | 6·2 |
| | 20 | 98 | −0·5 | 6·4 |
| | 30 | 89 | −0·5 | 6·6 |
| | 40 | 80 | −0·4 | 6·8 |
| | 50 | 70 | −0·4 | 7·0 |
| 10 | 0 | 59 | −0·4 | 7·2 |
| | 10 | 49 | −0·4 | 7·4 |
| | 20 | 38 | −0·3 | 7·6 |
| | 30 | 27 | −0·3 | 7·7 |
| | 40 | 16 | −0·3 | 7·9 |
| | 50 | − 5 | −0·2 | 8·0 |
| 11 | 0 | + 6 | −0·2 | 8·1 |
| | 10 | 18 | −0·2 | 8·2 |
| | 20 | 29 | −0·1 | 8·2 |
| | 30 | 41 | −0·1 | 8·3 |
| | 40 | 53 | −0·1 | 8·3 |
| | 50 | 65 | 0·0 | 8·3 |
| 12 | 0 | 77 | 0·0 | 8·4 |
| | 10 | + 89 | 0·0 | −8·3 |

d = minutes of decl.



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| h | m | 25 prec. α (s) | s | | δ (′) |
|---|---|---|---|---|---|
| 12 | 0 | + 77 | 0·0 | d | − 8·4 |
| | 10 | 89 | 0·0 | | 8·3 |
| | 20 | 101 | + 0·1 | | 8·3 |
| | 30 | 112 | + 0·1 | | 8·3 |
| | 40 | 124 | + 0·1 | | 8·2 |
| | 50 | 136 | + 0·2 | | 8·2 |
| 13 | 0 | 147 | + 0·2 | | 8·1 |
| | 10 | 159 | + 0·2 | | 8·0 |
| | 20 | 170 | + 0·3 | | 7·9 |
| | 30 | 181 | + 0·3 | | 7·7 |
| | 40 | 192 | + 0·3 | | 7·6 |
| | 50 | 203 | + 0·4 | | 7·4 |
| 14 | 0 | 213 | + 0·4 | | 7·2 |
| | 10 | 223 | + 0·4 | | 7·0 |
| | 20 | 233 | + 0·4 | | 6·8 |
| | 30 | 243 | + 0·5 | | 6·6 |
| | 40 | 252 | + 0·5 | | 6·4 |
| | 50 | 261 | + 0·5 | | 6·2 |
| 15 | 0 | 270 | + 0·5 | | 5·9 |
| | 10 | 278 | + 0·6 | | 5·6 |
| | 20 | 286 | + 0·6 | | 5·4 |
| | 30 | 293 | + 0·6 | | 5·1 |
| | 40 | 300 | + 0·6 | | 4·8 |
| | 50 | 307 | + 0·6 | | 4·5 |
| 16 | 0 | 313 | + 0·7 | | 4·2 |
| | 10 | 319 | + 0·7 | | 3·9 |
| | 20 | 324 | + 0·7 | | 3·5 |
| | 30 | 329 | + 0·7 | | 3·2 |
| | 40 | 333 | + 0·7 | | 2·9 |
| | 50 | 337 | + 0·7 | | 2·5 |
| 17 | 0 | 340 | + 0·7 | | 2·2 |
| | 10 | 343 | + 0·7 | | 1·8 |
| | 20 | + 345 | + 0·7 | | − 1·5 |

d = minutes of decl.

## 451—510.

| mag. | 12ʰ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 8·5 | 12 | 9 | 44 | 35·8 | g |
| 10·1 | | 11 | 45 | 14·0 | |
| 10·2 | | | 51 | 27·9 | |
| 10·1 | | 12 | 47 | 18·1 | |
| 9·8 | | 14 | 42 | 17·6 | g |
| 10·4 | | 15 | 33 | 49·3 | |
| 9·6 | | | 55 | 19·8 | g |
| 10·3 | | 16 | 5 | 11·4 | |
| 10·3 | | | 22 | 9·8 | |
| 10·3 | | 17 | 35 | 28·7 | |
| 6·4 | | 20 | 3 | 6·6 | GSg |
| 10·3 | | | 39 | 15·3 | |
| 10·4 | | 21 | 31 | 17·8 | |
| 8·6 | | 22 | 5 | 48·1 | g |
| 10·0 | | | 46 | 58·5 | |
| 10·2 | | 23 | 44 | 53·9 | |
| 10·1 | | 24 | 45 | 33·7 | |
| 10·3 | | 25 | 39 | 16·4 | |
| 10·1 | | | 56 | 58·6 | |
| 7·9 | | 26 | 9 | 35·1 | g |
| 10·3 | | 28 | 39 | 39·0 | |
| 9·6 | | 30 | 41 | 7·8 | |
| 10·1 | | | 49 | 35·2 | |
| 9·2 | | | 51 | 3·8 | g |
| 9·6 | | | 52 | 47·8 | |
| 9·9 | | 32 | 51 | 21·8 | |
| 9·9 | | 33 | 21 | 47·0 | |
| 9·7 | | 34 | 24 | 41·5 | |
| 10·2 | | 36 | 31 | 56·9 | |
| 9·7 | | 39 | 29 | 3·7 | |
| 9·4 | | | 58 | 58·5 | |
| 10·1 | | 41 | 10 | 45·9 | |
| 9·6 | | | 11 | 50·5 | g |
| 9·5 | | | 17 | 35·8 | g |
| 10·1 | | 42 | 4 | 18·9 | |
| 10·0 | | | 12 | 18·9 | |
| 10·3 | | | 13 | 55·0 | |
| 10·2 | | | 28 | 6·9 | |
| 10·3 | | 43 | 4 | 38·7 | |
| 10·4 | | | 48 | 58·0 | |
| 9·9 | | | 48 | 56·9 | |
| 9·5 | | | 56 | 55·0 | |
| 10·3 | | 44 | 13 | 58·8 | |
| 10·3 | | | 55 | 8·8 | |
| 9·8 | | 45 | 58 | 18·0 | g |
| 10·1 | | 46 | 6 | 31·8 | |
| 10·1 | | | 34 | 33·7 | |
| 10·3 | | 47 | 21 | 51·7 | |
| 9·7 | | | 45 | 45·9 | |
| 9·8 | | 48 | 33 | 23·0 | |
| 10·0 | | | 41 | 45·0 | |
| 10·0 | | 50 | 7 | 2·7 | |
| 10·2 | | 51 | 2 | 48·0 | |
| 10·0 | | | 5 | 7·6 | |
| 10·0 | | | 34 | 58·9 | |
| 10·1 | | 52 | 39 | 59·9 | |
| 9·6 | | | 40 | 40·1 | |
| 10·2 | | 54 | 10 | 17·6 | |
| 10·1 | | 55 | 5 | 38·6 | |
| 9·5 | | 56 | 42 | 6·6 | g |

## 511—570.

| mag. | 12ʰ—14ʰ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 10·3 | 12 | 58 | 59 | 32·9 | |
| 10·0 | | 59 | 21 | 32·1 | |
| 9·3 | | | 48 | 2·8 | |
| 9·9 | 13 | 0 | 40 | 36·2 | |
| 9·4 | | 1 | 34 | 10·6 | g |
| 9·7 | | | 38 | 58·4 | |
| 8·7 | | | 45 | 47·8 | GSg |
| 9·7 | | 2 | 40 | 26·2 | |
| 10·1 | | | 47 | 4·7 | |
| 10·1 | | 3 | 6 | 22·4 | |
| 10·0 | | 8 | 29 | 44·1 | |
| 9·2 | | | 40 | 56·9 | g |
| 9·4 | | 11 | 6 | 24·9 | g |
| 9·1 | | 14 | 29 | 35·3 | g |
| 9·4 | | | 45 | 15·0 | |
| 9·7 | | 16 | 7 | 22·8 | g |
| 8·5 | | | 20 | 6·4 | g |
| 10·0 | | | 44 | 33·0 | |
| 9·9 | | 19 | 58 | 15·9 | g |
| 9·4 | | 20 | 35 | 48·1 | |
| 9·4 | | | 42 | 48·3 | |
| 9·0 | | 23 | 46 | 48·7 | Gg |
| 7·3 | | | 47 | 16·1 | GSg |
| 9·9 | | | 49 | 57·7 | |
| 8·6 | | 26 | 10 | 11·2 | g |
| 10·0 | | | 16 | 2·1 | |
| 9·4 | | 32 | 27 | 50·3 | |
| 9·6 | | 33 | 27 | 14·3 | |
| 9·6 | | 37 | 40 | 52·0 | |
| 9·6 | | 38 | 25 | 26·1 | g |
| 9·0 | | 39 | 41 | 25·3 | g |
| 9·0 | | 41 | 27 | 52·0 | g |
| 9·4 | | 44 | 46 | 18·1 | |
| 10·0 | | 46 | 47 | 54·5 | |
| 10·2 | | 47 | 8 | 22·8 | |
| 9·9 | | | 15 | 49·4 | |
| 7·6 | | 53 | 4 | 56·8 | GSg |
| 9·6 | | 54 | 32 | 5·0 | |
| 10·0 | | 55 | 47 | 31·0 | |
| 10·0 | | 58 | 40 | 10·7 | |
| 9·4 | | 59 | 51 | 23·1 | |
| 9·5 | 14 | 1 | 0 | 2·1 | |
| 9·0 | | 2 | 44 | 25·4 | g |
| 10·0 | | | 47 | 18·5 | |
| 10·0 | | 3 | 5 | 37·1 | |
| 9·7 | | 5 | 1 | 8·3 | |
| 6·4 | | 7 | 8 | 5·5 | GSgrλ |
| 8·4 | | 14 | 21 | 35·2 | GSg |
| 9·9 | | 16 | 4 | 15·1 | |
| 9·9 | | 19 | 34 | 17·2 | |
| 9·9 | | 23 | 23 | 15·8 | |
| 9·7 | | 24 | 37 | 28·6 | |
| 9·4 | | | 56 | 2·8 | |
| 9·9 | | 25 | 6 | 26·8 | |
| 9·9 | | 29 | 0 | 58·0 | |
| 9·4 | | 33 | 7 | 21·5 | |
| 9·0 | | | 37 | 37·7 | g |
| 9·2 | | 34 | 1 | 31·2 | |
| 9·6 | | 35 | 20 | 54·9 | G |
| 9·4 | | | 44 | 17·8 | |

## 571—630.

| mag. | 14ʰ—17ʰ h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 9·7 | 14 | 40 | 55 | 30·2 | |
| 8·4 | | 42 | 1 | 8·5 | g |
| 7·8 | | 45 | 40 | 24·8 | GSg |
| 8·7 | | 49 | 34 | 11·8 | g |
| 9·0 | | 52 | 2 | 1·3 | |
| 10·0 | | | 56 | 36·0 | |
| 9·2 | | 53 | 17 | 35·9 | g |
| 9·4 | | | 35 | 16·4 | |
| 10·2 | | 54 | 38 | 34·4 | |
| 9·9 | | | 59 | 39·5 | |
| 9·4 | | 58 | 40 | 33·9 | |
| 9·7 | | | 59 | 20·8 | |
| 9·4 | 15 | 3 | 26 | 44·7 | g |
| 8·8 | | 6 | 40 | 15·8 | g |
| 9·6 | | 13 | 19 | 26·8 | |
| 9·2 | | 14 | 11 | 55·4 | g |
| 9·6 | | 17 | 30 | 22·8 | |
| 9·0 | | 30 | 54 | 8·6 | |
| 9·7 | | 32 | 42 | 53·7 | |
| 8·1 | | 37 | 40 | 24·4 | g |
| 9·7 | | 38 | 22 | 10·0 | |
| 9·9 | | 41 | 2 | 30·6 | |
| 8·2 | | | 23 | 52·4 | GSg |
| 8·7 | | 44 | 59 | 27·3 | g |
| 9·2 | | 45 | 52 | 30·0 | g |
| 8·7 | | 46 | 19 | 46·8 | g |
| 9·8 | | 50 | 2 | 41·5 | |
| 9·1 | | 51 | 15 | 39·8 | g |
| 8·2 | | 52 | 9 | 46·1 | g |
| 9·3 | | 54 | 44 | 30·9 | |
| 8·9 | | 57 | 5 | 1·1 | g |
| 8·2 | 16 | 0 | 1 | 9·5 | g |
| 9·0 | | 3 | 8 | 35·9 | g |
| 8·1 | | 4 | 14 | 17·7 | GSg |
| 8·7 | | | 37 | 16·1 | Gg |
| 8·6 | | 8 | 51 | 15·9 | Gg |
| 8·9 | | 12 | 21 | 59·5 | g |
| 9·2 | | 14 | 23 | 40·9 | g |
| 8·7 | | 22 | 3 | 28·8 | g |
| 9·3 | | 32 | 29 | 34·5 | g |
| 8·9 | | 34 | 48 | 46·9 | |
| 9·0 | | 36 | 51 | 31·1 | g |
| 8·9 | | 37 | 24 | 30·4 | g |
| 8·9 | | 48 | 23 | 8·2 | |
| 8·7 | | 49 | 23 | 30·9 | g |
| 9·5 | | 50 | 56 | 50·7 | |
| 9·1 | | 55 | 55 | 38·9 | g |
| 9·7 | | 56 | 43 | 31·1 | |
| 9·7 | | 58 | 7 | 22·1 | |
| 9·7 | 17 | 0 | 9 | 33·4 | |
| 10·0 | | | 51 | 12·8 | |
| 9·5 | | 1 | 15 | 37·7 | |
| 9·5 | | 2 | 47 | 26·3 | |
| 9·5 | | | 50 | 59·1 | |
| 9·7 | | 3 | 22 | 3·1 | |
| 9·3 | | | 39 | 56·6 | |
| 9·1 | | 5 | 30 | 32·9 | |
| 9·8 | | 8 | 29 | 44·9 | |
| 9·7 | | 9 | 13 | 23·8 | |
| 9·3 | | 12 | 59 | 19·2 | |



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### 631—674.

| mag. | 17h.–18h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 9·1 | 17 | 13 | 6 | 40·0 | |
| 9·5 | | 15 | 40 | 26·5 | |
| 10·0 | | 21 | 10 | 32·0 | |
| 9·7 | | | 15 | 22·5 | |
| 10·0 | | 23 | 29 | 0·0 | |
| 7·0 | | 28 | 0 | 10·8 | GS*g* |
| 9·5 | | 29 | 56 | 35·7 | |
| 9·4 | | 31 | 42 | 25·1 | |
| 9·3 | | 37 | 16 | 24·7 | *g* |
| 10·1 | | | 26 | 59·9 | |
| 10·0 | | 39 | 32 | 39·4 | |
| 8·4 | | | 56 | 6·9 | *g* |
| 8·6 | | 43 | 32 | 24·5 | *g* |
| 9·8 | | 44 | 1 | 0·8 | |
| 9·7 | | | 25 | 8·7 | |
| 10·0 | | 45 | 27 | 31·0 | |
| 9·4 | | | 54 | 14·9 | |
| 9·8 | | 47 | 49 | 50·8 | |
| 8·8 | | 51 | 19 | 3·7 | *g* |
| 9·5 | | | 24 | 27·4 | |
| 9·7 | | | 28 | 8·7 | |
| 9·4 | | 53 | 36 | 34·9 | |
| 9·4 | | 56 | 14 | 9·6 | *g* |
| 10·0 | 18 | 1 | 25 | 28·5 | |
| 9·8 | | | 25 | 5·7 | |
| 9·4 | | 3 | 13 | 4·5 | |
| 9·4 | | | 15 | 15·8 | |
| 9·5 | | 11 | 12 | 25·2 | *g* |
| 9·7 | | 16 | 2 | 52·9 | |
| 9·8 | | | 27 | 24·8 | |
| 9·3 | | 19 | 7 | 25·1 | |
| 8·5 | | 20 | 8 | 40·4 | GS*gg* |
| 8·4 | | 21 | 56 | 25·6 | GS*g* |
| 5·8 | | 27 | 45 | 33·1 | GS*g* |
| 10·0 | | 29 | 7 | 6·6 | |
| 9·1 | | 30 | 58 | 1·4 | |
| 8·8 | | 32 | 33 | 46·1 | *g* |
| 9·3 | | 33 | 58 | 20·2 | |
| 9·0 | | 35 | 49 | 1·9 | |
| 9·7 | | 36 | 17 | 57·9 | |
| 9·8 | | 40 | 30 | 37·4 | |
| 9·3 | | | 41 | 42·6 | |
| 9·7 | | | 53 | 24·5 | |
| 7·3 | | 41 | 41 | 39·1 | GS*g* |

### 675—718.

| mag. | 18h.–21h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 9·1 | 18 | 42 | 29 | 56·3 | |
| 9·0 | | 45 | 42 | 56·2 | *g* |
| 9·8 | | 51 | 5 | 25·0 | |
| 9·0 | | 52 | 18 | 57·9 | *g* |
| 9·3 | | 54 | 29 | 18·6 | |
| 8·6 | | | 55 | 51·0 | *g* |
| 9·3 | 19 | 3 | 59 | 36·5 | |
| 8·7 | | 11 | 57 | 54·7 | *g* |
| 9·7† | | 12 | 24 | 1·3 | |
| 9·8† | | | 38 | 0·1 | |
| 9·0† | | 16 | 18 | 2·3 | *g* |
| 8·3 | | 21 | 21 | 12·5 | *g* |
| 8·7 | | 28 | 11 | 48·9 | *g* |
| 8·9 | | 32 | 42 | 5·2 | *g* |
| 9·3 | | 35 | 2 | 44·1 | *g* |
| 8·5 | | 36 | 39 | 45·9 | *g* |
| 9·7 | | 38 | 5 | 39·8 | *g* |
| 9·4 | | 41 | 54 | 12·2 | *g* |
| 8·1 | | 43 | 24 | 8·5 | *g* |
| 8·8 | | 52 | 0 | 36·7 | *g* |
| 6·3 | | 57 | 56 | 41·2 | GSc*g* |
| 9·3 | 20 | 5 | 21 | 49·7 | G*g* |
| 9·1 | | 16 | 47 | 10·8 | *g* |
| 9·7 | | 30 | 9 | 38·3 | *g* |
| 8·1 | | 36 | 19 | 36·8 | *g* |
| 9·5 | | 40 | 4 | 42·6 | *g* |
| 9·1 | | 41 | 1 | 49·6 | |
| 9·0 | | 43 | 30 | 47·4 | G*g* |
| 10·3† | | 45 | 10 | 0·2 | |
| 9·0 | | 46 | 46 | 32·8 | |
| 9·0 | | 47 | 36 | 32·6 | |
| 9·2 | | 49 | 11 | 47·9 | *g* |
| 8·8 | | | 24 | 49·2 | G*g* |
| 9·2 | | 50 | 29 | 49·9 | *g* |
| 8·6 | | 52 | 30 | 46·0 | GS*g* |
| 9·3 | | 54 | 20 | 4·6 | |
| 7·6 | | 59 | 26 | 43·3 | GS*g* |
| 9·0 | | | 53 | 47·8 | *g* |
| 9·3 | 21 | 3 | 45 | 6·1 | *g* |
| 8·9 | | 6 | 3 | 42·1 | *g* |
| 6·9 | | 9 | 48 | 34·1 | GS*g* |
| 6·5 | | 13 | 17 | 13·4 | GS*g* |
| 9·0 | | 17 | 23 | 55·2 | |
| 9·0 | | 21 | 13 | 31·0 | *g* |

### 719—761.

| mag. | 21h.–23h. h | m | s | −83° ′ | |
|---|---|---|---|---|---|
| 8·7 | 21 | 22 | 53 | 37·9 | *g* |
| 9·3 | | 27 | 29 | 55·3 | |
| 7·2 | | 30 | 38 | 0·2 | GS*g* |
| 6·2 | | 31 | 30 | 17·4 | GS*g* |
| 9·1 | | | 43 | 58·9 | |
| 8·9 | | | 45 | 37·4 | *g* |
| 8·9 | | 34 | 31 | 13·7 | G*g* |
| 8·9 | | 37 | 21 | 37·1 | *g* |
| 9·0 | | 40 | 4 | 20·5 | *g* |
| 8·7 | | 45 | 21 | 14·2 | *g* |
| 8·9 | | 50 | 38 | 14·2 | *g* |
| 8·2 | | 51 | 10 | 57·7 | GS*g* |
| 9·2 | | 53 | 19 | 34·2 | |
| 9·1 | | | 58 | 59·1 | *g* |
| 9·5 | | 54 | 29 | 13·1 | *g* |
| 9·3 | 22 | 1 | 48 | 2·2 | *g* |
| 8·9 | | 3 | 5 | 15·1 | *g* |
| 9·1 | | 8 | 12 | 6·9 | *g* |
| 9·2 | | 20 | 58 | 50·1 | *g* |
| 8·0 | | 23 | 54 | 27·6 | GS*g* |
| 6·7 | | 24 | 15 | 53·9 | GS*g* |
| 9·6 | | 36 | 42 | 21·8 | |
| 8·9 | | 38 | 8 | 52·6 | *g* |
| 8·7 | | | 15 | 21·8 | *g* |
| 8·1 | | 49 | 47 | 22·5 | GS*g* |
| 9·3 | | 52 | 23 | 19·7 | |
| 9·3 | | 57 | 22 | 4·1 | G*g* |
| 9·3 | | | 29 | 4·8 | G*g* |
| 9·5 | 23 | 0 | 20 | 25·8 | *g* |
| 9·6 | | 8 | 36 | 17·7 | |
| 8·8 | | 20 | 3 | 12·9 | *g* |
| 9·8 | | 23 | 26 | 38·8 | |
| 8·3 | | | 56 | 12·7 | *g* |
| 8·6 | | 25 | 37 | 1·7 | *g* |
| 9·6 | | 30 | 58 | 5·3 | |
| 9·8 | | 31 | 53 | 42·3 | |
| 8·9 | | 34 | 15 | 49·5 | *g* |
| 7·8 | | 35 | 43 | 11·9 | GS*g* |
| 8·1 | | 40 | 2 | 6·5 | *g* |
| 8·0 | | 46 | 13 | 42·2 | GS*g* |
| 9·8 | | 47 | 54 | 49·2 | *g* |
| 8·5 | | 49 | 38 | 40·7 | G*g* |
| 9·6 | | 57 | 21 | 23·1 | |

### 25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 17 | 10 | +343 | +0·7 | d | −1·8 |
| | 20 | 345 | +0·7 | | 1·5 |
| | 30 | 347 | +0·8 | | 1·1 |
| | 40 | 348 | +0·8 | | 0·7 |
| | 50 | 349 | +0·8 | | −0·4 |
| 18 | 0 | 349 | +0·8 | | 0·0 |
| | 10 | 349 | +0·8 | | +0·4 |
| | 20 | 348 | +0·8 | | 0·7 |
| | 30 | 347 | +0·8 | | 1·1 |
| | 40 | 345 | +0·7 | | 1·5 |
| | 50 | 343 | +0·7 | | 1·8 |
| 19 | 0 | 340 | +0·7 | | 2·2 |
| | 10 | 337 | +0·7 | | 2·5 |
| | 20 | 333 | +0·7 | | 2·9 |
| | 30 | 329 | +0·7 | | 3·2 |
| | 40 | 324 | +0·7 | | 3·5 |
| | 50 | 319 | +0·7 | | 3·9 |
| 20 | 0 | 313 | +0·7 | | 4·2 |
| | 10 | 307 | +0·6 | | 4·5 |
| | 20 | 300 | +0·6 | | 4·8 |
| | 30 | 293 | +0·6 | | 5·1 |
| | 40 | 286 | +0·6 | | 5·4 |
| | 50 | 278 | +0·6 | | 5·6 |
| 21 | 0 | 270 | +0·5 | | 5·9 |
| | 10 | 261 | +0·5 | | 6·2 |
| | 20 | 252 | +0·5 | | 6·4 |
| | 30 | 243 | +0·5 | | 6·6 |
| | 40 | 233 | +0·4 | | 6·8 |
| | 50 | 223 | +0·4 | | 7·0 |
| 22 | 0 | 213 | +0·4 | | 7·2 |
| | 10 | 203 | +0·4 | | 7·4 |
| | 20 | 192 | +0·3 | | 7·6 |
| | 30 | 181 | +0·3 | | 7·7 |
| | 40 | 170 | +0·3 | | 7·9 |
| | 50 | 159 | +0·2 | | 8·0 |
| 23 | 0 | 147 | +0·2 | | 8·1 |
| | 10 | 136 | +0·2 | | 8·2 |
| | 20 | 124 | +0·1 | | 8·2 |
| | 30 | 112 | +0·1 | | 8·3 |
| | 40 | 101 | +0·1 | | 8·3 |
| | 50 | 89 | 0·0 | | 8·3 |
| 0 | 0 | +77 | 0·0 | | +8·4 |

d = minutes of decl.



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# ZONE—84°.

25 prec.

| h | m | a (s s) | | δ |
|---|---|---|---|---|
| 0 | 0 | + 77 0·0 | d | + 8·4 |
| | 10 | 63 − 0·1 | | 8·3 |
| | 20 | 49 − 0·1 | | 8·3 |
| | 30 | 35 − 0·1 | | 8·3 |
| | 40 | 21 − 0·2 | | 8·2 |
| | 50 | + 8 − 0·2 | | 8·2 |
| 1 | 0 | − 6 − 0·3 | | 8·1 |
| | 10 | 19 − 0·3 | | 8·0 |
| | 20 | 32 − 0·4 | | 7·9 |
| | 30 | 45 − 0·4 | | 7·7 |
| | 40 | 58 − 0·4 | | 7·6 |
| | 50 | 70 − 0·5 | | 7·4 |
| 2 | 0 | 82 − 0·5 | | 7·2 |
| | 10 | 94 − 0·6 | | 7·0 |
| | 20 | 106 − 0·6 | | 6·8 |
| | 30 | 117 − 0·6 | | 6·6 |
| | 40 | 128 − 0·7 | | 6·4 |
| | 50 | 138 − 0·7 | | 6·2 |
| 3 | 0 | 148 − 0·8 | | 5·9 |
| | 10 | 158 − 0·8 | | 5·6 |
| | 20 | 167 − 0·8 | | 5·4 |
| | 30 | 176 − 0·8 | | 5·1 |
| | 40 | 184 − 0·9 | | 4·8 |
| | 50 | 192 − 0·9 | | 4·5 |
| 4 | 0 | 199 − 0·9 | | 4·2 |
| | 10 | 206 − 0·9 | | 3·9 |
| | 20 | 212 − 1·0 | | 3·5 |
| | 30 | 218 − 1·0 | | 3·2 |
| | 40 | 223 − 1·0 | | 2·9 |
| | 50 | 227 − 1·0 | | 2·5 |
| 5 | 0 | 231 − 1·0 | | 2·2 |
| | 10 | 234 − 1·0 | | 1·8 |
| | 20 | 237 − 1·0 | | 1·5 |
| | 30 | 239 − 1·1 | | 1·1 |
| | 40 | 241 − 1·1 | | 0·7 |
| | 50 | 241 − 1·1 | | + 0·4 |
| 6 | 0 | 242 − 1·1 | | 0·0 |
| | 10 | 241 − 1·1 | | − 0·4 |
| | 20 | 241 − 1·1 | | 0·7 |
| | 30 | 239 − 1·1 | | 1·1 |
| | 40 | 237 − 1·0 | | 1·5 |
| | 50 | 234 − 1·0 | | 1·8 |
| 7 | 0 | 231 − 1·0 | | 2·2 |
| | 10 | 227 − 1·0 | | 2·5 |
| | 20 | 223 − 1·0 | | 2·9 |
| | 30 | 218 − 1·0 | | 3·2 |
| | 40 | 212 − 1·0 | | 3·5 |
| | 50 | 206 − 0·9 | | 3·9 |
| 8 | 0 | − 199 − 0·9 | | − 4·2 |

d = minutes of decl.

## 1—50.

| mag. | h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| | 0h.—4h. | | | | |
| 9·0 | 0 | 0 | 2 | 47·6 | g |
| 9·2 | | 2 | 31 | 48·1 | g |
| 9·2 | | 3 | 23 | 7·6 | g |
| 9·8 | | 8 | 34 | 45·9 | |
| 9·3 | | 15 | 17 | 18·4 | g |
| 8·3 | | 17 | 32 | 26·2 | g |
| 8·2 | | 28 | 36 | 15·0 | g |
| 9·8 | | 34 | 1 | 30·2 | g |
| 9·8 | | | 45 | 40·2 | g |
| 8·1 | | 36 | 53 | 46·4 | g |
| 9·8 | | 39 | 16 | 24·4 | g |
| 9·8 | | | 34 | 26·0 | g |
| 8·4 | | 45 | 40 | 41·0 | g |
| 8·8 | | 46 | 36 | 53·6 | g |
| 8·6 | | | 42 | 11·9 | g |
| 7·7 | | 49 | 23 | 25·4 | Gg |
| 9·3 | | | 45 | 6·2 | g |
| 9·8 | | 59 | 17 | 50·9 | g |
| 8·9 | 1 | 1 | 49 | 45·6 | g |
| 8·2 | | 6 | 8 | 15·5 | GSg |
| 9·0 | | 9 | 1 | 34·6 | |
| 8·9 | | 21 | 7 | 4·5 | g |
| 9·3 | | 40 | 15 | 42·2 | g |
| 9·3 | | 57 | 18 | 35·2 | g |
| 9·3 | 2 | 1 | 24 | 46·1 | g |
| 9·3 | | 6 | 10 | 53·1 | g |
| 9·0 | | 37 | 16 | 55·1 | g Cape 91 |
| 9·1 | | 45 | 10 | 50·5 | g |
| 9·7 | | 56 | 2 | 10·9 | g |
| 9·1 | | | 26 | 9·1 | g |
| 9·1 | | 58 | 52 | 7·3 | g |
| 8·7 | | 59 | 29 | 25·2 | g |
| 9·1 | | | 52 | 47·5 | g |
| 8·8 | 3 | 1 | 10 | 4·3 | g |
| 9·0 | | 10 | 2 | 29·9 | g |
| 9·8 | | 15 | 31 | 42·7 | g |
| 9·2 | | 17 | 8 | 18·0 | |
| 9·0 | | 20 | 34 | 59·2 | g |
| 9·4 | | 23 | 27 | 58·0 | g |
| 8·7 | | 24 | 10 | 37·0 | g |
| 9·0 | | | 25 | 7·7 | g |
| 8·9 | | 53 | 0 | 33·0 | g |
| 8·8 | | 54 | 15 | 34·0 | g |
| 7·6 | | 59 | 7 | 27·4 | GSg |
| 9·4 | 4 | 6 | 45 | 32·3 | g |
| 9·4 | | 25 | 38 | 52·2 | |
| 9·0 | | 32 | 30 | 19·5 | g |
| 6·7 | | 34 | 26 | 46·4 | GSg |
| 7·8 | | 35 | 10 | 27·8 | GSg |
| 9·0 | | 46 | 45 | 20·5 | g |

## 51—100.

| mag. | h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| | 4h.—6h. | | | | |
| 9·1 | 4 | 47 | 16 | 6·3 | g |
| 10·0 | | 49 | 37 | 32·6 | |
| 9·9 | | 50 | 55 | 32·2 | g |
| 9·3 | | 53 | 43 | 41·2 | g |
| 8·9 | | 54 | 11 | 36·3 | g |
| 9·5 | 5 | 0 | 6 | 17·2 | |
| 9·9 | | 1 | 44 | 42·2 | |
| 10·0 | | 7 | 38 | 28·4 | |
| 9·5 | | 12 | 49 | 37·4 | |
| 8·6 | | | 57 | 2·2 | g |
| 9·7 | | 13 | 55 | 20·5 | |
| 9·3 | | 16 | 45 | 36·3 | |
| 9·1 | | 19 | 8 | 10·5 | g |
| 10·1 | | | 33 | 36·1 | |
| 10·2 | | | 42 | 30·1 | g |
| 8·1 | | 31 | 21 | 24·0 | g |
| 9·7 | | 32 | 33 | 13·1 | |
| 9·7 | | 33 | 32 | 55·7 | |
| 9·6 | | 40 | 24 | 46·3 | g |
| 10·2 | | 41 | 11 | 58·5 | |
| 9·0 | | 43 | 59 | 29·1 | g |
| 9·4 | | 45 | 31 | 51·0 | g |
| 9·3 | | 46 | 22 | 16·1 | g |
| 9·5 | | 53 | 46 | 18·0 | g |
| 6·0 | | 54 | 28 | 50·5 | GSg |
| 9·3 | | 55 | 20 | 57·5 | g |
| 9·3 | | | 24 | 21·4 | g |
| 9·6 | | 56 | 16 | 0·6 | g |
| 9·2 | | 57 | 55 | 2·1 | g |
| 10·2 | | 59 | 18 | 42·0 | |
| 9·4 | 6 | 0 | 50 | 59·0 | g |
| 8·7 | | 2 | 2 | 36·3 | g |
| 9·3 | | 4 | 53 | 20·6 | |
| 9·1 | | | 55 | 6·9 | |
| 7·8 | | 7 | 50 | 55·0 | Sg |
| 9·9 | | 14 | 44 | 2·8 | g |
| 9·3 | | 20 | 50 | 11·9 | g |
| 9·7 | | 30 | 27 | 15·5 | |
| 9·9 | | 35 | 34 | 45·1 | |
| 8·5 | | 36 | 18 | 59·6 | |
| 10·0 | | 41 | 48 | 38·8 | |
| 9·4 | | 48 | 0 | 51·4 | g |
| 8·6 | | | 1 | 34·2 | g |
| 9·7 | | 49 | 27 | 45·9 | |
| 9·9 | | 50 | 36 | 14·6 | |
| 9·8 | | 52 | 6 | 55·8 | g |
| 10·2 | | 54 | 4 | 22·6 | |
| 9·5 | | 57 | 14 | 5·8 | g |
| 9·9 | | | 21 | 38·2 | |
| 10·2 | | 59 | 21 | 14·8 | |

## 101—150.

| mag. | h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| | 7h. | | | | |
| 10·2 | 7 | 0 | 37 | 45·8 | |
| 10·0 | | 1 | 35 | 39·1 | |
| 10·5 | | 2 | 45 | 7·3 | |
| 9·6 | | | 50 | 28·8 | |
| 10·2 | | 6 | 14 | 7·7 | |
| 10·2 | | 7 | 13 | 30·8 | |
| 10·2 | | | 50 | 15·8 | |
| 10·3 | | 9 | 16 | 48·1 | |
| 9·6 | | | 46 | 6·6 | |
| 10·0 | | | 53 | 59·3 | g |
| 10·2 | | 10 | 10 | 45·7 | |
| 9·4 | | 11 | 30 | 44·8 | |
| 9·9 | | 12 | 17 | 20·3 | |
| 9·8 | | 15 | 12 | 28·1 | |
| 9·5 | | | 43 | 40·7 | |
| 10·0 | | 16 | 8 | 40·8 | |
| 10·3 | | 18 | 25 | 21·4 | |
| 10·2 | | | 54 | 15·8 | |
| 10·3 | | 20 | 13 | 29·7 | |
| 10·1 | | | 40 | 9·9 | |
| 9·5 | | 22 | 2 | 35·3 | g |
| 10·6 | | 23 | 32 | 11·6 | |
| 10·6 | | | 44 | 34·5 | |
| 10·3 | | | 57 | 56·5 | |
| 10·2 | | 24 | 3 | 10·9 | |
| 10·6 | | 26 | 30 | 8·1 | |
| 10·0 | | 29 | 23 | 5·5 | |
| 8·3 | | 30 | 35 | 47·5 | |
| 10·3 | | | 40 | 27·8 | |
| 10·2 | | 31 | 19 | 19·5 | |
| 10·3 | | | 26 | 21·4 | |
| 7·2 | | | 38 | 13·5 | GSg |
| 10·5 | | 32 | 16 | 16·5 | |
| 9·8 | | 33 | 1 | 4·6 | |
| 10·0 | | 34 | 24 | 53·9 | |
| 10·0 | | 38 | 12 | 9·5 | |
| 10·4 | | 39 | 27 | 27·7 | |
| 10·4 | | | 42 | 29·5 | |
| 10·2 | | 41 | 32 | 58·9 | |
| 10·2 | | 42 | 6 | 6·9 | |
| 10·6 | | | 17 | 3·2 | |
| 10·2 | | | 40 | 41·7 | |
| 8·9 | | | 49 | 16·9 | g |
| 9·0 | | 44 | 6 | 3·6 | g |
| 9·3 | | | 53 | 35·1 | |
| 10·7 | | 47 | 48 | 36·1 | |
| 10·0 | | 49 | 15 | 52·5 | |
| 9·4 | | | 23 | 1·8 | |
| 10·2 | | 51 | 51 | 42·8 | |
| 10·5 | | 52 | 37 | 8·6 | |



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## 151—210.

| mag. | h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 10·3 | 7 | 53 | 31 | 31·3 | |
| 10·4 | | 55 | 14 | 7·8 | |
| 10·3 | | 58 | 45 | 11·5 | |
| 10·2 | | | 46 | 55·3 | |
| 10·0 | 8 | 5 | 12 | 16·5 | |
| 9·5 | | | 17 | 7·3 | |
| 10·5 | | 8 | 53 | 4·7 | |
| 9·5 | | 10 | 42 | 53·8 | |
| 10·2 | | 11 | 14 | 24·6 | |
| 9·6 | | 12 | 5 | 40·8 | |
| 10·3 | | | 13 | 58·2 | |
| 10·5 | | | 14 | 31·6 | |
| 9·5 | | 14 | 20 | 49·1 | |
| 9·9 | | | 44 | 0·4 | |
| 10·7 | | 15 | 11 | 34·0 | |
| 10·5 | | 16 | 11 | 11·2 | |
| 10·6 | | 18 | 34 | 28·8 | |
| 10·7 | | | 37 | 28·2 | |
| 9·8 | | 21 | 48 | 45·1 | |
| 10·2 | | 23 | 16 | 4·1 | |
| 9·5 | | | 28 | 50·4 | |
| 10·2 | | 24 | 50 | 14·8 | |
| 10·2 | | 26 | 23 | 27·6 | |
| 8·7 | | | 30 | 3·0 | g |
| 10·3 | | | 53 | 22·8 | |
| 9·8 | | | 56 | 12·5 | |
| 10·6 | | 27 | 40 | 14·6 | |
| 9·9 | | 30 | 57 | 35·3 | |
| 9·4 | | 31 | 31 | 24·9 | |
| 10·5 | | | 34 | 49·7 | |
| 9·5 | | 33 | 1 | 25·0 | |
| 9·2 | | | 30 | 37·1 | |
| 10·5 | | 35 | 5 | 6·1 | |
| 9·1 | | 36 | 58 | 39·7 | g |
| 9·8 | | 37 | 38 | 18·3 | |
| 10·3 | | 38 | 4 | 52·1 | |
| 10·0 | | 41 | 7 | 16·8 | |
| 9·7 | | | 46 | 18·3 | |
| 9·9 | | 45 | 19 | 30·2 | |
| 10·2 | | 46 | 32 | 29·6 | |
| 9·2 | | 47 | 2 | 14·4 | g |
| 10·5 | | | 16 | 14·2 | |
| 10·6 | | | 34 | 13·1 | |
| 10·6 | | 48 | 37 | 30·0 | |
| 10·6 | | 49 | 27 | 51·0 | |
| 10·5 | | 51 | 42 | 23·1 | |
| 10·0 | | 53 | 41 | 24·7 | |
| 10·2 | | 56 | 14 | 53·0 | |
| 8·9 | | 57 | 56 | 8·4 | g |
| 10·1 | | 59 | 56 | 27·5 | |
| 9·6 | 9 | 3 | 24 | 14·2 | |
| 9·6 | | 8 | 56 | 23·3 | |
| 9·9 | | | 56 | 21·3 | |
| 9·7 | | 10 | 3 | 18·8 | |
| 9·9 | | | 5 | 30·4 | |
| 10·0 | | | 15 | 54·4 | |
| 10·1 | | | 19 | 47·0 | |
| 9·9 | | 11 | 10 | 33·3 | |
| 8·5 | | 12 | 34 | 17·6 | g |
| 9·6 | | 13 | 3 | 59·2 | g |

Header over the time columns: $7^{h}$–$9^{h}$

## 211—270.

| mag. | h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 8·4 | 9 | 15 | 47 | 39·6 | g |
| 9·9 | | 18 | 9 | 37·2 | |
| 9·6 | | 20 | 7 | 52·3 | g |
| 9·6 | | 21 | 40 | 29·6 | |
| 10·3 | | 25 | 47 | 42·3 | |
| 8·4 | | 26 | 19 | 5·5 | GSg |
| 8·8 | | 27 | 34 | 6·8 | GSg |
| 9·6 | | | 48 | 57·8 | |
| 8·2 | | 28 | 24 | 7·4 | GSg |
| 9·8 | | 29 | 7 | 5·2 | |
| 10·1 | | | 33 | 45·3 | |
| 10·2 | | | 38 | 47·7 | |
| 9·7 | | | 59 | 20·0 | |
| 10·3 | | 30 | 2 | 22·2 | |
| 9·6 | | | 45 | 54·2 | |
| 10·5 | | 32 | 39 | 41·1 | |
| 9·7 | | | 58 | 43·9 | |
| 9·3 | | 37 | 2 | 25·5 | |
| 9·9 | | 38 | 57 | 17·3 | |
| 10·4 | | 39 | 13 | 56·6 | |
| 10·0 | | 43 | 12 | 1·1 | |
| 8·9 | | | 27 | 6·9 | g |
| 9·6 | | 47 | 4 | 7·4 | |
| 10·0 | | | 31 | 2·0 | |
| 10·4 | | 49 | 37 | 44·7 | |
| 10·2 | | 50 | 2 | 29·2 | |
| 10·5 | | | 57 | 59·2 | |
| 9·9 | | | 59 | 41·7 | |
| 10·5 | | 51 | 31 | 4·0 | |
| 10·0 | | 53 | 43 | 0·9 | |
| 9·9 | | 55 | 24 | 24·0 | |
| 10·1 | 10 | 0 | 39 | 2·4 | |
| 9·0 | | | 52 | 57·0 | g |
| 10·3 | | 3 | 7 | 4·6 | |
| 10·0 | | 5 | 26 | 16·1 | |
| 9·8 | | | 36 | 32·8 | |
| 9·7 | | 7 | 49 | 35·6 | |
| 8·7 | | 8 | 31 | 10·6 | g |
| 10·5 | | | 40 | 56·9 | |
| 9·6 | | | 43 | 25·7 | |
| 10·1 | | 9 | 26 | 46·7 | |
| 9·9 | | | 37 | 47·6 | |
| 10·3 | | | 57 | 19·1 | |
| 9·9 | | 10 | 5 | 4·8 | |
| 9·6 | | | 40 | 6·5 | |
| 10·2 | | 12 | 0 | 9·7 | |
| 9·7 | | | 20 | 40·0 | |
| 9·3 | | | 45 | 35·3 | g |
| 10·3 | | 13 | 36 | 31·0 | |
| 9·2 | | 14 | 52 | 46·0 | g |
| 10·4 | | 15 | 14 | 29·4 | |
| 9·3 | | | 17 | 30·1 | |
| 8·5 | | | 48 | 28·2 | g |
| 10·5 | | | 56 | 29·8 | |
| 10·0 | | 16 | 50 | 27·5 | |
| 9·5 | | | 59 | 19·4 | |
| 9·5 | | 19 | 19 | 28·2 | g |
| 10·2 | | 20 | 1 | 30·7 | |
| 9·8 | | 21 | 56 | 36·9 | |
| 10·0 | | 22 | 26 | 50·6 | |

Header over the time columns: $9^{h}$–$10^{h}$

## 271—330.

| mag. | h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 9·1 | 10 | 23 | 46 | 50·4 | g |
| 10·4 | | 25 | 5 | 0·4 | |
| 9·9 | | 26 | 5 | 56·8 | |
| 9·4 | | 28 | 25 | 6·0 | g |
| 8·9 | | | 49 | 44·2 | g |
| 9·2 | | 29 | 57 | 12·1 | g |
| 9·5 | | 30 | 9 | 53·4 | |
| 10·3 | | 31 | 39 | 54·6 | |
| 10·5 | | | 58 | 26·1 | |
| 9·9 | | 32 | 38 | 59·3 | |
| 10·3 | | 34 | 18 | 29·1 | |
| 10·0 | | 35 | 22 | 48·4 | |
| 9·5 | | | 35 | 2·7 | |
| 10·3 | | 37 | 13 | 7·7 | |
| 10·4 | | 38 | 9 | 43·3 | |
| 9·0 | | | 20 | 44·6 | g |
| 8·4 | | 39 | 0 | 37·9 | g |
| 9·7 | | 40 | 35 | 36·9 | g |
| 9·1 | | 41 | 4 | 38·6 | g |
| 10·4 | | | 51 | 16·1 | |
| 7·6 | | | 56 | 32·4 | g |
| 10·3 | | 43 | 14 | 16·6 | |
| 9·7 | | 44 | 8 | 44·8 | |
| 10·2 | | | 12 | 1·1 | |
| 9·2 | | 45 | 32 | 59·5 | g |
| 10·4 | | 46 | 55 | 50·4 | |
| 10·4 | | 49 | 48 | 26·3 | |
| 10·5 | | 52 | 12 | 3·5 | |
| 9·6 | | | 13 | 28·9 | |
| 10·0 | | | 47 | 45·9 | |
| 10·1 | | 53 | 23 | 59·0 | |
| 10·3 | | | 58 | 23·5 | |
| 10·5 | | 56 | 58 | 32·2 | |
| 10·0 | | 57 | 29 | 45·5 | g |
| 8·8 | | | 45 | 13·6 | g |
| 10·0 | | 58 | 6 | 53·2 | |
| 10·2 | | | 42 | 59·5 | |
| 10·1 | | 59 | 44 | 35·6 | |
| 10·3 | | | 46 | 23·9 | |
| 9·5 | 11 | 1 | 12 | 44·4 | g |
| 9·8 | | 4 | 21 | 0·8 | |
| 10·4 | | 5 | 48 | 2·6 | |
| 9·4 | | 6 | 30 | 11·5 | |
| 10·3 | | 7 | 13 | 37·7 | |
| 10·1 | | | 49 | 51·5 | |
| 9·6 | | | 52 | 2·3 | |
| 10·0 | | 8 | 38 | 45·9 | |
| 10·1 | | 9 | 7 | 54·8 | |
| 9·8 | | 11 | 13 | 24·7 | |
| 10·0 | | 12 | 31 | 12·2 | |
| 9·8 | | | 50 | 47·7 | |
| 9·4 | | 15 | 12 | 0·4 | g |
| 9·8 | | | 37 | 15·0 | |
| 10·1 | | | 40 | 5·7 | |
| 9·6 | | 16 | 45 | 5·2 | |
| 10·2 | | 17 | 5 | 19·6 | |
| 10·1 | | | 50 | 17·5 | |
| 10·2 | | 18 | 14 | 52·9 | |
| 10·0 | | 19 | 20 | 1·5 | |
| 8·7 | | | 52 | 39·8 | g |

Header over the time columns: $10^{h}$–$11^{h}$

### 25 prec.

| h | m | α s s | δ ′ |
|---|---|---|---|
| 7 | 50 | − 206 − 0·9 d | − 3·9 |
| 8 | 0 | 199 − 0·9 | 4·2 |
| | 10 | 192 − 0·9 | 4·5 |
| | 20 | 184 − 0·9 | 4·8 |
| | 30 | 176 − 0·8 | 5·1 |
| | 40 | 167 − 0·8 | 5·4 |
| | 50 | 158 − 0·8 | 5·6 |
| 9 | 0 | 148 − 0·8 | 5·9 |
| | 10 | 138 − 0·7 | 6·2 |
| | 20 | 128 − 0·7 | 6·4 |
| | 30 | 117 − 0·6 | 6·6 |
| | 40 | 106 − 0·6 | 6·8 |
| | 50 | 94 − 0·6 | 7·0 |
| 10 | 0 | 82 − 0·5 | 7·2 |
| | 10 | 70 − 0·5 | 7·4 |
| | 20 | 58 − 0·4 | 7·6 |
| | 30 | 45 − 0·4 | 7·7 |
| | 40 | 32 − 0·4 | 7·9 |
| | 50 | 19 − 0·3 | 8·0 |
| 11 | 0 | − 6 − 0·3 | 8·1 |
| | 10 | + 8 − 0·2 | 8·2 |
| | 20 | + 21 − 0·2 | − 8·2 |

d = minutes of decl.



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| 25 prec. h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 11 | 10 | + 8 | − 0·2 | d | − 8·2 |
| | 20 | 21 | − 0·2 | | 8·2 |
| | 30 | 35 | − 0·1 | | 8·3 |
| | 40 | 49 | − 0·1 | | 8·3 |
| | 50 | 63 | 0·0 | | 8·3 |
| 12 | 0 | 77 | 0·0 | | 8·4 |
| | 10 | 91 | 0·0 | | 8·3 |
| | 20 | 105 | + 0·1 | | 8·3 |
| | 30 | 118 | + 0·1 | | 8·3 |
| | 40 | 132 | + 0·2 | | 8·2 |
| | 50 | 146 | + 0·2 | | 8·2 |
| 13 | 0 | 159 | + 0·3 | | 8·1 |
| | 10 | 173 | + 0·3 | | 8·0 |
| | 20 | 186 | + 0·4 | | 7·9 |
| | 30 | 199 | + 0·4 | | 7·7 |
| | 40 | 211 | + 0·4 | | 7·6 |
| | 50 | 224 | + 0·5 | | 7·4 |
| 14 | 0 | 236 | + 0·5 | | 7·2 |
| | 10 | 248 | + 0·6 | | 7·0 |
| | 20 | 260 | + 0·6 | | 6·8 |
| | 30 | 271 | + 0·6 | | 6·6 |
| | 40 | 282 | + 0·7 | | 6·4 |
| | 50 | 292 | + 0·7 | | 6·2 |
| 15 | 0 | 302 | + 0·8 | | 5·9 |
| | 10 | 312 | + 0·8 | | 5·6 |
| | 20 | 321 | + 0·8 | | 5·4 |
| | 30 | 330 | + 0·8 | | 5·1 |
| | 40 | 338 | + 0·9 | | 4·8 |
| | 50 | 345 | + 0·9 | | 4·5 |
| 16 | 0 | 353 | + 0·9 | | 4·2 |
| | 10 | 359 | + 0·9 | | 3·9 |
| | 20 | 366 | + 1·0 | | 3·5 |
| | 30 | 371 | + 1·0 | | 3·2 |
| | 40 | 376 | + 1·0 | | 2·9 |
| | 50 | 381 | + 1·0 | | 2·5 |
| 17 | 0 | + 385 | + 1·0 | | − 2·2 |

d = minutes of decl.

## 331—390.

| mag. | 11ʰ·—12ʰ· h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| 10·1 | 11 | 20 | 36 | 46·9 | |
| 9·9 | | 21 | 3 | 12·0 | |
| 10·2 | | 22 | 39 | 34·2 | |
| 9·7 | | 23 | 7 | 19·6 | |
| 8·0 | | | 30 | 16·1 | GS*g* |
| 10·2 | | 25 | 28 | 37·1 | |
| 9·8 | | | 53 | 24·8 | |
| 8·9 | | 27 | 2 | 16·2 | *g* |
| 8·6 | | | 58 | 8·0 | *g* |
| 10·3 | | 28 | 31 | 36·5 | |
| 10·1 | | | 55 | 11·9 | |
| 9·8 | | 29 | 36 | 57·9 | |
| 10·2 | | 31 | 31 | 1·0 | |
| 9·3 | | | 40 | 25·8 | *g* |
| 10·1 | | 34 | 2 | 23·9 | |
| 7·6 | | | 34 | 47·7 | GS*g* |
| 9·8 | | | 59 | 7·5 | |
| 10·4 | | 35 | 13 | 34·6 | |
| 9·7 | | 36 | 5 | 45·4 | *g* |
| 10·2 | | | 18 | 34·3 | |
| 10·3 | | 37 | 31 | 24·1 | |
| 10·1 | | 38 | 22 | 26·9 | |
| 10·3 | | 39 | 13 | 41·4 | |
| 9·7 | | | 56 | 37·0 | |
| 10·3 | | 40 | 9 | 13·2 | |
| 10·1 | | 42 | 17 | 15·0 | |
| 8·1 | | | 38 | 24·8 | *g* |
| 10·3 | | 43 | 25 | 57·6 | |
| 10·4 | | | 37 | 4·3 | |
| 9·8 | | | 51 | 54·1 | |
| 10·0 | | 44 | 48 | 24·5 | |
| 10·0 | | 47 | 17 | 5·0 | |
| 10·1 | | 49 | 1 | 53·1 | |
| 10·2 | | | 53 | 43·8 | |
| 10·1 | | 50 | 20 | 7·2 | |
| 10·3 | | | 29 | 52·7 | |
| 10·0 | | 51 | 24 | 26·9 | |
| 10·2 | | 52 | 23 | 45·7 | |
| 9·9 | | | 53 | 6·3 | |
| 9·9 | | 55 | 58 | 34·1 | *g* |
| 8·4 | | 56 | 8 | 56·2 | GSc*g* |
| 9·1 | | | 17 | 56·5 | *g* |
| 9·7 | | | 23 | 50·1 | |
| 10·1 | | 57 | 32 | 46·0 | |
| 10·0 | | 58 | 16 | 2·9 | |
| 10·1 | 12 | 0 | 25 | 24·0 | |
| 10·0 | | 1 | 47 | 33·2 | |
| 10·1 | | 2 | 10 | 17·0 | |
| 10·2 | | | 20 | 17·7 | |
| 10·1 | | 4 | 23 | 29·5 | |
| 9·7 | | | 31 | 32·3 | |
| 10·3 | | 6 | 23 | 48·5 | |
| 10·3 | | | 43 | 30·5 | |
| 9·2 | | 7 | 11 | 21·8 | *g* |
| 9·7 | | | 40 | 11·2 | |
| 10·3 | | 8 | 45 | 21·1 | |
| 9·9 | | 10 | 37 | 47·8 | *g* |
| 9·8 | | | 48 | 57·0 | |
| 9·5 | | 12 | 57 | 51·9 | *g* |
| 9·3 | | 13 | 10 | 19·0 | *g* |

## 391—450.

| mag. | 12ʰ·—13ʰ· h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| 9·9 | 12 | 14 | 29 | 59·1 | |
| 10·0 | | 15 | 10 | 49·3 | |
| 10·1 | | 19 | 6 | 11·2 | |
| 8·2 | | | 18 | 53·3 | *g* |
| 10·3 | | 21 | 17 | 15·8 | |
| 10·0 | | 24 | 28 | 59·1 | |
| 9·9 | | 25 | 16 | 31·9 | |
| 9·0 | | | 42 | 10·9 | *g* |
| 10·0 | | 27 | 2 | 1·9 | |
| 10·3 | | 28 | 43 | 15·6 | |
| 9·3 | | 32 | 54 | 59·3 | |
| 10·0 | | 36 | 7 | 36·4 | |
| 10·3 | | | 25 | 59·0 | |
| 10·5 | | 37 | 18 | 54·0 | |
| 9·6 | | 40 | 46 | 31·9 | |
| 10·1 | | 41 | 3 | 29·9 | |
| 6·7 | | 42 | 5 | 26·6 | GSc*gr* |
| 10·1 | | | 11 | 32·5 | |
| 10·1 | | | 20 | 14·4 | |
| 9·7 | | | 47 | 26·1 | *g* |
| 9·6 | | 43 | 4 | 13·0 | |
| 9·6 | | 44 | 26 | 47·1 | |
| 10·0 | | 45 | 39 | 17·5 | |
| 10·2 | | 46 | 28 | 39·6 | |
| 9·9 | | 47 | 17 | 5·3 | |
| 10·3 | | | 20 | 48·3 | |
| 10·1 | | | 21 | 26·8 | |
| 9·2 | | 50 | 47 | 41·8 | *g* |
| 9·9 | | 51 | 6 | 49·9 | |
| 10·3 | | | 18 | 53·6 | |
| 9·5 | | 52 | 47 | 40·5 | |
| 10·0 | | | 51 | 28·5 | *g* |
| 9·5 | | 53 | 1 | 30·0 | *g* |
| 9·9 | | | 37 | 56·7 | |
| 9·9 | | 54 | 22 | 14·2 | |
| 10·0 | | | 41 | 36·4 | |
| 10·0 | | 55 | 3 | 5·4 | |
| 9·6 | | | 47 | 45·8 | |
| 9·6 | | | 51 | 13·3 | |
| 10·2 | | | 54 | 45·3 | |
| 10·0 | | 57 | 37 | 48·5 | |
| 10·0 | | 59 | 15 | 47·9 | |
| 7·9 | | | 40 | 53·7 | *g* |
| 9·9 | 13 | 0 | 17 | 52·7 | |
| 10·1 | | 1 | 20 | 50·3 | |
| 9·8 | | 3 | 43 | 13·3 | |
| 10·2 | | 4 | 11 | 39·9 | |
| 10·0 | | | 44 | 37·9 | |
| 10·4 | | 7 | 51 | 15·9 | |
| 9·9 | | 11 | 9 | 1·0 | |
| 9·4 | | | 10 | 40·1 | |
| 9·4 | | 21 | 22 | 24·7 | |
| 10·2 | | 22 | 52 | 47·9 | |
| 9·9 | | 28 | 46 | 43·8 | |
| 9·9 | | 29 | 18 | 0·1 | |
| 10·2 | | | 25 | 11·8 | |
| 9·9 | | 31 | 38 | 40·9 | |
| 9·9 | | | 45 | 46·7 | |
| 9·6 | | 32 | 12 | 46·6 | |
| 10·0 | | | 35 | 43·0 | |

## 451—510.

| mag. | 13ʰ·—15ʰ· h | m | s | − 84° ′ | |
|---|---|---|---|---|---|
| 9·2 | 13 | 34 | 46 | 36·7 | *g* |
| 10·2 | | 39 | 1 | 41·9 | |
| 9·6 | | 41 | 39 | 25·0 | *g* |
| 9·0 | | 43 | 38 | 10·7 | G*g* |
| 9·9 | | 44 | 32 | 46·2 | *g* |
| 9·9 | | 46 | 38 | 7·9 | |
| 10·0 | | 50 | 14 | 10·9 | |
| 9·4 | | 53 | 18 | 32·0 | |
| 10·2 | | 58 | 9 | 48·0 | |
| 9·0 | 14 | 1 | 25 | 0·3 | *g* |
| 9·9 | | 4 | 53 | 47·3 | |
| 10·2 | | 6 | 13 | 40·5 | |
| 9·9 | | 9 | 29 | 51·0 | |
| 9·6 | | 11 | 41 | 57·0 | |
| 9·0 | | 12 | 12 | 9·7 | *g* |
| 8·6 | | | 53 | 44·1 | *g* |
| 10·0 | | 13 | 18 | 30·0 | |
| 9·9 | | 14 | 9 | 30·9 | |
| 9·4 | | | 34 | 16·3 | |
| 9·0 | | 17 | 20 | 1·1 | *g* |
| 9·9 | | | 25 | 49·1 | |
| 9·7 | | | 52 | 11·4 | |
| 9·2 | | 22 | 23 | 21·7 | *g* |
| 9·4 | | 23 | 58 | 59·0 | |
| 9·7 | | 24 | 55 | 10·1 | |
| 9·4 | | 25 | 10 | 32·3 | |
| 9·9 | | 26 | 17 | 50·6 | |
| 9·4 | | | 21 | 13·7 | *g* |
| 8·8 | | 27 | 42 | 0·9 | G*g* |
| 10·2 | | 29 | 25 | 48·0 | |
| 8·8 | | | 31 | 41·0 | *g* |
| 9·7 | | 32 | 3 | 56·4 | |
| 9·9 | | 38 | 42 | 8·4 | |
| 9·9 | | 39 | 21 | 14·7 | |
| 9·2 | | 40 | 30 | 5·1 | |
| 9·0 | | | 50 | 37·8 | *g* |
| 10·0 | | 42 | 50 | 8·6 | |
| 9·3 | | 43 | 14 | 23·6 | |
| 8·3 | | | 50 | 40·0 | *g* |
| 5·8 | | 44 | 18 | 17·4 | GS*g* |
| 9·9 | | 45 | 4 | 20·1 | |
| 10·2 | | | 22 | 49·1 | |
| 9·7 | | 47 | 23 | 13·1 | |
| 9·6 | | | 49 | 3·5 | |
| 9·5 | | 51 | 52 | 32·1 | |
| 9·6 | | 55 | 31 | 52·7 | |
| 9·9 | | | 48 | 42·7 | |
| 9·2 | | 56 | 40 | 23·2 | *g* |
| 9·4 | | 57 | 19 | 21·7 | *g* |
| 9·9 | | 59 | 7 | 53·4 | |
| 9·6 | 15 | 5 | 16 | 41·8 | *g* |
| 8·8 | | | 40 | 9·4 | *g* |
| 9·1 | | 7 | 47 | 2·4 | *g* |
| 9·6 | | 8 | 25 | 33·7 | |
| 9·1 | | 11 | 39 | 19·4 | *g* |
| 9·4 | | 12 | 0 | 41·6 | *g* |
| 9·6 | | 14 | 7 | 17·2 | |
| 9·7 | | | 28 | 51·0 | *g* |
| 9·7* | | | 34 | 1·5 | |
| 6·1 | | | 49 | 2·6 | GS*g* |

## 511—560.

| mag. | 15h–17h h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 8·9 | 15 | 23 | 34 | 16·1 | g |
| 9·4 | | 25 | 18 | 2·0 | g |
| 9·9 | | 28 | 55 | 27·0 | |
| 9·2 | | 29 | 8 | 9·2 | g |
| 9·4 | | | 20 | 36·4 | |
| 9·4 | | | 39 | 34·4 | |
| 9·8 | | 39 | 8 | 3·6 | |
| 9·2 | | 52 | 47 | 33·6 | |
| 8·6 | | 53 | 24 | 7·8 | g |
| 9·7 | | 58 | 22 | 52·0 | |
| 9·3 | | | 56 | 28·3 | |
| 9·6 | 16 | 1 | 2 | 7·8 | |
| 8·8 | | 2 | 56 | 39·0 | g |
| 9·5 | | 5 | 3 | 13·2 | |
| 8·7 | | 8 | 8 | 42·1 | g |
| 9·9 | | | 24 | 47·4 | g |
| 8·7 | | 14 | 46 | 58·9 | |
| 8·5 | | 19 | 29 | 45·5 | g |
| 8·7 | | 20 | 43 | 3·9 | g |
| 9·6 | | 23 | 25 | 1·0 | |
| 8·9 | | 29 | 58 | 5·0 | g |
| 8·7 | | 30 | 57 | 4·3 | g |
| 8·6 | | 32 | 41 | 27·2 | g |
| 9·4 | | 34 | 21 | 5·7 | g |
| 9·7 | | 40 | 56 | 54·3 | |
| 9·7 | | 46 | 35 | 40·2 | |
| 9·7 | | 47 | 32 | 4·2 | |
| 8·9 | | 48 | 49 | 20·8 | g |
| 9·7 | | 52 | 52 | 57·3 | |
| 9·7 | | 54 | 9 | 33·2 | |
| 9·5 | | | 21 | 53·1 | |
| 10·0 | | 55 | 30 | 33·0 | |
| 10·0 | | 56 | 36 | 20·9 | |
| 10·0 | | 58 | 12 | 9·1 | |
| 8·7 | | 59 | 50 | 34·1 | g |
| 10·0 | 17 | 0 | 12 | 2·5 | |
| 9·7 | | 1 | 54 | 1·4 | |
| 9·4 | | 2 | 23 | 50·5 | |
| 9·1 | | 4 | 35 | 26·3 | g |
| 10·0 | | | 55 | 46·5 | |
| 9·5 | | 5 | 37 | 58·9 | |
| 9·6 | | 8 | 51 | 36·0 | |
| 9·6 | | 9 | 19 | 9·4 | |
| 10·0 | | 12 | 4 | 21·6 | |
| 10·0 | | 13 | 50 | 6·7 | |
| 9·3 | | 15 | 58 | 49·0 | g |
| 9·3 | | 16 | 12 | 41·7 | |
| 9·5 | | 17 | 16 | 26·1 | |
| 9·0 | | 18 | 8 | 51·0 | g |
| 8·1 | | | 46 | 2·1 | GSg |

## 561—610.

| mag. | 17h–19h h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 10·1 | 17 | 22 | 39 | 3·5 | |
| 10·1 | | | 52 | 29·5 | |
| 8·8 | | 25 | 16 | 0·6 | g |
| 8·3 | | 26 | 7 | 21·3 | g |
| 10·0 | | | 53 | 9·3 | |
| 9·5 | | 31 | 24 | 7·7 | |
| 8·5 | | 36 | 42 | 13·9 | g |
| 9·7 | | 40 | 26 | 37·0 | |
| 9·7 | | 43 | 49 | 4·7 | |
| 9·7 | | 45 | 12 | 3·6 | |
| 9·3 | | 48 | 17 | 46·0 | g |
| 9·3 | | 50 | 33 | 46·4 | g |
| 6·3 | | 53 | 17 | 25·1 | GSg |
| 9·8 | | 57 | 0 | 17·6 | |
| 9·7 | | | 6 | 41·0 | g |
| 9·0 | 18 | 6 | 47 | 17·8 | g |
| 10·0 | | 7 | 28 | 47·5 | |
| 9·1 | | 10 | 12 | 48·8 | g |
| 9·7 | | 11 | 8 | 53·1 | |
| 9·2 | | 13 | 0 | 33·9 | |
| 9·7 | | 14 | 17 | 21·9 | |
| 9·5 | | 18 | 56 | 37·0 | |
| 9·3 | | 20 | 20 | 7·2 | |
| 9·7 | | 22 | 52 | 8·7 | |
| 10·0 | | 25 | 19 | 34·6 | |
| 9·0 | | | 23 | 31·8 | g |
| 7·3 | | 29 | 49 | 4·7 | GSg |
| 10·0 | | 33 | 46 | 11·9 | |
| 8·6 | | 34 | 57 | 1·7 | g |
| 9·5 | | 35 | 27 | 39·1 | |
| 10·0 | | | 36 | 31·7 | |
| 8·8 | | 40 | 41 | 4·1 | g |
| 8·6 | | 41 | 37 | 58·6 | g |
| 9·7 | | 42 | 27 | 43·4 | |
| 8·8 | | 43 | 8 | 25·0 | g |
| 9·7 | | 45 | 0 | 24·2 | |
| 8·8 | | | 9 | 17·4 | g |
| 9·7 | | 48 | 33 | 58·8 | |
| 8·5 | | 53 | 8 | 55·8 | GSg |
| 9·5 | | | 35 | 12·4 | g |
| 8·5 | | 56 | 40 | 36·1 | g |
| 9·3 | 19 | 0 | 41 | 7·7 | |
| 9·4 | | 1 | 3 | 25·0 | |
| 8·3 | | 2 | 43 | 18·5 | g |
| 8·4 | | 5 | 22 | 56·0 | g |
| 9·4 | | 15 | 36 | 45·5 | g |
| 9·3 | | | 43 | 11·5 | |
| 9·2 | | 21 | 43 | 39·3 | g |
| 8·9 | | 26 | 53 | 1·4 | g |
| 8·6 | | 28 | 8 | 5·2 | g |

## 611—661.

| mag. | 19h–23h h | m | s | −84° ′ | |
|---|---|---|---|---|---|
| 9·1 | 19 | 28 | 10 | 41·4 | g |
| 9·3 | | 32 | 0 | 55·0 | g |
| 9·4 | | 34 | 57 | 46·6 | g |
| 9·3 | | 45 | 57 | 26·3 | g |
| 9·3 | | 49 | 17 | 26·3 | g |
| 9·3 | 20 | 4 | 3 | 29·5 | g |
| 8·9 | | 5 | 11 | 45·4 | g |
| 9·1 | | 7 | 8 | 6·5 | g |
| 7·1 | | 12 | 27 | 49·6 | GSg |
| 8·3 | | 19 | 9 | 7·1 | g |
| 9·3 | | 27 | 58 | 18·3 | g |
| 8·7 | | 30 | 55 | 19·8 | g |
| 9·6 | | 31 | 0 | 33·6 | |
| 9·3 | | | 59 | 3·0 | |
| 8·3 | | 41 | 2 | 24·2 | g |
| 7·6 | | 54 | 57 | 49·1 | GSg |
| 8·5 | | 57 | 5 | 47·0 | Sg |
| 9·5 | | | 14 | 6·1 | g |
| 9·3 | 21 | 12 | 51 | 34·4 | g |
| 9·3 | | 13 | 32 | 24·9 | g |
| 8·7 | | 19 | 40 | 41·7 | g |
| 9·5 | | 23 | 2 | 20·0 | g |
| 7·2 | | 28 | 19 | 31·8 | GSg |
| 9·0 | | 34 | 32 | 15·5 | g |
| 9·1 | | 35 | 28 | 18·2 | g |
| 9·5 | | 37 | 31 | 8·2 | g |
| 8·9 | | 40 | 34 | 32·4 | g |
| 9·0 | | 50 | 36 | 30·9 | g |
| 7·7 | 22 | 8 | 27 | 8·6 | GSg |
| 9·0 | | 12 | 22 | 14·3 | g |
| 9·1 | | 23 | 37 | 42·8 | g |
| 8·6 | | | 56 | 46·8 | g |
| 9·1 | | 25 | 51 | 6·6 | g |
| 9·5 | | 29 | 17 | 28·3 | g |
| 9·0 | | | 29 | 58·2 | g |
| 7·8 | | | 44 | 23·6 | GSg |
| 9·3 | | 35 | 3 | 55·2 | Ggg |
| 9·4 | | 38 | 37 | 42·2 | |
| 9·0 | | 40 | 52 | 22·7 | g |
| 7·7 | | 41 | 59 | 1·0 | g |
| 9·3 | | 46 | 32 | 46·5 | g |
| 9·5 | | 58 | 28 | 14·1 | |
| 9·4 | | | 35 | 38·6 | g |
| 9·6 | 23 | 13 | 14 | 12·4 | |
| 8·8 | | 14 | 35 | 14·1 | g |
| 8·0 | | 27 | 16 | 31·8 | g |
| 9·8 | | 38 | 58 | 18·8 | |
| 8·1 | | 39 | 12 | 33·4 | GSg |
| 9·8 | | 43 | 18 | 4·3 | g |
| 9·8 | | — | 24 | 10·1 | g |
| 8·7 | | 54 | 47 | 13·1 | g |

| h | m | 25 prec. α s s | | δ ′ |
|---|---|---|---|---|
| 17 | 0 | + 385 + 1·0 | d | − 2·2 |
| | 10 | 388 + 1·0 | | 1·8 |
| | 20 | 391 + 1·0 | | 1·5 |
| | 30 | 393 + 1·1 | | 1·1 |
| | 40 | 394 + 1·1 | | 0·7 |
| | 50 | 395 + 1·1 | | − 0·4 |
| 18 | 0 | 395 + 1·1 | | 0·0 |
| | 10 | 395 + 1·1 | | + 0·4 |
| | 20 | 394 + 1·1 | | 0·7 |
| | 30 | 393 + 1·1 | | 1·1 |
| | 40 | 391 + 1·0 | | 1·5 |
| | 50 | 388 + 1·0 | | 1·8 |
| 19 | 0 | 385 + 1·0 | | 2·2 |
| | 10 | 381 + 1·0 | | 2·5 |
| | 20 | 376 + 1·0 | | 2·9 |
| | 30 | 371 + 1·0 | | 3·2 |
| | 40 | 366 + 1·0 | | 3·5 |
| | 50 | 359 + 0·9 | | 3·9 |
| 20 | 0 | 353 + 0·9 | | 4·2 |
| | 10 | 345 + 0·9 | | 4·5 |
| | 20 | 338 + 0·9 | | 4·8 |
| | 30 | 330 + 0·8 | | 5·1 |
| | 40 | 321 + 0·8 | | 5·4 |
| | 50 | 312 + 0·8 | | 5·6 |
| 21 | 0 | 302 + 0·8 | | 5·9 |
| | 10 | 292 + 0·7 | | 6·2 |
| | 20 | 282 + 0·7 | | 6·4 |
| | 30 | 271 + 0·6 | | 6·6 |
| | 40 | 260 + 0·6 | | 6·8 |
| | 50 | 248 + 0·6 | | 7·0 |
| 22 | 0 | 236 + 0·5 | | 7·2 |
| | 10 | 224 + 0·5 | | 7·4 |
| | 20 | 211 + 0·4 | | 7·6 |
| | 30 | 199 + 0·4 | | 7·7 |
| | 40 | 186 + 0·4 | | 7·9 |
| | 50 | 173 + 0·3 | | 8·0 |
| 23 | 0 | 159 + 0·3 | | 8·1 |
| | 10 | 146 + 0·2 | | 8·2 |
| | 20 | 132 + 0·2 | | 8·2 |
| | 30 | 118 + 0·1 | | 8·3 |
| | 40 | 105 + 0·1 | | 8·3 |
| | 50 | 91 0·0 | | 8·3 |
| 0 | 0 | + 77 0·0 | | + 8·4 |

d = minutes of decl.



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# ZONE—85°.

25 prec.

| h | m | α s | s | d | δ ′ |
|---|---|---|---|---|---|
| 0 | 0 | + 77 | 0·0 | d | + 8·4 |
| | 10 | 60 | − 0·1 | | 8·3 |
| | 20 | 43 | − 0·1 | | 8·3 |
| | 30 | 27 | − 0·2 | | 8·3 |
| | 40 | + 10 | − 0·3 | | 8·2 |
| | 50 | − 6 | − 0·3 | | 8·2 |
| 1 | 0 | 22 | − 0·4 | | 8·1 |
| | 10 | 38 | − 0·5 | | 8·0 |
| | 20 | 54 | − 0·5 | | 7·9 |
| | 30 | 70 | − 0·6 | | 7·7 |
| | 40 | 85 | − 0·7 | | 7·6 |
| | 50 | 100 | − 0·7 | | 7·4 |
| 2 | 0 | 115 | − 0·8 | | 7·2 |
| | 10 | 129 | − 0·8 | | 7·0 |
| | 20 | 143 | − 0·9 | | 6·8 |
| | 30 | 156 | − 1·0 | | 6·6 |
| | 40 | 169 | − 1·0 | | 6·4 |
| | 50 | 182 | − 1·1 | | 6·2 |
| 3 | 0 | 194 | − 1·1 | | 5·9 |
| | 10 | 206 | − 1·2 | | 5·6 |
| | 20 | 217 | − 1·2 | | 5·4 |
| | 30 | 227 | − 1·3 | | 5·1 |
| | 40 | 237 | − 1·3 | | 4·8 |
| | 50 | 246 | − 1·3 | | 4·5 |
| 4 | 0 | 255 | − 1·4 | | 4·2 |
| | 10 | 263 | − 1·4 | | 3·9 |
| | 20 | 270 | − 1·4 | | 3·5 |
| | 30 | 277 | − 1·5 | | 3·2 |
| | 40 | 283 | − 1·5 | | 2·9 |
| | 50 | 288 | − 1·5 | | 2·5 |
| 5 | 0 | 293 | − 1·5 | | 2·2 |
| | 10 | 297 | − 1·5 | | 1·8 |
| | 20 | 300 | − 1·6 | | 1·5 |
| | 30 | 303 | − 1·6 | | 1·1 |
| | 40 | 305 | − 1·6 | | 0·7 |
| | 50 | − 306 | − 1·6 | | + 0·4 |

d = minutes of decl.

## 1—40.

| mag. | h | m | s (0h.—3h.) | ′ (−85°) | |
|---|---|---|---|---|---|
| 9·2 | 0 | 6 | 13 | 36·3 | *g* |
| 7·5 | | 8 | 31 | 41·3 | GS*g* |
| 9·3 | | 15 | 44 | 46·6 | *g* |
| 9·8 | | 19 | 25 | 29·3 | *g* |
| 9·6 | | 23 | 51 | 13·4 | *g* |
| 9·5 | | 26 | 53 | 20·1 | *g* |
| 8·7 | | 36 | 27 | 56·2 | GS*g* |
| 9·8 | | 39 | 17 | 56·5 | |
| 9·8 | | 40 | 16 | 52·1 | *g* |
| 9·6 | | 49 | 53 | 55·9 | *g* |
| 8·7 | | 50 | 55 | 42·6 | *g* |
| 8·3 | | | 58 | 36·9 | S*g* |
| 9·5* | | 56 | 36 | 23·7 | *g* |
| 9·2 – | 1 | 12 | 5 | 57·6 | *g* |
| 9·3 | | 26 | 48 | 19·9 | *g* |
| 9·3 | | 34 | 21 | 35·9 | |
| 6·7 | | 44 | 50 | 24·0 | GS*g*g |
| 8·9 | | 45 | 50 | 41·8 | *g* |
| 8·9 | | 52 | 54 | 23·8 | *g* |
| 9·3 | | 53 | 24 | 56·9 | *g* |
| 9·3 | 2 | 2 | 18 | 42·8 | *g* |
| 7·7 | | 3 | 24 | 38·5 | GS*g* |
| 9·0 | | 4 | 11 | 16·0 | *g* |
| 8·0 | | 5 | 27 | 21·2 | GS*g* |
| 9·5 | | 17 | 39 | 40·0 | *g* |
| 9·4 | | 19 | 43 | 35·1 | *g* |
| 9·2 | | 23 | 26 | 52·9 | *g* |
| 9·2 | | 26 | 1 | 11·7 | *g* |
| 9·3 | | | 5 | 15·9 | *g* |
| 8·6 – | | 31 | 28 | 9·7 | *g* |
| 9·5 | | 33 | 46 | 6·6 | *g* |
| 9·8 | | 42 | 2 | 3·7 | *g* |
| 8·1 | | 51 | 23 | 32·6 | GS*g* |
| 8·9 | 3 | 2 | 16 | 40·0 | GS*g* |
| 8·1 | | 6 | 8 | 15·5 | G*g* |
| 9·2 | | 20 | 7 | 10·5 | *g* |
| 8·7 | | 25 | 5 | 43·9 | *g* |
| 9·5 | | 26 | 40 | 0·1 | *g* |
| 9·8 | | 27 | 36 | 10·5 | *g* |
| 8·2 | | 46 | 39 | 7·5 | GS*g* |

## 41—80.

| mag. | h | m | s (3h.—6h.) | ′ (−85°) | |
|---|---|---|---|---|---|
| 8·6 | 3 | 47 | 48 | 42·0 | *g* |
| 8·7 | | 59 | 8 | 1·5 | *g* |
| 9·0 | 4 | 2 | 20 | 34·0 | G*g* |
| 6·1 | | 5 | 57 | 37·6 | GS*g* |
| 9·2 | | 36 | 36 | 3·5 | *g* |
| 9·5 – | | | 55 | 47·9 | |
| 9·5 | | 37 | 30 | 2·6 | *g* |
| 9·5 | | | 50 | 8·4 | *g* |
| 9·3 | | 45 | 0 | 7·6 | *g* |
| 9·1 | | 52 | 23 | 2·5 | *g* |
| 9·3 | | 58 | 17 | 52·9 | |
| 9·5 | 5 | 0 | 45 | 16·0 | |
| 9·1 | | 3 | 19 | 53·0 | |
| 9·3 | | 5 | 38 | 11·5 | *g* |
| 8·6 | | 7 | 16 | 0·3 | *g* |
| 9·7 | | | 46 | 41·0 | |
| 10·0 | | 12 | 12 | 57·1 | |
| 9·7 | | 14 | 29 | 56·5 | |
| 9·0 | | | 53 | 41·8 | *g* |
| 9·0 | | | 59 | 21·2 | |
| 8·3 | | 18 | 5 | 32·5 | *g* |
| 9·1 | | 21 | 34 | 49·7 | *g* |
| 9·9 | | 23 | 31 | 42·9 | *g* |
| 9·5 | | 24 | 36 | 5·4 | |
| 9·1 | | 28 | 37 | 18·2 | |
| 8·5 | | 30 | 20 | 37·1 | *g* |
| 9·8 | | 31 | 20 | 39·5 | *g* |
| 8·5 | | | 44 | 10·5 | *g* |
| 9·7 | | | 47 | 32·9 | |
| 9·0 | | 37 | 10 | 9·4 | *g* |
| 9·4 | | 41 | 39 | 31·9 | *g* |
| 8·6 | | 42 | 39 | 46·9 | *g* |
| 9·8 | | 59 | 40 | 37·5 | *g* |
| 10·0 | 6 | 4 | 33 | 36·3 | |
| 9·6 | | 5 | 38 | 22·2 | *g* |
| 9·1 | | 10 | 53 | 7·8 | |
| 7·6 | | 12 | 44 | 55·5 | GS*g* |
| 9·8 | | 20 | 4 | 24·3 | *g* |
| 9·5 | | 23 | 33 | 53·8 | *g* |
| 9·9 | | 24 | 16 | 25·8 | |

## 81—120.

| | mag. | h | m | s (6h.—7h.) | ′ (−85°) | | |
|---|---|---|---|---|---|---|---|
| | 9·7 | 6 | 25 | 16 | 2·3 | | |
| | 8·0 | | 30 | 55 | 37·9 | *g* | |
| | 9·9 | | 31 | 4 | 0·4 | | |
| | 9·1 | | 33 | 13 | 28·0 | *g* | |
| | 9·9 | | 36 | 17 | 51·9 | | |
| | 10·1 | | 41 | 3 | 1·3 | | |
| | 9·9 | | 42 | 57 | 5·9 | | |
| | 9·7 – | | 52 | 8 | 1·6 | *g* | |
| | 10·2 | | 54 | 44 | 30·5 | | |
| | 10·6 | | 59 | 52 | 39·4 | | |
| | 10·3 | 7 | 0 | 12 | 13·7 | | |
| ? | 10·2 | | | 21 | 53·6 | | |
| | 10·2 | | 2 | 48 | 34·9 | | |
| | 10·0 | | 4 | 7 | 45·9 | | |
| | 9·8 | | 5 | 44 | 10·2 | | |
| | 10·2 | | 7 | 42 | 59·5 | | |
| | 10·2 | | | 42 | 45·1 | | |
| | 10·0 | | 10 | 13 | 43·2 | *g* | |
| | 10·1 | | 13 | 43 | 6·9 | | |
| | 9·3 | | 15 | 27 | 33·8 | *g* | |
| | 10·2 | | 19 | 40 | 6·3 | | |
| | 10·5 | | 21 | 55 | 9·7 | | |
| | 9·4 | | 23 | 4 | 12·4 | *g* | |
| | 9·6 | | 27 | 31 | 14·2 | | |
| | 9·8 | | 28 | 39 | 18·0 | | |
| | 10·3 | | 30 | 32 | 9·0 | | |
| | 9·8 | | 31 | 48 | 20·8 | | |
| | 8·9 | | 32 | 8 | 45·0 | *g* | |
| | 10·0 | | 33 | 31 | 18·0 | | |
| | 9·8 | | | 50 | 36·9 | | |
| | 10·7 | | 38 | 51 | 55·1 | | ? |
| | 10·3 | | | 55 | 34·0 | | |
| | 10·3 | | 40 | 7 | 22·4 | | |
| | 10·7 | | 41 | 10 | 32·8 | | |
| | 9·2 | | 42 | 8 | 19·4 | *g* | |
| | 10·2 | | | 41 | 19·6 | *g* | |
| | 10·4 | | 44 | 12 | 26·5 | | |
| | 8·7 | | 45 | 54 | 59·2 | *g* | |
| | 9·5 | | 46 | 31 | 7·6 | | |
| | 10·6 | | 47 | 30 | 23·0 | | |



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## 121—180.

| mag. | $7^{h}$–$9^{h}$ h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 9·9 | 7 | 48 | 29 | 59·2 | |
| 9·1 | | 49 | 6 | 16·8 | *g* |
| 10·3 | | 51 | 15 | 21·3 | |
| 10·5 | | 52 | 20 | 43·7 | |
| 10·0 | | 55 | 38 | 28·2 | |
| 10·2 | | | 42 | 24·0 | |
| 10·6 | | 56 | 51 | 43·6 | |
| 10·7 | | 57 | 23 | 27·9 | |
| 8·3 | 8 | 0 | 4 | 7·1 | *g* |
| 9·5 | | | 34 | 58·2 | *g* |
| 10·2 | | 2 | 55 | 2·3 | |
| 10·2 | | 3 | 5 | 24·2 | |
| 9·6 | | | 20 | 5·8 | *g* |
| 8·8 | | | 58 | 22·8 | *g* |
| 10·7 | | 5 | 53 | 28·7 | |
| 10·3 | | | 59 | 52·1 | |
| 8·0 | | 7 | 58 | 34·9 | GS*g* |
| 9·8 | | 8 | 47 | 34·8 | *g* |
| 10·5 | | 11 | 39 | 50·7 | |
| 10·7 | | 13 | 3 | 7·4 | |
| 10·5 | | | 19 | 16·9 | |
| 10·0 | | | 56 | 45·6 | |
| 10·3 | | 15 | 55 | 16·1 | |
| 10·5 | | 18 | 1 | 9·2 | |
| 9·7 | | 19 | 29 | 35·4 | |
| 10·6 | | 22 | 43 | 38·0 | |
| 9·8 | | 23 | 45 | 1·5 | |
| 9·8 | | | 56 | 11·2 | |
| 10·0 | | 24 | 38 | 8·1 | |
| 9·5 | | 25 | 32 | 18·5 | *g* |
| 9·9 | | 26 | 28 | 24·8 | |
| 9·8 | | | 46 | 5·5 | |
| 10·6 | | 27 | 54 | 1·1 | |
| 10·3 | | 28 | 19 | 52·8 | |
| 10·2 | | | 19 | 35·3 | |
| 10·3 | | 30 | 35 | 50·7 | |
| 9·7 | | 31 | 51 | 24·6 | |
| 10·3 | | 33 | 29 | 13·9 | |
| 10·6 | | 34 | 18 | 4·7 | |
| 9·9 | | 35 | 58 | 32·6 | |
| 9·9 | | 36 | 32 | 40·0 | |
| 9·5 | | 37 | 32 | 30·7 | |
| 10·7 | | 38 | 53 | 57·3 | |
| 10·6 | | 43 | 37 | 39·4 | |
| 9·8 | | 44 | 43 | 39·0 | |
| 9·8 | | | 59 | 30·5 | |
| 9·4 | | 46 | 47 | 21·7 | |
| 10·2 | | 47 | 20 | 47·7 | |
| 8·3 | | | 34 | 56·6 | *g* |
| 10·5 | | 48 | 26 | 10·7 | |
| 9·8 | | 49 | 27 | 47·9 | *g* |
| 9·6 | | 52 | 14 | 4·7 | |
| 10·2 | | 56 | 25 | 0·7 | |
| 10·2 | | | 47 | 10·1 | |
| 10·4 | | 57 | 38 | 12·7 | |
| 9·5 | | 59 | 15 | 31·2 | |
| 10·0 | 9 | 2 | 57 | 19·2 | |
| 10·0 | | 6 | 30 | 3·8 | |
| 9·9 | | 7 | 11 | 2·8 | |
| 10·5 | | 10 | 57 | 8·9 | |

## 181—240.

| mag. | $9^{h}$–$10^{h}$ h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 10·0 | 9 | 12 | 59 | 7·8 | |
| 9·4 | | 13 | 18 | 12·8 | *g* |
| 5·8 | | 14 | 23 | 9·7 | GS*g*λ |
| 8·5 | | 15 | 47 | 14·6 | *g* |
| 10·3 | | 18 | 5 | 54·9 | |
| 9·7 | | | 5 | 50·8 | |
| 9·9 | | | 10 | 0·5 | |
| 9·7 | | | 55 | 39·2 | |
| 10·4 | | 21 | 42 | 49·8 | |
| 10·5 | | | 48 | 22·5 | |
| 10·3 | | 27 | 36 | 47·1 | |
| 10·0 | | 28 | 38 | 29·8 | |
| 9·6 | | 29 | 25 | 32·4 | |
| 10·5 | | 30 | 24 | 2·6 | |
| 10·3 | | 31 | 7 | 17·0 | |
| 10·4 | | 32 | 35 | 36·6 | |
| 10·0 | | 34 | 12 | 3·9 | |
| 9·2 | | | 14 | 7·6 | |
| 10·4 | | | 48 | 16·3 | |
| 10·0 | | 35 | 31 | 22·4 | |
| 9·9 | | 37 | 43 | 27·0 | |
| 10·3 | | 38 | 39 | 10·4 | |
| 10·5 | | 41 | 31 | 6·4 | |
| 10·5 | | 43 | 48 | 7·5 | |
| 10·3 | | 44 | 47 | 25·1 | |
| 10·5 | | | 58 | 11·0 | |
| 10·3 | | 46 | 40 | 13·4 | |
| 9·7 | | 47 | 4 | 1·1 | |
| 9·2 | | | 42 | 59·9 | |
| 6·7 | | 48 | 8 | 26·3 | GS*g* |
| 10·0 | | 49 | 6 | 30·5 | |
| 9·5 | | 52 | 15 | 59·8 | |
| 10·2 | | 53 | 28 | 29·8 | |
| 10·2 | | 54 | 1 | 29·4 | |
| 9·5 | | | 4 | 55·9 | *g* |
| 9·9 | | | 30 | 11·6 | |
| 10·5 | | 56 | 47 | 41·1 | |
| 10·0 | | 57 | 22 | 50·3 | |
| 8·8 | | 58 | 9 | 51·4 | *g* |
| 9·8 | | 59 | 2 | 10·1 | *g* |
| 10·5 | | | 32 | 10·0 | |
| 9·9 | 10 | 2 | 32 | 34·9 | |
| 10·5 | | 6 | 37 | 0·8 | |
| 10·4 | | | 41 | 10·1 | |
| 10·5 | | 9 | 50 | 5·5 | |
| 10·2 | | 10 | 18 | 18·3 | |
| 8·8 | | | 41 | 20·6 | *g* |
| 10·1 | | 11 | 36 | 12·8 | |
| 9·6 | | | 44 | 27·8 | |
| 10·3 | | 12 | 37 | 36·2 | |
| 9·6 | | 13 | 37 | 15·2 | |
| 10·2 | | 17 | 5 | 49·8 | |
| 9·1 | | 18 | 42 | 57·7 | *g* |
| 10·1 | | 20 | 50 | 51·5 | |
| 10·3 | | 22 | 14 | 59·2 | |
| 9·9 | | 26 | 49 | 53·1 | *g* |
| 9·3 | | 28 | 21 | 24·3 | *g* |
| 10·3 | | | 50 | 14·6 | |
| 10·2 | | 30 | 2 | 43·3 | |
| 7·8 | | | 55 | 55·2 | GS*g* |

## 241—300.

| mag. | $10^{h}$–$11^{h}$ h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 10·5 | 10 | 31 | 20 | 50·3 | |
| 10·1 | | 32 | 34 | 54·0 | |
| 10·5 | | 33 | 46 | 47·8 | |
| 10·3 | | | 53 | 49·0 | |
| 6·7 | | 38 | 9 | 26·6 | GS*g* |
| 10·1 | | | 20 | 5·7 | |
| 9·7 | | | 58 | 31·5 | |
| 10·4 | | 40 | 35 | 48·6 | |
| 8·0 | | 41 | 50 | 43·1 | *g* |
| 9·9 | | 42 | 9 | 38·8 | *g* |
| 10·2 | | | 58 | 59·7 | |
| 10·5 | | 43 | 2 | 55·6 | |
| 10·4 | | 45 | 11 | 34·3 | |
| 10·4 | | | 53 | 55·6 | |
| 10·5 | | 49 | 51 | 5·5 | |
| 10·1 | | | 58 | 21·4 | |
| 9·3 | | 50 | 13 | 11·6 | |
| 9·9 | | | 52 | 27·9 | |
| 10·1 | | 51 | 58 | 21·8 | |
| 10·3 | | 52 | 14 | 32·6 | |
| 10·5 | | 53 | 24 | 51·4 | |
| 10·3 | | 54 | 21 | 34·2 | |
| 10·4 | | | 30 | 34·4 | |
| 10·1 | | 56 | 11 | 3·0 | |
| 9·8 | | 59 | 28 | 22·9 | |
| 10·1 | 11 | 1 | 5 | 11·4 | |
| 10·1 | | | 8 | 19·4 | |
| 10·3 | | 5 | 53 | 7·1 | |
| 10·0 | | 6 | 47 | 5·8 | |
| 7·1 | | 7 | 48 | 4·3 | GS*g* |
| 9·3 | | 8 | 10 | 44·3 | *g* |
| 9·8 | | | 39 | 34·9 | |
| 9·2 | | 9 | 37 | 14·2 | *g* |
| 10·0 | | | 55 | 27·5 | |
| 9·5 | | 10 | 31 | 42·6 | *g* |
| 8·7 | | | 47 | 33·1 | GS*g* |
| 10·3 | | 11 | 4 | 15·9 | |
| 10·1 | | | 33 | 31·3 | |
| 10·0 | | 12 | 17 | 25·5 | |
| 10·0 | | | 46 | 17·8 | |
| 10·0 | | 13 | 2 | 10·1 | |
| 10·1 | | | 10 | 11·8 | |
| 10·3 | | | 32 | 53·3 | |
| 9·5 | | 14 | 55 | 17·0 | *g* |
| 10·3 | | 15 | 0 | 2·8 | |
| 9·7 | | 17 | 49 | 22·1 | |
| 10·2 | | 18 | 18 | 37·7 | |
| 10·1 | | 19 | 2 | 53·7 | |
| 9·5 | | | 13 | 2·0 | |
| 9·8 | | | 41 | 10·6 | |
| 10·2 | | 21 | 26 | 23·9 | |
| 9·5 | | | 30 | 20·6 | |
| 9·9 | | 23 | 20 | 6·0 | |
| 10·1 | | | 33 | 45·2 | |
| 10·3 | | | 58 | 4·1 | |
| 10·0 | | 25 | 31 | 28·9 | |
| 10·0 | | | 37 | 23·9 | |
| 10·0 | | 27 | 52 | 7·9 | |
| 9·5 | | 28 | 39 | 28·0 | |
| 9·9 | | 29 | 32 | 41·8 | |

25 prec.

| h | m | α s s | | δ |
|---|---|---|---|---|
| 5 | 50 | − 306 − 1·6 | d | + 0·4 |
| 6 | 0 | 306 − 1·6 | | 0·0 |
| | 10 | 306 − 1·6 | | − 0·4 |
| | 20 | 305 − 1·6 | | 0·7 |
| | 30 | 303 − 1·6 | | 1·1 |
| | 40 | 300 − 1·6 | | 1·5 |
| | 50 | 297 − 1·5 | | 1·8 |
| 7 | 0 | 293 − 1·5 | | 2·2 |
| | 10 | 288 − 1·5 | | 2·5 |
| | 20 | 283 − 1·5 | | 2·9 |
| | 30 | 277 − 1·5 | | 3·2 |
| | 40 | 270 − 1·4 | | 3·5 |
| | 50 | 263 − 1·4 | | 3·9 |
| 8 | 0 | 255 − 1·4 | | 4·2 |
| | 10 | 246 − 1·3 | | 4·5 |
| | 20 | 237 − 1·3 | | 4·8 |
| | 30 | 227 − 1·3 | | 5·1 |
| | 40 | 217 − 1·2 | | 5·4 |
| | 50 | 206 − 1·2 | | 5·6 |
| 9 | 0 | 194 − 1·1 | | 5·9 |
| | 10 | 182 − 1·1 | | 6·2 |
| | 20 | 169 − 1·0 | | 6·4 |
| | 30 | 156 − 1·0 | | 6·6 |
| | 40 | 143 − 0·9 | | 6·8 |
| | 50 | 129 − 0·8 | | 7·0 |
| 10 | 0 | 115 − 0·8 | | 7·2 |
| | 10 | 100 − 0·7 | | 7·4 |
| | 20 | 85 − 0·7 | | 7·6 |
| | 30 | 70 − 0·6 | | 7·7 |
| | 40 | 54 − 0·5 | | 7·9 |
| | 50 | 38 − 0·5 | | 8·0 |
| 11 | 0 | 22 − 0·4 | | 8·1 |
| | 10 | − 6 − 0·3 | | 8·2 |
| | 20 | + 10 − 0·3 | | 8·2 |
| | 30 | + 27 − 0·2 | | − 8·3 |

d = minutes of decl.



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| h | m | 25 prec. α s | s | | δ ′ |
|---|---|---|---|---|---|
| 11 | 20 | + 10 | − 0.3 | d | − 8.2 |
| | 30 | 27 | − 0.2 | | 8.3 |
| | 40 | 43 | − 0.1 | | 8.3 |
| | 50 | 60 | − 0.1 | | 8.3 |
| 12 | 0 | 77 | 0.0 | | 8.4 |
| | 10 | 94 | + 0.1 | | 8.3 |
| | 20 | 110 | + 0.1 | | 8.3 |
| | 30 | 127 | + 0.2 | | 8.3 |
| | 40 | 143 | + 0.3 | | 8.2 |
| | 50 | 160 | + 0.3 | | 8.2 |
| 13 | 0 | 176 | + 0.4 | | 8.1 |
| | 10 | 192 | + 0.5 | | 8.0 |
| | 20 | 208 | + 0.5 | | 7.9 |
| | 30 | 223 | + 0.6 | | 7.7 |
| | 40 | 239 | + 0.7 | | 7.6 |
| | 50 | 254 | + 0.7 | | 7.4 |
| 14 | 0 | 268 | + 0.8 | | 7.2 |
| | 10 | 283 | + 0.9 | | 7.0 |
| | 20 | 296 | + 0.9 | | 6.8 |
| | 30 | 310 | + 1.0 | | 6.6 |
| | 40 | 323 | + 1.0 | | 6.4 |
| | 50 | 336 | + 1.1 | | 6.2 |
| 15 | 0 | 348 | + 1.1 | | 5.9 |
| | 10 | 359 | + 1.2 | | 5.6 |
| | 20 | 370 | + 1.2 | | 5.4 |
| | 30 | 381 | + 1.3 | | 5.1 |
| | 40 | 391 | + 1.3 | | 4.8 |
| | 50 | 400 | + 1.3 | | 4.5 |
| 16 | 0 | 408 | + 1.4 | | 4.2 |
| | 10 | 417 | + 1.4 | | 3.9 |
| | 20 | 424 | + 1.4 | | 3.5 |
| | 30 | 431 | + 1.5 | | 3.2 |
| | 40 | 437 | + 1.5 | | 2.9 |
| | 50 | 442 | + 1.5 | | 2.5 |
| 17 | 0 | 447 | + 1.5 | | 2.2 |
| | 10 | 451 | + 1.5 | | 1.8 |
| | 20 | 454 | + 1.6 | | 1.5 |
| | 30 | 457 | + 1.6 | | 1.1 |
| | 40 | 458 | + 1.6 | | 0.7 |
| | 50 | 459 | + 1.6 | | − 0.4 |
| 18 | 0 | 460 | + 1.6 | | 0.0 |
| | 10 | 459 | + 1.6 | | + 0.4 |
| | 20 | 458 | + 1.6 | | 0.7 |
| | 30 | 457 | + 1.6 | | 1.1 |
| | 40 | 454 | + 1.6 | | 1.5 |
| | 50 | 451 | + 1.5 | | 1.8 |
| 19 | 0 | 447 | + 1.5 | | 2.2 |
| | 10 | 442 | + 1.5 | | 2.5 |
| | 20 | 437 | + 1.5 | | 2.9 |
| | 30 | 431 | + 1.5 | | 3.2 |
| | 40 | 424 | + 1.4 | | 3.5 |
| | 50 | 417 | + 1.4 | | 3.9 |
| 20 | 0 | 408 | + 1.4 | | 4.2 |
| | 10 | + 400 | + 1.3 | | + 4.5 |

d = minutes of decl.

## 301—360.

| mag. | 11ʰ·–12ʰ· h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 10.3 | 11 | 29 | 43 | 0.4 | |
| 9.7 | | 31 | 20 | 50.7 | |
| 9.9 | | | 30 | 22.4 | |
| 10.1 | | 32 | 27 | 31.0 | |
| 10.1 | | | 33 | 25.5 | |
| 10.2 | | 35 | 28 | 1.9 | |
| 10.0 | | | 44 | 8.6 | |
| 9.9 | | | 50 | 44.2 | |
| 10.0 | | 37 | 18 | 13.8 | |
| 9.5 | | 39 | 7 | 51.7 | |
| 9.8 | | 43 | 29 | 50.1 | |
| 9.8 | | | 29 | 7.6 | |
| 9.8 | | 45 | 3 | 1.8 | |
| 9.7 | | | 16 | 14.9 | |
| 10.1 | | 50 | 42 | 34.9 | |
| 10.0 | | | 45 | 25.8 | |
| 10.0 | | 53 | 43 | 4.1 | |
| 10.0 | | 55 | 17 | 25.3 | |
| 10.3 | | 56 | 12 | 37.1 | |
| 10.1 | | | 19 | 15.9 | |
| 9.5 | | | 41 | 12.0 | *g* |
| 9.7 | | | 56 | 6.3 | *g* |
| 10.0 | | 57 | 58 | 25.5 | |
| 9.1 | | | 58 | 16.4 | *g* |
| 9.9 | | 58 | 9 | 12.2 | |
| 10.0 | | | 18 | 41.9 | |
| 7.9 | | 59 | 50 | 5.0 | G*g* |
| 10.0 | 12 | 1 | 52 | 33.3 | |
| 10.2 | | 2 | 31 | 32.7 | |
| 10.3 | | 3 | 3 | 7.2 | |
| 10.1 | | 4 | 34 | 48.0 | |
| 9.7 | | 5 | 33 | 11.5 | |
| 10.2 | | 6 | 29 | 38.0 | |
| 9.6 | | 7 | 6 | 55.0 | |
| 10.0 | | | 34 | 43.8 | |
| 9.7 | | | 53 | 52.4 | |
| 10.3 | | 9 | 12 | 40.3 | |
| 9.6 | | | 48 | 49.7 | |
| 10.0 | | 12 | 24 | 9.1 | |
| 10.3 | | 13 | 5 | 27.1 | |
| 10.0 | | 14 | 43 | 3.1 | |
| 9.5 | | 15 | 4 | 24.7 | *g* |
| 7.8 | | | 50 | 27.4 | GS*g* |
| 10.2 | | 16 | 43 | 10.5 | |
| 10.1 | | | 54 | 17.1 | |
| 10.1 | | 17 | 56 | 54.7 | |
| 10.0 | | 19 | 0 | 6.1 | |
| 10.3 | | 22 | 21 | 35.5 | |
| 10.1 | | 29 | 30 | 40.9 | |
| 9.0 | | 31 | 6 | 16.5 | *g* |
| 9.7 | | 32 | 18 | 37.2 | |
| 10.1 | | 33 | 6 | 17.9 | |
| 9.5 | | 35 | 13 | 21.3 | *g* |
| 10.0 | | 37 | 12 | 9.1 | |
| 9.7 | | | 27 | 58.5 | |
| 10.3 | | 38 | 25 | 4.0 | |
| 9.1 | | 39 | 10 | 9.9 | *g* |
| 9.6 | | 40 | 38 | 44.6 | |
| 9.9 | | | 56 | 56.7 | |
| 10.3 | | 44 | 55 | 55.7 | |

## 361—420.

| mag. | 12ʰ·–14ʰ· h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 9.6 | 12 | 48 | 30 | 37.5 | |
| 10.1 | | 51 | 21 | 46.5 | |
| 10.0 | | 55 | 4 | 13.2 | |
| 10.1 | | | 42 | 12.4 | |
| 10.3 | | 56 | 48 | 39.8 | |
| 10.3 | | 57 | 23 | 14.6 | |
| 10.2 | | | 48 | 38.7 | |
| 9.9 | | 58 | 48 | 15.0 | |
| 10.3 | | 59 | 26 | 10.5 | |
| 9.8 | | | 36 | 9.9 | |
| 10.3 | 13 | 0 | 49 | 3.7 | |
| 9.9 | | 2 | 37 | 57.9 | |
| 9.5 | | 3 | 9 | 12.6 | *g* |
| 9.9 | | 4 | 45 | 5.5 | |
| 9.3 | | 8 | 50 | 47.6 | *g* |
| 10.0 | | 10 | 48 | 48.0 | |
| 9.6 | | 11 | 12 | 20.9 | *g* |
| 9.0 | | 13 | 31 | 14.3 | *g* |
| 7.0 | | 16 | 12 | 10.6 | GSc*gg* |
| 8.8 | | 17 | 51 | 0.6 | *g* |
| 10.0 | | 19 | 20 | 24.9 | |
| 9.9 | | 20 | 13 | 30.8 | |
| 10.0 | | | 55 | 11.9 | |
| 6.2 | | 21 | 6 | 8.6 | GS*g*gr |
| 9.4 | | 25 | 24 | 7.3 | *g* |
| 9.3 | | | 55 | 59.7 | *g* |
| 9.6 | | 26 | 4 | 35.4 | |
| 9.9 | | 27 | 35 | 12.9 | |
| 9.4 | | 28 | 5 | 3.5 | |
| 8.6 | | 31 | 53 | 9.6 | *g* |
| 8.5 | | 32 | 4 | 19.9 | *g* |
| 9.9 | | 35 | 26 | 48.1 | |
| 9.6 | | 37 | 34 | 44.3 | *g* |
| 9.9 | | 38 | 35 | 32.7 | |
| 9.9 | | | 38 | 10.6 | |
| 9.6 | | 39 | 12 | 18.5 | |
| 9.6 | | 41 | 4 | 53.1 | *g* |
| 10.0 | | 42 | 39 | 17.8 | |
| 9.0 | | 46 | 42 | 13.8 | *g* |
| 9.6 | | 47 | 10 | 17.9 | |
| 9.9 | | | 29 | 12.4 | |
| 9.6 | | 52 | 41 | 27.3 | *g* |
| 9.6 | | | 56 | 40.4 | |
| 9.9 | | 54 | 16 | 9.1 | |
| 9.9 | | 57 | 27 | 27.6 | |
| 9.9 | 14 | 6 | 35 | 17.9 | |
| 9.4 | | 7 | 31 | 16.0 | *g* |
| 10.0 | | 10 | 5 | 24.6 | |
| 10.2 | | 11 | 39 | 16.7 | |
| 8.8 | | 18 | 56 | 51.0 | G*g* |
| 8.8 | | 23 | 35 | 37.4 | *g* |
| 10.0 | | 24 | 25 | 18.8 | |
| 9.9 | | | 49 | 38.1 | |
| 9.2 | | 27 | 24 | 3.0 | *g* |
| 8.6 | | 30 | 19 | 57.2 | GS*g* |
| 10.2 | | 32 | 55 | 20.6 | |
| 9.6 | | 33 | 1 | 19.4 | *g* |
| 9.1 | | | 56 | 23.2 | *g* |
| 9.6 | | 34 | 41 | 25.7 | *g* |
| 9.0 | | 35 | 43 | 49.9 | *g* |

## 421—480.

| mag. | 14ʰ·–17ʰ· h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| 9.1 | 14 | 37 | 25 | 33.3 | *g* |
| 8.7 | | | 33 | 47.6 | *g* |
| 8.9 | | 40 | 20 | 2.0 | *g* |
| 10.2 | | 41 | 41 | 23.6 | |
| 10.0 | | | 48 | 28.4 | |
| 9.4 | | 42 | 13 | 51.9 | *g* |
| 10.0 | | 46 | 21 | 13.6 | |
| 9.7 | | 47 | 49 | 57.4 | |
| 8.8 | | 48 | 18 | 11.7 | *g* |
| 9.6 | | 49 | 59 | 33.8 | |
| 9.4 | | 50 | 27 | 45.9 | *g* |
| 10.0 | | 51 | 40 | 5.8 | |
| 9.6 | | | 53 | 45.2 | |
| 9.6 | | 56 | 3 | 38.9 | *g* |
| 10.2 | | 57 | 2 | 0.2 | |
| 10.0 | | 58 | 17 | 31.7 | |
| 9.6 | 15 | 1 | 5 | 15.6 | |
| 9.4 | | 6 | 36 | 26.1 | *g* |
| 9.1 | | 13 | 22 | 40.0 | *g* |
| 9.9 | | 15 | 37 | 42.2 | |
| 9.7 | | 22 | 50 | 51.6 | *g* |
| 9.8 | | 23 | 40 | 50.9 | *g* |
| 9.0 | | 27 | 28 | 46.7 | *g* |
| 9.9 | | 35 | 27 | 49.7 | *g* |
| 9.2 | | 41 | 13 | 41.0 | *g* |
| 8.2 | | 47 | 11 | 3.5 | *g* |
| 9.9 | | 48 | 54 | 36.6 | *g* |
| 9.5 | | 52 | 20 | 26.4 | *g* |
| 9.4 | | 53 | 43 | 6.4 | *g* |
| 8.9 | | | 46 | 11.6 | *g* |
| 9.8 | 16 | 3 | 15 | 41.9 | |
| 8.5 | | 10 | 42 | 15.5 | *g* |
| 8.2 | | 24 | 57 | 59.0 | *g* |
| 8.7 | | 26 | 10 | 3.8 | *g* |
| 9.0 | | 27 | 1 | 15.8 | *g* |
| 8.6 | | 29 | 23 | 24.1 | *g* |
| 9.5 | | 49 | 5 | 54.1 | |
| 9.0 | | 50 | 46 | 1.0 | *g* |
| 9.3 | | 56 | 56 | 54.6 | |
| 9.5 | 17 | 1 | 0 | 3.6 | |
| 9.3 | | 6 | 49 | 43.4 | *g* |
| 9.5 | | 11 | 2 | 58.0 | |
| 9.0 | | | 22 | 45.0 | *g* |
| 9.7 | | | 42 | 6.9 | |
| 10.0 | | 15 | 9 | 7.1 | |
| 9.5 | | 18 | 41 | 55.0 | |
| 9.3 | | 20 | 56 | 30.2 | *g* |
| 9.5 | | 21 | 20 | 14.1 | |
| 7.3 | | 22 | 12 | 9.3 | GS*g* |
| 9.0 | | 28 | 5 | 23.2 | *g* |
| 9.3 | | | 27 | 29.2 | *g* |
| 9.1 | | 30 | 14 | 3.2 | *g* |
| 9.6 | | 38 | 19 | 6.2 | *g* |
| 9.1 | | | 23 | 26.0 | |
| 10.0 | | 42 | 57 | 2.3 | |
| 9.8 | | 47 | 12 | 41.0 | |
| 9.8 | | 54 | 38 | 18.0 | |
| 8.4 | | | 56 | 45.5 | *g* |
| 9.7 | | 55 | 5 | 52.1 | *g* |
| 9.8 | | 56 | 25 | 24.7 | |



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### 481—507.

| mag. | h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| | 17h.–20h. | | | | |
| 8·8 | 17 | 57 | 56 | 3·6 | g |
| 9·7 | 18 | 3 | 26 | 35·7 | |
| 9·3 | | 10 | 24 | 34·9 | g |
| 9·3 | | 15 | 22 | 40·5 | GSg |
| 9·5 | | | 55 | 39·9 | Sg |
| 9·1 | | 28 | 39 | 0·2 | g |
| 9·3 | | 30 | 15 | 52·1 | |
| 10·0 | | 31 | 58 | 40·3 | |
| 9·7 | | 35 | 5 | 20·6 | |
| 9·5 | | 37 | 7 | 12·6 | |
| 9·7 | | 40 | 0 | 21·6 | |
| 9·7 | | 41 | 34 | 18·5 | |
| 9·8 | | 44 | 45 | 56·2 | |
| 9·7 | 19 | 0 | 22 | 25·5 | |
| 8·4 | | 1 | 16 | 14·6 | g |
| 9·3 | | 7 | 19 | 26·7 | |
| 9·7 | | | 44 | 24·7 | |
| 9·8 | | 9 | 24 | 11·9 | |
| 9·7 | | 10 | 28 | 29·1 | |
| 8·9 | | 16 | 11 | 8·3 | g |
| 9·7 | | 22 | 36 | 24·0 | g |
| 9·4 | | 27 | 6 | 47·3 | g |
| 9·3 | | | 27 | 13·8 | g |
| 8·9 | | 41 | 15 | 36·2 | g |
| 8·8 | 20 | 14 | 1 | 30·5 | g |
| 9·3 | | 15 | 37 | 24·9 | g |
| 9·7 | | 16 | 45 | 37·3 | g |

### 508—534.

| mag. | h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| | 20h.–22h. | | | | |
| 8·5 | 20 | 21 | 54 | 54·3 | g |
| 9·7 | | 22 | 47 | 6·7 | g |
| 9·1 | | 27 | 31 | 53·5 | g |
| 9·0 | | 29 | 33 | 16·1 | g |
| 8·8 | | 30 | 50 | 28·4 | g |
| 9·5* | | 32 | 12 | 8·9 | g |
| 8·9 | | | 53 | 9·5 | g |
| 8·9 | | 36 | 13 | 11·0 | g |
| 8·1 | | 47 | 0 | 42·0 | GSg |
| 8·0 | | 50 | 51 | 15·4 | GSg |
| 7·8 | | 52 | 54 | 47·9 | g |
| 7·9 | 21 | 4 | 36 | 20·4 | GSgg |
| 9·4 | | 6 | 58 | 50·2 | |
| 9·3 | | 9 | 33 | 29·6 | Gg |
| 9·3 | | 11 | 17 | 21·3 | Gg |
| 9·5 | | 15 | 16 | 2·1 | g |
| 9·7 | | 20 | 56 | 33·9 | |
| 9·4 | | 21 | 6 | 10·2 | |
| 9·4 | | 23 | 16 | 41·7 | |
| 8·7 | | 27 | 28 | 6·8 | g |
| 7·6 | | 28 | 39 | 36·4 | GSg |
| 9·4 | | 31 | 31 | 56·7 | g |
| 9·1 | | 35 | 26 | 1·0 | g |
| 9·0 | | 41 | 58 | 19·5 | g |
| 9·5 | | 47 | 15 | 30·5 | g |
| 9·0 | | 51 | 13 | 9·8 | g |
| 9·3 | 22 | 0 | 25 | 59·9 | |

### 535—560.

| mag. | h | m | s | −85° ′ | |
|---|---|---|---|---|---|
| | 22h.–23h. | | | | |
| 9·1 | 22 | 1 | 13 | 17·0 | g |
| 9·1 | | 4 | 11 | 9·9 | g |
| 9·1 | | 12 | 8 | 31·9 | g |
| 9·4 | | 24 | 51 | 33·1 | g |
| 9·3 | | 25 | 25 | 25·7 | g |
| 9·1 | | 26 | 18 | 41·2 | g |
| 9·3 | | 28 | 57 | 12·9 | g |
| 9·4 | | 31 | 30 | 36·2 | Ggg |
| 9·5 | | | 37 | 37·2 | g |
| 9·3 | | 34 | 46 | 3·0 | Ggg |
| 9·4 | | | 53 | 4·9 | Gg |
| 9·5 | | 36 | 5 | 31·9 | Ggg |
| 9·5* | | 40 | 16 | 0·5 | |
| 9·7 | | | 17 | 47·1 | Ggg |
| 8·9 | | 49 | 33 | 12·4 | Ggg |
| 9·2 | | 54 | 9 | 33·1 | Ggg |
| 9·1 | | 59 | 27 | 41·2 | Ggg |
| 9·5 | 23 | 1 | 25 | 4·2 | Ggg |
| 9·8 | | 3 | 29 | 53·7 | |
| 9·6 | | 8 | 21 | 15·2 | g |
| 8·9 | | 11 | 30 | 11·7 | g |
| 9·2 | | 12 | 24 | 48·6 | |
| 9·5 | | 30 | 10 | 13·1 | g |
| 9·0 | | 43 | 7 | 55·9 | g |
| 9·4 | | | 36 | 24·8 | g |
| 9·2 | | 50 | 23 | 1·6 | g |

### 25 prec.

| h | m | α s | s | | δ ′ |
|---|---|---|---|---|---|
| 20 | 10 | +400 | +1·3 | d | +4·5 |
| | 20 | 391 | +1·3 | | 4·8 |
| | 30 | 381 | +1·3 | | 5·1 |
| | 40 | 370 | +1·2 | | 5·4 |
| | 50 | 359 | +1·2 | | 5·6 |
| 21 | 0 | 348 | +1·1 | | 5·9 |
| | 10 | 336 | +1·1 | | 6·2 |
| | 20 | 323 | +1·0 | | 6·4 |
| | 30 | 310 | +1·0 | | 6·6 |
| | 40 | 296 | +0·9 | | 6·8 |
| | 50 | 283 | +0·9 | | 7·0 |
| 22 | 0 | 268 | +0·8 | | 7·2 |
| | 10 | 254 | +0·7 | | 7·4 |
| | 20 | 239 | +0·7 | | 7·6 |
| | 30 | 223 | +0·6 | | 7·7 |
| | 40 | 208 | +0·5 | | 7·9 |
| | 50 | 192 | +0·5 | | 8·0 |
| 23 | 0 | 176 | +0·4 | | 8·1 |
| | 10 | 160 | +0·3 | | 8·2 |
| | 20 | 143 | +0·3 | | 8·2 |
| | 30 | 127 | +0·2 | | 8·3 |
| | 40 | 110 | +0·1 | | 8·3 |
| | 50 | 94 | +0·1 | | 8·3 |
| 0 | 0 | +77 | 0·0 | | +8·4 |

d = minutes of decl.



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# ZONE—86°.

| mag. | 1—40 Equ. 1875. 0h.–3h. h m s | –86° ′ | | 1850. h m s | 86° ′ | 1900. h m s | 86° ′ | PRECESSION in R. A. 1875. s | in R. A. 1900. s | in Decl. 1875. ′ | in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9·5 | 0 1 8· | 4·2 | *g* | 23 59 52· | 12·6 | 0 2 21· | – 4·2 | + 2·976 | + 2·880 | +0·3342 | +0·3342 |
| 6·8 | 2 5· | 44·1 | GS*g* | 0 0 52· | 52·5 | 3 15· | 35·7 | 2·859 | 2·754 | ·3342 | ·3342 |
| 9·8 | 11 46· | 26·2 | *g* | 10 56· | 34·5 | 12 35· | 17·9 | 1·970 | 1·939 | ·3338 | ·3337 |
| 9·8 | 24 56· | 55·9 | *g* | 24 48· | 64·2 | 25 6· | 47·6 | + 0·364 | 0·463 | ·3323 | ·3322 |
| 9·4 | 29 37· | 55·4 | *g* | 29 42· | 63·7 | 29 36· | 47·1 | – 0·130 | 0·008 | ·3315 | ·3314 |
| 9·6 | 30 25· | 3·4 | *g* | 30 13· | 11·7 | 30 38· | – 4·9 | + 0·506 | + 0·576 | ·3313 | ·3312 |
| 8·8 | 35 53· | 54·5 | *g* | 36 15· | 62·8 | 35 36· | 46·2 | – 0·788 | – 0·594 | ·3301 | ·3302 |
| 8·0 | 38 50· | 5·8 | GS*g* | 38 57· | 14·0 | 38 46· | – 2·4 | 0·232 | 0·114 | ·3294 | ·3294 |
| 7·7 | 39 54· | 23·2 | GS*g* | 40 11· | 31·4 | 39 41· | 15·0 | 0·595 | 0·441 | ·3292 | ·3292 |
| 8·0 | 46 3· | 34·5 | GS*g* | 46 41· | 42·7 | 45 31· | 26·3 | 1·386 | 1·165 | ·3275 | ·3276 |
| 8·3 | 46 29· | 57·7 | *g* | 47 23· | 65·9 | 45 43· | 49·5 | – 2·002 | – 1·703 | +0·3274 | +0·3276 |
| 9·8 | 1 8 35· | 21·9 | *g* | 1 9 58· | 29·9 | 1 7 21· | 13·9 | 3·145 | 2·806 | ·3194 | ·3199 |
| 9·8 | 15 6· | 49·4 | *g* | 17 10· | 57·3 | 13 15· | 41·5 | 4·681 | 4·194 | ·3165 | ·3173 |
| 9·2 | 16 25· | 20·7 | *g* | 18 4· | 28·6 | 14 55· | 12·8 | 3·778 | 3·413 | ·3158 | ·3165 |
| 9·6 | 26 6· | 18·2 | *g* | 28 4· | 26·0 | 24 18· | 10·4 | 4·520 | 4·116 | ·3109 | ·3118 |
| 9·3 | 31 34· | 45·2 | *g* | 34 14· | 52·9 | 29 9· | 37·5 | 6·096 | 5·523 | ·3079 | ·3092 |
| 9·5 | 45 19· | 55·1 | *g* | 48 47· | 62·6 | 42 10· | 47·6 | 7·942 | 7·215 | ·2996 | ·3015 |
| 9·1 | 45 34· | 34·1 | *g* | 48 33· | 41·6 | 42 50· | 26·6 | 6·838 | 6·257 | ·2994 | ·3011 |
| 9·3 | 45 57· | 50·9 | *g* | 49 21· | 58·4 | 42 52· | 43·4 | 7·757 | 7·059 | ·2992 | ·3011 |
| 9·3 | 46 41· | 47·1 | *g* | 50 1· | 54·5 | 43 39· | 39·6 | 7·611 | 6·937 | ·2987 | ·3006 |
| 9·3 | 51 17· | 19·1 | *g* | 54 10· | 26·5 | 48 38· | 11·7 | – 6·625 | – 6·102 | +0·2956 | +0·2974 |
| 8·9 | 54 11· | 25·0 | *g* | 57 17· | 32·3 | 51 20· | 17·6 | 7·130 | 6·562 | ·2936 | ·2955 |
| 9·2 | 59 18· | 43·7 | *g* | 2 3 1· | 50·9 | 55 53· | 36·4 | 8·560 | 7·848 | ·2900 | ·2924 |
| 8·9 | 2 16 26· | 46·7 | *g* Cape 91 | 20 53· | 53·6 | 2 12 20· | 39·7 | 10·247 | 9·437 | ·2767 | ·2800 |
| 9·0 | 19 45· | 46·7 | *g* | 24 19· | 53·5 | 15 32· | 39·8 | 10·530 | 9·710 | ·2740 | ·2775 |
| 9·2 | 28 25· | 16·0 | *g* | 32 26· | 22·6 | 24 41· | 9·3 | 9·288 | 8·666 | ·2666 | ·2698 |
| 9·2 | 38 5· | 20·5 | *g* | 42 30· | 26·9 | 33 58· | 14·0 | 10·234 | 9·565 | ·2578 | ·2616 |
| 7·5 | 39 36· | 16·2 | GS*g* | 43 57· | 22·6 | 35 32· | 9·7 | 10·082 | 9·435 | ·2564 | ·2601 |
| 9·3 | 44 58· | 47·4 | | 50 26· | 53·6 | 39 53· | 41·1 | 12·643 | 11·753 | ·2513 | ·2561 |
| 9·8 | 3 0 24· | 15·9 | *g* | 3 5 18· | 21·7 | 55 47· | 9·9 | 11·435 | 10·767 | ·2359 | ·2406 |
| 7·9 | 3 45· | 22·0 | GS*g* | 8 56· | 27·7 | 58 53· | 16·1 | –12·058 | –11·349 | +0·2325 | +0·2375 |
| 9·2 | 9 50· | 52·3 | | 16 16· | 57·9 | 3 3 48· | 46·6 | 14·951 | 13·988 | ·2260 | ·2324 |
| 8·9 | 18 39· | 54·7 | *g* | 25 27· | 60·0 | 12 16· | 49·2 | 15·816 | 14·827 | ·2164 | ·2233 |
| 9·1 | 25 45· | 6·0 | *g* | 31 0· | 11·1 | 20 46· | 0·7 | 12·262 | 11·656 | ·2084 | ·2140 |
| 8·9 | 32 17· | 16·0 | *g* | 37 58· | 20·9 | 26 53· | 10·9 | 13·306 | 12·650 | ·2008 | ·2070 |
| 9·2 | 42 57· | 5·1 | | 48 31· | 9·7 | 37 38· | 0·3 | 13·074 | 12·492 | ·1882 | ·1945 |
| 8·7 | 44 5· | 0·1 | | 49 32· | 4·7 | 38 52· | – 4·6 | 12·789 | 12·238 | ·1868 | ·1930 |
| 9·2 | 46 34· | 38·7 | | 53 24· | 43·2 | 40 4· | 34·0 | 15·976 | 15·183 | ·1838 | ·1916 |
| 8·1 | 49 31· | 33·0 | | 56 11· | 37·4 | 43 10· | 28·4 | 15·606 | 14·865 | ·1802 | ·1879 |
| 8·4 | 53 2· | 20·8 | *g* | 59 19· | 25·1 | 47 2· | 16·3 | 14·735 | 14·085 | ·1758 | ·1832 |

| | 41—100 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION in R. A. | | in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3h.-7h. | − 86° | | | 86° | | 86° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9·0 | 3 58 24· | 30·3 | g | 4 5 8· | 34·4 | 3 51 57· | 26·0 | −15·809 | −15·113 | +0·1691 | +0·1772 |
| 9·1 | 4 10 55· | 33·6 | g | 18 1· | 37·3 | 4 4 6· | 29·7 | 16·697 | 16·021 | ·1531 | ·1619 |
| 9·4 | 19 16· | 27·9 | | 26 16· | 31·3 | 12 31· | 24·2 | 16·513 | 15·899 | ·1422 | ·1510 |
| 9·0 | 29 42· | 28·9 | | 36 54· | 32·0 | 22 44· | 25·6 | 17·006 | 16·435 | ·1283 | ·1376 |
| 8·8† | 31 39·3 | 39·930 | g | 39 21·7 | 42·942 | 24 12·3 | 36·662 | 18·191 | 17·558 | ·1257 | ·1357 |
| 8·8† | 33 6·4 | 40·311 | g | 40 51·0 | 43·273 | 25 37·0 | 37·091 | 18·286 | 17·657 | ·1237 | ·1338 |
| 9·8† | 34 59·7 | 43·209 | | 42 54·2 | 46·104 | 27 20·8 | 40·050 | 18·672 | 18·034 | ·1211 | ·1315 |
| 7·6† | 36 21·1 | 32·543 | GSg | 43 48·0 | 35·399 | 29 8·2 | 29·437 | 17·598 | 17·034 | ·1193 | ·1290 |
| 8·2† | 44 28·9 | 28·089 | g | 51 50·5 | 30·666 | 37 19·5 | 25·262 | 17·423 | 16·925 | ·1081 | ·1180 |
| 9·8† | 53 21·9 | 22·900 | | 5 0 36·6 | 25·168 | 46 17·6 | 20·382 | 17·183 | 16·753 | ·0958 | ·1056 |
| 9·6 | 59 55· | 44·1 | | 8 10· | 46·1 | 51 52· | 41·8 | −19·563 | −19·072 | +0·0866 | +0·0979 |
| 9·5† | 5 0 30·6 | 47·169 | | 8 54·9 | 49·166 | 52 18·3 | 44·880 | 19·940 | 19·436 | ·0858 | ·0973 |
| 8·2† | 8 19·7 | 32·881 | g | 16 7·5 | 34·610 | 5 0 41·1 | 30·878 | 18·531 | 18·146 | ·0747 | ·0855 |
| 9·5† | 9 6·0 | 0·688 | | 15 40·0 | 2·412 | 2 38·6 | − 1·268 | 15·631 | 15·351 | ·0736 | ·0828 |
| 9·8† | 11 15·9 | 6·552 | g | 18 2·8 | 8·195 | 4 35·8 | 4·670 | 16·142 | 15·858 | ·0705 | ·0800 |
| 10·2† | 12 17·0 | 44·297 | | 20 38·6 | 45·875 | 4 5·0 | 42·423 | 19·881 | 19·473 | ·0691 | ·0807 |
| 9·8† | 13 57·6 | 8·899 | | 20 50·4 | 10·444 | 7 11·2 | 7·110 | 16·386 | 16·110 | ·0667 | ·0763 |
| 9·6 | 21 22· | 4·7 | g | 28 8· | 6·0 | 14 41· | 3·2 | 16·151 | 15·921 | ·0561 | ·0657 |
| 10·2† | 26 15·9 | 31·392 | | 34 6·1 | 32·476 | 18 31·7 | 30·027 | 18·696 | 18·430 | ·0490 | ·0602 |
| 9·5† | 31 32·8 | 43·473 | | 39 58·2 | 44·354 | 23 13·2 | 42·288 | 20·108 | 19·847 | ·0414 | ·0534 |
| 10·2† | 31 37·2 | 21·792 | | 39 4·4 | 22·689 | 24 14·6 | 20·627 | −17·802 | −17·593 | +0·0413 | +0·0519 |
| 10·2† | 33 49·4 | 44·655 | | 42 18·7 | 45·453 | 25 25·3 | 43·551 | 20·276 | 20·030 | ·0381 | ·0502 |
| 10·2† | 34 16·3 | 35·265 | | 42 18·7 | 36·055 | 26 18·7 | 34·185 | 19·209 | 18·989 | ·0374 | ·0489 |
| 10·2† | 35 50·3 | 36·998 | | 43 57·8 | 37·729 | 27 47·4 | 35·973 | 19·417 | 19·204 | ·0352 | ·0468 |
| 9·8† | 42 10·7 | 51·873 | | 51 4·0 | 52·361 | 33 21·4 | 51·063 | 21·260 | 21·062 | ·0260 | ·0388 |
| 9·7 | 42 23· | 12·2 | | 49 30· | 12·7 | 35 19· | 11·4 | 17·015 | 16·885 | ·0257 | ·0359 |
| 10·2† | 48 31·1 | 47·739 | | 57 11·4 | 48·000 | 39 53·2 | 47·163 | 20·778 | 20·642 | ·0167 | ·0293 |
| 9·7 | 48 44· | 12·2 | | 55 51· | 12·5 | 41 39· | 11·7 | 17·050 | 16·963 | ·0164 | ·0267 |
| 10·2† | 52 52·6 | 56·626 | | 6 2 2·1 | 56·718 | 43 44·9 | 56·199 | 21·957 | 21·844 | ·0104 | ·0237 |
| 9·5 | 54 5· | 3·1 | | 0 52· | 3·2 | 47 18· | 2·8 | 16·289 | 16·241 | ·0086 | ·0185 |
| 9·5† | 58 53·7 | 50·825 | g | 7 43·2 | 50·704 | 50 4·4 | 50·624 | −21·188 | −21·147 | +0·0016 | +0·0145 |
| 8·2 | 6 4 7· | 26·2 | | 11 46· | 25·9 | 56 27· | 26·2 | 18·394 | 18·392 | − ·0058 | + ·0052 |
| 9·9 | 9 12· | 1·6 | | 15 55· | 1·1 | 6 2 28· | 1·8 | 16·160 | 16·188 | ·0134 | − ·0036 |
| 10·0 | 21 54· | 8·9 | | 28 50· | 8·0 | 14 55· | 9·6 | 16·695 | 16·801 | ·0319 | ·0217 |
| 9·1 | 22 49· | 37·6 | | 30 54· | 36·6 | 14 40· | 38·3 | 19·497 | 19·639 | ·0332 | ·0214 |
| 10·2† | 23 24·6 | 56·884 | | 32 28·5 | 55·867 | 14 15·3 | 57·569 | 21·873 | 22·046 | ·0341 | ·0208 |
| 7·8 | 26 14· | 3·0 | g | 32 56· | 1·9 | 19 28· | 3·8 | 16·163 | 16·283 | ·0382 | ·0284 |
| 9·7 | 28 23· | 56·4 | | 37 23· | 55·2 | 19 16· | 57·3 | 21·746 | 21·969 | ·0413 | ·0281 |
| 8·8† | 29 12·2 | 52·895 | g | 38 0·5 | 51·674 | 20 17·5 | 53·796 | 21·270 | 21·487 | ·0425 | ·0295 |
| 8·7 | 29 56· | 21·6 | g | 37 18· | 20·4 | 22 30· | 22·6 | 17·765 | 17·936 | ·0435 | ·0328 |
| 8·9 | 32 37· | 14·8 | g | 39 42· | 13·5 | 25 27· | 15·9 | −17·101 | −17·279 | −0·0474 | −0·0370 |
| 10·2† | 32 39·4 | 56·927 | | 41 39·4 | 55·577 | 23 32·4 | 57·949 | 21·756 | 22·015 | ·0475 | ·0343 |
| 9·4 | 33 55· | 9·7 | g | 40 48· | 8·3 | 26 57· | 10·8 | 16·637 | 16·810 | ·0493 | ·0392 |
| 9·9 | 34 19· | 41·5 | g | 42 30· | 40·1 | 26 1· | 42·6 | 19·798 | 20·033 | ·0499 | ·0379 |
| 8·8 | 45 47· | 42·5 | g | 53 55· | 40·7 | 37 30· | 44·0 | 19·711 | 20·036 | ·0663 | ·0544 |
| 10·5 | 53 8· | 48·1 | | 7 1 28· | 46·0 | 44 37· | 49·9 | 20·214 | 20·634 | ·0768 | ·0647 |
| 10·3 | 53 55· | 0·4 | | 0 20· | − 1·7 | 47 23· | 2·2 | 15·551 | 15·811 | ·0779 | ·0686 |
| 9·9 | 59 45· | 40·0 | g | 7 37· | 37·7 | 51 42· | 42·0 | 19·106 | 19·524 | ·0862 | ·0748 |
| 10·0 | 7 0 22· | 44·1 | | 8 25· | 41·8 | 52 8· | 46·1 | 19·556 | 19·994 | ·0870 | ·0754 |
| 10·0 | 2 38· | 44·9 | g | 10 42· | 42·5 | 54 22· | 47·0 | 19·587 | 20·047 | ·0902 | ·0785 |
| 10·3 | 4 21· | 55·8 | | 12 56· | 53·3 | 55 32· | 58·0 | −20·879 | −21·417 | −0·0926 | −0·0802 |
| 10·5 | 5 2· | 0·5 | | 11 21· | − 2·0 | 58 35· | 2·7 | 15·321 | 15·635 | ·0936 | ·0845 |
| 10·0 | 7 7· | 55·9 | | 15 40· | 53·3 | 58 20· | 58·2 | 20·808 | 21·364 | ·0965 | ·0841 |
| 10·2 | 8 42· | 58·4 | | 17 21· | 55·8 | 59 47· | 60·7 | 21·083 | 21·668 | ·0987 | ·0862 |
| 10·4 | 12 7· | 4·7 | | 18 29· | 2·0 | 7 5 36· | 7·2 | 15·472 | 15·832 | ·1034 | ·0944 |
| 10·5 | 13 22· | 26·2 | | 20 29· | 23·4 | 6 4· | 28·7 | 17·307 | 17·753 | ·1052 | ·0950 |
| 10·6 | 13 25· | 51·7 | | 21 39· | 48·9 | 4 56· | 54·2 | 20·071 | 20·652 | ·1052 | ·0934 |
| 10·0 | 13 54· | 2·1 | | 20 10· | − 0·7 | 7 29· | 4·6 | 15·222 | 15·580 | ·1059 | ·0970 |
| 10·3 | 15 15· | 13·2 | | 21 52· | 10·4 | 8 28· | 15·8 | 16·082 | 16·489 | ·1078 | ·0984 |
| 10·0 | 15 47· | 43·0 | g | 23 34· | 40·2 | 7 46· | 45·6 | 18·970 | 19·517 | ·1085 | ·0974 |



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| 101—160 Equ. 1875. | | | | 1850. | | 1900. | | PRECESSION in R. A. | | in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mag. | 7ʰ·–9ʰ. h m s | – 86° ′ | | h m s | 86° ′ | h m s | 86° ′ | 1875. s | 1900. s | 1875. ′ | 1900. ′ |
| 10·2 | 7 17 28· | 20·2 | | 7 24 18· | 17·3 | 7 10 27· | 22·9 | –16·628 | –17·077 | –0·1108 | –0·1011 |
| 10·1 | 27 35· | 32·8 | | 34 45· | 29·6 | 20 11· | 35·8 | 17·485 | 18·045 | ·1246 | ·1146 |
| 10·2 | 28 10· | 22·4 | | 34 56· | 19·1 | 21 12· | 25·4 | 16·479 | 16·996 | ·1254 | ·1159 |
| 10·0 | 28 11· | 30·5 | | 35 15· | 27·2 | 20 53· | 33·5 | 17·237 | 17·785 | ·1254 | ·1155 |
| 6·8 | 30 6· | 49·1 | GS*g* | 37 56· | 45·8 | 21 59· | 52·2 | 19·144 | 19·826 | ·1280 | ·1170 |
| 8·8 | 31 21· | 43·2 | *g* | 38 54· | 39·8 | 23 32· | 46·3 | 18·427 | 19·070 | ·1297 | ·1191 |
| 10·2 | 33 15· | 27·6 | | 40 7· | 24·2 | 26 8· | 30·8 | 16·775 | 17·337 | ·1323 | ·1227 |
| 9·8 | 33 20· | 6·7 | | 39 29· | 3·3 | 27 0· | 9·9 | 14·989 | 15·450 | ·1324 | ·1238 |
| 9·8 | 33 23· | 47·8 | *g* | 41 6· | 44·4 | 25 23· | 51·0 | 18·860 | 19·552 | ·1324 | ·1216 |
| 10·5 | 34 22· | 45·8 | | 41 58· | 42·3 | 26 29· | 49·0 | 18·593 | 19·272 | ·1338 | ·1231 |
| 10·6 | 36 44· | 52·9 | | 44 37· | 49·3 | 28 32· | 56·2 | –19·315 | –20·054 | –0·1369 | –0·1259 |
| 10·2 | 39 55· | 23·6 | | 46 32· | 20·0 | 33 4· | 27·0 | 16·154 | 16·723 | ·1411 | ·1320 |
| 10·2 | 42 0· | 11·5 | | 48 10· | 7·8 | 35 37· | 15·0 | 15·056 | 15·573 | ·1439 | ·1354 |
| 10·6 | 42 59· | 35·8 | | 50 0· | 32·1 | 35 41· | 39·3 | 17·178 | 17·835 | ·1452 | ·1355 |
| 10·0 | 43 40· | 25·9 | | 50 18· | 22·1 | 36 47· | 29·4 | 16·211 | 16·807 | ·1461 | ·1370 |
| 10·2 | 44 29· | 10·6 | | 50 35· | 6·8 | 38 10· | 14·2 | 14·889 | 15·414 | ·1471 | ·1388 |
| 10·4 | 52 56· | 38·4 | | 59 52· | 34·3 | 45 42· | 42·2 | 16·990 | 17·710 | ·1581 | ·1487 |
| 10·5 | 54 27· | 32·4 | | 8 1 7· | 28·3 | 47 30· | 36·3 | 16·340 | 17·027 | ·1601 | ·1511 |
| 9·6 | 56 17· | 34·2 | *g* | 2 59· | 30·0 | 49 18· | 38·1 | 16·424 | 17·126 | ·1624 | ·1534 |
| 10·0 | 56 21· | 17·3 | | 2 27· | 13·1 | 50 0· | 21·3 | 14·937 | 15·541 | ·1625 | ·1543 |
| 10·6 | 8 0 22· | 47·2 | | 7 30· | 42·9 | 52 53· | 51·3 | –17·532 | –18·365 | –0·1676 | –0·1580 |
| 10·2 | 6 42· | 36·9 | | 13 17· | 32·4 | 59 48· | 41·2 | 16·164 | 16·935 | ·1755 | ·1668 |
| 9·1 | 9 25· | 26·6 | *g* | 15 34· | 22·0 | 8 2 59· | 31·0 | 15·098 | 15·802 | ·1789 | ·1708 |
| 10·0 | 12 4· | 8·3 | | 17 35· | 3·7 | 6 18· | 12·8 | 13·547 | 14·135 | ·1821 | ·1750 |
| 9·7 | 14 18· | 51·8 | *g* | 21 18· | 47·1 | 6 55· | 56·3 | 17·254 | 18·185 | ·1848 | ·1758 |
| 10·6 | 14 33· | 16·2 | | 20 15· | 11·5 | 8 35· | 20·7 | 14·002 | 14·647 | ·1852 | ·1778 |
| 9·5 | 16 19· | 13·2 | | 21 53· | 8·4 | 10 29· | 17·8 | 13·688 | 14·315 | ·1873 | ·1802 |
| 10·0 | 17 55· | 56·8 | | 25 2· | 52·0 | 10 23· | 61·4 | 17·589 | 18·586 | ·1892 | ·1800 |
| 9·6 | 20 42· | 25·0 | | 26 33· | 20·1 | 14 34· | 29·7 | 14·379 | 15·097 | ·1925 | ·1851 |
| 9·7 | 21 14· | 6·4 | | 26 31· | 1·5 | 15 42· | 11·1 | 12·959 | 13·562 | ·1932 | ·1865 |
| 10·6 | 22 26· | 38·1 | | 28 41· | 33·1 | 15 50· | 42·9 | –15·414 | –16·246 | –0·1946 | –0·1867 |
| 9·1 | 22 28· | 14·2 | *g* | 27 56· | 9·3 | 16 44· | 19·0 | 13·451 | 14·106 | ·1946 | ·1878 |
| 10·2 | 28 10· | 53·6 | | 34 53· | 48·5 | 21 3· | 58·5 | 16·589 | 17·582 | ·2013 | ·1929 |
| 10·5 | 29 42· | 19·3 | | 35 10· | 14·1 | 23 57· | 24·3 | 13·443 | 14·144 | ·2031 | ·1964 |
| 10·2 | 30 58· | 14·8 | | 36 16· | 9·6 | 25 24· | 19·8 | 13·044 | 13·713 | ·2046 | ·1981 |
| 10·6 | 35 52· | 33·1 | | 41 37· | 27·8 | 29 48· | 38·3 | 14·179 | 14·995 | ·2102 | ·2032 |
| 8·9 | 42 21· | 22·4 | *g* | 47 36· | 16·9 | 36 48· | 27·8 | 12·946 | 13·689 | ·2175 | ·2112 |
| 6·8 | 44 32· | 8·0 | GS*g* | 49 20· | 2·4 | 39 28· | 13·4 | 11·826 | 12·471 | ·2199 | ·2142 |
| 10·2 | 46 59· | 11·9 | | 51 49· | 6·3 | 41 52· | 17·4 | 11·940 | 12·619 | ·2226 | ·2169 |
| 10·5 | 47 8· | 16·1 | | 52 5· | 10·5 | 41 54· | 21·6 | 12·213 | 12·913 | ·2227 | ·2169 |
| 9·8 | 48 25· | 18·9 | | 53 24· | 13·2 | 43 8· | 24·4 | –12·329 | –13·046 | –0·2241 | –0·2183 |
| 9·6 | 49 10· | 34·4 | | 54 36· | 28·7 | 43 24· | 39·9 | 13·444 | 14·280 | ·2249 | ·2186 |
| 10·0 | 50 17· | 50·1 | | 56 14· | 44·4 | 43 56· | 55·7 | 14·734 | 15·733 | ·2261 | ·2192 |
| 9·7 | 50 18· | 42·3 | *g* | 55 58· | 36·6 | 44 16· | 47·9 | 14·029 | 14·945 | ·2261 | ·2195 |
| 10·3 | 57 27· | 14·1 | | 9 2 5· | 8·2 | 52 32· | 19·9 | 11·453 | 12·144 | ·2337 | ·2285 |
| 9·5 | 57 35· | 22·2 | *g* | 2 26· | 16·3 | 52 26· | 28·0 | 11·986 | 12·733 | ·2338 | ·2284 |
| 10·2 | 58 12· | 30·1 | | 3 15· | 24·2 | 52 49· | 35·9 | 12·509 | 13·321 | ·2345 | ·2288 |
| 9·6 | 9 1 55· | 42·4 | | 7 15· | 36·4 | 56 13· | 48·3 | 13·219 | 14·138 | ·2383 | ·2324 |
| 10·0 | 2 29· | 41·7 | | 7 46· | 35·7 | 56 50· | 47·6 | 13·120 | 14·031 | ·2389 | ·2330 |
| 10·5 | 2 31· | 18·1 | | 7 7· | 12·1 | 57 37· | 24·0 | 11·393 | 12·107 | ·2389 | ·2338 |
| 10·4 | 2 54· | 27·6 | | 7 45· | 21·6 | 57 44· | 33·5 | –12·014 | –12·800 | –0·2393 | –0·2340 |
| 8·7 | 5 43· | 44·8 | *g* | 11 0· | 38·7 | 9 0 3· | 50·8 | 13·140 | 14·082 | ·2421 | ·2364 |
| 10·2 | 9 21· | 9·0 | | 13 33· | 2·8 | 4 53· | 15·1 | 10·391 | 11·045 | ·2458 | ·2413 |
| 9·9 | 10 20· | 5·9 | | 14 26· | – 0·3 | 5 58· | 12·0 | 10·150 | 10·784 | ·2468 | ·2424 |
| 8·7 | 16 41· | 3·6 | *g* | 20 34· | – 2·8 | 12 33· | 9·9 | 9·619 | 10·236 | ·2529 | ·2489 |
| 9·9 | 16 48· | 40·8 | | 21 37· | 34·4 | 11 37· | 47·1 | 11·987 | 12·882 | ·2530 | ·2480 |
| 9·6 | 18 28· | 13·6 | | 22 32· | 7·2 | 14 8· | 19·9 | 10·062 | 10·735 | ·2546 | ·2504 |
| 9·7 | 18 56· | 21·2 | | 23 10· | 14·8 | 14 25· | 27·5 | 10·486 | 11·210 | ·2550 | ·2507 |
| 10·5 | 20 21· | 45·6 | | 25 12· | 39·1 | 15 8· | 51·9 | 12·081 | 13·009 | ·2564 | ·2514 |
| 10·1 | 21 37· | 25·1 | | 25 52· | 18·6 | 17 4· | 31·5 | 10·542 | 11·293 | ·2575 | ·2532 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 9·5† | 9 29 20·2 | 59·648 | g | 9 34 19·8 | 52·978 | 9 23 54·8 | 66·202 | −12·486 | −13·561 | −0·2646 | −0·2596 |
| 10·1 | 30 3· | 17·7 | | 33 52· | 11·0 | 25 57· | 24·3 | 9·493 | 10·176 | ·2652 | ·2615 |
| 10·2 | 31 0· | 3·4 | | 34 30· | − 3·3 | 27 16· | 10·0 | 8·667 | 9·261 | ·2660 | ·2627 |
| 10·2† | 32 36·7 | 54·276 | g | 37 19·0 | 47·538 | 27 30·6 | 60·908 | 11·754 | 12·754 | ·2675 | ·2629 |
| 10·5 | 35 16· | 55·6 | | 39 55· | 48·8 | 30 13· | 62·3 | 11·630 | 12·639 | ·2698 | ·2653 |
| 9·3 | 38 21· | 7·7 | g | 41 43· | 0·9 | 34 44· | 14·5 | 8·375 | 8·980 | ·2724 | ·2693 |
| 9·6 | 38 33· | 37·7 | | 42 35· | 30·8 | 34 12· | 44·5 | 10·062 | 10·871 | ·2726 | ·2688 |
| 9·8† | 41 19·0 | 55·393 | g | 45 44·4 | 48·474 | 36 30·0 | 62·216 | 11·078 | 12·062 | ·2749 | ·2708 |
| 10·0 | 43 23· | 52·8 | | 47 39· | 45·8 | 38 44· | 59·7 | 10·698 | 11·649 | ·2766 | ·2727 |
| 8·4 | 44 51· | 36·5 | g | 48 39· | 29·5 | 40 45· | 43·4 | 9·473 | 10·258 | ·2778 | ·2744 |
| 9·9 | 48 35· | 46·4 | | 52 30· | 39·3 | 44 20· | 53·4 | − 9·793 | −10·656 | −0·2808 | −0·2773 |
| 10·1 | 50 30· | 9·5 | | 53 33· | 2·4 | 47 13· | 16·5 | 7·589 | 8·169 | ·2823 | ·2797 |
| 10·3 | 50 55· | 20·7 | | 54 10· | 13·6 | 47 24· | 27·7 | 8·103 | 8·749 | ·2826 | ·2798 |
| 7·9† | 52 39·8 | 39·865 | g | 56 16·5 | 32·731 | 48 44·5 | 46·926 | 9·027 | 9·812 | ·2840 | ·2809 |
| 10·4 | 54 43· | 38·6 | | 58 14· | 31·4 | 50 54· | 45·7 | 8·777 | 9·544 | ·2855 | ·2826 |
| 10·0 | 54 54· | 14·6 | | 57 54· | 7·4 | 51 39· | 21·7 | 7·498 | 8·095 | ·2857 | ·2831 |
| 9·6 | 56 28· | 19·0 | | 59 31· | 11·8 | 53 11· | 26·1 | 7·586 | 8·204 | ·2869 | ·2843 |
| 10·3 | 58 17· | 5·4 | | 10 1 2· | − 1·8 | 55 20· | 12·6 | 6·835 | 7·371 | ·2882 | ·2860 |
| 9·0 | 10 1 21· | 6·0 | g | 4 0· | − 1·3 | 58 29· | 13·2 | 6·633 | 7·160 | ·2904 | ·2883 |
| 10·5 | 2 59· | 41·9 | | 6 16· | 34·6 | 59 24· | 49·2 | 8·253 | 9·012 | ·2916 | ·2890 |
| 10·4 | 4 43· | 13·5 | | 7 24· | 6·2 | 10 1 49· | 20·8 | − 6·696 | − 7·252 | −0·2929 | −0·2907 |
| 10·4 | 4 55· | 55·7 | | 8 28· | 48·3 | 1 1· | 63·0 | 8·919 | 9·798 | ·2930 | ·2902 |
| 9·9 | 5 4· | 37·8 | | 8 12· | 30·4 | 1 39· | 45·1 | 7·842 | 8·557 | ·2931 | ·2906 |
| 10·2† | 6 59·8 | 30·676 | | 9 55·1 | 23·290 | 3 49·1 | 38·008 | 7·308 | 7·960 | ·2944 | ·2922 |
| 10·0 | 8 32· | 41·5 | | 11 37· | 34·1 | 5 10· | 48·9 | 7·738 | 8·467 | ·2955 | ·2931 |
| 10·3 | 9 20· | 22·6 | | 12 1· | 15·2 | 6 24· | 30·0 | 6·731 | 7·323 | ·2960 | ·2940 |
| 10·5 | 10 15· | 24·0 | | 12 56· | 16·6 | 7 20· | 31·4 | 6·720 | 7·314 | ·2966 | ·2946 |
| 9·7 | 10 27· | 5·6 | | 12 50· | − 1·8 | 7 52· | 13·0 | 5·935 | 6·428 | ·2968 | ·2950 |
| 8·3 | 11 25· | 18·2 | GSg | 13 58· | 10·7 | 8 39· | 25·6 | 6·369 | 6·924 | ·2974 | ·2955 |
| 10·4 | 11 26· | 48·9 | | 14 34· | 41·4 | 7 59· | 56·3 | 7·888 | 8·662 | ·2974 | ·2951 |
| 10·5 | 14 16· | 7·3 | | 16 33· | − 0·2 | 11 47· | 14·8 | − 5·708 | − 6·196 | −0·2993 | −0·2976 |
| 10·5 | 14 32· | 41·8 | | 17 24· | 34·3 | 11 23· | 49·3 | 7·215 | 7·914 | ·2995 | ·2974 |
| 10·1 | 26 15· | 30·1 | | 28 29· | 22·4 | 23 48· | 37·7 | 5·626 | 6·174 | ·3066 | ·3052 |
| 10·2† | 28 48·0 | 16·140 | | 30 44·4 | 8·424 | 26 40·6 | 23·828 | 4·872 | 5·336 | ·3081 | ·3069 |
| 10·4 | 30 19· | 43·6 | | 32 38· | 35·9 | 27 45· | 51·3 | 5·844 | 6·458 | ·3090 | ·3075 |
| 10·2 | 30 32· | 1·9 | | 32 14· | − 5·8 | 28 41· | 9·6 | 4·262 | 4·654 | ·3091 | ·3080 |
| 10·2 | 33 18· | 13·3 | | 35 3· | 5·5 | 31 23· | 21·1 | 4·405 | 4·834 | ·3106 | ·3095 |
| 10·1 | 33 46· | 35·8 | | 35 49· | 28·0 | 31 30· | 43·6 | 5·189 | 5·730 | ·3109 | ·3096 |
| 10·2† | 33 53·2 | 15·698 | | 35 39·0 | 7·914 | 31 57·0 | 23·458 | 4·436 | 4·871 | ·3109 | ·3098 |
| 10·2† | 35 30·9 | 49·953 | | 37 44·7 | 42·143 | 33 2·5 | 57·732 | 5·633 | 6·257 | ·3118 | ·3104 |
| 10·2† | 36 0·3 | 37·079 | | 38 0·1 | 29·265 | 33 47·9 | 44·865 | − 5·035 | − 5·569 | −0·3120 | −0·3108 |
| 10·2† | 36 19·3 | 30·794 | | 38 12·7 | 22·977 | 34 14·1 | 38·585 | 4·763 | 5·258 | ·3122 | ·3111 |
| 10·3 | 37 54· | 56·9 | | 40 10· | 49·1 | 35 23· | 64·7 | 5·720 | 6·380 | ·3130 | ·3117 |
| 10·4 | 39 0· | 48·2 | | 41 4· | 40·3 | 36 43· | 56·0 | 5·213 | 5·792 | ·3136 | ·3124 |
| 10·0 | 40 18· | 29·0 | | 42 1· | 21·1 | 38 24· | 36·8 | 4·342 | 4·801 | ·3142 | ·3132 |
| 9·9 | 45 8· | 10·1 | g | 46 27· | 2·2 | 43 40· | 18·0 | 3·333 | 3·686 | ·3166 | ·3158 |
| 9·9 | 45 23· | 27·4 | | 46 54· | 19·5 | 43 42· | 35·3 | 3·834 | 4·256 | ·3167 | ·3159 |
| 9·8† | 46 35·0 | 10·073 | g | 47 51·3 | 2·134 | 45 10·5 | 17·996 | 3·213 | 3·557 | ·3172 | ·3166 |
| 10·0 | 46 59· | 42·4 | | 48 38· | 34·5 | 45 8· | 50·3 | 4·204 | 4·693 | ·3174 | ·3165 |
| 8·2† | 47 20·9 | 14·483 | GSg | 48 38·6 | 6·535 | 45 54·7 | 22·415 | 3·272 | 3·637 | ·3176 | ·3169 |
| 9·4 | 49 0· | 0·9 | g | 50 6· | − 7·1 | 47 47· | 8·8 | − 2·778 | − 3·095 | −0·3183 | −0·3177 |
| 9·5† | 54 9·9 | 45·375 | g | 55 35·2 | 37·354 | 52 34·2 | 53·380 | 3·611 | 4·061 | ·3205 | ·3198 |
| 9·5† | 59 1·5 | 36·821 | g | 11 0 9·0 | 28·752 | 57 45·2 | 44·878 | 2·868 | 3·239 | ·3225 | ·3220 |
| 10·3 | 11 0 13· | 55·5 | | 1 31· | 47·4 | 58 44· | 63·6 | 3·346 | 3·803 | ·3229 | ·3223 |
| 10·2† | 0 42·3 | 39·629 | | 1 47·9 | 31·546 | 59 28·1 | 47·701 | 2·790 | 3·160 | ·3231 | ·3226 |
| 10·1 | 1 32· | 29·1 | | 2 29· | 21·0 | 11 0 28· | 37·2 | 2·419 | 2·741 | ·3234 | ·3230 |
| 10·1 | 2 0· | 43·7 | | 3 5· | 35·6 | 0 46· | 51·8 | 2·780 | 3·162 | ·3236 | ·3231 |
| 9·6† | 2 2·3 | 35·900 | g | 3 2·3 | 27·805 | 0 54·1 | 43·985 | 2·556 | 2·900 | ·3236 | ·3232 |
| 10·2 | 4 17· | 38·9 | | 5 14· | 30·8 | 3 12· | 47·0 | 2·423 | 2·762 | ·3244 | ·3240 |
| 9·9 | 4 42· | 34·1 | | 5 35· | 26·0 | 3 42· | 42·2 | 2·252 | 2·571 | ·3245 | ·3242 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11h·–12h· | −86° | | | 86° | | 86° | in R. A. | | in Decl. | |
| | | | | | | | | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9·8 | 11 6 10· | 31·5 | | 11 6 58· | 23·4 | 11 5 15· | 39·6 | − 2·052 | − 2·347 | −0·3251 | −0·3247 |
| 10·0 | 7 3· | 58·5 | | 8 6· | 50·4 | 5 50· | 66·6 | 2·721 | 3·128 | ·3254 | ·3249 |
| 9·5† | 9 49·1 | 41·566 | | 10 34·5 | 33·407 | 8 56·5 | 49·719 | 1·953 | 2·258 | ·3262 | ·3259 |
| 10·0 | 10 20· | 41·2 | | 11 4· | 33·0 | 9 29· | 49·4 | 1·893 | 2·194 | ·3264 | ·3261 |
| 10·3 | 21 6· | 33·7 | | 21 21· | 25·5 | 20 46· | 41·9 | 0·687 | 0·875 | ·3294 | ·3293 |
| 10·2† | 26 21·2 | 42·590 | | 26 27·5 | 34·323 | 26 10·9 | 50·855 | − 0·330 | − 0·496 | ·3306 | ·3306 |
| 9·5 | 29 30· | 18·0 | g | 29 21· | 9·7 | 29 37·0 | 26·3 | + 0·329 | + 0·234 | ·3313 | ·3313 |
| 9·8† | 31 16·1 | 45·889 | | 31 11·7 | 37·598 | 31 17·3 | 54·180 | 0·115 | − 0·014 | ·3316 | ·3316 |
| 9·8 | 32 29· | 16·5 | | 32 13· | 8·2 | 32 44· | 24·8 | 0·614 | + 0·541 | ·3318 | ·3318 |
| 10·1 | 32 33· | 55·0 | | 32 29· | 46·7 | 32 34· | 63·3 | 0·107 | − 0·030 | ·3318 | ·3318 |
| 9·7 | 35 10· | 32·8 | | 34 52· | 24·5 | 35 26· | 41·1 | + 0·676 | + 0·604 | −0·3323 | −0·3323 |
| 8·9 | 35 29· | 34·6 | g | 35 11· | 26·3 | 35 45· | 42·9 | 0·686 | 0·613 | ·3323 | ·3323 |
| 10·3 | 36 18· | 39·0 | | 35 59· | 30·7 | 36 35· | 47·3 | 0·714 | 0·643 | ·3324 | ·3325 |
| 10·1 | 41 19· | 3·8 | | 40 42· | − 4·5 | 41 56· | 12·1 | 1·490 | 1·487 | ·3331 | ·3330 |
| 10·1 | 48 36· | 35·3 | | 47 48· | 47·0 | 49 25· | 43·6 | 1·957 | 1·994 | ·3338 | ·3338 |
| 9·7 | 49 26· | 15·1 | | 48 33· | 6·8 | 50 20· | 23·4 | 2·132 | 2·179 | ·3339 | ·3339 |
| 9·9 | 50 3· | 5·1 | | 49 8· | − 3·2 | 50 59· | 13·4 | 2·224 | 2·276 | ·3339 | ·3339 |
| 9·4 | 51 8· | 42·5 | g | 50 14· | 34·2 | 52 3· | 50·9 | 2·173 | 2·231 | ·3340 | ·3340 |
| 9·6 | 51 40· | 14·1 | | 50 42· | 5·8 | 52 39· | 22·5 | 2·334 | 2·396 | ·3340 | ·3340 |
| 9·1 | 52 52· | 5·9 | g | 51 51· | − 2·5 | 53 54· | 14·3 | 2·462 | 2·532 | ·3341 | ·3341 |
| 10·0 | 55 22· | 22·0 | | 54 17· | 13·6 | 56 29· | 30·4 | + 2·645 | + 2·737 | −0·3342 | −0·3342 |
| 10·1 | 56 22· | 27·3 | | 55 15· | 18·9 | 57 31· | 35·7 | 2·730 | 2·812 | ·3342 | ·3342 |
| 9·6 | 59 32· | 45·3 | g | 58 18· | 36·9 | 12 0 49· | 53·7 | 3·024 | 3·160 | ·3342 | ·3342 |
| 9·3 | 59 59· | 3·8 | g | 58 44· | − 4·6 | 1 17· | 12·2 | 3·071 | 3·186 | ·3342 | ·3342 |
| 10·3 | 12 1 7· | 34·6 | | 59 49· | 26·2 | 2 28· | 43·0 | 3·181 | 3·324 | ·3342 | ·3342 |
| 9·9 | 3 33· | 9·9 | | 12 2 10· | 1·5 | 4 59· | 18·3 | 3·381 | 3·523 | ·3342 | ·3341 |
| 10·2 | 4 6· | 10·4 | | 2 42· | 2·0 | 5 34· | 18·8 | 3·430 | 3·577 | ·3342 | ·3341 |
| 10·0 | 4 34· | 1·3 | | 3 9· | − 7·1 | 6 2· | 9·7 | 3·455 | 3·597 | ·3342 | ·3341 |
| 10·1 | 4 50· | 56·4 | | 3 22· | 48·0 | 6 22· | 64·8 | 3·599 | 3·801 | ·3342 | ·3341 |
| 9·6 | 5 43· | 37·7 | | 4 14· | 29·3 | 7 16· | 46·1 | 3·638 | 3·823 | ·3341 | ·3340 |
| 9·8 | 7 30· | 37·4 | | 5 57· | 29·0 | 9 8· | 45·8 | + 3·814 | + 4·014 | −0·3341 | −0·3339 |
| 9·8 | 7 40· | 31·3 | | 6 7· | 22·9 | 9 18· | 39·7 | 3·808 | 4·002 | ·3341 | ·3339 |
| 10·0 | 15 19· | 30·1 | | 13 29· | 21·8 | 17 15· | 38·4 | 4·533 | 4·785 | ·3335 | ·3332 |
| 10·3 | 15 27· | 18·2 | | 13 38· | 9·9 | 17 22· | 26·5 | 4·466 | 4·700 | ·3335 | ·3332 |
| 9·7 | 16 5· | 12·8 | | 14 15· | 4·5 | 18 0· | 21·1 | 4·488 | 4·718 | ·3334 | ·3332 |
| 10·3 | 16 45· | 39·2 | | 14 50· | 30·9 | 18 47· | 47·5 | 4·742 | 5·025 | ·3334 | ·3331 |
| 10·4 | 19 48· | 29·2 | | 17 48· | 20·9 | 21 55· | 37·5 | 4·951 | 5·237 | ·3330 | ·3327 |
| 10·1 | 19 58· | 44·8 | | 17 54· | 36·5 | 22 10· | 53·1 | 5·119 | 5·445 | ·3330 | ·3326 |
| 10·1 | 20 16· | 55·9 | | 18 8· | 47·6 | 22 32· | 64·2 | 5·275 | 5·636 | ·3329 | ·3326 |
| 10·3 | 20 20· | 7·0 | | 18 22· | − 1·3 | 22 23· | 15·3 | 4·817 | 5·064 | ·3329 | ·3326 |
| 9·9 | 23 29· | 22·9 | | 21 22· | 14·6 | 25 44· | 31·2 | + 5·235 | + 5·536 | −0·3325 | −0·3321 |
| 9·8 | 25 27· | 20·0 | | 23 16· | 11·7 | 27 45· | 28·3 | 5·384 | 5·691 | ·3322 | ·3318 |
| 10·1 | 26 8· | 22·0 | | 23 55· | 13·7 | 28 29· | 30·3 | 5·468 | 5·786 | ·3321 | ·3316 |
| 9·8 | 28 42· | 11·5 | | 26 26· | 3·2 | 31 5· | 19·8 | 5·581 | 5·891 | ·3316 | ·3311 |
| 10·2 | 29 21· | 33·9 | | 26 57· | 25·6 | 31 53· | 42·2 | 5·917 | 6·291 | ·3315 | ·3310 |
| 10·1 | 34 47· | 30·1 | | 32 12· | 21·8 | 37 32· | 38·4 | 6·379 | 6·785 | ·3304 | ·3297 |
| 10·2 | 36 11· | 39·3 | | 33 29· | 31·0 | 39 3· | 47·5 | 6·669 | 7·117 | ·3301 | ·3294 |
| 9·9 | 36 36· | 46·3 | | 33 50· | 38·0 | 39 33· | 54·5 | 6·842 | 7·323 | ·3300 | ·3292 |
| 9·7 | 38 13· | 12·5 | | 35 37· | 4·3 | 40 58· | 20·7 | 6·420 | 6·794 | ·3296 | ·3289 |
| 10·2 | 38 50· | 3·1 | | 36 16· | − 5·1 | 41 33· | 11·3 | 6·339 | 6·690 | ·3294 | ·3287 |
| 10·4 | 41 42· | 29·9 | | 38 52· | 21·7 | 44 43· | 38·1 | + 7·026 | + 7·481 | −0·3287 | −0·3279 |
| 10·0 | 42 4· | 42·8 | | 39 7· | 34·6 | 45 13· | 51·0 | 7·322 | 7·834 | ·3286 | ·3277 |
| 9·2 | 42 16· | 59·2 | g | 39 10· | 51·0 | 45 37· | 67·4 | 7·730 | 8·331 | ·3286 | ·3276 |
| 9·7 | 44 33· | 32·2 | | 41 35· | 24·0 | 47 42· | 40·4 | 7·339 | 7·825 | ·3280 | ·3270 |
| 9·4 | 46 35· | 15·3 | g | 43 40· | 7·1 | 49 40· | 23·5 | 7·195 | 7·631 | ·3273 | ·3264 |
| 10·0 | 46 50· | 5·1 | | 43 59· | − 3·1 | 49 51· | 13·3 | 7·037 | 7·441 | ·3273 | ·3263 |
| 9·2 | 47 48· | 46·0 | g | 44 35· | 37·8 | 51 14· | 54·2 | 7·972 | 8·551 | ·3270 | ·3259 |
| 8·7 | 48 58· | 32·9 | g | 45 50· | 24·7 | 52 19· | 41·1 | 7·772 | 8·296 | ·3266 | ·3255 |
| 10·2 | 49 4· | 3·3 | | 46 9· | − 4·9 | 52 9· | 11·5 | 7·191 | 7·603 | ·3266 | ·3256 |
| 9·7 | 49 7· | 10·3 | | 46 9· | 2·1 | 52 15· | 18·5 | 7·321 | 7·755 | ·3266 | ·3256 |



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| | 281—340 Equ. 1875. 12h.–16h. | – 86° | | 1850. | 86° | 1900. | 86° | Precession in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 10·4 | 12 49 32· | 39·8 | | 12 46 19· | 31·6 | 12 52 59· | 47·9 | + 7·990 | + 8·547 | −0·3265 | −0·3253 |
| 10·1 | 50 34· | 29·6 | | 47 24· | 21·4 | 53 57· | 37·7 | 7·847 | 8·365 | ·3261 | ·3250 |
| 7·8 | 53 40· | 53·2 | GS*g* | 50 8· | 45·1 | 57 28· | 61·3 | 8·776 | 9·448 | ·3251 | ·3238 |
| 10·1 | 54 28· | 7·6 | | 51 20· | − 0·5 | 57 46· | 15·7 | 7·721 | 8·175 | ·3248 | ·3236 |
| 10·2 | 54 54· | 28·9 | | 51 34· | 20·8 | 58 26· | 37·0 | 8·232 | 8·776 | ·3247 | ·3234 |
| 10·3 | 55 0· | 37·8 | | 51 35· | 29·7 | 58 39· | 45·9 | 8·469 | 9·059 | ·3247 | ·3233 |
| 10·1 | 55 4· | 37·4 | | 51 39· | 29·3 | 58 43· | 45·5 | 8·464 | 9·054 | ·3246 | ·3233 |
| 9·4 | 55 18· | 11·0 | *g* | 52 7· | 2·9 | 58 40· | 19·1 | 7·861 | 8·333 | ·3245 | ·3233 |
| 9·9 | 13 0 37· | 26·9 | | 57 6· | 18·8 | 13 4 22· | 34·9 | 8·703 | 9·276 | ·3226 | ·3211 |
| 9·7 | 1 14· | 48·5 | | 57 27· | 40·4 | 5 18· | 56·5 | 9·404 | 10·106 | ·3224 | ·3207 |
| 10·0 | 4 22· | 9·0 | | 13 0 53· | 1·0 | 8 3· | 17·0 | + 8·579 | + 9·094 | −0·3211 | −0·3196 |
| 10·4 | 5 16· | 31·5 | | 1 32· | 23·5 | 9 15· | 39·5 | 9·258 | 9·886 | ·3208 | ·3191 |
| 9·7 | 5 33· | 29·9 | | 1 49· | 21·9 | 9 32· | 37·9 | 9·236 | 9·859 | ·3207 | ·3189 |
| 9·6 | 5 52· | 33·0 | *g* | 2 5· | 25·0 | 9 54· | 41·0 | 9·358 | 10·000 | ·3205 | ·3188 |
| 10·1 | 6 23· | 19·5 | | 2 44· | 11·5 | 10 16· | 27·5 | 9·017 | 9·592 | ·3203 | ·3186 |
| 9·9 | 7 37· | 57·4 | | 3 27· | 49·4 | 12 7· | 65·4 | 10·386 | 11·212 | ·3198 | ·3178 |
| 9·6 | 8 34· | 45·9 | *g* | 4 32· | 37·9 | 12 54· | 53·9 | 10·044 | 10·788 | ·3194 | ·3174 |
| 10·1* | 8 52· | 2·9 | | 5 18· | − 5·1 | 12 38· | 10·9 | 8·801 | 9·315 | ·3193 | ·3176 |
| 9·2 | 11 21· | 52·5 | *g* | 7 6· | 44·5 | 15 55· | 60·4 | 10·575 | 11·387 | ·3182 | ·3160 |
| 8·5 | 17 19· | 4·9 | GS*g* | 13 27· | − 3·0 | 21 24· | 12·8 | 9·533 | 10·096 | ·3154 | ·3133 |
| 9·9 | 17 57· | 11·3 | | 14 0· | 3·4 | 22 8· | 19·2 | + 9·765 | +10·363 | −0·3151 | −0·3130 |
| 9·0 | 18 3· | 0·5 | *g* | 14 13· | − 7·4 | 22 7· | 8·4 | 9·472 | 10·021 | ·3150 | ·3130 |
| 9·4 | 21 49· | 42·4 | *g* | 17 18· | 34·5 | 26 39· | 50·2 | 11·192 | 12·000 | ·3132 | ·3106 |
| 9·6 | 24 34· | 28·8 | | 20 10· | 21·0 | 29 16· | 36·6 | 10·911 | 11·642 | ·3117 | ·3092 |
| 9·1 | 28 12· | 0·9 | *g* | 24 2· | − 6·9 | 32 36· | 8·6 | 10·277 | 10·869 | ·3098 | ·3073 |
| 8·8 | 29 30· | 59·5 | GS*g* | 24 23· | 51·7 | 35 1· | 67·2 | 12·758 | 13·776 | ·3091 | ·3059 |
| 9·2 | 32 37· | 38·1 | *g* | 27 46· | 30·4 | 37 48· | 45·7 | 12·013 | 12·850 | ·3073 | ·3042 |
| 10·2 | 35 21· | 55·0 | | 30 5· | 47·3 | 41 1· | 62·6 | 13·103 | 14·114 | ·3057 | ·3023 |
| 9·6 | 35 23· | 1·4 | *g* | 30 59· | − 6·3 | 40 2· | 9·0 | 10·848 | 11·470 | ·3057 | ·3029 |
| 9·4 | 46 27· | 0·9 | | 41 43· | − 6·6 | 51 27· | 8·3 | 11·667 | 12·332 | ·2988 | ·2955 |
| 9·6 | 49 26· | 5·5 | | 44 33· | − 2·0 | 54 36· | 12·9 | +12·065 | +12·761 | −0·2968 | −0·2933 |
| 9·6 | 51 55· | 46·6 | *g* | 46 12· | 39·2 | 58 3· | 53·9 | 14·210 | 15·224 | ·2952 | ·2908 |
| 9·3 | 14 25 4· | 43·0 | *g* | 14 18 15· | 36·2 | 14 32 19· | 49·7 | 16·858 | 17·952 | ·2695 | ·2631 |
| 8·5 | 25 24· | 39·1 | *g* | 18 41· | 32·3 | 32 32· | 45·8 | 16·617 | 17·670 | ·2692 | ·2629 |
| 9·3 | 26 13· | 53·8 | *g* | 19 3· | 47·0 | 33 52· | 60·4 | 17·759 | 18·975 | ·2685 | ·2617 |
| 9·9 | 45 8· | 3·9 | *g* | 38 40· | − 2·5 | 51 55· | 10·1 | 15·896 | 16·680 | ·2512 | ·2445 |
| 8·8 | 47 9· | 18·9 | *g* Cape 91 | 40 17· | 12·6 | 54 22· | 25·0 | 16·905 | 17·792 | ·2492 | ·2420 |
| 9·4 | 48 39· | 57·7 | *g* | 40 35· | 51·4 | 57 14· | 63·8 | 19·979 | 21·276 | ·2478 | ·2392 |
| 9·7 | 56 35· | 33·7 | | 49 3· | 27·6 | 15 4 32· | 39·6 | 18·567 | 19·587 | ·2399 | ·2316 |
| 9·7 | 58 57· | 49·7 | *g* | 50 50· | 43·7 | 7 33· | 55·5 | 20·054 | 21·239 | ·2374 | ·2284 |
| 9·1 | 59 53· | 44·7 | *g* | 51 54· | 38·7 | 8 19· | 50·5 | +19·686 | +20·814 | −0·2365 | −0·2276 |
| 8·5 | 15 0 34· | 49·6 | *g* Cape 91 | 52 24· | 43·6 | 9 13· | 55·4 | 20·166 | 21·352 | ·2358 | ·2266 |
| 9·6 | 2 43· | 20·7 | *g* | 55 23· | 14·8 | 10 25· | 26·4 | 18·046 | 18·941 | ·2335 | ·2253 |
| 9·9 | 3 17· | 15·7 | *g* | 56 4· | 9·8 | 10 51· | 21·4 | 17·746 | 18·604 | ·2329 | ·2249 |
| 9·9 | 7 45· | 15·7 | | 15 0 25· | 9·9 | 15 26· | 21·3 | 18·022 | 18·876 | ·2282 | ·2198 |
| 9·6 | 38 18· | 31·0 | *g* | 29 45· | 26·0 | 47 14· | 35·7 | 20·970 | 21·874 | ·1937 | ·1830 |
| 9·8 | 41 14· | 7·8 | | 33 20· | 2·9 | 49 26· | 12·4 | 19·322 | 20·050 | ·1902 | ·1803 |
| 9·5 | 48 0· | 34·5 | *g* | 39 6· | 29·8 | 57 16· | 38·9 | 21·807 | 22·704 | ·1820 | ·1705 |
| 9·7 | 56 17· | 50·9 | *g* | 46 32· | 46·5 | 16 6 27· | 55·0 | 23·900 | 24·906 | ·1718 | ·1589 |
| 9·7 | 16 1 35· | 46·2 | *g* | 51 55· | 41·9 | 11 38· | 50·2 | 23·670 | 24·608 | ·1651 | ·1522 |
| 10·2† | 2 18·2 | 52·380 | | 52 20·9 | 48·117 | 12 40·3 | 56·320 | +24·388 | +25·378 | −0·1642 | −0·1508 |
| 9·5† | 3 58·2 | 56·160 | *g* | 53 48·1 | 51·946 | 14 33·9 | 60·043 | 24·917 | 25·937 | ·1621 | ·1484 |
| 5·9 | 14 49· | 7·2 | GS c*g* | 16 6 18· | 3·4 | 23 35· | 10·8 | 20·745 | 21·348 | ·1481 | ·1365 |
| 10·2† | 18 11·3 | 49·824 | | 8 0·6 | 46·066 | 28 44·0 | 53·241 | 24·871 | 25·732 | ·1436 | ·1296 |
| 9·8† | 31 23·5 | 36·915 | | 21 32·1 | 33·598 | 41 32·3 | 39·894 | 24·009 | 24·692 | ·1260 | ·1122 |
| 9·7 | 31 34· | 25·8 | | 22 9· | 22·5 | 41 15· | 28·8 | 22·926 | 23·534 | ·1258 | ·1126 |
| 9·4 | 34 56· | 6·1 | | 26 9· | 2·9 | 43 56· | 9·0 | 21·356 | 21·853 | ·1212 | ·1089 |
| 8·2† | 44 1·4 | 44·270 | *g* | 33 38·5 | 41·371 | 54 40·7 | 46·807 | 25·251 | 25·877 | ·1088 | ·0940 |
| 9·5† | 46 4·8 | 37·446 | *g* | 35 58·3 | 34·622 | 56 26·3 | 39·916 | 24·568 | 25·138 | ·1060 | ·0915 |
| 9·8† | 50 14·7 | 35·506 | | 40 9·7 | 32·827 | 17 0 33·7 | 37·831 | 24·489 | 25·019 | ·1002 | ·0857 |



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| mag. | 341—400 Equ. 1875. 16h.–21h. h m s | – 86° ′ | | 1850. h m s | 86° ′ | 1900. h m s | 86° ′ | PRECESSION in R. A. 1875. s | in R. A. 1900. s | in Decl. 1875. ′ | in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9·7 | 16 50 36· | 0·7 | | 16 41 47· | − 1·9 | 16 59 35· | 3·0 | +21·375 | +21·764 | −0·0997 | −0·0871 |
| 9·7 | 55 22· | 6·1 | | 46 19· | 3·6 | 17 4 35· | 8·3 | 21·917 | 22·309 | ·0930 | ·0800 |
| 9·0 | 55 46· | 0·6 | g | 46 54· | − 1·9 | 4 48· | 2·8 | 21·492 | 21·858 | ·0924 | ·0797 |
| 9·1 | 57 33· | 11·1 | | 48 19· | 8·7 | 6 57· | 13·2 | 22·382 | 22·766 | ·0900 | ·0767 |
| 10·2† | 17 1 10·3 | 54·180 | | 50 3·5 | 51·863 | 12 31·5 | 56·101 | 26·973 | 27·505 | ·0848 | ·0687 |
| 9·5 | 13 4· | 44·3 | | 17 2 19· | 42·4 | 24 0· | 45·8 | 26·037 | 26·421 | ·0680 | ·0523 |
| 9·1 | 13 44· | 2·5 | g Cape 91 | 4 38· | 0·7 | 22 57· | 4·0 | 22·001 | 22·262 | ·0670 | ·0538 |
| 9·3 | 16 13· | 35·2 | | 5 51· | 33·4 | 26 44· | 36·6 | 25·080 | 25·403 | ·0635 | ·0483 |
| 9·3 | 20 0· | 34·9 | | 9 36· | 33·3 | 30 32· | 36·2 | 25·115 | 25·407 | ·0580 | ·0429 |
| 9·7 | 39 43· | 35·8 | | 29 9· | 34·9 | 50 21· | 36·3 | 25·466 | 25·587 | ·0295 | ·0141 |
| 8·6 | 40 16· | 41·0 | g | 29 27· | 40·1 | 51 9· | 41·5 | +26·057 | +26·182 | −0·0288 | −0·0129 |
| 9·0 | 41 59· | 2·2 | g | 32 43· | 1·4 | 51 18· | 2·7 | 22·309 | 22·377 | ·0262 | ·0127 |
| 9·0 | 43 33· | 18·4 | g | 33 41· | 17·6 | 53 28· | 18·8 | 23·730 | 23·811 | ·0240 | ·0095 |
| 9·4 | 45 1· | 25·5 | | 34 52· | 24·8 | 55 13· | 25·9 | 24·425 | 24·506 | ·0218 | − ·0070 |
| 9·3 | 52 0· | 14·6 | g | 42 16· | 14·1 | 18 1 46· | 14·7 | 23·418 | 23·441 | − ·0117 | + ·0026 |
| 9·5 | 18 0 31· | 32·3 | | 50 2· | 32·1 | 11 0· | 32·1 | 25·174 | 25·125 | + ·0007 | ·0160 |
| 8·5 | 0 32· | 16·0 | GSg | 50 43· | 15·8 | 10 21· | 15·8 | 23·561 | 23·521 | ·0008 | ·0151 |
| 9·3 | 1 29· | 35·0 | g | 50 53· | 34·9 | 12 5· | 34·8 | 25·465 | 25·411 | ·0022 | ·0176 |
| 9·5 | 11 5· | 37·7 | | 18 0 21· | 37·9 | 21 47· | 37·1 | 25·739 | 25·594 | ·0162 | ·0317 |
| 10·0 | 14 12· | 50·8 | | 2 48· | 51·1 | 25 32· | 50·1 | 27·293 | 27·099 | ·0207 | ·0372 |
| 8·3 | 21 58· | 9·1 | g | 12 25· | 9·7 | 31 27· | 8·1 | +22·858 | +22·674 | +0·0320 | +0·0457 |
| 9·7 | 22 33· | 1·5 | | 13 16· | 2·2 | 31 46· | 0·5 | 22·219 | 22·046 | ·0328 | ·0462 |
| 9·0 | 31 11· | 5·3 | g | 21 48· | 6·3 | 40 29· | 4·0 | 22·444 | 22·213 | ·0453 | ·0587 |
| 9·6 | 36 2· | 34·1 | | 25 31· | 35·2 | 46 25· | 32·6 | 25·092 | 24·752 | ·0523 | ·0672 |
| 9·5 | 39 39· | 2·7 | g | 30 23· | 4·0 | 48 49· | 1·1 | 22·121 | 21·844 | ·0575 | ·0706 |
| 9·4 | 39 51· | 47·4 | g | 28 43· | 48·6 | 50 50· | 45·8 | 26·551 | 26·133 | ·0578 | ·0735 |
| 9·3 | 42 56· | 17·3 | | 33 9· | 18·7 | 52 35· | 15·6 | 23·321 | 22·987 | ·0622 | ·0760 |
| 9·5 | 47 29· | 45·6 | | 36 29· | 47·1 | 58 18· | 43·7 | 26·184 | 25·706 | ·0688 | ·0841 |
| 9·7 | 47 31· | 5·2 | | 38 12· | 6·8 | 56 42· | 3·3 | 22·198 | 21·867 | ·0688 | ·0818 |
| 9·1 | 47 32· | 42·7 | g | 36 41· | 44·2 | 58 12· | 40·8 | 25·843 | 25·378 | ·0688 | ·0840 |
| 9·8 | 54 59· | 33·6 | | 44 37· | 35·4 | 19 5 10· | 31·4 | +24·676 | +24·193 | +0·0794 | +0·0938 |
| 9·0 | 58 47· | 6·4 | g | 49 31· | 8·4 | 7 54· | 4·1 | 22·074 | 21·676 | ·0848 | ·0976 |
| 10·0 | 19 2 1· | 19·5 | | 52 18· | 21·6 | 11 34· | 17·1 | 23·130 | 22·666 | ·0894 | ·1027 |
| 9·5 | 4 7· | 9·6 | g | 54 47· | 11·7 | 13 17· | 7·1 | 22·216 | 21·776 | ·0923 | ·1051 |
| 9·8 | 4 15· | 1·1 | | 55 12· | 3·3 | 13 8· | − 1·4 | 21·530 | 21·119 | ·0925 | ·1048 |
| 9·8 | 4 47· | 22·6 | | 54 58· | 24·8 | 14 25· | 20·1 | 23·347 | 22·852 | ·0932 | ·1066 |
| 9·7 | 30 43· | 3·3 | g | 19 21 52· | 6·4 | 39 20· | − 0·1 | 20·959 | 20·415 | ·1289 | ·1404 |
| 9·6 | 37 34· | 16·2 | | 28 23· | 19·5 | 46 30· | 12·6 | 21·749 | 21·113 | ·1380 | ·1498 |
| 8·3 | 43 3· | 28·0 | g Cape 91 | 33 30· | 31·5 | 52 18· | 24·2 | 22·572 | 21·838 | ·1453 | ·1573 |
| 9·7 | 43 42· | 10·5 | g | 34 48· | 14·0 | 52 21· | 6·7 | 21·056 | 20·425 | ·1461 | ·1573 |
| 9·7 | 44 35· | 50·9 | g | 34 2· | 54·4 | 54 45· | 47·1 | +24·868 | +23·950 | +0·1473 | +0·1604 |
| 8·8 | 52 6· | 32·9 | g | 42 30· | 36·7 | 20 1 22· | 28·8 | 22·639 | 21·828 | ·1570 | ·1688 |
| 8·9 | 54 45· | 38·0 | g | 44 59· | 41·9 | 4 9· | 33·8 | 23·009 | 22·146 | ·1604 | ·1723 |
| 9·3 | 56 26· | 3·2 | g | 47 58· | 7·1 | 4 38· | − 1·0 | 20·003 | 19·364 | ·1626 | ·1729 |
| 8·7 | 59 57· | 30·2 | g | 50 36· | 34·2 | 8 57· | 25·9 | 22·023 | 21·201 | ·1670 | ·1783 |
| 8·3 | 20 0 28· | 41·8 | g | 50 39· | 45·8 | 9 54· | 37·5 | 23·109 | 22·196 | ·1677 | ·1794 |
| 9·3 | 20 3· | 48·0 | g | 20 10 23· | 52·7 | 29 16· | 43·1 | 22·658 | 21·614 | ·1918 | ·2026 |
| 9·5 | 41 31· | 57·6 | g | 31 59· | 62·9 | 50 32· | 52·1 | 22·249 | 21·048 | ·2165 | ·2264 |
| 8·3 | 49 58· | 2·9 | g | 42 35· | 8·4 | 57 2· | − 2·8 | 17·343 | 16·612 | ·2258 | ·2332 |
| 8·7 | 50 4· | 8·8 | GSg | 42 31· | 14·3 | 57 17· | 3·1 | 17·703 | 16·929 | ·2259 | ·2335 |
| 9·1 | 52 59· | 14·0 | g | 45 22· | 19·6 | 21 0 15· | 8·2 | +17·865 | +17·055 | +0·2290 | +0·2366 |
| 8·9 | 55 9· | 40·0 | g | 46 45· | 45·7 | 3 7· | 34·1 | 19·643 | 18·622 | ·2313 | ·2395 |
| 9·0 | 21 0 56· | 13·1 | g | 53 33· | 18·9 | 7 59· | 7·1 | 17·316 | 16·510 | ·2373 | ·2444 |
| 9·3 | 17 41· | 50·4 | g | 21 9 36· | 56·7 | 25 17· | 44·0 | 18·825 | 17·710 | ·2538 | ·2609 |
| 9·3 | 17 54· | 21·0 | g | 10 46· | 27·3 | 24 41· | 14·6 | 16·690 | 15·838 | ·2541 | ·2603 |
| 8·1 | 21 46· | 24·1 | GSg | 14 39· | 30·5 | 28 30· | 17·6 | 16·612 | 15·741 | ·2577 | ·2638 |
| 9·5 | 26 41· | 55·9 | | 18 42· | 62·4 | 34 10· | 49·3 | 18·540 | 17·378 | ·2622 | ·2688 |
| 8·6 | 34 37· | 29·4 | g | 27 46· | 36·1 | 41 6· | 22·6 | 15·990 | 15·098 | ·2692 | ·2747 |
| 9·3 | 42 53· | 57·0 | g | 35 28· | 63·8 | 49 49· | 50·0 | 17·204 | 16·072 | ·2762 | ·2817 |
| 9·7 | 46 53· | 42·5 | | 40 4· | 49·4 | 53 16· | 35·5 | 15·828 | 14·862 | ·2794 | ·2844 |

| 401—426 Equ. 1875. | 21h.–23h. | −86° | | 1850. | 86° | 1900. | 86° | PRECESSION in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9.7 | 21 47 7. | 5.5 | | 21 41 13. | 12.4 | 21 52 43. | − 1.5 | +13.794 | +13.089 | +0.2796 | +0.2840 |
| 9.2 | 48 39. | 38.9 | | 42 0. | 45.9 | 54 53. | 31.8 | 15.451 | 14.519 | .2808 | .2856 |
| 8.6 | 22 0 56. | 46.5 | *g* | 54 32. | 53.7 | 22 6 55. | 39.2 | 14.852 | 13.900 | .2901 | .2943 |
| 9.0 | 1 36. | 54.4 | *g* | 55 0. | 61.6 | 7 45. | 47.1 | 15.292 | 14.269 | .2906 | .2949 |
| 9.1 | 6 21. | 54.2 | *g* | 59 57. | 61.5 | 12 19. | 46.8 | 14.831 | 13.831 | .2940 | .2980 |
| 7.0 | 7 0. | 36.0 | GS*g* | 22 1 6. | 43.3 | 12 32. | 28.6 | 13.723 | 12.884 | .2944 | .2981 |
| 9.6 | 15 7. | 14.9 | | 9 56. | 22.4 | 20 0. | 7.4 | 12.081 | 11.410 | .2998 | .3029 |
| 9.4 | 19 50. | 53.6 | *g* | 14 0. | 61.1 | 25 16. | 46.0 | 13.499 | 12.578 | .3028 | .3061 |
| 9.0 | 21 42. | 2.9 | *g* | 16 56. | 10.5 | 26 13. | − 4.7 | 11.121 | 10.532 | .3040 | .3066 |
| 8.7 | 22 19. | 9.3 | *g* | 17 28. | 16.9 | 26 54. | 1.7 | 11.296 | 10.681 | .3043 | .3070 |
| 9.0 | 23 44. | 56.0 | *g* | 18 0. | 63.6 | 29 3. | 48.3 | +13.249 | +12.329 | +0.3052 | +0.3082 |
| 9.0 | 25 23. | 8.1 | *g* | 20 40. | 15.7 | 29 51. | 0.4 | 11.012 | 10.412 | .3062 | .3087 |
| 9.4 | 34 57. | 4.0 | G*g* | 30 37. | 11.8 | 39 3. | − 3.8 | 10.124 | 9.582 | .3115 | .3136 |
| 10.2† | 37 1.6 | 57.233 | | 31 50.7 | 65.014 | 41 50.1 | 49.388 | 11.971 | 11.129 | .3126 | .3149 |
| 9.8† | 59 25.9 | 53.494 | *g* | 55 19.3 | 61.540 | 23 3 15.2 | 45.410 | 9.503 | 8.855 | .3226 | .3240 |
| 10.2† | 23 2 26.1 | 56.083 | | 58 25.4 | 64.157 | 6 9.9 | 47.973 | 9.277 | 8.638 | .3237 | .3250 |
| 8.8† | 13 23.1 | 54.371 | *g* | 23 9 53.7 | 62.543 | 16 37.8 | 46.175 | 8.069 | 7.518 | .3274 | .3282 |
| 8.0 | 16 21. | 23.8 | GS*g* | 13 18. | 32.0 | 19 13. | 15.6 | 7.091 | 6.693 | .3282 | .3289 |
| 9.8† | 25 25.6 | 44.973 | | 22 34.9 | 53.227 | 28 5.7 | 36.705 | 6.610 | 6.206 | .3304 | .3310 |
| 9.8 | 29 50. | 29.5 | *g* | 27 17. | 37.8 | 32 14. | 21.2 | 5.934 | 5.608 | .3313 | .3318 |
| 9.8 | 43 32. | 21.3 | *g* | 41 34. | 29.6 | 45 24. | 13.0 | + 4.579 | + 4.360 | +0.3334 | +0.3335 |
| 9.3 | 44 4. | 32.0 | *g* | 42 6. | 40.3 | 45 56. | 23.7 | 4.605 | 4.374 | .3334 | .3336 |
| 7.7 | 44 16. | 35.5 | GS*g* | 42 17. | 43.8 | 46 8. | 27.2 | 4.612 | 4.377 | .3334 | .3336 |
| 8.6 | 46 53. | 23.6 | *g* | 45 3. | 31.9 | 48 38. | 15.3 | 4.286 | 4.085 | .3337 | .3338 |
| 9.8 | 56 32. | 20.3 | *g* | 55 5. | 28.7 | 57 55. | 11.9 | 3.388 | 3.256 | .3342 | .3342 |
| 9.8† | 57 6.2 | 57.073 | *g* | 55 39.2 | 65.428 | 58 28.8 | 48.718 | 3.390 | 3.232 | .3342 | .3342 |



# ZONE—87°.

| 1—10 Equ. 1875. | 0h. | −87° | | 1850. | 87° | 1900. | 87° | PRECESSION in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 8.4 | 0 5 19.0 | 0.176 | *g* | 0 4 15.9 | 8.530 | 0 6 19.9 | − 8.176 | + 2.480 | + 2.399 | +0.3341 | +0.3341 |
| 10.1 | 8 45.2 | 59.928 | | 8 4.6 | 68.278 | 9 25.2 | 51.578 | 1.611 | 1.603 | .3340 | .3339 |
| 10.0 | 10 46.6 | 15.370 | | 10 2.2 | 23.717 | 11 30.2 | 7.025 | + 1.761 | + 1.741 | .3339 | .3338 |
| 9.7 | 25 3.7 | 48.286 | | 25 25.9 | 56.592 | 24 48.7 | 39.980 | − 0.734 | − 0.472 | .3322 | .3322 |
| 9.9 | 27 6.3 | 33.836 | | 27 25.5 | 42.134 | 26 53.3 | 25.538 | 0.636 | 0.408 | .3319 | .3319 |
| 9.6 | 32 55. | 2.1 | *g* | 33 13. | 10.4 | 32 42. | − 6.2 | 0.622 | 0.433 | .3308 | .3308 |
| 10.2 | 33 20.8 | 21.333 | | 33 52.6 | 29.599 | 32 56.0 | 13.063 | 1.125 | 0.867 | .3307 | .3308 |
| 8.5 | 37 19.7 | 23.587 | *g* Cape 91 | 38 6.5 | 31.831 | 36 41.4 | 15.339 | 1.689 | 1.374 | .3298 | .3299 |
| 10.2 | 37 52.7 | 16.545 | | 38 35.6 | 24.786 | 37 17.6 | 8.300 | 1.551 | 1.260 | .3297 | .3298 |
| 9.7 | 40 36.1 | 40.291 | | 41 50.8 | 48.513 | 39 33.8 | 32.062 | 2.722 | 2.281 | .3290 | .3292 |



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| mag. | 11—70 Equ. 1875. 0h.–5h. h m s | −87° ′ | | 1850. h m s | 87° ′ | 1900. h m s | 87° ′ | Precession in R. A. 1875. s | Precession in R. A. 1900. s | Precession in Decl. 1875. ′ | Precession in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10·0 | 0 47 19·1 | 52·624 | | 0 49 17·2 | 60·795 | 0 45 39·8 | 44·439 | − 4·321 | − 3·635 | +0·3271 | +0·3276 |
| 9·6 | 47 34·7 | 37·973 | | 49 12·3 | 46·145 | 46 11·8 | 29·791 | 3·594 | 3·049 | ·3271 | ·3274 |
| 10·1 | 49 16·7 | 49·964 | | 51 18·6 | 58·120 | 47 34·0 | 41·794 | 4·466 | 3·776 | ·3265 | ·3270 |
| 10·2 | 49 19·7 | 13·881 | | 50 36·1 | 22·039 | 48 13·9 | 5·714 | 2·832 | 2·431 | ·3265 | ·3268 |
| 10·2 | 55 21·1 | 11·777 | | 56 53·9 | 19·885 | 54 0·5 | 3·657 | 3·457 | 3·007 | ·3245 | ·3250 |
| 9·1 | 57 40· | 7·6 | g | 59 15· | 15·7 | 56 17· | − 0·5 | 3·560 | 3·112 | ·3237 | ·3242 |
| 10·1 | 1 7 14·6 | 46·695 | | 1 10 20·4 | 54·678 | 1 4 34·2 | 38·682 | 6·895 | 5·965 | ·3200 | ·3210 |
| 10·0 | 10 35·5 | 27·894 | | 13 17·9 | 35·842 | 8 12·9 | 19·918 | 6·082 | 5·341 | ·3185 | ·3195 |
| 9·1 | 14 26·5 | 17·364 | g | 17 4·5 | 25·268 | 12 6·7 | 9·430 | 5·940 | 5·259 | ·3168 | ·3178 |
| 9·9 | 17 18·6 | 52·738 | g | 21 17·5 | 60·599 | 13 51·9 | 44·833 | 8·875 | 7·692 | ·3154 | ·3170 |
| 9·4 | 23 25· | 2·9 | g | 26 8· | 10·7 | 20 59· | − 4·9 | − 6·158 | − 5·520 | +0·3123 | +0·3135 |
| 9·7 | 24 1·4 | 44·913 | | 28 5·7 | 52·686 | 20 27·9 | 37·090 | 9·118 | 7·982 | ·3120 | ·3138 |
| 8·8 | 35 14·0 | 59·356 | g Cape 91 | 40 44·6 | 66·961 | 30 27·1 | 51·676 | 12·229 | 10·691 | ·3058 | ·3085 |
| 10·1 | 36 35·1 | 37·504 | | 41 4·2 | 45·096 | 32 37·0 | 29·850 | 10·114 | 8·955 | ·3050 | ·3073 |
| 9·8 | 39 18·0 | 39·355 | | 44 1·3 | 46·903 | 35 7·5 | 31·739 | 10·640 | 9·420 | ·3033 | ·3058 |
| 9·8 | 58 3· | 18·5 | g | 2 2 51· | 25·7 | 53 43· | 11·2 | 10·937 | 9·878 | ·2909 | ·2939 |
| 9·2 | 2 3 43·4 | 48·394 | g | 10 18·5 | 55·499 | 57 52·8 | 41·172 | 14·870 | 13·205 | ·2867 | ·2910 |
| 9·5 | 9 38·5 | 35·168 | | 15 46·4 | 42·164 | 2 4 8·3 | 28·060 | 13·926 | 12·512 | ·2822 | ·2864 |
| 9·0 | 17 9·2 | 49·571 | g | 24 33·8 | 56·400 | 10 33·1 | 42·600 | 16·770 | 14·957 | ·2762 | ·2814 |
| 10·2 | 44 43·7 | 32·843 | | 52 21·9 | 39·040 | 37 46·3 | 26·470 | 17·481 | 15·932 | ·2515 | ·2581 |
| 10·2 | 46 39·6 | 39·890 | | 54 51·1 | 46·033 | 39 13·3 | 33·558 | −18·722 | −17·006 | +0·2497 | +0·2567 |
| 9·2 | 54 42·1 | 51·821 | g Cape 91 | 3 4 12·4 | 57·744 | 46 6·6 | 45·670 | 21·677 | 19·598 | ·2417 | ·2502 |
| 10·2 | 54 42·7 | 46·182 | | 3 44·5 | 52·111 | 46 31·1 | 40·036 | 20·635 | 18·728 | ·2417 | ·2498 |
| 10·0 | 3 4 30·7 | 46·727 | | 14 1·5 | 52·394 | 55 51·1 | 40·822 | 21·777 | 19·836 | ·2317 | ·2405 |
| 9·5 | 8 5· | 1·9 | g | 14 54· | 7·5 | 3 1 44· | − 3·9 | 15·791 | 14·714 | ·2279 | ·2345 |
| 9·6 | 12 9·9 | 47·526 | g | 22 4·4 | 52·979 | 3 7·1 | 41·816 | 22·716 | 20·749 | ·2235 | ·2331 |
| 10·2 | 13 1·1 | 11·132 | | 20 27·5 | 16·595 | 6 5·7 | 5·475 | 17·219 | 16·018 | ·2225 | ·2299 |
| 9·7 | 16 57·0 | 12·646 | | 24 36·0 | 17·996 | 9 49·6 | 7·092 | 17·713 | 16·493 | ·2182 | ·2260 |
| 10·4 | 17 51·0 | 55·423 | | 28 44·8 | 60·703 | 7 55·5 | 49·855 | 24·953 | 22·733 | ·2172 | ·2280 |
| 10·0 | 20 48·5 | 14·417 | | 28 40·8 | 19·656 | 13 28·4 | 8·966 | 18·237 | 16·995 | ·2139 | ·2220 |
| 10·1 | 21 39·9 | 28·985 | | 30 28·9 | 34·186 | 13 29·7 | 23·545 | −20·368 | −18·868 | +0·2130 | +0·2220 |
| 9·4 | 23 45·2 | 40·844 | | 33 32·6 | 45·972 | 14 43·6 | 35·451 | 22·560 | 20·792 | ·2106 | ·2206 |
| 9·7 | 24 30·9 | 42·373 | | 34 27·5 | 47·476 | 15 20·9 | 37·000 | 22·913 | 21·108 | ·2097 | ·2200 |
| 9·5 | 24 59·4 | 22·308 | g | 33 28·4 | 27·417 | 17 5·5 | 16·966 | 19·643 | 18·273 | ·2092 | ·2180 |
| 9·6 | 27 31·8 | 42·717 | | 37 37·1 | 47·731 | 18 13·5 | 37·426 | 23·253 | 21·445 | ·2063 | ·2168 |
| 10·2 | 29 38·8 | 56·196 | | 41 6·6 | 61·128 | 19 8·6 | 50·948 | 26·334 | 24·107 | ·2039 | ·2158 |
| 8·9 | 29 52·1 | 9·979 | g Cape 91 | 37 46·0 | 14·955 | 22 28·1 | 4·783 | 18·348 | 17·182 | ·2036 | ·2121 |
| 10·1 | 36 17·1 | 22·876 | | 45 9·4 | 27·647 | 27 59·1 | 17·850 | 20·598 | 19·244 | ·1961 | ·2058 |
| 9·9 | 36 42·5 | 35·447 | g | 46 30·8 | 40·191 | 27 35·5 | 30·422 | 22·693 | 21·090 | ·1956 | ·2062 |
| 10·2 | 41 25·3 | 50·008 | | 52 40·8 | 54·590 | 31 0·1 | 45·102 | 26·000 | 24·031 | ·1900 | ·2023 |
| 8·4 | 41 36·0 | 46·199 | g | 52 29·8 | 50·781 | 31 29·8 | 41·303 | −25·189 | −23·331 | +0·1898 | +0·2017 |
| 10·2 | 51 52·3 | 1·016 | | 59 51·9 | 5·325 | 44 17·9 | − 3·533 | 18·677 | 17·685 | ·1773 | ·1865 |
| 10·3 | 59 50·2 | 41·474 | | 4 10 51·9 | 45·483 | 49 29·9 | 37·127 | 25·634 | 24·002 | ·1673 | ·1802 |
| 8·8 | 4 1 43·9 | 37·093 | g | 12 25·2 | 41·047 | 51 40·8 | 32·809 | 24·885 | 23·366 | ·1649 | ·1775 |
| 9·2 | 11 59·4 | 58·644 | g | 25 11·1 | 62·224 | 59 38·3 | 54·650 | 30·660 | 28·635 | ·1517 | ·1676 |
| 9·7 | 15 0·3 | 41·497 | g | 26 26·1 | 45·006 | 4 4 12·4 | 37·625 | 26·675 | 25·157 | ·1478 | ·1618 |
| 9·9 | 18 37·1 | 39·552 | g | 29 57·2 | 42·942 | 7 53·1 | 35·798 | 26·486 | 25·042 | ·1431 | ·1570 |
| 8·9 | 20 32·3 | 42·004 | g | 32 8·7 | 45·326 | 9 32·6 | 38·308 | 27·129 | 25·650 | ·1405 | ·1549 |
| 10·5 | 21 9·5 | 46·067 | | 33 10·7 | 49·360 | 9 46·9 | 42·386 | 28·086 | 26·518 | ·1397 | ·1546 |
| 10·5 | 26 40·2 | 37·845 | | 38 1·4 | 40·965 | 15 52·0 | 34·355 | 26·599 | 25·260 | ·1324 | ·1467 |
| 10·2 | 35 17·3 | 43·249 | | 47 19·7 | 46·064 | 23 47·9 | 40·035 | 28·251 | 26·894 | 0·1207 | 0·1362 |
| 10·0 | 38 5·5 | 31·595 | | 49 7·0 | 34·330 | 27 31·3 | 28·491 | −25·924 | −24·805 | + ·1169 | + ·1312 |
| 10·4 | 39 22·6 | 39·716 | | 51 9·0 | 42·394 | 28 6·3 | 36·644 | 27·670 | 26·425 | ·1152 | ·1304 |
| 9·5 | 51 25·0 | 17·456 | | 5 1 32·6 | 19·741 | 41 36·9 | 14·821 | 23·926 | 23·118 | ·0985 | ·1121 |
| 9·7 | 52 16·4 | 2·936 | | 1 27·5 | 5·208 | 43 21·2 | 0·348 | 21·737 | 21·070 | ·0973 | ·1097 |
| 9·9 | 52 52·4 | 46·201 | g | 5 30·8 | 48·393 | 40 42·1 | 43·577 | 29·799 | 28·601 | ·0965 | ·1133 |
| 10·0 | 5 0 15·5 | 26·852 | g | 11 12·4 | 28·812 | 49 38·0 | 24·512 | 25·905 | 25·082 | ·0861 | ·1010 |
| 8·9 | 4 19·0 | 9·623 | g Cape 91 | 14 3·2 | 11·462 | 54 49·4 | 7·444 | 23·089 | 22·469 | ·0804 | ·0938 |
| 10·0 | 4 53·7 | 4·202 | | 14 17·6 | 6·026 | 55 43·3 | 2·050 | 22·297 | 21·720 | ·0796 | ·0925 |
| 9·5 | 7 14·2 | 16·146 | | 17 26·7 | 17·873 | 57 16·7 | 14·063 | 24·218 | 23·571 | ·0763 | ·0903 |



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| 71—130 Equ. 1875. | | | | 1850. | | 1900. | | PRECESSION in R. A. | | PRECESSION in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $5^{h}$–$8^{h}$ | −87° | | | 87° | | 87° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9·9 | 5 10 5·0 | 37·223 | | 5 22 2·3 | 38·815 | 4 58 26·7 | 35·211 | −28·339 | −27·511 | +0·0722 | +0·0887 |
| 10·2 | 10 27·4 | 37·403 | | 22 26·0 | 38·982 | 58 47·7 | 35·402 | 28·391 | 27·565 | ·0717 | ·0882 |
| 10·4 | 10 32·4 | 59·349 | | 24 57·8 | 60·882 | 56 33·7 | 57·310 | 34·123 | 32·943 | ·0716 | ·0913 |
| 9·9 | 12 46·3 | 20·925 | | 23 22·8 | 22·448 | 5 2 24·3 | 19·030 | 25·189 | 24·560 | ·0684 | ·0831 |
| 10·0 | 13 1·7 | 18·680 | *g* | 23 27·9 | 20·195 | 2 48·9 | 16·797 | 24·802 | 24·193 | ·0680 | ·0825 |
| 9·0 | 20 25·4 | 20·032 | *g* | 31 1·3 | 21·277 | 10 1·6 | 18·409 | 25·212 | 24·673 | ·0574 | ·0723 |
| 10·0 | 27 9· | 58·5 | | 41 35· | 59·4 | 13 0· | 57·1 | 34·353 | 33·521 | ·0477 | ·0681 |
| 9·9 | 28 48·0 | 7·425 | | 38 34·2 | 8·382 | 19 10·3 | 6·116 | 23·293 | 22·916 | ·0454 | ·0592 |
| 10·4 | 33 38·0 | 38·295 | | 45 50·9 | 39·033 | 21 35·8 | 37·118 | 29·131 | 28·622 | ·0384 | ·0557 |
| 10·4 | 34 34·9 | 36·722 | | 46 38·9 | 37·427 | 22 40·9 | 35·581 | 28·790 | 28·310 | ·0370 | ·0542 |
| 9·7 | 39 13·7 | 16·061 | | 49 37·1 | 16·627 | 28 56·6 | 15·118 | −24·828 | −24·523 | +0·0302 | +0·0452 |
| 10·1 | 43 19·9 | 15·683 | | 53 42·0 | 16·102 | 33 2·8 | 14·888 | 24·803 | 24·547 | ·0243 | ·0392 |
| 9·9 | 50 26·0 | 55·076 | | 6 4 29·2 | 55·168 | 36 28·0 | 54·472 | 33·673 | 33·328 | ·0140 | ·0343 |
| 10·1 | 52 0· | 29·6 | | 3 27· | 29·7 | 40 36· | 29·1 | 27·449 | 27·254 | ·0117 | ·0283 |
| 9·7 | 57 10·7 | 29·071 | *g* | 8 34·5 | 28·966 | 45 48·0 | 28·760 | 27·357 | 27·236 | ·0041 | ·0207 |
| 8·9 | 57 57·2 | 7·927 | *g* | 7 47·5 | 7·822 | 48 7·6 | 7·672 | 23·615 | 23·538 | +0·0030 | ·0173 |
| 9·4 | 6 5 56·8 | 54·384 | | 19 51·3 | 53·912 | 51 59·3 | 54·346 | 33·487 | 33·463 | −0·0087 | ·0117 |
| 10·5 | 6 16·1 | 9·579 | | 16 1·4 | 9·169 | 56 19·1 | 9·625 | 23·865 | 23·876 | ·0091 | ·0054 |
| 10·0 | 6 51·0 | 59·778 | | 21 26·2 | 59·262 | 52 12·5 | 59·760 | 35·127 | 35·107 | ·0100 | ·0114 |
| 9·9 | 7 45·3 | 38·162 | | 19 55·4 | 37·657 | 55 32·3 | 38·223 | 29·296 | 29·316 | ·0113 | +0·0065 |
| 9·4 | 22 3·7 | 2·897 | | 31 29·1 | 1·923 | 6 12 33·0 | 3·527 | −22·737 | −22·907 | −0·0321 | −0·0183 |
| 10·0 | 26 31·2 | 27·663 | | 37 38·0 | 26·497 | 15 15·5 | 28·423 | 26·877 | 27·160 | ·0386 | ·0222 |
| 9·5 | 35 1·6 | 47·625 | | 47 53·5 | 46·121 | 21 54·0 | 48·660 | 31·227 | 31·742 | ·0509 | ·0319 |
| 10·1 | 47 38· | 7·1 | | 57 5· | 5·2 | 37 59· | 8·7 | 22·916 | 23·366 | ·0690 | ·0551 |
| 9·9 | 51 3·6 | 26·750 | | 7 1 48·8 | 24·711 | 40 1·9 | 28·401 | 26·158 | 26·760 | ·0739 | ·0581 |
| 9·7 | 53 41·2 | 18·463 | *g* | 3 47·5 | 16·344 | 43 19·3 | 20·220 | 24·583 | 25·157 | ·0776 | ·0628 |
| 9·4 | 53 53·1 | 47·187 | *g* | 6 25·0 | 45·019 | 40 58·2 | 48·905 | 30·564 | 31·408 | ·0779 | ·0594 |
| 9·5 | 55 18·0 | 56·381 | *g* | 8 48·8 | 54·144 | 41 19·8 | 58·130 | 33·016 | 34·010 | ·0799 | ·0599 |
| 10·3 | 7 9 59·1 | 59·753 | | 23 34·3 | 57·004 | 55 47·7 | 62·018 | 33·365 | 34·716 | ·1005 | ·0806 |
| 10·4[1] | 11 23· | 29·6 | | 22 1· | 26·9 | 7 0 22· | 32·0 | 25·998 | 26·890 | ·1024 | ·0870 |
| 9·2 | 12 11·5 | 16·283 | | 21 51·4 | 13·527 | 2 12·0 | 18·699 | −23·599 | −24·356 | −0·1035 | −0·0896 |
| 9·6 | 13 22·3 | 55·360 | *g* | 26 22·1 | 52·504 | 6 59 47·6 | 57·754 | 31·916 | 33·233 | ·1052 | ·0862 |
| 9·0 | 17 5·1 | 23·997 | *g* Cape 91 | 27 11·4 | 21·066 | 7 6 35·9 | 26·574 | 24·720 | 25·605 | ·1103 | ·0958 |
| 10·2[1] | 20 7· | 0·1 | | 28 41· | − 2·9 | 11 16· | 2·8 | 20·909 | 21·596 | ·1145 | ·1022 |
| 9·2 | 23 19·3 | 33·400 | *g* | 34 0·3 | 30·246 | 12 10·4 | 36·182 | 26·212 | 27·293 | ·1189 | ·1035 |
| 8·8 | 29 43·6 | 9·419 | *g* | 38 37·8 | 6·079 | 20 27·6 | 12·451 | 21·812 | 22·663 | ·1275 | ·1149 |
| 10·3 | 31 3· | 22·8 | | 40 47· | 19·4 | 20 53· | 25·9 | 23·869 | 24·893 | ·1293 | ·1155 |
| 10·4 | 31 54· | 36·7 | | 42 39· | 33·3 | 20 37· | 39·8 | 26·440 | 27·682 | ·1305 | ·1151 |
| 10·5[1] | 33 53· | 9·4 | | 42 42· | 5·9 | 24 41· | 12·6 | 21·619 | 22·507 | ·1331 | ·1207 |
| 10·5[1] | 39 45· | 10·8 | | 48 32· | 7·1 | 30 35· | 14·2 | 21·539 | 22·488 | ·1409 | ·1287 |
| 10·3[1] | 41 8· | 4·8 | | 49 32· | 1·1 | 32 21· | 8·2 | −20·627 | −21·514 | −0·1427 | −0·1311 |
| 10·6[1] | 45 10· | 12·9 | | 53 56· | 9·1 | 35 58· | 16·5 | 21·568 | 22·588 | ·1480 | ·1359 |
| 8·4 | 45 32·9 | 3·482 | *g* | 53 47·4 | − 0·367 | 36 55·8 | 7·055 | 20·232 | 21·138 | ·1486 | ·1372 |
| 9·0 | 48 49·5 | 5·195 | *g* | 57 5·1 | 1·240 | 40 10·5 | 8·876 | 20·292 | 21·238 | ·1528 | ·1415 |
| 10·1 | 49 33·9 | 15·674 | | 58 23·8 | 11·686 | 40 16·8 | 19·368 | 21·741 | 22·823 | ·1538 | ·1416 |
| 8·8 | 50 41·3 | 29·564 | *g* | 8 0 24·0 | 25·524 | 40 25·7 | 33·278 | 23·968 | 25·273 | ·1552 | ·1418 |
| 10·4 | 50 56· | 47·7 | | 2 6· | 43·6 | 39 3· | 51·4 | 27·668 | 29·362 | ·1555 | ·1400 |
| 10·5 | 51 29· | 38·3 | | 1 50· | 34·2 | 40 31· | 42·0 | 25·585 | 27·061 | ·1562 | ·1419 |
| 9·4 | 53 44·9 | 44·160 | | 4 31·0 | 40·007 | 42 17·8 | 47·956 | 26·666 | 28·306 | ·1592 | ·1443 |
| 10·3[1] | 56 41· | 11·3 | | 5 5· | 7·1 | 47 50· | 15·2 | 20·697 | 21·764 | ·1629 | ·1515 |
| 8·9 | 59 34·0 | 8·288 | *g* | 7 44·0 | 3·995 | 50 58·1 | 12·316 | −20·114 | −21·164 | −0·1666 | −0·1556 |
| 9·9 | 8 0 24·2 | 59·173 | | 12 22·8 | 54·793 | 47 31·6 | 63·161 | 29·821 | 31·996 | ·1676 | ·1511 |
| 8·8 | 8 5·6 | 20·698 | *g* | 16 44·0 | 16·132 | 58 55·3 | 24·986 | 21·372 | 22·654 | ·1772 | ·1657 |
| 9·9 | 9 5·5 | 56·933 | | 20 30·9 | 52·293 | 56 45·8 | 61·205 | 28·492 | 30·686 | ·1785 | ·1630 |
| 8·9 | 10 52·0 | 13·119 | *g* | 18 59·6 | 8·478 | 8 2 15·3 | 17·562 | 20·081 | 21·261 | ·1806 | ·1699 |
| 9·0 | 14 7·2 | 9·069 | *g* | 21 56·4 | 4·335 | 5 50·0 | 13·558 | 19·323 | 20·462 | ·1846 | ·1744 |
| 9·9 | 18 1·1 | 18·673 | | 26 14·9 | 13·816 | 9 15·1 | 23·274 | 20·387 | 21·690 | ·1893 | ·1786 |
| 9·7 | 18 7·7 | 32·075 | | 27 11·5 | 27·202 | 8 25·6 | 36·666 | 22·508 | 24·068 | ·1895 | ·1776 |
| 9·2 | 32 11·6 | 32·449 | *g* | 40 48·3 | 27·175 | 22 55·0 | 37·466 | 21·453 | 23·086 | ·2060 | ·1952 |
| 10·7[1] | 35 45· | 4·0 | | 42 42· | − 1·3 | 28 20· | 9·1 | 17·222 | 18·362 | ·2101 | ·2015 |

[1] From Plates 85° $8^h$ (605).

| | 131—190 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION in R. A. | | in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8h.-11h. | − 87° | | | 87° | | 87° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 10·1 | 8 43 45· | 29·1 | | 8 51 44· | 23·5 | 8 35 7· | 34·5 | −19·922 | −21·535 | −0·2190 | −0·2093 |
| 10·7[1] | 44 1· | 4·4 | | 50 44· | − 1·2 | 36 50· | 9·8 | 16·663 | 17·832 | ·2193 | ·2113 |
| 10·5 | 44 35· | 10·4 | | 51 33· | 4·8 | 37 7· | 15·8 | 17·318 | 18·575 | ·2199 | ·2116 |
| 10·5[1] | 44 41· | 5·4 | | 51 25· | − 0·2 | 37 28· | 10·8 | 16·726 | 17·908 | ·2200 | ·2120 |
| 10·5 | 48 42· | 27·8 | | 56 25· | 22·1 | 40 20· | 33·3 | 19·293 | 20·881 | ·2244 | ·2152 |
| 9·5 | 59 45·1 | 22·398 | | 9 6 46·8 | 16·405 | 52 7·9 | 28·201 | 17·557 | 19·042 | ·2361 | ·2281 |
| 10·5[1] | 9 2 5· | 20·0 | | 8 54· | 14·0 | 54 41· | 25·9 | 17·040 | 18·484 | ·2385 | ·2308 |
| 7·3 | 2 39·9 | 16·610 | g Cape 91 | 9 17·9 | 10·548 | 55 28·5 | 22·496 | 16·572 | 17·947 | ·2391 | ·2316 |
| 10·5 | 4 29· | 21·6 | | 11 18· | 15·5 | 57 5· | 27·5 | 17·025 | 18·491 | ·2409 | ·2333 |
| 9·7 | 6 28·9 | 21·573 | | 13 12·8 | 15·415 | 59 9·8 | 27·553 | 16·838 | 18·307 | ·2429 | ·2354 |
| 8·9 | 12 6·4 | 1·257 | g | 17 45·9 | − 5·024 | 9 5 59·9 | 7·394 | −14·104 | −15·239 | −0·2485 | −0·2424 |
| 10·4 | 14 17·6 | 56·480 | | 22 48·2 | 50·112 | 4 49·0 | 62·630 | 21·538 | 24·015 | ·2506 | ·2412 |
| 9·7 | 15 41·3 | 28·799 | | 22 24·9 | 22·419 | 8 19·2 | 35·009 | 16·889 | 18·510 | ·2520 | ·2447 |
| 10·3[2] | 17 5· | 0·7 | | 22 33· | − 5·7 | 11 10· | 7·0 | 13·638 | 14·759 | ·2533 | ·2475 |
| 10·3[2] | 17 36· | 34·1 | | 24 32· | 27·7 | 9 59· | 40·4 | 17·421 | 19·155 | ·2538 | ·2464 |
| 9·9 | 19 47·5 | 37·257 | | 26 47·5 | 30·779 | 12 4·3 | 43·562 | 17·634 | 19·445 | ·2558 | ·2484 |
| 9·0 | 25 32·1 | 44·934 | g | 32 43·0 | 38·322 | 17 33·4 | 51·372 | 18·154 | 20·171 | ·2611 | ·2537 |
| 9·9 | 27 6·2 | 5·133 | | 32 22·3 | − 1·489 | 21 22·6 | 11·632 | 13·176 | 14·332 | ·2626 | ·2573 |
| 9·7 | 37 59·0 | 33·079 | | 43 57·6 | 26·212 | 31 21·8 | 39·811 | 15·086 | 16·717 | ·2721 | ·2663 |
| 9·2 | 41 5·6 | 1·059 | | 45 42·2 | − 5·857 | 36 3·9 | 7·875 | 11·547 | 12·601 | ·2747 | ·2704 |
| 7·6 | 42 27·6 | 44·097 | g | 48 46·7 | 37·136 | 35 23·9 | 50·920 | −16·018 | −17·919 | −0·2758 | −0·2699 |
| 8·8 | 45 9·3 | 22·254 | g | 50 21·0 | 15·250 | 39 25·4 | 29·146 | 13·087 | 14·452 | ·2780 | ·2733 |
| 10·3 | 50 9· | 46·2 | | 56 12· | 39·1 | 43 22· | 53·2 | 15·356 | 17·268 | ·2820 | ·2765 |
| 10·5 | 53 11· | 11·7 | | 57 40· | 4·5 | 48 15· | 18·8 | 11·268 | 12·417 | ·2844 | ·2805 |
| 9·4 | 56 44·1 | 24·101 | g | 10 1 29·9 | 16·881 | 51 27·1 | 31·227 | 12·030 | 13·348 | ·2870 | ·2830 |
| 10·5[2] | 58 50· | 7·6 | | 2 57· | 0·3 | 54 18· | 14·8 | 10·364 | 11·420 | ·2886 | ·2852 |
| 9·2 | 10 1 16·2 | 21·782 | g | 5 44·6 | 14·482 | 56 18·2 | 28·996 | 11·303 | 12·557 | ·2904 | ·2867 |
| 9·4 | 4 12·3 | 16·149 | g | 8 21·9 | 8·800 | 59 35·9 | 23·420 | 10·495 | 11·636 | ·2925 | ·2891 |
| 10·4[2] | 15 17· | 9·2 | | 18 46· | 1·7 | 10 11 25· | 16·7 | 8·790 | 9·756 | ·3000 | ·2974 |
| 10·3 | 15 39· | 42·8 | | 20 13· | 35·3 | 10 29· | 50·3 | 11·651 | 13·214 | ·3002 | ·2968 |
| 9·2 | 20 8·5 | 44·863 | g | 24 33·4 | 37·253 | 15 7·6 | 52·400 | −11·275 | −12·830 | −0·3030 | −0·2998 |
| 10·3[2] | 20 30· | 11·3 | | 23 49· | 3·7 | 16 49· | 18·9 | 8·378 | 9·332 | ·3032 | ·3009 |
| 10·5 | 21 1· | 28·5 | | 24 48· | 20·9 | 16 46· | 36·1 | 9·619 | 10·823 | ·3035 | ·3009 |
| 9·7 | 22 15·3 | 17·829 | | 25 39·8 | 10·194 | 18 26·7 | 25·408 | 8·641 | 9·664 | ·3043 | ·3019 |
| 9·7 | 26 45·5 | 36·548 | | 30 31·2 | 28·847 | 22 29·7 | 44·191 | 9·599 | 10·886 | ·3070 | ·3044 |
| 8·9 | 35 35·1 | 5·374 | g Cape 91 | 38 6·5 | − 2·439 | 32 45·9 | 13·151 | 6·396 | 7·152 | ·3118 | ·3103 |
| 10·2[2] | 41 30· | 6·5 | | 43 48· | − 1·4 | 38 56· | 14·4 | 5·817 | 6·533 | ·3148 | ·3135 |
| 10·1 | 46 35·3 | 34·243 | | 49 15·7 | 26·296 | 43 31·9 | 42·156 | 6·850 | 7·837 | ·3172 | ·3158 |
| 9·3 | 46 48·4 | 21·180 | | 49 9·6 | 13·233 | 44 8·3 | 29·097 | 6·007 | 6·818 | ·3173 | ·3161 |
| 9·4 | 46 52·2 | 29·959 | g | 49 25·3 | 22·009 | 43 57·6 | 37·877 | 6·532 | 7·454 | ·3174 | ·3160 |
| 10·1[2] | 51 47· | 15·4 | | 53 47· | 7·4 | 49 31· | 23·4 | − 5·111 | − 5·805 | −0·3195 | −0·3185 |
| 9·2 | 59 11·6 | 40·051 | g | 11 1 20·5 | 31·977 | 56 42·4 | 48·102 | 5·534 | 6·423 | ·3225 | ·3215 |
| 10·2[2] | 11 4 23· | 19·3 | | 5 52· | 11·2 | 11 2 41· | 27·4 | 3·796 | 4·374 | ·3244 | ·3238 |
| 10·4[3] | 9 57· | 3·2 | | 10 56· | − 5·0 | 8 48· | 11·4 | 2·555 | 2·961 | ·3263 | ·3259 |
| 10·1[3] | 18 4· | 10·7 | | 18 47· | 2·5 | 17 13· | 18·9 | 1·863 | 2·218 | ·3286 | ·3284 |
| 8·6 | 18 19·7 | 40·079 | g | 19 25·3 | 31·856 | 17 1·2 | 48·293 | 2·864 | 3·429 | ·3287 | ·3283 |
| 10·3[3] | 21 46· | 4·5 | | 22 15· | − 3·7 | 21 11· | 12·7 | 1·273 | 1·554 | ·3296 | ·3294 |
| 9·5 | 22 7·2 | 5·670 | | 22 35·5 | − 2·575 | 21 32·1 | 13·911 | 1·262 | 1·546 | ·3297 | ·3295 |
| 10·3[3] | 25 38· | 19·0 | | 26 4· | 10·7 | 25 5· | 27·3 | 1·189 | 1·492 | ·3305 | ·3303 |
| 9·0 | 26 22· | 33·8 | g | 26 56· | 25·5 | 25 39· | 42·1 | 1·522 | 1·898 | ·3306 | ·3305 |
| 10·3[3] | 28 9· | 7·7 | | 28 22· | − 0·6 | 27 51· | 16·0 | − 0·620 | − 0·842 | −0·3310 | −0·3309 |
| 10·3[3] | 33 7· | 0·2 | | 33 3· | − 8·1 | 33 7· | 8·5 | + 0·083 | − 0·061 | ·3319 | ·3319 |
| 10·1[3] | 38 42· | 18·9 | | 38 30· | 10·6 | 38 51· | 27·2 | 0·426 | + 0·303 | ·3328 | ·3328 |
| 10·0 | 39 23·9 | 33·030 | | 39 15·4 | 24·707 | 39 28·6 | 41·353 | 0·266 | 0·110 | ·3329 | ·3329 |
| 9·9 | 40 34·1 | 22·326 | | 40 17·8 | 14·000 | 40 47·9 | 30·652 | 0·605 | 0·499 | ·3330 | ·3330 |
| 9·8 | 43 24· | 5·4 | | 42 54· | − 2·9 | 43 53· | 13·7 | 1·169 | 1·132 | ·3334 | ·3334 |
| 10·2[3] | 49 41· | 41·8 | | 49 2· | 33·5 | 50 20· | 50·1 | 1·576 | 1·582 | ·3339 | ·3339 |
| 10·0 | 51 1· | 1·1 | | 50 10· | − 7·2 | 51 53· | 9·5 | 2·066 | 2·119 | ·3340 | ·3340 |
| 10·4[3] | 51 35· | 33·4 | | 50 47· | 25·1 | 52 24· | 41·8 | 1·922 | 1·968 | ·3340 | ·3340 |
| 9·2 | 52 49·9 | 23·789 | | 51 56·8 | 15·438 | 53 44·5 | 32·142 | 2·154 | 2·224 | ·3341 | ·3341 |



[1] From Plates 85° 8h (605). [2] From Plates 85° 10h (606). [3] From Plates 85° 12h (607).

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| 191—250 Equ. 1875. | $11^h$–$15^h$. | −87° | | 1850. | 87° | 1900. | 87° | PRECESSION in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 10·2[1] | 11 53 46· | 34·8 | | 11 52 51· | 26·4 | 11 54 42· | 43·2 | + 2·212 | + 2·296 | −0·3341 | −0·3341 |
| 9·7 | 55 39·1 | 30·264 | | 54 37·9 | 21·910 | 56 42·7 | 38·618 | 2·490 | 2·607 | ·3342 | ·3342 |
| 10·2 | 55 48· | 49·0 | | 54 48· | 40·6 | 56 50· | 57·4 | 2·430 | 2·555 | ·3342 | ·3342 |
| 9·0 | 57 36·1 | 41·533 | | 56 29·6 | 33·178 | 58 46·1 | 49·887 | 2·725 | 2·883 | ·3342 | ·3342 |
| 10·0[1] | 12 7 40· | 0·3 | | 12 6 4· | − 8·1 | 12 9 21· | 8·7 | 3·927 | 4·166 | ·3341 | ·3339 |
| 6·5 | 7 44·6 | 43·226 | GS*g* | 6 3·1 | 34·873 | 9 34·0 | 51·575 | 4·207 | 4·565 | ·3340 | ·3339 |
| 10·3[1] | 9 18· | 3·7 | | 7 38· | − 4·7 | 11 4· | 12·0 | 4·129 | 4·392 | ·3340 | ·3338 |
| 9·4 | 10 46·1 | 1·000 | | 9 2·1 | − 7·348 | 12 36·3 | 9·346 | 4·277 | 4·552 | ·3339 | ·3337 |
| 10·3 | 21 28· | 33·0 | | 19 4· | 24·7 | 24 5· | 41·3 | 5·995 | 6·546 | ·3328 | ·3324 |
| 10·0 | 22 16·5 | 25·096 | | 19 53·3 | 16·775 | 24 51·5 | 33·408 | 5·950 | 6·464 | ·3327 | ·3322 |
| 9·4 | 23 10·5 | 52·104 | *g* | 20 30·7 | 43·785 | 26 6·9 | 60·411 | + 6·698 | + 7·440 | −0·3325 | −0·3320 |
| 10·0 | 24 1· | 10·1 | | 21 39· | 1·8 | 26 34· | 18·4 | 5·900 | 6·359 | ·3324 | ·3320 |
| 9·5 | 24 48·7 | 32·834 | | 22 14·2 | 24·521 | 27 37·2 | 41·136 | 6·445 | 7·049 | ·3223 | ·3318 |
| 10·1[1] | 27 50· | 33·0 | | 25 6· | 24·7 | 30 49· | 41·3 | 6·858 | 7·514 | ·3318 | ·3312 |
| 10·0 | 29 44·3 | 9·751 | | 27 5·8 | 1·459 | 32 34·8 | 18·030 | 6·562 | 7·089 | ·3314 | ·3308 |
| 9·5 | 30 21·5 | 6·289 | | 27 43·0 | −2·001 | 33 11·8 | 14·565 | 6·564 | 7·079 | ·3313 | ·3307 |
| 9·0 | 31 20·3 | 26·082 | *g* | 28 28·9 | 17·796 | 34 26·8 | 34·352 | 7·140 | 7·794 | ·3311 | ·3304 |
| 10·3 | 32 44· | 37·8 | | 29 40· | 29·5 | 36 5· | 46·1 | 7·670 | 8·451 | ·3308 | ·3301 |
| 10·0 | 34 58·2 | 56·964 | | 31 30·8 | 48·695 | 38 49·9 | 65·211 | 8·748 | 9·821 | ·3303 | ·3294 |
| 10·3 | 35 0· | 38·6 | | 31 49· | 30·3 | 38 30· | 46·8 | 8·014 | 8·838 | ·3303 | ·3295 |
| 10·3[1] | 37 5· | 1·6 | | 34 11· | − 6·7 | 40 12· | 9·8 | + 7·219 | + 7·781 | −0·3299 | −0·3291 |
| 9·0 | 42 46·5 | 38·926 | *g* | 39 8·7 | 30·703 | 46 46·0 | 47·123 | 9·115 | 10·077 | ·3284 | ·3273 |
| 9·8 | 43 58· | 2·5 | | 40 45· | − 5·7 | 47 26· | 10·7 | 8·001 | 8·646 | ·3281 | ·3271 |
| 10·3 | 47 12· | 24·8 | | 43 33· | 16·6 | 51 11· | 33·0 | 9·124 | 9·990 | ·3272 | ·3259 |
| 9·5 | 51 18·9 | 23·556 | *g* | 47 29·0 | 15·393 | 55 29·8 | 31·687 | 9·591 | 10·498 | ·3259 | ·3245 |
| 10·3 | 52 7· | 41·4 | | 47 56· | 33·2 | 56 45· | 49·5 | 10·544 | 11·697 | ·3256 | ·3240 |
| 10·1[1] | 52 54· | 5·7 | | 49 15· | − 2·5 | 56 51· | 13·8 | 9·100 | 9·856 | ·3254 | ·3240 |
| 10·0 | 57 6· | 2·9 | | 53 18· | − 5·2 | 13 1 12· | 11·0 | 9·466 | 10·242 | ·3239 | ·3224 |
| 10·1[1] | 59 18· | 31·5 | | 54 56· | 23·4 | 4 6· | 39·6 | 10·986 | 12·104 | ·3231 | ·3212 |
| 10·0[1] | 59 40· | 18·4 | | 55 31· | 10·3 | 4 11· | 26·5 | 10·388 | 11·343 | ·3230 | ·3212 |
| 10·4[1] | 13 3 25· | 3·8 | | 59 20· | − 4·3 | 7 50· | 11·8 | +10·192 | +11·036 | −0·3215 | −0·3197 |
| 8·6 | 4 13·0 | 49·798 | *g* | 59 8·7 | 41·742 | 9 52·2 | 57·799 | 12·830 | 14·355 | ·3212 | ·3188 |
| 10·4 | 13 52· | 41·5 | | 13 8 29· | 33·5 | 19 50· | 49·4 | 13·578 | 15·076 | ·3170 | ·3141 |
| 10·2 | 25 22· | 56·1 | | 18 56· | 48·3 | 32 41· | 63·8 | 16·566 | 18·626 | ·3113 | ·3072 |
| 10·0 | 30 6· | 9·6 | | 24 44· | 1·8 | 35 55· | 17·3 | 13·396 | 14·550 | ·3087 | ·3054 |
| 9·5 | 32 9·6 | 24·863 | | 26 18·7 | 17·131 | 38 33·1 | 32·507 | 14·659 | 16·053 | ·3076 | ·3038 |
| 9·0 | 52 18·2 | 59·946 | *g* | 43 59·3 | 52·503 | 14 1 36·9 | 67·239 | 21·083 | 23·689 | ·2949 | ·2882 |
| 9·7 | 56 32·9 | 45·621 | *g* | 48 43·7 | 38·251 | 5 11·7 | 52·843 | 19·716 | 21·839 | ·2920 | ·2856 |
| 9·2 | 14 2 0·3 | 49·290 | *g* | 53 42·9 | 42·014 | 11 11·0 | 56·404 | 20·910 | 23·202 | ·2880 | ·2809 |
| 9·9 | 7 19·7 | 24·238 | | 59 52·8 | 17·067 | 15 25·5 | 31·259 | 18·624 | 20·274 | ·2840 | ·2775 |
| 9·7 | 8 18·6 | 40·863 | *g* | 14 0 6·6 | 33·702 | 17 19·0 | 47·856 | +20·606 | +22·675 | −0·2832 | −0·2760 |
| 10·5 | 16 7· | 35·4 | | 7 48· | 28·4 | 25 12· | 42·2 | 20·849 | 22·807 | ·2770 | ·2693 |
| 8·9 | 25 23·7 | 35·233 | *g* | 16 39·4 | 28·408 | 34 55·2 | 41·860 | 21·878 | 23·875 | ·2692 | ·2607 |
| 8·8 | 27 47· | 3·0 | *g* | 20 16· | − 3·8 | 35 50· | 9·6 | 18·666 | 20·016 | ·2671 | ·2599 |
| 7·2 | 29 11·0 | 37·950 | GS*g* | 20 8·2 | 31·202 | 39 3·3 | 44·488 | 22·666 | 24·752 | ·2659 | ·2569 |
| 8·4 | 33 43· | 12·8 | *g* | 25 37· | 6·2 | 42 25· | 19·2 | 20·144 | 21·660 | ·2618 | ·2537 |
| 8·4 | 44 26· | 9·4 | *g* | 36 4· | 3·0 | 53 23· | 15·6 | 20·771 | 22·246 | ·2518 | ·2430 |
| 8·8 | 49 9·3 | 19·102 | *g* | 40 11·5 | 12·81 | 58 46·7 | 25·165 | 22·278 | 23·934 | ·2472 | ·2376 |
| 9·9 | 57 41· | 11·5 | | 48 45· | 5·4 | 15 7 13· | 17·3 | 22·149 | 23·649 | ·2387 | ·2288 |
| 9·9 | 15 0 11·5 | 47·768 | | 49 8·6 | 41·722 | 12 13·0 | 53·516 | 27·658 | 30·084 | ·2361 | ·2234 |
| 8·5 | 7 42·3 | 36·568 | *g* | 57 5·0 | 30·718 | 19 9·3 | 42·122 | +26·465 | +28·512 | −0·2283 | −0·2158 |
| 9·9 | 9 51·4 | 38·909 | *g* | 58 59·7 | 33·112 | 21 34·1 | 44·400 | 27·063 | 29·169 | ·2260 | ·2131 |
| 9·4 | 12 42·4 | 30·101 | *g* | 15 2 16·9 | 24·386 | 23 53·1 | 35·522 | 25·907 | 27·768 | ·2229 | ·2105 |
| 10·3 | 14 19· | 47·9 | | 2 39· | 42·2 | 26 57· | 53·3 | 29·149 | 31·540 | ·2211 | ·2070 |
| 10·0 | 18 44· | 6·1 | | 9 20· | 0·6 | 28 41· | 11·4 | 23·207 | 24·585 | ·2162 | ·2050 |
| 9·9 | 21 42·9 | 10·900 | *g* | 12 0·1 | 5·440 | 32 0·9 | 16·078 | 24·006 | 25·447 | ·2129 | ·2011 |
| 8·7 | 27 22·7 | 24·184 | *g* | 16 46·6 | 18·870 | 38 39·6 | 29·184 | 26·250 | 27·915 | ·2065 | ·1933 |
| 9·9 | 30 48·9 | 39·368 | | 19 6·8 | 34·135 | 43 20·4 | 44·249 | 29·056 | 31·068 | ·2025 | ·1877 |
| 10·1 | 44 52·4 | 43·530 | | 32 21·0 | 38·694 | 58 13·9 | 47·973 | 31·050 | 33·068 | ·1858 | ·1693 |
| 8·8 | 49 2·4 | 13·482 | *g* | 38 22·4 | 8·798 | 16 0 16·0 | 17·830 | 26·271 | 27·612 | ·1808 | ·1668 |

[1] From Plates 85° $12^h$ (607).



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| mag. | 251—310 Equ. 1875. 15h–21h h m s | −87° ′ | | 1850. h m s | 87° ′ | 1900. h m s | 87° ′ | Precession in R. A. 1875. s | in R. A. 1900. s | in Decl. 1875. ′ | in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9·7 | 15 53 30·5 | 25·650 | g | 15 41 59·4 | 21·090 | 16 5 39·9 | 29·842 | +28·411 | +29·930 | −0·1752 | −0·1599 |
| 9·8 | 59 0·4 | 56·477 | | 44 48·9 | 52·044 | 14 8·9 | 60·448 | 35·202 | 37·474 | ·1684 | ·1489 |
| 9·9 | 16 0 44·3 | 36·463 | g | 48 14·5 | 32·111 | 13 56·3 | 40·409 | 30·839 | 32·516 | ·1662 | ·1492 |
| 10·1 | 1 13·2 | 49·902 | | 47 35·3 | 45·547 | 15 42·3 | 53·812 | 33·746 | 35·771 | ·1656 | ·1469 |
| 9·9 | 2 33·7 | 31·800 | g | 50 21·5 | 27·509 | 15 25·5 | 35·693 | 30·085 | 31·644 | ·1639 | ·1473 |
| 10·3 | 3 39·7 | 33·495 | g | 51 18·2 | 29·236 | 16 41·6 | 37·349 | 30·472 | 32·054 | ·1625 | ·1456 |
| 10·1 | 4 49·2 | 27·805 | | 52 49·9 | 23·589 | 17 25·5 | 31·628 | 29·519 | 30·980 | ·1610 | ·1446 |
| 8·5 | 7 54·9 | 3·063 | g | 57 18·8 | − 1·034 | 18 57·8 | 6·810 | 25·983 | 27·050 | ·1570 | ·1426 |
| 7·8 | 10 46·7 | 19·885 | GSg | 59 9·0 | 15·863 | 22 56·7 | 23·520 | 28·560 | 29·829 | ·1533 | ·1373 |
| 9·4 | 12 14·5 | 40·264 | g | 59 6·1 | 36·265 | 26 4·5 | 43·825 | 32·379 | 34·010 | ·1514 | ·1332 |
| 9·4 | 12 22·4 | 25·030 | g | 16 0 22·2 | 21·054 | 24 56·8 | 28·606 | +29·502 | +30·837 | −0·1512 | −0·1347 |
| 8·8 | 20 22·7 | 1·926 | g | 9 33·7 | − 1·771 | 31 36·3 | 5·259 | 26·462 | 27·413 | ·1407 | ·1257 |
| 10·2 | 21 36·0 | 5·659 | | 10 33·3 | 1·999 | 33 4·0 | 8·947 | 27·022 | 28·009 | ·1391 | ·1238 |
| 10·1 | 32 16·5 | 45·774 | | 18 6·1 | 42·412 | 47 5·7 | 48·643 | 34·818 | 36·287 | ·1248 | ·1045 |
| 10·3 | 49 32·6 | 48·693 | | 34 40·0 | 45·907 | 17 4 59·0 | 50·952 | 36·418 | 37·647 | ·1011 | ·0794 |
| 9·2 | 53 24·0 | 7·873 | GSg | 41 38·1 | 5·274 | 5 28·7 | 10·056 | 28·632 | 29·332 | ·0958 | ·0788 |
| 8·8 | 53 28·6 | 15·561 | GSg | 41 13·6 | 12·955 | 6 4·2 | 17·733 | 29·834 | 30·593 | ·0957 | ·0779 |
| 9·4 | 17 5 1·6 | 53·192 | g | 49 20·6 | 50·927 | 21 11·2 | 54·891 | 38·261 | 39·264 | ·0794 | ·0563 |
| 9·3 | 7 11·1 | 13·182 | g | 54 52·9 | 11·054 | 19 45·5 | 14·868 | 29·874 | 30·454 | ·0764 | ·0584 |
| 9·4 | 10 33·7 | 47·842 | g | 55 21·4 | 45·782 | 26 10·3 | 49·352 | 37·025 | 37·849 | ·0716 | ·0491 |
| 10·4 | 20 42·7 | 31·054 | | 17 6 54·9 | 29·379 | 34 45·9 | 32·227 | +33·457 | +33·964 | −0·0570 | −0·0367 |
| 10·5 | 33 48·4 | 49·607 | | 18 4·8 | 48·369 | 49 45·6 | 50·271 | 38·072 | 38·446 | ·0381 | ·0149 |
| 10·4[1] | 37 16· | 0·6 | | 25 26· | − 0·4 | 49 12· | 1·2 | 28·542 | 28·724 | ·0331 | ·0157 |
| 7·2 | 41 13·5 | 39·411 | GScg | 26 27·7 | 38·465 | 56 7·4 | 39·819 | 35·638 | 35·833 | ·0271 | −0·0056 |
| 9·9 | 49 3·0 | 40·150 | Gg | 34 9·6 | 39·481 | 18 4 1·3 | 40·277 | 35·881 | 35·940 | ·0160 | +0·0059 |
| 9·9 | 49 6·4 | 13·209 | | 36 24·4 | 12·581 | 1 51·8 | 13·375 | 30·576 | 30·631 | ·0159 | ·0027 |
| 10·3 | 58 19·1 | 39·216 | | 44 28·2 | 38·884 | 13 10·8 | 39·006 | 35·699 | 35·595 | −0·0024 | ·0192 |
| 10·1 | 18 1 38·3 | 35·232 | | 47 9·1 | 35·028 | 16 6·9 | 34·908 | 34·802 | 34·650 | +0·0024 | ·0235 |
| 10·2 | 4 23·5 | 18·307 | | 51 16·7 | 18·228 | 17 28·7 | 17·908 | 31·472 | 31·322 | ·0064 | ·0255 |
| 9·9 | 5 39·4 | 29·861 | | 51 38·0 | 29·812 | 19 38·8 | 29·400 | 33·657 | 33·456 | ·0082 | ·0286 |
| 9·9 | 6 32·7 | 49·636 | | 50 35·1 | 49·585 | 22 27·1 | 49·108 | +38·296 | +37·997 | +0·0095 | +0·0327 |
| 9·4 | 7 32·3 | 18·347 | g | 54 25·2 | 18·384 | 20 37·0 | 17·834 | 31·468 | 31·276 | ·0110 | ·0300 |
| 9·8[1] | 21 29· | 5·5 | | 18 9 15· | 6·1 | 33 37· | 4·5 | 29·272 | 28·955 | ·0313 | ·0488 |
| 10·4 | 26 27·4 | 43·322 | | 11 11·1 | 44·006 | 41 31·5 | 42·086 | 36·456 | 35·832 | ·0385 | ·0602 |
| 9·7[1] | 31 3· | 7·9 | | 18 41· | 8·8 | 43 16· | 6·5 | 29·512 | 29·067 | ·0451 | ·0627 |
| 9·5 | 35 48·4 | 36·181 | g | 21 16·4 | 37·219 | 50 5·6 | 34·623 | 34·622 | 33·912 | ·0520 | ·0725 |
| 9·9 | 37 19·0 | 57·571 | | 20 27·3 | 58·622 | 53 49·4 | 55·919 | 40·099 | 39·078 | ·0542 | ·0778 |
| 10·3 | 44 41·9 | 28·582 | | 30 53·7 | 29·955 | 58 13·7 | 26·720 | 32·831 | 32·073 | ·0648 | ·0840 |
| 10·3 | 51 19·2 | 48·714 | | 35 38·1 | 50·290 | 19 6 35·3 | 46·586 | 37·190 | 36·058 | ·0742 | ·0958 |
| 10·1 | 57 30·8 | 55·457 | | 41 6·2 | 57·243 | 13 24·3 | 53·101 | 38·807 | 37·430 | ·0830 | ·1052 |
| 9·4[1] | 19 3 27· | 6·2 | g | 51 26· | 8·3 | 15 10· | 3·7 | +28·488 | +27·728 | +0·0914 | +0·1076 |
| 9·6 | 8 21·7 | 39·934 | | 53 47·6 | 42·137 | 22 27·1 | 37·233 | 34·420 | 33·184 | ·0982 | ·1177 |
| 8·7 | 17 55·3 | 59·697 | g | 19 1 18·0 | 62·198 | 33 49·6 | 56·637 | 39·075 | 37·231 | ·1115 | ·1330 |
| 9·5 | 18 51· | 29·3 | g | 5 23· | 31·9 | 31 51· | 26·3 | 31·765 | 30·585 | ·1127 | ·1304 |
| 8·4 | 22 0·1 | 48·445 | g | 6 47·3 | 51·111 | 36 34·9 | 45·271 | 35·781 | 34·182 | ·1170 | ·1367 |
| 9·2 | 38 7·9 | 54·475 | g | 22 35·2 | 57·686 | 52 52·5 | 50·762 | 36·367 | 34·390 | ·1388 | ·1580 |
| 9·3 | 43 10· | 16·1 | g | 31 8· | 19·5 | 54 43· | 12·3 | 28·302 | 27·097 | ·1454 | ·1604 |
| 7·4 | 20 9 5· | 12·8 | g Cape 91 | 57 51· | 17·1 | 20 19 46· | 8·2 | 26·297 | 24·982 | ·1784 | ·1914 |
| 9·6 | 14 34·6 | 51·918 | g | 20 0 22·7 | 56·332 | 27 49·7 | 47·088 | 32·932 | 30·689 | ·1852 | ·2009 |
| 9·9 | 23 11·7 | 46·672 | | 9 48·8 | 51·362 | 35 40·2 | 41·600 | 31·017 | 28·887 | ·1955 | ·2099 |
| 10·4 | 33 19·8 | 57·069 | | 19 16·9 | 62·051 | 46 17·5 | 51·701 | +32·387 | +29·860 | +0·2073 | +0·2218 |
| 9·4 | 34 9· | 32·2 | g | 22 21· | 37·2 | 45 11· | 26·8 | 27·381 | 25·595 | ·2082 | ·2205 |
| 8·9 | 34 24· | 32·4 | g | 22 36· | 37·4 | 45 26· | 27·0 | 27·393 | 25·603 | ·2085 | ·2208 |
| 9·7[2] | 41 7· | 21·4 | g | 30 17· | 26·6 | 51 16· | 15·9 | 25·164 | 23·600 | ·2161 | ·2271 |
| 8·9 | 44 59·4 | 42·064 | g | 32 49·4 | 47·408 | 56 16·2 | 36·400 | 28·112 | 26·055 | ·2204 | ·2324 |
| 8·9 | 50 47· | 18·7 | g | 40 27· | 24·2 | 21 0 28· | 12·9 | 23·999 | 22·466 | ·2267 | ·2368 |
| 10·1 | 57 32·0 | 47·042 | | 45 28·2 | 52·729 | 8 38·0 | 41·055 | 27·763 | 25·551 | ·2338 | ·2450 |
| 9·2 | 57 45·3 | 48·744 | g | 45 33·2 | 54·435 | 8 58·0 | 42·749 | 28·062 | 25·793 | ·2340 | ·2454 |
| 9·9 | 21 0 57· | 21·6 | | 50 49· | 27·4 | 10 24· | 15·5 | 23·490 | 21·896 | ·2373 | ·2469 |
| 10·2 | 2 13·8 | 56·557 | | 49 31·0 | 62·362 | 13 49·7 | 50·444 | 29·133 | 26·587 | ·2386 | ·2501 |



[1] From Plates 85° 18h (610).
[2] From Plates 85° 20h (611).

| | 311—349 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION in R. A. | | in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $21^h$—$23^h$ | − 87° | | | 87° | | 87° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9·5 | 21 7 55·1 | 39·022 | | 20 56 56·0 | 44·996 | 21 18 2·6 | 32·788 | +25·301 | +23·331 | +0·2444 | +0·2542 |
| 9·5 | 18 28· | 55·9 | *g* | 21 6 38· | 62·1 | 29 13· | 49·4 | 27·057 | 24·581 | ·2546 | ·2644 |
| 9·9 | 20 53·5 | 49·223 | | 9 44·5 | 55·515 | 31 3·7 | 42·683 | 25·546 | 23·313 | ·2569 | ·2661 |
| 9·4 | 31 43·0 | 52·842 | *g* | 20 49·8 | 59·389 | 41 34·8 | 46·067 | 24·849 | 22·551 | ·2667 | ·2751 |
| 10·3 | 32 48· | 40·3 | | 22 52· | 46·9 | 41 53· | 33·5 | 22·769 | 20·845 | ·2676 | ·2753 |
| 9·5[1] | 36 7· | 4·8 | *g* | 28 9· | 11·5 | 43 33· | — 2·0 | 18·468 | 17·220 | ·2705 | ·2767 |
| 8·0 | 41 28· | 4·8 | GS*g* | 33 42· | 11·6 | 48 42· | — 2·2 | 17·968 | 16·740 | ·2750 | ·2808 |
| 8·8 | 47 9·4 | 52·687 | *g* | 37 7·8 | 59·580 | 56 12·3 | 45·606 | 22·836 | 20·651 | ·2797 | ·2866 |
| 9·7 | 47 34·7 | 46·540 | | 38 0·3 | 53·445 | 56 16·0 | 39·454 | 21·871 | 19·873 | ·2800 | ·2867 |
| 9·0 | 56 18·2 | 16·547 | *g* | 48 42·3 | 23·645 | 22 3 19·2 | 9·315 | 17·512 | 16·185 | ·2867 | ·2918 |
| 9·5 | 22 0 0·3 | 44·432 | *g* | 51 14·1 | 51·589 | 7 57·1 | 37·123 | +20·014 | +18·171 | +0·2895 | +0·2950 |
| 10·2 | 1 3·8 | 17·335 | | 53 38·9 | 24·525 | 7 54·0 | 10·018 | 17·076 | 15·766 | ·2902 | ·2950 |
| 8·3 | 1 52·2 | 57·148 | *g* | 52 23·6 | 64·333 | 10 21·8 | 49·803 | 21·505 | 19·320 | ·2908 | ·2967 |
| 8·8 | 3 53·3 | 36·308 | *g* | 55 46·1 | 43·543 | 11 17·2 | 28·937 | 18·585 | 16·960 | ·2922 | ·2973 |
| 9·4 | 4 18·6 | 17·318 | | 57 2·8 | 24·568 | 11 0·3 | 9·946 | 16·725 | 15·436 | ·2926 | ·2971 |
| 10·0 | 5 54·7 | 48·478 | | 57 14·1 | 55·745 | 13 44·2 | 41·069 | 19·751 | 17·859 | ·2937 | ·2989 |
| 9·0 | 6 57·9 | 27·787 | *g* | 59 23·8 | 35·083 | 13 53·5 | 20·367 | 17·358 | 15·922 | ·2944 | ·2990 |
| 10·2 | 18 41·7 | 31·067 | | 22 11 35·5 | 38·566 | 25 10·5 | 23·464 | 16·265 | 14·869 | ·3021 | ·3060 |
| 9·3 | 32 1·0 | 41·709 | *g* | 25 12·4 | 49·409 | 38 10·2 | 33·919 | 15·514 | 14·061 | ·3099 | ·3131 |
| 10·2 | 39 20·9 | 0·336 | *g* | 34 12·1 | 8·148 | 44 7·1 | — 7·538 | 11·882 | 11·031 | ·3138 | ·3161 |
| 9·2 | 42 52·4 | 2·427 | G*gg* | 37 50·4 | 10·284 | 47 32·0 | — 5·488 | +11·612 | +10·770 | +0·3155 | +0·3176 |
| 10·2 | 44 24·3 | 48·466 | | 38 4·3 | 56·334 | 50 5·6 | 40·527 | 14·384 | 12·963 | ·3162 | ·3188 |
| 9·9 | 47 59·9 | 56·627 | | 41 32·9 | 64·538 | 53 44·6 | 48·648 | 14·580 | 13·043 | ·3179 | ·3203 |
| 10·2 | 50 46·9 | 12·175 | | 45 54·6 | 20·127 | 55 16·2 | 4·173 | 11·212 | 10·351 | ·3191 | ·3210 |
| 9·5 | 58 24·9 | 38·440 | | 53 17·4 | 46·473 | 23 3 3·4 | 30·363 | 11·687 | 10·621 | ·3222 | ·3239 |
| 9·7 | 23 9 4·7 | 52·673 | | 23 4 12·8 | 60·804 | 13 26·0 | 44·505 | 11·022 | 9·914 | ·3260 | ·3273 |
| 9·9 | 13 54·1 | 27·317 | | 9 56·1 | 35·490 | 17 31·5 | 19·116 | 9·082 | 8·333 | ·3275 | ·3285 |
| 10·2 | 18 8·6 | 5·291 | | 14 44·6 | 13·498 | 21 17·6 | — 2·936 | 7·846 | 7·292 | ·3287 | ·3294 |
| 7·8 | 27 1·2 | 5·373 | GS*g* | 24 3·6 | 13·636 | 29 46·3 | — 2·904 | 6·843 | 6·374 | ·3308 | ·3313 |
| 9·7 | 27 17·5 | 44·331 | | 23 49·9 | 52·594 | 30 25·6 | 36·053 | 7·888 | 7·179 | ·3308 | ·3314 |
| 9·2 | 29 20·2 | 33·959 | *g* | 26 9·7 | 42·233 | 32 14·2 | 25·671 | + 7·268 | + 6·669 | +0·3312 | +0·3318 |
| 10·2 | 31 44·8 | 6·663 | | 29 0·7 | 14·950 | 34 17·5 | — 1·635 | 6·322 | 5·902 | ·3317 | ·3321 |
| 10·1 | 34 51·3 | 16·155 | | 32 11·5 | 24·455 | 37 19·3 | 7·844 | 6·141 | 5·708 | ·3322 | ·3326 |
| 9·7 | 35 51·4 | 57·401 | | 32 45·9 | 65·706 | 38 37·9 | 49·086 | 7·012 | 6·340 | ·3324 | ·3327 |
| 9·6 | 41 21·5 | 41·378 | | 38 50·6 | 49·703 | 43 39·6 | 33·047 | 5·764 | 5·300 | ·3331 | ·3333 |
| 10·0 | 45 20·7 | 29·153 | *g* | 43 10·0 | 37·490 | 47 21·6 | 20·812 | 5·018 | 4·663 | ·3336 | ·3337 |
| 9·8 | 45 58·3 | 3·927 | *g* | 43 57·7 | 12·265 | 47 51·5 | — 4·415 | 4·668 | 4·391 | ·3336 | ·3337 |
| 9·2 | 50 39·4 | 8·176 | *g* | 48 51·9 | 16·524 | 52 20·3 | — 0·174 | 4·162 | 3·924 | ·3340 | ·3340 |
| 9·7 | 52 7·1 | 30·400 | | 50 20·1 | 38·750 | 53 46·9 | 22·048 | 4·128 | 3·862 | ·3340 | ·3341 |



[1] From Plates 85° $22^h$ (612).

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# ZONE—88°.

| | 1—40 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0h.–4h. | – 88° | | | 88° | | 88° | in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 8·7 | 0 7 34·4 | 6·613 | g | 0 6 50·8 | 14·964 | 0 8 17·4 | – 1·738 | + 1·734 | + 1·708 | +0·3340 | +0·3340 |
| 8·5 | 21 14·4 | 21·730 | g | 21 52·2 | 30·050 | 20 48·4 | 13·409 | – 1·255 | – 0·836 | ·3328 | ·3328 |
| 9·7 | 25 31·0 | 48·914 | g | 27 32·4 | 57·214 | 24 3·0 | 40·607 | 4·110 | 2·988 | ·3322 | ·3324 |
| 10·0 | 28 9·4 | 58·920 | | 31 13·4 | 67·207 | 25 58·7 | 50·622 | 6·148 | 4·418 | ·3317 | ·3320 |
| 10·2 | 38 14·1 | 0·734 | | 39 46·4 | 8·971 | 36 58·8 | – 7·509 | 3·325 | 2·714 | ·3296 | ·3299 |
| 10·6 | 1 8 10·9 | 25·673 | | 1 13 20·5 | 33·635 | 1 3 55·6 | 17·661 | 11·207 | 9·288 | ·3196 | ·3213 |
| 10·0 | 8 16·8 | 42·651 | | 15 1·6 | 50·602 | 2 54·8 | 34·634 | 14·367 | 11·518 | ·3195 | ·3217 |
| 9·9 | 12 49·6 | 39·769 | | 19 45·0 | 47·668 | 7 15·9 | 31·800 | 14·823 | 11·997 | ·3175 | ·3199 |
| 10·1 | 24 24·9 | 44·177 | | 33 11·5 | 51·913 | 17 23·6 | 36·335 | 18·750 | 15·122 | ·3118 | ·3153 |
| 9·9 | 27 17·4 | 46·386 | g | 36 43·9 | 54·079 | 19 46·0 | 38·578 | 20·133 | 16·175 | ·3103 | ·3142 |
| 10·1 | 28 39·6 | 37·354 | | 36 57·2 | 45·034 | 21 53·8 | 29·569 | –17·904 | –14·699 | +0·3095 | +0·3131 |
| 9·3 | 31 2·8 | 21·031 | g | 37 49·6 | 28·687 | 25 20·2 | 13·285 | 14·891 | 12·590 | ·3082 | ·3113 |
| 9·3 | 38 34·0 | 30·841 | g | 47 0·6 | 38·374 | 31 32·9 | 23·195 | 18·416 | 15·385 | ·3038 | ·3079 |
| 10·2 | 59 55·7 | 37·668 | | 2 11 19·2 | 44·802 | 50 28·9 | 30·344 | 24·819 | 20·686 | ·2895 | ·2961 |
| 10·3 | 2 9 16·8 | 7·707 | | 17 40·7 | 14·686 | 2 1 57·0 | 0·575 | 18·802 | 16·443 | ·2824 | ·2880 |
| 10·2 | 22 32·9 | 16·222 | | 32 42·9 | 22·905 | 13 42·4 | 9·336 | 22·724 | 19·795 | ·2716 | ·2789 |
| 9·5 | 39 46·5 | 13·850 | | 50 46·1 | 20·126 | 30 6·3 | 7·330 | 24·718 | 21·764 | ·2562 | ·2650 |
| 8·7 | 43 2·9 | 29·395 | g | 56 32·2 | 35·563 | 31 24·2 | 22·927 | 30·042 | 25·969 | ·2532 | ·2639 |
| 10·2 | 45 21·8 | 31·331 | | 59 21·9 | 37·437 | 33 17·6 | 24·913 | 31·158 | 26·889 | ·2510 | ·2622 |
| 9·9 | 49 0·3 | 12·421 | | 3 0 22·1 | 18·466 | 38 56·7 | 6·113 | 25·644 | 22·714 | ·2474 | ·2570 |
| 10·4 | 49 49·4 | 35·474 | | 4 57·8 | 41·451 | 36 49·6 | 29·149 | –33·625 | –28·896 | +0·2466 | +0·2590 |
| 7·8 | 50 27·0 | 56·108 | GS*g* | 11 29·2 | 62·002 | 33 12·0 | 49·745 | 45·626 | 37·463 | ·2460 | ·2623 |
| 9·7 | 51 17·1 | 45·869 | g | 9 2·9 | 51·777 | 36 19·6 | 39·555 | 39·062 | 32·936 | ·2452 | ·2594 |
| 10·2 | 56 45·9 | 31·149 | | 11 31·5 | 36·953 | 43 56·9 | 24·995 | 32·977 | 28·646 | ·2396 | ·2523 |
| 10·4 | 57 31· | 11·2 | | 9 12· | 17·0 | 47 6· | 5·1 | 26·463 | 23·564 | ·2389 | ·2492 |
| 9·0 | 3 1 51·3 | 24·327 | g | 15 42·2 | 30·006 | 49 40·6 | 18·308 | 31·144 | 27·403 | ·2344 | ·2468 |
| 8·8 | 19 51·9 | 39·962 | GS*g* | 38 7·9 | 45·079 | 3 3 58·3 | 34·365 | 40·886 | 35·518 | ·2150 | ·2322 |
| 9·9 | 22 32·9 | 12·731 | | 35 44·0 | 17·844 | 10 39·7 | 7·264 | 30·044 | 27·051 | ·2120 | ·2251 |
| 10·2 | 31 23·1 | 20·198 | | 46 9·1 | 25·030 | 18 5·8 | 14·958 | 33·623 | 30·197 | ·2019 | ·2169 |
| 9·0 | 39 11·7 | 7·251 | g | 52 21·7 | 11·872 | 27 9·5 | 2·256 | 30·225 | 27·582 | ·1927 | ·2067 |
| 9·9 | 39 20·9 | 8·840 | g | 52 44·4 | 13·452 | 27 7·3 | 3·846 | –30·718 | –28·000 | +0·1925 | +0·2068 |
| 9·0 | 44 57·2 | 22·465 | g | 4 0 45·0 | 26·869 | 30 39·0 | 17·604 | 36·093 | 32·600 | ·1858 | ·2027 |
| 10·3 | 50 55·9 | 20·013 | | 6 32·6 | 24·233 | 36 42·4 | 15·333 | 35·786 | 32·517 | ·1784 | ·1956 |
| 10·0 | 51 52·1 | 43·598 | | 13 2·2 | 47·700 | 33 4·8 | 38·875 | 47·918 | 42·320 | ·1773 | ·1999 |
| 10·1 | 51 54·1 | 30·099 | | 9 32·5 | 34·256 | 35 58·5 | 25·422 | 40·262 | 36·225 | ·1772 | ·1965 |
| 10·0 | 52 44·6 | 43·424 | | 13 54·3 | 47·500 | 33 56·7 | 38·727 | 47·922 | 42·365 | ·1762 | ·1989 |
| 10·2 | 57 27·0 | 53·600 | | 22 31·9 | 57·464 | 35 27·0 | 48·995 | 56·476 | 49·189 | ·1703 | ·1971 |
| 10·1 | 58 51·7 | 7·495 | | 12 48·2 | 11·488 | 45 58·2 | 3·078 | 32·193 | 29·688 | ·1686 | ·1845 |
| 9·7 | 59 55·7 | 11·124 | | 14 26·1 | 15·075 | 46 32·6 | 6·732 | 33·468 | 30·801 | ·1672 | ·1838 |
| 9·9 | 4 2 59·5 | 59·712 | | 31 14·6 | 63·342 | 38 23·0 | 55·233 | 63·435 | 54·757 | ·1633 | ·1936 |



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| | 41—100 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $4^{h.}$–$10^{h.}$ | – 88° | | | 88° | | 88° | in R. A. 1875. | in R. A. 1900. | in Decl. 1875. | in Decl. 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 10·4 | 4 8 57·6 | 52·678 | | 4 34 14·7 | 56·161 | 3 46 29·4 | 48·424 | –57·335 | –50·535 | +0·1557 | +0·1839 |
| 9·4 | 9 47·7 | 22·247 | *g* | 26 32·1 | 25·841 | 54 22·4 | 18·133 | 38·603 | 35·420 | ·1546 | ·1742 |
| 10·2 | 14 40·3 | 2·894 | | 28 28·6 | 6·374 | 4 1 45·0 | – 1·024 | 32·082 | 29·943 | ·1483 | ·1649 |
| 9·4 | 17 56·0 | 23·548 | *g* | 35 11·6 | 26·863 | 1 56·9 | 19·687 | 39·921 | 36·784 | ·1440 | ·1646 |
| 10·5 | 30 23·3 | 19·600 | | 47 15·6 | 22·501 | 14 35·4 | 16·149 | 39·238 | 36·568 | ·1274 | ·1484 |
| 9·0 | 31 56·7 | 57·180 | *g* | 5 0 13·2 | 59·833 | 6 23·7 | 53·616 | 64·750 | 57·815 | ·1253 | ·1590 |
| 9·9 | 33 51·5 | 26·718 | | 4 52 15·1 | 29·473 | 16 40·3 | 23·360 | 42·747 | 39·718 | ·1227 | ·1456 |
| 10·0 | 48 34·5 | 51·846 | | 5 14 55·6 | 53·946 | 24 9·5 | 48·858 | 61·111 | 55·950 | ·1025 | ·1357 |
| 8·9 | 50 54·6 | 7·878 | *g* | 6 15·7 | 10·091 | 36 14·9 | 5·141 | 36·057 | 34·282 | ·0992 | ·1194 |
| 8·5 | 52 48·8 | 34·452 | *g* | 13 29·8 | 36·504 | 33 17·7 | 31·697 | 48·349 | 45·280 | ·0966 | ·1234 |
| 10·5 | 5 0 2·5 | 7·672 | | 15 30·6 | 9·561 | 45 11·0 | 5·249 | –36·438 | –34·847 | +0·0864 | +0·1072 |
| 10·0 | 17 17·3 | 12·305 | | 33 41·4 | 13·560 | 5 1 22·1 | 10·471 | 38·851 | 37·506 | ·0619 | ·0846 |
| 7·1 | 28 21·5 | 0·811 | S*g* | 43 6·7 | 1·694 | 13 54·0 | – 0·600 | 35·106 | 34·250 | ·0460 | ·0668 |
| 9·5 | 59 47·9 | 48·681 | | 6 25 15·0 | 48·224 | 34 20·8 | 48·208 | 61·363 | 60·530 | +0·0003 | ·0373 |
| 9·6 | 6 1 1·1 | 16·513 | | 18 11·6 | 16·163 | 43 49·8 | 16·237 | 41·326 | 41·093 | –0·0015 | ·0236 |
| 10·1 | 4 0·8 | 48·265 | | 29 15·1 | 47·659 | 38 39·9 | 47·949 | 60·979 | 60·424 | ·0058 | ·0311 |
| 10·0 | 7 25·4 | 54·139 | | 34 56·3 | 53·365 | 39 40·6 | 53·903 | 66·668 | 66·174 | ·0108 | ·0296 |
| 8·3 | 17 13·8 | 21·291 | S*g* | 35 7·6 | 20·338 | 59 5·6 | 21·589 | 43·345 | 43·612 | ·0251 | +0·0013 |
| 9·5 | 21 52·7 | 9·590 | | 37 42·4 | 8·505 | 6 5 48·5 | 10·095 | 38·352 | 38·714 | ·0319 | –0·0085 |
| 9·9 | 22 15·1 | 22·411 | | 40 17·8 | 21·273 | 3 53·6 | 22·888 | 43·789 | 44·230 | ·0324 | ·0057 |
| 10·5 | 34 30·1 | 15·514 | | 51 5·6 | 13·963 | 17 29·4 | 16·461 | –40·404 | –41·170 | –0·0501 | –0·0255 |
| 10·3 | 39 4·9 | 20·937 | | 56 33·0 | 19·206 | 21 5·5 | 22·032 | 42·639 | 43·625 | ·0567 | ·0307 |
| 9·8 | 39 53·1 | 58·269 | | 7 8 18·2 | 56·312 | 10 4·6 | 59·181 | 70·247 | 72·408 | ·0579 | ·0147 |
| 10·3 | 7 10 39·4 | 18·430 | | 26 52·9 | 15·612 | 53 34·1 | 20·668 | 40·032 | 41·922 | ·1014 | ·0774 |
| 8·2 | 21 33·5 | 49·474 | *g* | 44 39·4 | 46·167 | 56 25·9 | 51·956 | 58·004 | 62·420 | ·1164 | ·0815 |
| 9·7 | 24 2·4 | 48·371 | *g* | 46 39·4 | 44·990 | 59 24·3 | 50·949 | 56·819 | 61·249 | ·1198 | ·0857 |
| 9·3 | 33 39·1 | 13·103 | *g* | 48 18·3 | 9·537 | 7 18 1·1 | 16·163 | 36·370 | 38·633 | ·1328 | ·1116 |
| 6·7 | 8 10 36·2 | 30·171 | GS*g* | 8 26 24·7 | 25·419 | 53 3·8 | 34·410 | 39·996 | 44·209 | ·1803 | ·1583 |
| 9·7 | 11 32·4 | 14·113 | | 24 49·8 | 9·372 | 57 0·4 | 18·429 | 33·367 | 36·392 | ·1815 | ·1633 |
| 10·3 | 15 32· | 10·9 | | 28 14· | 6·0 | 8 1 39· | 15·3 | 31·888 | 34·769 | ·1863 | ·1692 |
| 8·5 | 17 4·2 | 15·403 | *g* | 30 16·4 | 10·499 | 2 34·0 | 19·890 | –33·229 | –36·411 | –0·1882 | –0·1703 |
| 10·3 | 21 18·0 | 31·200 | | 36 42·6 | 26·138 | 4 3·0 | 35·776 | 39·146 | 43·683 | ·1933 | ·1722 |
| 10·2 | 49 6·9 | 43·239 | | 9 5 2·8 | 37·402 | 30 34·6 | 48·611 | 41·221 | 47·893 | ·2248 | ·2041 |
| 8·5 | 56 33·4 | 2·726 | *g* Cape 91 | 6 27·7 | – 3·223 | 45 33·2 | 8·402 | 25·042 | 27·812 | ·2328 | ·2210 |
| 10·3 | 57 12· | 3·6 | | 7 9· | – 2·4 | 46 8· | 9·3 | 25·177 | 27·993 | ·2334 | ·2216 |
| 7·7 | 58 15·3 | 27·980 | *g* | 10 56·0 | 21·951 | 43 46·0 | 33·655 | 32·505 | 37·123 | ·2345 | ·2190 |
| 10·1 | 9 1 58·4 | 26·781 | | 14 14·8 | 20·664 | 47 56·3 | 32·560 | 31·473 | 35·986 | ·2384 | ·2236 |
| 10·1 | 2 55·6 | 6·989 | | 12 54·0 | 0·878 | 51 46·0 | 12·830 | 25·306 | 28·309 | ·2393 | ·2277 |
| 9·9 | 3 12·4 | 5·469 | | 13 1·4 | – 0·647 | 52 14·0 | 11·320 | 24·894 | 27·814 | ·2396 | ·2282 |
| 10·0 | 3 19·1 | 53·468 | | 20 27·0 | 47·255 | 42 41·0 | 59·201 | 45·058 | 54·251 | ·2397 | ·2178 |
| 9·4 | 10 59·6 | 9·795 | *g* | 20 48·0 | 3·487 | 59 56·8 | 15·842 | –24·961 | –28·123 | –0·2474 | –0·2363 |
| 9·9 | 13 12·7 | 14·713 | | 23 22·5 | 8·350 | 9 1 41·1 | 20·812 | 25·956 | 29·438 | ·2496 | ·2380 |
| 9·7 | 15 46·8 | 14·417 | *g* | 25 45·8 | 7·996 | 4 26·8 | 20·582 | 25·509 | 28·964 | ·2520 | ·2409 |
| 10·3 | 19 47· | 23·5 | | 30 31· | 17·0 | 7 27· | 29·8 | 27·569 | 31·756 | ·2558 | ·2439 |
| 9·9 | 20 31·5 | 58·994 | | 37 28·5 | 52·383 | 8 59 27·7 | 65·161 | 45·217 | 56·318 | ·2565 | ·2358 |
| 7·6 | 38 33·3 | 30·705 | *g* | 48 50·3 | 23·781 | 9 26 28·1 | 37·392 | 26·707 | 31·463 | ·2726 | ·2620 |
| 10·1 | 40 37· | 13·4 | | 49 1· | 6·5 | 30 59· | 20·2 | 21·555 | 24·795 | ·2743 | ·2660 |
| 9·5 | 49 3·8 | 5·185 | | 56 18·8 | – 1·916 | 40 47·2 | 12·132 | 18·565 | 21·236 | ·2812 | ·2744 |
| 9·9 | 49 44·2 | 53·528 | | 10 2 31·3 | 46·361 | 33 46·6 | 60·416 | 34·142 | 42·860 | ·2817 | ·2684 |
| 9·4 | 10 10 17·7 | 13·511 | | 16 47·7 | 6·038 | 10 2 43·5 | 20·864 | 16·801 | 19·620 | ·2967 | ·2914 |
| 10·0 | 15 23·6 | 50·696 | | 25 9·3 | 43·115 | 3 6·3 | 58·097 | –26·155 | –33·168 | –0·3000 | –0·2917 |
| 8·9 | 16 44·6 | 2·411 | *g* | 22 9·9 | – 5·155 | 10 29·9 | 9·883 | 13·941 | 16·111 | ·3009 | ·2968 |
| 10·3 | 18 2· | 19·3 | | 24 25· | 11·7 | 10 31· | 26·8 | 16·566 | 19·592 | ·3017 | ·2968 |
| 8·1 | 26 25·6 | 24·678 | *g* | 32 34·6 | 16·964 | 19 5·5 | 32·294 | 16·067 | 19·256 | ·3068 | ·3023 |
| 8·5 | 29 46·4 | 52·753 | GS*g* | 38 20·9 | 44·977 | 18 48·4 | 60·394 | 23·141 | 29·871 | ·3087 | ·3022 |
| 9·5 | 35 8·5 | 27·163 | *g* | 40 47·7 | 19·335 | 28 20·2 | 34·907 | 14·838 | 17·952 | ·3116 | ·3078 |
| 10·0 | 38 0·0 | 6·608 | | 42 17·5 | – 1·247 | 32 58·7 | 14·403 | 11·117 | 13·054 | ·3131 | ·3104 |
| 10·4 | 38 27· | 7·9 | | 42 46· | 0·0 | 33 23· | 15·7 | 11·206 | 13·181 | ·3133 | ·3106 |
| 8·5 | 38 48·0 | 2·288 | *g* | 42 51·0 | – 5·575 | 34 5·0 | 10·095 | 10·469 | 12·233 | ·3135 | ·3110 |
| 9·6 | 41 33·3 | 18·653 | | 46 12·2 | 10·752 | 36 1·1 | 26·490 | 12·144 | 14·532 | ·3148 | ·3120 |

| mag. | 101—160 Equ. 1875. 10h.–17h. h m s | −88° ′ | | 1850. h m s | 88° ′ | 1900. h m s | 88° ′ | Precession in R. A. 1875. s | in R. A. 1900. s | in Decl. 1875. ′ | in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.4 | 10 41 45.2 | 43.544 | g | 10 48 8.2 | 35.630 | 10 33 45.7 | 51.369 | −17.052 | −21.530 | −0.3150 | −0.3108 |
| 9.5 | 46 14.8 | 3.251 | g | 49 51.9 | − 4.697 | 42 0.6 | 11.153 | 9.374 | 11.015 | .3171 | .3150 |
| 9.9 | 49 13.4 | 21.346 | | 53 26.8 | 13.361 | 44 8.7 | 29.279 | 11.083 | 13.386 | .3184 | .3161 |
| 8.8 | 59 48.8 | 21.125 | g | 11 3 13.7 | 13.038 | 55 40.6 | 29.175 | 8.992 | 10.940 | .3228 | .3211 |
| 10.1 | 11 0 44.9 | 23.932 | | 4 13.1 | 15.838 | 56 31.5 | 31.991 | 9.156 | 11.202 | .3231 | .3215 |
| 10.0 | 4 41.3 | 1.829 | | 7 4.3 | − 6.295 | 11 1 51.5 | 9.930 | 6.220 | 7.403 | .3246 | .3235 |
| 8.5 | 22 46.0 | 16.565 | g | 24 18.5 | 8.314 | 20 50.9 | 24.806 | 4.113 | 5.132 | .3298 | .3293 |
| 9.0 | 24 55.4 | 45.059 | g | 27 13.0 | 36.794 | 21 54.3 | 53.309 | 6.276 | 8.328 | .3303 | .3296 |
| 7.4 | 26 5.6 | 33.331 | GSg | 27 50.5 | 25.061 | 23 50.4 | 41.589 | 4.743 | 6.135 | .3306 | .3300 |
| 10.0 | 43 33.9 | 49.217 | | 44 5.2 | 40.882 | 42 43.9 | 57.550 | − 1.579 | 2.466 | .3334 | .3332 |
| 9.8 | 46 45.2 | 32.949 | | 46 41.2 | 24.606 | 46 41.8 | 41.290 | + 0.023 | − 0.314 | −0.3337 | −0.3336 |
| 9.7 | 12 7 59.0 | 36.813 | | 12 6 2.0 | 28.460 | 12 10 13.6 | 45.162 | 4.996 | + 5.812 | .3340 | .3339 |
| 9.9 | 8 55.1 | 19.509 | | 7 0.1 | 11.158 | 11 3.9 | 27.856 | 4.851 | 5.479 | .3340 | .3338 |
| 10.1 | 9 39.6 | 55.360 | | 7 20.9 | 47.010 | 12 28.2 | 63.706 | 6.068 | 7.512 | .3339 | .3337 |
| 10.3 | 12 54. | 21.2 | | 10 40. | 12.9 | 15 26. | 29.5 | 5.688 | 6.489 | .3337 | .3334 |
| 10.3 | 17 42. | 25.3 | | 15 2. | 17.0 | 20 45. | 33.6 | 6.816 | 7.881 | .3332 | .3328 |
| 10.1 | 25 12. | 15.6 | | 22 6. | 7.3 | 28 43. | 23.9 | 7.902 | 9.048 | .3322 | .3316 |
| 9.9 | 29 54.2 | 52.275 | | 25 24.9 | 43.978 | 35 27.9 | 60.547 | 11.901 | 14.985 | .3314 | .3302 |
| 10.0 | 55 42.2 | 55.987 | | 48 6.8 | 47.842 | 13 5 18.9 | 64.054 | 20.350 | 26.165 | .3244 | .3207 |
| 9.2 | 13 2 50.6 | 8.972 | g | 57 15.2 | 0.901 | 9 12.4 | 16.984 | 14.278 | 16.336 | .3218 | .3191 |
| 10.5 | 10 42.3 | 52.799 | | 13 1 45.8 | 44.788 | 21 52.6 | 60.698 | +23.837 | +30.170 | −0.3184 | −0.3131 |
| 10.0 | 17 35. | 4.6 | | 11 11. | − 3.3 | 24 49. | 12.4 | 16.293 | 18.516 | .3153 | .3116 |
| 9.8 | 21 22.0 | 8.805 | g | 14 32.8 | 0.927 | 29 7.9 | 16.590 | 17.435 | 19.919 | .3134 | .3092 |
| 10.1 | 21 24.2 | 27.312 | | 13 33.2 | 19.428 | 30 35.2 | 35.087 | 20.313 | 23.908 | .3134 | .3084 |
| 8.9 | 21 43.3 | 7.499 | g Cape 91 | 14 55.9 | − 0.375 | 29 25.9 | 15.280 | 17.328 | 19.761 | .3132 | .3091 |
| 10.2 | 48 36.7 | 24.344 | | 38 54.5 | 16.828 | 59 50.7 | 31.685 | 24.994 | 29.056 | .2974 | .2895 |
| 8.1 | 57 55.8 | 48.079 | GSg | 44 49.2 | 40.687 | 14 13 50.3 | 55.210 | 34.519 | 42.176 | .2910 | .2788 |
| 10.2 | 14 12 55. | 12.6 | g | 14 2 31. | 5.5 | 24 41. | 19.5 | 26.516 | 30.053 | .2796 | .2698 |
| 10.1 | 20 29.6 | 32.060 | | 7 39.0 | 25.090 | 35 23.5 | 38.738 | 33.135 | 38.539 | .2734 | .2603 |
| 8.8 | 22 17.2 | 9.464 | g Cape 91 | 11 33.6 | 2.553 | 34 20.0 | 16.132 | 27.252 | 30.658 | .2719 | .2612 |
| 9.7 | 46 2.0 | 5.327 | g | 34 18.4 | − 1.073 | 59 2.4 | 11.426 | +29.624 | +32.867 | −0.2503 | −0.2373 |
| 9.9 | 50 41.9 | 49.726 | g | 32 31.0 | 43.358 | 15 12 13.0 | 55.603 | 47.398 | 56.145 | .2457 | .2234 |
| 9.5 | 52 50.9 | 53.796 | g | 33 31.2 | 47.465 | 15 55.9 | 59.596 | 50.604 | 60.471 | .2436 | .2193 |
| 10.1 | 54 59.2 | 21.048 | | 41 8.8 | 14.837 | 10 32.0 | 26.888 | 35.181 | 39.531 | .2414 | .2252 |
| 9.5 | 15 1 25.3 | 11.677 | g | 48 15.6 | 5.634 | 16 1.0 | 17.359 | 33.251 | 36.856 | .2349 | .2192 |
| 9.9 | 5 12.8 | 40.697 | | 47 43.6 | 34.693 | 25 19.2 | 46.203 | 44.969 | 51.687 | .2309 | .2088 |
| 9.3 | 5 40.0 | 27.798 | | 50 17.2 | 21.833 | 23 0.2 | 33.329 | 39.173 | 44.126 | .2304 | .2114 |
| 9.7 | 9 6.1 | 55.954 | | 47 45.4 | 49.998 | 34 26.6 | 61.282 | 55.785 | 66.071 | .2268 | .1983 |
| 9.4 | 25 28.1 | 35.163 | g | 15 7 39.1 | 29.691 | 45 31.8 | 40.093 | 45.384 | 50.959 | .2087 | .1850 |
| 9.7 | 34 29.4 | 12.773 | g | 19 31.0 | 7.597 | 50 50.9 | 17.488 | 37.571 | 40.960 | .1982 | .1785 |
| 9.2 | 38 54.0 | 37.525 | g | 19 47.2 | 32.416 | 16 0 17.7 | 42.032 | +48.560 | +54.147 | −0.1930 | −0.1667 |
| 8.8 | 39 58.1 | 57.897 | Gg | 15 22.4 | 52.738 | 8 32.0 | 62.263 | 63.683 | 73.432 | .1918 | .1562 |
| 10.3 | 53 28.6 | 34.847 | | 34 4.2 | 30.163 | 14 54.8 | 38.896 | 49.006 | 53.873 | .1753 | .1479 |
| 10.3 | 57 19. | 55.1 | g | 32 21. | 50.4 | 25 40. | 58.9 | 63.977 | 71.998 | .1705 | .1337 |
| 10.4 | 59 10. | 20.3 | | 42 1. | 15.8 | 17 46. | 24.2 | 42.900 | 46.338 | .1682 | .1442 |
| 10.1 | 16 8 11.4 | 1.787 | | 53 6.2 | − 2.373 | 24 15.7 | 5.445 | 37.403 | 39.726 | .1567 | .1356 |
| 8.6 | 14 46.7 | 48.542 | g | 50 46.1 | 44.446 | 41 18.9 | 51.811 | 60.722 | 66.526 | .1481 | .1125 |
| 9.6 | 24 28.7 | 37.114 | g | 16 2 59.4 | 33.374 | 47 44.0 | 40.109 | 53.767 | 57.751 | .1353 | .1036 |
| 10.5 | 32 5.0 | 10.568 | | 15 4.7 | 7.152 | 50 2.9 | 13.391 | 42.005 | 44.174 | .1251 | .1004 |
| 9.3 | 33 4.9 | 42.739 | g | 9 46.0 | 39.251 | 58 16.4 | 45.406 | 58.324 | 62.450 | .1238 | .0889 |
| 9.9 | 45 2.1 | 48.643 | | 19 23.6 | 45.514 | 17 12 37.1 | 50.851 | +64.058 | +68.108 | −0.1074 | −0.0686 |
| 9.9 | 45 36.1 | 15.770 | g | 27 24.0 | 12.790 | 4 43.3 | 18.104 | 44.852 | 46.855 | .1066 | .0798 |
| 9.2 | 45 48.0 | 35.937 | g | 23 40.4 | 32.897 | 9 19.2 | 38.189 | 54.895 | 57.867 | .1063 | .0733 |
| 10.1 | 47 43.7 | 19.700 | | 28 48.9 | 16.779 | 7 36.4 | 21.947 | 46.623 | 48.710 | .1037 | .0757 |
| 10.1 | 49 12.8 | 57.634 | | 20 0.3 | 54.585 | 20 49.3 | 59.623 | 73.271 | 78.070 | .1016 | .0569 |
| 10.3 | 17 13 9.0 | 18.348 | | 53 47.2 | 16.306 | 33 9.0 | 19.687 | 47.333 | 48.558 | .0678 | .0391 |
| 10.0 | 16 19.7 | 10.773 | | 58 7.8 | 8.864 | 35 2.6 | 12.020 | 44.375 | 45.366 | .0633 | .0363 |
| 9.2 | 16 36.7 | 57.244 | g | 46 17.2 | 55.128 | 48 27.0 | 58.246 | 74.990 | 77.388 | .0629 | .0168 |
| 9.9 | 36 14.9 | 58.295 | | 17 4 43.8 | 56.859 | 18 8 38.4 | 58.571 | 77.155 | 77.823 | .0346 | +0.0126 |
| 9.4 | 38 57.1 | 21.309 | g | 18 33.5 | 20.172 | 17 59 39.1 | 21.699 | 49.434 | 49.810 | .0306 | −0.0005 |



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| | 161—213 Equ. 1875. | | | 1850. | | 1900. | | Precession in R. A. | | Precession in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 18h.–23h. | − 88° | | | 88° | | 88° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 9·9 | 18 1 39·1 | 0·159 | | 17 44 25·2 | − 0·096 | 18 18 52·0 | − 0·216 | +41·408 | +41·156 | +0·0024 | +0·0275 |
| 9·4 | 17 47·7 | 30·998 | *g* | 54 58·5 | 31·232 | 40 17·7 | 29·942 | 54·545 | 53·304 | ·0259 | ·0584 |
| 10·1 | 18 31·8 | 30·108 | | 55 55·3 | 30·373 | 40 48·6 | 29·029 | 54·023 | 52·780 | ·0270 | ·0592 |
| 9·6 | 19 46·7 | 39·582 | *g* | 54 39·2 | 39·847 | 44 28·3 | 38·413 | 60·003 | 58·332 | ·0288 | ·0644 |
| 10·1 | 21 24·0 | 9·756 | | 18 2 44·6 | 10·197 | 39 48·4 | 8·642 | 44·567 | 43·706 | ·0312 | ·0578 |
| 10·1 | 26 43·0 | 18·423 | | 6 34·9 | 19·030 | 46 29·3 | 17·093 | 48·000 | 46·802 | ·0389 | ·0673 |
| 9·4 | 29 57·5 | 3·424 | | 12 16·0 | 4·193 | 47 19·8 | 2·021 | 42·146 | 41·183 | ·0436 | ·0685 |
| 10·3 | 43 24·4 | 41·953 | | 17 37·8 | 43·064 | 19 8 12·0 | 39·935 | 60·896 | 57·937 | ·0629 | ·0980 |
| 8·5 | 55 6·8 | 6·040 | *g* Cape 91 | 37 15·0 | 7·715 | 12 23·2 | 3·744 | 42·228 | 40·633 | ·0796 | ·1038 |
| 8·7 | 19 9 7·3 | 26·758 | *g* | 47 44·3 | 28·866 | 29 25·9 | 23·922 | 50·129 | 47·297 | ·0993 | ·1271 |
| 9·9 | 9 22·2 | 45·644 | | 42 45·2 | 47·670 | 34 19·2 | 42·719 | +62·065 | +57·564 | +0·0996 | +0·1337 |
| 10·5 | 10 36·2 | 54·856 | | 40 19·6 | 56·861 | 38 41·3 | 51·835 | 70·296 | 64·329 | ·1014 | ·1395 |
| 10·2 | 18 32·1 | 0·893 | *g* | 19 1 45·9 | 3·413 | 34 33·9 | − 2·189 | 39·402 | 37·512 | ·1123 | ·1340 |
| 10·3 | 24 52· | 19·6 | | 5 17· | 22·3 | 43 21· | 16·3 | 45·735 | 42·947 | ·1210 | ·1456 |
| 9·4 | 26 36·4 | 51·536 | *g* | 18 58 13·1 | 54·135 | 52 37·7 | 48·013 | 65·457 | 59·349 | ·1233 | ·1577 |
| 10·3 | 28 14·0 | 33·566 | | 19 5 41·7 | 36·323 | 49 14·7 | 30·073 | 52·344 | 48·468 | ·1255 | ·1533 |
| 9·9 | 43 40·9 | 36·007 | | 21 0·6 | 39·286 | 20 4 31·8 | 32·014 | 52·277 | 47·771 | ·1461 | ·1728 |
| 10·1 | 20 16 32·1 | 21·021 | | 58 26·9 | 25·436 | 33 2·7 | 16·084 | 41·497 | 37·787 | ·1876 | ·2069 |
| 10·1 | 21 23·7 | 14·227 | G | 20 4 38·3 | 18·811 | 36 44·5 | 9·165 | 38·503 | 35·200 | ·1934 | ·2112 |
| 10·5 | 31 24·6 | 15·875 | | 14 51·1 | 20·764 | 46 28·6 | 10·531 | 37·915 | 34·445 | ·2051 | ·2220 |
| 9·7 | 38 59·1 | 13·569 | G | 23 7·9 | 18·688 | 53 23·1 | 8·025 | +36·265 | +32·908 | +0·2137 | +0·2294 |
| 10·4 | 55 8·5 | 17·000 | | 39 37·5 | 22·578 | 21 9 4·6 | 11·035 | 35·277 | 31·681 | ·2313 | ·2455 |
| 9·9 | 21 3 40·6 | 9·081 | | 49 40·8 | 14·904 | 16 18·1 | 2·918 | 31·888 | 28·775 | ·2401 | ·2525 |
| 10·0 | 7 9·2 | 27·987 | *g* | 50 35·6 | 33·869 | 21 44·3 | 21·716 | 37·266 | 32·848 | ·2436 | ·2576 |
| 10·1 | 7 40·1 | 48·611 | | 46 21·1 | 54·447 | 25 44·4 | 42·285 | 47·040 | 39·932 | ·2441 | ·2613 |
| 10·0 | 25 43·9 | 48·649 | | 21 6 0·8 | 54·957 | 42 15·6 | 41·930 | 43·225 | 36·354 | ·2613 | ·2756 |
| 9·9 | 29 40·1 | 25·589 | | 15 3·4 | 32·048 | 42 27·2 | 18·826 | 32·756 | 28·719 | ·2649 | ·2758 |
| 9·0 | 31 44·5 | 23·951 | G*g* | 17 31·0 | 30·461 | 44 12·2 | 17·148 | 31·905 | 28·018 | ·2667 | ·2772 |
| 10·0 | 33 11·9 | 45·272 | | 15 4·0 | 51·772 | 48 27·5 | 38·406 | 39·823 | 33·648 | ·2680 | ·2806 |
| 9·9 | 47 47·0 | 28·292 | | 34 8·1 | 35·160 | 59 35·2 | 21·172 | 30·400 | 26·389 | ·2802 | ·2891 |
| 9·4 | 49 24·0 | 7·396 | *g* | 38 18·2 | 14·323 | 59 16·3 | 0·264 | +25·086 | +22·361 | +0·2814 | +0·2889 |
| 8·4 | 49 51·0 | 57·400 | *g* | 29 59·6 | 64·246 | 22 5 49·7 | 50·201 | 42·557 | 34·528 | ·2818 | ·2936 |
| 9·9 | 53 41·3 | 53·151 | *g* | 35 34·7 | 60·094 | 8 26·7 | 45·893 | 39·070 | 32·075 | ·2848 | ·2954 |
| 9·7 | 56 38·7 | 16·234 | | 45 9·7 | 23·301 | 6 43·5 | 8·967 | 25·770 | 22·700 | ·2870 | ·2942 |
| 10·0 | 58 16·9 | 12·709 | | 47 16·3 | 19·812 | 7 59·1 | 5·415 | 24·762 | 21·897 | ·2882 | ·2951 |
| 10·1 | 22 20 2·0 | 54·757 | | 22 4 39·8 | 62·210 | 32 20·8 | 47·090 | 32·831 | 26·593 | ·3030 | ·3100 |
| 8·8 | 20 41·6 | 31·950 | G*g* | 9 22·1 | 39·447 | 30 19·4 | 24·293 | 24·984 | 21·381 | ·3034 | ·3090 |
| 9·7 | 28 45·4 | 52·979 | | 14 53·5 | 60·582 | 39 53·9 | 45·199 | 29·656 | 24·108 | ·3081 | ·3140 |
| 10·0 | 38 2·7 | 14·845 | | 29 49·5 | 22·619 | 45 12·6 | 6·972 | 18·366 | 16·103 | ·3131 | ·3166 |
| 10·1 | 40 20·6 | 24·739 | | 31 32·8 | 32·540 | 47 53·8 | 16·835 | 19·502 | 16·853 | ·3142 | ·3178 |
| 9·2 | 46 2·4 | 38·104 | G*gg* | 36 29·1 | 45·973 | 54 1·3 | 30·134 | +20·866 | +17·589 | +0·3170 | +0·3204 |
| 8·4 | 56 24·5 | 14·188 | G*gg* | 49 42·8 | 22·192 | 23 2 15·0 | 6·123 | 14·966 | 13·131 | ·3214 | ·3236 |
| 9·9 | 23 6 46·4 | 6·141 | *g* | 23 1 16·6 | 14·250 | 11 37·4 | − 2·010 | 12·360 | 11·093 | ·3253 | ·3268 |
| 7·1 | 8 15·8 | 10·068 | GS*gg*r | 2 43·1 | 18·189 | 13 7·7 | 1·905 | 12·427 | 10·973 | ·3258 | ·3272 |
| 9·9 | 10 38·6 | 31·093 | | 4 13·7 | 39·230 | 16 5·1 | 22·909 | 14·117 | 12·084 | ·3265 | ·3281 |
| 9·9 | 11 7·1 | 16·436 | G*gg* | 5 32·2 | 24·581 | 15 58·7 | 8·251 | 12·463 | 10·920 | ·3267 | ·3280 |
| 10·1 | 19 49·4 | 42·163 | | 13 40·1 | 50·370 | 24 55·3 | 33·919 | 13·369 | 11·210 | ·3291 | ·3303 |
| 10·5 | 21 0·9 | 35·349 | | 15 25·4 | 43·566 | 25 43·8 | 27·099 | 12·262 | 10·440 | ·3294 | ·3305 |
| 10·2 | 22 47·7 | 26·992 | | 17 48·0 | 35·224 | 27 4·8 | 18·733 | 11·057 | 9·567 | ·3298 | ·3308 |
| 10·6 | 25 55·0 | 39·607 | | 20 37·6 | 47·856 | 30 20·2 | 31·331 | 11·542 | 9·760 | ·3306 | ·3314 |
| 8·5 | 29 57·6 | 58·657 | *g* | 23 51·8 | 66·926 | 34 45·5 | 50·362 | +12·863 | +10·325 | +0·3314 | +0·3322 |
| 10·3 | 41 39·7 | 16·896 | | 38 42·6 | 25·222 | 44 16·0 | 8·563 | 6·634 | 5·900 | ·3332 | ·3333 |
| 9·5 | 46 15·1 | 30·347 | | 43 29·7 | 38·685 | 48 38·9 | 22·003 | 6·145 | 5·394 | ·3336 | ·3338 |



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# ZONE.

| mag. | 1—40 Equ. 1875. $0^h$–$13^h$ h m s | –89° ′ | | 1850. h m s | 89° ′ | 1900. h m s | 89° ′ | Precession in R. A. 1875. s | Precession in R. A. 1900. s | Precession in Decl. 1875. ′ | Precession in Decl. 1900. ′ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7·2 | 0 12 53·9 | 3·511 | GS*gr* | 0 13 44·7 | 11·853 | 0 12 26·0 | – 4·832 | – 1·504 | – 0·770 | +0·3337 | +0·3337 |
| 10·0 | 35 43·3 | 0·580 | *g* | 40 8·7 | 8·823 | 32 31·9 | – 7·683 | 8·934 | 6·532 | ·3302 | ·3308 |
| 9·0 | 58 29·1 | 18·384 | *g* | 1 11 27·1 | 26·410 | 49 56·3 | 10·258 | 24·805 | 16·898 | ·3234 | ·3263 |
| 10·0 | 1 14 54·3 | 36·220 | | 51 42·6 | 43·918 | 56 40·1 | 28·198 | 58·977 | 32·294 | ·3165 | ·3240 |
| 9·0 | 16 54·6 | 5·248 | *g* | 28 57·9 | 13·067 | 1 8 2·8 | – 2·696 | 24·570 | 18·370 | ·3156 | ·3196 |
| 8·9 | 50 42·8 | 6·390 | *g* Cape 91 | 2 8 32·4 | 13·640 | 37 21·2 | – 1·123 | 36·748 | 27·910 | ·2960 | ·3045 |
| 10·0 | 2 38 40·4 | 39·891 | | 4 2 25·5 | 45·340 | 54 19·7 | 32·937 | 142·825 | 78·166 | ·2573 | ·2935 |
| 10·2 | 40 35·2 | 32·734 | | 3 37 1·7 | 38·455 | 2 5 21·2 | 25·930 | 105·607 | 67·078 | ·2555 | ·2854 |
| 9·9 | 42 36·4 | 28·469 | | 29 58·3 | 34·247 | 11 3·0 | 21·753 | 91·885 | 61·948 | ·2536 | ·2810 |
| 9·9 | 3 17 48·0 | 24·026 | | 4 3 24·5 | 28·827 | 44 6·7 | 18·125 | 94·003 | 68·964 | ·2173 | ·2521 |
| 9·2 | 21 31·7 | 48·415 | *g* Cape 91 | 6 23 33·4 | 51·047 | 1 59 12·2 | 41·915 | –302·532 | –123·216 | +0·2131 | +0·2900 |
| 9·5 | 35 31·1 | 6·191 | *g* | 4 5 37·9 | 10·673 | 3 10 30·8 | 0·897 | 65·919 | 54·367 | ·1970 | ·2252 |
| 10·3 | 55 9·3 | 2·693 | | 24 33·8 | 6·565 | 29 55·8 | – 2·032 | 65·515 | 55·682 | ·1732 | ·2035 |
| 10·0 | 4 9 39·3 | 19·613 | | 54 11·2 | 22·762 | 32 51·8 | 15·147 | 97·787 | 78·982 | ·1548 | ·2001 |
| 10·2 | 5 3 46·5 | 19·659 | | 5 50 16·4 | 20·865 | 4 21 40·9 | 16·883 | 107·442 | 93·848 | ·0812 | ·1390 |
| 9·5 | 36 54·5 | 32·821 | | 6 45 44·1 | 32·404 | 32 0·8 | 30·788 | 165·171 | 142·791 | ·0336 | ·1252 |
| 9·9 | 40 36·0 | 32·110 | | 47 28·2 | 31·593 | 36 53·0 | 30·238 | 161·128 | 141·292 | ·0283 | ·1186 |
| 10·2 | 41 4·4 | 20·681 | | 28 28·1 | 20·507 | 55 17·2 | 19·157 | 113·417 | 104·985 | +0·0276 | ·0931 |
| 9·9 | 6 21 31·0 | 49·393 | | 8 45 3·5 | 45·913 | 3 41 30·8 | 47·147 | 428·326 | 291·162 | –0·0313 | +0·1899 |
| 10·4 | 7 0 14·8 | 5·122 | | 7 31 12·0 | 2·405 | 6 26 43·3 | 6·703 | 77·795 | 82·561 | ·0869 | –0·0389 |
| 9·9 | 8 4 32·9 | 4·297 | | 8 30 29·9 | – 0·430 | 7 34 10·4 | 8·143 | – 67·545 | – 78·165 | –0·1728 | –0·1335 |
| 8·3 | 14 54·6 | 9·704 | *g* Cape 91 | 42 31·7 | 4·643 | 41 37·3 | 13·838 | 72·923 | 86·848 | ·1856 | ·1434 |
| 10·1 | 32 17·3 | 11·990 | *g* | 59 17·4 | 6·448 | 58 43·5 | 16·662 | 72·286 | 89·050 | ·2061 | ·1655 |
| 9·7 | 9 24 48·0 | 8·669 | *g* | 9 44 17·1 | 1·935 | 8 59 30·7 | 14·895 | 53·029 | 69·121 | ·2605 | ·2358 |
| 10·1 | 59 16·9 | 8·386 | | 10 14 24·9 | 1·023 | 9 39 2·2 | 15·425 | 41·690 | 56·413 | ·2889 | ·2730 |
| 9·9 | 10 1 57·5 | 4·089 | | 15 39·7 | – 3·305 | 43 59·0 | 11·202 | 37·416 | 49·592 | ·2909 | ·2771 |
| 10·5 | 16 49·6 | 13·993 | | 31 10·9 | 6·355 | 56 38·2 | 21·358 | 40·394 | 57·893 | ·3009 | ·2869 |
| 10·3 | 18 30·4 | 11·039 | | 31 48·9 | 3·385 | 10 0 7·9 | 18·448 | 37·151 | 52·169 | ·3020 | ·2895 |
| 10·1 | 24 33·9 | 17·114 | | 38 41·4 | 9·367 | 4 3·9 | 24·605 | 40·274 | 59·839 | ·3057 | ·2923 |
| 10·1 | 26 26·8 | 0·117 | | 36 29·1 | – 7·625 | 13 16·7 | 7·692 | 27·392 | 36·373 | ·3067 | ·2986 |
| 10·1 | 43 51·6 | 23·990 | | 56 54·2 | 16·013 | 23 9·8 | 31·767 | – 38·553 | – 63·674 | –0·3160 | –0·3048 |
| 9·9 | 11 1 43·6 | 7·833 | | 11 8 31·5 | – 0·285 | 52 12·2 | 15·878 | 19·087 | 27·290 | ·3235 | ·3197 |
| 9·0 | 22 58·1 | 10·655 | *g* | 27 7·7 | 2·397 | 11 16 52·9 | 18·885 | 11·911 | 17·832 | ·3299 | ·3283 |
| 7·6 | 27 30·8 | 6·672 | *g* | 30 42·6 | – 1·609 | 22 54·5 | 14·933 | – 9·103 | – 13·358 | ·3309 | ·3298 |
| 9·7 | 12 7 44·4 | 11·172 | | 12 5 25·4 | 2·820 | 12 10 45·0 | 19·523 | + 6·250 | + 8·396 | ·3340 | ·3338 |
| 10·2 | 32 55·4 | 8·622 | | 27 8·2 | 0·337 | 40 41·0 | 16·872 | 15·878 | 21·888 | ·3308 | ·3289 |
| 8·3 | 33 28·0 | 6·765 | GS*g* | 27 44·6 | – 1·517 | 41 3·7 | 15·012 | 15·634 | 21·276 | ·3307 | ·3289 |
| 9·5 | 50 28·4 | 37·171 | | 35 52·4 | 28·963 | 13 20 27·8 | 45·207 | 47·052 | 109·914 | ·3262 | ·3138 |
| 9·9 | 13 48 9·4 | 34·425 | | 13 20 46·7 | 26·757 | 14 36 59·4 | 41·460 | 84·767 | 159·894 | ·2977 | ·2588 |
| 9·9 | 52 59·1 | 33·851 | | 24 56·0 | 26·250 | 42 1·5 | 40·787 | 86·254 | 158·447 | ·2944 | ·2541 |



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# —89°.

RIGHT ASCENSIONS

| 1900. | diff. | 1910. | diff. | 1920. | diff. | 1930. | diff. | 1940. | diff. | 1950. |
|---|---|---|---|---|---|---|---|---|---|---|
| h m | m | h m | m | h m | m | h m | m | h m | m | h m |
| 0 12·4 | 0·1 | 0 12·3 | 0·0 | 0 12·3 | 0·1 | 0 12·2 | 0·0 | 0 12·2 | 0·0 | 0 12·2 |
| 32·5 | 1·0 | 31·5 | 0·9 | 30·6 | 0·8 | 29·8 | 0·7 | 29·1 | 0·7 | 28·4 |
| 49·9 | 2·6 | 47·3 | 2·3 | 45·0 | 2·0 | 43·0 | 1·8 | 41·2 | 1·5 | 39·7 |
| 56·7 | 4·9 | 51·8 | 4·0 | 47·8 | 3·3 | 44·5 | 2·8 | 41·7 | 2·4 | 39·3 |
| 1 8·0 | 2·9 | 1 5·1 | 2·6 | 1 2·5 | 2·3 | 1 0·2 | 2·1 | 58·1 | 2·0 | 56·1 |
| 37·4 | 4·5 | 32·9 | 4·0 | 28·9 | 3·6 | 25·3 | 3·3 | 1 22·0 | 3·0 | 1 19·0 |
| 54·3 | 11·7 | 42·6 | 9·5 | 33·1 | 7·9 | 25·2 | 6·6 | 18·6 | 5·6 | 13·0 |
| 2 5·4 | 10·3 | 55·1 | 8·8 | 46·3 | 7·5 | 38·8 | 6·4 | 32·4 | 5·6 | 26·8 |
| 11·0 | 9·5 | 2 1·5 | 8·3 | 53·2 | 7·3 | 45·9 | 6·3 | 39·6 | 5·6 | 34·0 |
| 44·1 | 10·8 | 33·3 | 9·6 | 2 23·7 | 8·5 | 2 15·2 | 7·6 | 2 7·6 | 6·8 | 2 0·8 |
| 1 59·2 | 17·6 | 1 41·6 | 13·2 | 1 28·4 | 10·1 | 1 18·3 | 7·9 | 1 10·4 | 6·4 | 1 4·0 |
| 3 10·5 | 8·7 | 3 1·8 | 8·0 | 2 53·8 | 7·5 | 2 46·3 | 6·9 | 2 39·4 | 6·4 | 2 33·0 |
| 29·9 | 9·0 | 20·9 | 8·4 | 3 12·5 | 7·8 | 3 4·7 | 7·3 | 57·4 | 6·7 | 50·7 |
| 32·9 | 12·6 | 20·3 | 11·5 | 8·8 | 10·4 | 2 58·4 | 9·5 | 48·9 | 8·6 | 40·3 |
| 4 21·7 | 15·1 | 4 6·6 | 14·1 | 52·5 | 13·0 | 3 39·5 | 12·0 | 3 27·5 | 11·1 | 3 16·4 |
| 32·0 | 22·8 | 9·2 | 20·5 | 48·7 | 18·3 | 30·4 | 16·3 | 14·1 | 14·3 | 2 59·8 |
| 36·9 | 22·6 | 14·3 | 20·4 | 53·9 | 18·4 | 35·5 | 16·4 | 19·1 | 14·6 | 3 4·5 |
| 55·3 | 17·1 | 38·2 | 16·1 | 4 22·1 | 15·1 | 4 7·0 | 14·1 | 52·9 | 13·0 | 39·9 |
| 3 41·5 | 41·8 | 2 59·7 | 30·4 | 2 29·3 | 22·5 | 2 6·8 | 16·9 | 1 49·9 | 13·0 | 1 36·9 |
| 6 26·7 | 13·8 | 6 12·9 | 14·0 | 5 58·9 | 13·9 | 5 45·0 | 13·8 | 5 31·2 | 13·6 | 5 17·6 |
| 7 34·2 | 13·4 | 7 20·8 | 14·0 | 7 6·8 | 14·6 | 6 52·2 | 15·0 | 6 37·2 | 15·3 | 6 21·9 |
| 41·6 | 14·9 | 26·7 | 15·8 | 10·9 | 16·5 | 54·4 | 17·2 | 37·2 | 17·6 | 19·6 |
| 58·7 | 15·4 | 43·3 | 16·5 | 26·8 | 17·6 | 7 9·2 | 18·5 | 50·7 | 19·3 | 31·4 |
| 8 59·5 | 12·1 | 8 47·4 | 13·6 | 8 33·8 | 15·0 | 8 18·8 | 16·5 | 8 2·3 | 18·2 | 7 44·1 |
| 9 39·0 | 10·0 | 9 29·0 | 11·4 | 9 17·6 | 13·0 | 9 4·6 | 14·9 | 49·7 | 16·9 | 8 32·8 |
| 44·0 | 8·8 | 35·2 | 9·9 | 25·3 | 11·1 | 14·1 | 12·7 | 9 1·4 | [illegible] | 47·0 |
| 56·6 | 10·4 | 46·2 | 12·2 | 34·0 | 14·5 | 19·5 | 17·1 | 2·4 | 20·4 | 42·0 |
| 10 0·1 | 9·3 | 50·8 | 10·9 | 39·9 | 12·7 | 27·2 | 14·9 | 12·3 | 17·6 | 54·7 |
| 4·1 | 10·9 | 53·2 | 13·0 | 40·2 | 15·7 | 24·5 | 19·1 | 5·4 | 23·3 | 42·1 |
| 13·3 | 6·5 | 10 6·8 | 7·3 | 59·5 | 8·3 | 51·2 | 9·5 | 41·7 | 10·8 | 9 30·9 |
| 23·2 | 12·0 | 11·2 | 15·1 | 56·1 | 19·7 | 36·4 | 26·1 | 10·3 | 34·9 | 8 35·4 |
| 52·2 | 4·9 | 47·3 | 5·8 | 10 41·5 | 6·9 | 10 34·6 | 8·3 | 10 26·3 | 10·1 | 10 16·2 |
| 11 16·9 | 3·3 | 11 13·6 | 3·9 | 11 9·7 | 4·8 | 11 4·9 | 6·0 | 58·9 | 7·5 | 51·4 |
| 22·9 | 2·4 | 20·5 | 2·9 | 17·6 | 3·5 | 14·1 | 4·2 | 11 9·9 | 5·2 | 11 4·7 |
| 12 10·8 | 1·5 | 12 12·3 | 1·7 | 12 14·0 | 2·1 | 12 16·1 | 2·5 | 12 18·6 | 3·2 | 12 21·8 |
| 40·7 | 3·9 | 44·6 | 4·6 | 49·2 | 5·4 | 54·6 | 6·6 | 13 1·2 | 8·1 | 13 9·3 |
| 41·1 | 3·8 | 44·9 | 4·4 | 49·3 | 5·2 | 54·5 | 6·2 | 0·7 | 7·5 | 8·2 |
| 13 20·5 | 23·0 | 13 43·5 | 38·7 | 14 22·2 | 71·2 | 15 33·4 | 125·6 | 17 39·0 | 137·9 | 19 56·9 |
| 14 37·0 | 30·8 | 15 7·8 | 40·6 | 15 48·4 | 52·2 | 16 40·6 | 62·1 | 42·7 | 64·8 | 18 47·5 |
| 42·0 | 30·3 | 12·3 | 39·2 | 51·5 | 49·6 | 41·1 | 58·4 | 39·5 | 61·0 | 40·5 |

DECLINATIONS

| 1900. −88° | diff. | 1910. −88° | diff. | 1920. −88° | diff. | 1930. −88° | diff. | 1940. −88° | diff. | 1950. −88° |
|---|---|---|---|---|---|---|---|---|---|---|
| ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ |
| 55·17 | 3·34 | 51·83 | 3·34 | 48·49 | 3·33 | 45·16 | 3·34 | 41·82 | 3·34 | 38·48 |
| 52·32 | 3·32 | 49·00 | 3·31 | 45·69 | 3·31 | 42·38 | 3·31 | 39·07 | 3·31 | 35·76 |
| 70·26 | 3·27 | 66·99 | 3·27 | 63·72 | 3·28 | 60·44 | 3·29 | 57·15 | 3·29 | 53·86 |
| 88·20 | 3·25 | 84·95 | 3·27 | 81·68 | 3·27 | 78·41 | 3·28 | 75·13 | 3·29 | 71·84 |
| 57·30 | 3·20 | 54·10 | 3·21 | 50·89 | 3·22 | 47·67 | 3·23 | 44·44 | 3·24 | 41·20 |
| 58·88 | 3·07 | 55·81 | 3·08 | 52·73 | 3·10 | 49·63 | 3·12 | 46·51 | 3·14 | 43·37 |
| 92·94 | 2·98 | 89·96 | 3·04 | 86·92 | 3·10 | 83·82 | 3·13 | 80·69 | 3·15 | 77·54 |
| 85·93 | 2·90 | 83·03 | 2·96 | 80·07 | 3·01 | 77·06 | 3·05 | 74·01 | 3·09 | 70·92 |
| 81·75 | 2·85 | 78·90 | 2·91 | 75·99 | 2·97 | 73·02 | 3·01 | 70·01 | 3·05 | 66·96 |
| 78·12 | 2·57 | 75·55 | 2·67 | 72·88 | 2·74 | 70·14 | 2·80 | 67·34 | 2·87 | 64·47 |
| 101·91 | 2·96 | 98·95 | 3·06 | 95·89 | 3·12 | 92·77 | 3·17 | 89·60 | 3·20 | 86·40 |
| 60·90 | 2·31 | 58·59 | 2·39 | 56·20 | 2·46 | 53·74 | 2·53 | 51·21 | 2·60 | 48·61 |
| 57·97 | 2·09 | 55·88 | 2·19 | 53·69 | 2·27 | 51·42 | 2·35 | 49·07 | 2·42 | 46·65 |
| 75·15 | 2·08 | 73·07 | 2·21 | 70·86 | 2·32 | 68·54 | 2·43 | 66·11 | 2·52 | 63·59 |
| 76·88 | 1·49 | 75·39 | 1·68 | 73·71 | 1·84 | 71·87 | 1·99 | 69·88 | 2·13 | 67·75 |
| 90·79 | 1·40 | 89·39 | 1·69 | 87·70 | 1·92 | 85·78 | 2·12 | 83·66 | 2·29 | 81·37 |
| 90·24 | 1·34 | 88·90 | 1·62 | 87·28 | 1·87 | 85·41 | 2·06 | 83·35 | 2·24 | 81·11 |
| 79·16 | 1·05 | 78·11 | 1·27 | 76·84 | 1·49 | 75·35 | 1·67 | 73·68 | 1·86 | 71·82 |
| 107·15 | 2·15 | 105·00 | 2·52 | 102·48 | 2·76 | 99·72 | 2·91 | 96·81 | 3·01 | 93·80 |
| 66·70 | 0·29 | 66·99 | 0·08 | 67·07 | 0·11 | 66·96 | 0·32 | 66·64 | 0·52 | 66·12 |
| 68·14 | 1·25 | 69·39 | 1·06 | 70·45 | 0·85 | 71·30 | 0·65 | 71·95 | 0·43 | 72·38 |
| 73·84 | 1·33 | 75·17 | 1·13 | 76·30 | 0·90 | 77·20 | 0·66 | 77·86 | 0·41 | 78·27 |
| 76·66 | 1·56 | 78·22 | 1·34 | 79·56 | 1·12 | 80·68 | 0·86 | 81·54 | 0·60 | 82·14 |
| 74·89 | 2·30 | 77·19 | 2·15 | 79·34 | 1·99 | 81·33 | 1·80 | 83·13 | 1·59 | 84·72 |
| 75·42 | 2·69 | 78·11 | 2·59 | 80·70 | 2·47 | 83·17 | 2·34 | 85·51 | 2·16 | 87·67 |
| 71·20 | 2·74 | 73·94 | 2·65 | 76·59 | 2·56 | 79·15 | 2·44 | 81·59 | 2·30 | 83·89 |
| 81·36 | 2·83 | 84·19 | 2·74 | 86·93 | 2·62 | 89·55 | 2·47 | 92·02 | 2·28 | 94·30 |
| 78·45 | 2·86 | 81·31 | 2·78 | 84·09 | 2·68 | 86·77 | 2·55 | 89·32 | 2·41 | 91·73 |
| 84·61 | 2·88 | 87·49 | 2·79 | 90·28 | 2·67 | 92·95 | 2·51 | 95·46 | 2·31 | 97·77 |
| 67·69 | 2·97 | 70·66 | 2·91 | 73·57 | 2·86 | 76·43 | 2·79 | 79·22 | 2·71 | 81·93 |
| 91·77 | 3·00 | 94·77 | 2·93 | 97·70 | 2·79 | 100·49 | 2·59 | 103·08 | 2·29 | 105·37 |
| 75·88 | 3·18 | 79·06 | 3·16 | 82·22 | 3·13 | 85·35 | 3·09 | 88·44 | 3·04 | 91·48 |
| 78·88 | 3·29 | 82·17 | 3·26 | 85·43 | 3·26 | 88·69 | 3·23 | 91·92 | 3·21 | 95·13 |
| 74·93 | 3·30 | 78·23 | 3·29 | 81·52 | 3·28 | 84·80 | 3·26 | 88·06 | 3·26 | 91·32 |
| 79·52 | 3·34 | 82·86 | 3·33 | 86·19 | 3·34 | 89·53 | 3·33 | 92·86 | 3·33 | 96·19 |
| 76·87 | 3·29 | 80·16 | 3·26 | 83·42 | 3·26 | 86·68 | 3·23 | 89·91 | 3·21 | 93·12 |
| 75·01 | 3·28 | 78·29 | 3·27 | 81·56 | 3·26 | 84·82 | 3·24 | 88·06 | 3·20 | 91·26 |
| 105·21 | 3·08 | 108·29 | 2·88 | 111·17 | 2·42 | 113·59 | 1·24 | 114·83 | 0·72 | 114·11 |
| 101·46 | 2·44 | 103·90 | 2·07 | 105·97 | 1·49 | 107·46 | 0·71 | 108·17 | 0·23 | 107·94 |
| 100·79 | 2·39 | 103·18 | 2·03 | 105·21 | 1·47 | 106·68 | 0·72 | 107·40 | 0·15 | 107·25 |



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| | 41—62 Equ. 1875. | | | 1850. | | 1900. | | PRECESSION in R. A. | | in Decl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 14h.–23h. | − 89° | | | 89° | | 89° | 1875. | 1900. | 1875. | 1900. |
| mag. | h m s | ′ | | h m s | ′ | h m s | ′ | s | s | ′ | ′ |
| 10·3 | 14 28 25·4 | 50·347 | | 13 18 46·0 | 42·914 | 18 26 57·0 | 54·116 | +290·317 | +778·711 | −0·2666 | +0·0392 |
| 9·9 | 16 1 16·4 | 15·683 | *g* | 15 25 58·5 | 10·970 | 16 43 33·8 | 19·150 | 93·169 | 109·368 | ·1655 | −0·1094 |
| 9·7 | 32 7·7 | 9·301 | Cape 91 | 58 7·8 | 5·600 | 17 10 26·4 | 11·778 | 87·139 | 96·148 | ·1250 | −0·0717 |
| 10·3 | 17 36 51·4 | 18·415 | | 16 51 16·2 | 16·743 | 18 24 15·3 | 18·395 | 113·027 | 112·907 | ·0337 | +0·0353 |
| 10·3 | 38 27·4 | 17·003 | | 54 10·6 | 15·413 | 24 19·2 | 16·953 | 109·488 | 109·224 | ·0314 | ·0354 |
| 10·3 | 54 57·1 | 46·505 | | 15 48 12·4 | 43·952 | 20 4 30·2 | 44·265 | 343·566 | 253·086 | −0·0074 | ·1728 |
| 5·7 | 18 15 34·7 | 16·649 | GSg | 17 30 12·7 | 16·388 | 18 59 49·3 | 15·273 | 108·842 | 102·334 | +0·0227 | ·0863 |
| 10·0 | 19 15 28·1 | 6·594 | | 18 38 43·2 | 8·660 | 19 48 47·4 | 3·317 | 84·501 | 75·178 | ·1081 | ·1527 |
| 10·1 | 30 25·5 | 37·032 | | 3 49·8 | 38·768 | 20 37 15·3 | 32·688 | 187·804 | 133·253 | ·1285 | ·2117 |
| 9·2 | 20 9 57·5 | 26·621 | *g* | 19 13 47·0 | 30·240 | 53 19·2 | 21·465 | 119·212 | 89·819 | ·1795 | ·2293 |
| 9·7 | 47 27·3 | 20·742 | | 20 4 13·6 | 25·728 | 21 20 15·3 | 14·720 | + 90·257 | + 68·221 | +0·2231 | +0·2562 |
| 9·7 | 51 6·9 | 21·928 | | 6 52·4 | 27·008 | 24 13·4 | 15·810 | 91·676 | 68·437 | ·2270 | ·2599 |
| 6·5 | 21 3 45·4 | 25·488 | GS*g* | 16 17·6 | 30·887 | 37 34·8 | 19·055 | 95·681 | 68·414 | ·2402 | ·2717 |
| 10·1 | 22 1 58·5 | 28·251 | | 21 22 21·0 | 35·165 | 22 27 12·6 | 20·753 | 74·369 | 49·194 | ·2909 | ·3072 |
| 10·3 | 11 11·9 | 45·918 | | 20 10 2·5 | 52·312 | 52 30·9 | 38·143 | 152·257 | 64·093 | ·2973 | ·3198 |
| 9·7 | 13 10·3 | 23·023 | *g* | 21 42 44·3 | 30·237 | 33 39·7 | 15·392 | 58·932 | 40·970 | ·2986 | ·3108 |
| 10·1 | 26 22·7 | 16·380 | | 22 3 52·3 | 23·885 | 42 22·3 | 8·595 | 44·925 | 32·776 | ·3067 | ·3152 |
| 10·3 | 50 9·7 | 32·246 | | 19 44·9 | 40·050 | 23 7 21·1 | 24·182 | 52·756 | 32·287 | ·3188 | ·3254 |
| 10·2 | 57 8·5 | 17·931 | | 40 29·5 | 25·892 | 8 39·6 | 9·832 | 32·661 | 23·421 | ·3217 | ·3258 |
| 10·3 | 23 25 52·3 | 11·413 | | 23 17 25·0 | 19·653 | 32 3·3 | 3·133 | 17·106 | 12·901 | ·3305 | ·3317 |
| 10·1 | 46 13·9 | 15·824 | | 41 35·8 | 24·159 | 49 35·9 | 7·478 | + 9·318 | + 7·042 | +0·3336 | +0·3339 |
| 8·9 | 52 38·7 | 1·504 | *g* | 50 2·1 | 9·853 | 54 45·8 | − 6·850 | 5·593 | 4·643 | ·3341 | ·3341 |



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| RIGHT ASCENSIONS | | | | | | | | | | | DECLINATIONS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900. | | 1910. | | 1920. | | 1930. | | 1940. | | 1950. | 1900. | | 1910. | | 1920. | | 1930. | | 1940. | | 1950. |
| | diff. | | diff. | | diff. | | diff. | | diff. | | – 83° | diff. | – 88° | diff. | – 88° | diff. | – 88° | diff. | – 88° | diff. | – 88° |
| h m | m | h m | m | h m | m | h m | m | h m | m | h m | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ | ′ |
| 18 27·0 | 111·9 | 20 18·9 | 68·3 | 21 27·2 | 39·5 | 22 6·7 | 24·3 | 22 31·0 | 16·3 | 22 47·3 | 114·12 | 1·22 | 112·90 | 2·32 | 110·58 | 2·80 | 107·78 | 3·03 | 104·75 | 3·13 | 101·62 |
| 16 43·6 | 18·6 | 17 2·2 | 19·5 | 17 21·7 | 20·0 | 17 41·7 | 20·3 | 18 2·0 | 20·3 | 18 22·3 | 79·15 | 0·96 | 80·11 | 0·70 | 80·81 | 0·41 | 81·22 | 0·11 | 81·33 | 0·17 | 81·16 |
| 17 10·4 | 16·3 | 26·7 | 16·6 | 43·3 | 16·7 | 18 0·0 | 16·7 | 16·7 | 16·6 | 33·3 | 71·78 | 0·60 | 72·38 | 0·36 | 72·74 | 0·12 | 72·86 | 0·12 | 72·74 | 0·37 | 72·37 |
| 18 24·3 | 18·6 | 18 42·9 | 18·1 | 19 1·0 | 17·4 | 19 18·4 | 16·5 | 19 34·9 | 15·6 | 19 50·5 | 78·39 | 0·49 | 77·90 | 0·75 | 77·15 | 1·00 | 76·15 | 1·23 | 74·92 | 1·45 | 73·47 |
| 24·3 | 18·0 | 42·3 | 17·5 | 18 59·8 | 16·9 | 16·7 | 15·1 | 32·8 | 15·2 | 48·0 | 76·95 | 0·49 | 76·46 | 0·74 | 75·72 | 0·98 | 74·74 | 1·20 | 73·54 | 1·42 | 72·12 |
| 20 4·5 | 37·7 | 20 42·2 | 29·6 | 21 11·8 | 23·2 | 21 35·0 | 18·3 | 21 53·3 | 14·7 | 22 8·0 | 104·27 | 1·97 | 102·30 | 2·34 | 99·96 | 2·59 | 97·37 | 2·77 | 94·60 | 2·91 | 91·69 |
| 18 59·8 | 16·7 | 19 16·5 | 16·0 | 19 32·5 | 15·1 | 19 47·6 | 14·2 | 20 1·8 | 13·2 | 20 15·0 | 75·27 | 0·98 | 74·29 | 1·20 | 73·09 | 1·41 | 71·68 | 1·61 | 70·07 | 1·78 | 68·29 |
| 19 48·8 | 12·2 | 20 1·0 | 11·5 | 20 12·5 | 10·9 | 20 23·4 | 10·2 | 33·6 | 9·6 | 43·2 | 63·32 | 1·61 | 61·71 | 1·76 | 59·95 | 1·89 | 58·06 | 2·02 | 56·04 | 2·13 | 53·91 |
| 20 37·3 | 20·5 | 57·8 | 17·6 | 21 15·4 | 15·1 | 21 30·5 | 13·0 | 21 43·5 | 11·2 | 21 54·7 | 92·69 | 2·24 | 90·45 | 2·43 | 88·02 | 2·59 | 85·43 | 2·71 | 82·72 | 2·81 | 79·91 |
| 53·3 | 14·0 | 21 7·3 | 12·7 | 20·0 | 11·2 | 31·2 | 10·0 | 41·2 | 9·0 | 50·2 | 81·47 | 2·39 | 79·08 | 2·49 | 76·59 | 2·61 | 73·98 | 2·71 | 71·27 | 2·78 | 68·49 |
| 21 20·3 | 10·7 | 31·0 | 9·7 | 40·7 | 8·7 | 49·4 | 7·8 | 57·2 | 7·2 | 22 4·4 | 74·72 | 2·61 | 72·11 | 2·70 | 69·41 | 2·79 | 66·62 | 2·84 | 63·78 | 2·90 | 60·88 |
| 24·2 | 10·8 | 35·0 | 9·6 | 44·6 | 8·7 | 53·3 | 7·8 | 22 1·1 | 7·1 | 8·2 | 75·81 | 2·66 | 73·15 | 2·73 | 70·42 | 2·81 | 67·61 | 2·88 | 64·73 | 2·91 | 61·82 |
| 37·6 | 10·7 | 48·3 | 9·4 | 57·7 | 8·4 | 22 6·1 | 7·5 | 13·6 | 6·6 | 20·2 | 79·05 | 2·76 | 76·29 | 2·85 | 73·44 | 2·91 | 70·53 | 2·96 | 67·57 | 3·01 | 64·56 |
| 22 27·2 | 7·6 | 22 34·8 | 6·6 | 22 41·4 | 5·8 | 47·2 | 5·1 | 52·3 | 4·6 | 56·9 | 80·75 | 3·08 | 77·67 | 3·14 | 74·53 | 3·17 | 71·36 | 3·19 | 68·17 | 3·20 | 64·97 |
| 52·5 | 9·3 | 23 1·8 | 7·3 | 23 9·1 | 5·8 | 23 14·9 | 4·8 | 23 19·7 | 4·0 | 23 23·7 | 98·14 | 3·21 | 94·93 | 3·25 | 91·68 | 3·27 | 88·41 | 3·29 | 85·12 | 3·29 | 81·83 |
| 33·7 | 6·4 | 22 40·1 | 5·6 | 22 45·7 | 5·0 | 22 50·7 | 4·5 | 22 55·2 | 4·0 | 22 59·2 | 75·39 | 3·12 | 72·27 | 3·16 | 69·11 | 3·18 | 65·93 | 3·20 | 62·73 | 3·22 | 59·51 |
| 42·4 | 5·2 | 47·6 | 4·6 | 52·2 | 4·1 | 56·3 | 3·8 | 23 0·1 | 3·4 | 23 3·5 | 68·60 | 3·17 | 65·43 | 3·19 | 62·24 | 3·20 | 59·04 | 3·22 | 55·82 | 3·24 | 52·58 |
| 23 7·4 | 4·9 | 23 12·3 | 4·2 | 23 16·5 | 3·7 | 23 20·2 | 3·2 | 23·4 | 2·8 | 26·2 | 84·18 | 3·26 | 80·92 | 3·28 | 77·64 | 3·29 | 74·35 | 3·29 | 71·06 | 3·30 | 67·76 |
| 8·7 | 3·6 | 12·3 | 3·3 | 15·6 | 3·0 | 18·6 | 2·7 | 21·3 | 2·4 | 23·7 | 69·83 | 3·27 | 66·56 | 3·27 | 63·29 | 3·28 | 60·01 | 3·29 | 56·72 | 3·30 | 53·42 |
| 32·1 | 2·0 | 34·1 | 1·9 | 36·0 | 1·7 | 37·7 | 1·5 | 39·2 | 1·5 | 40·7 | 63·13 | 3·32 | 59·81 | 3·32 | 56·49 | 3·33 | 53·16 | 3·33 | 49·83 | 3·32 | 46·51 |
| 49·6 | 1·1 | 50·7 | 1·1 | 51·8 | 0·9 | 52·7 | 0·9 | 53·6 | 0·8 | 54·4 | 67·48 | 3·34 | 64·14 | 3·34 | 60·80 | 3·34 | 57·46 | 3·34 | 54·12 | 3·34 | 50·78 |
| 54·8 | 0·7 | 55·5 | 0·7 | 56·2 | 0·7 | 56·9 | 0·6 | 57·5 | 0·6 | 58·1 | 53·15 | 3·34 | 49·81 | 3·34 | 46·47 | 3·34 | 43·13 | 3·34 | 39·79 | 3·34 | 36·45 |

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